NTU Library Services in Changing Contexts

Chien-Kang Huang, Ph.D.
Associate Professor - National Taiwan University
Director of NTU Library Information Technology Services
Library in the Information Age

• Library Website Design and Maintenance

• Library Automation System Maintenance and Value-added Services

• Information System Development and Maintenance
  – E-workflow System, Readers Service System
  – Digital Resource Management System
Library Website Design and Maintenance
2011 Old Website Disadvantages

1. Fragmented blocks
2. Excessive information (looks like a sitemap)
3. Lack of visual identity
4. Difficult to update or maintain (texts in *.JPEG)
Reference Websites

USA
Harvard, Columbia University, Traverse District MI, Washington State University, DC public library, NYU etc.

Asia
Waseda University, University of Tokyo, Hitotsubashi University, Keio University etc.

Europe
University of Cambridge, The National Library of Finland, Helsinki University Library etc.

Oceania
Australia etc.
Phase 1 Goals

- Phase 1: (2012~2013)
  - From webpage-type to database-type website
  - Develop sub-websites
  - Retain original content
Website Development Steps

**Simplify**
- Main Menu
- Taxonomy

**Categorize**
- Google analytics
- AWStats

**Flow**
- From top to bottom
- Center-focused Visual

**Main Menu**
- Library Catalog
- Special Collections
- E-Resources
- Services
- Publications
- About us

**Types of Pages**

1. **General Services**
   (ex. Hours, Off-campus Internet Connection Services)

2. **Customized Services**
   (ex. Exam Collections, Intercampus Loan Services)

3. **E-Resources**
   (ex. E-books)
Homepage Layout Design

1

2 √
Homepage Layout Design

5/2012

Fixed top and bottom info blocks

Browsing Flow
1. From top to bottom
2. From top to bottom Center-focused Visual
Main Service

Visual Focus

News
5/2012

Web Content Management System
## 2010-2011 Website Page Views TOP10

<table>
<thead>
<tr>
<th>Behavior</th>
<th>1/2010~8/2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>1. Home</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Exam Collections</strong></td>
<td></td>
</tr>
<tr>
<td>3. Network</td>
<td></td>
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<tr>
<td>4. Hours</td>
<td></td>
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<tr>
<td>5. <strong>e-Books</strong></td>
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<tr>
<td>6. English Home</td>
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<tr>
<td>7. <strong>Library Catalog</strong></td>
<td></td>
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<tr>
<td>8. Introduction</td>
<td></td>
</tr>
<tr>
<td>9. FAQ</td>
<td></td>
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<tr>
<td>10. Delivery Book Service</td>
<td></td>
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</tbody>
</table>

*Develop websites database based on the page views ranking.*
Completed Items in Phase 1

New Website
1. Home Page
2. Framework
3. Visual Design

NTUML Newsletter
Exam Collections
NTU Collected Works
NTU Academic Development Foundation for e-Journal
University Library Journal
NTU Curriculum Digital Archive
Special Collections

Knowledge Management System
Equipment Lending System
NTU Library Newsletters Website
Lost and Found System

Completed Items in Phase 1

2012/1

2013/12
Completed Items in Phase 1

Readers Services Websites

Internal Systems

2012/1

2013/12
Sub-Website

Pageviews 2012/7-2014/7

Top 1-5
1. Exam Collection
2. Mobile Tulips
3. New Book Blog
4. NTU Gallery
5. NTU Library Journal

Top 6-10
6. Subject Services
7. NTU Collected Works
8. Lost and Found System (new site)
9. e-Learning Website (new site)
10. Special Collections (new site)
# 2014 Website Page Views TOP10

*Does not include sub-websites.*

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Page</strong></td>
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</tr>
<tr>
<td>1. Home</td>
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<td>2. <strong>e-Resources</strong></td>
</tr>
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<td>2. <strong>Exam Collections</strong></td>
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<td>2. <strong>e-Resources</strong></td>
</tr>
<tr>
<td>3. Network</td>
<td>2. <strong>e-Resources</strong></td>
<td>3. <strong>Statistics</strong></td>
</tr>
<tr>
<td>5. e-Books</td>
<td>4. Network</td>
<td>5. Hours</td>
</tr>
<tr>
<td>9. FAQ</td>
<td>8. e-Books</td>
<td>9. <strong>Off-campus Internet Connection</strong></td>
</tr>
<tr>
<td>10. <strong>Delivery Book Service</strong></td>
<td>9. <strong>Off-campus Internet Connection</strong></td>
<td>10. <strong>Student Information Web Services</strong></td>
</tr>
</tbody>
</table>

*Does not include sub-websites.*
Why the Exam Collections did not appear on TOP10 Page Views in 2014?

Because the Exam Collections was developed into a sub-website.

During exam period, the highest Page views can reach up to 10,086.
Most Used Services are placed on the Homepage which leads to the increase of its page views. (i.e Graduation Procedure)
Library Automation System
Maintenance and Value-added Services
Information System Development and Maintenance

E-workflow System
Readers Service System
Digital Resource Management System
Information System Development

NTU Library In-house Projects

Readers Service Tools:

1. **QR Code** - Scan QR Code to quickly obtain the title and other information.
2. **Opinion** - Reading experience sharing
3. **Bookmark** - Share catalogs on social media
4. **MetaCat** (Union Catalog)
5. **EndNote Tool**
6. **Troubleshooting** - User Feedback
In-house-developed subject catalogue presented by webpage
Digital Resource Management System

Open Access e-Books Collection: 110,074 records
NTU Web Archiving System
Archive government agencies, contemporary events and NTU websites: 6,168 websites, 22,245 website versions.

National Taiwan University Scholar Gateway
NTUSG, established by NTU Library, is a free online service that helps you to find the best web resources for your studies and research.
New Challenges
New Challenges

1. Increasing website usage
2. Different system vendors
3. Saturation of walk-in readers
4. Increasing special collections
5. Increasing mobile devices
6. Increasing foreign students
The difficulties of open source CMS and Responsive Web Design

1. Conflicts between the Drupal system modules
2. UI designs for different devices
3. Conflicts between JavaScript and open source
4. Issues with browsing speed
New Challenges

1. Different databases have different licensing requirements, which is difficult for application development.
2. Drupal has a different interface from other systems.
3. Hard to integrate many system platforms.
New Challenges

Challenging main menu simplification
Future Development
2014 Phase 2 Goals:
- Structural adjustment
- Content re-profiling
- More statistics for decision making
- Improving visual design
- Public data gathering, using, linking
- Opening data and Library API
Website Design Trends

1. Responsive Web Design
2. Visual Image Design
Ex. Future Development

1. Use images to attract readers
2. UI designs for different devices
3. Use tags to label information
4. Single-window Search Platform
Ex. Service - Interlibrary Loan

1. Step by step

2. Labeling Process Procedure

3. Describing content while the procedure is progressing.
Future Development - Mobile Service
Current Operating Mode

1. Internal Demand 60%
2. Readers Demand (Reference Service) 30%
3. Web Statistics 10%

Changes in important issues
1. Changes Home
2. Changes Main Menu

Website Team
(14 representatives from all divisions)

IST Division
1. Update Content
2. Layout Design
3. Improve Function

Library Website
1. Structure
2. Interface
3. Content
Future Development - Development Patterns and Cycles

- **Demand** → **Flow Design** → **Implementation** → **Validation/Testing** → **Maintenance/Debug**

**Future Development - Development Patterns and Cycles**

1. **Internal Demand**: 60% → 40%
2. **Readers Demand**: 30% → 40%
3. **Web Statistics**: 10% → 20%

**Small feature changes/Period of about 4-6 months**

**System Function**

**Content Structure**

**Version Update**

**Period of about two years**
Thank you for listening!