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Audiobook and eBook Publishing in Canada

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This market study was commissioned by the Initiative for Equitable Library Access at Library and Archives Canada and conducted from August-October 2008.

The opinions expressed herein are those of the authors and do not necessarily reflect those of Library and Archives Canada.

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EXECUTIVE SUMMARY

Commissioned by the Initiative for Equitable Library Access (IELA) at Library and Archives Canada (LAC) and conducted from August through October 2008, this study presents a comprehensive overview of audio and digital book publishing in Canada, exploring current issues and trends related to the production, distribution, and use of non-print formats.

The study addresses two broad categories in terms of format: (1) audiobooks and (2) eBooks. For our purposes, an audiobook is a spoken word recording based on a print edition of a book, while an eBook is any text-based, book-length digital edition (whether based on an equivalent print edition or not).

Both English and French-language markets in Canada are encompassed in the study. All major categories of book publishing, including educational texts, are considered but the focus is largely on trade publishing—i.e., books published for a general audience and sold mainly through bookstores or circulated in public libraries.

The study explores digital publishing as it pertains both to a mainstream reading audience and to print-disabled readers, since in some ways these audiences are interlinked within the digital content marketplace. An increasing selection of digital book content presents new opportunities for print-disabled readers, especially when twinned with assistive technologies. Similarly, the print-disabled community can be a catalyst for innovation and digitization.

The context for the study is a time of rapid change in the book business. The widespread adoption of broadband Internet has created a new mass medium—one that supports a host of related technologies and that has triggered important changes in how we read and write. The publishing industry has already realized some of the opportunities and challenges of an Internet-enabled marketplace, and experience tells us that in this environment change can be fast and far-reaching. There is little doubt that there is something important happening in the world of digital publishing.

The study's main findings include:

<u>Mainstream audiences are primed for digital:</u> "Digital natives" (i.e., those who have grown up using computers and the Internet) are very at ease reading off a screen as opposed to the printed page and are ready consumers of digital content. At the other end of the demographic spectrum, Canada's aging population means that an increasing number of consumers will prefer or

require non-print formats that help them counter sight or other print-reading challenges.
Digital devices are on the rise: The mass market's adoption of a new generation of Internet-enabled portable devices—e.g., cell phones, smart phones, and PDAs—has accelerated consumption of digital content, both online and via download. Similarly, the rapid adoption of purpose-built reading devices, especially the Sony Reader and the Amazon Kindle, has given eBooks real traction in consumer markets for the first time.

Digitization of book content is increasing rapidly: Thanks to increasingly digital production workflows, virtually all publishers can easily generate some level of eBook file from their native production files. As publishers accumulate a growing archive of digital production files, and as older backlist titles are scanned or otherwise converted into usable digital source files, the commercial output of digital books has naturally increased. To date, this has mainly been in the form of eBooks of various formats—especially PDF—and large multinational publishers have accounted for the majority of commercial releases.

There are basically three major factors that are encouraging publishers to expand their digitization efforts:

1. The prospect of increased eBook sales (or other sale or licensing arrangements for electronic content)
2. The opportunity to use print-on-demand technology for titles with limited print runs
3. The need to participate, and respond quickly to new opportunities, in online sales and marketing

These factors suggest that it is the changing book marketplace—rather than book publishers themselves—that is driving change in digitization and distribution of digital book content.

The audiobook market is growing quickly but title output has remained relatively stable over the past decade. Fuelled by new formats and an increasing shift to online distribution, the market for audiobooks is growing quickly—an average of 8–10% per year over the last four years—and at a pace that significantly outstrips the overall growth in the book market. The number of new audiobooks released in 2007 represented slightly more than 3% of the total title output recorded that year.

New platforms exist for digital content: The digital marketplace has given rise to new sales channels and new types of trading partners that present publishers with additional opportunities to bring their digital editions to market. There are now major consumer platforms for digital book content online, including Amazon for eBooks and Audible and Numilog for audiobooks. Specialized library service providers are driving development of digital collections: The institutional market—including both academic and public libraries—is now widely served by a group of specialized library service providers that are also aggregating large digital collections on behalf of their library clients. These service providers, such as OverDrive and NetLibrary, have introduced new collection models and sophisticated tools for both librarians and library patrons that support the circulation of digital books within libraries.

There is relatively little Canadian content in sales channels for digital editions: The Canadian market for digital book content is largely shaped by major multinational publishers. Prices are effectively set by imported book product, and the title selection is mainly determined by global rights arrangements and working relationships between large trading partners in New York, London, and Paris. At the same time, the Canadian-owned publishing firms that account for the majority of Canadian-authored titles published each year have been relatively slow to publish digital editions of their books. Canadian-owned firms are small compared to their multinational competitors and generally have more limited staff and/or budget resources to invest in digitization programs.

Digital does not equal accessible: eBooks offer certain advantages over printed books to individuals living with a loss of vision or other print disabilities, but accessing and handling the plurality of formats in which eBooks are available requires a fairly advanced level of computer skill, and the required equipment can be expensive. Therefore, ease of use and accessibility for all readers remains an issue, even with a growing inventory of digital book content.

Management of rights and copyright is a major market shaper: The ability to acquire electronic and/or audio rights is a prerequisite for digital publishing. Many book publishers will have audio rights for their titles, but relatively few have historically acquired electronic rights. Therefore, a decision to publish electronic editions of one's books is often accompanied by the need to revise contract language for new titles and to clear or acquire electronic rights for previously published work.

The application of Digital Rights Management protections (DRM) is the other key rights issue in digital publishing. Once digitized and made available online, book content can be easily copied and widely circulated beyond the control of

the publisher or an authorized distributor. DRM measures typically restrict the use of digital content to a specified number of copies or formats or playback options. The goal is to limit piracy of copyrighted work, but these measures often also have the effect of locking content into a given sales channel.
But in recent years, consumer resistance to DRM restrictions on digital content, combined with publishers' interest in breaking down platform monopolies has led to a weakening (or even abandoning) of DRM protections on an expanding range of digital titles.

Beyond these key findings, which are found in Part I of the study report, the study is organized in the following chapters.

- Part II: The Canadian Market for Digital Books: An overview of the current market for audiobooks and eBooks in Canada, including basic market characteristics, consumer behaviour, and channels to market.

- Part III: Production of Digital Editions: An exploration of the current environment for the production of digital and audio publications in Canada, including major producers in and outside of the traditional publishing industry and a review of factors that affect title output.

- Part IV: Circulation in Public Libraries: An overview of how digital editions are collected and circulated by public libraries in Canada, and a discussion around the factors that encourage or discourage the availability and use of non-print resources in Canadian libraries.

PART I.
INTRODUCTION AND KEY FINDINGS

1.0 INTRODUCTION

New media formats often compete with established forms and formats for a share of the audience's attention. For example, the printed word was once seen—and perhaps in some quarters still is seen—as an affront to knowledge and the oral tradition of storytelling and teaching. The invention of television forever changed the role of the radio broadcast in modern society. In this sense, the introduction of a new medium or form of communication is often accompanied by a dynamic tension between old and new—between the desire to sustain an established form of meaning and our natural interest in the promise of something different.

This conflict often expresses itself as confusion and as fear that the "new" thing will mean the demise of the old. In practice, and as we will see over the course of this paper, this is generally not the case. The more common pattern throughout history is that established forms adapt and change—or at least the role they play and the way in which we use them adapts and changes—to account for the new.

History also tells us that the adoption of a new form of communication or technology often proceeds in entirely unpredictable and unexpected ways. The complex web of related technology, culture, politics, and economics that accompanies the introduction of a new technology can only be truly observed and understood from the secure, retrospective vantage point of the future.

These ideas underpin the discussion that follows. This study aims to contribute to our understanding of the publishing industry by presenting a comprehensive overview of audio and digital book publishing in Canada, and by exploring current issues and market trends related to the production, distribution, and use of a range of non-print formats.

The study encompasses both English and French-language markets in Canada. All major categories of book publishing, including educational texts, are considered but the focus throughout is largely on trade publishing—that is, books that are published for a general audience and sold mainly through bookstores or circulated in public libraries.

We address two broad categories in terms of format: (1) audiobooks and (2) eBooks. For our purposes, an audiobook is a spoken word recording based on a print edition of a book. This may be a complete unabridged audio edition of the original work or an abridged recording. We include in this definition works read by the author, by volunteer or professional narrators, or by multiple performers. We also include any recordings based on a print edition that were originally made for television or radio broadcast and subsequently published as a distinct audio edition.

We apply a similarly broad definition for the eBook category. For our purposes, eBooks are any text-based, book-length digital editions (whether based on an equivalent print edition or not). This definition anticipates a range of business-to-business and business-to-consumer formats for adapting, distributing, and delivering digital book content. It also allows for the possibility of both fixed-page formats, such as Adobe's ubiquitous Portable Document Format (PDF), and reflowable file formats, such as XML or HTML-based files. Finally, our eBook definition includes both full-length digital editions (with or without additional indexing, media, or other incremental features) along with smaller, discrete units of the original work, whether published individually or aggregated within a larger anthology or database.

In making general references to these broad categories, we use the terms "digital editions," "digital publishing," "alternate formats," and "non-print formats" interchangeably throughout the paper.

1.1 STUDY BACKGROUND AND STRUCTURE

The study was commissioned by the Initiative for Equitable Library Access (IELA) at Library and Archives Canada (LAC) and conducted from August through October 2008.

IELA has a mandate to develop a national strategy for equitable library access for Canadians with print disabilities—that is, to expand the range and availability of content within public libraries that can be accessed by someone with a print disability.

Within the IELA framework, the term "print disability" describes a fairly broad spectrum of visual, perceptual, and physical disabilities, including sight impairments, learning disabilities, and any other cognitive or physical disability that prevents a person from reading a standard print edition of a book. Estimates of the population of print-disabled readers in Canada run as high as three million people—roughly 10% of the total population of the country.

Over the course of this study, we will explore issues that pertain both to a mainstream reading audience and to print-disabled readers. This will allow us to identify overlapping trends where developments in the mainstream book market may be relevant to the print-disabled community, or vice versa. This approach also allows us to consider the accessibility of current and emerging commercial formats in relation to specialized formats and technologies developed explicitly for print-disabled readers.

As we will see, mainstream and print-disabled audiences tend to blend naturally—to a degree—within the digital content marketplace. An increasing selection of digital book content presents new opportunities for print-disabled readers, especially when these digital formats are twinned with specialized assistive technologies for readers with disabilities. Similarly, the print-disabled community has spurred innovation and digitization efforts in other major book markets, and we should be alert to this possibility in Canada as well.

Our research process for the study began with an extensive discovery phase that identified and examined existing data and analysis regarding audio and digital publishing in Canada and in select foreign markets, particularly those that are heavy exporters of cultural product to Canada.

This initial research phase was complemented with a wide-ranging interview series with industry professionals in Canada and the US. The interview panel comprised publishers, industry associations, librarians, retailers, specialized service providers, technical experts, and industry consultants. Without exception, these interview respondents were incredibly generous with their insights and assistance and we are pleased to recognize their contribution here.

We should note at the outset that there is not a great deal of publicly available data on the publication of audiobooks or other types of digital editions in Canada. This paper draws on data from Statistics Canada and other published studies for its statistical foundations. We expand on this with observations and insights gathered through the interview panel as well as additional proprietary data contributed by individual firms or organizations and other secondary sources. For this, we would particularly like to recognize the generous contributions of specialized data and other research materials from BookNet Canada, Bowker, the Department of Canadian Heritage, Library and Archives Canada, l’Observatoire de la Culture et des communications du Québec, la Société de développement des entreprises culturelles, la Banque de titres de langue française, and Bibliothèque et Archives nationales du Québec.

Our findings and observations are summarized throughout the paper and organized in the following chapters:

- Part I: Key Findings: A commentary on the broader context of the study, including an overview of some of the major factors that are driving change in this part of the publishing industry, and a summary of our key findings.

- Part II: The Canadian Market for Digital Books: An overview of the current market for audiobooks and eBooks in Canada, including basic market characteristics, consumer behaviour, and channels to market.

- Part III: Production of Digital Editions: An exploration of the current environment for the production of digital and audio publications in Canada, including major producers in and outside of the traditional publishing industry and a review of factors that affect title output.

- Part IV: Circulation in Public Libraries: An overview of how digital editions are collected and circulated by public libraries in Canada, and a discussion around the factors that encourage or discourage the availability and use of non-print resources in Canadian libraries.

2.0 KEY FINDINGS

2.1 CONTEXT

For roughly ten years now, publishers and consumers have been exposed to dramatic predictions about the emergence of electronic books and the decline of print editions. A 2000 PriceWaterhouseCoopers study forecasted that eBooks would account for 26% of the unit sales for books by 2004. Also in 2000, Anderson Consulting predicted that one out of every ten books would be published electronically by 2005.

With the benefit of hindsight, these projections seem wildly optimistic. These early forecasts (and many others like them) have encouraged a fair degree of caution—even skepticism—throughout the book trade. Industry observers have cried wolf about the imminent digital future so many times that many publishers have simply learned to pay less attention over the years.

We have to acknowledge this skepticism even as we observe that we are writing this report at a time of rapid change in the book business. The widespread adoption of broadband Internet has created a new mass medium—one that supports a host of related technologies and that has triggered important changes in how we read and write. The Internet is sometimes politely referred to as a disruptive technology, in that it can reshape both behaviour and markets. The publishing industry has already realized some of the opportunities and challenges of an Internet-enabled marketplace, and experience tells us that in this environment change can be fast and far-reaching.

In short, the book market is rearranging itself as we speak, and there is little doubt that there is something important happening in the world of digital publishing.

First, consumer and institutional markets for digital book content are growing quickly. Anyone younger than 30 years old today (that is, in 2008) has grown up using computers, and only the oldest in this group can remember a time when the Internet was not a mainstream medium for everyday communication, entertainment, schoolwork, or shopping. These "digital natives" are ready consumers of non-print formats and are much more at ease with living off a screen, as opposed to the printed page, then those of us who are…older.

The Economist recently observed that while predictions of the "paperless office" have been with us since the 1960s, "What actually happened was that global consumption of office paper more than doubled in the last two decades of the 20th century, as digital technology made printing cheaper and easier than ever before.[1]"

The article continues to observe that in 2008, "[The prediction of a paperless office] seems to be coming true at last. American office workers' use of paper has actually been in decline since 2001…The explanation seems to be sociological rather than technological. A new generation of workers, who have grown up with e-mail, word processing and the Internet, feel less of a need to print documents out than their older colleagues did. Offices are still far from paperless, but the trend is clear."

At the other end of the demographic spectrum, Canada's aging population means that a growing number of consumers will prefer or require non-print formats to help counter sight disabilities or other print-reading challenges that inhibit their ability to use conventional print editions.

To take a broader view of accessibility for a moment, we have seen cases, notably in the US, where the introduction of standards and supporting legislation for accessible materials has been an important driver for digitization in book publishing. For example, the NIMAS[2] standard has been nationally adopted in the US, and was passed into law in 2004. Within the NIMAS framework, K-12 schools throughout the country follow a formal XML-based standard for accessible learning materials. The related legislation for NIMAS requires publishers selling print materials to US schools to also provide digital source files to a national repository for conversion to various braille, eBook, and audio formats and circulation to print-disabled students.

Beyond the effect of standards or legislation for the print-disabled population, the mass market's adoption of a new generation of Internet-enabled portable devices has accelerated consumption of digital content, both online and via download. These cell phones, smart phones, and PDAs—most notably Research in Motion's Blackberry and the Apple iPhone—support electronic reading with new degrees of ease of use, portability, and quality of reading experience. Similarly, the rapid adoption of purpose-built reading devices, especially the Sony Reader and the Amazon Kindle[3], has given eBooks real traction in consumer markets for the first time.

[1] "Not dead, just resting," *The Economist*, October 11–17, 2008.
[2] National Instructional Materials Accessibility Standard.
[3] As of October 2008, the Sony Reader is available in a number of markets, including Canada. However, the Amazon Kindle is only available in the US.

At the same time, thanks to their increasingly digital production workflows, virtually all publishers can easily generate some level of eBook file from their native production files. Year over year, the volume of digitized backlist titles (i.e., older titles for which suitable digital production files no longer exist) is also growing exponentially. As we will see below, Canadian publishers have begun to assemble the first major collection of digital Canadian content and are poised to add significantly to this archive.

Finally, the digital marketplace has given rise to new sales channels and new types of trading partners that present publishers with additional opportunities to bring their digital editions to market. There are now major consumer platforms for digital book content online, including Amazon for eBooks and Audible for audiobooks. These consumer-facing platforms are aggregating tens of thousands of titles in one convenient location and introducing totally different pricing and distribution models in the process.

Similarly, the institutional market—including both academic and public libraries—is now widely served by a group of specialized library service providers that are also aggregating large digital collections on behalf of their library clients. These service providers, such as OverDrive and NetLibrary, have introduced new collection models and sophisticated tools for both librarians and library patrons that support the circulation of digital books within libraries.

While the degree and pace of change remains uncertain, there is therefore little doubt that the landscape for writing, publishing, and reading is changing around us. This report adopts the following viewpoints with regard to this emerging marketplace.

1. A shift to digital publishing will not be felt equally among all types of publishers or categories of books. A recent BookNet Canada study[4] analyzed 50 subject categories and identified several that were most likely to adopt digital editions (i.e., to the point that eBooks or other digital formats might account for a meaningful share of unit sales). The categories that "scored positive for digital adoption" in the BookNet analysis included travel, medical, computers, law, reference, foreign language study, business, and fiction, among others.

2. The same BookNet study points out that relatively modest shifts to digital editions would still likely create a dramatic effect within the book trade, and highlights that, "The [experience of the music industry] showed that even a small shift in sales (digital sales made up 10% of

[4] *Impact of eBooks and Digital Delivery on the Canadian Book Industry*, BookNet Canada

music sales in 2008, according to market research firm In-Stat) can significantly rearrange the value chain."

3. Whether a print or digital edition, the economics of cultural production still apply. A publisher may spend many months and tens of thousands of dollars to acquire, edit, design, and make a new title ready for press. However, once the presses start turning, additional copies of the book can be created for a few dollars each. This cost structure is even more acute in the case of digital editions where the cost of a copy circulated online might even be $0.00, or very close to it. However, because of the up-front investment required to bring a new edition to market in any format, publishers will continue to publish only those titles and formats for which they feel there is a prospect for a reasonable return.

4. A growing market share for digital editions does not herald the death of the (printed) book. Instead, we expect the market's adoption of digital content to be more nuanced than a simple choice of one over the other. The end result is likely to be that reading behaviour will be more varied than it has been, even in the recent past, as people read print editions and various types of digital editions, including a growing range of audiobooks.

2.2 SUMMARY OF KEY FINDINGS

The following developments have been categorized as key findings due to the frequency with which they occurred in the study, the weight given them by our research sources and respondents, and the degree of their actual or potential effect on the book trade in Canada.

1. The digitization of book content is increasing rapidly. As publishers accumulate a growing archive of digital production files, and as older backlist titles are scanned or otherwise converted into usable digital source files, the commercial output of digital books has naturally increased. To date, this has mainly been in the form of eBooks of various formats—especially PDF—and large multinational publishers have accounted for the majority of commercial releases.

   eBooks are variously sold to consumers, aggregated into different kinds of digital collections, or even given away for free as reading copies. Because of the variety of formats and the ways in which these digital editions are circulated, it is difficult to be precise about commercial output in this area.

   However, the expanded selection of eBooks within major consumer platforms, such as Amazon or the Sony Reader, and the large eBook collections gathered by library service providers, such as OverDrive or NetLibrary, provide a clear indication of growing eBook output. As a single example, the Amazon Kindle reader was initially launched in November 2007 with a catalogue of 90,000 eBook titles. Within less than a year (as of October 2008), the inventory available for the Kindle platform had more than doubled to 185,000 titles.

   Aside from the pursuit of more efficient production workflows and the delivery of digital files to printers, there are basically three major factors that are encouraging publishers to expand their digitization efforts:

   - The prospect of increased eBook sales (or other sale or licensing arrangements for electronic content)
   - The opportunity to use print-on-demand technology for titles with limited print runs
   - The need to participate, and respond quickly to new opportunities, in online sales and marketing

   These factors suggest that it is the changing book marketplace—rather than book publishers themselves—that is driving change in digitization and distribution of digital book content. In October 2008, the organizers of the Frankfurt Book Fair conducted a global survey of more than 1,000 publishing executives. Twenty-two percent of the survey respondents felt that consumer demand was driving digitization in the book industry. Twenty-one percent felt that online retailers, notably Amazon, were leading the industry toward digitization, and 20% felt that other major gatekeepers, such as Google, were the main cause of increasing digitization in the book trade.

With all of these factors in mind, we expect that publishers of all sizes will continue to expand their commercial output of digital book editions in the years ahead.

2. <u>The audiobook market is growing quickly but title output has remained relatively stable over the past decade</u>. Fuelled by new formats and an increasing shift to online distribution, the market for audiobooks is growing quickly—an average of 8–10% per year over the last four years—and at a pace that significantly outstrips the overall growth in the book market.

   However, whereas virtually any new title published today could be converted into one or more eBook formats at little or no cost, the creation of an audiobook comes with a significant incremental cost attached (i.e., the cost of recording the master file). At full market rates for studio time and voice talent, a commercial audiobook can cost as much as $10,000–$15,000 to record. Partnering arrangements—between book publishers and recording studios, for example—can reduce this cost by about half. Meanwhile, non-commercial producers, including those that produce audiobooks for print-disabled readers, can record an audio title for roughly $1,500–$2,000 through the use of in-house recording facilities and volunteer voice talent.

   At the same time, most audiobook titles will have fairly modest unit sales in Canada. A small number of top-selling titles may sell as many as 5,000 copies, but publishers report that unit sales of 2,000 copies or fewer are more the norm.

   In terms of commercial output, Bowker’s Books In Print® reports that an average of 10,900 new audiobooks were published in each year between 2000 and 2005. While this output dipped slightly in 2006 with 8,970 new titles that year, it rebounded with 13,437 new audiobook titles in 2007. To put this in perspective, the number of new audiobooks released in 2007 represented slightly more than 3% of the total title output recorded by Bowker that year[5].

There is some indication that publishers and authors are moving to reduce the cost of audiobook production through expanded partnering arrangements or even through the use of home studio equipment to produce podcasts or other promotional samples of an author's work. Nevertheless, we expect that the additional investment required to produce a commercial audiobook will prevent a major expansion of output in this area in the foreseeable future.

3. <u>There is relatively little Canadian content in sales channels for digital editions</u>. The Canadian market for digital book content is largely shaped by major multinational publishers. Prices are effectively set by imported book product, and the title selection is mainly determined by global rights arrangements and working relationships between large trading partners in New York, London, and Paris.

   At the same time, the Canadian-owned publishing firms that account for the majority of Canadian-authored titles published each year[6] have been relatively slow to publish digital editions of their books. Canadian-owned firms are small compared to their multinational competitors and generally have more limited staff and/or budget resources to invest in digitization programs. There are exceptions of course, and Canadian eBook output will expand in the years ahead as increasing numbers of Canadian publishers invest in this area and contribute titles to some of the early digital collections in Canada.

   However, commercial audiobook production in Canada is very limited with only three established audio programs among commercial publishers in English Canada, and nine in French Canada. This appears to be largely a function of the limited economies of scale in audiobook publishing in Canada. It is expensive to produce an audiobook, and, as a niche format in the smaller Canadian market, the average unit sales per title are modest (meaning that recovering those initial production costs can be a challenging proposition).

[5] These statistics include titles from a number of countries, including the UK and Canada. However, the majority of titles in the Bowker system originate in the US.
[6] Statistics Canada figures indicate a high correlation between ownership and publication of Canadian authors, with Canadian-owned publishers accounting for roughly 77% of new Canadian-authored titles published each year.

Partly due to the absence of significant commercial production, non-commercial producers—especially those that produce titles for the print-disabled community, such as CNIB or La Magnétothèque in Québec—continue to play a significant role in producing Canadian audiobooks for restricted library circulation[7].

4. <u>"Digital does not equal accessible"[8]</u>. eBooks offer certain advantages over printed books to individuals living with a loss of vision or other print disabilities. The benefits include the possibility of changing the size or style of type and the automatic conversion of eBooks to talking books with speech synthesizing software. However, accessing and handling the plurality of formats in which eBooks are available requires a fairly advanced level of computer skill, and the required equipment can be expensive. Therefore, ease of use and accessibility for all readers remains an issue, even with a growing inventory of digital book content.

   As noted above, eBook production has been the focus of most publishers' digitization efforts to date. Broadly speaking, the current inventory of eBooks is composed of a variety of proprietary and other formats, with varying degrees of accessibility associated with each. For example, a large percentage of the current eBook catalogue is available only in PDF format, and not all PDF files can be easily or reliably read by text-to-speech applications, such as JAWS[9], at least not without some additional manipulation or conversion by the user (e.g., such as stripping the text from the file and re-saving it as a plain-text or Microsoft Word document).

   All this considered, we can say that a growing inventory of eBooks does create some new opportunities for print-disabled readers, especially for those with some level of sightedness as well as the computer skills to manipulate these files and the financial means to acquire the required equipment and software.

   However, there are some notable challenges still. First, only some of the total number of books available are published in any sort of digital

[7] Restricted in the sense that such titles produced by non-commercial publishers are published and distributed under a copyright exemption that permits the creation of an audiobook edition of a copyrighted work for circulation to readers with perceptual disabilities (i.e., a vision or learning disability that limits their access to the print edition of the work).
[8] Council on Access to Information for Print-Disabled Canadians, Response to Draft Canadian Digital Information Strategy from Library and Archives Canada, December 5, 2007.
[9] JAWS (Job Access With Speech) is a screen-reading, text-to-speech software program for visually impaired users. It is compatible with PCs running Microsoft Windows.

format, and as yet there is very limited Canadian content in the digital marketplace.

Further, a large percentage of Canada's print-disabled population is composed of elderly readers who do not necessarily have the skills, means, or inclination to manipulate eBook content in the ways we have described above. Largely because of this, the audiobook—especially some highly accessible audio formats as we will explore below—is the preferred format for print-disabled readers.

This is a significant issue as only a very small percentage of books will also be published as audiobooks, and there is therefore a sizable gap between the available audio catalogue and the demand from print-disabled readers.

One of our study respondents—a librarian—noted that, "It's unrealistic to expect that we can acquire materials only from commercial publishers. There is virtually no Canadian content, and many of the [audiobook titles] are bestselling commercial fiction. We want to have the books that are in the [*Globe & Mail* bestseller list] but they are not available."

5. <u>Libraries, retailers, and publishers are managing multiple formats</u>. Audiobooks have seen the introduction of a number of new formats in recent years, even as legacy formats have remained in retailer inventories and library collections. Cassette tapes have led to CD editions and then MP3-CDs[10], downloadable audio files in various formats, and even preloaded portable players. Interestingly, none of these formats have fully displaced any of the others as yet.

   Due to consumer preference, the installed base of cassette and CD players in homes and automobiles, and the cumulative library investment across this range of formats, most libraries, retailers, and publishers handling audiobooks feel they have to accommodate most of these format options.

   The collections of many public libraries are accordingly mixed across these different types of audiobooks. The Outreach Services Branch at the Vancouver Public Library (VPL), for example, has a collection of 9,768 audiobooks on cassette, another 300 on CD and another 1,200

[10] MPEG-1 Audio Layer 3, or MP3, is a compressed digital audio format. It is a *de facto* standard for transfer and playback on digital audio players.

again that are either MP3 or DAISY-format[11] CDs. In addition, VPL provides its patrons with access to several thousand downloadable audio and eBooks through its "Library to Go" service (provided by OverDrive).

The situation is similar with respect to eBooks in that downloadable editions have been and continue to be published in a wide range of formats. In the absence of a broad industry standard for eBooks, publishers have produced—and retailers and librarians have adopted—a variety of digital formats including PDF files and various formats with DRM (Digital Rights Management[12]) protections built in. Publishers serving files to multiple retailers or other aggregators therefore typically have to provide the same title in several different file formats.

Having to handle this range of audio and electronic book formats places an additional adoption burden on consumers and on trading partners throughout the book supply chain.

6. <u>New platforms are emerging to aggregate, manage, and distribute digital content</u>. These service providers are important channels to market in themselves, and in many respects, they constitute a new type of trading partner in the book supply chain. They include:

    i. Digital asset distributors (DADs)—for example, Ingram Digital—that store and manage the publisher's digital assets; convert them into various formats; serve them to recipients of all types (who then deliver them to end user/consumer); and provide digital rights management and transactional services.

    ii. Library service providers, such as NetLibrary, which aggregate digital titles for licensing or sale to libraries. These specialist firms tend to offer flexible collections development options to their library clients as well as sophisticated services for librarians and library patrons alike. Most importantly, they offer large collections of rights-managed audiobooks and eBooks for use in libraries.

    iii. Online retailers, whether general bookstores, such as Amazon, or specialty retail, such as Simply Audiobooks or Tonality, which sell

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[11] Digital Accessible Information System, or DAISY, is a standards-based audio format that enables navigation within a structure consisting of marked-up text synchronized with audio.
[12] The term "Digital Rights Management" is used to describe any technology that constrains the unauthorized use of media, including book content. DRM technology attempts to control use of copyrighted material by limiting access and by preventing copying or conversion to other formats.

digital content to consumers. These retailers emphasize extensive title selection, and often feature attractive discount pricing, bundled pricing (where the electronic edition is packaged with a print edition, for example), or subscription pricing options.

As these examples and categories indicate, many of the major market channels and sales platforms for digital content are online. This makes abundant sense given that for the most part they are handling and delivering downloadable digital editions, and in true long-tail fashion, an online platform allows each aggregator to assemble the largest possible inventory of titles.

7. The management of rights and copyright is a major market shaper. There are a couple of key aspects to rights management for audiobooks and eBooks. First, the ability to acquire electronic and/or audio rights is a prerequisite for digital publishing. Many book publishers will have audio rights for their titles—which will often go unexercised as we observed earlier—but relatively few have historically acquired electronic rights (fewer still have done so in a way that would hold up to a court challenge today).

   Therefore, a decision to publish electronic editions of one's books is often accompanied by the need to revise contract language for new titles and to clear or acquire electronic rights for previously published work. This can be a time-consuming process that in itself encourages the publisher to be selective about which digital editions it brings to market.

   In acquiring electronic rights for editions that will be available for download, the publisher will be most interested in global rights so it can sell via the Internet without being constrained by national boundaries or competing rights holders in different jurisdictions. This is perhaps less of an issue for audiobooks, where national editions (reflecting national accents) may be more relevant, but a title with global rights attached will often be a more attractive proposition for the publisher when it comes to producing an eBook edition. Conversely, titles for which the publisher holds only national rights for a given territory may be less attractive to major retailers or other aggregators in the digital supply chain as they will necessarily have a more limited virtual marketplace.

   The application of Digital Rights Management protections (DRM) is the other key rights issue in digital publishing. The Internet has been described as the world's biggest copy machine. Once digitized and made available online, book content can be easily copied and widely circulated beyond the control of the publisher or an authorized distributor. The example of the music industry—where increased digitization led to a corresponding increase in copyright violations—is often cited as an illustration of how copyright protections can break down in the digital marketplace. Publishers are therefore naturally concerned about protecting their publishing rights from piracy or other inappropriate use. To date, this concern has mainly expressed itself both in a reluctance to publish digital editions at all, and in a commitment to publishing titles with appropriate copyright protections in place.

DRM measures typically restrict the use of digital content to a specified number of copies or formats or playback options. The goal is to limit piracy of copyrighted work, but these measures often also have the effect of locking content into a given sales channel.

For example, Audible, the market's leading audiobook retailer, has an exclusive distribution arrangement with Apple's iTunes store. Audible provides audiobooks for sale on iTunes, with the proviso that the audiobook files incorporate Apple's proprietary "FairPlay" DRM system. This not only gives Audible access to the iTunes customer base, it means that Audible's files will be compatible with Apple's hugely successful iPod player. In other words, the only DRM files that can play on iPods are files protected with Apple's DRM measures. The Apple-Audible deal ensures that, when it comes to audiobooks, the only files that meet this requirement are Audible files.

In this sense, DRM is not only a protection against piracy, but also a way of locking digital content to a specific platform or channel to market—and locking other competitors out.

In recent years, consumer resistance to DRM restrictions on digital content, combined with publishers' interest in breaking down platform monopolies, has led to a weakening (or even abandoning) of DRM protections on an expanding range of digital titles.

Since early-2008, some major publishers, notably Random House, Penguin, and Simon & Schuster, have opted to forgo DRM protection in order to attract consumers with more flexible usage of their digital editions. These companies are essentially betting that the absence of DRM protection will result in greater sales.

At the same time, this DRM-free strategy allows publishers to step around proprietary bottlenecks on major platforms. For example, while only files that carry Apple's proprietary DRM protection can be played on an iPod, any DRM-free files can also be played on iPods. This iPod compatibility is important enough to audiobook publishers that some are content to trade DRM protection for access to the large installed base of iPod users.

PART II.
AN OVERVIEW OF THE CANADIAN MARKET

3.0 THE AUDIOBOOK MARKET

“Downloading is reshaping the way audio is bought and sold.”

—*Publisher’s Weekly*, May 8, 2006

3.1 MARKET SIZE

We have very little in the way of solid statistics on the Canadian audiobook market. The country’s premiere sales-tracking system, BookNet Canada’s BNC SalesData, reports that audiobooks accounted for .66% of tracked unit sales in 2007 (roughly 320,000 units in total). This places the dollar value of 2007 consumer audiobooks sales at more than $5 million.

These data points are a noteworthy part of the audiobook puzzle, but they mainly capture sales in English Canada and do not include download sales of audiobooks (as we will see below the online channel is a significant growth segment in the market). Nor do the BNC SalesData figures reflect the important institutional market for audiobooks or any specialty retailers of spoken-word titles.

If we factor in an estimate for French-language title sales and download sales, our overall estimate for the Canadian audiobook market creeps up to about $7.5 million. Coming at this estimate another way, the total value of the consumer book market in Canada has been calculated as $1.6 billion[13]. If we apply the apparent market share of audiobooks from the BookNet data to this aggregate figure, we get a market value of $10.5 million, suggesting that the real value of the audiobook market in Canada falls somewhere in the $7.5–$10.5 million range.

As a point of comparison, the annual sales survey of the US-based Audio Publishers Association (APA)—a more wide-ranging study than anything we have in Canada—pegs the value of the American audiobook market at slightly more than US$1 billion for 2007. The APA reports that spoken-word audio[14] sales have grown by 25% since 2004. Annual reporting from the Association of American Publishers (AAP) also points to strong growth in audiobook sales, on the order of 8–10% per year in recent years.

[13] *The Book Retail Sector in Canada*, Department of Canadian Heritage, January 2008.
[14] We use the terms “spoken-word audio” and “audiobook” interchangeably throughout the paper.

While we cannot easily transpose this market size to the Canadian market, many of the other data that we can draw from the US—for example, regarding format and title production—are highly relevant to our Canadian context given the extremely high market share of imported audiobook titles. In contrast to the overall book market, where imported titles hold a 65–70% market share, we estimate that imported titles hold as much as 95% of the Canadian audiobook market.

Leaving aside the question of imports for the moment, the available data do suggest that the Canadian audiobook market, while small, is growing more quickly than the broader domestic book market. There appear to be two main reasons for this: (1) the introduction of new audiobook formats and (2) growth in online sales in particular.

3.2 FORMAT

As we noted earlier, Bowker Books In Print® reports that 13,437 new audiobook titles were released in 2007. In that year, a total of 311,535 spoken-word audio titles were listed in the authoritative Books In Print® database—the vast majority of which were available in Canada[15].

Audiobooks are currently commercially published in multiple formats, including:

- Cassettes, which, while being phased out by some publishers, have proven to be surprisingly durable in both consumer and library markets. Cassettes owe their consumer loyalty to the large installed base of home, automobile, and portable cassette players and to the ease of use of cassettes for audiobook listening.

- CDs, including MP3 CDs. CDs continue to hold the lion's share of the consumer market, due in part to the prevalence of CD players and consumer comfort with the format.

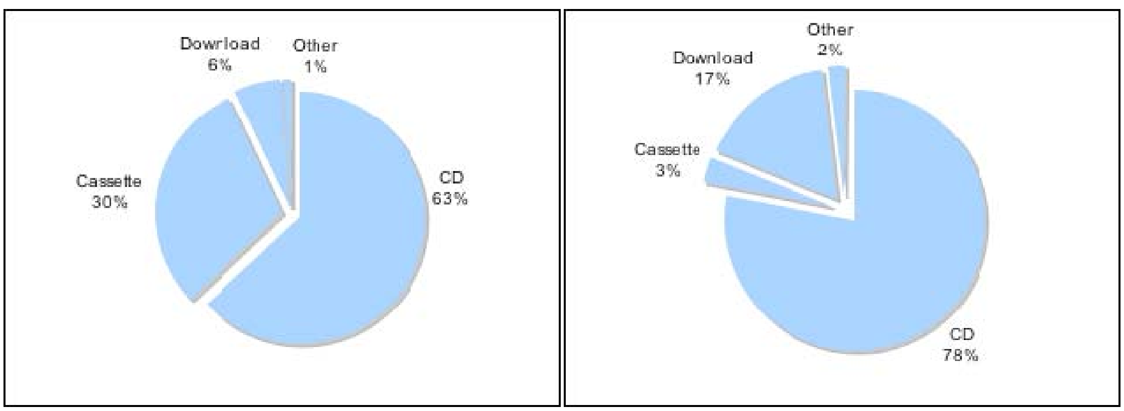
- Downloadable digital formats—the fastest growing segment of the market, these files are largely sold through major online retailers for audiobooks, such as Audible, Simply Audiobooks, and eMusic.

- Preloaded digital formats, such as the Playaway, where the audiobook content is pre-packaged with a basic portable player (see Figure 1).

[15] This compares to 10,608,796 print titles listed in Bowker's Books In Print® in 2007.

The Playaway edition of Philip Pullman's *The Golden Compass*.

Interestingly, while market share is certainly shifting among these formats, none have been displaced outright. Drawing on the latest APA sales data, we can observe the following change in format market share in the US between 2003 and 2007, and a clear trend toward increased CD and online sales.



Figures 1 and 2. US audiobook sales by format for 2003 (left) and 2007.
Source: Audio Publishers Association

In addition to their various formats, audiobooks are sold in both abridged and unabridged editions. Unabridged works are word-for-word readings of the original print editions, whereas abridged titles have been edited for length. Abridgements appear to have been more the norm in the past in order to manage production costs and to help the publisher drive to an attractive consumer price.

However, the consumer market has shifted to favour unabridged editions in recent years and the ratio of unabridged-to-abridged sales is currently running about 70:30 in the United States. Roughly two-thirds of all new audiobook titles are now released as unabridged editions. Further, bestselling titles (or those expected to be bestselling titles) may also be released as both unabridged and abridged editions.

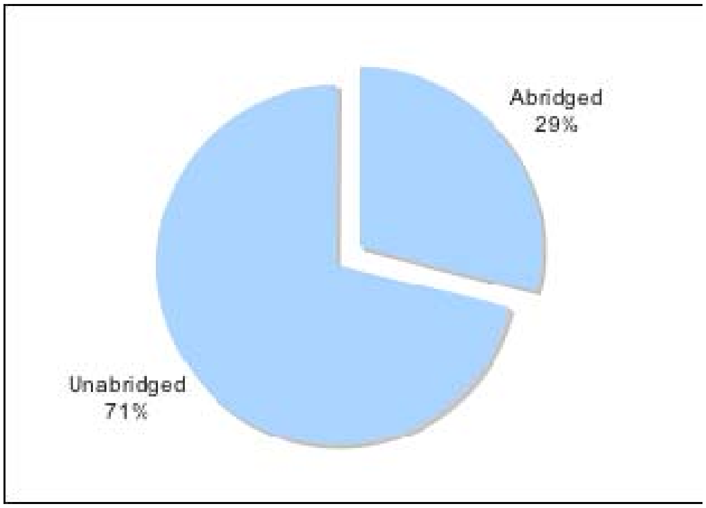


Figure 3. Percentages of abridged and unabridged editions among new audiobook titles published in 2006.
Source: Bowker's Books In Print®

3.3 PRICING

There are a few broad pricing relationships we can observe with respect to audiobooks. Audiobooks on cassette or CD are generally priced higher than a comparable hardcover print edition. This reflects the additional production cost associated with recording the audiobook and the relatively limited economies of scale relative to the print edition. Preloaded digital formats are priced competitively in relation to CD-format audiobooks.

Downloadable audiobooks tend to range somewhere between the price points for hardcover and paperback editions of comparable titles. Even with the cost of producing, storing, managing, and delivering these digital editions, it seems possible that prices could decline on downloadable audiobooks. However, publishers may be reluctant to price them too aggressively for fear of undermining the sales of the corresponding print editions.

Librarian respondents to this study provided the following Canadian list price benchmarks for various unabridged audiobook formats.

FORMAT	PRICE
CASSETTE, LIBRARY EDITION*	$108–$135
CASSETTE, COMMERCIAL EDITION	$45–$65
AUDIO CD	$40–$50
MP3 CD	$25–$40
DAISY CD**	$50
DOWNLOADABLE EDITION***	$25–$45

Table 1. Canadian list price benchmarks for audiobooks.

* Library editions, as distinct from normal commercial releases, include an option for the library to buy a single replacement cassette if one of the cassettes for the audiobook is damaged or lost (rather than having to buy the entire multi-cassette title again).
** CNIB is the only vendor of DAISY-format CDs.
*** Based on the purchase of a single-user license.

Bowker released a study last year that reported the average US list price for unabridged audiobooks as US$41.26 in 2006, as compared to an average list of US$27.55 for adult hardcover editions in that same year. This translates to roughly CDN$46.00 and CDN$31.00 respectively, at 2006 exchange rates, but of course there would generally be an additional Canadian list price mark-up on the US price (i.e., beyond the currency differential)—in which case the Bowker averages appear to support the Canadian price benchmarks given above.

As a further illustration of relative pricing across various editions, here is a random sampling of new titles releases from major multinational publishers, all of which were published in fall 2008.

	PRINT EDITION*	PRINT PRICE	AUDIO EDITION	AUDIO PRICE	DIFFERENTIAL
TITLE A	TP	$17.00	CD	$37.95	$20.95
TITLE B	HC	$30.00	CD	$45.00	$15.00
TITLE C	HC	$27.99	CD	$43.98	$15.99
TITLE D	HC	$23.99	CD	$32.98	$8.99
TITLE E	HC	$32.00	CD	$41.72	$9.72
TITLE F	HC	$39.99	CD	$59.99	$20.00
AVERAGE					$15.11

Table 2. Canadian list prices for selected US audiobooks released in 2008. All prices shown in Canadian dollars. All audio editions are unabridged.
Source: Publishers' catalogues; Amazon.ca.

* "TP" = trade paperback edition; "HC" = hardcover edition

As a final comment on pricing, specialized online audiobook retailers such as Audible or Simply Audiobooks feature a subscription pricing model in addition to regular list prices on downloadable titles. At current subscription rates, the average price of a downloadable audiobook purchased from either retailer is roughly CDN$16.00[16].

Given that these large consumer-facing platforms have an important price-setting influence in the marketplace, we expect that the increasing market share of downloadable audiobooks will push the average price of an audio title down over time. Audiobooks are likely to become more affordable as the market continues to shift online.

3.4 CONSUMER BEHAVIOUR

Audiobook publishing is a commuter-based category: heaviest usage of audiobooks occurs in the car or on public transit. Publishers of audio titles report that sales tend to be concentrated in larger urban areas where many people make a daily commute between home and work. One Canadian publisher also noted a strong sales trend in the Victoria area, which was attributed to the popularity of gardening in that city combined with the long growing season.

In other words, audiobooks play an important role in entertaining or educating people while they are otherwise engaged in an activity that prevents them from reading a printed book.

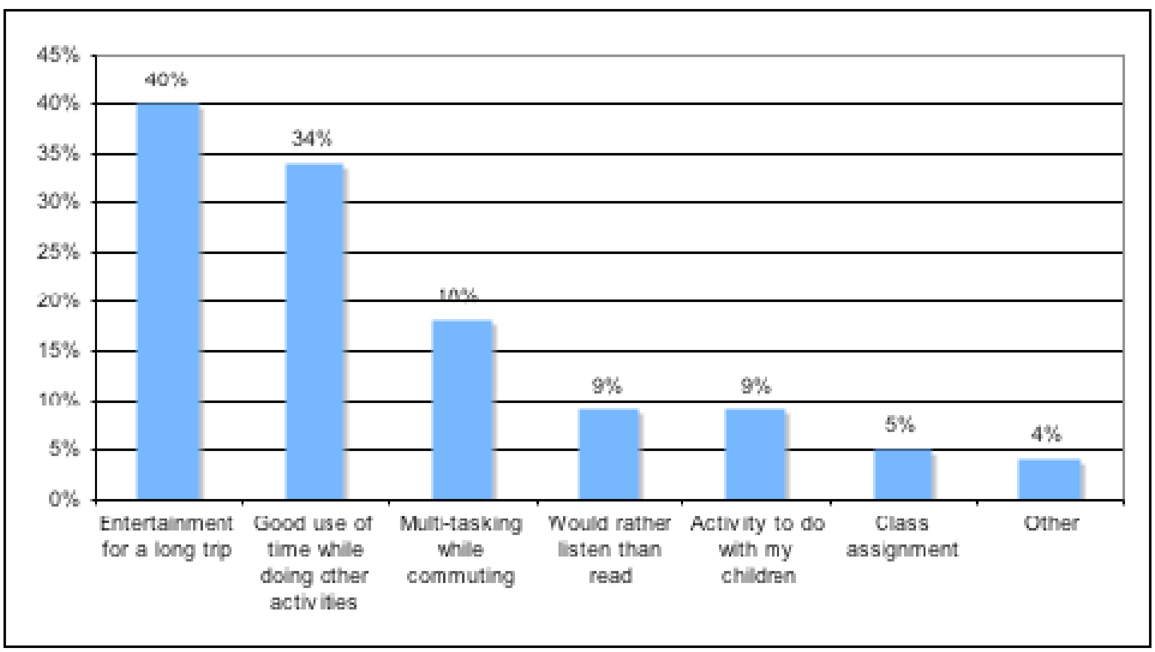


Figure 4. Reasons consumers choose audiobooks.
Source: Audio Publishers Association

[16] Please note that these are consumer prices. Neither of these online retailers serves the library market at this time.

3.4.1 PRINT-DISABLED READERS AND AUDIOBOOKS

For readers with a print disability, audiobooks are less a matter of multi-tasking than they are an invaluable format for accessing books of all kinds. As Jim Sanders, president and CEO of CNIB, has said, "For many people, technology can make things easier. For people who are blind, technology makes things possible."

As noted earlier, there are a number of non-commercial producers, such as library consortia, charitable organizations, and others, that produce audio adaptations of printed materials for circulation to print-disabled readers.

These materials are produced in a particular context—under copyright exemption and with a significant volunteer contribution—and have a restricted circulation through Canada's public libraries and via specialized agencies serving the print-disabled community. Further, these non-commercial editions are circulated in distinct formats that feature a higher degree of accessibility and sophistication in meeting the needs of people with print disabilities.

With all of these points in mind, we will defer further comment on audiobook production for print-disabled readers for the moment in favour of a more detailed discussion in Part III: Production of Digital Editions.

The growing market footprint of audiobooks provides real benefits to print-disabled readers. First, it means that they have a chance to share in the advantages of this increasing mass market adoption: lower costs both for devices and for audiobooks themselves, and a greater selection of available titles (especially those aggregated by large consumer-facing retailers online and by specialized library service providers).

The main limitation, however, remains the relatively small percentage of books that are produced in audio editions. Yes, many print-disabled readers have better access to audiobooks in 2008 than they would have in years past—especially those readers with the means, the equipment, and the computer skills needed to access audiobooks online. However, as we will see in Part III, there are some important gaps between commercially available audiobooks and truly accessible audio formats. Further, even with the aggregate selection of audiobooks available today, the vast majority of new book titles are not produced in audio editions.

3.5 SALES CHANNELS

Most audiobook listeners acquire their audiobooks at the library, as indicated in Figure 5.

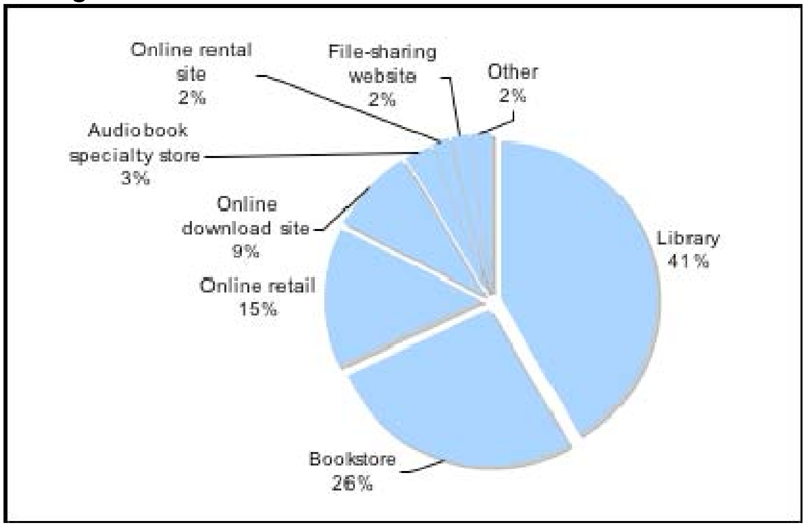


Figure 5. 2007 Market share for the various channels through which consumers acquire audiobooks. Source: Audio Publishers Association

We will defer a discussion of library distribution for the moment as this is the focus of a subsequent chapter (see Part IV). Bricks-and-mortar bookstores are the second-ranked channel, but all online sources combined have a share of sales roughly equivalent to bookstores. In general, the consumer market is shifting online as online retailers and other audiobook sites provide an extensive selection of audiobooks that can be acquired quickly and conveniently via download.

As Figure 6 illustrates, audiobooks are distributed[17] in a few distinct ways: (1) through regular distribution to bookstores and other specialty sales outlets handling book and/or audiobook inventory; (2) to online book retail or specialty retailers for CD editions; and (3) on specialized audiobook sites that sell or rent a wide selection of titles.

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[17] For further background on the book trade in Canada, please see *The Book Retail Sector in Canada*, Department of Canadian Heritage, January 2008. The paper is available in PDF and HTML editions, and in both official languages, on the Department of Canadian Heritage website: http://pch.gc.ca/progs/ac-ca/pubs/index_e.cfm

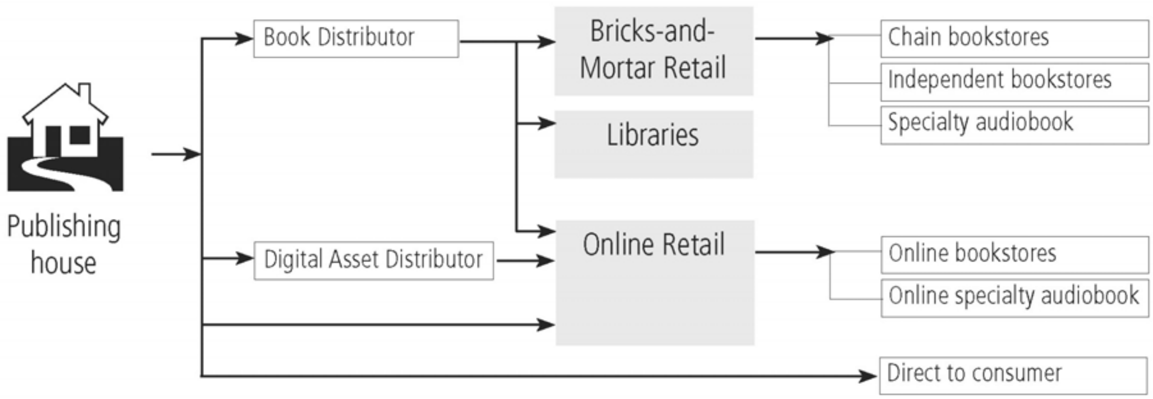


Figure 6. The supply chain for physical and digital audiobook media.

Generally, book publishers use the services of their bookstore distributors to distribute audiobooks. To draw some examples from Quebec, audiobook publishers Québec Amérique and Planète rebelle are distributed by Prologue, and Les Éditions ATMA international by Les Messageries ADP in Quebec and by DG diffusion in France. Les Éditions AdA and L'Oeil qui écoute distribute directly to bookstores, while Les Éditions Un monde différent and Alexandre Stanké use Agence MSH, a distributor specializing in audio titles. Alexandre Stanké has a particularly highly developed network, also employing the Quebec electronic platform iThèque and France's Daudin, Belgium's La Caravelle, and Switzerland's Servidis-Transat in foreign markets, and having established business relations with Audible.fr—Audible's French-language platform.

On the retail side, Canada's bricks-and-mortar bookstores are an important channel for audiobooks—although, as noted earlier, these outlets carry a modest title selection. There are also a small number of speciality audiobook retailers in Canada, including the bricks-and-mortar storefront for Simply Audiobooks in Toronto and, also in Toronto, the Talking Book World mini-chain.

Audible is the leading online platform for spoken-word audio and also the largest audiobook retailer. Acquired by Amazon in February 2008, Audible's sales are currently running about US$100 million per year. Audible has launched a number of additional country sites, including Audible.fr in France, and has strong distribution ties to Apple's iTunes store as well as Amazon. Canadian-owned Simply Audiobooks is a key online retailer as well, with the majority of its $7 million in annual sales coming from US customers.

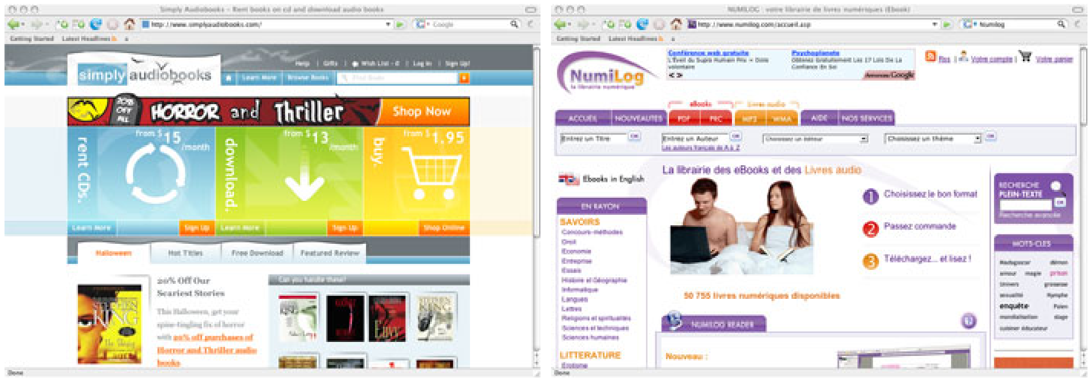
The Audible homepage.

The difference between bricks-and-mortar and online stores in terms of title selection is quite dramatic. A typical large-format bookstore might carry 100–200 audiobook titles, and a specialty audiobook retailer several thousand.

In contrast, the online audiobook retailer Audible boasts an inventory of 50,000 audiobooks, radio broadcasts, and periodicals. Numilog, a subsidiary of Hachette Livre, is a major distributor and online retailer of French-language digital books and offers a comparable number of audiobooks and eBooks. The Quebec-based online retailer Tonality also offers an extensive selection of more than 23,000 French-language audio titles, most of which originate in France.

Eileen Hutton, vice-president and associate publisher for the US audiobook publisher Brilliance Audio, has said of the sales channels for audiobooks, "One of the biggest problems for audiobook consumers today is the very small footprint of audio in most bookstores. There just isn't enough space allocated to allow for much breadth of selection. Bricks-and-mortar retailers are driving their customers to the Web, to either buy physical product or to buy downloads.[18]"

[18] "Downloads Have Publishers Singing a New Tune," *Publishers Weekly,* May 8, 2006.



Canadian-based Simply Audiobooks (left) and France's Numilog.

3.6 OUTLOOK

The audiobook market in Canada is clearly shifting online, both in terms of where spoken-word audio titles are available to be discovered and acquired and in terms of consumer buying and reading behaviour. A September 2008 report released by the Canadian Internet Project (CIP) notes that Canadians continue to be among the world's most frequent and heaviest Internet users. The CIP study includes the following highlights:

- 95% of students, 87% of employed citizens, and 47% of retired individuals use the Internet—most are heavy users who spend 15 hours or more online each week
- 54% of all Canadian homes have broadband Internet access
- 48% of Canadian Internet users have purchased a product or service online
- Books remain one of the most prominent product groups for online shopping

In other words, cultural and consumer behaviour continues to move online, and audiobooks are well positioned to meet this trend. Online audiobook platforms feature levels of selection, convenience, and affordability that are impossible to replicate through bricks-and-mortar sales channels.

Because of this, we expect the audiobook category to continue to grow in the years ahead at a faster rate than the overall book market. The major online consumer platforms for audiobooks will continue to aggregate increasing numbers of titles, to integrate their inventories with other dominant consumer platforms, and to stimulate mainstream demand for spoken-word audio.

As CD and downloadable formats continue to drive growth in audiobook sales, we expect this may trigger expanded production in spoken-word audio as well. As such, the emerging importance of the online sales channel for audiobooks stands to serve both mainstream readers as well as a growing percentage of print-disabled readers.

4.0 THE eBOOK MARKET

"Is the world finally ready for eBooks?"

— *Quill & Quire*, May 1, 2006

"[eBooks] have become mainstream in the sense that they are a genuine consumer product for which there is real appetite."

— Penguin Group Chief Executive John Makinson in "E-Readers Wow at Fair, But Face Tough Competition," *New York Times*, October 20, 2008

4.1 MARKET SIZE

As with the audiobook market, there is little concrete data on eBook sales in Canada, and the problem is compounded by the relatively amorphous nature of the category. Whereas audiobooks are distributed in both physical and downloadable formats—and the channels to market are relatively defined—eBooks circulate almost entirely as downloadable files. Further, they do so through multiple channels and without regard to national boundaries.

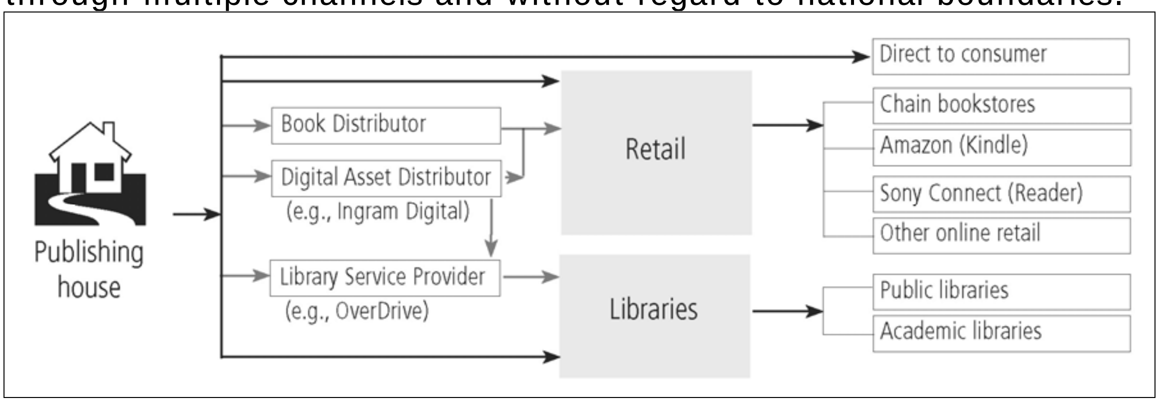


Figure 7. The eBook supply chain. Note that the aspect of the value chain that is not well represented here is the conversion and/or production of the eBook file. Depending on the trading partner and sales channel involved, various stages of conversion or production may occur within the publishing house, the publisher's distributor, the digital asset distributor, the library service services provider, and/or within major retail platforms.

Ingram Digital is one of the largest distributors of digital content in the book business, and a subsidiary of the leading trade wholesaler of the same name. As of October 2008, Ingram's eBook inventory numbered more than 130,000 titles from 1,100 publishers. The company provides the following summary comments on the current state of play in the eBook market:

- The majority of eBook titles in inventory are English-language editions
- The majority of eBook titles in inventory have secured global rights

- The majority of eBook sales are made to customers in the US, UK, and Canadian markets

Ingram also reports dramatic growth in eBook sales, noting that downloads for July–September 2008 were double those of the same quarter in 2007.

The Association for American Publishers (AAP) and the International Digital Publishing Forum (IDPF) both track eBook sales in the US, retail trade and trade wholesale respectively, and both sets of figures point to dramatic growth in the category.

The IDPF reports that US trade wholesale eBook sales grew from US$5.8 million in 2002 to US$31.8 million in 2007 for an overall growth rate of 448% over five years. The AAP reports that US trade sales for eBooks reached US$67 million in 2007, growing 23.6% over the previous year.

Figure 8. 2007 US trade wholesale and trade wholesale values for eBook sales (US$ millions). Source: Association of American Publishers, International Digital Publishing Forum

Given the porous nature of national boundaries in eBook markets and the dominant market share of imported eBook titles in Canada (which is likely in the neighbourhood of 90%), we believe that both the AAP and IDPF figures can be accepted as indicators of growth and relative size for the Canadian market.

However, while eBook sales have grown significantly over the past five to six years, they still represent a very small percentage of the total book market. The estimated eBook trade sale of US$67 million in 2007 represents less than 1% of the total trade market in the US that year[19].

[19] The Association of American Publishers estimates 2007 US trade sales at US$14.9 billion.

4.2 MARKET ADOPTION

As noted in the opening chapter of this paper, consumers and publishers have been hearing dizzying eBook projections for the last decade and are naturally cautious about framing their expectations for digital books today.

The promise of eBooks has always been increased convenience and choice for consumers—greater title selection, lower prices, immediate delivery, greater portability—and new efficiencies for publishers through on-demand digital distribution and the chance to drive sales and reach new readers via additional sales channels.

The market has nevertheless been slow to adopt eBooks. In 2006, the International Digital Publishing Forum conducted a consumer survey on eBook usage. The consumers in that study identified three factors preventing them from buying and reading more eBooks.

1. Price (too expensive)
2. Lack of selection among titles published in digital editions
3. Too many proprietary file formats with associated DRM protections—for consumers this has meant a lack of interoperability between reading platforms, concerns over the longevity of any one system or format, and frustration with DRM limitations on the usage of purchased files

These factors are widely considered to have impeded the growth of eBook platforms and markets to date, and they remain as pressing issues in the digital marketplace today.

However, that we are now observing a reasonably broad consumer adoption of eBook reading. This is happening as a result of a number of inter-related factors, including the deep penetration of broadband, the growing population of readers who have "grown up digital," and the emergence of major consumer platforms for eBooks.

As is sometimes said, every generation of publishers has to respond to the demographics of the day. For today's publishers, the change-driving demographic groups are those born after 1980—those who came of age when the Internet had firmly established itself as a new mass medium. It is difficult to fully measure the effect of these "digital natives" on the book trade and reading behaviour. But they are widely characterized as format-neutral multitaskers who are writing new rules for how they discover and engage with books.

Nick Bilton, of the *New York Times* R&D group, was recently quoted: “A common response to the prospect of an eReader is, ‘But I love the feel of paper, I love a good book in my hands.’ I can empathize with that sentiment, but I don’t think the digital generation can. If it’s not a touch screen, or hyperlinked, or instantly available at the press of a button, then it’s not worth their time.”

Aside from this generation’s strong drive to digital flexibility and immediacy, many observers in and outside of the book trade have felt for some time that eBook reading was only one iPod-like device away from wider consumer acceptance.

It’s not clear whether or not the book publishing industry has found its iPod as yet. But we have already seen the game-changing effect that a winning consumer device can have in the introduction of two major eBook readers: the Amazon Kindle and the Sony Reader. These competing consumer platforms have galvanized both industry and consumer attention[20]. More to the point, in a very short period of time they have demonstrated that a successful eBook reader can trigger dramatic growth in the availability of and the consumer demand for digital books.

4.3 FORMATS AND PLATFORMS

The early years of the eBook market—say 1998–2005—were characterized by a plurality of file formats and reading devices. Many of these were tied together via proprietary file formats that could only be used on a particular eBook reader.

This variety of file type and platform may be useful for the sake of healthy competition, but it is also a serious impediment to both consumer and industry adoption. Publishers need to produce, distribute, and manage not one but many digital editions for each eBook title. Consumers have to choose which technology they will invest in, and hope the one they choose will still be around in a couple of years. Librarians have to collect and manage multiple formats within their eBook collections.

[20] Amazon scored something of a consumer adoption coup on October 24, 2008, when Oprah Winfrey featured the Kindle on her television show, proclaiming it her “new favourite thing in the world.” Oprah’s ability to shape consumer tastes and drive buying behaviour is well documented, and in this case, her endorsement came with a special discount offer for any viewers wishing to buy the Kindle. *Advertising Age* reports that on the day the show aired, traffic to Amazon.com increased by 6%. As Amazon is a top-20 Internet site, a 6% increase likely translates into hundreds of thousands of additional visitors.

Over the years, this spirited competition has seen the introduction and varied fortunes of several different eBook formats and platforms, including the following.

DISCONTINUED

<u>Rocket eBook</u>
What: Reading device + proprietary file format
When: Introduced by NuvoMedia in 1998, discontinued in 2001
File type: Rocket (.rb). HTML-based proprietary format

<u>Softbook Reader</u>
What: Reading device + proprietary file format
When: Introduced in 1998, discontinued in 2001
File type: HTML-based proprietary format

<u>EB Dedicated Reader</u>
What: Reading device + proprietary file format
When: Introduced by Everybook in 1999, since discontinued
File type: PDF

ONGOING

<u>Adobe PDF</u>
What: Proprietary file format, *de facto* standard for fixed-format files
When: Introduced by Adobe in 1993, established as an open standard in July 2008
File type: Portable Document Format (.pdf)

<u>eReader</u> (aka Palm)
What: Software application to support reading on mobile devices and PDAs
When: Formerly Palm Digital Media/Peanut Press
File type: Palm (.pdb)

<u>Microsoft Reader</u> (aka MS Reader)
What: Software application for creating and reading proprietary file format
When: Introduced by Microsoft in 2000
File type: HTML-based proprietary format (.lit)

<u>Mobipocket Reader</u>

What: Software application to support reading on mobile devices and PDAs
When: Introduced by Mobipocket in 2000, acquired by Amazon in 2005
File type: Mobipocket (.prc or .mobi)

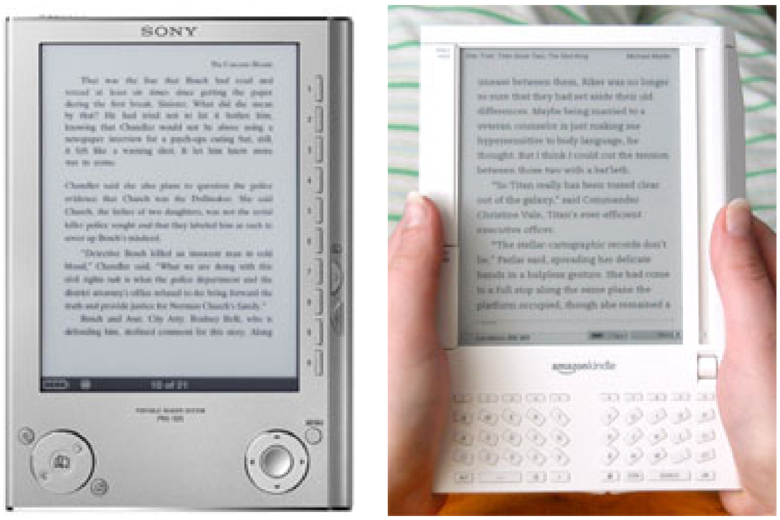
These examples illustrate two broad phases of industrial development in the eBook category: a first phase that emphasized new reading devices using proprietary file formats, and a second generation of development focused on both open and proprietary formats and software applications for eBook reading.

US industry consultant Mike Shatzkin has reported recently on research he conducted in early-2008 on eBook reading behaviour: "[Our research] demonstrated pretty convincingly that most eBooks sold in the US are not read on [dedicated eBook readers], but are Adobe files that are most likely read on PCs…Only about a third of sales are of Palm, [Mobipocket], or [MS Reader] formats that we'd expect to be read on a handheld."

Shatzkin's observations are borne out by our interviews with retailers and aggregators during this study. A number of these respondents indicated that a large percentage of their digital inventories were in the form of Adobe PDF files. Some characterized these titles as "legacy inventory," suggesting that while early eBook collections have been built with PDF files this will likely change over time in favour of new file formats.

On that note, the current phase of eBook development began in September 2006 with the introduction of the Sony Reader, and then the Amazon Kindle in November 2007[21]. Both readers use E Ink technology to deliver a paper-like reading experience; both retail for $300–$400; and both are tied to a consumer-facing online store of digital book inventory.

[21] There are a number of other readers coming to market as we prepare this report—including the foldable Readius device from the Dutch firm Polymer Vision and the more business-oriented Plastic Logic Reader.



The Sony Reader, Model PRS505S (left), and the Amazon Kindle.

Both the Sony Reader and the Kindle have proprietary formats as their primary file type—and each of these primary formats come bundled with DRM protections designed to constrain piracy.

Publishers that aim to make titles available on either platform have to go through an intake process that converts their source files to the requisite format, and catalogues the title within the online inventory for each reader. (Both readers also support additional file formats, as outlined below, and so users also have the option to load compatible files sourced outside of the Sony and Amazon eBook inventories.)

In terms of competitive posture, Sony has the advantage of a leading market position in consumer electronics. The company also has considerable expertise in building mass market appeal for its consumer products, as evidenced by the relatively rapid rollout of the Reader to book markets outside the US. The Kindle has the advantage of its linkage with the world's leading online book retailer as well as the expertise and established trading relationships that Amazon has with publishers around the world.

4.3.1 SONY READER

The Sony Reader debuted in the US in 2006, and then in Canada and the UK in 2008. It retails in Canada for CDN$299.

The Reader is designed to be connected by cable to the user's laptop or desktop computer so that eBook or other compatible files can be passed back and forth. Consumers can purchase eBook titles for the Reader from the Sony

Connect eBook store. Sony claims to have “thousands” of titles available via this consumer-facing platform.

The Reader’s primary file type is Sony’s proprietary Broadband eBooks (BBeB) format. In addition to BBeB, the Reader supports DRM-free PDF, HTML, TXT, RTF, and ePub files as well as DRM-added PDF and EPUB. The device can also play MP3 and AAC audio files.

4.3.2 AMAZON KINDLE

The Amazon Kindle was launched in the US in late-2007. It is still available only in the United States, where it retails for US$359. Amazon’s main e-commerce site at Amazon.com boasts 185,000 eBook titles for the Kindle platform.

The Kindle uses Amazon’s proprietary .azw file format. These files have a Mobipocket base, but they are distinct from their Mobipocket cousins. In addition to .azw, the Kindle supports PDF, TXT, RTF, and EPUB files.

The Kindle is noticeably absent from international markets, including Canada. Amazon prefers not to comment on its longer-term plans for international release, but there appear to be two principal reasons behind the Kindle’s US focus. First, the internal systems for managing transactions for the platform are strongly tied to the main Amazon.com site in the US, suggesting that some additional work—which Amazon clearly prefers not to undertake for the moment—would be required to integrate the Kindle platform with Amazon’s various country sites outside of the US.

In addition, the Kindle links to Amazon.com via a wireless Internet connection. In the US, this wireless service operates on Sprint’s CDMA cellular network[22], and Amazon covers the connection charges to the network. In order to apply this model outside of the US, Amazon would need to negotiate similar terms with a cell carrier in each market in which the Kindle was introduced.

The Canadian market has a relatively smaller field of cellular service providers, including only two major telecoms that use a CDMA system: Telus and Bell. (The country’s other major cell service, Rogers, uses a GSM network.) The less competitive cell phone market in Canada, along with the smaller size of the market generally, may discourage Amazon from launching the Kindle here in the near future.

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[22] There are two types of cell phone networks: CDMA and GSM. Devices that operate on one do not operate on the other.

A Kindle launch was planned in the UK for fall 2008, but it has been postponed to late-2009 due to implementation issues within European cell phone networks.

4.3.3 MEASURING MARKET ADOPTION

Sony does not report sales for the Reader, in Canada or otherwise, but informal reports indicate that the device is selling at or above sales targets in the US and UK. Many observers, including Evan Schnittman, Vice President of Business Development and Rights at the Oxford University Press, have speculated that combined Sony Reader and Kindle sales will approach one million units in 2008.

As is the case with Sony, Amazon does not report Kindle sales in detail, but the reader's market penetration has been the subject of considerable speculation by industry observers and analysts alike.

In August 2008, the technology blog TechCrunch reported Kindle sales of 240,000 units in the first nine months since launch. Citibank's investment research unit subsequently released its updated three-year forecasts. These latest projections anticipate unit sales of 400,000 in 2008 alone and suggest that the Kindle could be a billion dollar business by 2010.

	2008E	2009E	2010E
Kindle Units Sold	378	794	3,312
Kindle Unit Price	$350	$298	$253
Cash Revenue	**$132,300**	**$236,185**	**$837,522**
Annual Revenue Recognition*	50%	50%	50%
Recognized Unit Revenue	**$66,150**	**$184,243**	**$536,854**
Kindle Book Sales			
Units in Circulation	378	1172	4,484
Attach Rate (Books per Month)	1.0	1.0	1.0
Price per Book	$9.99	$9.99	$9.99
Book Sale Revenue	**$45,315**	**$140,487**	**$537,530**
Total Revenue	**$111,465**	**$324,730**	**$1,074,384**
Estimated Total Amazon Revenue	$19,704,899	$24,084,671	$28,504,125
Kindle as a Percentage of Total Revenue	0.6%	1.3%	3.8%

Table 3. Three-year sales forecast for the Kindle platform, all values in thousands.
Source: Citi Investment Research

* Amazon recognizes Kindle revenue over two years.

For its part, Amazon has reported the following of Kindle sales and consumer behaviour as of October 2008:

- Kindle editions account for more than 10% of unit sales for books that are available on Amazon.com in both digital and print formats.
- Print book-buying behaviour remains unchanged among Kindle owners in that those that have a Kindle continue to buy the same number of print books.
- Total book purchases, digital and print combined, increase by an average of 2.6 times among Kindle owners.

Bearing in mind that (1) these data come from a single source and (2) they describe consumer behaviour for only the early months of the Kindle's release in the US, they nevertheless reflect some of the publishing industry's fondest hopes for eBooks. That is, that eBooks might help increase overall sales in the industry—whether by encouraging consumers to buy more books or by attracting new types of book buyers (or both).

4.3.4 THE ROLE OF MOBILE DEVICES

It seems clear that in the first half of this decade the majority of eBooks were read on PCs or portable digital assistants (PDAs) such as the Palm. In 2008, it seems equally clear that the number of new devices, platforms, and applications that are driving continued growth in the mobile device market will continue to figure in the development of eBook markets.

Some of the most successful product launches for both consumer and business audiences in recent years have been mobile devices, most notably the Blackberry from Research In Motion and the iPhone from Apple.

Further, while both the Sony Reader and the Kindle are drawing considerable interest and each is having a significant market-shaping effect at this time, some observers wonder if either company has the wherewithal to succeed in building a durable technology and content platform for digital reading. O'Reilly Media's Matt Slocum recently noted, "Distribution is what Amazon has as its core competency. The Kindle, like all of its predecessors, will not rise in success beyond the early adopters because Amazon does not own the brand loyalty within the consumer electronic market segment that is required to make the next big step in creating meaningful demand."

Perhaps because of this perspective, recent stories about the iPhone's suitability as an eBook reader have been widely discussed within technology and publishing circles. The iPhone has sold more than four million units by now. In the process it has established itself as a leading mobile platform, and third-party developers have responded with a variety of applications that support eBook reading on the iPhone.

"It's official," announced *Forbes* magazine in October 2008, "The iPhone is more popular than Amazon.com's Kindle." *Forbes* reported that a third-party eBook application for the iPhone, Stanza, had been downloaded nearly 400,000 times to that point and was continuing to be installed by iPhone users at a pace of about 5,000 per day. "In other words, Apple may have inadvertantly sold more e-readers than any other company in the nascent digital book market.[23]"

Other iPhone applications, including TextOnPhone and Readdle, have also been quickly taken up by iPhone owners. All of these third-party applications rely on public domain content, such as the inventory at Project Gutenberg, to supply books to consumers reading on iPhones. However, they also allow users to load content purchased or gathered elsewhere in a variety of file formats. Readdle, for example, supports .doc, .gif, .html, .jpeg, .pdf, .ppt, .rtf, .txt, and .xls files.

Given the mass market adoption of devices like the iPhone, and the flexibility of the e-reading applications developed for the device to date, it's possible that the PDA category could push the eBook market toward a more platform-neutral state (i.e., non-proprietary file format) in the years to come. At the least, given Apple's success in knitting together technology and music content through its iTunes platform, mobile devices like the iPhone and consumer electronics brands such as Apple can be expected to play an expanded role in the developing eBook market.

4.4 PRICING

It appears that Amazon, with its broad reach in the book market, has now effectively set the price for eBooks. Amazon has aggressively priced most eBooks available through its .com site at US$9.99. This is a price that undoubtedly respond to consumer interest in lower eBook prices, but it also appears to be a price point at which Amazon may be losing money on every digital copy sold.

A BookNet Canada study provides an overview of how this retail price breaks down within the value chain for digital books.

	DOLLAR VALUE	% OF RETAIL
Retail Price	**$9.99**	**100%**
Author Royalty	$1.00	10%

[23] "iPhone Steals Lead Over Kindle," *Forbes*, October 2, 2008.

Publisher Margin	$4.25	42.5%
Retailing Costs	$5.25	52.5%
Sub-total	$10.50	
Retail Profit per Unit	**($.51)**	**(2%)**

Table 4. Distribution of margins for Kindle title sales.
Source: BookNet Canada

It remains to be seen how this situation will reconcile itself in the years ahead, but for the moment Amazon seems prepared to forgo profits on eBooks sales in favour of driving unit sales of the Kindle and greater consumer adoption. Most other consumer-facing platforms for eBook sales—at least in English markets—will have to match or at least approximate this price.

Interestingly, the French online retailer Numilog has taken a different approach in holding the prices of eBooks at 10–20% less than a comparable print edition. Numilog's market position is strong enough that it may be able to fend off other price competitors for the time being until it is more clear what sort of volume and pricing patterns will develop in eBook markets for the medium to long term.

4.5 EBOOKS AND THE PRINT-DISABLED READER

As with growth in the audiobook market, the burgeoning collections of eBooks represent real opportunities for print-disabled readers. Depending on the file format, an eBook can be enlarged for screen reading using magnification software, or can be converted to synthesized voice with text-to-speech applications, such as JAWS.

In this sense, at least at a theoretical level, any eBook could become a more accessible text, through magnification, rendering as a large-print edition (on screen or through print-on-demand), or conversion to spoken-word audio. In practice, there are a number of factors that intrude on this possibility.

First, not all books are published as digital editions. By some estimates, considerably fewer than half of all titles released by major multinational publishers are commercially released as eBooks. As of fall 2008, this is changing—Penguin Group, for example, has recently announced its intention to publish all new titles in both print and eBook editions—and is likely to shift further in the years ahead.

Second, not all digital book files lend themselves to easy manipulation or conversion. As we have observed, a large percentage of the digital book stock available today exists as PDF files. While the latest versions of the PDF format are more pliable, the format is generally not ideal for access or conversion by print-disabled readers[24]. Similarly, DRM protections on eBooks interfere with accessibility by preventing text-to-speech applications from converting the text to synthesized voice. The anti-copying protections in the file's DRM components perceive the text-to-speech application as an illegal attempt to copy.

In short, a growing stock of eBooks is an important building block to improved accessibility for print-disabled readers, but, as we will see in Part III below, the ideal state for accessible digital content is a highly agile, standards-based format that can be easily converted or adapted to meet the diverse needs of different users within the print disabled community.

4.6 OUTLOOK

Consumers expect a lot of the eBook format. A 2006 IDPF study demonstrated clearly that consumers strongly believe that a much wider selection of eBooks should be available, that eBooks should cost considerably less than their print counterparts, and that having purchased an eBook, customers should be free to use it in any way they would use a print edition. In particular, eBook consumers expect to be able to read their books where, when and how they wish (i.e., to move books from device to device as needed) and to share them with friends.

As we have seen, the emerging eBook market responds to a number of these concerns with a wider (and growing) selection of titles and aggressive pricing. We expect that title selection will continue to grow rapidly in the years ahead and that price competition will be intense in the near future as well.

The industry is still searching for the proper balance with respect to DRM measures, but it appears that consumers remain determined to vigorously resist any protections that they perceive as overly restrictive or as an undue limit on flexible and fair use. For publishers, the choice will be to publish with

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[24] The current Adobe Acrobat release is version 9.0. From version 6.0 onwards (circa 2003), the Acrobat program has featured improved accessibility features for users with print disabilities. PDF files can now be specifically created to be accessible by those with a print disability. A tagging function built into the Acrobat program is a key component of this. Current PDF file formats can include tags (XML), text equivalents, captions, and audio descriptions. Some software applications, notably Adobe InDesign, can automatically produce tagged PDFs. Leading screen readers, including JAWS, can read tagged PDFs, and the current releases of Acrobat and the Acrobat Reader can also read PDFs aloud. Tagged PDFs can also be re-flowed and/or magnified for readers with visual impairments. However, not all PDF files are created with tags, and problems remain with adding tags to older PDFs or to those that are generated from scanned documents. In such cases, the file content cannot be re-flowed or magnified reliably, and screen reading software will not be able to access the file reliably. This is especially true in the case of files with more complex content (e.g., graphs or charts).

DRM—especially for platforms such as Sony and Amazon that explicitly support it—or to pursue greater consumer acceptance at the risk of increased piracy.

Beyond this, the online distribution of digital books also challenges some long-held conventions in book publishing, including the industry's definition of "in print", the basis for calculating author royalties, and the concept of territoriality.

The consumer behaviour, technology platforms, and sales channels that the eBook market needs to thrive are increasingly in place. We expect that the accommodations that publishers, retailers, authors, and consumers reach around rights management, as well as the adaptability and agility of file formats for digital editions, will now be the major determinants of the pace and degree of consumer adoption of eBooks over the next three to five years.

PART III.
DIGITIZATION AND THE PRODUCTION OF DIGITAL EDITIONS

5.0 THE CANADIAN CONTEXT FOR AUDIOBOOK AND EBOOK PRODUCTION

A March 2008 Market Partners study observed that "far less than half" of the total title offerings of major multinational publishers are available as eBooks. As we noted earlier, approximately 3% of the total title output available in the Canadian market is published in audiobook form, with the vast majority of those titles released by specialized audiobook publishers or large multinational firms.

We have also described a Canadian market where imported titles—particularly those from the US, UK, and France—have a majority market share. Estimates of market share vary, but it would be safe to say that imported books account for at least 65% of the Canadian market. In the case of audiobooks, we believe this market share is closer to 95%, and, for eBooks, roughly 90%.

These observations point to a key characteristic of the Canadian marketplace: with only a few exceptions, the largest firms are foreign-owned while Canadian-owned firms are on average noticeably smaller. In its 2004 Survey of Book Publishers, Statistics Canada data identified a core group of 330 publishers operating in Canada. Of these, 311 were Canadian-owned and 19 were foreign-owned. Despite their smaller numbers, foreign-owned firms account for a majority of domestic book sales.

In fact, BookNet Canada reports that only five firms—Pearson Canada (Penguin), Simon & Schuster Canada, Random House Canada, HarperCollins Canada, and H.B. Fenn[25]— accounted for roughly 37% of tracked retail book sales in Canada in 2006 (through their original and distributed titles).

This concentration of market share has a number of implications for title output in the audiobook and eBook categories, but it also highlights the particular dynamics of production in book publishing.

5.0.1 CURIOUS ECONOMICS OF CULTURAL PRODUCTION

Our understanding of the economics of cultural industries owes much to the work of Richard Cave, author of *Creative Industries*, and Peter Grant in his co-authored book, *Blockbusters and Trade Wars*. These works identify a number

[25] H.B. Fenn is a Canadian-owned publisher-distributor. In 2007, 71 of Fenn's 74 distributed lines were imported books, including Hachette.

of distinguishing characteristics of cultural products, and Grant offers three critical observations that reflect what *The Economist* has termed the "curious economics" of the cultural marketplace.

> "*Most products fail to achieve commercial success, and it is virtually impossible to predict ahead of time which products those will be.* This makes the cultural business exceptionally risky. That risk is further heightened by the brief opportunity that cultural products have to prove themselves….The second observation, however, is the converse of the first*. If they are successful, cultural products can produce a much higher reward than any ordinary commodities can.* Once the cost of the first or master copy has been recovered, the marginal costs of selling additional copies are tiny…the revenue from sales of additional copies in additional markets is profit.
>
> A third observation is also worth noting at this point: *cultural products that are attractive to consumers in a large geographical market have a lower risk and a much greater potential reward than do those that are produced for a smaller market*. The reason is that with the larger market, there are a greater number of potential customers over which to amortize the fixed costs of the master copy, after which the product can go into profit.[26]"

As Grant's observations illustrate, cultural industries are characterized by sharply increasing returns to scale. These economies of scale are more readily available to—and represent a formidable source of competitive advantage for—larger firms in the cultural marketplace. Such competitors are better placed to produce a higher volume of product (thereby spreading the risk of unpredictable demand across a larger number of titles), to command a significant presence in channels to market with high-profile talent and substantial marketing budgets, and to exploit intellectual property under contract across the widest possible range of markets and formats.

These factors create a self-reinforcing cycle where the result is that the characteristics of cultural markets reward larger players throughout the supply chain. The further implications of this is that companies will expand to as many viable markets as possible to extend economies of scale to the greatest extent.

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[26] Grant and Wood, *Blockbusters and Trade Wars: Popular Culture in a Globalized World*, Douglas & McIntyre.

Put another way, the cultural marketplace has a number of defining structural characteristics that both favour larger competitors and encourage market concentration. In a globalized economy where supply chains are increasingly integrated, and technological change is rapid and far-reaching, these market characteristics have an observable effect on the selection of products available to consumers.

5.0.2 IMPLICATIONS FOR DIGITAL BOOK PRODUCTION

This broad discussion of cultural economics applies to our more specific context of audiobook and eBook publishing in the following ways:

- The largest firms in the market are in the best position to acquire and publish the most commercially viable titles, and to exploit these titles in as many markets, and in as many formats, as possible. This largely explains the pattern that we see in Canada, where large multinational firms account for the vast majority of audiobook and eBook titles (and sales).

- Many foreign-owned subsidiary firms operating in Canada also have well-established original publishing programs that produce top-selling Canadian-authored titles. They also have the resources to produce audiobook and/or eBook editions of bestselling titles originated in Canada.

- In contrast, the smaller Canadian-owned firms have more limited market reach through which they can exploit audio and/or eBook editions. They also have more limited staff and budget resources to invest in digitization and digital distribution. As a result, Canadian-owned publishing houses have, to date, been slower to bring digital editions to market.

5.1 COMMERCIAL BOOK PUBLISHERS

We can divide the field of publishers producing audiobooks and eBooks for the Canadian market into three broad categories: (1) foreign and multinational publishers, (2) Canadian-owned publishers, and (3) non-commercial producers. We'll address the first two of these categories below, and review non-commercial producers separately in section 5.2.

5.1.1 FOREIGN AND MULTINATIONAL PUBLISHERS

The world's largest publishers have a large footprint, including wholly owned subsidiary companies, in the Canadian market. These include Random House, Penguin, HarperCollins, Simon & Schuster, and Hachette Livre.

The Canadian subsidiaries of these multinational publishers import a considerable number of titles from the various divisions, imprints, and international subsidiaries of their international parent companies. Most of the Canadian subsidiaries—notably Random House Canada, HarperCollins Canada, and Penguin Canada—operate original Canadian publishing programs as well.

Each of these multinational publishers has made major investments in digitization and digital distribution, and each publishes large catalogues of eBook and audiobook titles. In October 2008, for example, Penguin Group announced that it would use Ingram Digital—a prominent digital services firm—for the hosting, management, and distribution of Penguin's eBook and downloadable audiobook titles in the US, UK, and Canada. Penguin will initially distribute "approximately 11,000 titles" through Ingram Digital with "many more" scheduled to be added in 2009.

RANDOM HOUSE CANADA

Random House Canada was established in 1944 as the Canadian distributor of Random House Books[27], and the company subsequently established a Canadian publishing program in 1986. Random's worldwide revenues exceeded US$2.6 billion in 2007.

Random House, Inc. has invested significantly in digitization, and it has established its own digital services division: Random House Insight. Random digitizes and distributes its own digital content through Insight and also sells its services to other publishers.

[27] Today, Random House is owned by the German media powerhouse Bertelsmann AG.

The number of digitized Random House titles in the Insight system is changing quickly. The platform launched in February 2007 with 5,000 titles, but Random announced in fall 2008 that its collection had grown to more than 14,000 titles by that time.

In March 2007, Random House announced that the Insight program would be extended to audiobooks. In that month, 2,200 audiobook titles were immediately available on the system, and the total audio content is now reported to exceed 10,000 titles.

In an internal memo dated August 2008, Random House CEO Markus Dohle commented, "Our significant investments in the digital future are beginning to see results. Thanks to the successful introduction of the Amazon Kindle and continuing support for the Sony Reader, our e-book revenue in the United States for the first six months of 2008 is double our e-book revenue for all of 2007. It is still a tiny source of revenue for us, but it will grow quickly as we continue to make more of our titles available for downloading and more people adopt the new reading devices. Our e-book publishing program is well underway in Germany and Canada and will debut in the United Kingdom next month, timed to the launch there of the Sony Reader."

HARPERCOLLINS CANADA

In 1989, the News Corporation acquired publishers William Collins and Harper & Row and combined the two companies to form HarperCollins. HarperCollins Canada was established as a subsidiary company that same year to act as a Canadian distributor for HarperCollins titles and also to establish a Canadian publishing program under the HarperCollins Canada imprint. HarperCollins had worldwide revenues of US$1 billion in 2007.

The company launched an ambitious digitization effort in January 2007 by taking an equity position in the LibreDigital division of Newsstand, Inc[28]. Through this investment, HarperCollins announced its intention to work with LibreDigital to "create, market and operate digital services for the publishing industry....in discrete, modular segments including digital typesetting, production, digital warehousing, Internet distribution, and online marketing."

The effect of this transaction was to create a similar structure as at Random House, in that HarperCollins has joint ownership of a subsidiary company that will drive its digitization programs and is also selling digital services to other publishers. LibreDigital is now a leader within an emerging group of Digital Asset Distributors in the publishing business.

[28] Newsstand has since formally changed its name to LibreDigital.

In February 2007, the *New York Times* reported that HarperCollins had digitized 10,000 titles, with plans to add 15,000 more in the coming months. HarperCollins Canada has been active in digitization of its titles as well, and has converted "several hundred" of its original Canadian titles for digital delivery in the first half of 2008.

HACHETTE LIVRE

With 2007 revenues of US$2.67 billion, Hachette Livre is the largest publisher in France and part of Lagardère Media, the media division of Groupe Lagardère. The company is organized around three operating divisions: Hachette Livre (book publishing), Hachette Filipacchi Médias (magazine publishing), and Hachette Distribution Services (distribution and retail).

A major publisher of French-language titles, the Hachette Livre division also incorporates Hachette Book Group USA—a prominent English-language trade publisher[29] that has recently announced plans to establish a Canadian subsidiary.

Similar to HarperCollins, Hachette's investment in digitization was punctuated by the company's acquisition of a major online platform and digital services provider, Numilog, in May 2008. Numilog is an online retailer of eBooks and audiobooks that also offers a wide range of digital services to Hachette and other client publishers (including digitization, digital asset management, and digital distribution services), and provides collections of eBooks and audiobooks to libraries. Numilog's inventory of digital books currently exceeds 50,000 titles.

MANAGING RIGHTS BETWEEN SUBSIDIARIES AND PARENTS

As we noted earlier, many Canadian subsidiaries of multinational firms maintain substantial Canadian publishing programs. As these companies ramp up their digitization efforts, it is possible that more Canadian content from these subsidiary firms will find its way into major retail platforms for digital books, or into other digital collections. However, there are a couple of issues that may limit how quickly or easily any such titles could be incorporated within the global systems for digital content of which these subsidiary firms are a part:

[29] The Hachette Book Group includes a large number of distinct imprints, notably the Time Warner Book Group and Little, Brown and Company.

1. The subsidiary company may not have the digital rights to exploit. If the rights to the title were acquired from the parent, the parent company may well have retained the digital rights.

2. Digital licensing and distribution arrangements for multinational publishing firms are generally negotiated on a global basis from head offices in New York, London, or Paris. Many of these firms have also invested heavily in systems for managing digital content produced both by the international parent firm and its subsidiaries.

   These large international systems figure in the availability of digital Canadian books in a couple of ways. First, if the subsidiary company holds only Canadian rights to the title, those titles will generally have a lower priority within international frameworks for digital content. (That is, they will be incorporated more slowly if at all.) Second, even if digital rights are available for a title originally published by a Canadian subsidiary, the rights will often be effectively claimed by the parent company as Canadian-originated titles are rolled up into the firm's global systems for managing and distributing digital content.

5.1.2 FOREIGN AUDIOBOOK PUBLISHERS

Only one Canadian subsidiary, HarperCollins Canada, publishes original audiobook editions based on its Canadian book publishing program. The company launched its audiobook program in October 2007 through a partnership with Audio Joe, a Toronto-based recording company. HarperCollins Canada plans to produce 20+ audiobook titles per year[30], in both CD and downloadable formats.

Audiobook titles published within the HarperCollins Canada program are released simultaneously with the corresponding first print edition. All of the titles are unabridged, and, along with its originated titles, HarperCollins is also exploring options to acquire Canadian audio rights for foreign-originated titles and also producing localized Canadian editions of previously published audiobooks.

Beyond this singular example, there is a fairly well-established field of foreign publishers that regularly sell audiobooks into the Canadian market. A representative sample of these firms appears in the following table.

[30] The company published 22 original audio titles in 2007.

CATEGORY	PUBLISHERS
Independent (French):	Les Éditions Gallimard, Editions Thélème, Colombini-Frémeaux, Livraphone
Multinational (French):	Hachette Livre
Independent (English):	Blackstone Audio, Brilliance Audio, Chivers Audio, Isis Soundings, Magna Story Sound, Oakhill Publishing, Recorded Books, Tantor Media, BBC Audiobook, Hyperion, Zondervan
Multinational (English):	Simon & Schuster, HarperCollins, Random House, Penguin Group

Table 5. Foreign audiobook publishers distributed in the Canadian market.

5.1.3 CANADIAN-OWNED PUBLISHERS

The Department of Canadian Heritage reports that for the 2007–2008 fiscal year, only 28 publishers out of the 230 Canadian publishers participating in the Book Publishing Industry Development Program (BPIDP) reported any sales of non-print editions. The combined value of these non-print sales (encompassing eBooks, audiobooks, and licensed digital content) was roughly $3 million (about 1% of the total sales reported by BPIDP publishers that year), most of which was concentrated among only a few firms.

This reflects the observation we made earlier: the pace of digitization has generally been slower, and the circulation of digital books more limited, within the Canadian-owned segment of the publishing industry. There are exceptions to this of course, and in fact, a closer look reveals some impressive first steps by Canadian firms.

Several have launched substantial digitization initiatives and have already released or are about to release expanded inventories of eBook titles. Further, the Canadian market saw its first major sale of a domestic digital book collection last year through the Canadian Research Knowledge Network (CRKN)—an event that has fired the interest of domestic publishers in expanded digitization initiatives.

EARLY CASE STUDIES

Harlequin was one of the first Canadian-owned publishers to move strongly to eBook publishing. The company has published some of its titles as eBooks since 2005, initially releasing nine new titles per month. More recently, Harlequin has expanded its digital book program.

Consumers can now buy Harlequin eBooks directly from the company's dedicated retail site[31] in Adobe, Microsoft Reader, and Mobipocket editions.

[31] http://ebooks.eharlequin.com

Harlequin also circulates its titles to other retailers and in additional formats such as eReader (Palm) and Sony Reader (BBeB).

In addition, Harlequin announced in September 2007 that all of its new releases (which amount to roughly 120 new titles per month, or 1,440 per year) would be simultaneously published as eBooks. This statistic alone would make Harlequin the most prolific eBook publisher in the Canadian-owned sector.

Through targeted funding initiatives from the Canada Council for the Arts and the Ontario Media Development Corporation (OMDC), several additional publishers have embarked on substantial digitization projects over the past year as well. Twenty-five publishers have received targeted funding from the Supply Chain component of BPIDP to support business planning for additional digitization efforts.

In February 2007, the OMDC provided $152,000 to a consortium of four Canadian publishers—Insomniac Press, ECW Press, Dundurn Press, and McClelland & Stewart—to support digitization and digital distribution initiatives at each company. The grant allowed for the digitization of 150–200 backlist titles from each publishing house, and provided in the process an opportunity for each of the four firms to work through all of the issues—legal, production, technology, and others—associated with publishing digital books.

Similarly, the Canada Council, through its Supplementary Operating Fund Initiative, provided significant digitization funding to five Canadian publishing houses in July 2007: McClelland & Stewart ($200,000), Douglas & McIntyre ($185,000), Annick Press ($151,000), Kids Can Press ($77,000), and Goose Land Editions ($52,000). McClelland & Stewart used its funding to digitize selected titles from its New Canadian Library series. Douglas & McIntyre applied its funding to the development of a new system for managing and distributing digital assets. Annick's funding was commited to an online marketing and eBook project called the Annick Livebrary. Both Kids Can and Goose Lane applied their SOFI funds to online marketing as well (with expanded digital content and digital distribution components in both cases).

THE CANADIAN RESEARCH KNOWLEDGE NETWORK SALE

September 2008 saw the first major sale of a Canadian eBook collection when Montreal-based Gibson Publishing Connections brokered the sale of a 7,000-title collection to the Canadian Research Knowledge Network (CRKN). CRKN is a consortium of 67 academic libraries at universities throughout the country, and the Gibson sale places the entire collection (the "Canadian Publishers

Collection" as aggregated from 47 Canadian publishers between 2005 and 2008) in each library for a period of three years. The transaction was valued at just over $11 million.

There are a few significant aspects to the CRKN sale. First, it demonstrated to Canadian publishers that there is a market in the library sector for their digital content[32]. Second, it provided a basis for assembling the largest known collection of Canadian eBooks. Third, it triggered a national discussion within the Canadian publishing industry about expanded digitization efforts.

The Canadian Publishers Collection currently consists of 8,000 eBooks from more than 50 Canadian publishers. The collection was digitized and the source files managed by codeMantra, a digital asset distributor with offices in the US and India. The entire collection exists as "Universal PDF" files. Universal PDF[33] is a file specification developed by codeMantra to harmonize file requirements among 16 major aggregators, including Google Book Search and Amazon's Search Inside program.

In September 2008, the Association of Canadian Publishers—the national industry association in English Canada—convened a strategic planning symposium in Ottawa to tackle the question of digitization. The session gathered together industry representatives from across the country, including a large delegation from the Association nationale des éditeurs de livres (ANEL), the industry association for French Canada.

The symposium laid the foundation for expanded cooperation between the ACP and ANEL toward a national strategy for expanded digitization and digital distribution among Canadian publishers. It also provided a few key points with respect to the readiness of the industry to expand its output of digital editions:

1. In the summer of 2008, the ACP estimated that the quarter of its membership that is most interested in digital publishing will soon be in a

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[32] Two cautions here. (1) The CRKN sale was made possible through a one-time grant of $47 million from the Canadian Foundation for Innovation. As such, it is not necessarily indicative of ongoing sales potential in Canadian academic libraries. (2) Acquisitions budgets in academic libraries have shifted sharply to electronic resources, and as much as half of academic library collections budgets are now spent on digital content. The shift is less acute in public libraries, where spending on electronic collections accounts for only about 10% of total acquisitions.

[33] PDF may or may not be the optimal format for the collection going forward. Interestingly, however, codeMantra's digitization process first converts the books to an XML standard (pubXML) before onward conversion to PDF. In effect, this means that the Canadian Publishers Collection can also be made available as XML-based source files.

position to bring 800 frontlist titles per year to market as eBooks. These same publishers maintain a backlist of about 11,000 titles. Ten percent of these titles are available as Universal PDF eBooks; the remainder are available for digital conversion as resources permit.

2. The ACP has received $200,000 in targeted digitization funding from the OMDC and will be distributing these funds to its members in the coming year. The funds will be released on a 50:50 cost-share basis so that the combined value of digitization spending (presuming the fund is fully employed) will be $400,000—roughly enough to convert 2,000 additional print editions to digital books.

3. ANEL is currently engaged in the development of a digital repository of eBooks from Quebec-based publishers. Development of the repository has begun, with the idea that this would be a digital warehouse to securely store publishers' digital source files—which would then be distributed at the publisher's discretion. From a survey of its member publishers, ANEL estimates that there are currently 2,000 titles ready to go to market in French Canada[34].

In short, the total field of Canadian-authored books that could be available as eBooks in the near future likely numbers 15,000–20,000.

5.1.4 CANADIAN-OWNED AUDIOBOOK PUBLISHERS

As we have observed, the economics of audiobook production are very different from those of eBooks. As a result, audiobook output among Canadian-owned publishers is modest. Along with the Canadian audiobook program of HarperCollins Canada, there are two additional audiobook programs in English Canada, at Goose Lane Editions and Rattling Books, and several more in French Canada.

Goose Lane Editions has a long-standing partnership with the CBC to publish audiobook editions of CBC's "Between the Covers" series. The titles are all abridged from the original print works for broadcast purposes, and Goose Lane does not publish any other audio titles beyond the CBC series. In fact, the future of the audio program at Goose Lane is uncertain at the moment as the CBC is changing its broadcast strategy for "Between the Covers" to rely more on podcast delivery. This may preclude the commercial release of audiobooks based on the series.

[34] ANEL notes that the response to the survey was limited and this number is therefore not truly indicative of market readiness. The association believes there are many more digital books in French Canada that could be brought to market.

Newfoundland-based Rattling Books began publishing audiobooks in 2003. It has since published more than 40 unabridged titles and short stories. Rattling focuses on Canadian literary fiction and poetry as well as outdoor adventure-based non-fiction. The company emphasizes digital delivery of its books to consumers and libraries with direct sales available on the company website[35].

The field of audiobook publishers in Quebec is somewhat larger and more diffused. There are currently 660 Quebec-produced audiobook titles available for sale. The leading publisher in this area, Éditions Alexandre Stanké, established in 1995, has 342 titles on its list, 175 of them in the Coffragants series and 19 in the Pocketaudio series. The house produces approximately 30 new titles each year. In terms of country of origin for audiobooks produced by Éditions Alexandre Stanké, roughly 30% of audio rights are acquired from publishers in the province and 70% from those in France or the US.

The Coffragants series features popular and young people's literature in French, and Pocketaudio features books for young readers in English. Some of these works are unabridged, but the majority are released as abridged versions.

Other audiobook programs in Quebec include: Les Éditions AdA (self-help, 80 titles), Les Éditions Un monde different (self-help, 80 titles), Les Éditions Planète rebelle (literary titles and spoken word, 60 titles with CD-ROMs accompanying the printed version). Québec Amérique (reference and young adult, 15 titles), Québec Loisirs (commercial fiction, 15 titles), Les Éditions L'Oeil qui écoute (young adult, 12 titles), and Les Éditions ATMA international (51 spoken-word recordings). Finally, the library services provider iTheque has released five audiobooks on its 15e Avenue and PUN (Presses universitaires numériques) labels.

Other French-language publishers will very occasionally produce talking books on CD-ROM to accompany traditional printed books. We have not counted these here, although we note that this format is used by two French-Canadian houses in particular, Prise de Parole and GREF, both based in Ontario.

[35] http://www.rattlingbooks.com

5.2 NON-COMMERCIAL PRODUCERS

Outside of the educational and scholarly publishing sectors, there are three major non-commercial producers of audiobooks and eBooks in Canada[36]. The CNIB Library is the largest Canadian producer of audiobooks and maintains a catalogue of non-print resources, with both English and French-language titles, for visually impaired readers. British Columbia's Public Library InterLINK is a cooperative of 18 public library systems that manages an inter-library loan program and produces audiobooks for print-disabled readers. La Magnétothèque, a non-profit society in Quebec, produces audiobooks for visually impaired readers under commissions from the Service québécois du livre adapté (SQLA).

In this section, we'll explore the context in which these non-commercial producers operate, look at each one more closely, and explore their relationships with the book publishing industry.

5.2.1 CONTEXT FOR NON-COMMERCIAL PRODUCTION

Non-commercial production of adaptive books occurs in a particular context: under a copyright exemption and to specific standards for accessibility. We should also note that one of the main reasons that non-commercial editions are produced is that the works in question are not commercially available in the first place.

COPYRIGHT PROVISIONS FOR NON-COMMERCIAL PRODUCTION

Section 32(1) of the *Copyright Act* explicitly provides for a copyright exemption in order to provide accessible materials to print-disabled readers.

> *"32. (1) It is not an infringement of copyright for a person, at the request of a person with a perceptual disability, or for a non-profit organization acting for his or her benefit, to*
> *(a) make a copy or sound recording of a literary, musical, artistic or dramatic work, other than a cinematographic work,*

[36] We should note as well that other non-commercial ventures play an important role in circulating book content online, particularly public domain titles for which copyright protections have lapsed. Notable examples include Project Gutenberg for eBooks (http://www.gutenberg.org) and LibriVox for audiobooks (http://librivox.org). Project Gutenberg offers a catalogue of more than 25,000 free eBooks, and LibriVox's volunteer readers have produced nearly 2,000 free audio titles to date.

in a format specially designed for persons with a perceptual disability[37];"

The provisions in Section 32(1) explicitly exclude the production of large-print books, and are void in cases "where the work…is commercially available in a format specially designed to meet the needs of any person [with a perceptual disability]."

On this last point, the CNIB practices and procedures manual notes that, "While a commercial alternative format version of a work may be available, it is not always in a format specially designed for persons with perceptual disabilities. In particular, commercial audiobooks and e-books, while technically accessible, do not offer the benefits of the international DAISY (Digital Accessible Information System) standard (ANSI/NISO Z39.86), which provides print-disabled readers with a comparable experience to their sighted peers."

ACCESSIBLE FILE FORMATS: THE XML FAMILY TREE

If information, including books, is to move smoothly in a digital space, it needs supporting standards so that the various servers, computers, and playback devices among which it is being passed can receive it, process it, and render it properly at every step of the journey. This is the theory behind metadata, sometimes called "tagging" or "markup." In a publishing context, this "information about information" contains instructions or descriptions about the book itself, but it is not normally intended to be printed or displayed with the actual book.

XML (Extensible Markup Language) is a powerful metadata specification that is highly customizable. An XML file has two basic components: the "tagged" content itself and a DTD (Document Type Definition). The DTD defines all of the tags in the content file, and acts as a master key that interprets the data for other software applications or devices.

Because of the flexibility and wide acceptance of XML, it has emerged as a powerful foundation for standards development both in the print-disabled community and in the broader publishing industry.

The DTBook standard is one such example that emerged from the NISO Digital Talking Books Committee[38]. The NISO committee essentially defined

[37] "Perceptual disability" is essentially synonymous with the term "print-disabled" as we have applied it throughout this paper.

an initial XML element set to represent the content and structure of books and other publications presented in digital talking book format.

The Digital Accessible Information System (DAISY) Consortium was formed in 1996 with the goal of further developing accessibility standards for people who are print disabled. The DTBook standard in turn became the foundation for DAISY/NISO[39], the accessibility standard for book content.

From the DAISY website:

> "A digital talking book (DTB) is a collection of electronic files arranged to present information to the target population via alternative media, namely, human or synthetic speech, refreshable Braille, or visual display, e.g., large print. When these files are created and assembled into a DTB in accordance with this standard, they make possible a wide range of features such as rapid, flexible navigation; bookmarking and highlighting; keyword searching; spelling of words on demand; and user control over the presentation of selected items (e.g., footnotes, page numbers, etc.). Such features enable readers with visual and physical disabilities to access the information in DTBs flexibly and efficiently…The three basic types of DAISY publications are:
>
> 1. Audio with NCX: DTB with structure. The NCX is the Navigation Control Center, a file containing all points in the book to which the user may navigate. The XML textual content file, if present, contains the structure of the book and may contain links to features such as narrated footnotes, etc. Some DTBs of this type may also contain additional textual components, for example, index or glossary, supporting keyword searching.
>
> 2. Audio and full text: DTB with structure and complete text and audio. This form of a DTB is the most complete and provides the richest multimedia reading experience and the greatest level of access. The XML textual content file contains the structure and the full text of the book. The audio and the text are synchronized.

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[38] NISO, the National Information Standards Organization, a non-profit association accredited by the American National Standards Institute (ANSI), identifies, develops, maintains, and publishes technical standards to manage information in our changing and ever-more digital environment.
[39] The official name for the DAISY standard is the ANSI/NISO Z39.86, Specifications for the Digital Talking Book, known as DAISY 3.

3. Text and no audio: DTB without audio. The XML textual content file contains the structure and full text of the book. There are no audio files. This type of DAISY DTB may, for example, be rendered with synthetic speech or with a refreshable braille display."

As this description illustrates, there are important distinctions to be drawn between commercial audiobooks or eBooks, and a DAISY-standard edition. The DAISY standard offers print-disabled readers a highly navigable and complete digital representation of the original work to a degree that is not possible in available commercial formats.

5.2.2 CNIB LIBRARY

Founded in 1918, the Canadian National Institute for the Blind is a not-for-profit organization that offers a range of direct services to individuals who have suffered either total or partial loss of vision. It has a presence in all Canadian provinces and territories, including Quebec. It also offers alternate format products and has created a major library for individuals who cannot read printed materials.

CNIB produces talking books in English and French and braille books in English. Each year, it produces 200–225 DAISY titles in French and 400–525 in English. The library circulates a catalogue of 74,137 English titles and 6,464 French editions to readers across the country. In 2007, the library circulated 2.2 million items and responded to 62,000 inquiries from print-disabled Canadians. The average CNIB library patron borrows 60 books per year.

FORMAT	FRENCH	ENGLISH
Analog and digital audio (DAISY CD-ROM)	2,573	8,214
Analog and digital audio for young readers (DAISY CD-ROM)	479	1,380
Digital audio online	2,817	10,552
Abridged in braille	0	14,905
Unabridged in braille	0	1,180
Braille on-line	141	3,353
Dual media for young readers (printed and braille)	0	2,913
Electronic text	454	11,687
Braille music partitions	0	19,953
Total	6,464	74,137

Table 6. CNIB Library holdings.

Over the past four years, the CNIB Library has undertaken a complete digital transformation of its infrastructure and is moving toward a fully integrated digital library service that will allow users to access downloadable titles online. For the moment, the library has moved from audiobooks on cassette to DAISY files on CD to online audio, and as with the mainstream audiobook market, is clearly on a track for expanded digital delivery from its online platform.

5.2.3 LA MAGNÉTOTHÈQUE

La Magnétothèque is a non-profit society established in 1976 to produce audiobooks for print-disabled readers. The organization receives base budget funding from Quebec's ministère de la Culture, des Communications et de la Condition féminine (MCCCQ), and the balance of its funding from production commissions from the Quebec government and others.

La Magnétothèque's production has increased in recent years, climbing from 400 titles in 2005 to 769 in 2006–2007—all in the form of unabridged audiobooks. In order to respond to a growing demand, La Magnétothèque has set itself the goal of reaching an output of 850 titles in 2010.

In 2005, La Magnétothèque transferred a collection of 5,000 titles to the Service québécois du livre adapté (SQLA), which at that point became the sole repository and distributor for all works intended for individuals with impaired vision in the province. Also in 2005, the SQLA was incorporated into the Bibliothèque et Archives nationales du Québec (BAnQ), and since then it has managed the development of collections for the visually impaired.

In 2007–2008, the SQLA's holdings included 25,343 items for 7,555 visually disabled subscribers, of whom 4,175 borrowed at least one title during the year. The total number of library loans reached 98,985 during 2007–2008—for a 147% increase over the previous year and an average of approximately 24 books per subscriber. The SQLA's holding are summarized in the table below.

FORMAT	HOLDINGS
Analog audio	10,760
Digital audio (DAISY CD-ROM)	2,558
Abridged in braille	6,975
Unabridged in braille	2,175
Dual media for young readers (printed and braille)	375

Braille music partitions	2,500
Total	25,343

Table 7. SQLA Library holdings[40].

5.2.4 PUBLIC LIBRARY INTERLINK

Established in 1994, Public Library InterLINK is a cooperative federation of 18 autonomous public libraries in British Columbia. The cooperative provides a platform for resource sharing and management of inter-library loans and other collaborative programs.

The cooperative also produces audiobooks on cassette for circulation to print-disabled readers. In the past, InterLINK had produced an average of 250 audiobooks per year. Due to recent budget cuts, audiobook output has slowed to 25–60 titles per year.

InterLINK maintains a collection of 15,000 audiobook titles for distribution among member libraries. The collection consists of titles produced by the InterLINK cooperative as well as unabridged titles acquired from commercial producers in Canada, the US, and the UK.

5.2.5 THE RELATIONSHIP BETWEEN PUBLISHERS AND NON-COMMERCIAL PRODUCERS

There really is very little interaction between traditional publishing houses and non-commercial producers of audiobooks or eBooks. The two groups share many common concerns, and each is affected by the same broad patterns in the Canadian market, such as limited economies of scale, the large market share for imported titles, and the increasing shift to digital production and delivery of book content. Nevertheless, aside from a few informal linkages, commercial and non-commercial producers appear to operate in very different spheres.

In recent years, there have been some efforts to bridge the gap, notably a 2005 pilot of an electronic clearinghouse. The clearinghouse model aims to

[40] We note as well the contribution of the Institut Nazareth et Louis-Braille (INLB) as a partner to the SQLA. Established in 1861, INLB is a specialized rehabilitation centre and partner in the Réseau québécois des services de santé et des services sociaux (a Quebec network of health and social service centres). The institute's mission is to promote the self-sufficiency and social integration of the visually impaired and in this capacity it is an important producer of non-commercial editions in both Braille and DAISY-text formats.

formalize arrangements for securing source files for conversion/adaptation for print-disabled readers[41].

Meanwhile, the Canadian publishing industry is moving toward expanded digitization and digital distribution. The country's non-commercial producers are clearly interested in expanding their title output to better keep up with the demand from print-disabled library patrons. There is an opportunity to build linkages between non-commercial producers and Canadian book publishers and we believe that the two groups could collaborate productively in a number of areas. The key to any such exchange—as is the case in all partnerships—is that each party has to benefit in a meaningful way.

For example, publishers and non-commercial producers could collaborate on audiobook production so that titles could be released for both print-disabled readers (by the non-commercial producer) and a mainstream audience (by the publisher). Similarly, they could share best practices and tools for digitization, and/or collaborate around common standards. More broadly, a targeted digitization fund for Canadian publishers could be implemented with the proviso that participating publishers deposit digital source files with a trusted national repository. Those files could then be made available on a restricted basis for the production of adapted editions for print-disabled readers.

5.3 ADDITIONAL FACTORS THAT ENCOURAGE DIGITAL PRODUCTION

We have explored a number of issues throughout this paper that influence publisher, trade, and consumer adoption of digital book content. With the launch of the Kindle and Sony Reader platforms, we are seeing real consumer adoption of eBooks for the first time, and the CRKN sale illustrates the potential of the library market in Canada. These are developments that certainly trigger expanded digitization efforts by themselves.

In this section, we'll explicitly set out a couple of additional levers—the presence of which encourages digitization (and the absence of which is an impediment).

5.3.1 STANDARDS

[41] The Initiative for Equitable Library Access at Library and Archives continues to work with the clearinghouse concept as part of a national strategy for more accessible library services for print-disabled Canadians. Please see http://www.collectionscanada.gc.ca/iela/005002-5000-e.html for further details.

> *"Traditionally, libraries serving persons who are blind or print disabled have had to create accessible, specially formatted materials and distribute these products to their patrons. As new technologies evolve, there is the vision of a time when materials published for the mainstream can be made accessible to persons with disabilities at the same time and at no greater cost than the versions targeted for the mainstream consumer."*
>
> — George Kerscher, Secretary General, DAISY Consortium

We earlier discussed the importance of the XML specification and of formal XML-based standards such as DAISY/NISO in supporting more accessible adapted editions for print-disabled readers.

Standards naturally have an important role to play in the mainstream publishing industry as well, and, interestingly, a recently established eBook standard shares the same digital heritage as the DAISY standard.

The International Digital Publishing Forum (IDPF) released the EPUB standard in September 2007. EPUB is an XML-based file format designed to reflow text according to screen size. EPUB is composed of three open standards, the Open Publication Structure (OPS), Open Packaging Format (OPF), and Open Container Format (OCF) produced by the IDPF.

EPUB is based on the DTBook standard from NISO—the same underlying standard on which the DAISY format was built. Using the DTBook standard, publishers can create EPUB files to bundle with other required files for NIMAS compliance. A number of our study respondents commented on the idea of the "holy grail" file—the single source file that can be converted easily into various accessible formats. Most agreed that a well-structured XML file is the closest currently available approximation of that ideal format. It appears that EPUB could be that file.

In mainstream book markets, the combined EPUB standard allows publishers to produce and send a single digital publication file through distribution for a variety of platforms. EPUB is a publisher-to-consumer format in that there are more and more software applications and devices that support the format (i.e., they can read EPUB files without any additional processing or conversion). But the standard is also a business-to-business format in that it can be reliably converted for use on a range of additional platforms, including Microsoft Reader, Palm, MobiPocket, and the Amazon Kindle.

This means that book publishers can reduce the costs of conversion and managing multiple file formats across the range of digital platforms and channels to market.

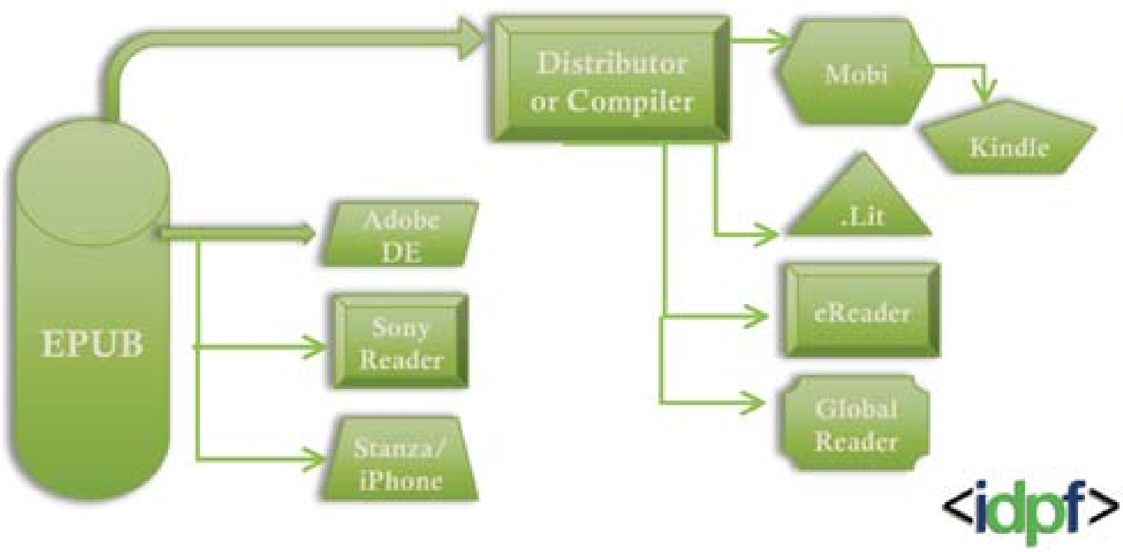

Figure 9. The EPUB standard as both a business-to-consumer and a business-to-business format.
Source: International Digital Publishing Forum

The EPUB standard has already been widely adopted throughout the publishing industry, particularly among large publishers, publishers' associations, software developers, and aggregators of digital books. In practice, this means that it is getting progressively easier to create[42] and circulate EPUB files.

While EPUB is an example of a formal standard, the market is also shaped by *de facto* standards—tools or platforms that are so commonly used that they effectively operate as market standards. Major consumer platforms such as the Kindle or Sony Reader have the potential to establish themselves as *de facto* standards. In fact, major retailers and other aggregators naturally aim to establish their platforms or products as standards in the marketplace—essentially, to lock the market to their platform.

This kind of competitive strategy can also help shape a marketplace, to the extent that a clear standard emerges from among the competing platforms. In any case, while there are now real contenders for broadly accepted standards in both audiobook and eBook markets, the digital marketplace is still young enough that no dominant standard has yet emerged.

[42] The latest release of Adobe InDesign (CS4) exports directly to the EPUB format. Quark Express does the same with a third-party plug-in.

5.3.2 SCALE

As noted earlier, the economics of the cultural marketplace reward size in that larger firms have a competitive advantage through economies of scale and market reach. This idea is relevant to the digital marketplace as well, with the further considerations of the required investment in digital platforms and consumer demand for wide title selection as additional drivers to scale.

Trading partners through the digital supply chain—retailers, library service providers, distributors—are working to assemble the largest possible collections of digital books. Larger collections push costs down, attract consumers, and help lock publishers and other trading partners into a given digital platform.

Amazon had 185,000 titles on its Kindle platform in October 2008. A *Quill & Quire* feature published that month comparing the Kindle and Sony e-readers nevertheless noted that, "For now, there's room for improvement in both models. But the biggest problem the format faces is the shortness of the tail.[43]" Perhaps this only makes the point that it doesn't matter if the platform features 185,000 books or twice that many. If the book you want isn't there, the inventory is still too small.

This emphasis on scale has some implications for marketing digital books. Most importantly, a bias toward building the largest possible collection naturally disadvantages smaller firms as the aggregator will naturally prefer to do business with larger publishers that can bring more titles to the collection. This suggests that Canadian firms—with their relatively small title catalogues—may have difficulty in fully or easily participating in key sales channels, and this may further constrain the availability of Canadian eBooks.

Some of our study respondents, for example, described additional delays or costs associated with getting their books listed for various retail platforms. When these firms approached the same retailers as a collective of publishers (as opposed to an individual publishing house), they found the doors opening much more readily.

This suggests that smaller publishers can achieve greater scale in various ways. They can work through their distributors, organize themselves in consortia, and/or join in digital collections, such as the Canadian Publishers Collection we described earlier. It may be that as the tools and sale channels to support expanded digitization programs are increasingly in place, the need

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[43] "The Future of Books," *Quill & Quire*, November 2008.

to create economies of scale will be the next big challenge for Canadian publishers.

5.3.3 PUBLISHERS' ACCESS TO DIGITAL SERVICES

The investment required to trade digital assets can be significant. The publisher's archive has to be catalogued and organized, and then it—or some portion of it—must be digitized, structured, and stored for delivery in various formats and to various platforms and vendors. At a basic level, each publisher that intends to produce digital editions has to make a decision about how much of that work it is going to do in-house, and what tasks or services, if any, it can efficiently contract for with an outside firm.

As noted earlier, the largest publishers, notably Random House and HarperCollins, have invested millions in building their own digital content systems. For most other publishers, however, the more cost-effective option will be to contract with an outside firm for digital services.

US publishing consultant Mike Shatzkin has described the emergence of several new digital distribution firms in America and Europe, and he has provided a glossary of terms that illustrate the roles played by major participants in the digital supply chain. In Shatzkin's lexicon, the market is composed of Digital Asset Producers (DAPs—i.e., publishers), Digital Asset Distributors (DADs), and Digital Asset Recipients (DARs—e.g., retailers, library service providers, printers, and others).

In effect, what Shatzkin is describing is a new supply chain for digital content. The Digital Asset Distributor, or DAD, is a specialist firm that provides a comprehensive service, including storing DAPs' digital assets; converting them into various formats; serving them to DARs of all types (who then deliver them to the end user/consumer); and providing digital rights management and transactional services.

The digital marketplace is fluid, but the current North American entrants in the DAD category include: (1) Accenture, a global consulting and technology services firm, (2) codeMantra, a US-based DAD with a production facility in Chennai, India, (3) LibreDigital, a division of Newsstand Inc that is partially owned by HarperCollins Publishers, (4) Random House Inc, one of the world's leading trade publishers, (5) RR Donnelly, and (6) Ingram Digital Ventures, a wholly owned subsidiary of the leading US book wholesaler[44]. All these firms are US-based.

[44] Educational publishers have a further option through Bibliovault, a digital repository, conversion, and asset delivery service operated by the University of Chicago Press.

There are a few cost components that are typical of digital conversion and management services. These include (1) ingestion or set-up fees for the publisher's account, (2) per-title fees to convert the publisher's books to a common source file standard, (3) and annual costs to store and manage the publisher's digital inventory of source files.

Cost structures vary but an analysis of costs provided by selected DADs indicates that average costs range between $150 and $200 per title for the first year after initial conversion, and then average $30–$40 per year per title thereafter.

For a mid-sized Canadian publisher with a backlist of 400 titles and annual title output of 25 books per year, these averages would translate into total costs of between $100,000 and $140,000 (depending on the DAD) over three years for digital conversion and management services. The bulk of these costs—roughly 75% of the total—would be incurred in year one as the publishing house absorbs both the initial set-up costs as well as the costs of digitizing its backlist.

As is the case in print distribution, these digital distributors will be most attracted to publisher-clients with large sales volumes and large numbers of titles—that is, they are attracted to economies of scale. Smaller clients will have more difficulty accessing these services or will at least have a challenging position from which to negotiate terms of business.

Perhaps because of this, new digital distributors have come into the marketplace within the past year with a special focus on serving smaller firms. In particular, some of the larger book distributors of independent presses in the US have expanded their services to the digital marketplace.

With more than 300 client-publishers, Perseus is one of the largest distributors of independent presses in the US. The company announced a new service, Constellation, in September 2008 that will distribute client eBooks to a wide range of vendors and aggregators, including Amazon's Kindle platform, Sony Reader, library service providers (e.g., OverDrive and ebrary), print-on-demand services such as Amazon BookSurge and Ingram Lightning Source, and search-inside programs at Google, Amazon, and Barnes & Noble.

Constellation does not provide a digitization service as such, but instead requires publishers to provide PDF files for onward distribution to these different vendors and platforms. The program is limited to eBooks for the time being, but Perseus expects to incorporate downloadable audiobook files by mid-2009.

Constellation is an attempt to improve the competitiveness of independent publishing houses in digital sales channels. In a way, Perseus is aiming for the same type of efficiency through greater scale and coordination that the ACP and ANEL have been pursuing for Canadian-owned publishers. The challenge is that smaller firms generally do not have the resources—either staff or budgets—to absorb the initial investments required to digitize and distribute a catalogue of eBooks.

As we noted earlier, the Canadian publishing industry has taken some important steps toward expanded production and distribution of digital books. It seems clear, however, that some combination of targeted supports and partnering arrangements will be necessary to strengthen the competitiveness of Canadian firms in the digital marketplace, in terms of their ability to access training, improve production workflows, pursue digitization of their backlists, and manage digital assets. If the industry is not able to access digitization and other digital services in a cost-effective way, Canadian publishers will lag behind in digital markets, and readers in and outside of Canada will continue to have only limited access to digital editions of Canadian books.

5.3.4 AN APPROPRIATE BALANCE OF RIGHTS

> *"Obscurity is a far greater threat to authors and creative artists than piracy."*
>
> —Tim O'Reilly, Publisher, O'Reilly Media
>
> *"The internet is a copy machine. At its most foundational level, it copies every action, every character, every thought we make while we ride upon it…The digital economy is thus run on a river of copies. Unlike the mass-produced reproductions of the machine age, these copies are not just cheap, they are free."*
>
> —Kevin Kelly, The Technium, January 31, 2008

Copyright is a complex area of legal, business, and social practice, perhaps especially so in the digital world. Intellectual property law—copyright in particular—provides a basis for the exploitation of creative work and other "products of the mind," and, as such, is a cornerstone of the publishing business (and all other cultural industries). But more than that, copyright is also a balancing act between the interests of creators in the ownership and integrity of their work, and the interests of society in an open and free exchange of information and ideas.

As with most other aspects of the digital marketplace, ideas and emerging practices around copyright are in flux right now. But this much is clear: to the extent that there is a clear and equitable environment for managing rights for digital content, publishers will be more likely to release digital books and consumers will be more likely to buy them.

There are basically two contending schools of thought around digital rights. On one hand, there is the perspective that any copyright protections that restrict the discoverability and use of digital content is bad for consumers, bad for creators, and bad for business. On the other, many rightsholders[45] are concerned about what happens to their intellectual property once it has been set loose on the world's biggest copy machine, and they are reasonably interested in limiting illegal distribution.

The way in which these arguments accommodate themselves to one another to find a balance between the interests of creators and consumers will play a pivotal role in how the market for digital content evolves.

The environment for copyright is shaped by industry practice, legal precedent arising from court challenges, and legislation. Canadian copyright law is widely acknowledged to be overdue for reform with respect to digital content. However, legislative reform tends to lag behind industry and social practice (as well as court findings), and recent attempts to introduce new copyright legislation in Canada[46] have been controversial to say the least.

Much of the current debate around both legislative reform and industry convention centres on two related copyright issues: (1) digital rights management and (2) fair use provisions.

The term "digital rights management," or DRM, generally refers to any technologies used by manufacturers, publishers, or other rightsholders to limit usage of digital media or media devices. In practice, DRM measures[47] are not absolute protections against illegal use. Rather, their function is to make unauthorized use as technically difficult as possible.

DRM provisions also reinforce the linkage between content, consumer, and a given retail or media platform. We have seen a number of examples of this

[45] We use the term "rightsholders" as a general reference to creators and any publishers, other producers, or distributors that have been assigned rights by authors or artists.
[46] The most recent draft legislation, Bill C-61, died on the parliamentary order papers when parliament was dissolved in fall 2008 for a federal election. The legislation is expected to be reintroduced in an upcoming legislative session, but it is unclear if it will be revised from its previous draft.
[47] Also sometimes referred to as "Technical Protection Measures" or TPMs.

throughout this paper, notably the iTunes–iPod platform and also Audible's exclusive relationship with Apple to distribute audiobooks through iTunes.

As we have also noted earlier, some producers who might otherwise be inclined to release content with strong DRM measures in place have also demonstrated a willingness to forego DRM protections in order to both pursue greater sales and to circumvent any cases of iTunes-like "platform lock in". Within the last year alone, major audiobook publishers such as Random House have released DRM-free audiobooks with these goals in mind.

Even so, DRM remains a common feature of commercially released digital content as well as a persistent source of controversy in digital publishing. DRM opponents argue that any such measures often manifest themselves as unreasonable restrictions on fair and appropriate consumer use of digital content. Much of the tension around what constitutes fair use centres around the consumer's ability to copy the content for his/her own use, to use the content for educational purposes, or even to access rights-protected content with assistive technologies such as text-to-speech reading software.

Cory Doctorow is an author and a high-profile advocate for DRM-free publishing. In a recent presentation to Microsoft executives, he provided an illustrative example of how DRM can interfere with consumer use.

> "Here's a true story about a user I know who was stopped by DRM. She's smart, college educated, and knows nothing about electronics. She has three kids. She has a DVD in the living room and an old VHS deck in the kids' playroom. One day, she brought home the *Toy Story* DVD for the kids. That's a substantial investment, and given the generally jam-smeared character of everything the kids get their paws on, she decided to tape the DVD off to VHS and give that to the kids—that way she could make a fresh VHS copy when the first one went south…Except she fails. There's a DRM system called Macrovision embedded—by law—in every VHS that messes with the vertical blanking interval in the signal and causes any tape made in this fashion to fail."

The scenario Doctorow describes has its parallel in consumers who buy music for one platform that cannot be moved to updated operating systems or devices, or eBook customers who invest in books for one reader device who are similarly locked in against updated software or platforms that may become available in the future.

As these experiences accumulate, they contribute to a growing consumer backlash against DRM protections. Whatever the legal arguments for and against, consumers have amply demonstrated in the past that if they cannot use the products they buy in the way they wish, or if they cannot be reasonably assured that investment in content for one platform will be portable to new file formats or devices in the future, they simply won't buy.

So how to reconcile the consumer's need for flexible use and "futureproofing" with the rightsholder's need to protect commercial and creative interests? The solution—in terms of an appropriate balance of interests—may rest in making a sharper distinction between copying and distribution. There is a growing body of opinion supporting this approach, under which DRM restrictions that prevent copying of digital content by consumers would be relaxed (particularly for personal or educational use) but legal prohibitions and/or remedies against unlawful distribution would be strengthened.

The persistent question of what constitutes fair use will be central to how copyright practice develops in the years to come. Our understanding of this question is constantly being tested and interpreted, and there is no better recent example of this than the October 2008 out-of-court settlement between Google and the Association of American Publishers (AAP) and the US-based Authors Guild.

The AAP and Authors Guild brought separate class-action lawsuits against Google to claim that Google Book Search (a massive digitization and indexing project that to date has digitized more than seven million books) was a violation of copyright. Google's position was that its use of digitized copies of rights-protected books was covered under the fair use provisions of US copyright law. The AAP and Authors Guild, to say the least, disagreed.

Through the out-of-court settlement, however, all parties have established a new basis for using and distributing digitized book content through Google Book Search. The terms under which Google can include copyrighted works in the Book Search program are specified, US-based libraries receive expanded access to digitized content, and Google and participating rightsholders share in expanded sales programs within the Book Search program.

Sara Lloyd, writing on The Digitalist[48] blog on October 28, 2008, summarized the terms as follows.

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[48] The Digitalist blog is published by the digital publishing team at book publisher Pan Macmillan: http://thedigitalist.net

> "The agreement, after all, acknowledges that Google needs to recognise the differences between out of copyright and in-copyright works; it gives rights holders of in-copyright works the power to opt in to 'preview' and 'purchase' functions as opposed to the previously held invidious assumption that the onus should be on publishers to opt out; the settlement money will partially be used to fund an independent, not-for-profit Book Rights registry which will work towards ensuring authors and publishers receive the money they are owed under the agreement, and the revenue split between the rights holder and Google is set at 63-37 respectively, which is surely the right way round."

The Google settlement effectively establishes Google Book Search as a major platform for distributing digital books, both public domain and those under copyright, and provides an important reference point for balancing rightsholder-consumer interests in the online distribution of books. Having done so, it is better placed to encourage both consumer use of and publisher participation in the Book Search program.

PART IV. CIRCULATION IN PUBLIC LIBRARIES

> *"Welcome to the brave new world of Canadian libraries. With more and more information available online, the pressure is on to provide users with digital content."*
>
> —*Quill & Quire*, May 1, 2008

In this final chapter of the study, we consider the types of alternate-format holdings (that is, other than print) available in Canada's public libraries. We will look in particular at how audiobook and eBook titles are collected and circulated by Canadian libraries, and at some of the issues libraries face in working with these digital editions.

In earlier chapters, we have identified a couple of key aspects of the role libraries play in making non-print materials available to both print-disabled patrons and to the general library service population. In terms of spoken-word audio, we observed that most consumers (41% of all audiobook listeners) get their audiobooks from libraries. We expect that this is accounted for in part by the fact that the audio selection of a typical public library far exceeds the selection of titles available at most local bookstores. This may change as mainstream audiobook consumption continues to shift online. However, as we will see below, libraries are also expanding their catalogues of downloadable audio files, both to keep pace with consumer demand and to recognize the expanded selection available online.

We have also noted that Canadian libraries are an important component of the developing marketplace for digital books. The potential for increased audiobook and eBook sales to libraries has already proven to be an important trigger for expanded digitization efforts among Canadian publishers. In particular, the 2008 CRKN sale brokered by Gibson Publishing Connections has proven to be an important illustration of this potential.

It seems fitting that the first major Canadian content sale was made to academic libraries as the pace of adoption for digital collections is generally faster in academic libraries than in their public library counterparts. This reflects an underlying pattern in that educational and scholarly publishing, including scholarly journals, has moved to digital platforms and formats more quickly than has trade publishing.

Further, universities are populated with "digital natives"—students who have grown up reading on screens and who are very comfortable with electronic resources. A 2008 survey of students and faculty at several universities in the US and elsewhere found that eBooks were mainly used for research or study purposes (see Figure 9).

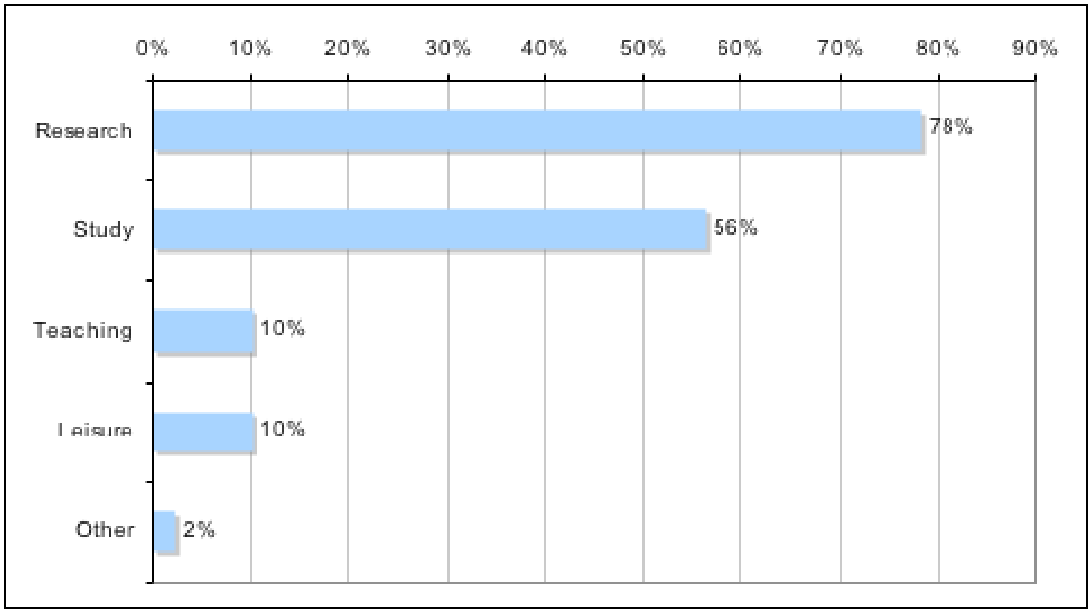

Figure 10. Survey responses of university students and faculty to the question, "For what purposes do you usually use eBooks?" (Multiple answers per respondent.) Source: Springer

It's generally held that as much as half of academic library collections budgets are now spent on digital content. An April 2008 paper by the Canadian Association of Research Libraries (CARL) provides some indication of growing spending on eBooks in particular:

> "Although complete figures for the growth of the market in Canada are not currently available, an analysis of electronic monograph titles held and purchased by CARL libraries demonstrates both the growing importance of e-books to CARL libraries and also the importance of libraries to the e-book market. Expenditures on electronic monographs have grown from $1,127,372 in 1999–2000 to $6,048,491 in 2006–2007—a staggering 436.5% increase. In the past year alone, CARL libraries have acquired $2,890,369 electronic monograph items. Electronic monographs currently represent approximately 13% of total monograph titles held by CARL libraries, and that number is expected to continue to grow over the next several years.[49]"

[49] *E-Books in Research Libraries: Issues of Access and Use*, Canadian Association of Research Libraries, April 2008.

Another recent study by Primary Research identified comparable growth in eBook spending among a combined sample of academic and public libraries. In the Primary Research sample, "Institutions that gave data on e-book spending from 2006 to 2008 showed an increase in spending between 2006 and 2007 from a mean of $19,340 to $26,290, a 36% increase, while in 2008 mean spending rose to $29,861, a 13.6% increase from 2007.[50]"

Generally speaking, however, the shift to digital is less acute in public libraries, where spending on electronic collections accounts for only about 10% of total acquisition budgets. However, we expect that some of the same factors that are driving growth in consumer markets—standards, new service providers, expanded selection—will contribute to the continued growth of demand for digital books among Canada's public libraries as well.

Finally, a plurality of formats is one of the persistent challenges that librarians face in handling audiobooks and eBooks. As we will see below, librarians maintain non-print collections in a variety of formats, including cassettes, CDs, and downloadable files. There is also considerable variety within these categories. There are often at least three types of audio CDs in a typical library collection: standard audio format, MP3 CDs, and DAISY titles as well. Similarly, downloadable audio and eBook files often come in a variety of file formats, with the further wrinkle that DRM provisions or requirements for specialized playback software (or devices) add to the services required of librarians. They also limit the flexibility of librarians' and patrons' use of digital books.

While libraries might naturally prefer to harmonize their holdings, there are two practical constraints on how quickly this can be done. First, library service populations are diverse and library patrons have high expectations not just for the titles they wish to have but also the formats in which they want to have them. Particularly in the case of older patrons, libraries are understandably reluctant to phase out "legacy formats," such as cassettes, too quickly. In addition, many libraries simply could not afford to set aside the considerable investments they have made in these older formats and replace their collections with newer editions.

As one of our respondents noted, "We are gradually shifting to digital. For many of our [patrons], it's better to go one step at a time."

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[50] *Library Use of E-Books, 2008–2009 Edition*, Primary Research Group, 2008.

6.0 ALTERNATE-FORMAT HOLDINGS

A typical public library in Canada carries a wide selection of alternate-format items, both for the use of print-disabled patrons and for general circulation within the library system. There is naturally some overlap in the library catalogue for these two types of users, but a portion of these library holdings must be set aside for the exclusive use of blind or print-disabled readers[51].

Aside from video and online databases, alternate-format library holdings typically consist of analog materials on cassette, CDs with various file formats, downloadable audio or text files, DAISY-format titles, and large-print books.

In September 2008, Library and Archives Canada surveyed public libraries across the country to gather current data on their alternate-format collections. We can make a few general observations based on those data:

1. Alternate-format collections are heavily weighted to large-print books and spoken-word audio on cassette. CDs occupy the next-largest share of alternate-format collections, followed by downloadable files.

2. Even so, the number of downloadable files available is notable, given that these libraries would have mainly begun developing their downloadable collections within the last couple of years. Like many other aspects of the digital marketplace, these digital collections appear to be growing quickly.

3. Larger library systems are more likely to offer downloadable audio or eBooks.

4. Smaller libraries (those with 10,000 or fewer registered users) have very limited alternate-format holdings. This appears to reflect the challenges these libraries have in stretching available budgets to address the needs of the relatively small populations of print-disabled readers in their communities.

[51] Adapted editions produced under Section 32(1) of the *Copyright Act* are circulated on a restricted basis for the exclusive use of registered library patrons with a print disability.

6.1 BUILDING DIGITAL COLLECTIONS

A 2008 survey of academic and public libraries highlights the role of aggregators in building digital collections. Of the sample libraries' total spending on eBooks, nearly 70% was placed with digital content aggregators. Another 25% was spent directly with publishers.

The term "aggregator" can mean many things in digital content markets, but for libraries it most often refers to a relatively new category of library service providers. These firms—such as NetLibrary, OverDrive, and Numilog—bring together large collections of audiobooks and eBooks and package them with sophisticated services and tools for library usage.

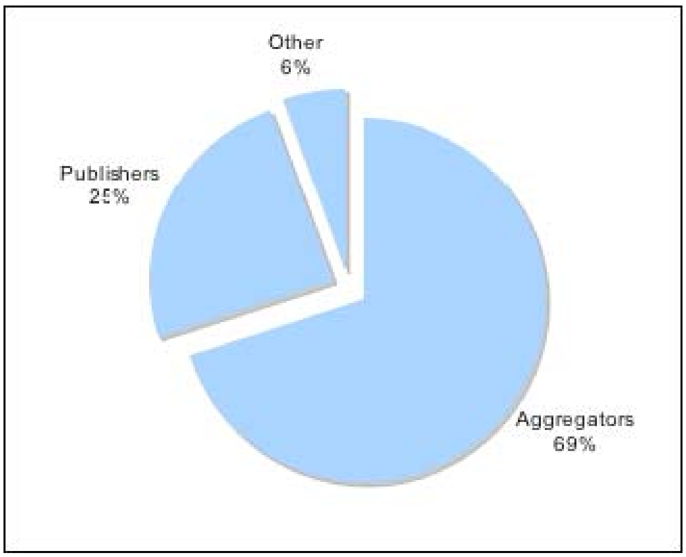

Figure 11. Library spending on digital collections to aggregators and direct to publishers.
Source: Primary Research Group

These library service providers play a critical role in the digital marketplace by clearing and managing digital rights, standardizing terms of use, aggregating large selections of digital books (and other content), and providing a range of supporting technology and services for librarians and their patrons.

The following sections provide illustrative examples of library service providers that have a significant presence in the Canadian library market.

OVERDRIVE

Based in Cleveland, Ohio, OverDrive is a prominent aggregator and service provider among Canadian libraries. The company was founded in 1986 as a distributor of disc-based media and founded its Content Reserve digital content warehouse in 2000 and then the OverDrive Digital Library Reserve (DLR) in 2002. Today, the OverDrive DLR contains more than 100,000 eBooks, 20,000 audiobooks, and a range of other digital content resources.

OverDrive's eBooks are predominantly PDF files, but Microsoft Reader, Mobipocket, and EPUB files are also found in the DLR (with some titles available in multiple formats). The DLR serves its audiobooks as "OverDrive Audio" files, but technically speaking the file format is WMA, or Windows Media Audio, a Microsoft audio format that incorporates a "DRM wrapper" (i.e., digital rights management).

To listen to an OverDrive Audio/WMA file, the library user must first download and install a player from OverDrive—this requirement is in fact part of the DRM framework within the Digital Library Reserve. Beyond this type of structural requirement, DRM restrictions are managed within the OverDrive system on a title-by-title and/or publisher-by-publisher basis. In effect, the publisher sets the DRM limits for its listed titles, and those specifications become part of the metadata (the data that accompany each digital book file and that instruct the system what the file is and how it can be used). The OverDrive user will see that DRM restrictions vary across the catalogue. Some titles allow copying to a CD or converting to MP3, and some do not. For that matter, some are DRM-free altogether[52].

OverDrive has established a strong client base among Canadian libraries, as indicated in the figure below.

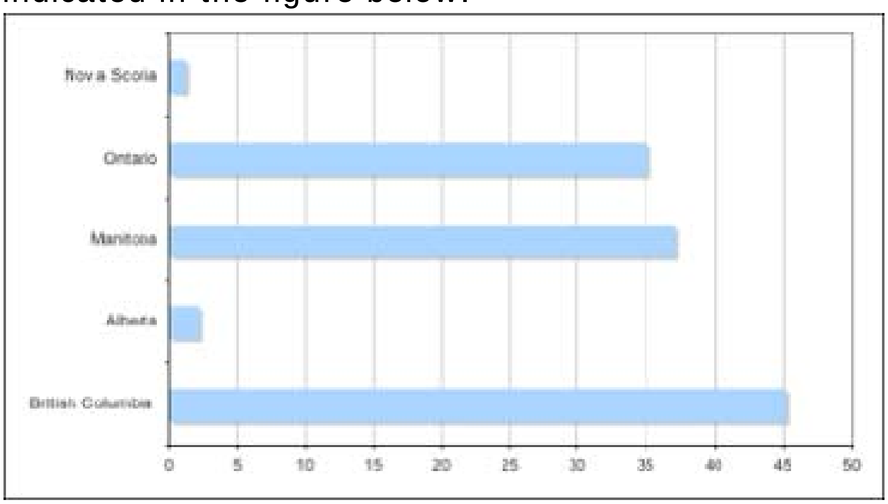

Figure 12. Number of OverDrive client libraries in Canada, by province. Source: OverDrive

[52] In March 2008, OverDrive announced that it would add DRM-free titles to its inventory and offer those titles directly to consumers. The company now also sells to consumers through major retail partners, such as Borders in the US and WH Smith and Waterstones in the UK. The advantage of DRM-free files for the consumer is that they can be used with more flexibility, including playback on any MP3-compatible playback device.

British Columbia's Public Library Services Branch has negotiated a province-wide license for OverDrive, as has the Manitoba library service, and the company's Canadian client base otherwise includes major library systems in Calgary, Edmonton, Toronto, Ottawa, and Halifax, as well as many others across the country.

From the perspective of the library, a service provider like OverDrive allows for a rapid ramping up of downloadable files available to library users. As in retail channels, a broad title selection is key to driving usage and adoption in libraries and aggregators allow libraries to build their collections more quickly than would otherwise be the case. Librarian-respondents that we spoke to during the study also gave OverDrive high marks for sophisticated services and tools for library staff. In fact, OverDrive reports that its ongoing training program provided training for 5,000 librarians in September 2008 alone.

From the perspective of the publisher, a service provider like OverDrive is a mixed blessing. Publishers can efficiently access institutional markets by working with an OverDrive-like aggregator, but this does put them at one remove from the library-client, and it does come at a cost in that aggregators reportedly claim as much as 50% of all revenues generated by library sales.

For the library user, an aggregator brings a broad title selection and additional user supports in the form of additional help resources and title information. However, the DRM regimes that accompany most aggregator platforms do restrict how audiobooks or eBooks from the collection can be used, and this may or may not match up with the user's needs.

GIBSON PUBLISHING CONNECTIONS

Established in 2005 and based in Montreal, Gibson Publishing Connections is a Canadian aggregator and the originator of the Canadian Publishers Collection, the largest available digital collection of Canadian books.

Aside from its distinctive focus on Canadian content, Gibson has engaged powerful digital platforms for its library clients in the form of ebrary, a widely used platform for delivering digital content, and codeMantra, a digital asset distributor that provides conversion, management, hosting, and distribution services. Gibson employs both of these platforms to convert publisher titles from their original source file (including print-to-digital scans of the original print editions in cases where suitable electronic files are not available). Through the conversion process, incoming titles are initially transformed into an XML file (codeMantra's PubXML format), and then to additional file formats for distribution. Within Gibson's digital collections, the titles are most commonly converted to codeMantra's Universal PDF format.

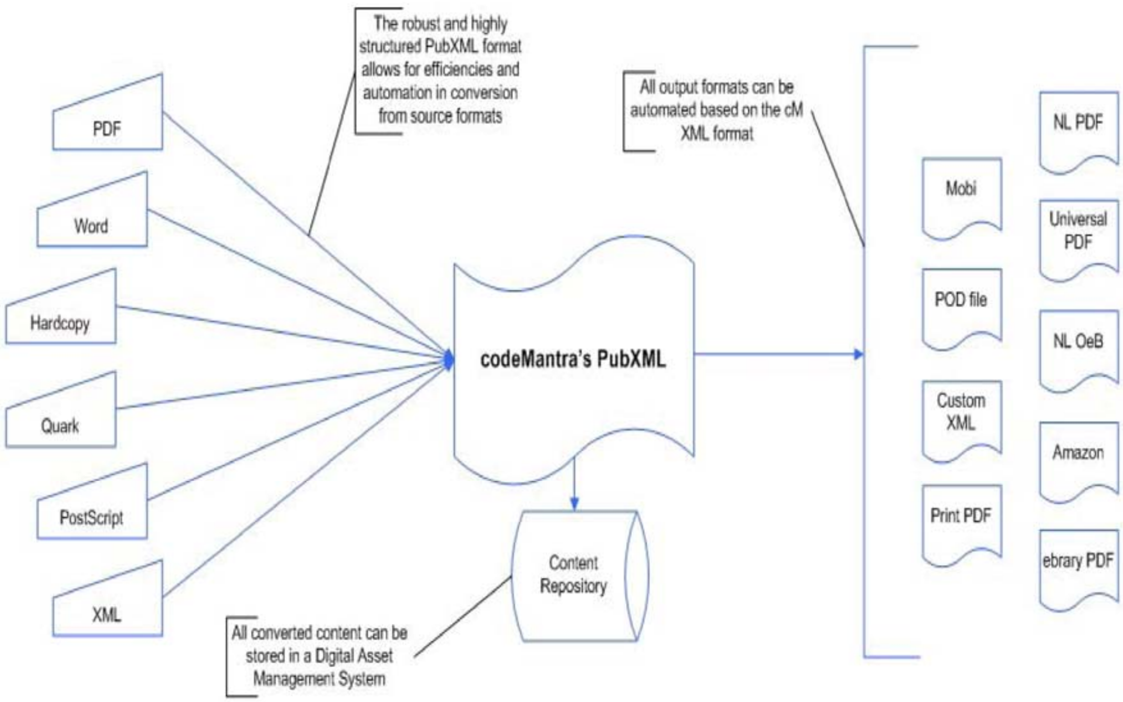

Figure 13. The codeMantra conversion workflow.
Source: Gibson Publishing Connections

Following conversion to PDF, the files are ready for integration into the ebrary platform for circulation to libraries and library patrons. ebrary converts the files again for final delivery by serving them as Exchange Data Format (EDF) files. EDF is a proprietary format for delivering PDF files page-by-page within the user's browser window for a faster and more efficient viewing experience.

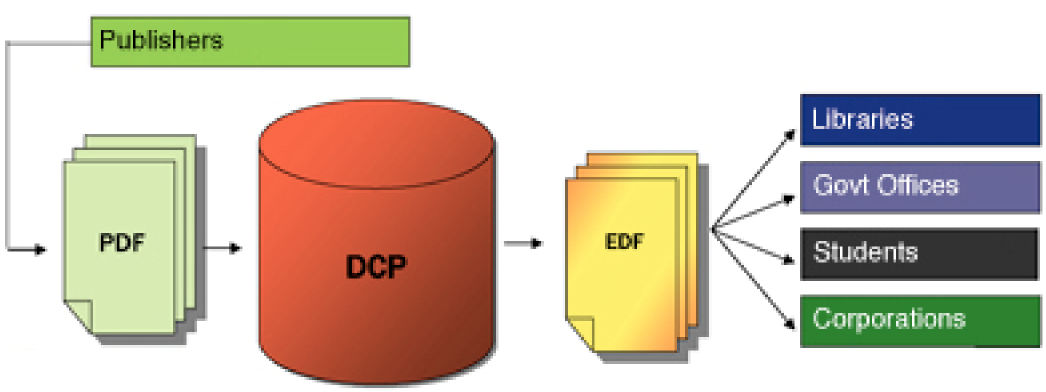

Figure 14. File handling within the ebrary platform.
Source: Gibson Publishing Connections

Gibson has distribution agreements with more than 60 Canadian publishers, among them five French-language publishers from Quebec. Altogether, they have posted 1,114 French-language and 7,652 English-language eBook titles, for a total of 8,766 Canadian titles in the Canadian Publishers Collection (as of October 2008).

NETLIBRARY

The NetLibrary collection consists of more than 160,000 titles with academic, business, scientific, technological and medical content, principally eBooks and audiobooks as well as electronic periodicals, in more than 20 languages.

NetLibrary serves its client-libraries through the Online Computer Library Center (OCLC), a not-for-profit research organization established in 1967. OCLC serves more than 69,000 libraries in 112 countries and territories around the world by locating, acquiring, cataloguing, loaning, and conserving library materials.

OCLC Canada has its main office in Chambly, Quebec, and serves the country's provinces and territories, working with more than 1,150 participating libraries. Its members are university, public, school, government and specialized libraries. A number of Quebec publishers collaborate with NetLibrary, among them Les Éditions Septentrion, Presses de l'Université du Québec and Presses de l'Université Laval.

Users can access NetLibrary's electronic content at their libraries using the library's website or online catalogue, the NetLibrary user's site, or through OCLC WorldCat. Talking books can be downloaded and listened to on any office or laptop computer equipped with systems that can read WMA (Windows Media Audio) files. Users are permitted to transfer titles to portable accessories, principally music players or multimedia devices.

ITHÈQUE

iThèque, established in 2006, is a French-language digital library collection. The iThèque catalogue includes 80 audiobooks produced in Quebec and 23,023 titles produced mostly in France, principally by Des oreilles pour lire, Wordiz and CitySpeaker. iThèque intends to add another 20,000 titles through spring of 2009. iThèque's digital audiobooks can be downloaded or accessed via streaming audio.

In addition to spoken-word audio, the company's collection includes 50 Quebec eBook titles and 1,702 titles originating primarily in France, produced for the most part by Publibooks and ebooksgratuits.com and consisting of literary classics in the public domain along with works under copyright.

iThèque serves a membership of 250 public libraries in Quebec, especially in the regions, roughly 10 public libraries in France, and the library at the University of Lima in Peru.

6.2 ISSUES IN WORKING WITH LIBRARY SERVICE PROVIDERS

6.2.1 PRICING MODELS

In most cases, Canadian libraries are buying digital books from library service providers in the same way that they buy print editions. That is, they purchase a single-user copy of a digital title. When someone checks that copy out, the title is not available for loan until the copy is returned to the library system. On checkout, the file is downloaded to the user's computer, complete with a code that automatically degrades the file at the end of the loan period, rendering it unusable and effectively "returning" the title to availability within the library collection.

The 2008 CARL study we referred to earlier provides a broader overview of pricing options for digital collections.

> "E-book licensing models can be grouped into several broad categories, including print, database and Open Access licensing arrangements…[T]he print model treats the e-book as a print book; meaning only one user at a time may access the content of the e-book. Should the library wish to increase the availability of the work, they must purchase additional copies or subscriptions to the work. Examples of print model vendors include NetLibrary and Libwise. Print model vendors tend to employ restrictive digital rights management technology, which may limit printing, copying, pasting and saving of the e-book content. In part because of its inability to accommodate the electronic environment, the print model has already begun to wane. Conversely, the database model, employed by vendors such as Ebrary, Safari and Knovel, treats the content of e-books as comparable to a database. Content is licensed from the vendor and a subscription is required to access the material. Many database model vendors allow simultaneous access to e-book content. Finally, the Open Access model allows e-book content to be accessed freely, though there may be some restrictions on use. Rice notes that many Open Access vendors, including Project Gutenberg and the National

> Academy Press, do not encrypt their e-books with DRM technology.[53]"

Single-user pricing (aka "print licensing" as in the CARL overview) is generally tied to the price of the print or disc equivalent, where digital editions are available at an equal or lower price. Broader licensing terms vary quite a bit but are usually calculated based on per-user fee for some or all of the defined service population of the library.

6.2.2 INTEGRATING SERVICE PROVIDER COLLECTIONS

Primary Research reports that 81% of the libraries it surveyed for its 2008 study of library eBook usage catalogued their eBook collections and listed them within their online library catalogues.

Digital collections from library service providers appear within the library holdings in a couple of different ways. First, a selection of titles from OverDrive, for example, may simply be listed as an OverDrive collection within the library's online resources. Or the same collection could be branded in a different way (but still delivered by OverDrive or another library service provider).

For example, OverDrive's province-wide license collection in British Columbia is branded as "Library to Go" whereas the OverDrive service in Manitoba libraries is presented as "eLibraries Manitoba." In each case, these services operate on the OverDrive platform, using OverDrive's inventory, management tools, and user support services.

6.2.3 CANADIAN CONTENT

A 2006 Pollara study of library purchase patterns in Ontario found that Canadian content is a priority for libraries in Canada. "[I]t was felt that, all things being equal, public libraries would select a Canadian-authored book first, particularly in subject areas such as law or accounting where Canadian content is more relevant.[54]"

However, one of the principal challenges in building digital collections from large library service providers is the limited availability of Canadian eBooks and audiobooks found in these aggregated inventories. We expect that this

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[53] *E-Books in Research Libraries: Issues of Access and Use*, Canadian Association of Research Libraries, April 2008.
[54] *Canadian Books Count…*, Pollara Inc., February 2006.

situation will improve—particularly with respect to eBooks—as Canadian publishers continue to expand their digitization efforts[55].

In the meantime, aside from the Gibson Canadian Publishers Collection, the aggregated collections of most library services providers contain a very modest proportion of Canadian-authored titles, and libraries have clearly signalled their interest in a greater selection of Canadian books.

The Toronto Public Library, for example, initially opted not to sign on to the OverDrive system because of its lack of Canadian content, or even of international titles for which Canadian digital rights had been cleared[56]. As the provider was able to clear more digital rights for Canada, the TPL subsequently did launch the OverDrive platform in November 2007. However, TPL officials, quoted in *Quill & Quire*, have noted, "We are always wanting to encourage [vendors] to add more Canadian [content].[57]"

As we have observed, there are a number of factors that affect the ability of Canadian publishers to create digital editions of their books and to access markets for digital content. As we will see below, there is a corresponding set of factors that influences the degree to which Canadian libraries can acquire and circulate digital books and Canadian books in particular.

6.3 AGGREGATED COLLECTIONS AND THE PRINT-DISABLED USER

All of the issues we have previously explored regarding the accessibility of digital editions for print-disabled users apply to the downloadable file formats normally supplied by commercial library service providers. However, some of these vendors have also begun to create specialized platforms for print-disabled users that offer greater degrees of accessibility. There are two examples we know of in this regard, one produced by OverDrive and a second created by Numilog in France. In addition, there is one integrated digital library for the print-disabled in Canada: the CNIB Digital Library.

CNIB DIGITAL LIBRARY

The CNIB Digital Library is available to registered CNIB library patrons. The library features more than 12,000 downloadable audiobook titles, and 8,600 eBooks.

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[55] Given the economics of audiobook production, however, we cannot expect the same of commercial output of spoken-word audio titles in Canada.
[56] Without Canadian digital rights clearances, titles may be listed on the system and available outside of Canada, but not available to Canadian libraries.
[57] "The long-distance library," *Quill & Quire*, May 1, 2008.

The majority of the audiobook titles available through the library have been collected or created by CNIB as part of its ongoing library collection development efforts. The CNIB Digital Library also licenses audiobook (4,000 titles) and eBook (8,600 titles) from NetLibrary to offer users a broader selection.

Writing in a spring 2007 issue of *Library Trends*, CNIB officials noted:

> "Technological change has been the norm for libraries serving people who are blind or otherwise print disabled. Technology is required to produce and disseminate books in various formats, and technical devices are often used as a means for a person to read the books. However, the development of digital technology combined with the evolution of the Internet has prompted significant changes for library services and operations in the past few years. The CNIB Library recognized the opportunity to create more content faster, provide more choice and accessibility, and to streamline and revolutionize processes by building the Integrated Digital Library Service (IDLS) in partnership with industry technology leaders.[58]"

CNIB reports that usage of the digital library is growing quickly—by 25% in the past year and 50% from 2006 to 2008.

The CNIB Library also makes its holdings, including the downloadable titles in the Digital Library, available on a subscription basis to public, school, academic, or other specialized libraries through the Visunet Canada Partners Program (VCPP). VCPP offers participating Canadian libraries a selection of alternate format books and magazines for restricted circulation to patrons with a print disability.

The library circulates materials in both English and French across the country. CNIB provides French-language material such as DAISY digital audio books and magazines for 16 public libraries outside Quebec, among them the Ottawa Public Library and others located mainly in Alberta and Manitoba.

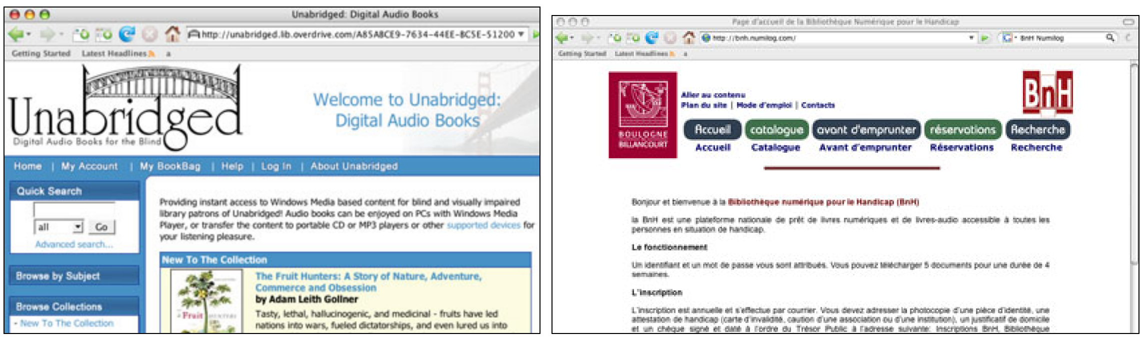
OVERDRIVE AND UNABRIDGED: DIGITAL AUDIOBOOKS FOR THE BLIND

Unabridged is an audiobook collection delivered via the OverDrive platform and designed to be more accessible for blind library patrons. The site is

[58] "The Impact of the Integrated Digital Library System on the CNIB Library," *Library Trends*, September 2007.

collaboration between OverDrive and nine libraries[59] serving blind and other print-disabled readers. The participating libraries share a common collection of downloadable audiobooks, and also contribute audio files to the collection.

Unabridged principally serves OverDrive Audio-format files (aka WMA or Windows Media), but it does so on a website, and using a specially designed downloadable player for the audio files, that have both been developed to meet web accessibility standards for blind patrons. The collection is available to patrons in the home states of the participating libraries: California, Colorado, Delaware, Illinois, Massachusetts, New Hampshire, Oregon, and Texas.



The Unabridged site (left) and Numilog's BnH (Digital Library for Disabled Persons)

NUMILOG'S DIGITAL LIBRARY FOR DISABLED PERSONS

The Digital Library for Disabled Persons (the Bibliotheque Numérique pour le Handicap or "BnH") is a joint venture of the French digital content platform Numilog and the City of Boulogne-Billancourt in France. After an initial pilot phase from January 2006 to September 2007, the BnH is now available to all print-disabled French citizens.

The BnH library delivers audiobooks in WMA format and eBooks in PDF or Palm formats, the latter for mobile devices. Denis Zwirn, president of Numilog, commented on the new platform in 2007:

> "As the main French-speaking aggregator of digital books, Numilog runs both the technical platform of the BnH - for it to be

[59] The participating libraries are the California State Library's Braille and Talking Book Library, the Colorado Talking Book Library, the Delaware Library for the Blind and Physically Handicapped, the National Library Service for the Blind and Physically Handicapped, the Talking Books Program of the New Hampshire State Library, the Oregon State Library, Talking Book & Braille Services, the Perkins Braille and Talking Book Library, the Talking Book Program of the Texas State Library and Archives Commission, and the Vermont Department of Libraries.

> able to lend books to disabled people - and the catalog of digital books. These books and audio books are the results of partnerships set by Numilog with a number of French-speaking publishers, including Gallimard, POL, Le Dilettante, Le Rocher, La Découverte, De Vive Voix, Eyrolles or Pearson Education France. The BnH project is particularly important for Numilog, on the one hand because it offers a real service to people with various disabilities, on the other hand because it shows the added value brought by digital technology to reading and to a better access to reading. It also demonstrates the ability to offer technical and economic models that are both adapted to disabled people and suitable for publishers, whose rights are fully respected within this digital library.[60]"

Library director Alain Patez adds, "We believe that digital publishing is the best way for disabled persons to access information and culture. The BnH wants to make it possible for any disabled people to download digital books. These are not public domain books, they are copyrighted books currently available in bookstores. We don't provide adapted books - i.e. Braille books or books in large fonts. We provide adapted access to books, with a technical mediation.[61]"

6.4 CANADIAN LIBRARY CONSORTIA

> *"While library consortia are not new phenomena, it would not be inaccurate to say that over the last few years the interest in, and development of, library consortia in Canada has been increasing remarkably."*
>
> — Consortia Canada Website, October 2008

Canadian libraries[62] collaborate in a variety of ways to build, manage, and share audiobook and eBook collections. They cooperate through their industry

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[60] "The Digital Library for Disabled Persons," www.etudes-francaises.net, October 2007.
[61] Ibid.
[62] There are major international consortia focused on building large repositories of digital books. Notable examples include the Open Content Alliance (http://www.opencontentalliance.org) and the HathiTrust (http://www.hathitrust.org). The Open Content Alliance (OCA) is a partnership of US libraries and organizations along with the European Archive, the National Archives in the UK, and the University of Toronto. The HathiTrust is a partnership of 12 American university libraries plus the 11 university libraries of the University of California network. Upon its launch in October 2008, the HathiTrust repository contained two million digitized books.

associations and also through provincial ministries or other provincial ministries.

For example, Canadian libraries participate in provincial license programs with major library service providers. The British Columbia Library Services Branch is the organizing body for provincial licensing in BC, and the Manitoba Public Library Service plays the same role in Manitoba. Similarly, the Bibliothèque nationale du Québec (BNQ) and Quebec's public libraries established the Consortium d'acquisition de ressources électroniques du Québec (CAREQ) in March 2003.

CAREQ's principal mandate is to negotiate collective subscription licences for access to electronic resources on behalf of the libraries, getting them the best possible rates and conditions. The specific objective is to obtain permanent access, ideally at a distance, to electronic resources through the Internet on a cost-sharing basis. Acquiring these resources brings a double benefit for participating libraries: easy, unlimited access for their clients and a much less cumbersome technology infrastructure than that required for CD-ROMs.

The InterLINK libraries in British Columbia are another example of regionally based library collective that works together to create audiobook adaptations and share those titles among the collective.

On the national stage, meanwhile, Consortia Canada[63] is the broadest current example of a nationwide library collaboration. The organization is essentially a consortium of consortia, with participation from 23 library collectives around the country. Participating groups include library consortia from the public library, academic library, and school library sectors.

Consortia Canada is effectively a mechanism for these library groups to create a dramatically larger scale for their negotiations with vendors of electronic resources. The Consortia Canada website provides the following elaboration of the group's mandate[64]:

> "1. *The delivery of information in all subject areas is being revolutionized by the emerging digital communications technologies. All types of libraries in Canada are actively working to collect, preserve, and make accessible to their clientele, information in digital form. By working collaboratively, Canada's libraries can effect real cost savings, both in the time of personnel across the country involved in*

[63] See http://www.concan.ca/institutions/index.php for a listing of current member consortia.
[64] http://www.concan.ca/view.php?id=4

individual licensing initiatives, and in the actual costs of the licenses (est. 20-40% savings).

2. *The transformation of Canada's libraries to the digital library model will, of necessity, be a lengthy process. However, the nature of the model is one that Canadians find persuasive. It is:*
   * *Collaborative;*
   * *Broad-based: in subject matter; and, in the types of consortia involved;*
   * *Indifferent to geography, providing access to content and service regardless of physical location; and,*
   * *Highly accessible and user-friendly, providing transparent electronic linkages between the user and the information they seek.*

3. *Valuable experience with regional site licensing in Canada has laid the foundation to move to national site licensing. In fact, the trend is increasingly toward national site licensing, with notable examples in the United States, the United Kingdom, Australia and Europe.*

4. *The initial focus on materials of importance to Canada and her citizens, will provide opportunities for libraries:*
   * *To develop new partnerships in this country;*
   * *Work collaboratively with national institutions; and,*
   * *To explore other sources of funding and support.*

5. *By working through established consortia, all types of libraries will help to create the context for future national site licenses, and will have the opportunity to participate in the development of national digital library services."*

6.5 FACTORS THAT INFLUENCE PUBLIC LIBRARIES' ADOPTION OF DIGITAL BOOKS

Through our discussions with respondents throughout the study, a clear picture emerged of the factors that influence a public library's capacity to build and manage digital book collections. These are summarized below to conclude our chapter on managing digital collections in public libraries.

1. Libraries need funding, both for staff training and equipment needed to support expanded digital book delivery and also for increased capacity

to invest in digital collections. There will be some natural transfer of collections budgets from print to digital in the years ahead, but libraries are grappling with the need to manage multiple formats for their diverse service populations at present. This means that additional collections funding—and other supports as noted above—will be needed in the near to medium term to enable libraries to build a critical mass of digital titles and to begin to phase out some of their older formats for spoken-word audio.

2. Confusion abounds within libraries regarding the variety of devices, formats, and platforms used to deliver and play digital audiobooks and eBooks. Libraries are not always sure where and how to invest funds in this area, and this confusion discourages collection development. This is likely to improve as major commercial platforms become more established and as both *de facto* and formal standards for digital publishing and distribution. Nevertheless, it remains an issue today.

3. Libraries need a consistent, balanced digital rights management regime. An April 2008 CARL study summed up the challenges of DRM in a library context.

> "[M]ost e-book distributors protect their e-books with DRM (Digital Rights Management). For example, with ebrary, users can only print five pages of an ebrary book at one time. With other e-books, the DRM makes it difficult to copy more than one page of text at one time. In the print environment, copying a reasonable number of pages is permitted...[but] e-books differ significantly from both the e-journal and print experience of most users…Legal copying under fair dealing, preservation, interlibrary loan, and alternate formats for the perceptually disabled are user rights inhibited by DRM. It is important to note that while circumventing DRM would be a violation of [the e-book license], it is not a violation of Canada's copyright law.[65]"

Inconsistent or unclear DRM restrictions place considerable additional burdens on library staff and patrons alike. Further, as the CARL overview suggests, both librarians and readers naturally expect that they would be allowed the same usage rights for digital books as they already experience with print or disc media, particularly where such usage is explicitly granted under Canadian copyright law. Outside the

[65] *E-Books in Research Libraries: Issues of Access and Use*, Canadian Association of Research Libraries, April 2008.

library, the consumer response against DRM, along with publishers' interest in getting greater access to key audiobook and eBook sales channels, is already changing DRM practice in the industry. We expect to see a similar pattern in library collections of digital books as libraries, distributors, and publishers work to find an appropriate balance of interests around rights management.

4. Libraries need to go further in their efforts to promote the use of digital collections among their service populations. Some of our survey respondents conceded that these services were not widely advertised within the library system as librarians preferred to manage a "soft launch" that would allow an extended period of time for staff to be training and to otherwise become more at ease with working with digital books. The corollary point here is that libraries need training in the management and use of digital books, and in emerging service standards for working with digital collections.

CONCLUSION

> *"The future of publishing is not about technology or widgets or free samples; the future of publishing is about giving readers what they want."*
>
> — Kassia Krozser, Booksquare.com, September 17, 2008

This study has explored the world of audiobook and eBook publishing from a number of different perspectives. We have considered how changing consumer demand and new technologies are shaping the marketplace, and we have looked at how publishers, retailers, and libraries are responding—along with other players in the digital value chain.

The digital marketplace will continue to develop in unpredictable ways and on an uncertain timeline. At the end of the day, however, book readers will no doubt have the final word on how the audiobook and eBook markets take shape in the years ahead.

Book buyers and library patrons are clearly drawn to easily accessible, broad collections of audiobooks and eBooks. For their part, book publishers and retailers and other service providers are learning how to provide digital content when, where, and how readers want to have it—whether that means selling copies of audiobooks in bookstores, delivering downloadable editions of audiobooks or eBooks to online retailers, or creating new flexible publishing platforms that allow readers to custom-design their own books. In the process, the supply chain is encountering better success at selling digital books and in using digital content—particularly through online search and sampling programs—to drive sales of both print and electronic editions.

The emergence of *bona fide* digital markets for books presents a number of compelling opportunities for trading partners throughout the supply chain, and, naturally, some challenges as well. Fundamentally, trading in digital content is a new type of business for all concerned, and there is a need for training and process development throughout the industry. At the same time, the digital marketplace needs effective standards that are pervasive, open, and agile enough to encourage both consumer adoption as well as buy-in throughout the supply chain. Finally, participation in the digital book market requires both up-front and ongoing investments to refine production workflows, digitize publishers' backlists, and establish trading relationships with service providers and distributors.

Given our focus on the Canadian marketplace, we have naturally considered the availability of Canadian content in sales channels for digital books. While there is relatively little Canadian content at the moment, the online channels that are emerging as the dominant distribution medium for audiobooks and eBooks will likely yet play an important role in ensuring the availability of a wide selection of Canadian-authored books for Canadian readers. Part of the solution will come over time as the global systems of multinational publishers develop to allow books originating with Canadian subsidiaries to be integrated more quickly and easily.

More broadly, the smaller Canadian-owned firms that produce the majority of Canadian-authored books will need targeted funding assistance in order to train their staff, develop their production processes, digitize their catalogues, and bring their digital editions to market.

These firms have limited staff resources and also limited access to capital and so run the risk of being left out of emerging digital markets without some targeted industrial supports in this area.

A similar condition exists within Canada's public libraries. Libraries across the country will need assistance in developing and implementing service standards for circulating digital content, training staff, building digital collections, and promoting these new services to library patrons.

While funding is part of the answer here, we believe that Canadian trading partners of all types can also benefit greatly from expanded collaborative initiatives that support the production and distribution of digital books. There have already been some notable first steps toward partnerships between publishers and among publishers' associations, as well as between libraries, publishers, non-commercial producers, service providers, and retailers. The potential of these early efforts—and the great potential of further work in this area—is that such partnerships can support an exchange of knowledge and skills development among these various players; they can allow producers (and others) to achieve the economies of scale that the digital marketplace demands; and they can smooth the way for new processes and standards.

To sum up, the significance of supporting expanded Canadian participation in the digital marketplace is simply this: today's book consumers and readers are presented with a vast selection of books. They have more choice than at any other time in history, and they can access those choices more quickly and more easily than ever before. While there is every indication that consumers continue to have large appetites for media and culture products, there is also more and more product competing for their attention with every passing year.

In such an environment, the amount of time required to search for, discover, and acquire books must be reduced. The process of finding out about, selecting, and then actually getting the book—in the format the consumer needs or prefers—must be as easy and attractive as possible. Those books that can be more easily discovered and acquired will earn their share of consumer attention; those that are not will increasingly be left on the shelf.

In this sense, the digital opportunity for Canadian publishers, libraries, retailers, and readers is not simply a question of a new sales channel, an innovative format, or an additional way to serve customers. Rather, it is a fundamental aspect of both competitiveness and inclusiveness in today's cultural marketplace, and it is an opportunity that is here today.