

What is the future of e-books?

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Abstract

This paper examines the genesis of e-books. The situational analysis with respect to different aspects relating to business organizations involvement in the industry and authentic published information is studied with the help of secondary data. Questions such as who is reading e-books and why they are reading and where they are reading are analyses and insights documented. A set of conclusions are provided on the nature of market for future of e-books is give.

Key words: e-books, marketing, electronic paper displays

1.1 Introduction

E-books are the electronic versions of printed books. E-books may be defined as follows; It is a digital version of a traditional print book designed to be read on a personal computer or an e-bookreader (a software application for use on a standard-sized computer or a book-sized computer used solely as a reading device)-Online Dictionary of Library and Information Science. e-book is a term used to describe a text analogous to a book that is in digital form to be displayed on a computer screen. e-books are books in computer file format and read on all types of computers, including handheld devices designed specifically for reading e-books. e-books are as familiar as their print counterparts or as unique as the electronic medium itself, containing audio, video or live hyperlinks. E-books could be delivered by download or e-mail files attachment or sold through online book shops like www.amazon.com.

1.2 Origin & Evolution of E-books

The first printing press with movable type that was invented in 1450 by Johannes Gutenberg revolutionized the printing process by making it simpler and more affordable. The first hypertext novel was published in 1987 (Afternoon, A Story by Michael Joyce), electronic books did not capture public attention until the online publication of Stephen King's novella , *Riding the Bullet* in

14 March 2000 and could be downloaded for 2.5\$. Within 24 hours, the text had been downloaded by 400,000 computer users 4.62 per second.

Keith Loris, president and CEO of SoftLock the organization that provided the server support, sent to prospective purchasers, telling them that more than 200,000 orders had been received and jamming their server, however, people waited for hours for it to download. The revenue is US \$500,000, which indicated that it is worthwhile venture and it is on first day (www.planetbook.com). But publisher's revenue has not solved the consumer's issues. The majority of eBook systems lock their content to the individual machines of purchasers to prevent piracy. And the DRM technology initially used for King's eBook worked only with PCs or hand-held devices. Glassbook provided the encryption and reader software for the PC version.) For the first two weeks after its release, Mac and UNIX users could not read "Riding the Bullet". Simon & Schuster posted an apology on its eBooks page, noting that it was working with vendors and worked with Adobe to solve the issue of viewing free for Mac version.

1.3 Situational analysis of e-book publishing

The modern concept of e-books became common after Martin Eberhart and Jim Sachs both started their own companies and developed Rocket eBook and SoftBook, the first two handheld e-book reading devices (<http://www.scaruffi.com/politics/silicon/bios.html>). In 1999, the e-book industry was dominated by small U.S. start-ups like NuvoMedia (Rocket eBook) and SoftBook and many small, Web-based, often amateur-looking e-book retailers. Presently multinational companies like Gemstar, Microsoft and Adobe, amazon dominate the e-book industry. Nearly all of the major U.S. publishing companies have launched extensive e-book production schemes. McGraw-Hill, Random House, Simon & Schuster, Harper Collins and Time Warner all have extensive e-book plans. They have all signed agreements with Amazon and Barnes & Noble, the dominant e-book retailers. In a short span of time, a large part of the e-book industry has been brought into the global economy by some of the most powerful companies in the world. Presently there is an increasing interest in the use of e-books and other forms of online documentation to disseminate information and provide global access to it. Moreover, the tremendous development in the technology related to the production and usage of E-Books is making them more and more popular. The factors behind the popularity of e-books include: advances in computer hardware and software, exchange of text and data electronically as a result of Internet, compatibility of World

Wide Web with a wide variety of document formats, electronic files used in the production of printed books are now being re-purposed for the production of e-books.

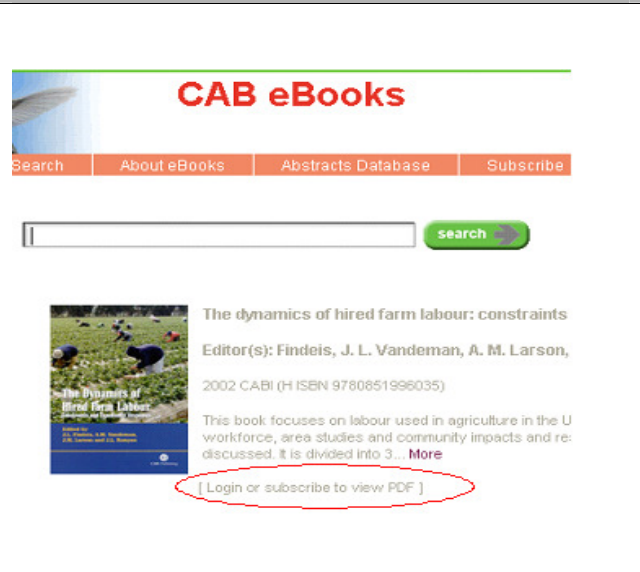
2. Formats of E-books

There exist many standard formats in which e-books are available. Some of the standard formats are being discussed as und

Type	Description
Image files	An e-book can be distributed as a sequence of images, one foreach page.
Rich Text Format (.rtf)	RTF files are actually ASCII files with special commands to indicate formatting information, such as fonts and margins.
Hyper Text Markup (e.g., Mozilla, Language (.html)	E-books using HTML can be read using a standard browser Firefox, or Microsoft Internet Explorer).
TEX	The TeX format is a popular academic format for technical writing applications in the scientific communities of mathematics and computer science.
Portable Document Format (.pdf)	PDF files are created mainly using Adobe Acrobat that provides a standard form for storing and editing printed publishable documents.
PostScript (.ps)	It is used for describing the contents of a printed page in a higher level than the actual output bitmap.
Exe-book (.exe)	It is a compiler that produces an e-book file that, when executed, produces a simulated book onscreen, complete with page texture.
DesktopAuthor (.EXE and .dnl)	It is used for the creation of digital web books with virtual turning pages, including brochures, e-books, digital photo albums, etc.

2.1 Portable Document Format

Adobe Portable Document Format (PDF) is a natural choice for *eBook* publishing because it is a universal standard that preserves essential attributes of the printed page. For instance, leading publishing companies including CABI, Springer publishes their e-Books in the PDF format, which can be seen in below table.

Springer's E-book Format	CABI's E-book Format
	

Plenty of e-book formats are available in including Mob pocket Format, E-Pub Format. However, from above the table it is evident that leading publishing companies including Springer and CABI prefers PDF as their e-book format. Therefore, we can infer that the most common and preferred eBook format among various eBook formats is PDF. The emergence of a commercially significant electronic book (e-book) market in the past three years has been the result of two quite-recent technological developments. The first, and most critical, has been a breakthrough in the technology for manufacturing reflective electronic paper displays (EPDs), allowing for the introduction of affordable, lightweight and portable e-book readers such as Amazon's Kindle and Sony's Reader. The second has been the rollout of reliable "3G" wireless broadband networks, which have made it possible to deliver digital books directly to reading devices without the intermediate steps of downloading files to a PC and then transferring them to a reader. Direct-to-

device sampling and delivery, particularly with Amazon's Kindle and Apple's iPhone, have enabled impulse-driven e-commerce, which has been critical to early consumer adoption of e-books. The technology for e-books, however, remains nascent. The Kindle and its ilk are very much first-generation devices that deliver the minimally acceptable experience. Further development of the business will be closely tied to future technological developments, including flexible and color displays, format standardization and rich-media applications. As the market grows, there are numerous opportunities for other technology players, from social networks to cloud service providers and more. This report examines the trends and opportunities ahead.

4. e-bookreader software

E-bookreader software are popular because they allow similar options like those of a printed book such as readers can bookmark pages, make notes, highlight passages, and save selected text. In addition to these, e-bookreaders also include built-in dictionaries, and alterable font sizes and styles. Some e-books can be downloaded for free or at reduced cost, however, prices for many e-books - especially bestsellers - are similar to those of hardcover books or even higher. Some of the most popular e-bookreader software available in the market includes:

2.2 Adobe Reader - Adobe Acrobat was the first software to support Adobe Systems' Portable Document Format (PDF). Formerly known as Acrobat Reader, Adobe Reader is freely available from the Adobe Web site (www.adobe.com). It allows viewing, printing, and searching Adobe PDF files. The latest version of Adobe Reader 8 which enable the users to view, print, search, sign and verify the authenticity of PDF files. It also includes new document viewing options, advanced collaboration, increased time-saving ways to work with PDF files, and other new features to help users more securely and consistently communicate and collaborate using PDF files. Reader 8 is now integrated with Adobe Connect™ software, which enables users to instantly communicate and accelerate approvals with virtually anyone, anywhere, at any time.

2.3 Microsoft Reader - Microsoft Reader (<http://www.microsoft.com/reader>) is free software for reading e-books that works with .LIT files and supports Clear Type Technology for easy reading on small PDA screens. This format is based on Microsoft Compressed HTML Help format. These books can be purchased and downloaded from large online stores, including Amazon.com. Its

features include highlighting and doodling/scribbling designed for quick note taking, text notes and a search function.

Other features include finding the last page you were on, your most recent page and a library of all the e-books you own. Depending on the book, there can be a cover image and images throughout the book. **MobiPocket** - The Mobipocket Reader is available for two platforms viz. PDAs and PCs. Through Mobipocket Reader for PC one can easily transfer the e-books from PC to PDA. One can build, organize, read and annotate entire e-book library, create reading lists, edit metadata, filter, browse, search, customize page size, full width display, 2 or 3 column display, touchscreen page turning, bookmarking, adjustable font size and colour, full text search or even use the auto scroll feature.

2.4DXReader

DX Reader is an XML driven intelligent reader solution to online eBook readers with a wide range of intelligent reading and facilities. With the help of DX Reader one can have instant Access to the content along with the sophisticated digital tools including Bookmarking the pages, highlight text, flipping through the content effortlessly, View illustrations, charts, etc. It also provides powerful and convenient digital aids like full search, highlighting, annotations, etc. that reinforce a gratifying reading experience. Additional ecommerce modules integrated with DX Reader include eSubscribe (to manage the access and distribution control of content through subscription agreements on an individual basis on time bound rules), eLicense (that allows the controlled distribution of bulk content to licensees for onward distribution to consumers), eCompile (that allows any selection of content to be assembled together and then distributed, purchased, printed or re- published as a new work), ePrint (to control the pages and quantity of pages that can be printed from any digital content), eCopy (that controls operations for copying and pasting text).

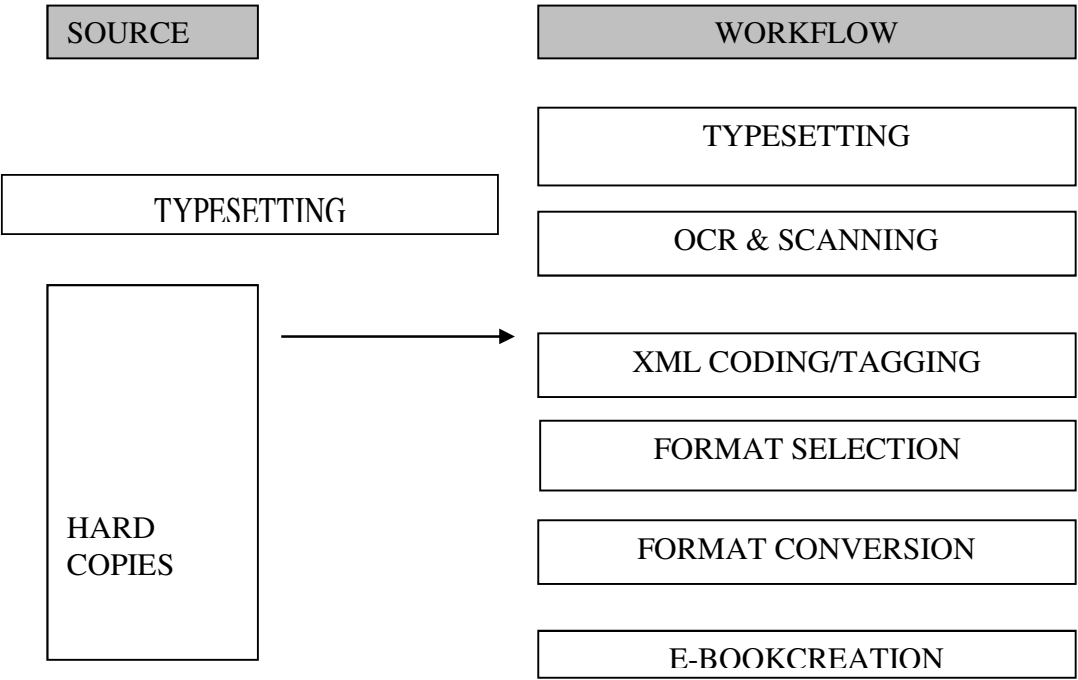
2.5 **dotReader** - It's a new e-bookreader (open source software) and documentation platform that is named after the late Dorothy Thompson, legendary foreign correspondent and broadcaster and one of the most influential women in American history. It is open source — available free, owned by no one and usable by everyone. It runs on multiple platforms including Windows, Macs, Linux, tablet PCs, and most PDAs. It reads multiple document formats with the ability to add additional formats via plug-ins. creates a community of readers with embedded forums,

discussion groups, polls, and shared annotations. is simple to use. The built in plug-in architecture allows users to enhance its use by simply “plugging in” new features.

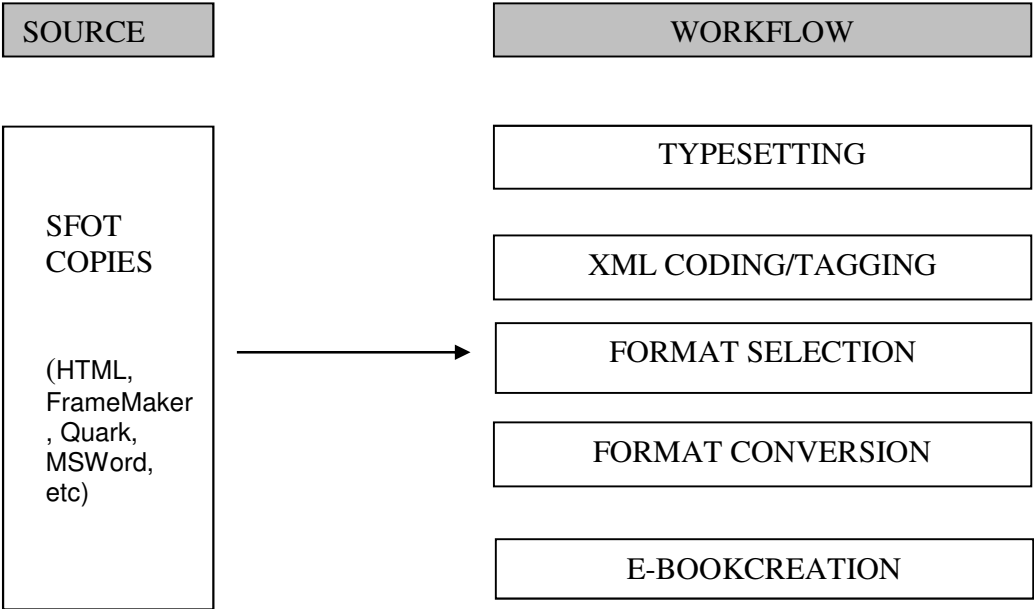
3. Process Involved in E-book Conversion

In the this chapter we will examine the process of converting content to e-book format. There are two models. The first model is conversion of hard copies to e-books. Conversion of soft copies to e-books.

Model 1: Conversion of Hard Copies into e-Books



Model 2: conversion of soft copies into e-books



E-Book Logistics Overview

COLLECTION

File Collection

- Convert MS Word or Quark to PDF (if required)
- Log PDF file and meta-data into tracking database
- Send acknowledgement

CONVERSION

PDF to OeB

Pre-process Evaluation

- Segment front and back matter
- Zone tables, line art and TOC for extraction
- Set column preferences

TextCafe Conversion

Post-Process Normalization

- Verify successful processing
- Normalize OeB markup and CSS class usage

Quality Control

CREATION

Create eBook

- Microsoft Reader
- Palm
- Gemstar Rocket eBook Softbook
- Adobe eBook
- MobiPocket
- OeB, HTML, XML
- Sample Books

DELIVERY

To File Hubs

- Amazon
- Barnes & Noble
- Palm/peanutpress
- Lightning Source
- netLibrary
- Reciprocal
- Softbook/Rocket
- Franklin
- Yahoo!

RIGHTS CHECK

- Basic eBook rights
- Cover art for eBook
- Illustrations
- Promotional chapter extracts (web, eBook)

Structure

- Confirm hyphenation
- Check page breaks
- Identify head levels
- Prepare file for note and index linking
- Validate OeB
- Verify TOC links

Style

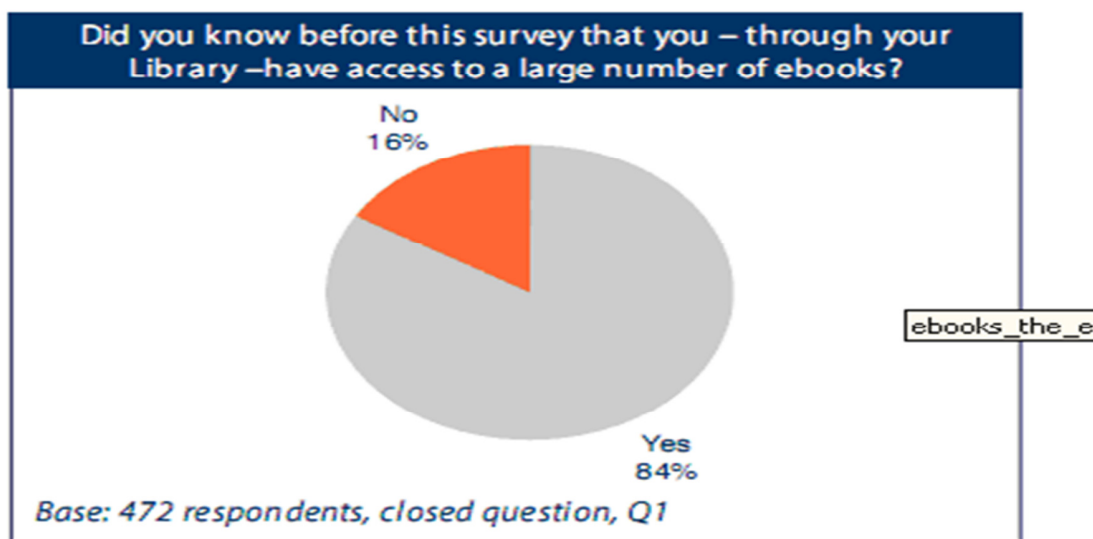
- Add feature markup (poetry, code, extracts, etc.)
- Adapt print styles to eBook formats

4. E-Books – The End User Perspective ((Source: Springer’s report))

An End User Perspective on e-Books

1. After years of development efforts and high expectations, eBooks have begun to cement their place as a central part of the information experience. Research and academic libraries are gradually building their eBook collections into a valuable resource for their users.
2. A 2007 Springer survey of librarians at six institutions found that many libraries recognize eBooks as an ideal opportunity to expand collections while enhancing users’ research experiences.
3. And in a recent Publishers Communication Group study, 43 percent of the librarians surveyed said that their budget for eBooks would likely increase in 2008. While most librarians acknowledge that eBook programs are in their early stages, they also clearly recognize the significant impact that eBooks will have on the future of research and information retrieval.

End User Awareness and Usage of eBooks

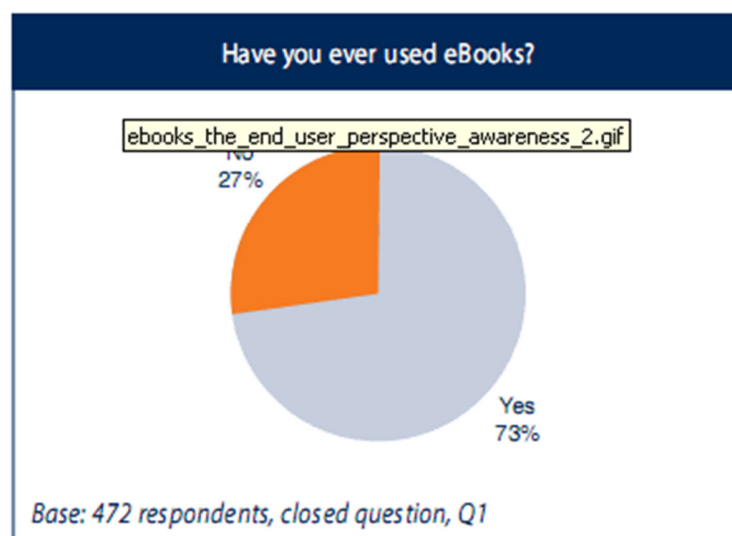


1. **Despite the relative** newness of eBooks as a resource, most of the users surveyed were aware of their existence and had used them at least once, whether through their libraries or through another source.
2. The study found that between 52 percent and 84 percent of respondents at each institution were aware of the availability of eBooks through their libraries.
3. Moreover, between 58 percent and 80 percent of respondents at each institution had used eBooks at least once, whether through their library or other sources.

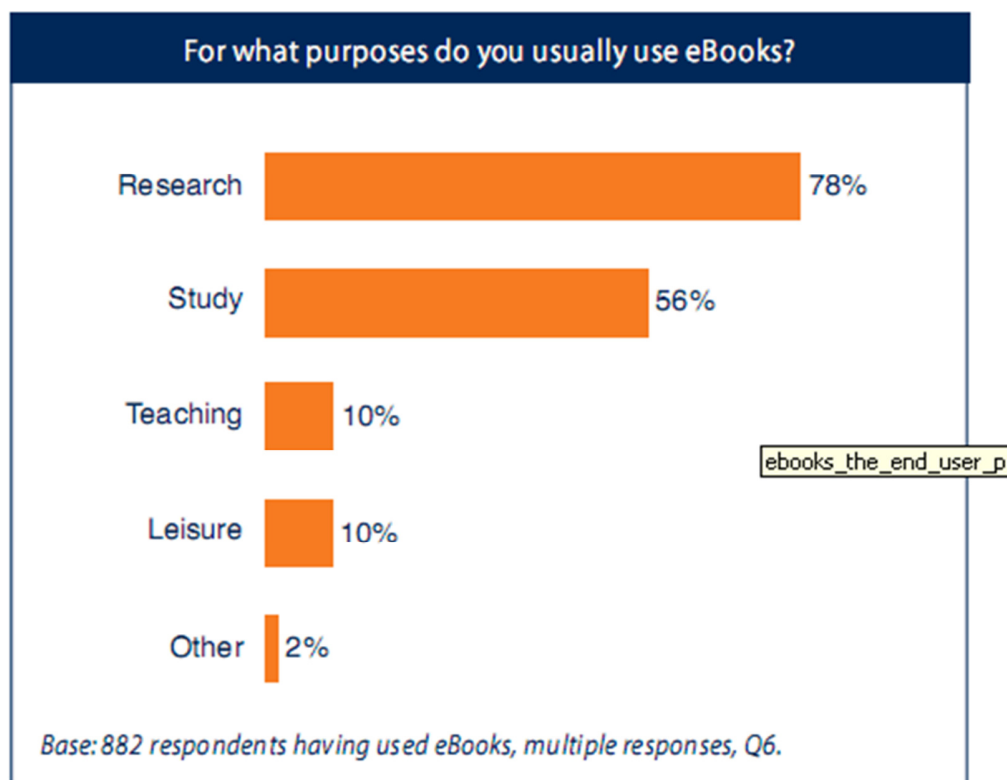
4. For example, at University of Turku, 84 percent of users said they were aware that they had access to a large number of eBooks through their library, and 73 percent said they had used eBooks at least once.

Springer's findings on the prevalence of eBook usage are consistent with a recent Joint Information Systems Committee (JISC) study in the UK,

2. The JISC study also found that while 46 percent of users obtained the last eBook they used through their library, nearly the same number (43percent) obtained their last eBook via the Internet.
3. Clearly, even if users do not realize their library contains eBook offerings, they are encountering eBooks in their online research through sources like Google Book Search. Libraries have the opportunity to position themselves as a central, convenient source of extensive eBook content for users who would otherwise turn to the Internet for their eBook searches.



4.1 Trends in eBook User Behavior

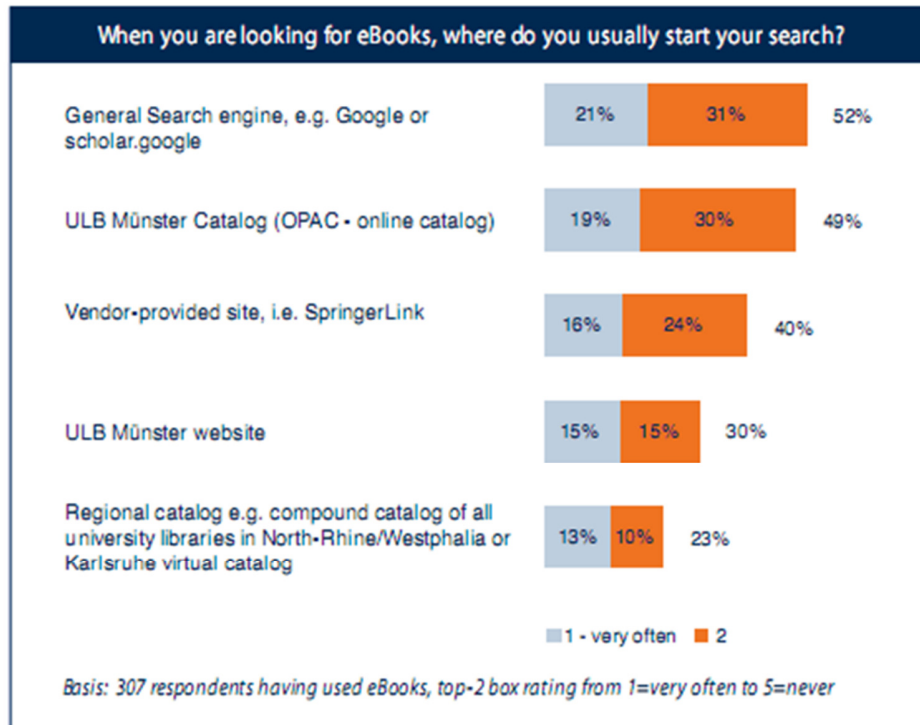


Frequency of eBook usage varied by institution, with most users indicating they access eBooks on a weekly or monthly basis. Users also said that they primarily use eBooks for research or study purposes, rather than for leisure or teaching purposes. For example, at the [University of Illinois at Urbana-Champaign](#), 78 percent of users said they use eBooks for research while 56 percent reported using eBooks for study, but only 10 percent mentioned teaching or leisure. Given most users' existing experience with seeking information on the Internet, research is a natural entry point for eBook usage.

Types of e-books

1. Reference works
2. Textbooks
3. Conference proceedings
4. Reference works

4.2 Locating e-book Content



4 End User Evaluation of e-book Advantages and Disadvantages

Advantages

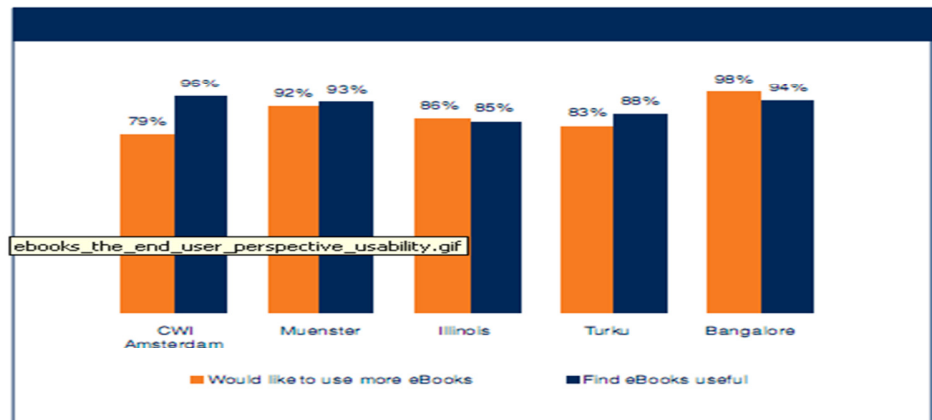
1. **Encouragingly**, users overwhelmingly indicated that eBooks are useful to them and that they would like to use more eBooks.
2. Almost all respondents found eBooks useful, with between 85 percent and 96 percent of respondents at each institution rating them as either very or somewhat useful.
3. Moreover, between 79 percent and 92 percent of users at each institution said that they would like to use more eBooks.

Disadvantages

1. Users cited the difficulty of reading books from a screen and a preference for traditional print books as the primary reasons for not using eBooks more often.

2. Given users' comfort level and long history with print books, the challenge of making eBooks easier to read is a difficult one.

4.3 End User Evaluation of E-book advantages and disadvantages



5 .The Future of eBook Usage

While users acknowledge that adoption of eBooks will continue to increase, they do not envision print books disappearing within the near future. Users expect that the transition to eBooks will happen fastest for research-related activities, rather than study, teaching, or leisure purposes. They also expect that reference works will most quickly make the transition to eBooks, followed by research monographs and textbooks.

1. The user survey found that users most frequently locate eBooks through general search engines like Google as well as through online library catalogs
2. Users also said that they primarily use e-Books for research or study purposes, rather than for leisure or teaching purposes.
3. The types of eBooks most frequently used are reference works and textbooks.
4. Users value the convenience and ease of access that eBooks provide and are engaging in new forms of book content usage to take advantage of their libraries' growing eBook collections.
5. Print books are perceived to have an advantage in ease and enjoy of reading
6. Finally, while e-Books will not replace print books in the near future, users are rapidly adopting them as complementary to print books.

It can be discerned that

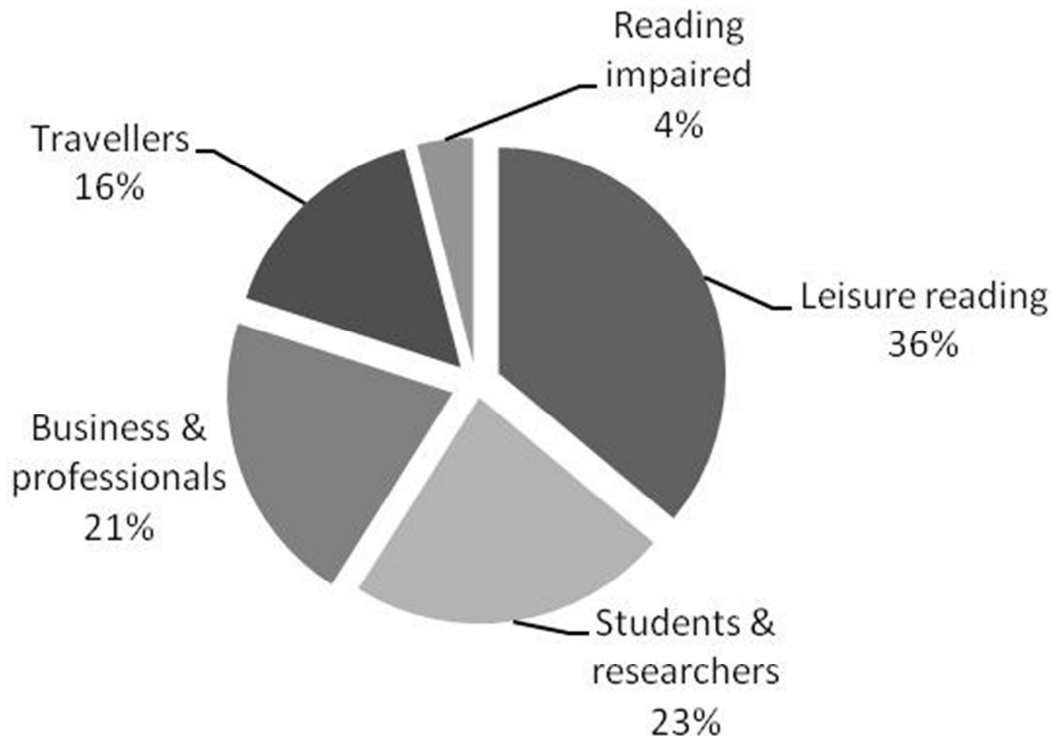
2. The user survey found that users most frequently locate eBooks through general search engines like Google as well as through online library catalogs
3. Users also said that they primarily use e-Books for research or study purposes, rather than for leisure or teaching purposes.
4. The types of eBooks most frequently used are reference works and textbooks.
5. Users value the convenience and ease of access that eBooks provide and are engaging in new forms of book content usage to take advantage of their libraries' growing eBook collections.
6. Print books are perceived to have an advantage in ease and enjoy reading.
7. Finally, while e-Books will not replace print books in the near future, users are rapidly adopting them as complementary to print books.

14 Size and dimension of e-book market

6. Who is reading e-books?

As expected, students, researchers and professionals have adopted ebooks much faster than the larger consumer market. This is likely due to the instant accessibility of ebooks, and the fact that you can search the entire contents of a book in a second.

Ebook Consumers



E-books are very popular with travellers because of their portability: you can carry 50 books in your smart phone and thousands on a laptop, and download more while you're on the road. One surprising statistic to emerge from e-book adoption data is the number of people who just seem to like reading books on a computer screen. Of the ebooks sold by eBooks.com, 74.6% are read on computers, while the remainders are read on a vast variety of hand-held devices, including personal digital organizers (PDAs), mobile phones and e-book devices.

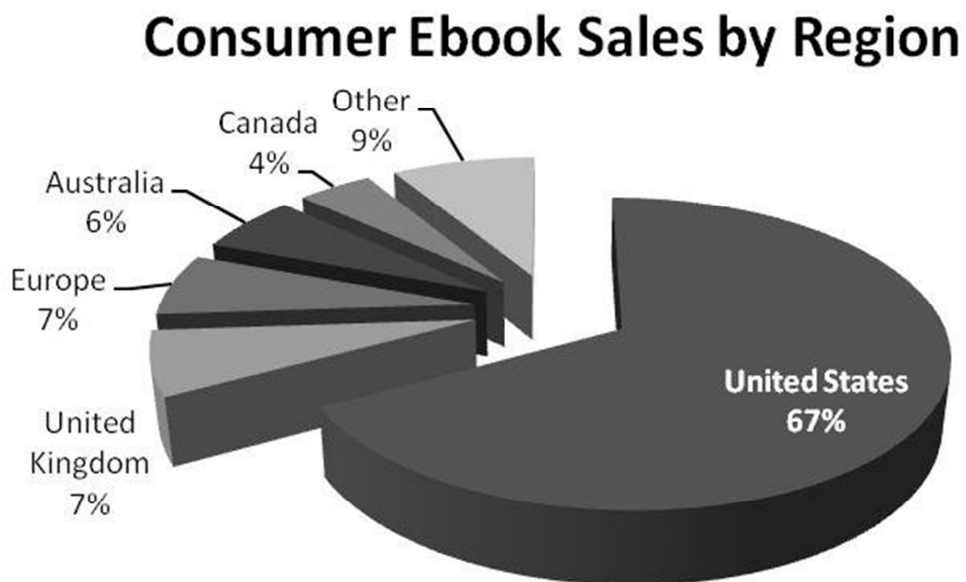
7. What is being read on ebooks?

The reading tastes of e-book users are very similar to those of mainstream book buyers.

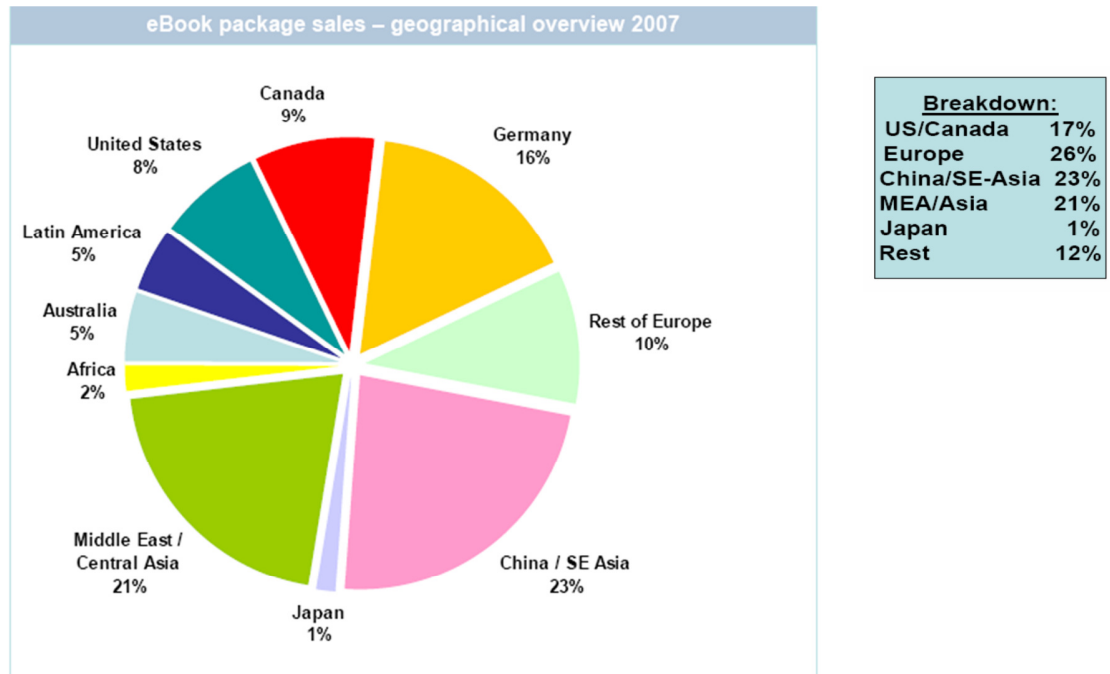
The following is the top e-book subjects

Subject	Percentage
Fiction	65.2
Business	8.2
Computers	2.6
Family & Relationships	2.4
Body, Mind & Spirit	1.6
History	1.6
Children's and young adult fiction	1.5
Religion	1.4
Languages arts & disciplines	1.2
Health & Fitness	1.2
Other	13.1

8 .Where are e-books being read?



STM eBook Sales by Region



9. Market size of e-books

1. The International Digital Publishing Foundation (IDPF), a US-based industry group, estimates the current e-book market to be about US\$50 million per annum.
2. The IDPF's figures are drawn from data provided by US trade (consumer) publishers. If library, educational and professional electronic sales are included, that figure will be closer to US\$155 million.
3. The overall English language book market is over US\$50 billion, which makes the e-book segment 0.31% of the total world book market. There's a long way to go. The printed book will be with us for a long time to come.

10.Conclusion

The overall characteristics of e-book market

1. The market for online books is projected to reach US\$9.5 billion by 2010.
2. United States is the largest market for online books worldwide. The market is estimated at US\$4.8 billion in 2007 as stated by Global Industry Analysts, Inc.
3. Europe is the second largest regional market with a projected value of US\$2.76 billion in 2009.
4. The US and Europe together account for close to 95% of the global online books market.
5. The global and regional markets are expected to register CAGRs ranging between 13% and 17%.
6. Online sales of consumer books are estimated at over US\$4.2 billion in 2007.
7. E-book sales worldwide will jump from \$323 million in 2008 to nearly \$9 billion in 2013, according to a new In-Stat forecast.
8. E-book shipments, meanwhile, will soar from under 1 million to almost 29 million in the next five years.
9. “The total e-bookmarket is about \$ 350 million in the year 2008 and expected to double or even triple to reach billion dollar market in 2009”.
10. Academic and professional books are forecast to register sales worth about US\$3 billion in 2011.
11. Thirty percent of e-bookmarket is comprises of academic and professional books.

Reference

1. <http://www.planetebook.com/mainpage.asp?webpageid=39>
2. <http://partners.nytimes.com/library/magazine/home/20000813mag-king.html?scp=10&sq=riding%20the%20bullet&st=cse>