The Value of Purchasing E-book Collections From A Large Publisher

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Miami University Libraries
I think we should give it another shot.

We should break up, and I can prove it.

Our relationship

Huh.

Maybe you're right.

I knew data would convince you.

No, I just think I can do better than someone who doesn't label her axes.

http://xkcd.com/833/

by Randall Monroe
Overview

- Background
- User attitudes toward e-books at Miami University
- Springer e-book collections & SpringerLink
- OhioLINK’s EBC
- Methodology
- Findings: titles used, the Pareto principle, the long tail, inflationary effect, downloads by book type, past usage as a predictor of future use, the value equation
- Conclusions
- Next steps
- Questions & Comments
Background & Context

- Miami University – public university, 16,000 students, known for quality teaching and learning, relatively small graduate student population (less than 10%)

- Transitioning to a mostly digital library

- Experimenting with a variety of providers, platforms, pricing and selection models

- OhioLINK (publisher deals), PDA pilot with ebrary, preparing a test of STLs, selectors are beginning to privilege e-books.
Q Methodology Study in 2008 & Large-n Survey in 2009 (n=735)

- Book Lovers (34%)
  - have an inherent affinity for the print form

- Technophiles (23%)
  - are strongly interested in the possibilities of new technology as regards the book

- Pragmatists (17%)
  - are the most neutral of the four, as they are most interested in content and see pros and cons of both formats

- Printers (26%)
  - printers prefer print books but are distinguished from Book Lovers in that they have specific difficulties with the usability of e-books
Where Do We Go From Here?

- Ramp up our e-book collections (local and consortial)
- Many more questions than answers: single or multi-user access? unlimited usage or a ceiling? owned or leased? local load or vendor/publisher platform? collection level, title-by-title, PDA, STL/PPV?
- Time to assess some of our experiments to-date. What does the data tell us?
- What’s the value of purchasing e-book collections from a large publisher?
- Preliminary study that focuses on the 2008 Springer e-book collection and its use over a three-year time period.
Digital Watermarking
Selected Papers
Hyoun-joong Kim, Stefan Katzenbeisser and Anthony T.S. Ho

Lecture Notes in Computer Science

Commenced Publication in 1973
Founding and Former Series Editors:
Gerhard Goos, Juris Hartmanis, and Jan van Leeuwen

View E-Book at SpringerLink
OhioLINK Electronic Book Center (EBC)

- What is it?
- What’s in it?
- What about the publisher’s platform?
- What publishers are included?
  - ABC-Clio
  - Chadwyck-Healey (ProQuest)
  - Gale
  - Oxford University Press
  - Sage
  - Springer
- What else is in the EBC?
A Robust Watermarking Scheme for H.264

A Robust Watermarking Scheme for H.264 by Jian Li, Hongmei Liu, Jiwu Huang, and Yongping Zhang

1. A Robust Watermarking Scheme for H.264

A Robust Watermarking Scheme for H.264 by Jian Li, Hongmei Liu, Jiwu Huang, and Yongping Zhang

Abstract: A Robust Watermarking Scheme for H.264 with the following contributions: 1) embed the watermark in a H.264 new syntax element named reference index; 2) propose a modifying the current block algorithm to improve the robustness of the scheme; 3) modify the current block by means of a geometry method, which makes the modifying algorithm degrades the video quality as slightly as possible. Experimental results have demonstrated the good performance of our scheme. 1 Introduction H.264 is gradually accepted to be a dominant video coding standard. It is time to develop copyright protection methods appropriate to it. Watermarking is widely considered a possible solution. Since digital video is generally stored and distributed in compressed format, it is time-consuming to decode and re-encode video for embedding watermark. The approach of hiding watermark in video bitstream is more reasonable to practical applications. However such scheme is closely related with specific video coding standard. In most cases, applying existing algorithms to a new standard is difficult. A few literatures have discussed the issues mentioned above. Ho et al. [1] proposed a hybrid watermarking scheme. Authors embedded the robust watermark into special DCT coefficients of I-frames, and extracted it from video bitstream directly. Literature [2] extended the method to P-frames. But Ho’s scheme is sensitive to some attacks followed by recompression. The reason is that syntax elements for embedding watermark tend to be changed or lost in the second coding process. Noorkamal and Merseineau in literatures [3] and [4] gave a robust algorithm scheme with controllable detection performance. To reduce the complexity of the algorithm, authors embedded watermark in the residual of I-frames and thus avoid decompressing the video; to gain robustness against prediction mode changing, like [5], they extracted watermark from the decoded video sequence. They also extended the method to P-frames in [6]. Noorkamal’s scheme was more robust, but its detection process was very complex. In this work was supported by NSFC (90604008, 60633030), 973 Program (2006CB303104) and NSF of Guangdong (06032191). H.J. Kim, S.
Methodology

- Copyright year 2008 & added to OhioLINK’s EBC in 2008
- \( n = 2,529 \) Springer e-book titles
- Compiled usage from 2008-2010 using Standard COUNTER BR2 reports & OhioLINK EBC download reports
- Springer’s eBook Title List
- SPSS
In God we trust. Everyone else, bring data: on.nyc.gov/oHMCKo #NYC #Smoking #PublicHealth

15 Sep via web

Retweeted by patmmccann and 100+ others
Title Use: 2008-2010, n=2,529

- Titles with use: 23%
- Titles with no use: 77%
Benchmarks


- 40% of print books are unused six years after purchase

Springer e-books: an average of 194 titles accessed for first time each year

- 2008 – 209 titles used for the 1\textsuperscript{st} time
- 2009 – 240/308 titles used for the 1\textsuperscript{st} time
- 2010 – 133/213 titles used for the 1\textsuperscript{st} time

Trend shows that 54% of our e-books will be unused after six years
More Benchmarks


- fewer than 40% of the purchased Springer e-books have not been used within two years of purchase


- ~19% of e-book titles have been accessed at least once
- 43,723 books from NetLibrary & Ebrary
Pareto Principle

80/20 Rule

20% of used titles
(116/582)

accounts for

80% of total downloads
(6,370/7,963)
Long Tail: Infrequently Used Titles

- 188/582 titles had 1 use
- 82/582 titles had 2 uses
- 48/582 titles had 3 uses

OR

318/582 titles had 3 uses or less (54.6%)  
Constitute 6.2% of the total downloads (7,963)
Long Tail: Infrequently Used Titles

Titles With 3 Uses or Less

Percentage of Titles Used 1, 2, and 3 Times:
- 1 use: 30%
- 2 uses: 15%
- 3 uses: 5%
Few High Use Titles Dominate

#1 Title

Algorithms and Data Structures

2,264 uses (or 28.4%) of the total uses over 3 years
Inflationary Effect: E-Journals

E-Journal Downloads

<table>
<thead>
<tr>
<th>Year</th>
<th>EJC Downloads</th>
<th>Springer Downloads</th>
</tr>
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<tr>
<td>2008</td>
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<td>5,000</td>
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<tr>
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<td>2010</td>
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Inflationary Effect: E-Books

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</tr>
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<tr>
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<td>120</td>
<td>80</td>
</tr>
<tr>
<td>2009</td>
<td>180</td>
<td>140</td>
</tr>
<tr>
<td>2010</td>
<td>70</td>
<td>140</td>
</tr>
</tbody>
</table>

EBC Downloads | Springer Downloads
Downloads by Book Type

- Monograph
- Proceedings
- Contributed volume
- Professional book
- Textbooks
- Handbook/Ref...
- Other

% of dls
% of titles
Number of Downloads by Book Type

- Monograph: High downloads, few titles
- Proceedings: Moderate downloads, few titles
- Contributed volume: Moderate downloads, few titles
- Professional book: Moderate downloads, few titles
- Textbooks: Low downloads, low titles
- Handbook/Ref Work/Encyclopedia: Low downloads, low titles
- Other: Low downloads, low titles

% of titles: Y-axis
% downloads / % titles: X-axis
Book Type Word Cloud

Textbooks

Handbook/RefWork/Encyclopedia

Monograph

Professional Book

Contributed Volume

Other

Processing
Number of Titles Used by Subject Area

- Architecture and Design
- Behavioral Science
- Biomedical and Life Sciences
- Business and Economics
- Chemistry and Materials Science
- Computer Science
- Earth and Environmental Science
- Humanities, Social Science and Law
- Mathematics and Statistics
- Medicine
- Physical and Astronomy

Years: 2008, 2009, 2010
Subject Area Word Cloud

View Subject Area Word Cloud at Wordle
Past Usage Predicts Future Usage

- Usage pattern shows that many titles that were well used (4 or more) in 2008 received additional usage in 2009 and 2010.
- There are 87 titles with 4 or more uses in 2008.
- Of these 87 titles 35 or 41.2% had 1 or more used in 2009, and 20 or 23.0% had 1 or more uses in 2010.
Past Usage Predicts Future Usage

Below are heavily used titles (4 or more downloads) during 2008. Each rectangle represents a book (87 in total). Size represents number of downloads in 2008 and brighter green indicates more usage during 2009 – 2010.
Value of the Big Deal

- Our price tag to OhioLINK is a good value and becomes a better value over time with additional usage.

- Cost per download also seems to be a good value when compared with others (e.g. Elsevier study of ScienceDirect e-books which determined cost per use is $5.10 per chapter).

- Having the choice to select only a subset of subjects might be useful.

80/20 – 116 titles @ $100.00
318 titles with 494 downloads @ $6 per download
~$14,500
Conclusions

• 77% percent of the titles in this study were not used from 2008-2010
• Underperforming asset?
• Pareto rules!
• A few high use titles dominate & the long tail accounts for a very small percentage of the total downloads.
• Platform matters -- e-books that are cross-searchable with e-journal content is appealing (SpringerLINK is a dream come true for Pragmatists and Technophiles)
• One word: textbooks
• Title use peaks across all subject areas in 2009 and it’s all about STEM with Computer Science as the most used collection.
• Heavy use begets more use as time goes on …
Next Steps

- Continue to evaluate different e-book purchasing and pricing models.
- No single approach
- PDA & PPV/STL
- Marketing
- Easy access and better usability (comprehensive search)
- Look for solutions that provide even more e-book titles, available at the time of publication, with multiple purchasing and pricing models
- Continue to investigate the Springer collections with more years and more titles or at the consortial level
- OUP
Questions or Comments?
Works Cited


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