Current issues of digital library performance indicators in Japanese academic library statistics

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Outline

• Japanese academic library statistics
• Necessity of e-measures for digital library functions
• Current trends of digital library performance indicators in academic library statistics
• Toward establishing a new framework
Japanese academic library statistics

• Statistics on Libraries in Japan
  – Publisher: Japan Library Association (JLA)
  – Frequency: Annual
  – First Launched: 1952 fiscal year
  – Figures: Represented respectively

• Library Statistics of Colleges and Universities
  – Publisher: Ministry of Education Culture, Sports, Science and Technology (MEXT)
  – Frequency: Annual
  – First Launched: 1966 fiscal year
  – Figures: Summarized according to the banding and type of college and universities
Statistics on Libraries in Japan

• Element (excerpts)
  – Total number of students, faculty and staff eligible to use
  – Number of Library staff (regular staff, non-regular staff)
  – Number of titles in total stock (printed materials: books and serials)
  – Number of titles added (printed materials: books and serials)
  – Number of initial loans (excluding on-site loans)
  – Number of sheets photocopied
  – Days open
  – Interlibrary lending (requests received to other libraries, requests made to other libraries)
  – Expenditures (operating expenditures, expenditures on acquisitions)

Library Statistics of Colleges and Universities

CONTENTS

Preface
I Outline of survey
II Summary of results
III Statistical tables
  1. Library staff
  2. Library buildings and facilities
  3. Library holdings
  4. Acquisitions
  5. Audio-Visual materials
Library Statistics of Colleges and Universities

6. Expenditures
7. Services
8. Outsourcing library operations
9. Services to public
10. Digital library functions

Appendix 1. Colleges and universities list
Appendix 2. Questionnaire on Library Statistics of Colleges and Universities

Source: http://www.mext.go.jp/b_menu/toukei/001/index20.htm
Library Statistics of Colleges and Universities

- Library holdings
  - Books
  - Serials
  - Others (includes electronic journals from 2000 fiscal year)

- Digital library functions
  - Computerization
  - Computer usage
  - Technical processing
  - Networking with ILL
  - Library website (from 1997 fiscal year)
  - CD-ROM and DVD-ROM services (from 1997 fiscal year)
  - Library service via website (from 1997 fiscal year)
Necessity of e-measures for digital library functions

Conceptual diagram of hybrid library

- New proposal of a comprehensive set of performance measures for evaluation of hybrid library
- Prepared by The Library Performance Measure Working Group of the Association of National University Libraries
- Referring to the ARL E-metrics Project and EQUINOX Project
- Application to self-assessment of academic libraries
  - Tohoku University Library (2003)
  - Yamagata University Library (2003)
- Need to a extensive review
Measures for Electronic Library Service

• Element (excerpts)
  – 4.2.1 Resource
    d2.1(1) e-books
    d2.1(2) size of electronic library collection
    d2.2(1) number of full-text electronic journals
    d2.3(1) number of electronic reference transactions
  – 4.2.2 Management
  – 4.2.3 Service
  – 4.2.4 expenditures
Current trends of digital library performance indicators in academic library statistics

• ARL E-Metrics Collection Data Collection Activities, 2002-03, 2003-04
  
  http://www.arl.org/stats/newmeas/emetrics/Data_Collect.htm

• SCONUL Statistical Questionnaire 2004-05
  
  http://www.sconul.ac.uk/pubs_stats/statques.html
### ARL E-Metrics Data Collection Activities, 2002-03, 2003-04

<table>
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<tbody>
<tr>
<td>1. Number of Electronic Full-text Journals</td>
<td>1. Number of electronic journals purchased.</td>
</tr>
<tr>
<td>2. Number of Electronic Reference Sources</td>
<td>2. Number of electronic “full-text” journals purchased.</td>
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<tr>
<td>3. Number of Electronic Books</td>
<td>3. Number of current electronic journals not purchased</td>
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<tr>
<td>5. Cost of Electronic Reference Sources</td>
<td>5. Number of electronic books</td>
</tr>
<tr>
<td>7. Library Expenditures for Bibliographic Utilities, Networks &amp; Consortia</td>
<td>7. Cost of electronic “full-text” journals</td>
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### ARL E-Metrics Data Collection Activities, 2002-03, 2003-04

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<tr>
<td>10. Number of Logins (sessions) in electronic databases</td>
<td>10. Number of virtual reference transactions</td>
<td>10. Number of virtual reference transactions</td>
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<tr>
<td>11. Number of queries (searches) in electronic databases</td>
<td>11. Number of logins (sessions) to electronic databases</td>
<td>11. Number of logins (sessions) to electronic databases</td>
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<tr>
<td>12. Items requested in electronic databases</td>
<td>11a. Number of databases for which you are reporting</td>
<td>11a. Number of databases for which you are reporting</td>
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<tr>
<td>13. Virtual visits to library’s websites and catalog</td>
<td>12. Number of queries (searches) in electronic databases</td>
<td>12. Number of queries (searches) in electronic databases</td>
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<tr>
<td>14a. Number of Digital Library Collections</td>
<td>13. Number of items requested in electronic databases</td>
<td>13. Number of items requested in electronic databases</td>
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<tr>
<td>14b. Number of Items in Digital Library Collections</td>
<td>13a. Number of databases for which you are reporting</td>
<td>13a. Number of databases for which you are reporting</td>
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<tr>
<td>14c. Size of Digital Library Collections</td>
<td>14. Number of virtual visits to library’s website and catalog</td>
<td>14. Number of virtual visits to library’s website and catalog</td>
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<tr>
<td>15. Use of Digital Library Collections</td>
<td>15a. Number of Library Digital Collections</td>
<td>15a. Number of Library Digital Collections</td>
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# ARL E-Metrics Data Collection Activities, 2002-03, 2003-04

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<tr>
<td>17. Percentage of electronic reference transactions of total reference</td>
<td>15c. Number of Items in Library Digital Collections</td>
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<tr>
<td>18. Percentage of virtual visits of all library visits</td>
<td>16a. Number of times items accessed in Library Digital Collections</td>
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<tr>
<td>19. Percentage of electronic books to all monographs</td>
<td>16b. Number of queries conducted in Library Digital Collections.</td>
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<td>17a. Direct cost of personnel in constructing and managing library digital collections</td>
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<tr>
<td></td>
<td>17b. Direct cost of equipment, software or contracted services for constructing and managing library digital collections</td>
</tr>
</tbody>
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SCONUL statistical Questionnaire 2004-05

• e-measures
  – 2d. Number of unique serial titles received by subscription
  – 2e. Number of unique titles received in print form only
  – 2f. Number of unique titles received in electronic form only
  – 2g. Number of unique titles received in print and electronic form
  – 2k. Number of electronic databases received by subscription
  – 2l. Number of electronic books
  – 4r. Number of successful requests for full-text journal articles
  – 4s. Number of successful accesses to electronic books
  – 7g. Total expenditures on electronic resources
  – 7h. expenditures on subscription to electronic databases
  – 7j. expenditures on e-books
  – 7k. expenditures on other digital documents
University information database

- Developing by National Institution for Academic Degrees and University Evaluation (NIAD-UE)
- Collecting and organizing basic data for education and research activities in the Japanese colleges and universities
- Includes library service statistics, however only two measures for digital library functions are included: “number of electronic journals purchased” and “number of electronic databases purchased”

Source: [http://www.niad.ac.jp/sub_hyouka/univdb/sesanko.pdf](http://www.niad.ac.jp/sub_hyouka/univdb/sesanko.pdf)
Introduction to electronic journals in academic libraries in Japan

Source: JANUL Workshop 2005

IADLC, 25th-26th August, 2005
Nagoya University
Expenditures on Foreign journals at National University Libraries

Source: JANUL Workshop 2005
Annual survey of electronic journals subscribed at national university libraries

- Conducted by Electronic Journal Task Force of Japan Association of National University Libraries from 2002 fiscal year
- First detailed survey of electronic journals at consortia level
- Access permitted members only
Annual survey of electronic journals subscribed at national university libraries

• Element (Excerpt)
  – Total number of foreign electronic journals
  – Number of subscribed foreign electronic journals
  – Expenditures on foreign print and electronic journals
  – Expenditures on foreign electronic journals
  – Total number of domestic electronic journals
  – Number of subscribed domestic electronic journals
  – Expenditures on domestic print and electronic journals
  – Expenditures on domestic electronic journals
  – Number of subscribed foreign print journals
  – Number of cancelled foreign print journals

Source: http://wwwsoc.nii.ac.jp/anul/j/projects/ej/
Toward establishing a new framework

• A new proposal for a minimum set of measures for digital library function
• Field test
• Implementation of new measures in academic library statistics
A new proposal for a minimum set of performance measures for digital library function

• Electronic Resources (e-resources)
  – Number of subscribed electronic full-text journals
  – Number of subscribed databases
  – Number of purchased or licensed e-books
  – Number of digital documents produced in house

• Services
  – Number of hits on the library website
  – Procedural/directional questions received electronically during sample week
  – Electronic resources related questions received electronically during sample week
  – Successful request for full-text journal articles
A new proposal for a minimum set of performance measures for digital library function

• Services
  – Turnaways from full-text journals
  – Successful requests for full-text journal articles
  – Successful session on databases
  – Total database searches performed during sessions
  – Turnaways from databases
  – Successful accesses to e-books
  – Turnaways from e-books
  – Number of sessions on digital documents produced in house
A new proposal for a minimum set of performance measures for digital library function*

• Costs
  – Subscriptions to electronic full-text journals
  – Subscriptions to databases
  – Expenditures on e-books
  – Expenditures on digital documents produced in house

* Based on e-measure project
  [http://www.ebase.uce.ac.uk/emeasures/emeasureslist.htm](http://www.ebase.uce.ac.uk/emeasures/emeasureslist.htm)