

# Electronic Books: How Digital Devices and Supplementary New Technologies are Changing the Face of the Publishing Industry

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**Abstract** This paper explores the topic of electronic books (e-books) and the effect that these digital devices and other new technologies has on the publishing industry. Contemporary society often claims that the publishing industry is dying and that the innovation of the e-book will eventually sentence the printed book to death. But this study will show that such is not the case. While it is true that the world is undergoing a digital revolution, publishers today have not been left in the dust, because these firms have embraced electronic publishing (e-publishing). The invention of e-books opens a world of opportunities and since the e-book market is still in its growth stage, there is much work left to be done. As with any new venture, the industry faces certain challenges, such as piracy, but with tools like encryption, digital asset management (DAM), digital rights management (DRM), and digital object identifiers (DOI), publishers are well on the way to a solution. While it is safe to say that the digital revolution has forever changed the face of publishing, e-books could actually revitalize the industry. No one knows what the future of e-publishing will hold, but developments affect publishing houses, authors, and consumers alike. And while the ultimate fate of the printed book is yet unknown, for now, it is here to stay.

**Keywords** Electronic books · e-Reader devices · Electronic publishing · Publishing industry · Digital asset management

## Overview

Many have said that publishing is a dying industry, but this is simply not true. Rather, the book industry as a whole is merely “undergoing a rapid reconfiguration” [1].

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Innovative technologies and emerging ideas surrounding said technology are forcing publishers to jump on board the bandwagon or be left behind. The most recent wave to rock the book industry is the electronic book, or “e-book,” which has arguably caused the greatest transformation to the long-established publishing industry since Gutenberg and his printing press. E-books, e-reader devices, and the like have made it necessary for publishers and booksellers alike to establish a digital strategy. Especially in a so-called dying industry such as publishing, without it, these firms have no chance of survival in contemporary society.

For some, particularly those who have yet to embrace the electronic book, the supposed “decline of books in the digital age” [1] can make one feel sad, somewhat nostalgic for the good old days, and maybe even a little resentful regarding “our old ink-on-paper books, those time-honored relics whose cultural supremacy now seems under siege by a binary blitzkrieg of blogs, tweets, social networks, and other emerging forms of digital dross” [1]. In the end, it will do society little good to waste time lamenting, because e-books are not going anywhere. Does it not make greater sense to take the time to learn more about publishing’s e-revolution? And in the meantime, those who are wary can take comfort in the fact that, for now, the print-on-paper book is not going away anytime soon.

## Development

### E-books Versus Books

There are a couple of key points that need to be made in order to highlight the crux of the issue of e-books versus books. First, it must be recognized that an e-book is, at this point in time, simply “another supplementary option to paper books rather than a replacement” [2]. Second, this kind of disruptive technology is not foreign to society: “The electronic book is just as much a consequence of the application of innovative information technologies as Gutenberg’s were for paper books” [2]. Before delving further, the difference between e-books and books must be identified. A book is primarily defined as “(a) a number of sheets of paper, parchment, etc. with writing or printing on them, fastened together along one edge, usually between protective covers (b) a literary or scientific work, anthology, etc. so prepared, distinguished by length and form from a magazine, tract, etc” [3]. Clearly, the term can either refer to the physical object itself or its content. The same is true for e-books. It can be thought of from many different perspectives, such as media (electronic format), device (hardware), delivery (Internet), and content (literature) [2]. Some of these perspectives can account for the different characteristics between an e-book and a book. Electronic books are distinct from books in terms of media, distribution, functionality, management, quantity, copyright and fair use, information technology, cost, typology of e-books, reading device specificity or lack thereof, pricing, accessibility, publishing model, book news and peer reviews, service model, quality assurance, standards and interoperability, user preferences, layout and paging, and contextual reading [2]. Electronic books have an advantage over regular books in terms of creation, revision, dissemination, use, and access control [2]. Now that the differences

between e-books and normal books are understood, the discussion can focus solely on e-books.

### Definition of E-books

Electronic books have many names: e-book, e-book reader, e-book device, and digital book [2]. The term “electronic book” covers a lot of ground. It can refer to the software, hardware, or content: “In other words, there is no single technology that defines the e-book in the way that paper and binding defines the traditional book” [4]. Due to the relative novelty of e-books, the definition surrounding this new technology is not terribly solidified. Over the years it has changed constantly and progressed, and only now is it more succinct and to the point. Vasileiou and Rowley [5] conducted a study in which they solicited all of the current definitions of an e-book in an effort to identify the common concepts and themes within these descriptions and from there construct a working definition based on these commonalities. General concepts included digital/electronic, content, book analogy, technologies, accessibility/delivery, and use features [5]. Their analysis also revealed universal themes, such as the digital/electronic form of e-books, the print book analogy, and basic components of e-books like content and e-book technologies used to view or read e-books [5]. In the end, the authors offer a two-part definition:

An e-book is a digital object with textual and/or other content, which arises as a result of integrating the familiar concept of a book with features that can be provided in an electronic environment.

E-books, typically have in-use features such search and cross reference functions, hypertext links, bookmarks, annotations, highlights, multimedia objects and interactive tools [5].

These two contend that the first part of the definition is stable since it focuses on persistent characteristics, while the second is dynamic and will need to be revised regularly since it focuses on benefits and technologies that will evolve over time [5]. They recognize “that continuous development of Internet and new technologies as well as cultural and commercial changes will affect further development of e-books” [5]. Hence, a two-part definition is necessary to capture these attributes.

### Examples of E-book Readers

Though e-books are still a relatively new development and are not necessarily widespread yet, there exists a myriad of examples of this exciting innovation. It is important to note that e-book reader devices “may mark the first steps toward a new kind of literary object that combines the physicality of the printed book with the lightweight efficiencies of software” [1]. Although there are a multitude of models out there, the most popular include Amazon.com, Inc.’s Kindle, different versions of Sony Corporation’s Reader, the Nook from Barnes & Noble, Inc., and the iBooks and iBookstore applications available on Apple Inc.’s iPad.

Hands down the most prevalent of these digital devices on the contemporary scene is the Kindle, which was released in November of 2007 by Amazon [6–9]. The initial release sold out in only five and a half hours [8]. Amazon currently sells the Kindle Wi-Fi, the Kindle 3G + Wi-Fi, and the Kindle DX [10]. The Kindle is a significant improvement on earlier models that failed. Besides being the most talked about e-reader device, the Kindle is probably the most visible in the general public. Sony currently offers up three versions of its e-readers, the Daily Edition™ (considered to be “top-of-the-range” [11]), the Touch Edition™, and the Pocket Edition™ [12]. As far as Barnes & Noble’s Nook is concerned, which comes in both the Wi-Fi® version and the 3G + Wi-Fi® version, the device is not unlike the Kindle [13]. The bookseller giant, who sadly put itself up for sale in early August, is keenly aware of how important its digital strategy is to its future and will probably spend \$140 million on it this year [14]. Currently, the company claims slightly over seventeen percent of the e-book market, and the CEO, William Lynch, expects that there will be “only three to four big players in the e-book market over time” [14]. The Nook’s biggest rivals are the aforementioned Amazon Kindle and the Apple iPad [14]. In terms of the iPad, the device itself is not explicitly an e-reader, but with its iBooks and iBookstore applications, it can be used as one. Apple claims that owners of the iPad have already downloaded over 1.5 million e-books from the iBookstore [15]. Although the “iPad has brought added attention to the e-book reading market,” [16] these particular devices “sell mainly to tech lovers who must have the hottest new technology, whereas e-reader buyers tend to be book lovers who are likely to find ‘the iPad much too expensive,’” [16] according to Rob Enderle, a tech industry analyst at The Enderle Group. There are, of course, other e-reader devices out there, but with technology always changing and improving, that discussion could go on forever. The moral of the story is that even though e-book readers may not yet be as visible to the general public as traditional books are in everyday life, these digital devices are growing in popularity and quickly becoming more prevalent.

## Implications

### Critical Success Factors of E-books

Before a publisher pursues an e-publishing strategy, there are a multitude of things that should be taken into consideration. Critical success factors for e-books demand that the industry looks closely at technology, cost, titles, user friendliness, ownership, fair use, and privacy [2]. More specifically, some of the most crucial points are content justification, interoperability, integration of various sources, accessibility, usage, and functionality [2]. In order to address the aforementioned factors, it is important that certain e-book standard formats eventually come to fruition. True, such formats exist, but not all players in the e-publishing game use the same interface. Publishers and manufacturers need to work together to come up with cooperating structure, representation, storage, identifier, indexing and organization, distribution and access management, and preservation and archiving [2].

Already, involved parties have begun to address the issue of standards in terms of e-book formats, digital audio formats, digital rights management (DRM) languages, DRM systems, and distribution and promotion [4]. Once these factors have been recognized and appropriately addressed, publishers can move forward with an e-publishing strategy.

### Changes in the Publishing Industry

After “hundreds of years of stability,” [4] a certain disruptive innovation is shaking up the publishing industry. Of late, one thing is certain: “Significant changes in the book industry, including the increase in audio books, the Internet, piracy of books, music, movies, and the newly invented ‘e-reader’... are having companies within the book industry all along the supply chain taking a closer look” [6]. When technological advances led to the initiation of e-publishing and the creation of the e-book, many forecasted the death of the book: “media experts are predicting that digital publishing will completely replace traditional paper-and-ink printing” [7]. While it is true that the publishing industry has been struggling, new technology and the advent of digital devices on which to read books have not handed down the death sentence to publishers. In actuality, “computers and other new technologies may in fact be enhancing our ability to produce and distribute printed books, ensuring that books will continue to be a part of our future” [17]. Publishing giants all over have recognized this reality and have tweaked company strategies accordingly. Though consumer adoption of these improved technologies is still in the growth stage, “as more users adopt e-books, the price of the hardware will come down, and bring more users into the market” [18]. Customers will be able to benefit from and enjoy more editorial choices [7]. Besides a growing market, e-publishing and e-books hold a number of opportunities for the publishing industry.

Due to the World Wide Web, “publisher dilemmas of distribution have been freed from the shackles of print and paper” [19]. The term out-of-print need not ever be uttered again [20]. English will not necessarily be the reigning language anymore [20]. The publishing industry’s traditional supply chain will be faster and shorter, and the associated costs will be proportionally less [7, 20]. The end result of this all around decrease in cost equals greater returns for publishers and authors, which in turn, also leads to lower prices for readers [20]. The industry can also reap the goodwill that comes with depleting fewer resources from the planet [7]. But as the cliché goes, every rose has its thorn.

For authors, a negative consequence of digitization is the distinct possibility that literary works could be considered a work in progress forever [20]. What will this mean for consumers who, dictated by human nature, desire a beginning, middle, and end in their prose? [20] Though the outlook is decidedly not good for devoted and traditional readers, still, this does not necessarily mean the end of the printed paper book: “Because books will now be stored digitally and transmitted electronically it does not follow that human beings will hereafter read Dickens or Proust or Norman Mailer on electronic screens as they now listen to music via iPod” [20]. The argument has been made that avid readers who enjoy curling up with a good book might not want to curl up to say, a Kindle. Nothing is set in stone yet, but one thing

is for sure. The pending publishing revolution will likely “forever change the way we generate, access, send and receive information” [7]. Surely, society can count on this truth.

### Challenges and Possible Solutions

When e-books first arrived on the scene, the race began to create a standard format and structure with which publisher-created documents could be read on different digital reading devices [21]. Coyle [4] argued that defined standards and base technology encourage the widespread adoption of an interoperable product, thereby promoting healthy competition between all involved. At the end of the day, such “standards would reduce the risk for all of the parties involved, especially the publishers who are otherwise faced with incompatible requests from competing technologies” [4]. In 1999, the Open eBook Authoring Group, including major e-book manufacturers, a handful of major publishers, and Microsoft Corporation, released Open eBook Specification OEB 1.0, which was based in Extensible Markup Language (XML) [21]. It was neither proprietary nor commercial, but rather an encoding scheme [21]. Open eBook Specification OEB 1.0 did not support any non-OEB format, and it did not help to address copyright protection or DRM [21]. Standards have actually come a long way since the Open eBook Forum first formed.

This group now goes by the name of the International Digital Publishing Forum (IDPF), which is essentially a trade and standards organization for the digital publishing industry [22]. The goals of the IDPF are as follows:

- Promote industry-wide adoption of electronic publishing through standards development, conferences, best practices, and demonstrations of proven technology
- Develop, publish, and maintain common standards (e.g. EPUB) relating to electronic publications and promote the successful adoption of these specifications
- Encourage interoperable implementations of EPUB publications and reading systems and provide a forum for resolution of interoperability issues
- Identify, evaluate, and recommend standards created by other bodies related to electronic publishing
- Provide a forum for the discussion of issues and technologies related to electronic publishing
- Accommodate differences in language, culture, reading and learning styles, and individual abilities [23]

The aforementioned Open eBook Publication Structure (OEB) was a precursor to the Open Publication Structure (OPS) [22]. Currently, “.epub,” which is still a file extension of XML, has two more open standards besides OPS: Open Packaging Format (OPF) and Open Container Format (OCF) [22]. Essentially, EPUB “allows publishers to produce and send a single digital publication file through distribution and offers consumers interoperability between software/hardware for unencrypted

reflowable digital books and other publications” [22]. Unfortunately, not all e-books and e-reader devices conform to the standards that the IDPF has created.

In fact, in their 2009 study, Vasileiou, Hartley, and Rowley [24] found Portable Document Format (PDF) to be the most common format that e-books appear in, though they allowed that e-books also appear in Hyper Text Markup Language (HTML), Exchange Data Format (EDF), and XML formats. Alligood [25], a channel manager at McGraw-Hill/Irwin, an imprint within McGraw-Hill Education (MH), confirms that the company has tried EPUB with a few titles, but generally provides content to partners in a print-ready format, which is then converted to the partner’s standard. For now, this seems to be the easiest method to use while MH waits to see “on what standard the market will eventually center” [25].

Piracy is certainly one of the biggest challenges that the publishing industry faces in this digital age [26]. Less than twenty-four hours after *Harry Potter and the Goblet of Fire* was released, there was a free, pirated version available on the Internet [26]. Publishers have therefore been cautious and insist on tight DRM, which unfortunately, could be a contributing factor to the slow growth of the e-book market [26]. Rights management sometimes prevents users from printing, emailing, or sharing an e-book’s content [5]. So what approach can the industry take to mitigate this problem?

Publishers have many feasible options to consider. The storage and transmission security of e-book content uses both encryption and compression [21]. First, each title is encrypted once with a single key [21]. When delivered, the content encryption key is encrypted again with a specific key that relates back to the particular e-reader device, and then this encrypted content key is stored on the customer’s so-called bookshelf in a secure database [21]. When downloaded by the user, the encrypted title and encrypted content key is downloaded to the e-book device, whichever it may be [21]. This type of security system does not allow for consumers to share e-books [21]. Examples of secure solutions are the Electronic Book Exchange (EBX) and Adobe ePaper Solutions [21]. Another interesting option is a digital object identifier (DOI), “an initiative of the publishing community for protecting its assets in the digital environment” [27].

The International DOI Foundation (IDF), a not-for-profit membership organization established in 1998, developed the DOI, which is “an identification system for intellectual property in the digital environment” [27, 28]. The underlying technology of the DOI system, which is robust, scalable, and Internet standards-tracked, was developed by Dr. Robert Kahn of the Corporation for National Research Initiative (CNRI), a non-profit organization [29]. Essentially, DOI lays the foundation for managing intellectual content, linking customers with content suppliers, facilitating electronic sales, enabling automated copyright management, automation of the supply chain, integration of distribution systems, and tracking of content [27–29]. In fact, it “can be thought of as something of a supercharged bar code for content on the Internet” [29]. The DOI acts as a “persistent, actionable hyperlink... from the content back to the copyright owner that can travel with the file” [29]. It offers a sophisticated, transparent, and user-friendly DRM solution [29].

Even though online content does not have any sort of physical inventory, transportation, or logistics, there exists a complex chain of transactions including



the sale, distribution, syndication, copyright protection, and re-use of this content [29]. All publishers and online booksellers use some form of identifier for products, and a DOI can be assigned to an ISBN entity [27, 29]. These systems should not necessarily be replaced outright, but perhaps upgraded instead [29]. A DOI can be very useful to publishers in that it is “a shared, globally unique identifier that enables these systems to talk to each other and to end-users successfully, reliably, and cost-effectively” [29]. Besides the promising attributes already described, DOI also has the potential for great monetary benefits. Publishers can gain return on investment in a DOI system on both the revenue side and the cost side [29]. In regard to the revenue stream, DOI makes “it easier for publishers to get paid by the digital distribution channel,” [29] and as far as costs, DOI limits “the amount of investment necessary for publishers to begin publishing electronically in a more serious way” [29]. A DOI system is built on the Handle System, which is its core technology [29]. The Handle System is free for use on the Internet, and there are already millions of DOIs in operation today [29]. Though digital piracy is a palpable danger for the publishing industry, firms have a great deal of choices from which to choose. Besides encryption, a publisher could potentially integrate any digital asset management (DAM), DRM, or DOI system that it currently uses to create the ultimate solution.

Another challenge is oft overlooked in the hundreds of articles that have been written on this very topic. Understandably, this concern can be easily forgotten, because rather than focusing on the industry itself, its focal point is the end user. In the traditional sense, publishers can be seen as “a gatekeeper” [30] by providing “a service to readers, since presumably only the best books are published” [30]. But like most debates, it can be successfully argued either way. Some might contend that many worthy books are turned away and never see the light of day, and surely, this is at the very least sometimes true [30]. The latter problem has a chance to be fixed in that publishing on the Internet is now possible [30]. Keeping this in mind, how is the end user to be expected to evaluate said publications [30]? Many e-book stores online attempt to combat this issue by providing what information is available and even passages from the book [30]. But more often than not, these efforts “fail to provide critical material and excerpts” [30]. A somewhat similar concern has to do with the cost that advancing technology is having not only on the industry itself and the end user, but authors, as well: “Lower sales of print books pressure publishers, which usually get lower profits on e-books. This could mean fewer opportunities for aspiring authors until new business models emerge. Just as technology undermined the economics of local newspapers with online alternatives to classified advertising and upended the music industry by de-bundling physical albums into digital songs, it will take time for book publishers and authors to find new revenues” [31].

One possible solution to this conundrum for publishers, authors, and consumers “in a sprawling marketplace increasingly filled with free content” [32] is Goodreads.com, “a digital library and social networking site where millions of members can log in and chat about any book they want, including many that will never see print” [32]. Word of mouth can help little known authors gain an audience, reviews on the site can aid publishers in promoting products, and readers can find the information they want on a book [32]. Websites like Goodreads.com are



a win–win situation for all parties involved. Due to technological advances, much like the dialogue regarding the definition of an e-book, a great deal of the topics discussed above will be in a constant state of change until the digital publishing market, specifically that of e-publishing and e-books, matures.

### Examples of Changes in the Publishing Industry

Besides manufacturers of the software and hardware needed to take advantage of e-publishing, the publishers themselves are jumping on board the e-revolution. How are these firms tackling this issue? Interviews by Michael Moon with top management at publishing giants, Hachette Book Group (HBG), McGraw-Hill Education, and Playboy Enterprises, Inc., demonstrate that publishers are taking the digitization of the industry seriously. Cappelen Damm also serves as an example.

Hachette Book Group USA is one of the largest trade book publishers in the United States [33]. Its literature includes fiction, nonfiction, illustrated, and books for young readers by popular authors such as James Patterson, Nicholas Sparks, and Stephenie Meyer [33]. Hachette Book Group is a division of Hachette Livre, which just so happens to be the second largest publisher in the world [33]. David Bercovici is a project manager in HBG's strategic publishing operations unit [33]. In the interview, Bercovici discussed HBG's first implementation of DAM back in 2000 and how it has evolved since that time [33]. He also pondered possible future DAM applications at HBG [33]. Bercovici carefully explained that HBG is “trying to build for the future” [33]. He mused that the publisher might eventually integrate its DAM system and digital warehouse, OpenBook™, which allows HBG to post browsable portions of its books online [33]. Doing so would effectively make the digital supply chain that much more cohesive, making it easier to go in a straight line and reduce duplication of efforts [33]. A strategy such as this one could also be applicable in supporting HBG's e-commerce, perhaps for e-books or audio files [33]. In fact, HBG already had e-books in mind when the publisher implemented its first DAM system years ago [33]. Back then, there was already an e-publishing program of sorts in place where HBG solicited manuscripts and established a discussion forum [33]. Bercovici reflected on the fact they “were very early adopters of that sort of thing” [33]. Hachette Book Group aims to create and maintain a supply chain that easily supports products such as Sony's Reader and the Amazon Kindle [33]. The publisher has committed to an EPUB format for e-books and looks to produce one industry-standard e-book, which will be able to be read on any of these digital devices [33]. McGraw-Hill is another publishing giant that recognizes the importance of a digital strategy and is well poised for the future.

McGraw-Hill Education, which operates under McGraw-Hill Companies, Inc., is a global publisher with offices in over twenty different countries [34]. Carl Hixson is the vice president of digital asset management [34]. In his position, Hixson's “primary focus is to enable McGraw-Hill's digital transformation, and to develop systems that facilitate enterprise content management, custom publishing and an increased global presence” [34]. His team works to develop systems that will eventually form MH's digital platform [34]. In the interview, Hixson discussed how this transformation would affect authors [34]. He emphasized that from now on, due

to publishing on the web and digital devices such as e-books, writers need to think digitally: “So now authors are not just developing a ‘book.’ They’re authoring ‘content.’ That’s really a mind shift... It’s a process change. It is largely embracing a whole new content development process” [34]. The opportunities associated with this revolutionary change are numerous. Authors have the potential to bring in more revenue, the content that they write can be longer, and they can reach a larger audience, possibly “more users and readers than ever before” [34]. Likewise, Alligood [25] states that the demand for e-books is growing at an extraordinarily high rate year-over-year, more than two hundred percent. He articulates, “It still represents a fairly small portion of our total business, but we expect that to grow and are well positioned to meet demand through multiple channels... We see digital content as the future of our business” [25]. To protect this future, MH chooses e-book distributors that can offer the firm protection against the stealing of content [25]. There exists minimum criteria for DRM at MH, and all partners are expected to abide by said standards [25]. A less traditional publisher, Playboy is just as concerned about DAM as the big guys are and has a long history of managing its assets.

Playboy Enterprises, Inc. is responsible for all branches of the company’s business, but the area most relevant to this discussion is the publication of *Playboy* magazine [35]. Mary Yurkovic is the manager of the digital asset management team and is responsible for leading the corporate DAM strategy [35]. When Playboy first decided to turn its informal asset management processes into a formal DAM system, the firm aptly named it Playboy Asset Management or PAM [36]. In terms of publishing textual content for the magazine, Playboy uses MEI’s K4 Solution for content management, while other facets of the organization use homegrown systems [35]. Eventually, the goal is to have all of these systems feed into one main asset management system in order to achieve a more streamlined workflow in the future [35]. To this end, editorial text is put into PDF format where it can be RIPd apart, which adds value to the product [35]. Then content is moved to an asset management system, where it is keyword-searchable, thereby making it an invariably useful tool to the publisher [35]. Like the three previously mentioned publishers, Cappelen was also an early adopter of DAM.

Cappelen Damm is the oldest publishing house in Norway, and it produces both domestic and foreign fiction, non-fiction, and educational literature [37]. The firm first investigated DAM back in 2000 [38]. The company aimed to have a single system that was flexible, easy to use and easy to learn, and able to integrate with other systems, but at that time, no such solution existed [38]. Cappelen ended up with Artesia for DAM, from Maryland based Artesia Digital Media Group, as its system’s core component with the Financial System from Schilling Data 2 and Logistical System from Microsoft Dynamics AX 3, though it chose to do some tweaking [38]. Opting out of using the DAM’s user interface, Cappelen used the Application Program Interfaces (APIs) to create its own interface [38]. Doing so enabled the organization to take the information it needed from the old Logistical System and other systems and put it into one Title Management and Production Planning module, thereby essentially creating one entire Product Management System that holds all book information, including authors, formats, production

plans, marketing plans, and relationships between diverse products [38]. Cappelen found having all product information be flexible and in one place to be very useful in various projects and eventually, a money saver, too [38]. A Central Book Archive and a Production Management System were incorporated into the DAM system, and the Content Management System responsible for all publishing on the company's website now utilizes data that feeds directly from the DAM and Title Management, ensuring on time delivery of information [38]. Users can also easily obtain book catalogs and other printed marketing materials [38]. The central storage of Cappelen's tailored DAM system that supports many different business processes truly is "a one-stop-shop for all product information" [38]. But in spite of the fact that publishers such as these have recognized and moved forward to become a part of the digital revolution, the industry still has some battles to fight.

Closely related to the theme of rights management and copyrighted content, the publishing industry has faced lawsuits galore of late, which is one of the biggest challenges stemming from the aforementioned topics. There are a multitude of examples, but *Tasini versus The New York Times Co. Inc., et al.* and *Google Inc. versus many* are a couple of the more notable cases.

In December of 1993, Jonathan Tasini, president of the National Writers Union, and five other writers filed suit in the U.S. District Court of Southern New York against *The New York Times Co. Inc., Newsday Inc., Time Inc., The Atlantic Monthly Co., and Sports Illustrated*, claiming that these companies had licensed republication of their articles to LexisNexis, maintained by Mead Data Central Corp., and two CD-ROM databases, the *New York Times OnDisc (NYTO)* and *General Periodicals OnDisc (GPO)*, both published by University Microfilms, sans permission from or payment to the authors [39, 40]. Defendants in the case claimed that these actions were protected by section 201(c) of the 1976 Copyright Act, which states:

Copyright in each separate contribution to a collective work is distinct from copyright in the collective work as a whole, and vests initially in the author of the contribution. In the absence of an express transfer of the copyright or of any rights under it, the owner of copyright in the collective work is presumed to have acquired only the privilege of reproducing and distributing the contribution as part of that particular collective work, any revision of that collective work, and any later collective work in the same series [39].

The defense argued that these particular republications were simply revisions [39]. Though the District Court originally ruled in the defendants' favor, the U.S. Court of Appeals for the Second Circuit eventually reversed the decision and the Supreme Court upheld the latter judgment [39, 40]. The Court stated that law is "medium-neutral," [39] and the move of the work from print to electronic format does not, in fact, alter its content. Hence, this transfer cannot be considered a revision, and therefore, infringes on the authors' rights [39]. Though it was the writers who won in the end, publishers have now taken extra precautions to avoid future lawsuits by demanding that freelancers sign away all future electronic rights or risk not being published at all [40]. In the end, the backlash of the Supreme Court decision has hurt the very people it intended to help.

One of the more recent and hairier cases is that of Google Inc. In 2005, the Authors Guild and the Association of American Publishers (AAP) filed suit against Google for copyright infringement, stemming from the company's plan to scan books from major libraries in order to make the texts available online [41]. A settlement was reached after two years of negotiation, but involved parties agreed to discuss making significant changes due to numerous objections filed against the settlement [41]. Hundreds of complaints came from the likes of individuals, law professors, authors, and publishers all the way to non-profit organizations, advocacy organizations, rival companies like Amazon, Microsoft, and Yahoo! Inc., the Department of Justice itself, states, and even foreign country governments [41, 42]. The settlement did, however, garner support from some academic antitrust and economics experts, civil rights groups, and companies like Sony [41]. Issues and concerns regarding the settlement included numerous law and antitrust objections, stating that the proposal did not protect authors' rights nor the privacy of readers and "would give Google a quasi-exclusive license to profit from millions of out-of-print books and create a consortium that would have power to set prices for digital books" [41]. Google, the Authors Guild, and the AAP disputed this claim [41]. The Justice Department and others believe that the settlement, "if properly revised, could offer great benefits, most notably, by providing broad access to millions of out-of-print books that are largely locked up in a small group of university libraries" [41]. Most agree that if a fair settlement can be reached, the general public would benefit [41]. As of November 2009, the Court had granted preliminary approval of the amended settlement, though final approval is still pending [43].

### Future Trends and Predictions

The future holds a variety of options for writers. In January, Amazon announced that it was ready to offer authors a seventy percent cut of the sales of e-books for Kindle customers, stating that writers would make more money publishing with the company, essentially encouraging authors to circumvent traditional publishers altogether [44]. However, the deal does not apply to the print versions [44]. Writers would still be allowed to sell with other vendors, but must match or lower the retail price for Amazon [44]. The only catch is that authors would have to sign basically all digital rights over to the company, "including the ability to turn text to speech and all future features of the Kindle" [44]. Other writers, like best-selling marketing author, Seth Godin, may choose forsake traditional publishers and vendors altogether [45]. Godin has decided to ditch his publisher, Portfolio, an imprint of Pearson plc's Penguin Group (USA) Inc., to go it alone [45]. He has garnered so many direct customer relationships from his blog, which has approximately 483,000 followers, that he feels he no longer needs the benefits that a traditional publisher normally provides [45]. He plans to sell future books as e-books, print-on-demand books, audio books, apps, PDFs, and pod casts [45]. Though Godin admits that he will hire a top-notch editor and someone to format his books for electronic distribution, much of the rest of the work will be done on his own, as he has often "created, executed and maintained a variety of e-book promotions for earlier titles" [45]. Referring to one of the ways in which Godin plans to sell his books, another

trend that will likely grow in the future is e-book reader applications, more affectionately known as “apps.”

Borders Group sells the digital reader, the Kobo™ eReader, which is produced by Kobo Inc., a global e-book retailer and e-reading service [46, 47]. Earlier this year, when the firm first unveiled its e-reader, “touted as ‘the real Kindle killer’ by *Wired Magazine*,” [48] it also announced an application that provides support for dedicated e-reading devices through the “Powered by Kobo” partner program for hardware manufacturers and retailers [47]. The app boasts provision of a “world-class e-reading experience and storefront” [47] and will be included in many top e-book digital devices. There already existed a “strong global following” [47] for the organization’s e-reading apps for the iPhone, Blackberry, Palm Pre, Android-based smart phones, and the iPad, and the launch marked “a first in this emerging market—standard software available for hardware partners worldwide” [47]. With the app, users can read e-books in an open standard format such as EPUB or PDF, and the app itself supports e-books, subscriptions, and documents, can be used on a myriad of hardware and screen options, including E Ink and LCD screens, and can connect via USB, Bluetooth, Wi-Fi, and 3G networks [46, 47]. As might be expected, any “Powered by Kobo” app is linked to a user’s Kobo account and can be used on Kobo-enabled devices [47]. In actuality, this trend is already becoming more popular. Borders now offers the Apple app for the iPhone and iPad and other Borders’ apps for the iPhone, Blackberry, Android, iPad, and all PCs, which are available for free on Borders’ website and with which readers have “the ability to browse and buy over a million e-book titles” [46, 48, 49] from the bookseller’s e-book store, that along with its apps, is powered by Kobo. Users benefit from being able to search by title, author, topic, or keyword and can take advantage of automatic bookmarking, print quality resolution, smooth transitions between pages and chapters, and customizable font size and type [49]. This step goes toward supporting the bookseller’s digital strategy [49]. It is likely that other e-book manufacturers, vendors, and publishers will follow.

This year will bring about more changes within the e-reader/e-book market, according to Epps and McQuivey [50] of Forrester Research, where they are analysts and contribute to the company’s blog for Consumer Product Strategy professionals. Among their predictions are the following:

- E Ink will lose its claim to near-100% market share for e-reader displays.
- Dual-screen mobile phones and net books will eat into e-reader demand.
- Apps will make non-reading devices more e-book-friendly.
- E-readers will get apps, too.
- E-book content sales will top \$500 million in the U.S.
- E-textbooks will become more accessible, but sales will be modest.
- Magazine and newspaper publishers will launch their own apps and devices.
- China, India, Brazil, and the EU will propel global growth, but the U.S. will still be the biggest market [50].

As the world watches 2010 come to a close, society can already see that some of these predictions are indeed coming to fruition. The launch of the iPad and its iBooks and iBookstore applications proves that the tablet, not explicitly a reading

device, is e-book friendly, and new apps for e-readers, such as Kobo's, are a quickly growing trend. Not to mention that William Lynch, the CEO of Barnes & Noble, believes that original estimates of 2010 e-book sales hitting \$500 million are low [14]. It looks like Epps and McQuivey's predictions are largely on track.

## Conclusion

In contemporary literary culture, “the written word is increasingly encountered in digital form” [51]. The digital age has spawned an e-publishing revolution and cultivated the growing prevalence of e-books. In his article, “Dispelling Five Myths about E-books,” Gall [51] presents five myths about e-books, which he then disproves. He lists the myths as follows:

- Myth 1—E-books represent a new idea that has failed
- Myth 2—E-books are easily defined
- Myth 3—E-books and printed books are competing media
- Myth 4—E-books are expensive
- Myth 5—E-books are a passing fad [51]

This discussion in its entirety backs up Gall's disproof. E-books still do not have a definitive definition and evidence suggests that such a definition will always be, in part at least, in flux. Although e-books had somewhat of a rough start, the digital publishing revolution has certainly not failed. It has been said that the “unprecedented progress” [5] within the e-book publishing industry has been “one of the major developments in the field of e-publishing during the last decades” [5]. The market for e-books is still in its growth phase, which suggests that it is anything but a fad. But does this spell death to the printed book?

Not necessarily: “The touch and feel of a paper book, its longevity and history are in our souls” [21]. It will likely take several generations before consumers stop depending on the paper book medium, embrace a new way of reading, and fully take advantage of these technologies [19]. Therefore, there is no need for publishers to make a distinct choice between print or digital just yet: “At least for now, the printed book will live alongside the e-book. These are new pages in the history of the book, whose final chapters are yet to be written” [31]. The industry, authors, and end users alike can have the best of both worlds thanks to the Internet [21]. Until the e-book market has matured, the publishing industry will continue to face challenges such as piracy, copyright infringement, and any resulting lawsuits. But thanks to new developments publishers are well equipped and prepared for the change. Using supplementary technologies such as encryption, DAM, DRM, and DOI, the industry can fight against its aggressors.

Society may not yet know what the future of e-publishing holds, but one thing is for sure, “e-books are providing us with a new way to read,” [19] and it “has the potential to alter our reading habits, affect the organization of our intellectual life, and change the venues of our reading experiences” [19]. Such a revolution may even have the potential to raise national literacy and educational standards [52]. And no one can argue with that benefit. Much like the advent of the e-book was predicted

years ago, the “new technologies of digitization and the Internet foreshadow a time when every book ever printed and in whatever language it happens to reside, will be permanently and cheaply available from the World Wide Web, downloaded from aggregators like the Gutenberg Project, Google, and the Open Content Alliance...” [20] Until then, society will continue to avidly devour its bestsellers and anxiously await the next development in the digital revolution.

### Future Study/Research

Certain areas for future study have been alluded to throughout this discussion. Vasileiou and Rowley [5] have suggested a handful of areas for future research, including further consideration for the definition of e-books, the establishment of a process for updating the definition, benefits, and characteristics of e-books in order to accommodate changes in technology, the context in which e-books can support access to information, reading, and learning, and viable business models for authors, publishers, and users. In their later study along with Hartley [24], these two have additionally suggested that there needs to be more extensive and thorough research of the history and subsequent growth of the e-book marketplace and careful observation of both the adoption of e-books and the nature of e-book utilization by the end consumer.

It should also be noted that DRM, while it proves to be a good and necessary thing for publishers, “causes a set of problems for users of e-readers” [53]. The most important issue is that “the use of DRM on books being sold means that only approved devices can access said books” [53]. What happens when a consumer decides to turn in his or her Kindle for a Nook? Should that person have to buy all of his or her e-books again simply because DRM prevents one from reading an e-book title purchased from Amazon on a Barnes & Noble device? This may not be a big issue now, but once e-book readers become more mainstream and consumers start trading in one device for another, much like one might do with a cell phone or other piece of electronic equipment, it will be. And what about the ever so common act of lending a book to a friend? DRM makes this impossible [53]. Most e-reader devices do not let one do so, as the device and e-books purchased are often linked to the user’s personal account. Currently, physical books are still more convenient in this regard. Much like the music industry debacle in recent years: “DRM is, in a manner of speaking, treating paying customers like criminals. It prevents legitimate customers from doing what they want with their content while doing absolutely nothing to the people who acquired the same content illegally” [53]. But the music industry eventually realized this and altered itself accordingly, so publishing is likely to follow [53]. Future research should look at various ways to do so.

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