The ARL Investment Index revisited: in search of reliable and valid indicators of extensiveness of research libraries in the 21st century

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The real husky!
In the beginning … there was the ‘print’
And when Mosaic was invented, it became interactive
Chronology

• 1986 ARL Membership Criteria Index
• 2005 New Ways of Measuring Collections Task Force
  – Recommendations based on interviews with ARL directors
• 2006 Investment Index
  – Also Qualitative complimentary approach
• Challenges with serials and volumes continued
  – ARL Profiles: Research Libraries 2010
• 2010 Board Task Force on Reviewing the ARL Statistics, Supplementary and Salary Survey
  – Interviews with ARL directors and two major subgroups
• ARL Statistics 2011-12 revised form
• The story of two indices (to be continued?)

www.arl.org
Most Important Issues (2008)

- Data is not expressing uniqueness of materials
- Relevance to teaching, learning, research not adequately reflected
- Collections go beyond printed volumes
- Research library is more than collections – include its services; ARL is not telling the story
- Increase in expenditures for Electronic Resources
- Ownership to Access
- Consortial relationships/cooperative collection development
Most Important Issues (cont)

- Shared storage facilities
- Duplicate serials based on bundling
- Special collections not reflected
- ARL Membership Committee wasn’t basing membership on Membership Index
Purpose of Revision

- Enhance survey relevancy for 21\textsuperscript{st} century research libraries
- Increase utility
- Diminish survey burden so that the survey is easier to complete
- Be Strategic
• New Format:
  – Revised Sections:
    • Collections = Titles, Volumes Held, and E-Books
    • Expenditures = Total Expenditures (*Excluding Fringe Benefits*) as the sum of:
      – Total Library Materials Expenditures:
        » One time resource purchases
        » Ongoing resource purchases
        » Collection support
      – Total Salaries and Wages (*Excluding Fringe Benefits*)
        » Questions are the same
        » Fringe benefits reported separately
      – Other Operating Expenditures
    • Circulation – Initial circulations only
New Format:

- New Sections:
  - Fringe Benefits - Dollar Amount and Designated Percent
  - Use of Electronic Resources
    - Number of successful full-text article requests (journals)
    - Number of total searches, result clicks, and record views (databases)
Collections challenges


- ARL Statistics Webcast on ARL’s YouTube Channel: http://www.youtube.com/watch?v=fKegMJWaONk
Dealing with uncertainty

“The Outlook in Thirty Seconds

Research libraries are well positioned to take a strong role in the development of new business and selection models. Publishers that emphasize data- and user-driven approaches will attract a growing proportion of collection dollars. Research libraries able to see their collection activities through this analytical lens have the brightest prospects to make the full range of collections available to users; to be effective partners with faculty and students in teaching, research, and learning; and to be the most successful long-term custodians of the scholarly record. - March 10, 2012
The story of two indices

<table>
<thead>
<tr>
<th>Membership Criteria Index (Historical)</th>
<th>Library Investment Index (Expenditures-focused)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Volumes Held</td>
<td>Total Expenditures</td>
</tr>
<tr>
<td>• Volumes added gross</td>
<td>• Salary Expenditures</td>
</tr>
<tr>
<td>• Current Serials</td>
<td>• Materials Expenditures</td>
</tr>
<tr>
<td>• Total Expenditures</td>
<td>• Professional plus support staff</td>
</tr>
<tr>
<td>• Professional plus support staff</td>
<td></td>
</tr>
</tbody>
</table>
Are they really different?

Linear Regression

\[ \text{Rank of expind05} = 2.56 + 0.94 \times \text{rindx05} \]

R-Square = 0.88
## Principal Component Analysis

<table>
<thead>
<tr>
<th>Year Range</th>
<th>ARL Historical % of Variance</th>
<th>ARL Investment % of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>90.5</td>
<td>92.8</td>
</tr>
<tr>
<td>2003-04</td>
<td>89.2</td>
<td>93.1</td>
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<td>2004-05</td>
<td>87.9</td>
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<td>2006-07</td>
<td>81.7</td>
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<td>2007-08</td>
<td>80.7</td>
<td>93.7</td>
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<tr>
<td>2008-09</td>
<td>81.9</td>
<td>93.3</td>
</tr>
<tr>
<td>2009-2010</td>
<td>77.5</td>
<td>92.6</td>
</tr>
<tr>
<td>2010-2011</td>
<td>76.7</td>
<td>92.1</td>
</tr>
</tbody>
</table>
Extensiveness …

- Staffing and expenditures in Special Collections
- Facilities?
- Number of PhD fields?
- Usage statistics?
- Linking behavior to outcomes in a research library environment
  - Global, Awards, Placements, Grants
To be continued?

- What’s the relationship among titles, volumes, ebooks, and expenditures
- One time and continuing expenditures
- Service variables relations – will we live up to the promise of developing a service index
- Special collections expenditures and staffing