LibValue: Assessing the Value of E-books to Academic Libraries and Users

Webcast
Association of Research Libraries
April 18, 2013
Welcome

Martha Kyrillidou

Senior Director
ARL Statistics and Service Quality Programs
Association of Research Libraries
• Everyone will be muted to cut down on background noise.

• We welcome questions. Please type your questions and ARL staff stand ready to answer them.

• The webcast will be distributed in about 2 weeks via YouTube.
Introductions

- **Martha Kyrillidou**, Senior Director, Association of Research Libraries

- **Paula Kaufman**, Juanita J. and Robert E. Simpson Dean of Libraries and University Librarian, University of Illinois at Urbana-Champaign

- **Tina Chrzastowski**, Chemistry Librarian and Professor of Library Administration, University of Illinois at Urbana-Champaign

- **Lynn Wiley**, Head of Acquisitions and Associate Professor, University of Illinois at Urbana-Champaign
Goals

• Become familiar with the LibValue Project; specifically the e-book component of the LibValue research done at UIUC.

• Discuss how libraries value e-books via data collection and cost/use analyses.

• Discuss how library users value e-books via survey data of UIUC scientists by Elsevier in fall of 2010.

• Present updated e-book user data via a new study of humanists’ e-book use currently underway at UIUC.
• Feb 14: LibValue: Undergraduate Student Success
• Mar 21: LibValue: Library Commons Spaces
• Apr 18: LibValue: Books and E-books
• May 9: LibValue: Comprehensive Approaches to Defining Library Value
• Jun 13: LibValue: Success in Teaching & Research
• Aug 15: LibValue: Digitized Special Collections
LibValue

Multiple institutions using multiple methods to measure multiple values for multiple stakeholders
StatsQUAL®
A gateway to library assessment tools that describe the role, character, and impact of physical and digital libraries.

ARL Statistics®
ARL Statistics™ is a series of annual publications that describe the collections, expenditures, staffing, and service activities for Association of Research Libraries (ARL) member libraries.

LibQUAL+®
LibQUAL+® is a rigorously tested Web-based survey that libraries use to solicit, track, understand, and act upon users’ opinions of service quality.

ClimateQUAL®
ClimateQUAL®: Organizational Climate and Diversity Assessment is an online survey that measures staff perceptions about: (a) the library's commitment to the principles of diversity, (b) organizational policies and procedures, and (c) staff attitudes.

DigiQUAL®
The DigiQUAL® online survey designed for users of digital libraries that measures reliability and trustworthiness of Web sites. DigiQUAL® is an adaptation of LibQUAL+® in the digital environment.

MINES for Libraries®
Measuring the Impact of Networked Electronic Resources (MINES) is an online transaction-based survey that collects data on the purpose of use of electronic resources and the demographics of users.
Poll Question

Are you engaged in a systematic assessment of the value of e-books as part of your library purchases?

1. Yes
2. No
3. Planning for one
Assessing the Value of E-books to Academic Libraries and Users

Paula Kaufman
Tina E. Chrzastowski
Lynn Wiley

University of Illinois at Urbana-Champaign
Two basic questions were posed by this research:

- What is the value of e-books to libraries?
Assessing the Value of E-books to Academic Libraries and Users

• Two basic questions were posed by this research:
  – What is the value of e-books to libraries?
  – What is the value of e-books to users?
Data Sets Employed to Answer Research Questions

- Longitudinal e-book collection growth data from UIUC
- Longitudinal e-book use and cost data from UIUC
- Longitudinal e-book cost-per-use data from UIUC
- UIUC e-book user study conducted by Elsevier, Fall 2010
  - 129 UIUC participants used over 800 e-books in 4 weeks;
  - E-book study participants filled out logbooks and questionnaires
  - The “value” question was asked in multiple ways
Poll Question

What is going to happen to the amount of money you spend on e-books next year?

1. Decrease
2. Stay the same
3. Increase
# Overall E-book Growth at UIUC 2008-2012

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>#E-books Added Per Year*</th>
<th>Cumulative E-book Total</th>
<th>Percent Increase Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
<td>292,002</td>
<td>NA</td>
</tr>
<tr>
<td>2008</td>
<td>27,531</td>
<td>345,186</td>
<td>9%</td>
</tr>
<tr>
<td>2009</td>
<td>66,178</td>
<td>411,364</td>
<td>19%</td>
</tr>
<tr>
<td>2010</td>
<td>73,404</td>
<td>484,768</td>
<td>18%</td>
</tr>
<tr>
<td>2011</td>
<td>129,435</td>
<td>614,203</td>
<td>27%</td>
</tr>
<tr>
<td>2012</td>
<td>57,735</td>
<td>671,938</td>
<td>9%</td>
</tr>
</tbody>
</table>

*Counts are per volume, not per title
# UIUC Cost Per E-book 2008-2012

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>$ Spent</th>
<th>#New E-books</th>
<th>$ per E-book</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>$224,047</td>
<td>27,531</td>
<td>$8.13</td>
</tr>
<tr>
<td>2009</td>
<td>$204,678</td>
<td>66,178</td>
<td>$3.09</td>
</tr>
<tr>
<td>2010</td>
<td>$383,167</td>
<td>73,404</td>
<td>$5.22</td>
</tr>
<tr>
<td>2011</td>
<td>$732,725</td>
<td>129,435</td>
<td>$5.66</td>
</tr>
<tr>
<td>2012</td>
<td>$1,114,245</td>
<td>57,735</td>
<td>$19.29</td>
</tr>
</tbody>
</table>
Definition of an E-book “Use”

• For the purpose of this study, a "use" of an e-book is counted when a user successfully views or downloads a section (generally by chapter) of an e-book through the vendor's portal.

• This definition of use follows Counter Book Report 2 (Number of Successful Section Requests by Month and Title) for most vendors.

• Of the vendors for which we could get information, 75% used Counter-compliant statistics.

• In 2011, 33 of 40 (82%) of e-book publishers were able to provide use data.
Cost and Use Data for UIUC E-books 2008-2012

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>#E-books (Cumulative)</th>
<th>Amount Spent</th>
<th>#E-books Added from Current Fiscal Year</th>
<th>Avg. $ per new E-book</th>
<th>Total Uses</th>
<th>Cost Per Use*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>292,002</td>
<td>$185,991</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>345,186</td>
<td>$224,047</td>
<td>27,531</td>
<td>$8.14</td>
<td>151,089</td>
<td>$1.48</td>
</tr>
<tr>
<td>2009</td>
<td>411,364</td>
<td>$204,678</td>
<td>66,178</td>
<td>$3.09</td>
<td>251,273</td>
<td>$0.81</td>
</tr>
<tr>
<td>2010</td>
<td>484,768</td>
<td>$383,167</td>
<td>73,404</td>
<td>$5.22</td>
<td>563,871</td>
<td>$0.68</td>
</tr>
<tr>
<td>2011</td>
<td>614,203</td>
<td>$732,725</td>
<td>129,435</td>
<td>$5.66</td>
<td>709,944</td>
<td>$1.03</td>
</tr>
<tr>
<td>2012</td>
<td>671,938</td>
<td>$1,114,245</td>
<td>57,735</td>
<td>$19.29</td>
<td>804,660</td>
<td>$1.38</td>
</tr>
</tbody>
</table>

Use data available from approximately 80% of e-book publishers
*Broad generalization based on all e-books but annual expenditures
## Top 10 FY2012 E-book Publishers by Number of E-book Uses at UIUC

<table>
<thead>
<tr>
<th>Publisher / Vendor</th>
<th>#E-books Owned In FY12</th>
<th>#E-book Uses In FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springer</td>
<td>53,228</td>
<td>190,917</td>
</tr>
<tr>
<td>Safari</td>
<td>648</td>
<td>122,637</td>
</tr>
<tr>
<td>Wiley</td>
<td>12,201</td>
<td>100,616</td>
</tr>
<tr>
<td>Ebrary</td>
<td>3,036</td>
<td>79,435</td>
</tr>
<tr>
<td>Elsevier</td>
<td>11,064</td>
<td>64,816</td>
</tr>
<tr>
<td>Gale</td>
<td>334,601</td>
<td>56,801</td>
</tr>
<tr>
<td>Oxford U. Press</td>
<td>396</td>
<td>42,036</td>
</tr>
<tr>
<td>ACLS Humanities</td>
<td>3,779</td>
<td>32,430</td>
</tr>
<tr>
<td>CRC NetBase</td>
<td>3,209</td>
<td>22,349</td>
</tr>
<tr>
<td>Credo Reference</td>
<td>633</td>
<td>17,639</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>422,795</strong></td>
<td><strong>729,676</strong></td>
</tr>
</tbody>
</table>

63% of Total E-books
91% of Total Uses
Comparison of per-object cost of print versus electronic storage (relative to print cost).

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Print</th>
<th>Electronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space</td>
<td>High</td>
<td>Much Less</td>
</tr>
<tr>
<td>Cleaning</td>
<td>Low</td>
<td>Much Less</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Medium</td>
<td>Much Less</td>
</tr>
<tr>
<td>Electricity / climate control</td>
<td>Low</td>
<td>Somewhat Less</td>
</tr>
<tr>
<td>Staffing</td>
<td>Low</td>
<td>Somewhat Less</td>
</tr>
<tr>
<td>Circulation / Access</td>
<td>Low</td>
<td>Much Less</td>
</tr>
</tbody>
</table>

From the perspective of library value, e-books:

- Have a low cost-per-ebook purchase
- Have a low cost-per-use
- Are more cost effective to lend, store and preserve than print
- Offer greater accessibility to users (24/7 anywhere)
- Offer greater availability to users (higher uses per e-book than print)
- Can provide broader collection variety due to low cost, package purchases and lower facilities and staffing costs; also
- Often no need to purchase multiple copies
- But....
From the perspective of library value, e-books:

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- Can provide broader collection variety due to low cost, package purchases and lower facilities and staffing costs; also
- Often no need to purchase multiple copies
- But…. What do Users Think?
The Value of E-books to Users

• Users demonstrate their estimation of e-book “value” through use
• But also from the “esteem” point of view
• UIUC participated in a global Elsevier e-book study in fall, 2010
  – 129 UIUC participants used over 800 e-books in 4 weeks
  – E-book study participants filled out logbooks and questionnaires
  – The “esteem” question was asked in multiple ways
  – Open text boxes also allowed for user feedback on their estimation of e-book value.
Survey Methodology

- On October 1, 2010 a mass email invitation was sent to all UIUC faculty and graduate students requesting their voluntary participation in an Elsevier e-book study.
- Participants were given a start-up questionnaire to determine their present experience with e-books and their current preferred format for reading books (p-books or e-books).
- Participants were asked to conduct one of their normal searches for information in their discipline on the Elsevier e-book platform.
- Following each search, and after reading some portion of an Elsevier e-book, a logbook diary entry was completed for each e-book interaction.
- The study asked researchers to fill out logbook diaries for up to four Elsevier e-books and participants were given up to four weeks to complete the diaries.
The Value of E-books to Users

In which field are you working? N=129

- Physical Sciences, 77
- Life Sciences, 21
- Engineering and Computer Science, 22
- Humanities, 4
- Interdisciplinary, 1
- Social Sciences, 3
- Not applicable, 1
The Value of E-books to Users

My position is best described as:

- PhD student: 114 (88%)
- Professor/Researcher/Other: 15 (12%)
The Value of E-books to Users

What is your preferred form at this moment for a scholarly book?

n = 114 (PhD students)

- print, 45
- electronic, 45
- no preferred form, 23
- do not know / no opinion / does not apply, 1
The Value of E-books to Users

What is your preferred form at this moment for a scholarly book?

n = 15 (Professor/Researcher/Other)

- Electronic, 7
- Print, 6
- No preferred form, 2
How frequently do you use printed scholarly books?

n = 129

- (hardly) ever, 6
- occasionally (less than once a month), 38
- on a monthly basis, 29
- on a weekly basis, 41
- on an (almost) daily basis, 15

The Value of E-books to Users
The Value of E-books to Users

How often do you search for (electronic or printed) books?

n = 129

- (hardly ever): 2.3%
- Occasionally (less than once a month): 21.7%
- On a monthly basis: 28.7%
- On a weekly basis: 34.9%
- On an (almost) daily basis: 12.4%
# The Value of E-books to Users

Apart from using the ScienceDirect platform, which other methods did you use in this information search?  
*[CHECK ALL BOXES THAT APPLY]*

<table>
<thead>
<tr>
<th>Method</th>
<th>Responses #</th>
<th>Responses %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific search engines such as Scopus, PubMed or Web of Science</td>
<td>242</td>
<td>46.9%</td>
</tr>
<tr>
<td>Google</td>
<td>221</td>
<td>42.8%</td>
</tr>
<tr>
<td>Google Scholar</td>
<td>217</td>
<td>42.1%</td>
</tr>
<tr>
<td>Library Catalogue of my University</td>
<td>171</td>
<td>33.1%</td>
</tr>
<tr>
<td>Other</td>
<td>38</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

Responses based on 516 search sessions
The Value of E-books to Users

My usage of (printed or electronic) books for research purposes is characterized by:

![Bar chart showing usage of books by different fields and research methods.]

- I use bits of information from a book
- I read one or two chapters from a book
- I read most or all chapters from a book

- Humanities and Social Sciences
- Life Sciences
- Physical Sciences, Engineering and Computer Science
The Value of E-books to Users

Preference for Electronic or Print
Summary: light, medium and heavy usage of books

<table>
<thead>
<tr>
<th>Summary: light, medium and heavy usage of books and preference for electronic or print</th>
<th>% Prefer Electronic</th>
<th>% Prefer Print</th>
<th>% No Preference</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light usage: using bits of information</td>
<td>74%</td>
<td>12%</td>
<td>15%</td>
<td>100%</td>
</tr>
<tr>
<td>Medium usage: reading 1 or 2 chapters</td>
<td>50%</td>
<td>29%</td>
<td>21%</td>
<td>100%</td>
</tr>
<tr>
<td>Heavy usage: reading most/ all chapters</td>
<td>16%</td>
<td>71%</td>
<td>13%</td>
<td>100%</td>
</tr>
</tbody>
</table>
## The Value of E-books to Users

What are the main advantages of E-books from your perspective?  
[PLEASE TICK A MAXIMUM OF 3 BOXES]

<table>
<thead>
<tr>
<th>Advantage</th>
<th># Responses</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 hours/7 days per week access</td>
<td>82</td>
<td>63.6%</td>
</tr>
<tr>
<td>online access</td>
<td>79</td>
<td>61.2%</td>
</tr>
<tr>
<td>easy to search and navigate</td>
<td>52</td>
<td>40.3%</td>
</tr>
<tr>
<td>downloading to laptop</td>
<td>39</td>
<td>30.2%</td>
</tr>
<tr>
<td>easy storage</td>
<td>36</td>
<td>27.9%</td>
</tr>
<tr>
<td>off campus access</td>
<td>33</td>
<td>25.6%</td>
</tr>
<tr>
<td>copying and pasting</td>
<td>16</td>
<td>12.4%</td>
</tr>
<tr>
<td>downloading to e-reader</td>
<td>9</td>
<td>7.0%</td>
</tr>
<tr>
<td>easy to share with colleagues</td>
<td>8</td>
<td>6.2%</td>
</tr>
<tr>
<td>easy to use in an electronic learning environment</td>
<td>6</td>
<td>4.7%</td>
</tr>
<tr>
<td>easy to use multiple documents at once</td>
<td>5</td>
<td>3.9%</td>
</tr>
<tr>
<td>use of multimedia in the E-book</td>
<td>4</td>
<td>3.1%</td>
</tr>
</tbody>
</table>
The Value of E-books to Users

My online behavior includes the following characteristics:
How do you value the information from this Elsevier E-book?

Based on over 800 ebook uses
How do you value the information from this Elsevier E-book?

When comparing the above-mentioned results with the retrieved Elsevier E-book(s) in this information search, I rate the value of the information in the Elsevier E-book(s) as: (n=516)

- Need to have: 12.6%
- Nice to have: 54.8%
- Could have done without it: 27.1%
- Not applicable: 5.4%

Based on over 800 ebook uses
From the perspective of the user, e-books:

- Offer impressive 24/7 accessibility from anywhere
- Are found using multiple search engines
- Are “Need to Have” (12.6%) or “Nice to Have” (54.8%)
- Are not likely to be shared with colleagues, printed out, or be used in “cut and paste”
- Are most likely to be read from the screen or briefly reviewed
- Need to have the ability to be downloaded in some format
- Are often difficult to access, despite strong interest in the title.
What about a Humanities E-book User?

- Phase II of this ebook research initiated Fall 2012
- Two aspects:
  - ebrary PDA project
  - Survey of e-books users in the Humanities
- Disciplines Studied:

![Discipline Study Graph]

- Faculty
- Masters Students
- PhD Students
What about a Humanities E-book User?

- Survey data forthcoming; surveys now being distributed
- ebrary PDA project includes 7,000 humanities e-books added to our Voyager catalog for instant access. Study began November 2012 and will continue until June 2013.
- Preliminary data from ebrary e-book use show interesting use patterns.
What about a Humanities E-book User?

Total Title Access: 373
November 2012 – March 28, 2013

- Short Term Loans: 352
- Purchased: 21
Conclusions

• E-books offer value to the library in both a monetary way and through documented “usefulness” to patrons (although YMMD).

• As noted by Courant and Neilsen, e-books are less expensive to own, circulate, maintain and preserve than print books.

• E-books offer value to patrons, who value them due to
  – Accessibility and availability (24/7, literally anywhere in the world)
  – Portability
  – Search and navigation capabilities

• There is still plenty of room for improvement!
Conclusions

• Despite documented value to both users and libraries, some e-book issues remain to be solved, including:

  – Non-standard downloading policies
  – Non-standard cut and paste capabilities
  – Confusion about what e-books are locally available
  – Inadequate and non-standard discovery tools
  – Digital rights management
  – Perpetual access “guarantees”
  – Sparse content in some disciplines

  – However… all predictions are for these issues, and others that have yet to arise, to be solved within the next 5-10 years.
Questions?

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• Tina Chrzastowski
  – chrz@illinois.edu

• Lynn Wiley
  – lnwiley@illinois.edu

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LibValue.org
Wrap-Up

Martha Kyrillidou

Senior Director
ARL Statistics and Service Quality Programs
Association of Research Libraries
Related Efforts & Research

• “It’s All in the Metadata”: Towards a Better QA for Ebooks
  by Ravit David, University of Toronto and Scholars Portal, and Dana Thomas, Ryerson University and Scholars Portal, 2012 Library Assessment Conference

• MINES for e-Books by Brinley Franklin, University of Connecticut, and Terry Plum, Simmons College, 2012 Library Assessment Conference

• Identifying Users of Demand-Driven E-book Programs: Applications for Collection Development
  Emily K. Chan and Susan L. Kendall, ACRL 2013 Conference
• Apr 18: LibValue: Books and E-books

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Thank you!

Special thanks to UIUC Graduate Assistants Dan Tracy and William Weathers and to Wendy Shelburne, Michael Norman and Elsevier.

This research is a part of Values, Outcomes, and Return on Investment of Academic Libraries ("Lib-Value"), a three year study funded by the Institute of Museum and Library Services IMLS grant # LG-06-09-0152-09.