

20/20 vision? E-books in practice and theory

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In the United States '20/20' means normal vision, being *clear-sighted*. In the digital book community, '2020' now has a different meaning – the British Library's prescient understanding of 'the book' 15 years from now, in the year 2020. It is based on first-rate research, the best that we have. But it is a partial view. This paper suggests where we have come from, where we are now, and where – perhaps – we might be going. It highlights the importance to publishers of product life cycle management and all that entails, and explains the concept of the publisher-producer. The short history of the e-book has embraced both vision and the visionary but we need to be sceptical of technology's wilder promises for the period up to 2020. Yet the future prospect is positive: there should be every confidence that the new generation joining the industry will rise to the publishing challenges outlined.



Photo courtesy Peter Parke

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In the United States '20/20' means normal vision, being *clear-sighted*. In the digital book community, '2020' is fast becoming a synonym for the coming-of-age of the e-book and all electronic forms of publishing. We need to be very clear-sighted about these developments.

In June 2005 Lynne Brindley, Chief Executive of the British Library, described the 'seismic shift' which would take place in the production and publication of books by 2020.¹ By then only 10% of UK research monographs will be available as print-on-paper. Her prediction was based on a report for the British Library by EPS (Electronic Publishing Services) entitled *Publishing Output to 2020*. David Powell, the report's main author, went further than Brindley. He suggested that by 2020 the transfer from print-on-paper to electronic formats would have passed the 'tipping point' for every category of publishing. The transformation would be comprehensive:

- By 2020 the percentage of UK book output available in electronic form will rise to over 80%.
- By 2020, 39 per cent of output will be *only* available in electronic form.²

Publishing Output to 2020 provides a stimulating (and sometimes provocative) analysis. It is, I judge, an accurate prediction. By 2020 most publications

will have an electronic form, even if some publishing markets will remain predominantly print-on-paper. The report was intended to be only a broad-brush projection of publishing patterns. It sought to answer one main question: in 15 years' time will publishing be print-on-paper, a hybrid of paper and electronic, or mostly electronic?

Publishing in 2020

My focus, unlike the EPS report, is on the nature and character of the market for publications in 2020. This paper suggests how we might add a market-focused perspective to its vision of future publishing output.³ But publishing's future perspectives will primarily be determined by EPS's three main predictions:

- **Proliferation:** *More titles ... more content will be generated in smaller 'packages' for smaller audiences, especially as electronic delivery channels extend their reach globally.*
- **Fragmentation:** *will also occur – considerable uncertainty exists about what will constitute a publication in the latter part of the period covered – say, from 2014.*
- **Digital objects:** *Discrete units of content corresponding more closely to chapters or articles than to*

monographs or serials will be available, requiring a more granular system of item numbering such as the DOI (digital object identifier).

These are the parameters within which today's publishing is already evolving. They will certainly determine the publishing landscape 15 years hence. But the more interesting question is: what will our complex and diverse industry look like at that point? How will it have changed? Not perhaps quite as much as we might imagine. As an industry, publishing has proved astonishingly flexible over the centuries. You could say that proliferation and fragmentation – two of the characteristics that EPS specifies for the mid-term development – could have described publishing markets at almost any point since 1500.⁴

Markets proliferating, splintering and reforming were perhaps the best defined characteristic of the 'Printing Revolution' four to five centuries ago. The opportunity that print then offered – reaching discrete and diverse markets economically – was a *step-change* from the era of the handcrafted manuscript. Proliferation then created many new markets; our new electronic technologies (like Gutenberg's press) will simply be the instrument to accomplish those basic market processes in our era.

So will there be some magic bullet, some unimagined technological miracle that could make 2020 radically different from our markets today? Possibly, but consider how the process of innovation works in practice. Technologies already in existence or in development at the moment will shape the new markets a decade-and-a-half hence. That time-scale of development from invention to market has been true of almost all recent innovation. Things do not happen as fast as visionaries would have us believe.⁵

I do not think we need obsess about the details of future technology. One of the best minds at the MIT Media Lab, Andy Lippmann, once said at a conference:

"Historically speaking, the providers of content have always mastered new technology".

By 2020, publishers will find the technology and systems that they need. By contrast we need to give serious thought to the economic and business framework within which 2020 publishing will have to operate.

Unlike many large industries, and with the significant exceptions of educational and reference

companies, today's publishing lacks a research and development culture. It even lacks any very clear process for innovation. This inadequate R&D culture grows out of book publishing's current economic cycle.⁶ But increasingly, book publishers will have to become like other industries and manage the full life cycle value of their IP rights. Some areas of publishing already engage in 'product life cycle management' as other industries would recognize it. It is an approach that provides a roadmap which can inform an entire business. Education and reference publishers already develop products, then run them through the phases of growth, maturity and development. An economics textbook which I managed for its 3rd edition three decades ago is now in its 8th edition. By 2020 all types of publisher will need to make product life cycle management a central principle of their business.

Time and eternity

Most publishers will have developed new business models by 2020. They will not have had to look very far. Today a successful automobile manufacturer will develop a product line, with a range of different models, built from the same basic box of parts, differentiated by customer needs. They can extend their product's profitable life over several decades through continuous innovation. The Volkswagen Golf marked its 30th year in 2004 and was then re-invigorated in a new model range. Of course, some publishers are already using the 'parts-box' metaphor for their construction of new books and electronic products. That is, the same intellectual property used and re-used time and again.

So what *kind* of economic activity will publishing be in 2020? Since the Renaissance, publishing (through its various iterations) has meant selling easy access to words and to images.⁷ It has succeeded by selling that access profitably and, over those centuries, it changed relatively slowly. But things now move faster. There are now significant differences – *disjunctures* – with the recent past. One key element of uncertainty at least as important as any new technology will determine how 2020 publishing operates. That is the issue of intellectual property.

Intellectual property rights

Before the early 20th century the structures of global intellectual property rights were rudimentary. During the 20th century authors' and publishers' rights grew steadily. The establishment of WIPO (the World Intellectual Property Organization) in 1974 as a fully-fledged, specialized agency of the United Nations marked a significant transition. Now we have a truly global structure, the culmination of efforts that began in the 1870s.⁸

But the intellectual property model we have at the moment might well alter during the next decade and a half. There are many straws in the wind. Most recently the UK Treasury commissioned a report to consider whether the current structure of rights is fit for purpose.⁹ There is an inherent tension at the heart of current copyright law between the private rights of owners and the public rights of users. And ultimately, at some point, the private rights of ownership invariably give way to the rights of free use: copyright and its protection always ends at some point.¹⁰

New technology can give better control over intellectual property. Digital information tracking, widely used in industry and education, can identify the original sources in electronic forms. Publishers can mark any level of their intellectual property with a digital object identifier (DOI). With mass digitization of all their assets, publishers could control and track everything that is still in copyright through DOIs. The downside is that digital asset management systems are fine in theory, but they make immense demands in terms of investment, organization, planning, and controlling work flow. Once all content is marked with a 'persistent identifier', publishers will possess a vast body of marketable knowledge but still no fool-proof means of using it to generate more business.

This investment would only pay off when publishers develop new business models. They will need to research – with real energy – both their markets and the content that they own. They will need to link the two kinds of data: what the market wants and what they own, and then find ways of producing profitable new products from all this new knowledge, which is precisely what other large industries do and book publishers do not. Close to home in the creative industries, magazine and newspaper publishers already invest extensively in continuous research into their audiences and markets.¹¹

Futures

Given all these uncertainties, can we say how the *producers* of books will operate in 2020? The semantic shift from publisher to producer is no accident. Writing of 'producers' rather than 'publishers' is a deliberate switch. Fifteen years hence more and more senior publishers, whatever their original professional function, will be operating entrepreneurially, thinking and working more like a producer ('the ideas hub' of film and multimedia) than the line managers they are today. They will have different skill sets and different objectives, but this shift will grow inexorably out of changes to the market dictated by new electronic forms.

So what will publishing's producers do? They will by 2020 outsource almost all the tasks, functions and component parts of the publishing process. Authors are already 'outsourced', for the most part. We have already outsourced desk- or copy-editing. Some companies outsource sales and the back office. Many of the best individual publishers are already the 'ideas hub' within large corporations. It is quite easy to see how the general shift could take place. This is not reinventing the defunct idea of an omni-competent editor. I am not proposing a 'sheep in wolf's clothing'.

Publishing – the process of making public – will still be there in 2020: but it will be run by producers. A producer's task is to exploit, stretch and, often, sweat assets. That is precisely the kind of task that a publisher-producer will have to undertake. Assets will need to be developed, used, re-used, recombined, updated, traded, transmuted into a range of clearly differentiated products. This process will ultimately extend into every type of publishing.

The logic of electronic publishing

Publishers create what they hope will sell profitably. They are often disappointed. This cycle – aspiration, success/failure – has been the norm for the last five hundred years. Over time, failures can become successes. The development of the new electronic publishing and product life cycle management will follow the same inexorable logic, but the financial paradigms will be different. I have perhaps laboured the role of the market to excess. It is not the only factor. But one thing that publishers have learned, and learned well, over the last

15 years is that their industry lives or dies by recognizing the changing shape of their markets. They need to satisfy those who buy and use their products, and they want to sell to them again. I cannot see those principles changing in the next 15 years, because they have always been the basis of successful publishing. Publishers – meaning both *publishing businesses* and the senior individuals within those firms – will have to change and evolve. Companies and people are already changing, and over the last 20 years the overall structure of publishing in the UK has changed a great deal.

The evolution will continue. All the attitudinal issues I have addressed can be resolved. Changing the business cycle and the handling of intellectual property assets are more intractable but not impossible. But the greatest engine of change will be new people joining the industry. Someone aged 24 entering publishing this year will be just under 40 in 2020. Their whole professional development will take place in the era of electronic publishing. They will meet the publishing challenges I have outlined.

Notes and references

1. See Press Release, British Library, 29 June 2005. <http://www.bl.uk/news/2005/pressrelease20050629.html>
2. EPS, *Publishing Output to 2020*, Migration from print to electronic: UK monographs consolidated overview – II, the British Library, 29 January 2004.
3. If we use a *publisher's perspective* on the conclusions of the EPS report, we begin to see that the same facts can tell different stories and produce different conclusions. EPS says of one of the categories – children's monograph publishing – from 1999 to 2003 that the '*clearest trends are a steady decline in children's publishing*'. But if we look to the *value* of the UK children's market in 2003, presented by the Book Marketing Council, we see a different picture. The number of titles *is* declining, but the *value* of the market is increasing – by 26% in 2003 alone. A publisher might say: 'Yes we are publishing fewer books, because we have cut out those lines which are unsuccessful or unprofitable. We are publishing less but making more money.' Productivity alone – more books – does not necessarily improve cash flow or profit. Publishers' Holy Grail is increasing the yield on *every* book that they publish. The least desirable option is to produce more titles, achieve the same level of revenue, but at a lower margin.
4. One of the most subtle analyses of this development in early British publishing, written from a readership perspective, is William St. Clair's: St. Clair, W., *The Reading Nation in the Romantic Period*, 2004, Cambridge, Cambridge University Press.
5. The history of the mobile telephone is a good example of innovation. Martin Cooper made the first mobile [cell phone] call on 3 April 1973. The first phone weighed about a kilo. Ten years later in 1983 Motorola launched their first marketable version of the technology. It cost \$3,500. The European GSM system 'began' in 1980, and had a million customers by 1993. Nokia made its first hand portable phone in 1987. Fifteen-years-plus covered the process from innovation to market. At some point between invention and commodification there's a 'sweet spot', the best time to enter the market. Come in too early, and it costs you a fortune, come in too late and you have too much established competition. Technological development from invention to marketability to proliferation and on to maturity will still be measured in decades.
6. I began to think in these terms after a set of conversations with Professor Neil de Marchi of Duke University while we were both at a conference at Caltech in Los Angeles in 2004. I am very grateful to him.
7. The technical complexity of this process which persisted until the development of lithography in the 19th century is described by Roger Gaskell, 'The Bibliography of Engravings in Books'. [Text of lecture given as the Winship Lecture at the Houghton Library, Harvard University on 25 October 2000. The underlined text refers to the slides which are not yet available in the web version of the text.] See: http://www.rogergaskell.com/Bibliography_of_engravings.htm
8. See World Intellectual Property Organization at: <http://www.wipo.int/portal/index.html.en>
9. The Gowers Review of Intellectual Property. Its main aims are to provide an analysis of the performance of the UK IP policy, regulation and operations, to include:
 - 1) the way in which Government administers the awarding of IP and their support to consumers and business;

- 2) how well businesses are able to negotiate the complexity and expense of the copyright and patent system, including copyright and patent licensing arrangements, litigation and enforcement; and
- 3) whether the current technical and legal IP infringement framework reflects the digital environment, and whether provisions for 'fair use' by citizens are reasonable.

It will report in Autumn 2006. See:

http://www.hm-treasury.gov.uk/independent_reviews/gowers_review_intellectual_property/gowersreview_index.cfm

10. Fair use of any kind is uncertain in application and has still to be tested in law. And the 18-month discussions on fair use in Washington DC in the mid to late 1990s got nowhere. Sanford Thatcher, Director of the Penn State University Press described 'fair use' as a 'double edged sword'.

For the report of the Conference on Fair Use, see: www.uspto.gov/web/offices/dcom/olia/confu/confurep.pdf

11. This is because magazines and newspapers have two revenue streams, sale of copies and advertising, and have to provide information to sell advertising.

[All web references accessed 1 February 2006]

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