Editing skills in the era of digital [r]evolution

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Introduction

Editors are used to the ever-changing computer-based technologies that have revolutionised the way books are written and published. With the explosion of eBooks and eReaders, editors find themselves in the midst of digital innovation and experimentation. Our current 'idea' of a book is shifting as the media-rich experiments are breaking the boundaries between books, apps, games and the web. In contrast to the print-first workflow



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with well-established industry standards, the digital-first or format-neutral workflow remains problematic, complicated by the fact that eReaders, eBook formats and eBook reading software continue to proliferate. This paper aims to address three questions: What are the current eBook formats? What digital workflows are used to produce eBooks? What skills and knowledge do editors need to remain at the centre of the eBook publishing process? Apart from new technical skills, the transition from print to digital delivery calls for new ways of thinking about the book and its context.

Since the introduction of computers, internet and email in the early 1990s and the arrival of Microsoft Word's track changes, macros and other functions in the late 1990s, editors have embraced the technological changes that have moved the editing process away from pen and paper and onto the computer screen. Onscreen editing has not only increased work efficiency, but has also widened the scope of the editor's role to include typesetting of corrections and styling of the manuscript.

The current changes in the publishing industry, driven by the growing adoption of eBooks and eReaders, are transforming the publishing workflow and the editorial process. Publishers have been experimenting with new ways of delivering content, new formats, enhanced eBooks and eBook applications. The publishing process, however, remains focused on the print paradigm and a lot of the experimentation has been driven by hardware capabilities of eReaders and tablet devices rather than an editorial vision.

Digital publishing is a relatively new, but rapidly changing field, with very little prior research. This paper aims to review the current state of the publishing industry focusing on the editorial skills and knowledge. A systematic review of industry practices and an evaluation of current workflow strategies will make a significant contribution to a more informed, constructive and effective use of digital media in the publishing industry. Digital publishing requires new skills and new ways of thinking from editors in order to move beyond the traditional print paradigm.



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Digitisation in the publishing industry has been under way since the 1970s. Over the years, publishers digitised their operating and content management systems, production workflows, sales and marketing divisions (Thompson 2010, 321). A number of these changes reduced costs and improved the efficiency of the publishing process across many areas including submission and editing, typesetting and design, printing, stock management and control, and the marketing and sales of printed books. But these changes were largely invisible to the readers. The arrival of online bookshops transformed the readers' buying habits, but still they were getting a familiar looking codex, tactile and redolent of print.

The digitisation of content delivery is different. The change of book format from print to digital not only constitutes a break with the centuries' old tradition of printed form of content delivery, but it redefines the understanding of what a book is: no longer distinctly bound in a physical container and no longer finite. According to Kevin Kelly, on the web:

bookish material tends to dissolve into an undifferentiated tangle of words. Without containment, a reader's attention tends to flow outward, wandering from the central narrative or argument. The velocity of shifting focus creates a centrifugal force which spins readers away from the pages of the book. (Kelly 2011)

While the containers and the context are going digital, at this stage the content is still written in a traditional print-driven paradigm. Moreover, the general lack of commercial success with enhanced eBooks shows that the new forms of content are by and large still in the experimental stage. As John Weldon commented 'the speed of technology might have changed but the speed of people hasn't, hence enhanced eBooks don't work yet' (Weldon 2012).

Kevin Kelly defines the form of the book as 'self-contained story, argument or a body of knowledge that takes more than an hour to read. A book is complete in a sense that it contains its own beginning, middle, and end' (Kelly 2011). Some of the forms are becoming extinct in the digital realm: dictionaries, encyclopaedias and atlases are better served by online databases and resources. Other forms are undergoing a revival such as short-length fiction. And new forms are appearing—like mobile phone novels in Japan written via text messaging. Enhanced eBooks and eBook applications with the ability to enrich the content with multimedia are crossing the borders between books, games and movies. They open opportunities for creating complex stories with alternative pathways, and interactive resources for training and education.

While readers and authors are figuring out how to read and write in the digital era, editors need to make sure that the content is available in a range of formats. These formats need to be appropriate to the content, and relevant to the readers and their expectations. The formless and definite content defined by Craig Mod (2012) can be used to decide on the eBook format. Formless content (without well-defined form) has no inherent visual structure. It can be separated from layout and reflowed into different formats, without a loss of any intrinsic meaning. For example, most novels and works of nonfiction are formless and suit the reflowable digital delivery (i.e. ePub, MOBI and HTML). In contrast, most texts composed with images, charts, graphs (for example in textbooks), or poetry are examples of definite content. Here the structure of the page is intertwined with the meaning of the text. The definite content is less likely to be reflowed without a loss of meaning or quality, and hence requires PDF (Portable Document Format), fixed-layout ePub or ePub3 (HTML5/CSS3).

Publishers need to pay more attention to how readers actually engage with different media, their reason for choosing one format over another, and the satisfactions with each format. The digital environment affects how people read. It has been observed that people spend more time 'browsing and scanning, keyword spotting, one-time reading, non-linear reading, and reading more selectively, while [they spend] less time ... on in-depth reading, and



concentrated reading' (Liu 2005). This has far-reaching implications for how digital books should be written and structured, what digital format is most suitable and what enhancements should be included. Many of the enhancements are not useful or desirable, such as the inclusion of marketing material (for example, author interviews or book trailers). Some are distracting and detrimental to the reading process. Others are trivial. They tend to answer the question 'what can we add?' instead of 'what is it for?' Liza Daly suggests: digital-only additions to texts should pass a two-fold test of utility. First, such additions should be *immersive*: they should appear to be natural extensions of the work, satisfying the curiousity [sic] of readers at the moment that these curiousities [sic] naturally arrive in the course of consuming the text. Enhancements must also be *nontrivial*. Loading up a reference work with links to Google Maps or Wikipedia offers little value the reader could not obtain independently. Primary source material, topics not easily discoverable via search engines, or deeply curated dives into ancillary topics represent rewarding additions that readers will want to explore. (Daly 2012, 43, original emphasis) Apart from the new ways of publishing stories, editors need to think through how the content is going to be discovered in the era of information abundance-focusing on context and metadata (Dawson 2012). A short history of eBooks

Electronic books or eBooks have been around for over 40 years. Following some early university-based experiments of the 1960s, the release of the US Declaration of Independence as eText #1 of the Project Gutenberg in July 1971 is commonly regarded as the pivotal point in the history of eBooks. Project Gutenberg (an initiative of Michael Hart) was the first producer of free eBooks and the oldest digital library. It focused on the creation and dissemination of electronic versions of literary works in plain text—the Plain Vanilla ASCII (American Standard Code for Information Interchange)—in order to ensure preservation and interoperability, although the texts are also released in HTML, ePub, PDF and MOBI (Ardito 2000).

While volunteers working for the Project Gutenberg were digitising books out of copyright (by March 2013 the collection has grown to over 42,000 items),¹ the widespread adoption of eBooks in commercial publishing was lagging behind. Although by the late 1990s, the mainstream publishers were widely experimenting with various electronic publishing projects, the sales were limited and by 2001 the investments in electronic publishing slowed down. The limited consumer uptake of eBooks has been blamed on the high prices and limited availability of content, as well as the low quality and high cost of the reading devices (Thompson 2010, 313–14).

The release of eBook readers (Sony LIBRIe in 2004, Sony eReader in 2006, Kindle in 2007) followed by Apple iPhone in 2007 and iPad in 2010, had a dramatic impact on the adoption of eBooks. From 0.1 per cent of overall trade sales in the period up to 2006 (Thompson 2010, 315), in 2012 the market share of eBooks has grown to account for 22–25 per cent of all trade sales in the US.² At the same time, the number of people reading digital books increased from 16 per cent of all Americans aged 16 and older to 23 per cent by the end of 2012, while the percentage of readers of printed books in the previous 12 months fell from 72 per cent of the population aged 16 and older to 67 per cent.³



¹ Retrieved 8 August 2013 from en.wikipedia.org/wiki/Project_Gutenberg.

² Wischenbart 2012, 6, 10; see also retrieved on 10 March 2013 from http://www.the-digital-reader.com/2013/02/25/ aap-reports-us-eBook-sales-up-46-in-2012-now-well-over-a-fifth-of-us-book-market/#.UTwBboUt1hA.

³ Retrieved on 23 January 2013 from http://libraries.pewinternet.org/2012/12/27/e-book-reading-jumps-print-book-reading-declines/.

Moreover, 33 per cent of Americans now own a tablet or eReader device.⁴ In the UK, eBooks accounted for 13–14 per cent of book sales in 2012.⁵ While precise figures of the eBook sales in Australia are lacking, it has been estimated that eBooks accounted for 10–20 per cent of the market in 2012 and this number could rise to 30 per cent in 2013.⁶ Not surprisingly, the production of eBooks is back on the agenda. It is no longer an option, but a business necessity, especially in view of the declining print sales.

Nevertheless, the digital delivery of content remains fraught with issues. The eBook pricing and rights are in flux (Thompson 2010, 332). The threat of piracy is higher than in the case of printed books. The use of Digital Right Management systems is not only ineffective in preventing piracy, but also restrict users from legitimately transferring eBooks between devices. Finally, eReaders, eBook formats and eBook reading software continue to proliferate forcing publishers to invest in a whole plethora of formats.

EBook formats

So what are eBooks? 'The eBook is pure content' (Thompson 2010, 319) delivered as a digital file. While most, if not all, books are produced digitally (up to the formation of print-ready PDF), eBooks are not only created digitally (or digitised from a printed copy), but also distributed in a digital form (Mattison 2002, 15). EBook readers have direct access to the digital medium (Abbot & Kelly 2004). Although the book as an artefact remains firmly embedded in the print paradigm, an eBook should not be simply a digital copy of the print edition. Hence PDF is hardly a satisfactory version of eBook. Going beyond a page-centric design, the digital medium opens a plethora of new possibilities of how to deliver content to the readers.

The currently available eBook formats can be divided into three main categories, depending on the level and type of interactivity that they include. 'Plain vanilla' or basic eBooks (ePub, MOBI and HTML) are suitable for a linear story and include limited interactivity. Readers have the ability to flip the pages, change font size, search for content and highlight words to see a dictionary definition. On some eReaders (like Kobo for example), readers can underline, highlight text, make margin notes and bookmarks, and share them with others.

Enhanced eBooks can be created in ePub3 (HTML5/CSS3) and iBook Author (for iPad) remain best suited to a linear story. In comparison to plain eBooks, they are far more interactive, though this interactivity focuses on menu navigation as a means to achieve a goal (i.e. view an image). They can contain multimedia and interactive features such as video, audio, web interactivity, GPS technology, internal and external links, Flash animations etc.

And finally the eBook applications, created as software for iOS and Android devices, allow for non-linear engagement with the content and blur the line between reading, watching and playing games. They typically contain various multimedia and interactive features. More importantly, though, they allow for interaction with content and storyline.

The multitude of opportunities created by digital publishing can be daunting when editors are faced with the need to decide on the degree of interactivity and technical approach best suited to the eBook content and within a specific budget. According to Mike Shatzkin's estimate, the sales of eBooks for fiction account for 50 per cent of the total sales, sales of eBooks for immersive non-fiction are at 25 per cent, while illustrated books account for about 10 per cent of the book sales.⁷

⁴ Retrieved on 23 January 2013 from http://www.infotodayeurope.com/2013/01/04/publishing-trends-and-predictions-for-2013/.

⁵ Retrieved on 23 January 2013 from http://www.bbc.co.uk/news/entertainment-arts-20908048.

⁶ Retrieved on 23 January 2013 from http://www.techlife.net/apps/how-tos/2012/12/where-to-buy-eBooks/.

⁷ Retrieved on 23 January 2013 from http://www.idealog.com/blog/stats-are-often-hard-to-interpret-in-ourbusiness/.

As these percentages show, the eBook penetration of fiction and immersive non-fiction, typically published as plain vanilla ePub or MOBI files, is far greater than enhanced eBooks or eBook applications. In fact, apart from a few exceptions, most of the experiments into enhanced eBooks and eBook apps have failed commercially. This lack of commercial success can be linked to the insufficient understanding of the digital medium, the market and the needs of readers.

EBooks can be read on multiple devices with screens of varying sizes. The readers have the ability to change text size and convert text to audio if needed. The incorporation of hypertext links within the eBook allows for intuitive navigation that makes access to the content quick and easy. Internal links to the table of contents, cross-references, endnotes and indexes, can be accompanied by access to additional external resources. EBooks have sophisticated search capabilities and some types even provide the ability to underline, highlight text and make margin notes and bookmarks (Abbot & Kelly 2004).

These functions do not work across all the platforms, but Brian O'Leary states:

The current proliferation of file formats, rights management schemes and device-specific content is unlikely to persist. Content consumers (i.e., readers) will increasingly look for content that can be accessed across multiple platforms on a real-time basis. (O'Leary 2012)

Until this happens publishers need to focus on supplying content in the formats that currently exist while retaining the flexibility to adapt to possible future formats. This has been challenging the publishing workflows.

Digital workflows

Printed books have been produced digitally since the introduction of desktop publishing applications such as PageMaker in the late 1980s, when the physical processes based on printer's plates and camera-ready copy were replaced by digital processes and files. The introduction of PDF in the early 1990s made professional printing easier. Apart from printing, technological change transformed every aspect of the publishing process from editing, to content management and workflows, to operating systems, to sales and marketing and finally content delivery (Thompson 2010, 321). While the need to deliver content digitally and produce eBooks is changing the process of publishing, the transformation from a traditional, print-centric production model to true digital book publishing is currently far from being achieved.

Print-first workflow

In the traditional model of print-first workflow, Microsoft Word is used for pre-production work, Adobe InDesign for text layout and cover design, and the creation of print-ready PDF files. Simply tacking a digital workflow onto the end of an existing print-first workflow is not efficient. However, producing an eBook from a PDF file remains a common practice in the Australian publishing industry. The PDF files are sent to conversion houses, usually overseas, for postproduction conversion. Text is extracted from electronic files using proprietary script libraries, tagged as XML (Extensible Markup Language) and parsed against the client's XML DTD (Document Type Definition) or schema, and finally converted for multiple online and physical devices. As the file conversion has the potential to introduce errors, this process requires a high degree of double handling.

The most common kinds of errors that crop up in the process of text extraction include misspellings and missing random characters, and superfluous hyphens in the middle of words carried over from the PDF where those words were broken across lines. Spaces between words are added (typically surrounding punctuation like apostrophes and quotes) or deleted



(especially when in italics). Blocks of text can appear out of order and extra garbage text shows up at the end of chapters. Paragraph breaks do not match the source, particularly when paragraphs are very short or span pages. Superscripts, subscripts and many special characters are frequently misinterpreted. Emphasis is not retained. Finally, it is nearly impossible for an automated tool to reproduce a table exactly as it appeared in the original document. While the majority of conversion houses have quality controls built into the production schedule, the final responsibility rests with the publishers, who need to build strict quality controls and checks into their processes, and this costs more money and time.

Apart from PDF conversion, an eBook can be also exported and converted from the typesetting file, a process that can be outsourced or done in house. There is no 'easy button', however, for exporting a clean ePub file and automatically generated ePub files require manual work. Typical workflow consists of exporting the file from InDesign, using Sigil or other ePub editing software to open and edit the ePUB file, using Adobe Dreamweaver to edit the CSS (Cascading Style Sheets) and Adobe Digital Editions to preview. Then, of course, the various formats need to be tested using specific ereading applications.

Format-independent workflow

The problem with print-first workflow, apart from its inefficiency, is the lack of future proofing and the dependence on proprietary formats (Adobe InDesign). In contrast, a formatindependent or media-neutral workflow merges print and digital production together, makes eBook conversion unnecessary, and drastically improves the speed and quality of the content production. The industry leaders have long been postulating the need for a single digital workflow as the way forward. So why isn't it commonly used?

The format-independent workflows tend to rely on the use of XML-based processes which are technically and operationally complex, break with the familiar word processing and desktop publishing paradigm, and require programming skills that typically remain scarce in small- and medium-sized publishing firms. XML-supported workflow is not a short-term proposition. It requires a significant software and labour investment upfront in order to realise the benefits of 'greater flexibility, multiple output options (including the development of apps and web-based solutions), searching and indexing, and general futureproofing' in the long term (Maxwell et al. 2010). There is a need to strike a balance between 'too much markup, which adds cost, time, and complexity without the benefit' and 'too little markup, which fails to serve all of the alternative, electronic uses of the content'.⁸

XML is a computer language that uses a set of rules to encode documents in a format that is both human and machine readable. It forces a level of structure and allows various platforms, applications and systems to identify the format styles within text and then translate those styles for their own use. XML has the ability to convey robust information about content (via semantic tagging or metadata) describing what it is rather than how it should look.

In XML-based workflow, XML-compliant styles (which are more structured and detailed than typical Microsoft Word styles) are applied to an MS document. The MS document is then converted to XML through programmed scripts, and the XML document is used to produce eBook and PDF formats via the use of style sheets. While XML-based workflow results in high-quality digital products, there is no easy-to-use XML software and no efficient way to produce high quality print pages out of XML files (there is little control over page and line breaks for example). Some publishers resort to flowing XML files into formatted InDesign documents in order to get a high-quality print PDF.

⁸ Freiberg, Mitchell (June 2009). XML prepress workflows, Newgen. PowerPoint presentation. Retrieved 14 December 2012 from www.slideshare.net/newgen/xml-publishing-workflows.

The ability to efficiently produce content for multiple channels and easily re-use content has made XML particularly attractive for professional and educational publishers. These publishers need to deliver the same content in various formats (print, CD-rom, eBook and online) and in multiple editions, and keep it up-to-date. The more 'chunkable' the content and the higher the frequency of its potential use is, the more suitable is the XML-based workflow—see fig. 1 (O'Leary 2012).



Unbundling: Establishing the benefits

Figure 1: XML readiness matrix. After O'Leary 2012. Copyright © 2012 O'Reilly Media, Inc. All rights reserved. Used with permission http://shop.oreilly.com/product/0636920020325.do.

In contrast, for trade publishers, who usually publish a single edition in limited formats, but with great focus on high-quality print, the XML-based workflow remains a less attractive proposition.

Cloud-based production tools

Several publishers and content production companies use a format-independent workflow in which both the user interface and the content are based on XHTML, CSS and Javascript. XHTML (Extensible HyperText Markup Language) is a more flexible markup language than XML; it forms the structure of web pages and 'allows manuscripts to be revised iteratively'. In XHTML-based workflow a stylised manuscript (in Microsoft Word, Rich Text Format or other formats) is imported into web-based content management system, where XHTML tags are applied, and then used to generate print, online, interactive and web content. Different CSS files are applied to XHTML to get different formats. The correct styling of a manuscript is a critical stage, as it defines the structure of the content and drives the design (Cramer 2012; Pipe 2012).

Having an in-house format-independent workflow allows for complete control over content. And it is important that editors are directly involved in the production process. As Dave Cramer (2012) comments, 'Who knows the manuscript better than the editor? They can do a better job of typemarking than the compositor who hasn't even read it.'



Such a system can even be used to collaborate in the writing/editing stage. For example, Lonely Planet uses a browser-based software pack developed in house which allows authors and editors to work directly in the content management system (Corbett 2012). A similar system is provided by PressBooks.com, which is built on a Wordpress blogging platform, and produces eBooks, printbooks and webbooks from a single online source file. And there are many more eBook authoring and production platforms (Navotka 2012). And the production of enhanced eBooks and eBook application is yet more complex, requiring collaboration with a developer or a programmer.

Editing skills

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Technology is blurring the boundaries of what the book is, and it is also affecting the editor's role. However, the core value of editing remains unchanged: 'to ensure that the focus, structure, language, style and format of a publication suit its purpose and readership' (Council of Australian Societies of Editors 2001). In the current iteration of the digital [r]evolution, the new formats of content delivery are driving the changes in the way books are edited and published.

Understanding of the different eBook formats and their advantages is vital so that editors can add value to the content and make the most of the digital medium. A lot of experimentation in the industry has been driven by hardware developers eager to show the capabilities of their devices without ensuring that the 'enhancements' actually contribute to the best possible reading experience. Enhanced eBooks can include a range of multimedia and interactive components. However, the inclusion of multimedia makes the file bigger and slower to download. They are also seen as detrimental to the immersive experience that readers are looking for in a narrative. Basically, they do not suit each form of content. Hence when deciding on the best format, it is important to check that the enhancements are immersive and nontrivial, and to keep in mind that reflowable eBooks (such as ePub, MOBI and HTML) support linear narratives, while eBook applications offer a suitable non-linear reading experience. Enhanced eBooks can enhance non-fiction titles, but rarely work well with fiction, unless the story was written specifically for a digital medium.

At present the majority of the content is written in the print-driven paradigm, and it is the editor's role to ensure its smooth transition to the digital realm, where 'the structure and relationship of elements to each other' (Rech 2012a) are more important than their relationship to the constraints of a page. Moreover, eBooks, similarly to web pages, require clear, well-organised links and navigation. All these elements need to be decided early in the publishing process.

In fact, Joe Vriend (2012) and David Rech (2012b) postulate the need to finalise the manuscript before it moves into the production stage in order to improve efficiency and avoid duplication of work, even though the desktop publishing software and various cloud-based content management systems allow for making corrections throughout the publishing process.

The work on a manuscript should start with the imposing of structure: identifying heading levels and other text components, resolving inconsistencies and other problems. A lot of preliminary work can be done using Microsoft Office search and replace function, spell check and macros in order to clean up inconsistent appearance, spacing, punctuation, hyphenation and dash problems, inconsistent spelling etc. A clean, well-structured manuscript becomes easier to copy-edit and takes less time. Moreover, the process results in a higher level of consistency and accuracy. Once the author review process is complete, the manuscript should be proofread and then it is ready to enter the production process.

While the 'capacity to update the digital content quickly, frequently and cheaply' (Thompson 2010, 334) is highlighted as one of the most important benefits of digital delivery, in reality things are not as straightforward. Yes, text in a digital format is not as fixed as in print, but

the readers are expecting mistake-free content to start with. Moreover, the variety of eBook formats and delivery platforms make the process of eliminating mistakes and emending the text quite laborious.

For example, in the case of ePub, regardless of how the file has been produced, once the coding is completed, it needs to be validated according to IDPF (International Digital Publishing Forum) industry standards. This process includes creating an OPF manifest file, compiling metadata and a dynamic table of contents file, and wrapping it all together into a valid ePub file. The validated file then moves onto quality assurance.

Finally, the files need to be tested on various eReaders. Editors may need to carry out the validation, quality assurance and testing themselves. Even if they don't, they will need to communicate with coders and programmers, the new entrants in the book publishing chain. An ePub file is basically a zip archive containing XHTML content, metadata describing the book, and a navigation map describing the structure of the book. Hence to understand ePub, it is good to know the basics of HTML or XHTML, CSS and web standards.

EBooks can be read on a plethora of devices from personal computers, tablets, to smartphones and dedicated eReaders, and editors need to be familiar with the main types of eReaders and tablets, and their capabilities. There are ways to experiment with different eBook reading applications without having all the hardware, as the majority of platforms (with the exception of Apple iBooks) provide reading applications that allow for the books to be read on other devices.

Finally, editors are best placed to ensure that metadata is accurate. Metadata, a collection of attributes (such as ISBN, title, author, copyright year, price, subject category etc.) still largely describes a physical product. As the books move online, the development of workflows that maintain relevant and machine-readable descriptions of books and eBooks are 'critical in a world in which "discovery" increasingly means "found it online" '(Dawson 2012). While there are no universally accepted standards for metadata, it is possible to embed several relevant sets of metadata within the ePub file (Dawson 2012), including MARC (for libraries), ONIX (for booksellers) and a consumer-friendly taxonomy for the publisher's website.

Conclusion

As can be seen in this overview of current publishing workflows and eBook formats, the role of editors has been evolving, yet some things never change.

Technology can't make the decisions needed to produce a good book. Technology cannot suggest a better way to organize your content or provide insight based on a deep understanding of a subject or the intended readership. For that, you need a human being.⁹

While the core editing skills focused on structure, language, style and clear communication remain as valid in the digital era as ever before, technology is blurring the boundaries of what the editor's role is and changing, yet again, what skills are needed. An in-depth knowledge of Microsoft Word, its functions and macros, remains the most useful of the technological skills for as long as it remains the most ubiquitous and commonly used writing software. However, to ensure that readers have the best possible experience within both print and electronic context (whether as eBooks or online), editors need to learn the basic principles of web design and eBook production process, and to understand metadata, file validation, usability and accessibility issues.

⁹ The NIDI is a measure of a nation's capacity for S&T innovation. In 2006, China's NIDI was 20.94, just behind Brazil, Mexico, Russia, Turkey and Romania. Sweden led the field with 67.01

Apart from new technical skills, the transition from print to digital delivery calls for new ways of thinking about the content, the container and the context of the book in order to make sure that books and reading stay relevant in the digital era, and editors stay central to the publishing process.

Once editors are equipped to carry out their roles effectively in this new landscape, future research should focus on creating a set of frameworks and models to make the digital publishing process more effective and worthwhile, facilitating well-balanced decision-making and providing solid justification for the extra investment used for enhancement and interactivity in eBooks.

Reference list

Print

Corbett D (2012). Future-proofing workflows. Bookseller + Publisher Magazine 92(1): 9.

- Council of Australian Societies of Editors (2001). *The Australian standards for editing practice*. Retrieved 14 December 2012 from iped-editors.org/Editing standards.aspx.
- Liu Z (2005). Reading behavior in the digital environment: changes in reading behavior over the past ten years, *Journal of Documentation*, 61(6): 700–12.

Mattison D (2002). Alice in e-book land: a primer for librarians. Computers in Libraries 22(9): 14-21.

Rech D (2012a). Instituting an XML-first workflow. Publishing Research Quarterly 28(3): 192–196.

Thompson JB (2010). Merchants of culture. Cambridge: Polity Press.

- Weldon J (2012). The text doesn't stop at the end of the page. Paper presented at the Independent Publishing Conference: 'Diversity and Independence in Australian Publishing', 8–9 November 2012. The Wheeler Centre for Books, Writing and Ideas, Melbourne Australia.
- Wischenbart R (2012). *Global eBook market: current conditions and future projections*. Revised October 2012. Boston, Massachusetts: O'Reilly Media.

Online

- Abbot W & Kelly K (2004). Sooner or later! Have e-books turned the page? Paper presented at the 12th Biennial Conference and Exhibition: Breaking Boundaries: Integration and Interoperability, 3–5 February 2004. Melbourne: Victorian Association for Library Automation Inc.. Available at: www.vala.org.au/vala2004/2004pprs/prgm2004.htm [Accessed 14 December 2012].
- Ardito S (2000). Electronic books: to "e" or not to "e"; that is the question. *Searcher* 8(4). Available at: www. infotoday.com/searcher/apr00/ardito.htm [Accessed 27 November 2012].
- Cramer D (2012). Production as if digital mattered: making books with HTML and CSS. *Digital Publishing: Digital Content Strategies and Business Beyond E-books*. Available at: infogridpacific.typepad.com/ digitalpublishing/2012/06/best-sellers-and-xhtml.html [Accessed 14 December 2012].
- Daly L (2012). What We Can Do with 'Books'. In H McGuire & B O'Leary (eds). Book: a futurist's manifesto. Essays from the bleeding edge of publishing. Boston, Massachusetts: O'Reilly Media. Available at: book. pressbooks.com/chapter/what-we-can-do-with-books-liza-daly [Accessed 14 December 2012].
- Dawson L (2012). What we talk about when we talk about metadata. In H McGuire & B O'Leary (eds). *Book: a futurist's manifesto. Essays from the bleeding edge of publishing.* Boston, Massachusetts: O'Reilly Media. Available at: book.pressbooks.com/chapter/metadata-laura-dawson [Accessed 14 December 2012].
- Freiberg M (2009). XML prepares workflows, Newgen. PowerPoint presentation. From www.slideshare.net/ newgwn/xml-publishing-workflows.
- Kelly K (2011). What books will become. *The Technium*. Available at: www.kk.org/thetechnium/archives/2011/04/ what_books_will.php [Accessed 2 December 2012].
- Maxwell J W, MacDonald M, Nicholson T, Halpape J, Taggart S & Binder H (2010). XML production workflows? Start with the beb. *The Journal of Electronic Publishing* 13(1). Available at: quod.lib.umich.edu/j/ jep/3336451.0013.106/--xml-production-workflows-start-with-the-web?rgn=main;view=fulltext [Accessed 17 November 2012].



- X rcros

- Mod C (2012). Designing books in the digital age. In H McGuire & B O'Leary (eds). *Book: a futurist's manifesto. Essays from the bleeding edge of publishing*. Boston, Massachusetts: O'Reilly Media. [Online]. Available at: book.pressbooks.com/chapter/book-design-in-the-digital-age-craig-mod [Accessed 24 November 2012].
- Navotka E (2012). Report: e-book platforms landscape, 8 trends, 29 companies shaping a market. *Publishing Perspectives*. [Online]. Available at: publishingperspectives.com/2012/08/report-e-book-platform-landscape-8-trends-29-companies-shaping-a-market/ [Accessed 8 December 2012].O'Leary B (2012). Context, not container. In H McGuire & B O'Leary (eds). *Book: a futurist's manifesto. Essays from the bleeding edge of publishing*. Boston, Massachusetts: O'Reilly Media. Available at: http://book.pressbooks.com/chapter/context-not-container-brian-oleary [Accessed 24 November 2012].
- Pipe R (2012). Best sellers and XHTML. *Digital Publishing: Digital Content Strategies and Business Beyond E-books*. Available at: infogridpacific.typepad.com/digitalpublishing/2012/06/best-sellers-and-xhtml.html [Accessed 14 December 2012].
- Rech D (2012b). Finalize the manuscript before pages. *Publishing Research Quarterly*: 1–6. Available at: dx.doi. org/10.1007/s12109-012-9298-8 [Accessed 14 December 2012].
- Vriend J (2012). Solidifying the manuscript. *Scribe*. [Online]. Available at: scribenet.com/node/2286 [Accessed 24 November 2012].