

# Assessing the Value of Ebooks to Academic Libraries and Users

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  - What is the value of ebooks to libraries?



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- Which led to a third question:



# Assessing the Value of Ebooks to Academic Libraries and Users

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  - What is the value of ebooks to libraries?
  - What is the value of ebooks to users?
- Which led to a third question:
  - What is value?



# What is Value?

(from dictionary.com)

## val·ue

[val-yoo] noun, verb, -ued, -u·ing.

- to calculate or reckon the monetary value of; give a specified material or financial value to; assess; appraise: to value their assets.
- to consider with respect to worth, excellence, usefulness, or importance.
- to regard or esteem highly: He values their friendship.



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# Data Sets Employed to Answer Research Questions

- Longitudinal ebook collection growth data from UIUC
- Longitudinal ebook use and cost data from UIUC
- Longitudinal ebook cost-per-use data from UIUC
- UIUC ebook user study conducted by Elsevier, Fall 2010
  - 129 UIUC participants used over 800 ebooks in 4 weeks;
  - Ebook study participants filled out logbooks and questionnaires
  - The “esteem” question was asked in multiple ways



# Overall Ebook Growth at UIUC 2008-2011

Fiscal Year	#Ebooks Added Per Year*	Cumulative Ebook Total	Percent Increase Per Year
2007		292,002	NA
2008	27,531	345,186	9%
2009	66,178	411,364	19%
2010	73,404	484,768	18%
2011	129,435	614,203	27%



# UIUC Cost Per Ebook 2008-2011

Fiscal Year	\$ Spent	#New Ebooks	\$ per Ebook
2008	\$224,047	27,531	\$8.13
2009	\$204,678	66,178	\$3.09
2010	\$383,167	73,404	\$5.22
2011	\$732,725	129,435	\$5.66



# Definition of an Ebook “Use”

- For the purpose of this study, a "use" of an ebook is counted when a user successfully views or downloads a section (generally by chapter) of an ebook 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.
- 33 of 40 (82%) of ebook publishers were able to provide use data.



# Cost and Use Data for UIUC Ebooks 2008-2011

Fiscal Year	#Ebooks (Cumulative)	Amount Spent	#Ebooks Added from Previous Year	Avg. \$ per new Ebook	Total Uses	Cost Per Use
2007	292,002	\$185,991				
2008	345,186	\$224,047	27,531	\$8.14	151,089	\$1.48
2009	411,364	\$204,678	66,178	\$3.09	251,273	\$0.81
2010	484,768	\$383,167	73,404	\$5.22	563,871	\$0.68
2011	614,203	\$732,725	129,435	\$5.66	709,944	\$1.05

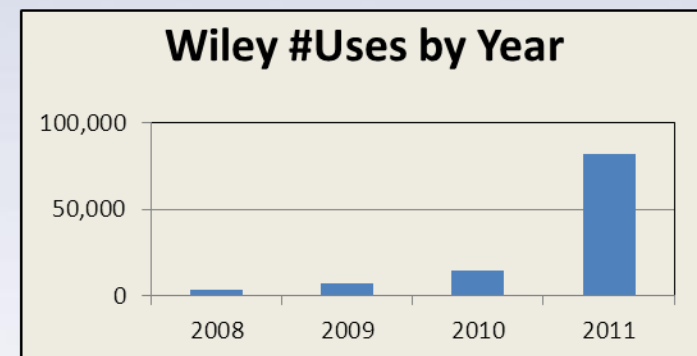
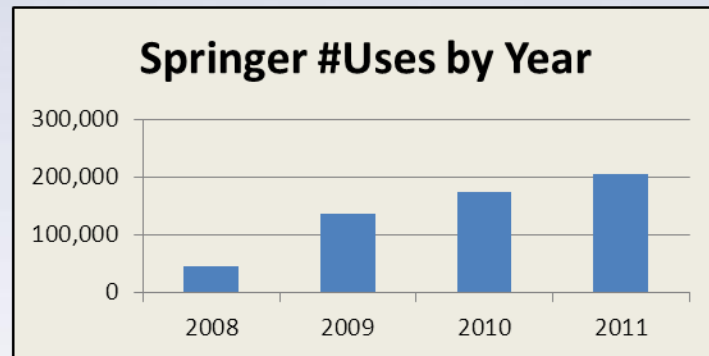
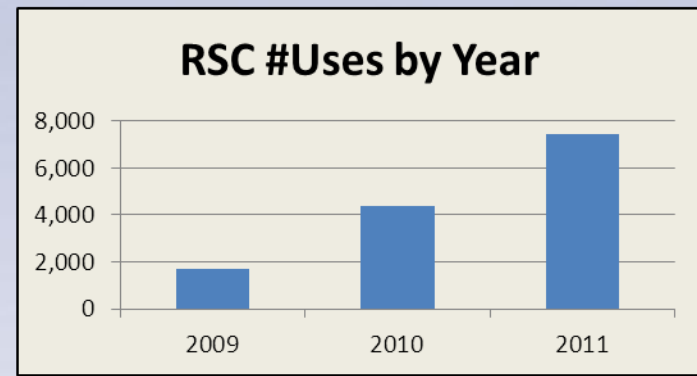
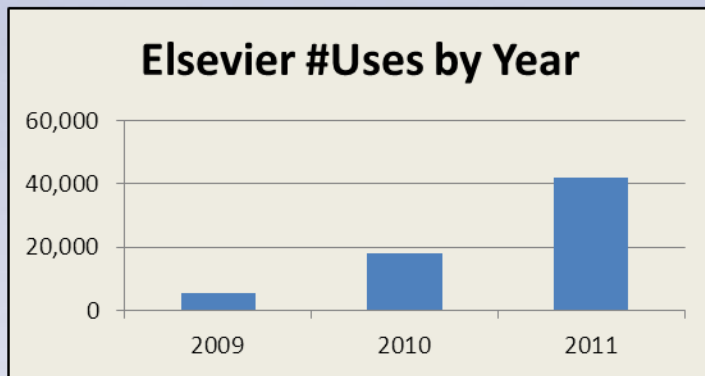


# Top 10 FY2011 Ebook Publishers by Number of Volumes Available at UIUC

<u>Publisher</u>	<u>#Ebooks in FY2011</u>	<u>FY2011 Uses</u>
Gale (includes Eighteenth Century Collections Online, Making of American Law, Making of Modern Mind)	332,609	69,769
Early English Books Online	106,853	94
Archives of Americana	66,892	Unknown
Springer	45,924	206,740
EBSCO	11,936	Unknown
Wiley	10,448	88,875
CRCNetBase	6,857	6,768
Organisation for Economic Co-operation and Development	6,615	545
Netlibrary	6,182	1,234
American Council of Learned Societies	3,368	33,123
<b>Total</b>	<b>597,684 (97%)</b>	<b>407,148 (57%)</b>

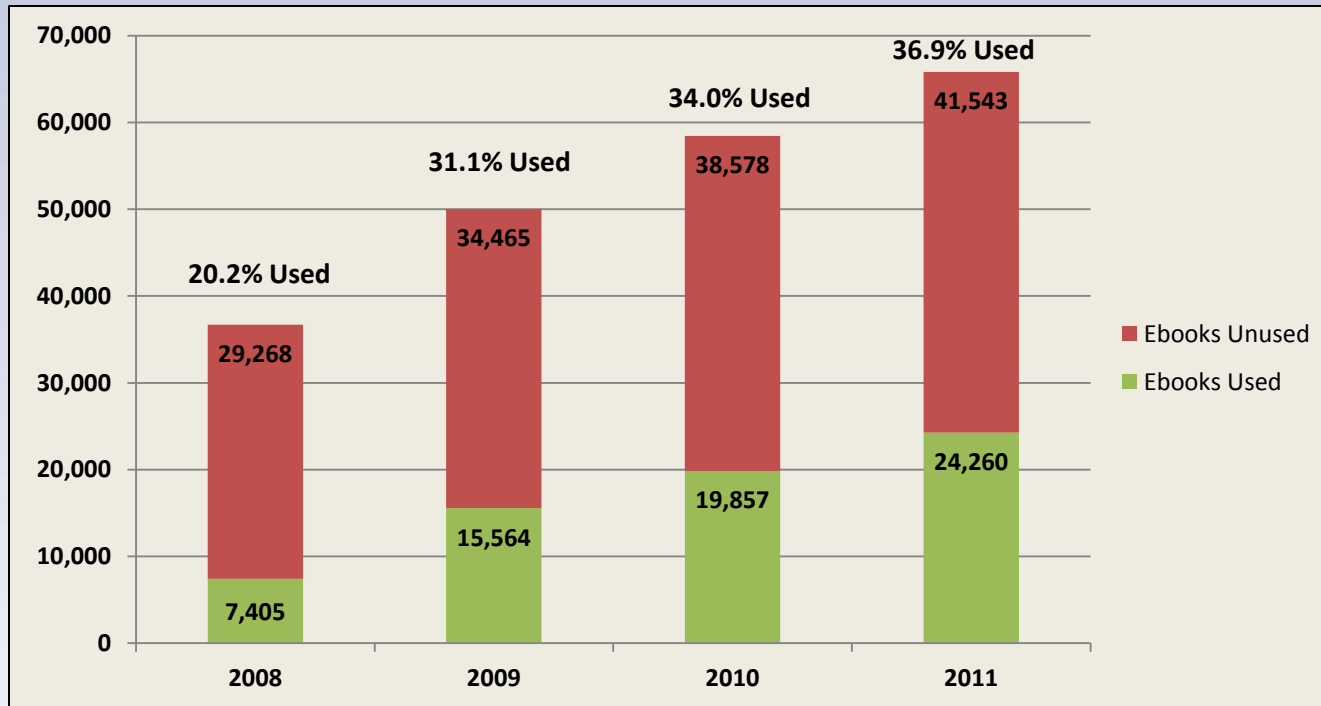


# UIUC Number of Ebook Uses/Year for Four Publishers

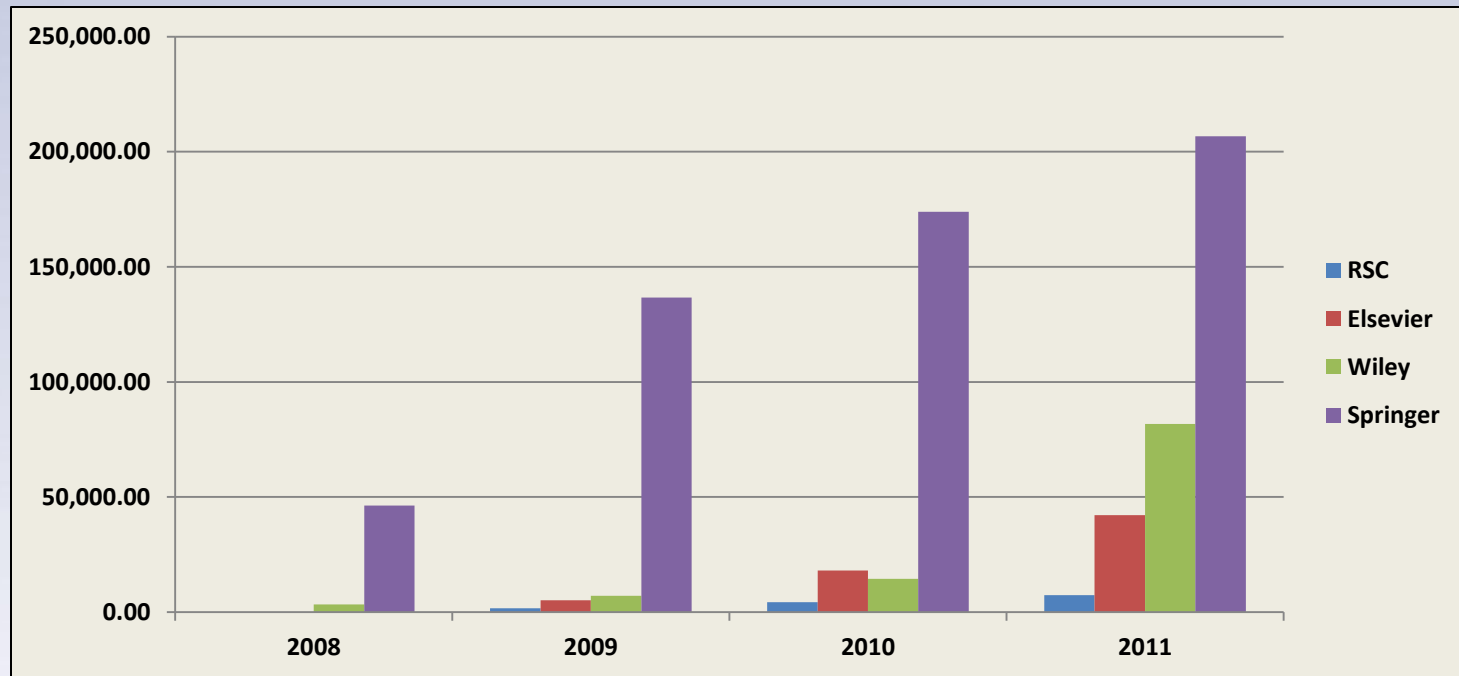




# UIUC Ebooks Used and Unused Wiley, Elsevier, RSC and Springer



# UIUC Ebook Uses by Publisher By Year



Use is directly correlated to number of ebooks available per publisher. However....

## UIUC Library Search Assistant Results

Search Term(s) Entered:

Your search **transition metal chemistry** matched a [journal/magazine title\(s\)](#).

[Ask a Librarian](#) for live help with this question

[\[+/-\]](#) Related terms:

### Finished Searching

#### Books, Multimedia in UIUC & Illinois Libraries and Full-Text Books

University of Illinois Library Classic Voyager Catalog	<a href="#">318 MATCHES</a> <a href="#">5 E-BOOKS</a>
University of Illinois Library VuFind+ Catalog	<a href="#">364 MATCHES</a> <a href="#">53 PHRASE</a> <a href="#">60 TITLE</a> <a href="#">5 E-BOOKS</a>
I-Share Library Catalog [state-wide Illinois, academic]	<a href="#">627 CATALOG MATCHES</a>
Springer E-Books	<a href="#">12204 CHAPTERS</a> <a href="#">27 TITLES</a> <a href="#">287 PROTOCOLS</a>
Elsevier E-Books	<a href="#">10728 E-BOOK MATCHES</a>
Wiley E-Books	<a href="#">17723 E-BOOK MATCHES</a>
Google Books	<a href="#">556 E-BOOK MATCHES</a>
Hathi Trust E-Books	<a href="#">185 E-BOOK MATCHES</a>
IDEALS - UIUC Reports, Papers	<a href="#">11 MATCHES</a>
Internet Archive Books	<a href="#">1 BOOK MATCHES</a>

#### Electronic Journals and Series Titles

Online Research Resources (ORR) Titles	<a href="#">6 TITLE MATCHES</a>
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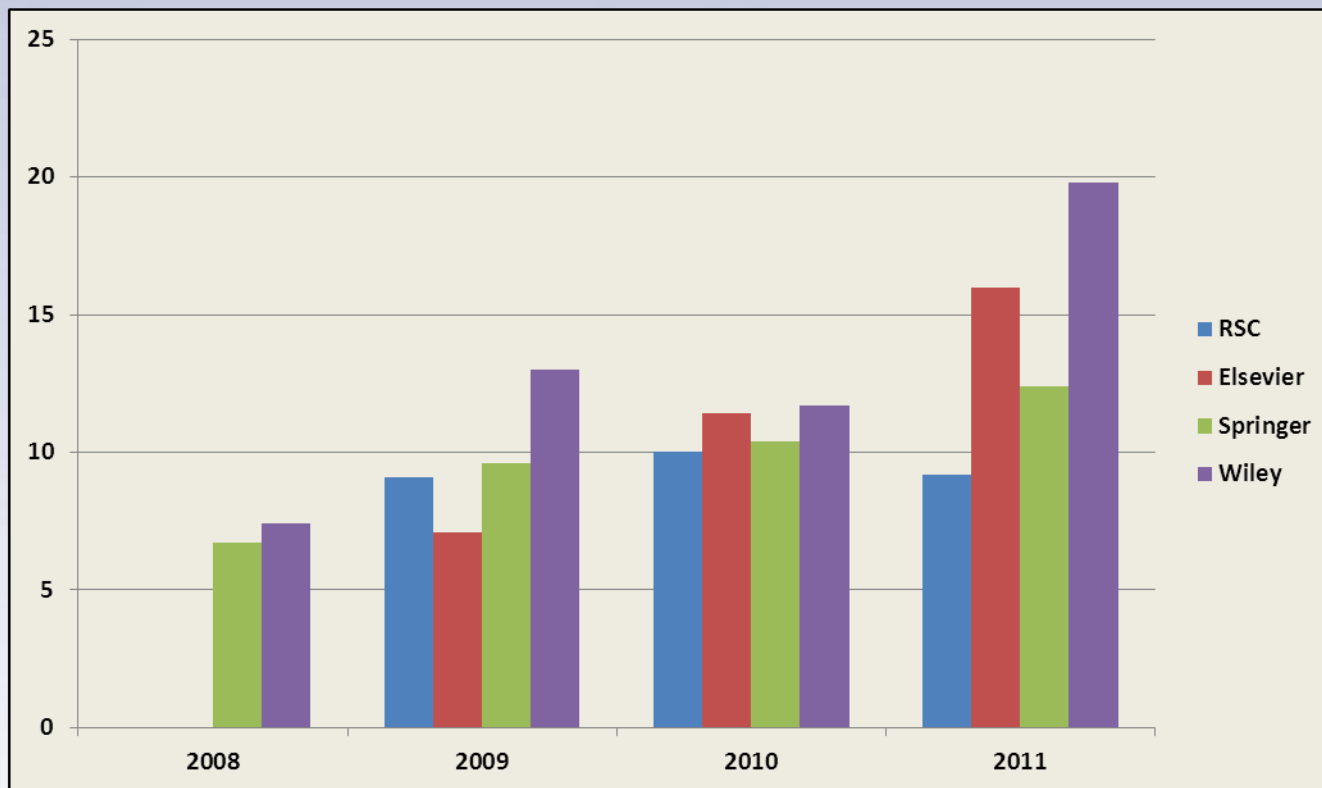
# Ebook Searching at UIUC

Easy Search E-book Clickthroughs for September 2010 thru May 2011.  
Data show the number of times users clicked on  
the results link for each of these targets:

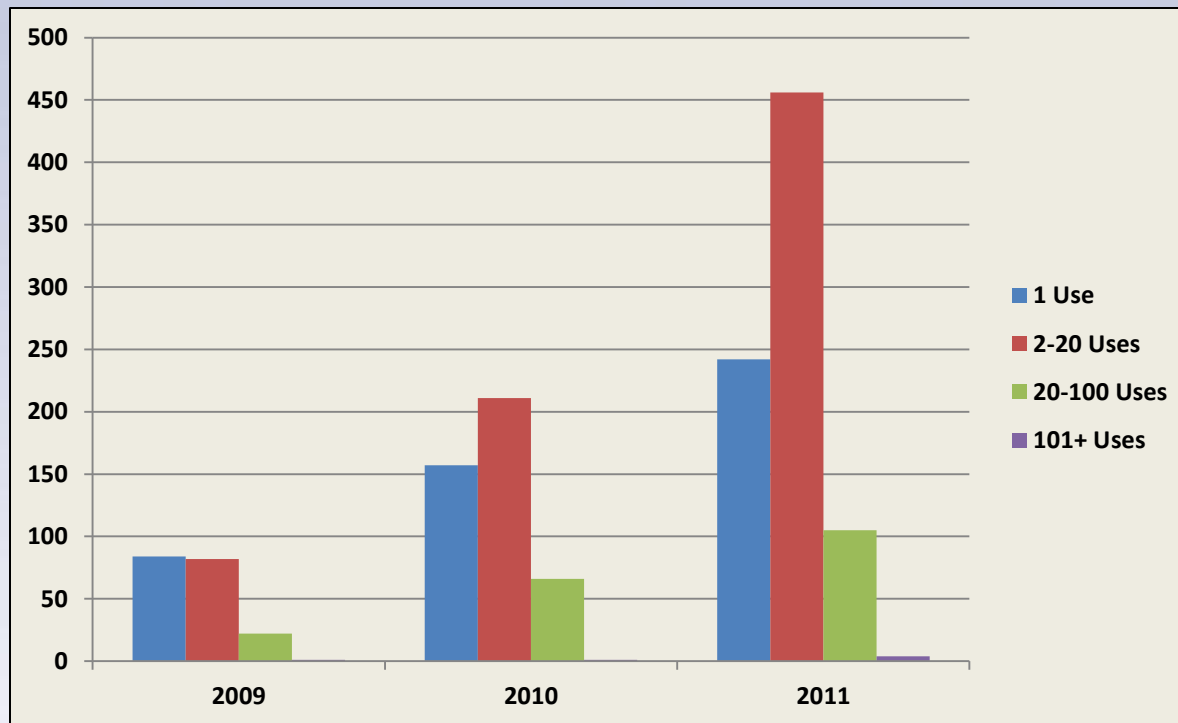
Google Books	34,081
Springer (titles, chapter, series, protocol)	29,906
Elsevier	17,984
Wiley	17,101
Hathi Trust	8,335
Internet Archive	4,450



# Use Frequency: Average uses per ebook



# RSC Ebooks at UIUC by Use Frequency



149 Uses in 2009 of "Molecular Biology and Biotechnology"

130 Uses in 2010 of "Handbook of Surface Plasmon Resonance"

317 Uses in 2011 of "Food Flavors and Chemistry"

## Comparison of per-object cost of print versus electronic storage (relative to print cost).

Cost Element	Print	Electronic
Space	High	Much Less
Cleaning	Low	Much Less
Maintenance	Medium	Much Less
Electricity / climate control	Low	Somewhat Less
Staffing	Low	Somewhat Less
Circulation / Access	Low	Much Less

From: Courant and Nielsen, 2010, "On the Cost of Keeping a Book."



# From the perspective of library value, ebooks:

- 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 ebook 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....





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- Often no need to purchase multiple copies
- But.... What do Users Think?



# The Value of Ebooks to Users

- Users demonstrate their estimation of ebook “value” through use
- But also from the “esteem” point of view
- UIUC participated in a global Elsevier ebook study in fall, 2010
  - 129 UIUC participants used over 800 ebooks in 4 weeks
  - Ebook 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 ebook value.

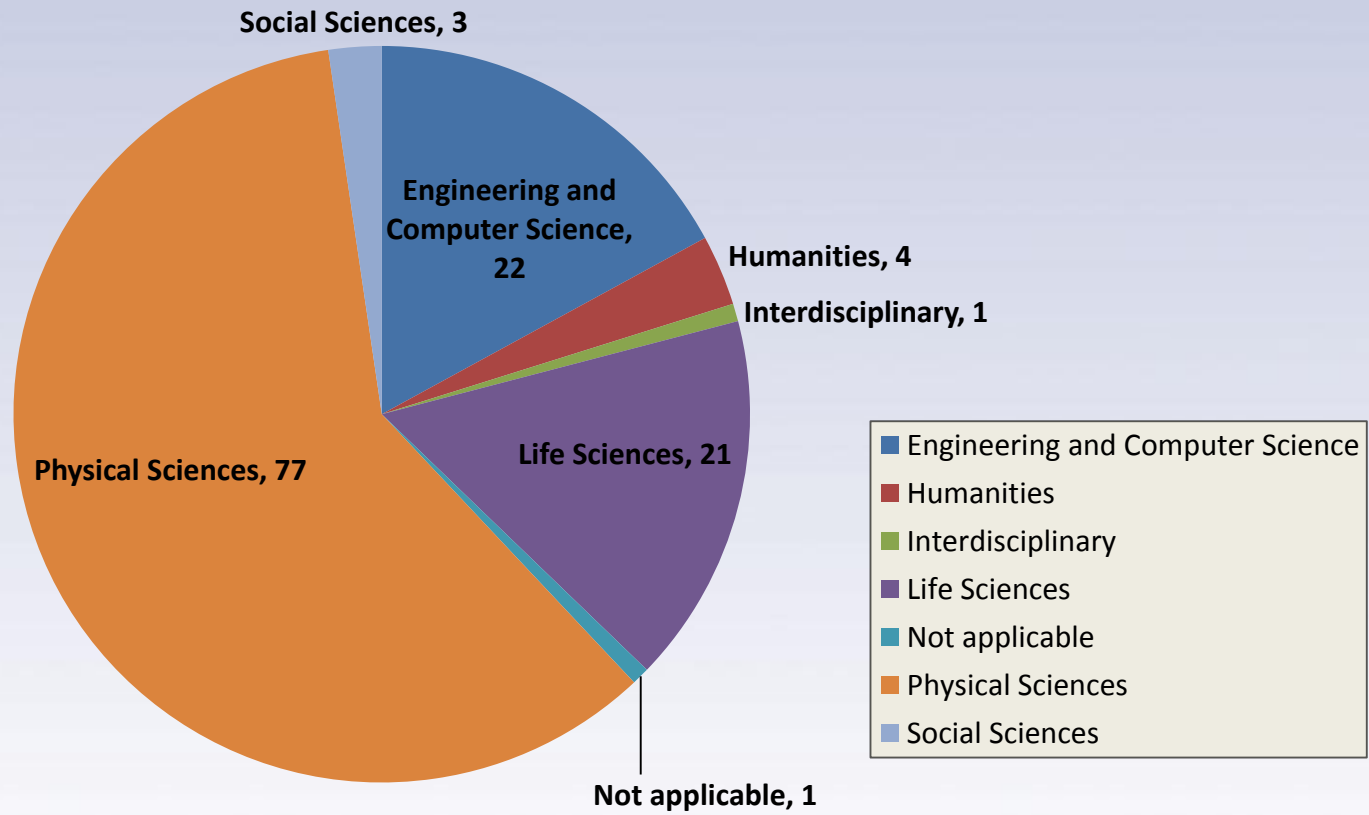


# Survey Methodology

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

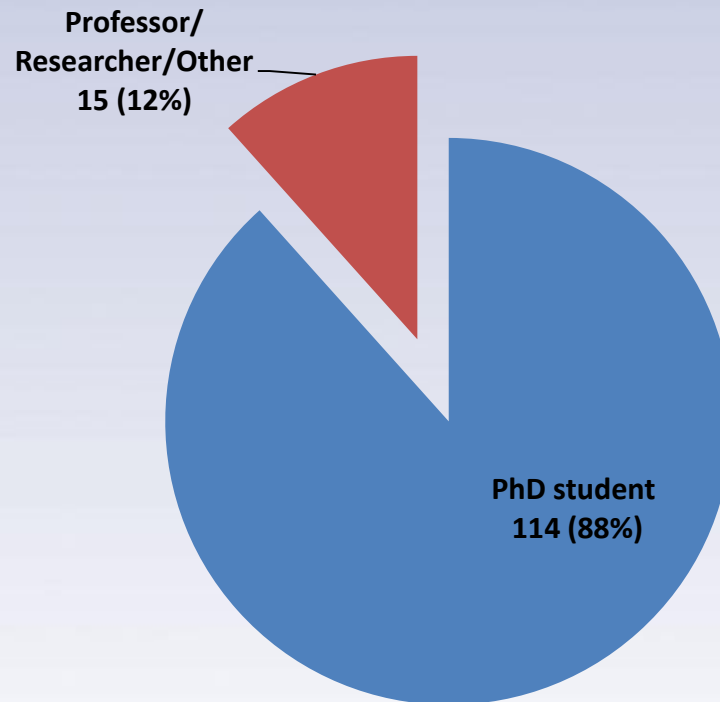
# The Value of Ebooks to Users

In which field are you working? N=129



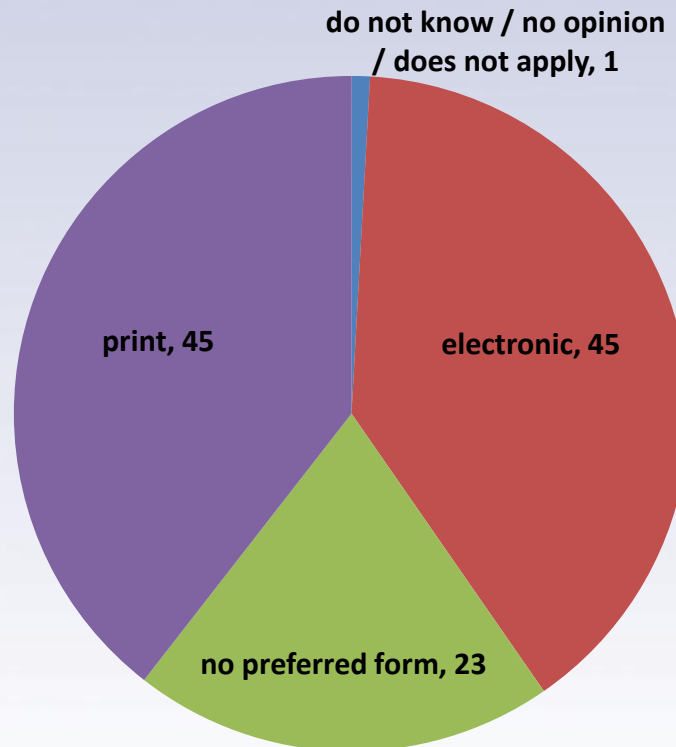
# The Value of Ebooks to Users

My position is best described as:



# The Value of Ebooks to Users

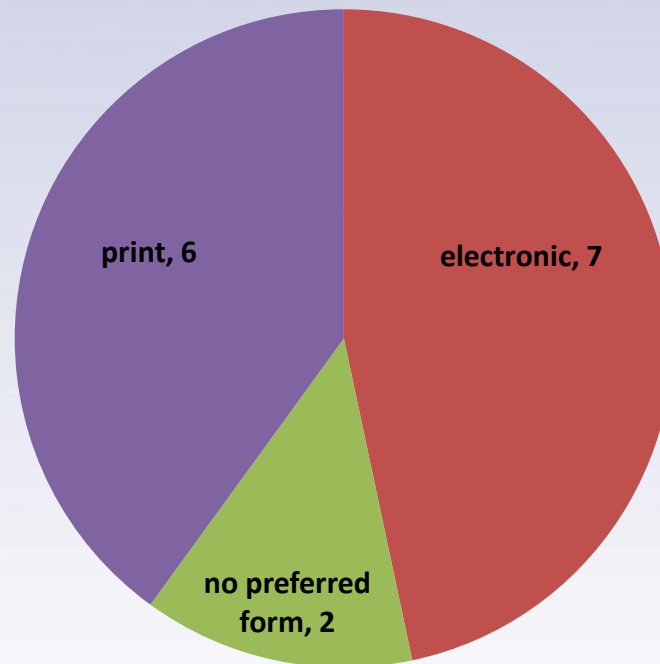
What is your preferred form at this moment for a scholarly book?  
n = 114 (PhD students)



# The Value of Ebooks to Users

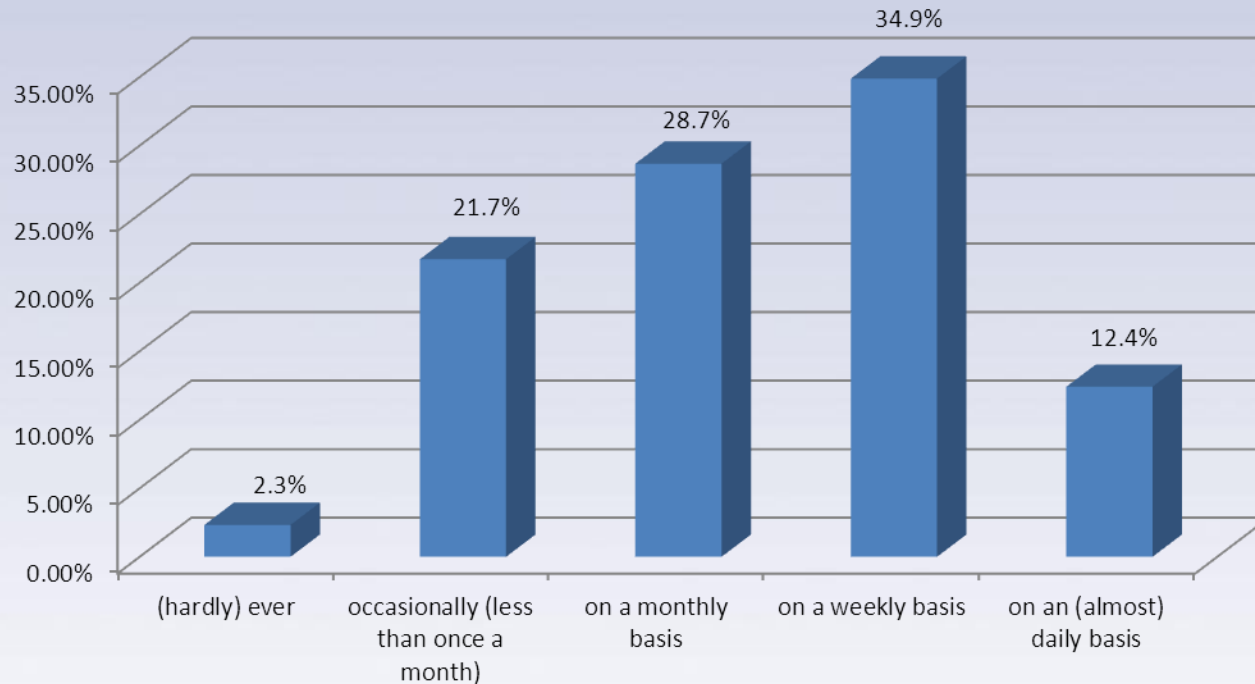
What is your preferred form at this moment for a scholarly book?

n = 15 (Professor/Researcher/Other )



# The Value of Ebooks to Users

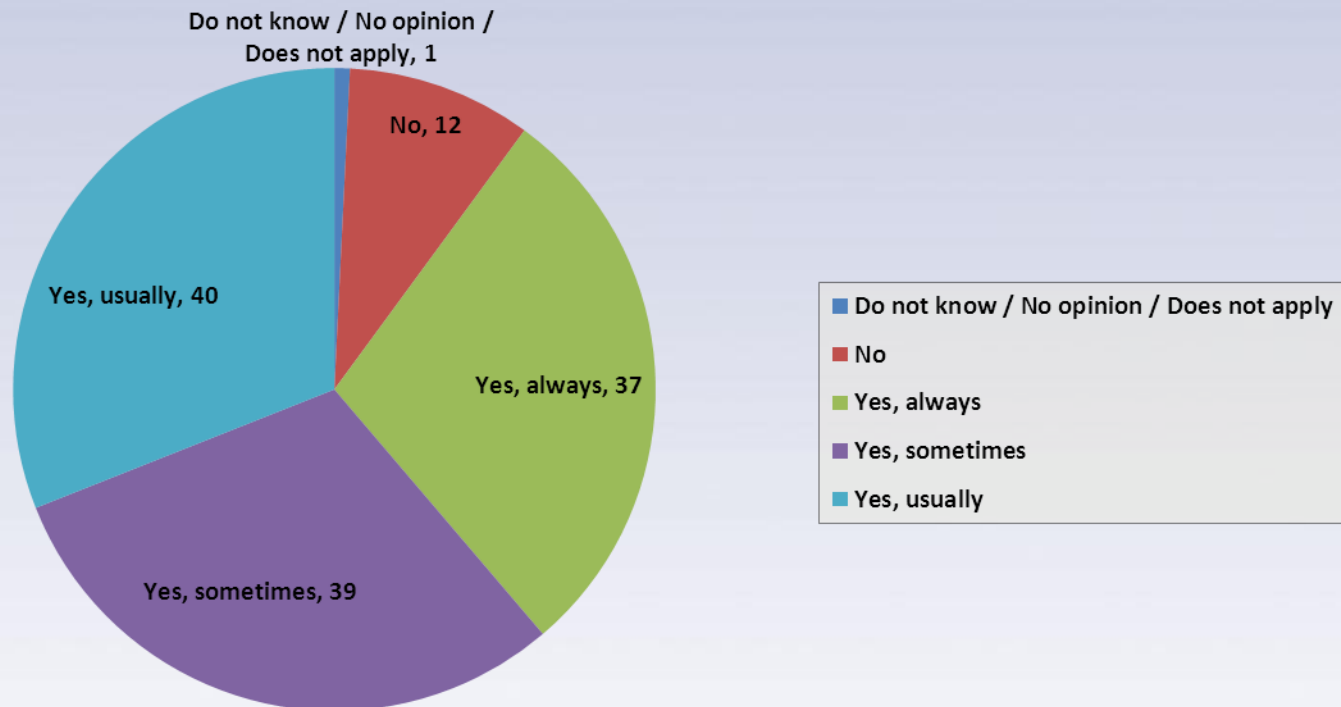
How often do you search for (electronic or printed) books?  
n = 129





# The Value of Ebooks to Users

Do you use the Library Catalogue of your University in your search for books? n = 129



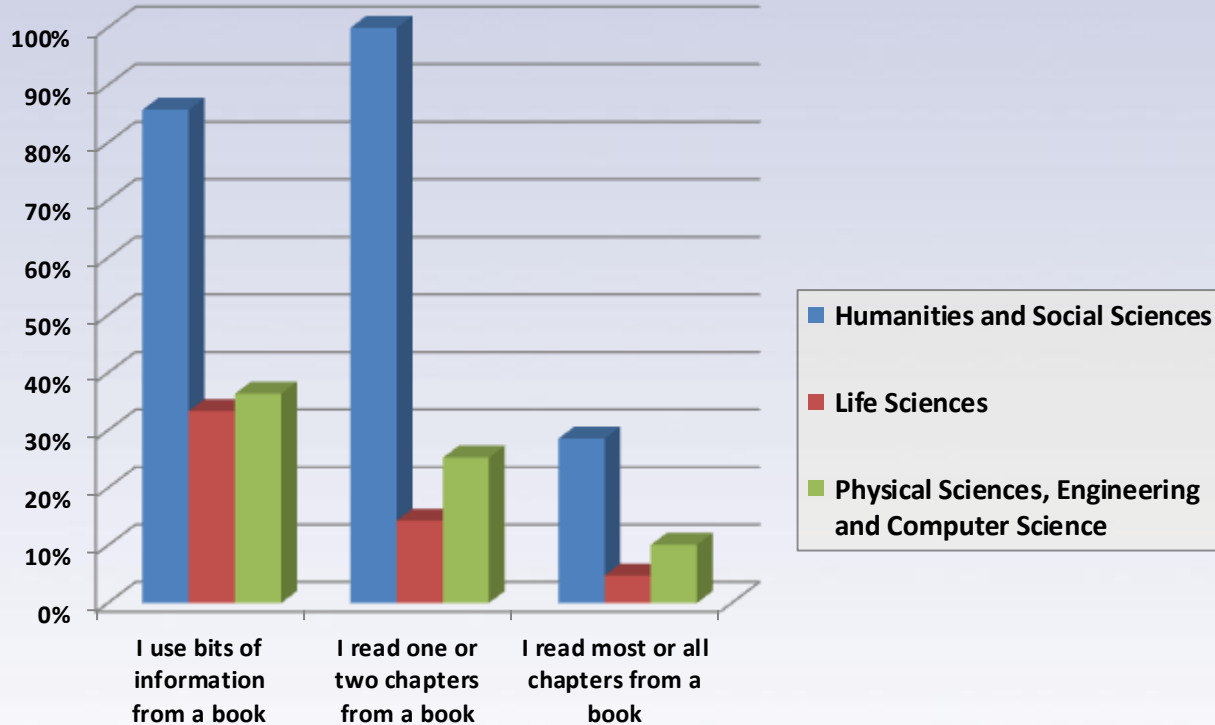
# The Value of Ebooks to Users

<i>Apart from using the ScienceDirect platform, which other methods did you use in this information search? [CHECK ALL BOXES THAT APPLY]</i>	Responses #	Responses %
<b>Scientific search engines such as Scopus, PubMed or Web of Science</b>	<b>242</b>	<b>46.9%</b>
<b>Google</b>	<b>221</b>	<b>42.8%</b>
<b>Google Scholar</b>	<b>217</b>	<b>42.1%</b>
<b>Library Catalogue of my University</b>	<b>171</b>	<b>33.1%</b>
<b>Other</b>	<b>38</b>	<b>7.4%</b>



# The Value of Ebooks to Users

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



# The Value of Ebooks to Users

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

Summary: light, medium and heavy usage of books and preference for electronic or print	% Prefer Electronic	% Prefer Print	% No Preference	Totals
Light usage: using bits of information	74%	12%	15%	100%
Medium usage: reading 1 or 2 chapters	50%	29%	21%	100%
Heavy usage: reading most/ all chapters	16%	71%	13%	100%



# The Value of Ebooks to Users

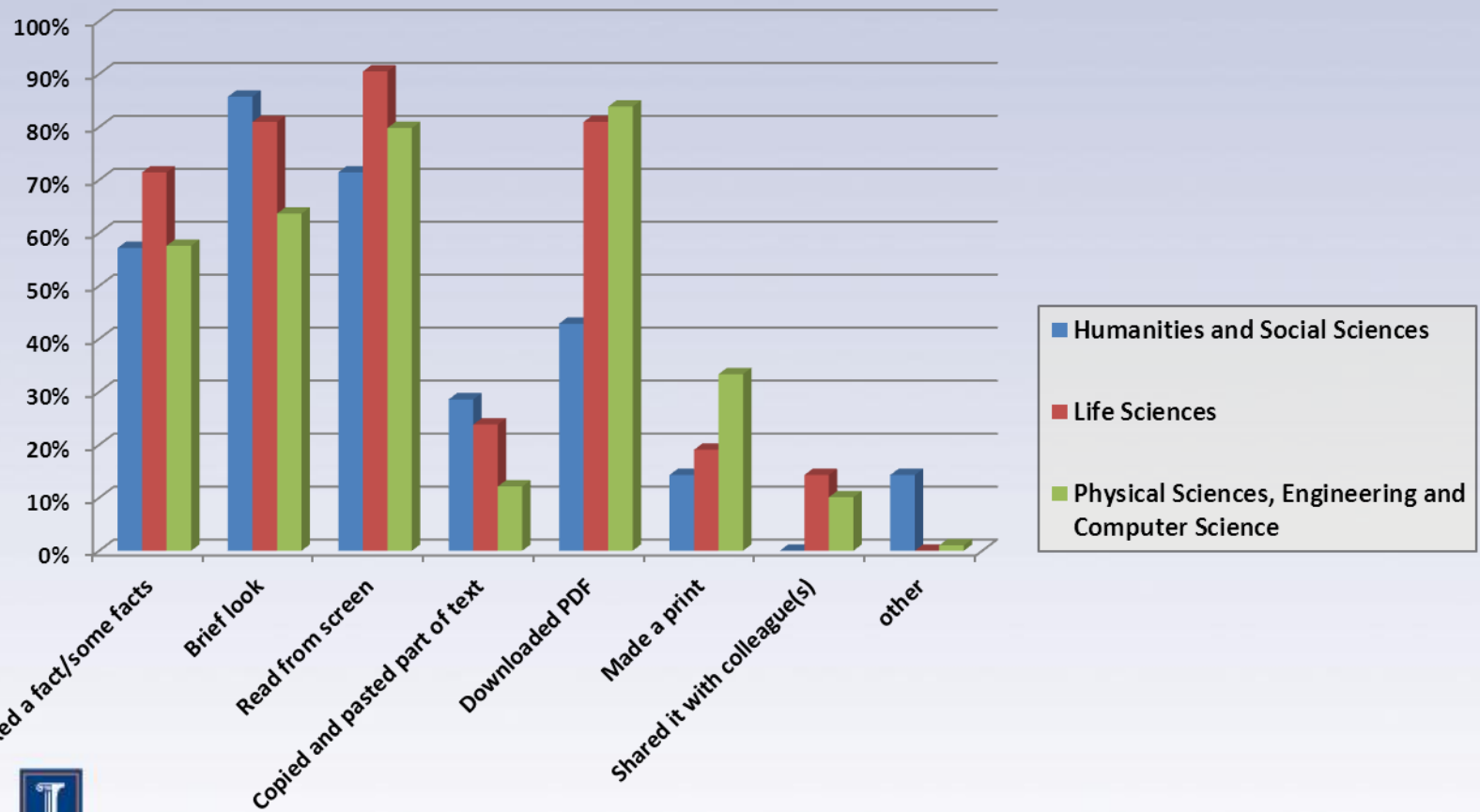
What are the main advantages of E-books from your perspective?  
[PLEASE TICK A MAXIMUM OF 3 BOXES]

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

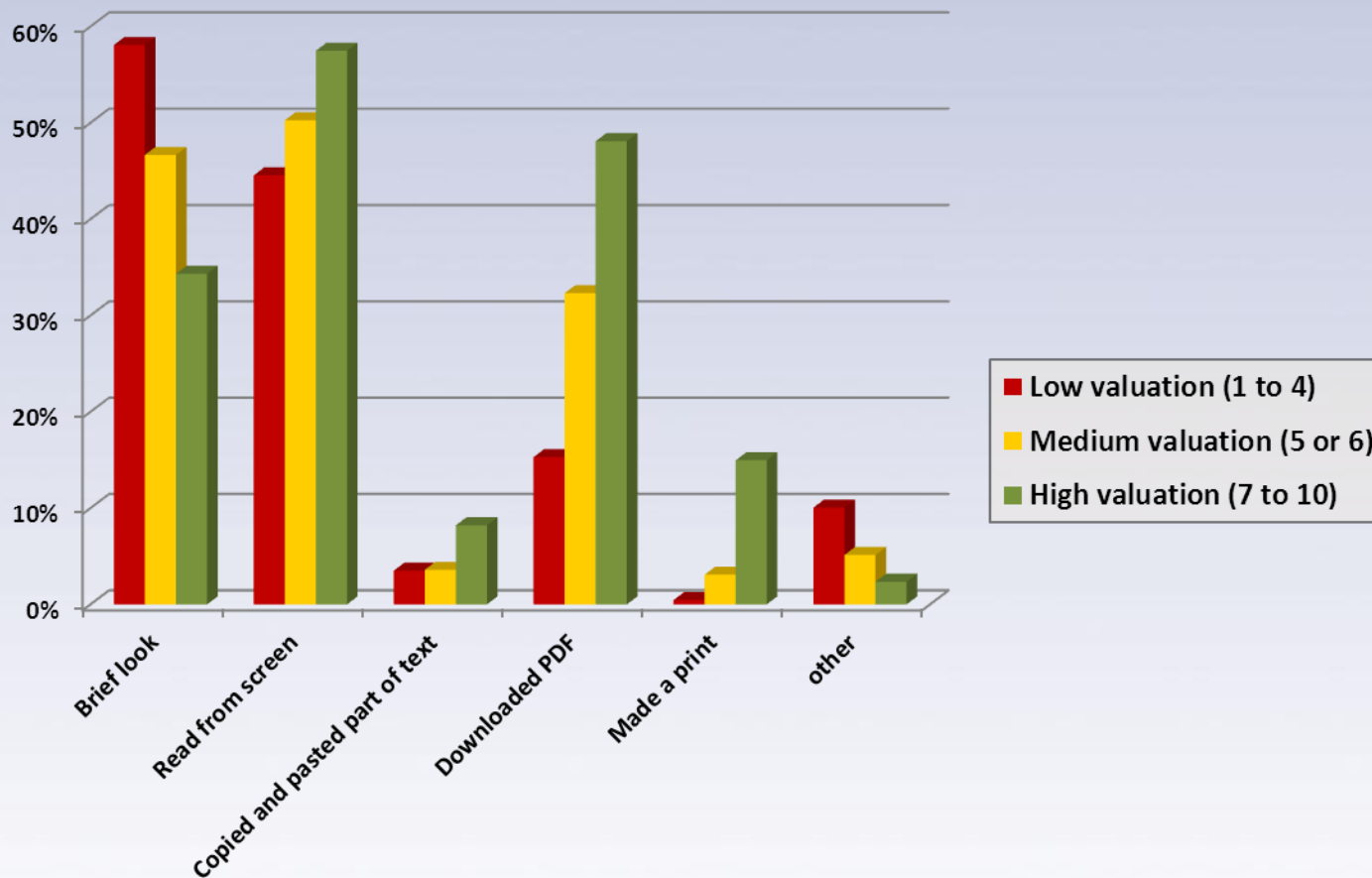


# The Value of Ebooks to Users

My online behavior includes the following characteristics:

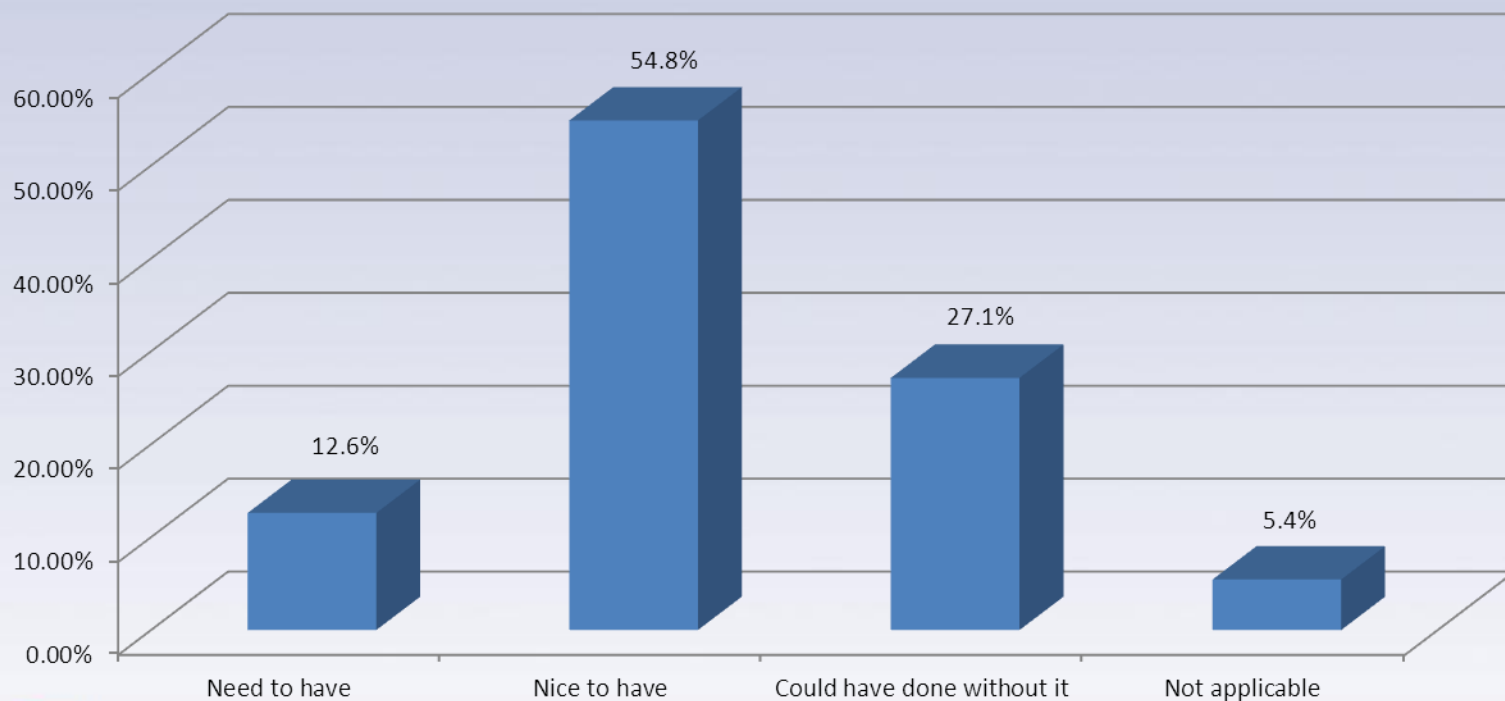


# How do you value the information from this Elsevier E-book?



# 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)





# Comment Box Responses Following Value Questions

Comment Description	Not Clear	Negative	Positive
Lack of relevant material	2	89	0
Did not have access to material	10	57	5
Did no better providing information than other resources (Google, journal articles)	5	27	0
Ebook was convenient and easy to access	2	0	6
Not clear	55	0	1
Obtained relevant/useful information	2	0	79
Liked ability to search within the ebooks	0	0	2
Would serve as a nice additional resource	0	1	13
Liked the ebook because it gave background information	4	1	39
Liked the ebook because it gave good detail	0	0	1
Search is good	0	0	9
Search results similar to other sources	1	1	0
Did not like search	0	6	0
Contained current information	0	0	1
E-book was not up-to-date enough	0	8	0
Information in E-book was too general	0	3	0
Liked platorm search	0	0	2
E-book content was too specific	0	3	0
Totals	81	196	158

# From the perspective of the user, ebooks:

- Offer impressive 24/7 accessibility from anywhere
- Are found using multiple search engines
- Are “Nice to Have” (12.6%) or “Need 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.



# Conclusions

- Ebooks offer value to the library in both a monetary way and through documented “usefulness” to patrons (although YMMD).
- As noted by Courant and Neilsen, ebooks are less expensive to own, circulate, maintain and preserve than print books.
- Ebooks offer value to patrons, who “esteem” 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 ebook issues remain to be solved, including:
  - Non-standard downloading policies
  - Non-standard cut and paste capabilities
  - Confusion about what ebooks 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.



**Thank you!**

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IMLS grant # LG-06-09-0152-09.**

