The Opportunities and Challenges in the Evolution of eBooks towards a Dynamic Future

MA. In Global Media and Communications

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Table of Contents

Abstract

This paper is an overview of the past, present and future of eBooks and the opportunities and challenges that have arisen in the evolutionary process. From static digital copies of printed books to interactive storytelling experiences, eBook have come a long way. These developments in the digital publishing industry have been both a cause and effect of the changing notions of reading and writing in a digital age characterized by collaborative content creation and shared consumption.

The paper introduces the efforts of the Annenberg Innovation Lab (a think-and-do tank at the Annenberg School for Communication and Journalism) in seeking to advance the future of enhanced and dynamic eBooks by collaborating with students and industry professionals to research, create and publish eBook projects that push the boundaries of digital publishing.

In addressing some of the practical problems in the development and appropriation of enhanced and dynamic eBooks, this paper also raises questions about the relevance of existing industry standards and processes and encourages the reader to think about innovative solutions to the roadblocks in the otherwise bright future of eBooks.

Introduction

Back in 1991, journalist and author Anna Quindlen wrote in her New York Times column, "*I would be most content if my children grew up to be the kind of people who think decorating consists mostly of building enough bookshelves*", she could not have presaged the dramatic ways in which the functionality of physical bookshelves would be affected by a singular device that was lighter in weight and smaller in size than most of the books on those shelves.

The bookshelf is changing forms. While it was once a piece of furniture that adorns the walls of your homes, it is now an icon on the eReader or the tablet of your choice. Hundreds and thousands of books are now available at the touch of a finger, and statistics show that we are not complaining.

"*E-book sales grew dramatically in the first quarter of 2010, jumping from just 1.5% of total US book sales in 2009 to 5% of the market in the first quarter of 2010. (Source: R.R. Bowker)*." Also, "*The International Digital Publishing Forum ([IDPF](#)) reported U.S. wholesale eBook sales for January, 2010 were $31.9 million, up 261 percent from the same month a year earlier*." (Chandler 2010)

The growth-potential that these statistics indicate is breaking down the defensive walls that traditional publishers had built around their businesses. The inability to adapt to the changing landscape of the publishing industry has forced many companies and bookstores into redundancy. Borders, the international chain of bookstores, filed for a Chapter 11 bankruptcy protection earlier this year and U.S. bookstore giant Barnes & Nobles (B&N) put itself up for sale in August 2010. A very plausible explanation for such game-changing events is offered by James Stewart of the Wall Street Journal- "*My hunch is that B&N never really embraced the Internet or e-books, tied as it was to the old-fashioned world of physical books and stores. As B&N focused on managing decline, a much more nimble Amazon could concentrate exclusively on the new world it was forming. B&N needed to destroy its business model to prevail*." (Stewart 2010). The downfall of powerhouses like Borders and B&N was a rude awakening for many change-averse publishers who are now scrambling to jump onto the digital bandwagon.

Thus, what has long been considered an either/or battle between print and digital media, now resembles a Mergers and Acquisitions scenario wherein both traditionalists and technological determinists are beginning to acknowledge the value in leveraging the affordances of each other's media.

The transformations that we are witnessing in the business models and processes of the publishing industry are, in large part, a response to the dynamic changes in today's 'reader'. The Reader is perhaps one of the most interesting constructs in the publishing world today because it connotes the two distinct but co-dependant entities that directly impact the way business is transforming: The 'reader' is both the person who reads the book, i.e. the audience *and* the platform or the technology that the audience uses to read the book.

Evolution of The 'Reader' as a member of the Audience

The importance of the 'reader' as a construct derives from the historical understanding that a book is a culmination of the efforts of an author and his/her publisher, written expressly for the purposes of appealing to the third most important cog in the wheel- the reader. The author, the publisher and the reader were thus three distinct entities in a bygone era that was characterized by the supremacy of print as a medium and the monopoly of a handful of publishers in the distribution of content.

However, the Internet and the subsequent advancements in technology have long since rendered the linear mass media model redundant. Today, anyone with the right resources (a computer/laptop, an internet connection and the appropriate channel of distribution- blogs, file sharing systems etc) can become a part of the production and distribution process. This liberty and access to resources has given a new lease of life to the phenomenon of self-publishing.

Self-publishing is a process that eliminates the need for a third-party publisher and allows the author to be his own publisher. In the early 21st century, entrepreneurs like Bob Young and Eileen Gittens created companies like Lulu (2002) and Blurb.com

(2005) when they realized the business-potential of offering self-publishing services[1] to anyone looking to share his/her story on a professional platform. By 2008, several self-publishing companies had emerged, each one offering its own Print-On-Demand (POD)[2] services.

These developments, in tandem with the explosive growth of social media platforms like MySpace, Facebook, Flickr and Twitter over the years have changed the way we read, write and communicate. Sharing stories, ideas and comments has now become intrinsic to the way we create and consume cultural artifacts.

Boynton, in 2000, predicted that "*It is safe to say that in the future, many, many more people are going to be "published," and their works will be read in many different formats*" and his intuition could not have been more spot on. Not only is the average digitally capable user producing/reproducing more content, but he/she is also becoming more aware of the options available to him/her for distributing the creations to audiences that would potentially be interested in consuming it.

The evolution of the reader as an active participant of the reading and writing process is thus a function of the changes in our social and cultural practices. 'Readers' don't *just* read anymore. They create and share their own stories on any and all platforms that are available to them.

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[1] The Self-publishing services provided by companies like Lulu and Blurb.com include helping both established and aspiring authors to create, market and distribute their books on a variety of platforms and in multiple formats so they can reach wider audiences. These services are lucrative because they allow the authors to keep their ownership rights and also retain a substantial percentage (80% or more) of the profit made on sales.
[2] POD (Print On Demand) is a publishing process in which the volume of books printed is directly dependant on the demand for the book, i.e., a new copy of the book is printed only when a new order is placed with the publisher. This process reduces waste, optimizes resources and maximizes profit.

Evolution of the 'Reading' Technology

To simply say that the book has evolved from print to digital media would be to deny the significant stages in the evolutionary process of the publishing industry.

The need for the digitization of content was perhaps first, and more keenly realized by the newspaper industry when they witnessed sharp declines in readership and subscription owing to the feely available and easily accessible information on the Internet. Print book (fiction and non-fiction) publishers around the same time were relatively complacent about the longevity of their content on the print medium and began to publish the digital versions of their printed books only to add a new revenue stream to their businesses and to reach out to younger audiences. Thus emerged the concept of an eBook that *The Oxford Dictionary of English* defines as "*an electronic version of a printed book*".

Historically then, the eBook was considered to be a mere digital mirror image of the printed book. Even when publishers had begun to realize the importance of tapping into the digital media for the distribution of previously authored literary works, an eBook simply served the purpose of a digitally modified print book. The content changed very little in form, if at all, and the eBook medium itself was used as yet another, albeit new, channel of distribution of pre-packaged content.

The next stage in the evolution, spurred on to a large extent by the previously mentioned phenomenon of self-publishing, was the emergence of digitally-born original eBooks. Wikipedia describes eBooks as. *"...a text and image-based publication in digital form produced on, published by, and readable on computers or other digital devices. Sometimes the equivalent of a conventional printed book, e-books can also be born digital.*" It is interesting to see how the evolution of this definition from the one mentioned previously is also indicative of the evolution of our sources of knowledge from the traditional dictionary to the crowd-sourced understanding provided by avenues like Wikipedia.

Moving forward, it wasn't long before creators of digitally born eBooks realized that the eBook platform could afford much more than just the traditional black and white presentation that resembled the print version. Digital publishing not only allowed publishers to circumvent the exorbitant printing costs of including color images, but

also afforded 'enhancing' the eBook with other audio/visual attachments like music clips, videos etc.[3] Many terms have since been used to describe this stage in the evolution of eBooks. "*In the spring Hachette Book Group called its version, by David Baldacci, an "enriched" book. Penguin Group released an "amplified" version of a novel by Ken Follett last week. And on Thursday Simon & Schuster will come out with one of its own, an "enhanced" e-book version of "Nixonland" by Rick Perlstein.*" (Bosman 2010).

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[3] These multimedia enhancements in the earlier eBook projects were usually hyperlinks to additional material made available externally on a web browser through access to the Internet.

Enhanced eBooks

Jonathan Taplin- Director of the Annenberg Innovation Lab- with his experience of overseeing many of the Lab's eBook projects says that an Enhanced eBook "*…takes the idea of an eBook much farther by integrating video and audio files into the eBook in a seamless way…*". By 'seamless', Taplin is referring to the integration of audio-visual content within the 'walled garden' of the eBook so the reader does not have to be redirected to a hyperlink outside the confines of the eBook.

In this stage of evolution, we have seen the emergence of two kinds of enhanced eBooks: A large majority of enhanced eBooks that have a primarily textual orientation and use multimedia enhancements to augment the story (Jonathan Taplin's eBook on the music industry- discussed in greater detail below- is a great example of this genre).

In the other genre of enhanced eBooks, it is the audio-visual elements that are the core communication while the textual matter is supplemental. Visually oriented enhanced eBooks are becoming particularly important in educational spheres as teachers and instructors are beginning to explore the idea of learning as a sensory experience.

Exemplary of visually enhanced eBooks is Theodore Gray's *The Elements* – an enhanced eBook (on the Apple platform) that explores the building blocks of our universe with the use of high-resolution images and audio-video clips in an interactive and engaging interface. Talking about the reasons behind the remarkable success of his enhanced eBook, Mr. Gray says, "*We* (the team behind The Elements) *come from a background of software designing….we bring to the table a deep appreciation of the value of developers and how one goes about developing software….but at the same time we have experience with the book world and how you go about telling a story and creating a work that is not an app, that's not just a piece of technology, but is actually…I don't know if I can use the term literary, but is basically a real book, with a real story and a real author…it brings back a sense of the traditional book publishing set of tools, experiences and competencies to the technology world where one typically finds companies that know how to make great games but not good books…The Elements combines both the non-trivial software and real storytelling and*

book-like attributes….Both sides of this digital divide make crucial contributions to the end product...both the book world and the software world."

Some other interesting examples of the optimal utilization of the multimedia affordances of the digital platform can be seen in the efforts of innovative think and do tanks like the Annenberg Innovation Lab (AIL). AIL, since its establishment in 2010, has been engaging students, the academia and the industry in projects that '*push the boundaries of knowledge with research on the ways that communications technology is used and how it is changing all forms of human interactions*' (AIL Mission statement).

The projects that the AIL is currently in the process of executing are:

An Enhanced eBook to deconstruct and analyze comics books and graphic novels:

The brain-child of renowned new media scholar Henry Jenkins, this project is looking at leveraging the inherent aesthetic of comic books (the centrality of colors images) while at the same time adding to this aesthetic the affordances of multimedia technologies that enhance the reading experience. "*I think we can do a kind of new criticism of comic books using* (the medium of) *eBooks that wouldn't have been possible before.*" Some of the 'enhancements' this eBook will include are:

- Optical and audio-visual effects layered on top of the textual and pictoral story of the comic/graphic novel "so they become part of the visual rhetoric by which you talk about a comic".
- Interviews with comic artists and writers and the inclusion of taped videos of their workspaces, their processes etc into the book to give the readers a broader and deeper insight into the development of the comic books.

An eBook on the Music Industry

Jonathan Taplin is writing an eBook on the history of avant-garde counter-culture in the 20th century. Multimedia enhancements have been heavily used in this eBook to provide contextual background information and trivia related to a story that traverses the historical and contemporary landscapes of the music industry.

In the creation of this particular project, Jonathan Taplin and his colleague Lee Warner faced several production challenges that throw up interesting concerns about the current ePublishing formats and standards:

The Challenge of Finding the Right Tools

Taplin's book was created in Pages- a page layout tool on the Macintosh platform. When Lee began working on compressing the heavy video files to fit in the Pages format, he encountered several issues- "*When we tried to export the file as an eBook in Pages, it failed. An update to Pages came along that allowed us to export it because of the more generous multimedia allowances* (in the new Pages). *Once we used that, we could finally upload it as an eBook in the iBooks* (an eBook application by Apple Inc.), *but it looked horrible. The video played fine but the text was all messed up. I took it upon myself to figure out how to edit an eBook and what I found was that there are really some very basic standards that aren't very good, specially for the kind of multimedia-heavy book that Jonathan wanted to create….the lexicon to create an eBook is just not clear…and you can't create it because you're not creating the standards, you're just bending them to your needs….so…I had to open up each chapter of the book and make sure that the style that we wanted was consistent throughout. But unless you have some knowledge about code programming, you simply cannot make a multimedia eBook on your own. What's more, at this point, there really is no standard for interactivity within eBooks. There's no Java, no room for inputs, it's just not possible at this point.*"

These issues are worthy of consideration keeping in mind that the trend of self-publishing is fast gaining momentum with the rising popularity of eBooks and eBook readers. If this momentum is to be carried forward into the Enhanced eBook genre,

we need to work towards creating the right tools and making them accessible to the broader content-creating population.

As it stands today, Pages (Apple product) and InDesign (Adobe product) are the two most commonly used tools to create standard eBooks that do not include heavy audio/visual elements. What this translates into is that in the genre of standard eBook production software, Apple and Adobe have created a sort of duopoly that discourages smaller independent software designers from entering this market for fear of being wiped out by the two giants. This lack of competition could prove to be a serious challenge in the proliferation of independent eBook productions.

Limitations of the Current Industry Standards

The three most recognized publishing formats in the digital publishing industry today are PDF (by Adobe), Mobi-Pocket (by Amazon) and ePub (open standard adopted by Apple).

- Adobe's PDF's have traditionally been the popular choice for eBooks that are largely textual in nature. The biggest strength of a PDF file is its compatibility across diverse devices. A PDF file downloaded on your computer can be accessed on your Kindle, iPad, iPhone, Android etc with minimal or no distortions in the layout of the content, thus saving the designer the hassle of reprogramming and reformatting content each time the eBook travels across different technological hardware.

    However, PDF files are self-contained documents that cannot support heavy audio-visual enhancements. Another drawback of the PDF format that will become an important consideration in the near future is the fact that PDF files are static, one-way communications that do not afford interactivity and participation.

- Amazon and its Kindle devices that use a closed proprietary publishing standard called Mobi-Pocket, are facing some criticism because of their exclusionary technology that does not support eBooks exported in formats

other than those compatible with Mobi-Pocket. It is interesting to note that while an eBook written for Mobi-Pocket can be read on both Android and Apple's iOS devices, Apple and Android's ePub files cannot be read on the Kindle.

This 'walled garden' approach is raising serious concerns in light of the fact that Amazon is the market leader in terms of the number of eBooks sold on any single platform. (Statistics put forth by Amazon say that for every 100 paperback/ hardback books, they sell 180 eBooks). Add to this the recent introduction of the Amazon App Store which is positioned as a direct competitor to both Google's Android App store and Apple's App store, and we see how the power has come to be concentrated, albeit unevenly, between these three monoliths.

- In contrast with the above mentioned standards, the ePub is an open platform promoted by The International Digital Publishing Forum (IDPF) that is optimal for 'reflowable content'- content that can travel across different devices. However, "*With ePUB, our challenge is to produce an eBook that can be read on a variety of eReaders, with its information hierarchy intact and intuitive navigation that makes access to the content quick and easy, no matter what device it's being viewed upon.*" (Cunningham 2011).

When Apple announced its decision to use ePub as the standard for publishing its eBooks within its iBooks application, publishers like McMillan breathed a sigh of relief because it allowed them to contest the hegemonic terms and conditions imposed by Amazon owing to its position as market leader.

While the ePub is advantageous in that eBooks published on this format can be accessed on almost all eReaders, Android and Apple devices, it is not devoid of its own limitations.
Firstly, the current ePub version 2.0.1 lacks a rich media and interactivity support that is crucial for enhanced multimedia eBooks. Perhaps ePub 3- a work in progress- will address these issues, but till then, enhanced eBook creators are forced to find ways of working around these pitfalls.

Secondly, the ePub does not conform to any *one* Digital Rights Management (DRM) system[4], therefore forcing eReaders and other device manufacturers to employ their own DRM schemes. The incompatibility of patented DRM systems on different devices makes the 'reflowability' of content problematic, and could prove to be a major hurdle in achieving a truly open standard for publishing.

The lack of a universally adopted publishing format is perhaps one of the biggest challenges in the eBook industry today because there is no *one* format in which eBooks are being published.

Some eBook publishers continue to use patented software like PDF and Mobi-Pocket to export their eBooks, while others prefer to use independent or open-sourced format like the ePub. In this debate between closed and open formats, Google has emerged as a strong contender for the open format with its bookstore that allows consumers to choose what they want to read (wide selection of eBooks), where they want to shop (connectivity to both independent booksellers, retailers and other online bookstores) and how they want to read it (on eReaders, Android, Web Readers, Apple devices). Chris Palma, Google product manager said in an interview, "*….unlike books bought from either Apple or Amazon, which are locked by digital rights management software and can only be read on the proprietary devices sold by those companies, Palma said that e-books bought from Google Editions will be accessible from a range of non-Google websites and will be readable on any device that has a web browser (including presumably a Google tablet, if one ever materializes)*" (Ingram 2010).

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[4] DRM systems are instituted to ensure fair use of proprietary digital content and to avoid piracy. The digital publishing industry is still in the process of figuring out how much restriction is too much, and what should or should not be protected. While it is imperative that authorial works be offered some kind of legal protection (if the author so chooses), what complicates matters is the fact that each publisher can devise his/her own DRM scheme, thus creating multiple and often contradictory definitions of 'piracy'. This can confuse the consumer and potentially drive them to circumvent the complex legal systems in order to get what they want. (For an interesting insight into the current eBook DRM dilemmas, please refer to Laura Owen's article in *Publishing Trends*- link provided in the bibliography).

It is important to note here, however, that in this new tripartite system of affluence, two of the players- Amazon and Google- are yet to dapple in the complex world of multimedia enhanced eBooks. This gives Apple a headstart, thanks to its media rich devices that most enhanced eBook creators are now heralding as the answer to their prayers.

Evolving from Enhanced eBooks

Enhanced eBooks have helped to redefine the constructs of reading and writing a book by addressing the textual bias that has long been ingrained in the minds of both readers and publishers. Erin Reilly, talking about the role that enhanced eBooks are playing in transforming the eBook industry says,

"*The problem with the way things are is that the entire publishing process, as of now, is based on the traditional ways of reading and writing. 'Text' is still considered to be print and the images, video and sounds supplement the traditional text. Part of the reason that tablets are becoming so popular is because they are like lightweight bookstores that can carry up to 1100 books. Well that's great, but does that really push the current standards of how we read and write? Where reading used to a traditional textual act, there are now ways we can read a transmedia story…We need to forefront the idea of reading through images and other forms of media*" (Erin Reilly in an interview)

An interesting example of a project that is trying to bridge the gap between print and digital media, and in doing so, is pushing the boundaries of traditional approaches to reading and writing is Nick Bilton' book, *I Live In The Future & Here's How It Works*. While the book would technically fall under the genre of a 'digitally born original work', it is noteworthy here because it breaks the mold of a closed narrative by inviting reader participation in the storytelling experience. Bilton has used QR codes[5] in his print book that lead the reader to extensive supplemental material that they can access on their phone's web browser. Not only does this external material give the reader a deeper insight into the subject matter using audio-visual narratives, but it also allows them to participate in the discussions around the subject by commenting on each chapter and interacting with the author himself.

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[5] Quick Response (QR) Code *"is a kind of 2-D (two-dimensional) symbology…with the primary aim of being a symbol that is easily interpreted by scanner equipment."* (QRCode.com). These codes can be scanned on camera phones that are loaded with the right applications. The encoded information could be a text or an external URL that can be accessed on a web browser.

Bilton's book is an exciting development for two important reasons: One, it is exemplary of the exciting and motley ways in which enhanced eBooks are being interpreted, and two, it is trying to belie the assumption that the reader's participation within multimedia enhanced eBooks ends at consuming the different audio-visual experiences provided by the writer in a pre-configured setting.

As the average consumer/reader becomes more aware of the lay of the digital land, he/she is beginning to talk back and he/she wants to be heard. In order to address this need to connect, share and contribute, avant-garde publishers are now experimenting with a more collaborative, interactive and participatory approach to storytelling that is giving impetus to the development of what can be referred to as Dynamic eBooks.

Dynamic eBooks

To start off a discussion about dynamic eBooks, we need to first address some common misconceptions about what constitutes *interactivity* in this genre. Finger flipping a page of an eBook on your iPad, integrated navigating systems with quick links to other chapters and supplemental material, audio book features etc are some of the functions associated with enhanced eBooks that engage readers in getting physically involved in the eBook, but the act of 'reading' such eBooks is still a static, linear process where the eBook delivers prepackaged content to the reader that the reader can then access with the touch of a finger or the click of a button.

Dynamic eBooks take forward the notion of interactivity in such a way that the reader becomes pivotal to the way the story unfolds, the way it is told and the way it is presented. Perhaps the best way to understand the scope of dynamic eBooks is to study the following projects that AIL is currently working on:

1. The New Quill
2. Mother Road

The New Quill

The New Quill is an exciting project that is traversing the relatively uncharted territory of dynamic eBooks. The project stems from the insight that new media is changing the classroom and the students within, in ways that traditional pedagogies cannot fully justify. The idea then, was to create an eBook that fosters an interactive approach to learning, thus engaging the attention and imagination of students in a way that overly instructive books could no longer do. Michael Morgan, project leader for The New Quill talks about the importance of getting student to interact with the learning material- "*Recent studies show that young people now spend ten hours a day consuming media and on social network. What that means is, that there are all these consumers and not that many creators…So our concept is, you give them a toolkit that*

allows for all these consumers to not only consume texts or media, but encourages them to be creating it at the same time".

The recently released prototype of The New Quill reinterprets the classic tales of Huckleberry Finn by integrating audio and visual cues in synergy with the text. What sets it apart from multimedia enhanced eBooks is that it encourages students to participate in the story by personalizing it with their own notes, images, music, videos and other multimedia elements supported by the iPad.

Mentioned below are some of the features that the team envisions will establish The New Quill as a new approach to classroom learning:

• Ambient Sound:

Each chapter of the book is accompanied by a background score that is *"half white noise and half theme music"*. This element was included when Michael realized that half of his students could not read or write without some sort of music in the background. Studies have also shown a strong correlation between ambient sound and attention spans on students. The idea is for every chapter to have a music piece that compliments its contents, and therefore for every book to have its own soundtrack. While some default soundtracks will be provided within the application, students can choose to upload a song/music clip from their own libraries and even create their own music (in Garageband and similar applications) and upload it to the chapter they think it correlates with.

• The Audio-book function:

The New Quill allows for instant access to the audio-book that can be listened to while reading the text. The team is also working on adding a karaoke version of this function that will enable the student to follow the story line-by-line as he/she hears the audio.

• Encouraging Participation:

The eBook format for the New Quill encourages the creation of user-generated content (UGC) in the form of side-notes, images, videos, music etc. Students can upload media elements of their choice as they see fit into the eBook for a truly personalized and customized feel. The new iPad2 offers great potential for users to

take pictures/make videos/create original soundtracks and synchronize them with the text in the eBook.

- Creative Learning:

The application makes reading fun and interactive by allowing students to record themselves while they read out aloud. The audio files hence created can be used as reading logs through with the teacher can keep track of his/her students' progress.

- Multilingual Capabilities:

Interactivity and participation in this eBook can also aid students in honing their language skills. Linguistic diversity within the student-body is leveraged by outsourcing the translation of the eBook to students within the classroom. Michael asks his students to write their reading logs in their own native languages because studies show that foreign languages are better learnt when people think and write in the language that they are most comfortable with.

The team behind The New Quill is working on including several other functions like a simplified language version (for non-native English speakers), pictoral definitions of complex words and sharing and collaborating over audio/visual additions to the text. In these and many other ways, The New Quill is endeavoring to create a truly interactive learning experience and their progress in the coming year will be interesting to follow.

The Mother Road

"*The Mother Road application challenges the notion of the solo authorship in the current travel guide e-book market by providing a hub where travelers are not only given the access to the specially curated tour guides but also the means to share their traveling tales with the family and friends at home.*" (As described on the AIL website)

The printed travel books segment has historically been dominated by authors that are acknowledged as knowledgeable experts in their field. However, travel writing became a lot more 'by the people, for the people' with the popularity of travel advisory sites and blogs like TripAdvisor, Travelocity, LonelyPlanet, Frommers etc.

The MotherRoad is perhaps the next logical step forward in the evolution of travel books. Not only does it leverage the multimedia affordances of digital platforms like the iPad and the iPhone, but it also promotes collaborative content creation.

The Mother Road is built on the user-insight that everyone wants to leave his/her mark on the destinations they journey to. At the same time, travelers hope to learn from the experiences of people before them so that they may be advised on the nuances of the place, its people and its culture. Mother Road uses these insights and offers the following unique features in its application:

- 'Curated' tourguides: Travelogues and multimedia experiences uploaded by authors who have expertise in different locations.
- Travelers' Tales: By scanning the QR codes at specific locations or checking in via geo-location, users can mark their presence at that location and let their friends and family know about the people, places and cultures they've learned about in their journey. It also invites users to be a part of the story, thus giving them a sense of ownership and authorship that is missing from most travel books.

The Challenges In Exploring the Potential of Dynamic eBooks

To say that the publishing industry is currently in a state of flux would be an understatement. The pace of change and development is so frantic that by the time this paper is published, its data will perhaps already be superseded by new facts and figures. As exciting as the future is, it is that much more risky because while the old ways of creating and publishing content are changing, the new ways are still in the process of crystallizing into norms.

"*In Grandinetti's view, book publishers—like executives in other media—are making the same mistake the railroad companies made more than a century ago: thinking they were in the train business rather than the transportation business. To thrive, he believes, publishers have to reimagine the book as multimedia entertainment.*" (Auletta 2010)

While Grandinetti's observation is right on the money, we can take his ideas even further to say that 'reimagining the book as *multimedia* entertainment' is no longer enough in the wake of the exciting possibilities created by digital technologies. What we need is to develop a deeper knowledge and greater appreciation for transmedia storytelling[6] so that we can understand the different affordances of each media and use them to the best of their potential.

Each stage in evolution of eBooks has been riddled with its own set of unique challenges. Some of the practical roadblocks in the development on dynamic eBooks are:

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[6] *Transmedia Storytelling* is a term made popular by Henry Jenkins, who describes it as "*...a process where integral elements of a fiction get dispersed systematically across multiple delivery channels for the purpose of creating a unified and coordinated entertainment experience. Ideally, each medium makes it own unique contribution to the unfolding of the story.*" (Jenkins 2007).

Finding the Right Tools

Most dynamic eBook publishers are currently swimming in the dark and trying to find their way as they go along because there isn't any one way to create an eBook. While on the one hand, this flexibility is liberating and conducive to innovation, on the other hand, small independent publishers who have great story ideas for the dynamic eBook medium could be deterred by the daunting task of finding the right tools.

As discussed earlier, Pages and InDesign continue to be the most widely used tools for creating enhanced eBooks. The problem is that while we may evolved from enhanced eBooks to dynamic eBooks, the tool-kit has not evolved simultaneously. Both Pages and InDesign enable authors to embed audio, video and image files within the text (to a limited extent), but they do not allow for a two-way interactive communication between the author and the reader.

Erin Reilly in talking about the challenges she faced in working on *The Mother Road* says, "*Where I struggled with using Pages or InDesign for The Mother Road is, I wanted more interaction and I wanted to incorporate more dynamic content, and the publishing tools do not allow for that, because once you download the book, it's not connected to anything anymore, so its kind of a stand-alone and there's no way to continue to update that dynamic content.*"

Publishing Standards

The two biggest players that have the resources, financial and technological, to experiment with dynamic eBook projects are Apple and Amazon. While at the moment Amazon's eBook titles are largely text-centric digital versions of print books and have yet to delve into the arena of enhanced eBooks, it is very likely that the next

generation of Kindle will support multimedia elements, thus offering an alternative to Apple's publishing platform.

Apple's iBooks, on the other hand, is already replete with multimedia-enhanced eBooks and it could foreseeably expand into the realm of dynamic eBooks with projects like *The Mother Road* and *The New Quill* under way.

The battle that is currently being fought between these Amazon and Apple is a battle between proprietary, patented standards (like PDF and Mobi-Pocket) and open, public-domain platforms like the ePub. However, to say that the future of eBooks will be shaped by this battle alone would be to resign to deny the existent of rebellious forces within the industry. If the incessant stream of new talent and technology in this space is any indicator, we may see the emergence of new standards created by consortiums of independent publishers who strive to develop a universal and a more democratically attested format.

Therefore the question is no more *whose* standard will emerge as a winner because as Cory Doctrow astutely observes, "*There is no future in which we have a happy peaceful literary marketplace dominated by single proprietary format owned by a single company*,". (Snyder 2009). The question is, which philosophy will the market embrace and what strategic implications will that have on the business processes in the digital publishing industry.

Digital Rights Management (DRM) Issues

Earlier in this paper we discussed how the lack of a uniform DRM system on both closed proprietary formats like MobiPocket and PDF and open formats like the ePub is a big hurdle in the development on content that can freely travel across platforms and devices. This is an issue that eBooks in all stages of evolution have had to face. What is specifically a challenge for dynamic eBooks is that we cannot talk about the idea of collaboration and participatory storytelling without giving careful thought to the notion of ownership and how thin we can stretch it without fracturing it.

In the age of participatory culture, ideologically, everyone is entitled to be an author/creator/publisher. But as we work towards the utopic vision of a creative

commons characterized by collective knowledge-creation and sharing, we must be perceptive towards our innate need to claim ownership of our ideas and products. Thus, when the author of a dynamic eBook opens his/her work up to the audiences to add or edit in any way the audiences see fit, he/she is stepping on a minefield of Intellectual Property Rights (IPR) clashes.

Laurie Racine of Startl- developer of educational technology- says, "*The idea of what one owns, and how one will collaborate with another publisher or an individual author or a fan to create the content is a problem.*" The practical fact of the matter is that every time an artist creates an original work, he/she needs a copyright to legitimize it, unless the work falls under the creative commons license. Theoretically then, no one can repurpose the original work without incurring an IPR infraction because any additional content or contribution to the work would fall in the bracket of a 'derivative work'.

This would additionally raise questions about the revenue models that will need to be instituted to cope with collaborative productions. The first-sale doctrine would fail to deliver in a structure that is built on the principle of creating by sharing. The task at hand then, is to create better-adapted licensing agreements that employ digital prohibitions that prevent unfair use without restricting the freedom to share and co-create.

Towards A Dynamic Future of The eBook

In recent time, both the academia and progressive elements in the industry have been reiterating the idea that the future of eBooks will be characterized by a more democratic and collaborative model of creation and distribution that will then have to be legitimized in a way that can benefit both the publishers (companies or individuals) and the audience.

As important as it is to devise the right tools, formats and standards to create and distribute eBooks, it is just as crucial to teach people how to read the new 'texts'. This is the mantle that AIL, under the auspices of the Annenberg Press, is poised to assume. The Annenberg Press is set to publish a series of enhanced and dynamic eBooks under the banner of 'Innovation Imprint' that will give fruition to the avant-garde projects that the Lab has undertaken since its establishment in 2010.

The association of the Annenberg Press with AIL will make it one of the first University Press' that will publish digitally born enhanced and dynamic eBooks that are created with the purpose of exploring the innovative multimedia and transmedia interactions between today's "readers" and the technologies that are increasingly becoming accessible to them.

As Dr. Anne Balsamo, the appointed editor-in-chief of the Innovation Imprint observes, "*We have a lot emphasis lately on people writing and people producing and one of the caveats I would offer to that is, we also have to teach people to read and to use the materials….at some point we also have to spend time reading what's being written. So the companion move that needs to happen is that in the academy and universities, instructors and teachers need to be assigning this material* (to students) *so they can read them….From there, we….want to have some mechanism whereby the book can record its own uses…so that it learns over time by being used.*"

Balsamo goes on to lay out some of the functions the Innovation Imprint will be serving in bringing together the academia and the industry- "*One* (function) *is to get students involved in the creation of multimodal news sources that we may call eBooks, and the other is to get traditional authors involved in the design process so they may begin to think about how to design for academic communication….We definitely want to look at and explore this notion of how a book can be what I call 'an evocative knowledge object…how a book can be an occasion for conversation among people….and it's not just conversation in terms of allowing readers to make comments, but….how can a book be a sort of a….place for people to have discussions*."

Academic think tanks have always served as incubators of innovative ideas, but the Innovation Imprint is endeavoring to go beyond theorizing innovation. The projects coming out of this association are not just poised to revolutionize educational practices, but also have tremendous scope of being adapted and reconfigured to fit the growing needs of an industry that is at cusp of exciting changes.

The fact is that the future of eBooks is as promising as we will allow it to be. Technological advancements have created endless possibilities for the exploration of innovative ways of storytelling and the only thing that can come in the way is our own intransigence. We may not have all the right answers yet, but asking the right questions is one step closer to realizing the opportunities and facing the challenges in the course of progress.

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List of Interviewees

Jonathan Taplin

Director of AIL

Project Lead for the upcoming enhanced eBook on the music industry.

Erin Reilly

Creative Director of AIL

Project Leader for *The Mother Road*

Henry Jenkins

Provost's Professor of Communication, Journalism and Cinematic Arts

Author of the upcoming enhanced eBook to deconstruct and analyze comic books and graphic novels.

Lee Warner

Online editor/technical supervisor for Impact (the USC Annenberg School Journalism's newsmagazine series)

Production Lead for Jonathan Taplin's eBook on the music industry.

Michael Morgan

Project Leader for *The New Quill*

Laurie Racine

Co-Founder and Managing Director of Startl

Dr. Anne Balsamo

Professor of Interactive Media in the School of Cinematic Arts, Professor of Communications in the Annenberg School of Communications.

Appointed Editor-in-Chief of the Innovation Imprint