





The Future of Publishing: Globally Delivering Bite-sized Content

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1. Executive summary

The scope of the “bite-size business content” project was “to facilitate UK SME publishers to reach the global market by providing a Software as a Service (SaaS) platform for bite-size content using digital content on PCs, Tablets or phones”. The feasibility study concentrated on the business and professional markets, rather than the general publishing market – so did not include fiction.

During the project we have realised a number of significant factors which underpin our ability to create innovative and commercial solutions in this market place.

We see a future of publishing in which people will access bite-sized pieces of content from a wide range of global electronic sources, anywhere, anytime and will be willing to pay small sums for each transaction. The existing content publishers from all industries are missing this opportunity for people to create their own content from bite-sized pieces. (Chapter 3)

So our mindset is about building content for a consumer from bite-sized components, rather than extracting pages from a book.

Secondly, the SME publishing market is not homogeneous and there are other organisations who are significant publishers in their own right who see benefit from the bite-size approach. For instance many professional associations have content to which they would like their members to have better access, and to profit from this. Also, in Higher Education, with the advent of Open Access, many institutions need to build new revenue models for their content to meet the costs associated with Open Access.(Chapter 3)

Thirdly, these are examples of communities of practice, which are key to unlocking this market. Jargon and terminology in business and professional worlds is fluid and often inconsistent. Use of automated search engines can overlook or make discoverability of valuable content difficult. For instance a chapter on scenario planning may include a good case study on interview techniques. Tagging by the owner or creator of the content often misses potential sources of value to the minds of users of that content. Tagging by communities of practice can unlock value communally.(Chapter 4)

Our study has identified a number of technology platforms which satisfy some but not all of the requirements to commercialise the bite-size approach. And the software to deliver to many forms of device – PC, phone, tablet – is in place.(Chapter 5)

One greater gap lies not in the technology itself, but in the mind-set and skills of existing supply-side organisations. An issue that we have identified is that many content owners are trying to take their existing business models into the digital world rather than evolve to take advantage of the digital opportunity. The rapidly changing technology landscape creates risks that many organisations do reasonably find daunting. (Chapter 4)

The market gap that we have recognised from this study is that end consumers are ready and willing to pay for content that they want, and that the current supply chains do not deliver against the expectations of the digital world. For instance, academics think that the bite-sized approach is needed to deliver the courseware that students expect under a rapidly changing FE and HE landscape. (Chapter 4)

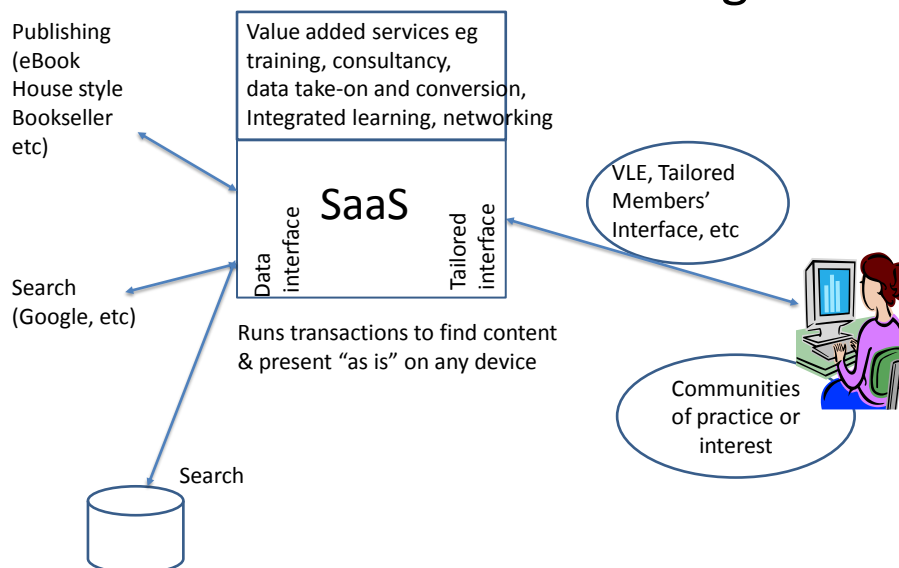


One of our findings is that many content owners are interested in revenue from existing content – for instance back catalogues. Another finding is that new content should be created in xml, which reflects an approach in which text is just one potential type of bite-sized content.(Chapter 6)

Another is that the challenge of IPR and digital rights management has hampered many projects in this space. We are proposing a model licence between authors and publishers, and publishers and the operator of the SaaS platform, which addresses many of the issues raised in this study. (Chapter 5)

We believe that the best way to meet this opportunity is through the creation of a white label SaaS platform plus innovative value added services to address the identified gaps for specific communities This will support new revenue streams and opportunities for authors of content, owners of content, for bookstores and for consumers.

The White Label Offering



The benefits of our approach are (as described in Chapter 6) that it:

1. Provides for discoverability through focusing on communities of practice;
2. Creates a better fit between the needs of consumers and education and training professionals, and inside communities of practice;
3. Supports the opportunity for reuse and repurpose of content to gain additional revenue;
4. Has proven commercial viability: it enables the setting up of a focused business to establish the principles and act as a springboard for expanding the opportunity to new markets;
5. It is repeatable and scalable: the model used for communities of practice is extendable to other communities e.g. trade associations, FE and HE colleges, historic and cultural associations.



2. Introduction and Methodology

2.1 Background

This report is based on a project undertaken by SAMI in the Technology Strategy Board's competition for feasibility funding in the "Convergence in a digital landscape" Programme. The project started on 1st January 2013 and completed on 31st August 2013. The topic we investigated was "how owners of business content could use the new opportunities arising from global electronic delivery of bite-sized content of all types – text, images, audio, ----."

Our realisation of the business opportunity from making bite-sized business content available globally arose from personal experience. Gill Ringland's book "Scenario Planning" is the amazon.com best seller on scenarios; but revenues from royalties in the past two years have been exceeded by revenues from copying fees collected by ALCS¹. This suggests that there is a market for "bite-sized" business content. This impression was reinforced by the success of the European Clearing House for case studies (ECCH) which has 26,000 subscribers² who have access to the library of case studies contributed by academics.

At the same time, when asking colleagues with senior jobs in major organisations to read our latest book "Here be Dragons", we were often asked if a chapter could be downloaded to mobile phones as an app. iPhones and Blackberries are the devices of choice. And we know that some mobile phone applications for digital payments in Asia and Africa are leapfrogging those in Europe and North Africa.³ There are now nearly as many mobile phones as people on the planet, and 2 billion mobile broadband subscribers⁴. And as we saw in the discussion on "why now is timely", 25% of the global population use social media. And we know that some mobile phone applications for digital payments in Asia and Africa are leapfrogging those in Europe and North Africa.⁵ So access to content is becoming global.

380 million people world-wide have English as their first language and a total of 1.8 billion speak it⁶. This is particularly important for business content, through for instance the UK Higher Education sector. A research paper from the Department for Business Innovation and Skills called "Estimating the value to the UK of Education Exports" (June 2011)⁷ estimates that in 2008-09 tuition fee income to the UK was worth over £4 billion: £2.4 billion for HE, £139 million for FE and £880 million for English language courses. These students represent a market for bite-sized content during and after their studies.

Similarly, UK qualifications in Accounting, and many other areas of expertise, have global acceptance. The Chartered Institute of Management Accountants has 203,000 members and students in 173 countries.⁸

¹ ALCS collects royalties from photocopying and pays them to the author.

² <http://www.ecch.com>

³ <http://www.economist.com/node/21554744>

⁴ <http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats/a#subscribers>

⁵ <http://www.economist.com/node/21554744>

⁶ http://en.wikipedia.org/wiki/English_language

⁷ <http://www.bis.gov.uk/assets/biscore/higher-education/docs/e/11-980-estimating-value-of-education-exports.pdf>

⁸ www.cimaglobal.com



Even within the European Commission and Parliament, where officially there are 24 official languages, the defacto language is English⁹.

Further, we know from the webpress analysis that hits to the SAMI blog are 57% from outside the UK: illustrating the market for English language content; and we also know that the “attendees” at our webinars are mostly from outside the UK.

So our vision is of a future in which people will have access to bite-sized pieces of content from a wide range of electronic publications, in a range of types of information – data, video, text, audio - anywhere, anytime and will be willing to pay small sums for each transaction. This is clearly an ambitious vision, and we have been very clear that the way to tackle it is following the precepts described in “Crossing the Chasm”¹⁰ and to ground the approach in real achievements on the way to the vision.

2.2 Definition

Bite-sized content could be as small as a paragraph or up to, say, 10-20 pages (the length of an academic article). The operational definition is the amount of content that end users want to satisfy their needs. Our assumption is that the format of information could span text, graphics, images, video, film, audio and beyond, and that the bite-sized definition might be different for each – a page from a magazine, a chapter from a book, an image, a 60 second audio clip, etc. The bite-sized approach would allow me to “buy” a chapter for re-use, maybe combine it with a chapter from another book or a video from YouTube, some data from the UN, and either “publish” it in book form or send to a colleague.

This mindset is about a consumer building content from bite-sized components, rather than extracting pages from a book. This has implications for our approach, which will be explored later.

2.3 Methodology

We have approached our work in three phases. In the first, we conducted a number of interviews, conducted market research and held a workshop for traditional and digital publishers. The aim was to understand the characteristics of the market for bite-sized business content.

In the second phase we developed a functional specification of a software portal to deliver bite-sized content to consumers for business content – students, professionals, academics.

In the third phase we held a brainstorm on TMT business models, developed an initial business plan and identified what needs to be in place for owners of content to be able to access the global market for bite-sized content; and suggest some next steps.

⁹<http://www.pri.org/stories/politics-society/government/european-union-prepares-to-adopt-24th-official-language-as-costs-mount-calls-for-english-rise-13903.html>

¹⁰Moore, Geoffrey, *Crossing the Chasm: Marketing and Selling High-tech Products to Mainstream End users*, First Collins Business Essentials, 1991, revised 2006.



2.4 Contents of this Report

We start by describing the gap that exists between the current supply chain for business content and the expectations of consumers.

In Chapter 4 on business models we discuss the characteristics of the new supply chain, the role of intermediaries and the challenges of different granularities of content.

Chapter 5 describes our approach, which has two key aspects: white label value added services around a SaaS platform, and an initial focus on meeting the requirements of communities of practice.

In Chapter 6 we identify the benefits of this to authors and academics, to owners and publishers of content, to bookstores and libraries, and to consumers.

Chapter 7 contains our recommendations to owners of content, publishing associations and the Technology Strategy Board.

We include five Annexes:

1. The History of Bite-Sized Content
2. Business Models for Online Content
3. A model license for a publisher to use with a portal for bite-sized content¹¹
4. A list of people/organisations consulted during this study: the recommendations and conclusions are the opinion of the study team only and should not be taken to represent the opinion of any of those mentioned.
5. A list of some think tanks, universities and others engaged in research on publishing.

¹¹ This licence is realised with help of Jisc Collections; web site is www.jisc.ac.uk. Please note that legal advice should be sought in setting up any contractual agreement.



3. The Gap

3.1 Consumers of Content¹²

We have identified five major categorisations of consumers of bite-sized content: each category will be supported by a supply chain with different intermediaries, potentially following different business models.

- Professionals at work – increasing demands for CPD¹³ – can be using content from professional bodies, corporate materials, academics or authors/journalists. Requirements: access to better tools to refine searches (rather than using cheap labour) – (*Recomind*), (*Wikipedia*) for peer-to-peer references. Just-in-time information supplied and discussed by experts. Using social media portals to create expert communities and provoke debate/influence. Building professional reputation to gain follow-up work – link to blogging, branding, new content, reputation, channel to market.
- Students (FE and HE) – like professionals at work with a mixture of tailored material delivered online at work or home, plus face-to-face learning with mentors or other students, and sharing with other students via blogs, online forums.
- Academics (FE and HE) – give away content in order to get teaching or research jobs. Pick and choose small bits at reasonable cost to build courses. Use of a mixture of media e.g. ancient history, video of archeological digs and artifacts, and texts from original sources as well as modern commentary from texts; building courses combining “how to” videos with theory and practical exercises.
- Authors/journalists – get paid to create content – and make wide use of other content. They seek an ability to grow brand more quickly, or to pick the best and put in publications (compressed TED). Possibly new routes to market might emerge, a new type of agent? “Living book” created with a mixture of media¹⁴.
- Individuals with a common interest such as heritage, culture, sports or a hobby: here UK content can have global reach, as in the International Arthurian Society¹⁵, National Trust¹⁶ or Manchester United¹⁷ which serve a self-defined community.

A number of book publishers have established online portals to provide bite-sized access to their own content. This may satisfy some communities – e.g. where all the reference works in a particular area of law are published by one publisher – but is less suitable in the changing business environment, where disruption comes from outside the domain. This disruption comes from three directions:

¹² This chapter owes much to the discussion at the Workshop held at Said Business School on 14th May. The participants are included in the list in Annex 4.

¹³ Continuous Professional Development –x hours per year of “training” are mandated in some organisations, but not necessarily tied to a specific qualification.

¹⁴ private communication Carolyn White

¹⁵ <http://www.internationalarthuriansociety.com/about>

¹⁶ http://www.nationaltrust.org.uk/membership/?campid=PPC_Membership_Google_BrandKeyword

¹⁷ <http://www.manutd.com/Splash-Page.aspx>



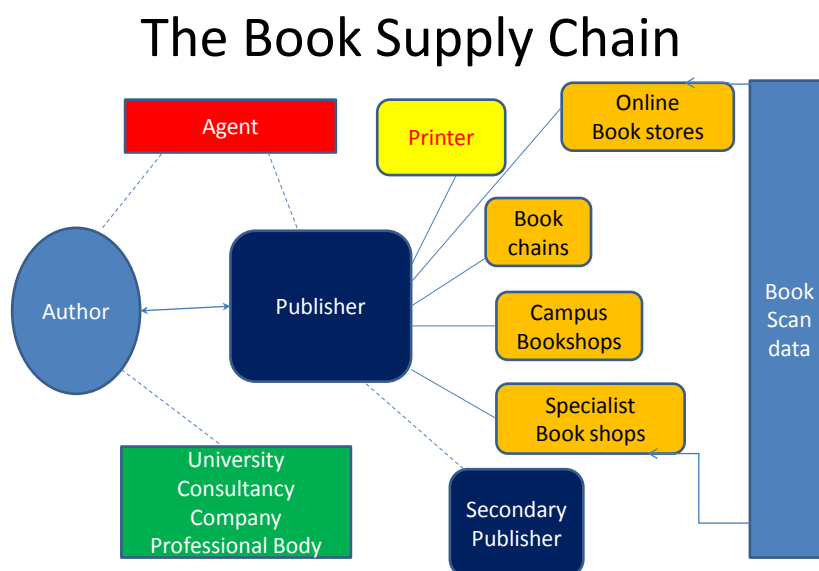
- the desire of consumers of content to bring together traditional content from more than one source, e.g. combine material from Publisher A with a chapter from a book from Publisher B.
- the desire of consumers of content to bring together information in multiple formats, e.g. a video with text, audio with graphics or a blog
- the desire of consumers to be able to discover content, including “on the fly”.

We will explore the implications of each of these for the owners of content later.

The user experience needs to be intuitive and easy to use, and to provide repeatable answers to searches for content. The next generation of users have been brought up on content which is free, on their current device, and instantly accessible. They use social media to discover content.

In the professional arena there is often a premium on up-to-date content – hence blogs rather than published papers – or reliable references – which could be from out-of-print books or disposed-of journals. Professionals are no more happy than entertainment consumers to be concerned about differing portals, DRM¹⁸ jurisdictions, etc. and they value being able to share with other professionals to find content, improve reputation, and be part of a community.

3.2 “Publishing” and Owners of Content



As a participant at one of our workshops said, “traditional publishers like books, but books are the crate the furniture comes in rather than the furniture”. And as another participant said “publishers are very proud of their profession”. It is important to understand these themes as we consider the characteristics of the publishing sector.

¹⁸Digital Rights Management



The formal UK publishing sector is made up of a diverse range of businesses operating both on- and off-line, providing books, directories and databases, journals, magazines and business media, newspapers and news agencies. It has a combined turnover of at least £20 billion, with more than 8,500 companies directly employing around 167,000 people. There were 2,200 book publishers registered for VAT in the financial year 2010/11 according to the Office for National Statistics. 1,922 of the publishers had revenues of less than £1m, while 83 had turnover of over £5m. 1,680 had four or fewer employees and just 15 had more than 250. The traditional book supply chain is shown below.

However the range of organisations involved in publishing is much wider e.g.

- research organisations and think tanks
- consultancies
- membership organisations (Professional, Trade, Heritage & Cultural, Sporting ----)
- companies
- academic institutions, training companies, standards bodies

Many of these organisations publish information in a range of formats, including but not limited to books and magazines, and have global reach. We have not been able within the confines of this study to explore the opportunity for bite-sized content delivery for these organisations, but first indications are that the amount of publishing outside the traditional publishers may well dwarf the “publishing sector”. For instance

- the global revenues of market research firms are estimated to be over £20 billion¹⁹, and access to data from academic research is a focus of the Open Access movement²⁰.
- membership organisations are very varied in size and it is difficult to count them, but there are estimated to be more than 1600 Trade Organisations in the UK alone²¹, and Professional Associations are increasingly global with upwards of 100,000 members²².
- companies in the science, technical and engineering space produce glossy brochures but also user instruction material and manuals, consultancies publish widely as part of building their brand, standards organisations provide definitions, manuals, guidance ----

The opportunity for global bite-sized content is different for each type of organisation.

3.3 Online Activity in Traditional Publishers

A large number of organisations sell eBooks online, including:

- publishers large and small, selling their book content direct.
- aggregators, generally large, such as Amazon, Inkling, Dawson, eBooks.com.
- others such as self-publishing websites, often small.

¹⁹ www.esomar.org › Publications Store, “Global Market Research 2012”

²⁰ ec.europa.eu/research/science-society/open_access

²¹ en.wikipedia.org/wiki/Trade_association

²² e.g. www.cimaglobal.com › About us



A few of these sell portions of books, mostly by chapter, some by page. Many journal publishers will sell separate articles contained within their journals, and these are often sold directly. There are several websites (including SharedBook, McGrawHill, Ebook library), that act as intermediaries for authors/ editors/ lecturers/ aggregators to select parts of publications and other content and combine them into a new book, either for on demand printing and/ or as eBooks, with all the necessary rights permissions.

Some of the large publishers provide PAYG access to chapters, e.g. Pearson, Springer, McGrawHill, but this is only for their own imprints. Pearson may make an announcement on a portal for bite-sized business content.²³ Wiley (US) has a site basically aimed at researchers and librarians with some access to journals and book chapters on a pay per view basis. Emerald Insight links to a number of portal services for eBooks which offer students some different models. We have identified that one or two of the smaller publishers “distribute” e-books through larger organisations such as Random House and Taylor and Francis, but such cooperative actions seem rare.

What we have found is that the characteristics of “trade” publishing – through bookstores, mostly fiction – are very different from that of business books.

The types of eBook readers that are widely used – such as Kindle – are ideal for reading fiction from start to finish. However, Kindle has two shortcomings for business books. First, it is not good for complex content such as diagrams, charts and graphs. Second, reading from start to finish is not the mode in which business content is used. So for instance an ebook works well for – for instance – taking War & Peace on holiday when there were weight restrictions on baggage. But reading the Economist’s “Megachange: The world in 2050” on the same trip was far less satisfactory – I wanted to share chapters with my husband, but Kindle is linear, and graphs were difficult to understand. And business content in one chapter within one book may very well go out of date but another retains currency. So, business books are often “dipped into”, with perhaps one main chapter describing the core idea and others as supporting evidence.

We see that the eBook market is qualitatively different from the bite-sized market, in the following ways:

- eBooks maintain the linearity of books, whereas bite-sized content is aligned to linked thoughts
- eBooks are priced in comparison with printed copies, bite-sized is priced by convenience – so that the total price for a few of the chapters in a book could well exceed the price of the book
- formats such as pdf (Google Books) or Kindle for eBooks do not support bite-sized access
- the bite-sized market for content does not seem to compete with the market for books/eBooks.

²³for more information contact melissa.sabella@pearson.com



4. New Business Models

4.1 The Supply Chain

The clashes of technology with media are leading to new business models. A number of business models for online businesses have been identified by Professor Michael Rappa,²⁴ and some of these are relevant to bite-sized content: see Annex 2.

We see three major characteristics of the new supply chain²⁵.

The first is that there are many more and different intermediaries in the supply chain for digital bite-sized content.

Intermediaries are crucial as a bridge between content owners and consumers of content. Their roles are to serve groups of end users – increasingly defined by common interests rather than geographic context.

The job title and role will be different for different groups of consumers in relation to bite-sized content, e.g.

- Libraries/librarians – role could be taken by HR or Resource Manager in a corporate. Librarians are often purchasers of and advisers on content. For research libraries, a database of chapters can be very cost-effective.
- Bookstores (carrying business books) – like librarians – could get involved vs. print on demand. University bookshops could have a role linked to academic course material.
- Agents, who have traditionally acted as brokers between authors and publishers. The role could be expanded in the bite-sized business world towards a similar role to that of a Product Manager in Procter & Gamble, covering product development (author or publisher) brand and channel management.²⁶
- Professional bodies (e.g. Institute for Engineering and Technology, Institute of Physics) and Trade bodies (e.g. Society of Motor Manufacturers, Engineering Employers Federation) – who provide “bodies of knowledge” to their communities in addition to the other roles that they play. Qualification awarding Bodies (PSRBs²⁷) have a particular need to provide a range of up to date content to back up their assessments and qualifications.
- Aggregators have traditionally been concerned with warehousing a distribution of physical books: a role is seen in the bite-sized market for aggregators to be able to aggregate micro-payments on behalf of publishers, authors and agents.

²⁴<http://thenextweb.com/entrepreneur/2011/05/25/the-9-types-of-online-business-models-which-one-do-you-use/>

²⁵ This section owes much to the TMT brainstorm that we held at Cass Business School on 24th July 2013: the participants are included in Annex 4.

²⁶ an interview with Chris Histed discusses this in more detail,

²⁷ Professional Statutory Regulatory Bodies



- Printers – one side effect of bite-sized access is the growth in the need for printing – often of large volumes – from a variety of sources. For some markets, e.g. corporate publishing, this requires a high-quality consistent finish, for others a high-speed bulk printer of whatever arrives.
- Logistics companies in the book and magazine trades face challenges from eBooks and the growth of online magazines.
- Portal providers for eBooks or bite-sized content. These can also ship physical goods as Amazon, or may focus on electronic delivery of whole books or parts of books.

The existence of multiple intermediaries puts **new emphasis on standards** to allow content to move between parts of the supply chain. These are of two types: standards which describe content formats, and standards for describing the content itself.

Future digital publishing is likely to be multimedia with text enhanced not just by pictures but movies and audio. Text, movies, pictures and audio all have clear, well established digital formats and the challenge is to have suitable standards for integrating these into a coherent structure while still allowing access at the component level for re-use and repurposing.

XML is the key to this, as XML is a well established and ubiquitous standard that can be processed by a range of presentation tools and devices including all web browsers and e-reader support systems as well as traditional typesetting systems for paper book production.

To facilitate the presentation and repurposing of content well structured XML with suitable metadata to fit the publishing workflow is required. A number of standards for this exist, some generic such as PRISM (further information at <http://www.idealliance.org/specifications/prism-metadata-initiative>) and some industry specific such as AdsML for the advertising industry. A range of examples of this more targeted standards material can be found at <http://schemas.liquid-technologies.com/>

Standards in this area are under active development and new facilities and tools to make effective use of them are appearing frequently from a range of collaborative industry bodies and software suppliers.

There are a number of specialists in conversion of documents to digital formats – there is a list for instance in Linda Bennett's "PA Guide to Going Digital"²⁸

Finding electronic content is facilitated by a number of pieces of information additional to the content itself, for instance

- Abstracts
- Keywords
- MARC data (as used by librarians)²⁹
- Metadata – structured around a set of keywords and data category descriptions – where ONIX is the emerging standard.³⁰ The keywords themselves are mostly domain dependent.

²⁸Bennett, Linda "PA Guide to Going Digital", The Publishers Association, 2010.

²⁹www.loc.gov/marc/specifications/spechome.html



Thirdly, the granularity of bite-sized content is different from that of books, magazines, films: the system works in terms of components.

This has implications for cost – the price per component is likely to be more in line with the cost of apps than of books. The number of transactions may be considerably higher than for “traditional” forms of content.

It has implications for the ability of owners of content and others to reuse and repurpose content, for instance combining chapters of several books with audio of lectures and videos of practical work to create a tailored course. This potentially gives content a longer shelf life, and adds value to the archive.

Further, it provides information to the content owner on which components are being reused, and to set prices accordingly.

4.2 Discoverability

To reach a global market, discoverability is key. We looked to the book trade for indications of how discoverability might work in the bite-sized world.

Research by the Codex Group in the US³¹ suggests that in 2011, 35% of book purchases were made because readers found out about a book in bricks-and-mortar bookstores, the single-largest site of discovery. In 2013, that number had dropped to 17%, which reflects both the closing of book stores, and the rise of the use of e-readers. In the same period, personal recommendations grew the most, to 22% from 14%. Some three-quarters of personal recommendations are made in person, while the rest come by e-mail (8%), phone (7%), Facebook (4%) and other social networks (3%).

Recent articles suggest that there are five mechanisms for discovery of books in the digital era:³² these are serendipitous, social, distributed (through reviews, links etc), data driven (e.g. best seller lists) and incentivised (which could be pricing and also includes social group mechanisms). Each of these mechanisms can apply to one or across multiple domains. Search engines are increasingly used to discover content across “open” domains: and SEO (search engine optimisation) is now widely used to tailor content to the search algorithms in use by Google and others.

The existence of search engines has not done away with the value of a domain which is trusted in some sense. For instance, a large majority of UK book, music & film/TV (DVD) publishers sell through Amazon, which provides discoverability via author and title, recognising the advantages that such a large aggregator has in reaching readers. This is replacing traditional discovery mechanisms such as browsing in the local book, library or music store; newspapers, or magazines. The critical mass of content which brings consumers of content to a portal is estimated to be 10,000 “trade” books³³ of search domain. The other approach to discoverability is by focus on a critical mass within a domain, for instance the legal market, or self help for start-ups among the newly retired, etc.

³⁰www.editeur.org/onix.html

³¹<http://www.mhpbooks.com/online-discovery-not-as-strong-as-in-person-book-recommendations/>

³²<http://www.theliteraryplatform.com/2013/04/five-types-of-online-book-discovery-a-new-approach-to-the-challenge/>

³³private communication



In the professional sphere, discoverability has always also come from a community of interest, and sharing of ideas, best practice and reputation informed by publication, is one key role of Professional, Trade and Historic/cultural Associations. So for instance, within an academic cohort, students need access to the relevant chapters from the nominated texts, and may also be set projects that require use of search engines to discover content: they will share understanding of key points and good sources for essays. Clubs of people with similar interests in say knitting, or 1940's films, share recommendations personally and via the ubiquitous "Like" used in social media. We speculate that a similar switch from face to face recommendation to online as seen in the book trade is being seen in communities of interest: we have anecdotal information from the legal profession that this is so.

We believe that a focus on serving an existing community will tackle at least part of the issue of discoverability. Bite-sized content can be recognised, traded, discussed and repurposed within a community of interest, with discoverability within the domain depending any one or more of the five mechanisms identified. This has other advantages too: for instance, in evolving subjects, the situation in many domains of professional and business content, a community can co-operatively define tagging and the metadata which will support the discovery of content.

4.3 What Do Content Owners Find Difficult?

We have talked to a number of publishers and other content owners (see the list in Annex 4) about the move to digital publishing and the incremental revenue opportunities from bite-sized content. All are interested in the potential for additional revenue but:

- They are wary of technology which seems to be moving very fast and, as small organisations, cannot take the risk of getting it wrong: until recently there seemed to be a plethora of standards and content management strategies.
- The model that the digital channels supports is for licensing whole books at prices which are (usually) comparable with the hard copy price. Bite-sized content would sell for a lower price, though potentially with higher numbers of units. It is difficult for organisations to move from units at a high price to a low price – as the IT industry found out in the 1990's³⁴.

In particular, they see

- risk associated with wasting time and money through getting involved in a noisy and volatile market.
- they are worried about the technical issues around databases and content management.
- many book publishers are uncomfortable with a subscription model and low price points: the smaller book publishers have not in the past needed to learn from other markets e.g. research on price points and buying decisions.
- difficulties in a transition from ownership vs. license to use.

³⁴see for instance the history of DEC, http://en.wikipedia.org/wiki/Digital_Equipment_Corporation



We see dangers to the traditional publishers, with parallels of disruption and collapse in other industries, e.g.

- the IT industry as above
- the effect of Google Maps³⁵ which has overtaken Ordnance Survey for many uses
- Netflix³⁶ on the video sales and rental business
- Aereo,³⁷ which offers an alternative channel for accessing TV

Potential sources of disruption to book publishers include Amazon, who by selling books online have put margins under pressure and also promoted Kindle as an alternative to hard copy – a major effect has been seen in booksellers. There were 1,028 bookshops in the UK in 2012, down from 1,535 in 2005³⁸. Meanwhile self-publishing has flourished.

Academic publishers are being targeted by a number of offerings, e.g.

- Figshare,³⁹ which is providing online storage and retrieval of data as well as research papers.
- Mendeley, a reference manager and social networking tool for researchers.

4.4 Why Now is Timely

The nirvana of access to bite-sized content is not new, as the history of bite-sized content in Annex 1 illustrates.

The factors which convince us that now is timely are:

- Technology is now in a state where it can change the user experience and hence the business model. Consumers can now interact with content and create their own personalized knowledge resources. The public “gets” self publishing, which has grown in the UK to over 20% of the eBook market for crime, science fiction, romance and humour⁴⁰. Social media are the daily diet for many people of all generations and reaches 25% of the global population⁴¹ Almost half of UK adults (48%) said they use a social networking site and 87% for 16-24 year olds.⁴² In 2012, just over half - 52 per cent - of all adults in the UK used a mobile device to access the internet and, of these 63 per cent accessed social networks. (The term 'mobile' in this context refers to any mobile or smart phone, PDA, MP3 player, e-book reader or handheld game console. It did not include tablet computers)⁴³. The growth of mobile devices and social media has meant that increasingly end users – whether in a business or private context – expect access immediately and instantaneously. People use apps or the web on the

³⁵maps.google.co.uk

³⁶www.wired.com/wired/archive/10.12/netflix_pr.html

³⁷<https://aereo.com/>

³⁸<http://www.mhpbooks.com/british-booksellers-call-on-government-to-follow-france-in-fight-against-amazon/>

³⁹<http://figshare.com/>

⁴⁰<http://www.theguardian.com/books/2013/jun/11/self-published-ebooks-20-per-cent-genre>

⁴¹<http://www.emarketer.com/Article/Social-Networking-Reaches-Nearly-One-Four-Around-World/1009976>

⁴²<http://www.telegraph.co.uk/technology/internet/9902269/British-internet-users-double-in-six-years.html>

⁴³<http://www.dailymail.co.uk/sciencetech/article-2340893/Britons-second-prolific-Facebook-Twitter-users-EUROPE-fifth-aged-65.html#ixzz2bTXwMp7K>



fly to orientate themselves, download music, touch base with friends, catch up on school or work projects. Trading through portals is accepted, from eBay to comparethemarket.com. The characteristics of the new generation is short attention span, any device, and the assumption is that content is free

- In the academic world, digital has become the way of working, not just in subjects like astrophysics or social science, which have always been connected with computation, but also in the traditional laboratory subjects such as chemistry and biology, now increasingly based on large data sets, and in arts where scanned images provide opportunities for analysis and synthesis power previously undreamt of⁴⁴. This has meant that all academics have become computer literate. Meanwhile, in the EU, Open Access is being introduced, whereby content generated with public funds is rightly accessible to all, including researchers, without cost. At the same time, IP rights are increasingly being sought by the Universities rather than belonging to the individual. This means that academics and corporate researchers are seeking direct access to information – often bite-sized – which might previously have appeared in an academic journal.
- The nature of teaching and learning is changing – with the availability of MOOCs⁴⁵, the emphasis moves from standard courses to tailoring the individual student's needs and to team-based learning as discussed earlier. And in the UK, FE Colleges are being orientated towards courses for specific employers, which might span, say, law, marketing, HR and network wiring.
- The standards for curating content so that it can be accessed in bite-sized are now becoming clear. xml format provides an envelope for content of all types, and component content management systems are emerging. While this does not remove the task of data mark up take-on, it does mean that effort spent in doing this will not be wasted.
- Finally, the pioneers in the 90's invested millions in building web sites before finding out that they had no market. The cost of building web sites is now much lower due to the range of tools available in the public domain. And the timescale for implementation is much quicker, with techniques like "lean"⁴⁶ and MVP⁴⁷ leading to the production of a usable early version to experiment with users' needs and wants. This is a key reason why now is timely – with such flux in the market, **experimentation and adaptation is the smart way to go.**

⁴⁴ Martin J Weller, 'The Digital Scholar: How Technology is Transforming Scholarly Practice' Basingstoke, Bloomsbury Academic, 2011, 208 pages, ISBN978-1849666176

⁴⁵ MOOCs - A massive open online course (MOOC) is an online course aimed at large-scale interactive participation and open access via the web. In addition to traditional course materials such as videos, readings, and problem sets, MOOCs provide interactive user forums that help build a community for the students, professors, and teaching assistants (TAs).

⁴⁶ www.cardiff.ac.uk/lean/principles/

⁴⁷ en.wikipedia.org/wiki/Minimum_viable_product



5. Our Approach

We believe that the best way to approach this opportunity is through the creation of a white label SaaS platform plus innovative value added services to address the identified gaps for specific communities

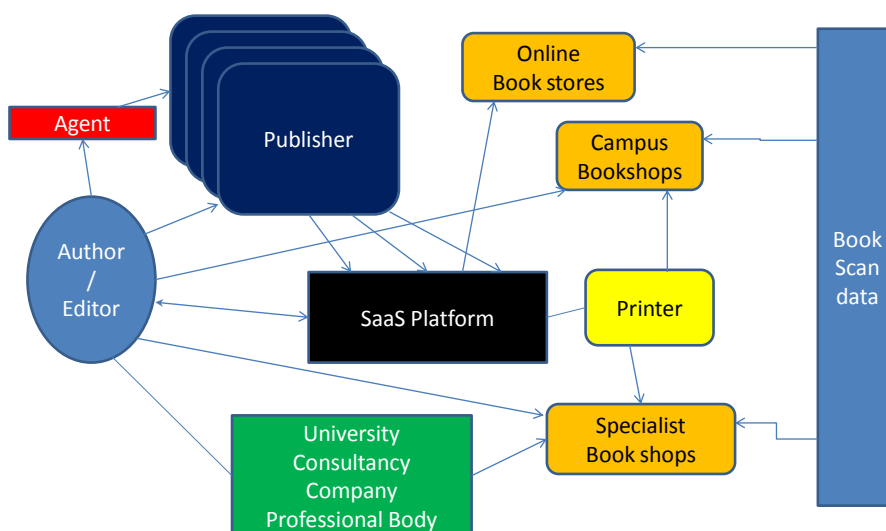
5.1 Digital Platforms for SaaS

Electronic publishing requires the addition of a digital platform, or portal, to the supply chain. Examples are Amazon, the McGrawHill LearnSmart portal, the Athens system in University libraries, etc.

While some large publishers are developing their own bite-sized content portals, we see the advantage of a third party portal as:

- increased discoverability through a larger end user/reader pool
- earlier access to incremental revenue from bite-sized content
- potential links to end user communities of practice and interest
- manageable and predictable cost (vs. in-house development and maintenance)
- earlier access to market information on frequently used components, etc

Possible Bite-sized Supply Chain



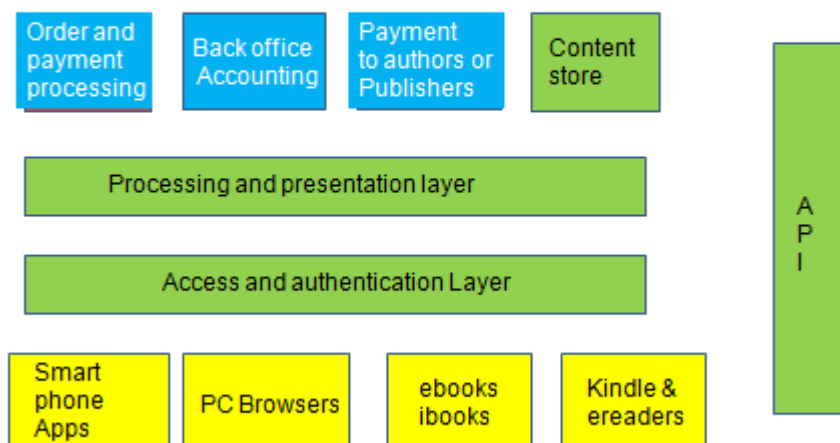
The characteristics of a portal supplying bite-sized content are:

- Order and Payment processing for consumers and intermediaries.
- Back-office accounting is handled via standard software.
- Links to digital content management stores or storage of digital content directly.
- An intuitive end user interface
- Access and authentication management – for free content and for paid for content



Our assessment is that in addition, facilities focused on community building through sharing, blogging etc are key to building the bite-sized business content market. This requires active management within the organisation hosting the community.

Block Diagram For Portal



5.2 Value Added Services

The provision of a white label SaaS helps towards tackling some of the difficulties faced by owners of content. To tackle the others, a number of value added services are required.

- Advisory services on monetisation of content
- Advisory services on xml and metdata standards, and content management systems
- Data conversion and take-on services
- Ongoing information management, knowledge curation and update services
- Training in social media in communities of practice and interest, xml and metdata standards, and content management.

Additionally, the issues of IPR and digital rights management are a concern to many owners of content. We therefore have developed a model licence for content to be used with the Value Added Services, which essentially takes a "Creative Commons" approach: content accessed through the SaaS is assumed to be able to be accessed and reused globally.

5.3 Communities of Practice or Interest

People like to share information with their peers, and in some fast changing fields such as media law, blogs are establishing themselves as prime sources of information.⁴⁸ People

⁴⁸ Workshop on digital content for publishers, Said Business School, 14th May 2013



also like to recommend sources to each other, so evolving the taxonomy of the metadata describing the communities' data.

The white label offer through Communities of Practice or Interest allows organisations to share the cost of platform development and maintenance. It also facilitates the sharing of information between organisations through evolution of common standards for metadata where there is overlap of content.



6. Benefits of Our Approach

6.1 For Authors

Authors are suffering decreases in income, and will welcome the opportunity to expand their range of channels for content. A survey by ALCS in 2005⁴⁹ sampled 25,000 members: this sets a lower limit on the total number of authors. The study also highlighted that many people combined being an author with another occupation - 32% with education or teaching – and that the incomes of authors were declining.

In order to take advantage of these new channels they should:

- design chapters so that they can be read as standalone content, with one idea per chapter
- design figures & tables to have surrounding explanatory text for retrieval by page
- create a book summary chapter to aid in discoverability
- design content so that it can be read on a small screen – for instance a tablet.

Publishers, training organisations, research organisations, etc could work with authors to encourage consideration of these aspects when commissioning new content, and provide templates to support the use of well structured xml. In the short to medium term, bite-sized text in the business context is likely to be at the chapter level, with the exception of specific “how to” pieces, examples and case studies.

6.2 For Owners of Content

The benefit to owners of thinking about and managing their content through a bite-sized portal are:

- By knowing what bites are used most, can better design and get value from long content, commission updates, determine charging.
- Ability to pull together new versions by collecting bite-sized pieces e.g. in travel guides.
- Use bite-sized (can be free) to link to long form (charged for as a book) or subscription to a tailored version of short form.
- Portal for bite-sized content provides no threat arena for collaboration and potential additional revenue stream (rich media, games, case studies, courses, webinars and simulation/role play).
- Ability to spot new talent through tracking usage of authors’ bite-sized pieces.
- Ability to build profiles of readers/consumers.
- Ability to deliver to a range of devices.

6.3 For Bookstores and Libraries

Bookstores will be able to suggest sources of information across a wider range of possible suppliers.

⁴⁹ <http://www.alcs.co.uk/Documents/Downloads/whatarewordsworth.aspx>



Libraries will be among the first to take advantage of the bite-sized approach, using the structured metadata and content searches to home in on works for borrowers or subscribers.

6.4 For Academics and trainers

Academics and trainers will be able to create new courses by combining existing course modules with new modules spanning different domains, from different sources, and/or with audio or video clips from well-known speakers or gurus.

6.5 For Consumers/Readers

The purpose of the bite-sized approach is to benefit consumers/readers and thereby increase revenues to authors and owners of content.

Consumers can combine content from different publishers.

Consumers can combine content in different formats.

Consumers can access content “on the fly”.

By providing access to tailored amounts of content, on the device to hand, consumers will be better able to get what they need for exams or revision, for preparing for a presentation, for sharing with their colleagues or fellow enthusiasts, or for writing a new article.

6.6 For Creating a Business to Serve This Market

Our approach provides for discoverability through focusing on communities of practice.

It is repeatable and scalable: the model used for communities of practice is extendable to other communities e.g. trade associations, FE and HE colleges, historic and cultural associations.

It creates a better fit between the needs of consumers and education and training professionals, and inside communities of practice

Crucially, it supports the opportunity for reuse and repurpose of content to gain additional revenue, and so has commercial viability: it enables the setting up of a focused business to establish the principles and act as a springboard for expanding the opportunity to new markets;



7. Recommendations

7.1 Content Owners

Content owners should plan to undertake, potentially collectively, a pilot project with a specific target market in mind, in order to explore the potential for re-use on third party portals.

A pilot project will provide for exploration and learning at minimal cost: it could involve

- working with an author on a new edition of a book for a defined market sector, e.g. professional or trade association
- working in xml throughout the production process
- working with the author on metadata and tagging
- use an existing portal.

Existing third party portals for bite-sized content include:

www.inkling.com

www.qbend.com,

www.tizra.com

www.valobox.com

The authors of this report will be happy to discuss the use of these portals, and the production of bite-sized content, with content owners.

7.2 Publishing Associations

Many owners of content are not able individually to meet the range of needs of any particular market segment (they do not own critical mass of content in any one space). This suggests a potential move to collaborative competition amongst publishers and their stakeholders. There is business potential in supplying training and digital take-on services to these publishers, possibly through one of the trade associations. This would also reduce the risk e.g.

- a. A subscription service.
- b. Consultancy and training (somebody to call).
- c. Learning from other content owners in the same position.

Services to assist content owners in addressing the bite-sized opportunity would need to address the firms' very real concerns, hence

- d. The need for an organisation to work with and through content owners to serve authors and readers (B2B rather than B2C).
- e. Aid content owners to add value to the current model, to repurpose content across markets. This needs to be a step by step journey with revenue visible at each stage, starting slowly, looking for opportunities such as anniversaries to recycle material from the back list as pure bonus.



Metadata needs concerted effort from the publishing world to get a dynamic standards environment moving and this could be a role for some of the industry bodies.

And ePub is – as the discussion above illustrates – likely to be the same sort of dead end as the Kindle formats. Industry bodies should lead a move towards xml formats which support the future of publishing.

Publishing Associations could also lead in developing a Model Licence for Publishers to use in commissioning work from authors, in line with 6.1 above.

7.3 Technology Strategy Board

The value of creating networks for UK SME publishers to share expertise and experience of using technology in addition to collaboration in exchanging content has been emphasised by a number of players. The model of BACS, which is an organisation owned by the banks as a not-for-profit, managing a portal on behalf of its members, is attractive. In the publishing sector it is possible that one of the existing associations could be a vehicle for this.



Annex 1: The History of Bite-sized Content

The notion of 'bite-sized' comes naturally once the model of 'linear', from the front to the back, is broken. This needed two things to be in place – electronic publishing and interlinked documents from different sources.

These concepts are generally tracked back to the work of Ted Nelson⁵⁰. In the early 1960s he invented both hypertext and micropayments. He has since then attempted to develop these ideas in a number of ways, notably through project Xanadu, but his vision has never been fully realised. He himself acknowledges the influence on his thinking of Vannevar Bush's notion of the Memex, developed in the 1930s. This became public through his influential 1945 article "As We May Think".⁵¹

Ted Nelson's insight was the creation of a read-write set of persistent two-way links. This has only been partially realised with the invention of the WWW. The gaps lie in the areas of both persistence and in the two-way links. In Nelson's vision there would be no "404 messages" so familiar to Internet users.

An important development in the late 1960s was the adoption of the notion of trans-copyright in hypertext. By this term Nelson meant that a link from one document to another could be at a book/chapter/paragraph/sentence/word/character level. If one author referenced another's work, the ability to click from one document to another and back again would mean that if an author took another's out of context that this could always be checked.

This also meant that authors could be paid through a system of micropayments for work at any level from a character to a whole tome.

The developments of the PC and MAC word-processors and DTP systems in the late 1970s and early 80s started realising part of the hypertext notions. The developments of Apple Lisa and MAC were the first systems to become widely adopted that embodied some of the principles of hypertext.

In parallel with Ted Nelson's work, Alan Kay's development of the Dynabook in 1968⁵² and published in 1972 created some of the hardware and software components that are familiar with laptop and tablet computing. Kay moved from Xerox Park later to HP and had an influence on the iPAQ developments. As an aside, Alan Kay's ideas came to popular attention through Douglas Adam's "Hitchhiker's Guide to the Galaxy"⁵³, which is modelled on the Dynabook ideas.

What this shows is that notions of e-books and new models of publishing including interconnected texts have a long and distinguished pedigree.

An early commercial development of bespoke publishing of texts from multiple sources came in the late 1980s with the development of McGraw Hill's Primis system⁵⁴. This was

⁵⁰ [Literary Machines](#): The report on, and of, Project Xanadu concerning word processing, electronic publishing, hypertext, thinker-toys, tomorrow's intellectual revolution, and certain other topics including knowledge, education and freedom (1981), Mindful Press, Sausalito, California

⁵¹ **As We May Think**, first published in [The Atlantic](#) in July 1945

⁵² <http://www.mprove.de/diplom/gui/kay72.html>

⁵³ Adams, Douglas, [The Hitchhiker's Guide to the Galaxy](#), London, Pan Books, (1979)

⁵⁴ <http://www.mheducation.com/about/about-us>



targeted at educational use. The idea initially was to allow an academic to take chapters from multiple McGraw Hill titles at a chapter level and create a set of readings for a particular course or semester. The books would be published in short runs and sold through campus bookstores. To make this happen required a significant change in author contracts and work on the distribution channels and on IPR and printing technologies. One issue for instance was adapting the system of ISBN for bespoke books. McGraw Hill updated this system in 2010, with a more flexible and larger scheme based on the Blackboardlearn system, "Connect and Create"⁵⁵. The system is restricted to titles within the McGraw Hill family.

The development of eBook standards and eBook readers started seriously during the 1990s. The adoption of eBook readers was very slow until the emergence of the Amazon Kindle. Developments such as Project Gutenberg⁵⁶ have made out of copyright texts widely available in multiple eBooks formats. The major standards in the field are EPUB, which is open, pdf, and Kindle's evolving standard set which is moving towards HTML5, and xml. So the standards are in flux, competing and converging.

The 1990's also saw the appearance of content management systems (CMS). The core function and use of content management systems is to present information on websites. CMS features vary widely from system to system. Simple systems showcase a handful of features, while other releases, notably enterprise systems, offer more complex and powerful functions. Most CMS include Web-based publishing, format management, revision control (version control), indexing, search, and retrieval. The CMS increments the version number when new updates are added to an already-existing file. A CMS may serve as a central repository containing documents, movies, pictures, phone numbers, and scientific data. CMSs can be used for storing, controlling, revising, semantically enriching and publishing documentation⁵⁷. And the development of persistent markers on texts has matured with the development of the DOI, Digital Object Identifiers, and for instance the Handle⁵⁸ system, developed by Bob Khan, co-inventor of the IP protocol with Vint Cerf.

A component content management system (CCMS) is a content management system that manages content at a granular level (component) rather than at the document level. Each component represents a single topic, concept or asset (for example an image, table, product description, a procedure). The CCMS must be able to track "not only versions of topics and graphics but relationships among topics, graphics, maps, publications, and deliverables." Components can be as large as a chapter or as small as a definition or even a word. Components in multiple content assemblies (content types) can be viewed as components or as traditional documents⁵⁹.

⁵⁵[https://confluence.umassonline.net/download/attachments/60136405/Release_Notes_McGraw-Hill_Connect_and_Create_Building_Block_for_9.1_\(v.1\).pdf?version=1&modificationDate=1345294422059](https://confluence.umassonline.net/download/attachments/60136405/Release_Notes_McGraw-Hill_Connect_and_Create_Building_Block_for_9.1_(v.1).pdf?version=1&modificationDate=1345294422059)

⁵⁶ Project <http://www.mheducation.com/about/about-usGutenberg>

⁵⁷ Web Content Management Systems (Wcms): High-Impact Strategies - What You Need to Know: Definitions, Adoptions, Impact, Benefits, Maturity, Vendors. Kevin Roebuck. Emereo Pty Limited, 2011

⁵⁸ http://en.wikipedia.org/wiki/Handle_System

⁵⁹ Ann Rockley and Steve Manning, "Component content management: Overlooked by analysts; required by technical publications departments". The Rockley Group Inc



Standards include Darwin Information Typing Architecture (DITA)⁶⁰ and S1000D⁶¹.

Alongside the developments in eBook readers and tablet devices has been the development of the internet book store, with Apple and Amazon stealing a significant market share. A milestone was reached in 2010 when, for the first time, Amazon announced that sales of eBooks outsold paper books for the first time. It should be noted that the biggest casualty in the UK of these changes has been in the decline of book stores. In part, this has been due to the sales in supermarkets of the blockbusters, but also the growth of online book stores both physical and digital. In 2012, the number of closures appears to have slowed down. However, there is a changing make up of bookstores. Small, niche independent stores (travel, religion, art, for instance) seem to be surviving better than the general bookstore.

In 2012, the book market was flat in the UK with decline in physical sales being matched by growth of digital sales. However, if the impact of “50 Shades of Grey” is taken out, revenues and margins look to be in decline along the traditional supply chain. 2012 showed a drop in book sales of £74 million...

Over the last 20 years much of the work traditionally done by publishers has been transferred back to the author, with indices, references, copyright clearance being examples. Many publishers expect authors to provide documents in particular layouts, formats and fonts as “camera-ready” copy. In parallel with these changes has been the growth of self-publishing, notably the Lulu and Amazon portals. Much of the focus until relatively recently has been in black and white, and in text-dominated worlds.

The development of the coloured Kindle, iPad and other tablet forms has moved the default option towards colour. At the same time the use of images, still and video, and sound embedded in “texts” is on a growth path.

It is important to stress that the transition from paper to digital is far from uniform. Even the best technologies today cannot match the image quality of the high-end art books for instance. So we have a very rapid move in areas like out-of-copyright texts, which can be freely downloaded. For example, last year F Scott Fitzgerald’s work went out of copyright and all the titles are now freely available for digital download. In niche areas like photographic and art books, there has been limited impact of digital publishing on physical book sales. However, even in areas like art, the availability of apps of art works has expanded the market. Two examples that are of note are the Monet and Klimt apps for the iPad. The decision of Apple to make software, iBook author, freely available makes the creation of “multimedia books” significantly easier, although only for the Apple portal.

Another strand in the development of bite-sized content has been the development of e-learning. E-learning refers to the use of electronic media and information and communication technologies (ICT) in education. E-learning includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. Information and communication systems, whether free-standing or based on either local networks or the Internet in networked learning, underlie many e-learning

⁶⁰DITA Best Practices: A Roadmap to Writing, Editing, and Architecting in DITA. Laura Bellamy, Michelle Carey, Jenifer Schlotfeldt. ISBN 0132480522 IBM Press (30 September 2011)

⁶¹<http://public.s1000d.org/Pages/Home.aspx>



processes.⁶² E-learning can occur in or out of the classroom. It can be self-paced, asynchronous learning or may be instructor-led, synchronous learning. E-learning is suited to distance learning and flexible learning, but it can also be used in conjunction with face-to-face teaching, in which case the term blended learning is commonly used.

The history of e-learning started in 1960, when the University of Illinois initiated a classroom system based in linked computer terminals where students could access informational resources on a particular course while listening to the lectures that were recorded via some form of remotely device like television or audio device.⁶³ Pioneers the Open University in Britain⁶⁴ and the University of British Columbia (where Web CT, now incorporated into Blackboard Inc. was first developed) began a revolution of using the Internet to deliver learning,⁶⁵ making heavy use of web-based training and online distance learning and online discussion between students. In 2008, the Council of Europe passed a statement endorsing e-learning's potential to drive equality and education improvements across the EU.⁶⁶

Until recently, e-learning was based around distribution of content to students in a predefined format. Indeed MOOCS⁶⁷ started in this way. It is suggested that only about 10% of students completed the course⁶⁸, but that students who had only taken specific modules of a course rated it over 90% as "useful"⁶⁹. This emphasises the value of bite-sized content "when it is needed". The research also noted the positive effect of interaction via online fora on completion rates.

What this illustrates is that bite-sized content has a history and is now in a period of significant flux on a range of fronts - technology and standards, business models and distribution channels. So while the desire is not new, a range of social, economic and technological factors mean that a solution is becoming possible.

⁶²Tavangarian D., Leypold M., Nölting K., Röser M., (2004). Is e-learning the Solution for Individual Learning? Journal of e-learning, 2004

⁶³Wolley, David, and as so many people had insisted Group Notes is one. "PLATO: The Emergence of Online Community." Thinkofit: Consultants in Online Communication. David R. Woolley, n.d. Web. 12 Feb. 2013. <<http://thinkofit.com/plato/dwplato.htm>>.

⁶⁴Mason. R. and Kaye, A. (1989) Mindweave: Communication, Computers and Distance Education Oxford, UK: Pergamon Press

⁶⁵Bates, A. (2005) Technology, e-Learning and Distance Education London: Routledge

⁶⁶[Recommendation 1836 \(2008\)](#) "Realising the full potential of e-learning for education and training." Council of Europe

⁶⁷MOOCS - A massive open online course (MOOC) is an online course aimed at large-scale interactive participation and open access via the web. In addition to traditional course materials such as videos, readings, and problem sets, MOOCs provide interactive user forums that help build a community for the students, professors, and teaching assistants (TAs).

⁶⁸Lewin, Tamar (February 20, 2013). "[Universities Abroad Join Partnerships on the Web](#)". *New York Times*

⁶⁹<http://augmentedtrader.wordpress.com/2013/01/27/mooc-student-demographics/>



Annex 2: Business Models for Online Content

- Brokerage: Brokers are market-makers: they bring buyers and sellers together and facilitate transactions. e.g. Amazon – business books, valobox⁷⁰ which offers books on a “pay per page read” basis, and remits a fraction to the publisher and a fraction to the recommender.
- Advertising: The web advertising model is an extension of the traditional media broadcast model. The broadcaster, in this case, a web site, provides content (usually, but not necessarily, for free) and services (like email, IM, blogs) mixed with advertising messages in the form of banner ads. Newspapers and ISP portals follow this model. Business sector magazines, online, often as part of a paper subscription: advertising on the site. e.g. Building magazine. It is not clear how advertising would work for bite-sized content, unless promoted by the broker;
- Manufacturer (Direct): The manufacturer or “direct model”, it is predicated on the power of the web to allow a manufacturer (i.e. a company that creates a product or service) to reach buyers directly and thereby compress the distribution channel. Harvard Business Review follows this model for bite-sized content (case studies and articles).
- Community: The viability of the community model is based on user loyalty. Users have a high investment in both time and emotion. Revenue can be based on the sale of ancillary products and services or voluntary contributions; or revenue may be tied to contextual advertising and subscriptions for premium services. Typically a community attracts 3% to 7% of paying end users (e.g. Strategic Planning Society, FT.com) for bite-sized content.
- Utility: The utility or “on-demand” model is based on metering usage, or a “pay as you go” approach, charging by transaction. This is often combined with a subscription service, with e.g. 300,000 subscribers paying £25 pa for newsletters. See valobox above.
- A widely used model is a subscription service: Users are charged a periodic – daily, monthly or annual – fee to subscribe to a service.
 - An example in business content is the European Clearing House for Case Studies (ECCH)⁷¹ which has 26,000 subscribers.
 - Personal Digital Assistant (PDA). Subscription may include access to the publisher/aggregators full list with ability to “taste what is available” and then buy/rent the book (through librarian or direct) if required.

Another business model in wide use is the “freemium” model⁷². “Give your service away for free, possibly ad supported but maybe not, acquire a lot of end users very efficiently through word of mouth, referral networks, organic search marketing, etc., then offer premium priced value added services or an enhanced version of your service to your end

⁷⁰ www.valobox.com

⁷¹ <http://www.ecch.com>

⁷² [Chris Anderson. *Free: the future of a radical price*. 1st ed. Hyperion; June 24, 2009. ISBN 978-1-4013-2290-8](#)



user base". In 2009, Chris Anderson published the book "Free", which examines the popularity of this business model. As well as for traditional software and services, it is now also often used by Web 2.0 and open source companies. The freemium model is closely related to tiered services. It has become a highly popular model with notable examples including LinkedIn,⁷³ and in the form of a "soft" pay wall, such as those employed by The New York Times.⁷⁴ A freemium model is sometimes used to build an end user base when the marginal cost of producing extra units is low.

⁷³Barr, Alistair (2011-09-11). "['Freemium' approach attracts venture capital](#)". *The Montreal Gazette* Postmedia Network Inc. Retrieved 2013-08-13. Revenue from paying members jumped 60% to US\$23.9-million in the second quarter

⁷⁴Chittum, Ryan (2011-07-22). "[The NYT Paywall Is Out of the Gate Fast](#)". *Columbia Journalism Review*



Annex 3: A Model Bite-Sized Content Licence Agreement

<NAME OF CONTENT OWNER>, a company having its registered office <> ("Publisher").

and

<NAME of SERVICE PROVIDER>, a company having its registered office <> ("Operator")

BACKGROUND

1. Publisher offers access to and use of bite-sized pieces of content (Bite-Sized Content) from a wide range of electronic publications, anywhere, anytime for either a small payment or for free for each access and use of Bite-Sized Content to end users via a software platform.
2. Bite-Sized Content and all intellectual property rights therein are owned by or duly licensed to the Publisher.

IT IS AGREED AS FOLLOWS

1. DEFINITIONS

- 1.1 In this Licence, the following terms shall have the following meanings:

"Bite-Sized Content"	means the material licensed in this Licence being [insert description] and any associated Tags, Metadata, Abstracts supplied by Publisher as further described in Schedule 2.
"Commercial Use"	means use for the purpose of monetary reward by means of the sale, resale, loan, transfer, hire or other form of exploitation of Bite-Sized Content.
"Educational Purposes"	means use for the purpose of education, teaching, distance learning, private study and/or research.
"Licence Fee"	means the fee for this Licence as set out in Schedule 1. The fee will be in line with the Offer.
"Offer"	means the offer agreed between Publisher and Operator for Bite-Sized Content as set out in Schedule 1.

- 1.2 Headings in this Licence are for reference purposes only and shall not be deemed to be an indication of the meaning of the clause to which they relate.

2. LICENCE GRANT

- 2.1 Publisher hereby grants to Operator, subject to and in accordance with the terms of this Licence, a non-exclusive non-transferable licence to access and use Bite-Sized Content for Commercial, Educational and all Purposes.



- 2.2 In consideration for Publisher's licensing of Bite-Sized Content pursuant to Clause 2.1, Operator undertakes to pay to Publisher the Licence Fee

3. PERMITTED USES

- 3.1 Operator is permitted to for Educational, Commercial and all other purposes to:

- 3.1.1 reproduce Bite-Sized Content in whole or in part, and to communicate the Bite-Sized Content to the public in print and/or digital form, whether or not in combination with copyright works of others, for example the making available to the public via internet or any other network, as part of a database, on-line or off-line, for use by third parties;
- 3.1.2. to translate Bite-Sized Content into other languages and to communicate the translation of Bite-Sized Content to the public;
- 3.1.3 to create adaptations, summaries or extracts of Bite-Sized Content or other derivative works based on Bite-Sized Content and exercise all of the rights in such adaptations, summaries, extracts and derivative works;
- 3.1.4 to include Bite-Sized Content, whether in translation or as adaptation or summary, in whole or in part in a computerised database and to make this database available to third parties;
- 3.1.5 to include Bite-Sized Content, in whole or in part, whether in translation or as adaptation or summary, in a course packs or compilation;
- 3.1.6 to rent or lend Bite-Sized Content to third parties;
- 3.1.7 to reproduce Bite-Sized Content by means of reprography, notwithstanding the limitations in the law.

- 3.2 Publisher undertakes that the source is acknowledged in standard bibliographic citation form or other form if widely used for other media or data.

4. RESPONSIBILITIES OF THE PUBLISHER

- 4.1 Publisher agrees to:

- 4.1.1 make Bite-Sized Content available to Operator from the start of this Licence;
- 4.1.2 use all reasonable endeavours to make Bite-Sized Content available to Operator 24 hours a day (except when routine maintenance is carried out), and to restore access to Bite-Sized Content as soon as possible after any interruption or suspension of the service;
- 4.1.3 use all reasonableendeavours to ensure that the relevant server or servers have adequate capacity and bandwidth to support the usage of Operator;
- 4.1.4 provide electronic product documentation to Operator free of charge.

- 4.2 In the event that Publisher withdraws from Bite-Sized Content any item or part of an item:



- for which the Publisher no longer retains the right to publish; or
- for which the Publisher has reasonable grounds to believe it infringes copyright or is defamatory, obscene, unlawful or otherwise objectionable or,
- when Bite-Sized Content become available to the public (via, for instance but not limited to, Google),

Publisher shall give written notice thereof to Operator. If the withdrawn or publicly available material represents more than ten per cent (10%) of Bite-Sized Content, Publisher shall make a pro rata refund of the Licence Fee to Operator. The refund will take into account the amount of material withdrawn or publicly available and the length of the Licence term remaining.

5. LICENCE FEE

- 5.1 Operator will pay the Licence Fee for the rights granted to Bite-Sized Content in the amount and upon terms as set out in Schedule 1.
- 5.2 Upon acceptance of this Licence, Publisher will issue an invoice for the Licence Fee to Operator.
- 5.3 The terms of payments to Publisher are set out in Schedule 1.

6. TERM AND TERMINATION

- 6.1 The term of this Licence will commence upon <> and will remain in full force and effect until <> unless terminated earlier as provided for in this Clause 8.
- 6.2 Operator may terminate this Licence without cause on the anniversary date of this Licence by giving Publisher sixty days notice to that effect.
- 6.3 Any party may terminate this Licence at any time on the material breach or repeated other breaches by the other of any obligation on its part under this Licence by serving a written notice on the other party identifying the nature of the breach. The termination will become effective thirty days after receipt of the written notice unless during the relevant period of thirty (30) days the defaulting party remedies the breach forthwith by written notice to the other party.
- 6.4 Upon termination of this Licence by Publisher due to a material breach or repeated other breaches by Operator, Publisher shall cease to authorise on-line access to Bite-Sized Content by Operator.
- 6.5 On termination of this Licence by Operator due to a material breach or repeated other breaches by Publisher, Publisher will reimburse Operator a pro rata proportion of the then remaining Licence Fee for the unexpired part of the Licence agreement. Publisher shall not be obligated to return any portion of the Licence Fee for termination by the Publisher due to the Operator's breach pursuant to Clause 8.3.

7. ACKNOWLEDGEMENT AND PROTECTION OF INTELLECTUAL PROPERTY RIGHTS



7.1 Except as provided for in Clauses 6.2 and 6.3, Operator acknowledges that all intellectual property rights in Bite-Sized Content are the sole and exclusive property of Publisher or duly licensed to Publisher and that this Licence does not assign or transfer to Operator any right, title or interest therein except for the right to access and use Bite-Sized Content in accordance with the terms and conditions of this Licence.

8. REPRESENTATION, WARRANTIES AND INDEMNIFICATION

8.1 Publisher warrants to Operator that Bite-Sized Content and all intellectual property rights therein are owned by or licensed to Publisher and that Bite-Sized Content used as contemplated in this Licence does not infringe any intellectual property rights of any natural or legal person.

8.2 While Publisher has no reason to believe that there are any inaccuracies or defects in the information contained in Bite-Sized Content, Publisher makes no representation and gives no warranty express or implied with regard to the information contained in or any part of Bite-Sized Content including (without limitation) the fitness of such information or part for any purposes whatsoever and Publisher accepts no liability for loss suffered or incurred by Operator as a result of their reliance on Bite-Sized Content.

8.3 In no circumstances will Publisher be liable to Operator for any loss resulting from a cause over which Publisher does not have direct control, including but not limited to failure of electronic or mechanical equipment or communication lines, telephone or other interconnect problems, unauthorised access, theft, or operator errors.

9. FORCE MAJEURE

9.1 Either party's failure to perform any term or condition of this Licence as result of circumstances beyond the control of the relevant party (including without limitation, war, strikes, flood, governmental restrictions, and power, telecommunications or Internet failures or damages to or destruction of any network facilities ["Force Majeure"]) shall not be deemed to be, or to give rise to, a breach of this Licence.

9.2 If either party to this Licence is prevented or delayed in the performance of any of its obligations under this Licence by Force Majeure and if such party gives written notice thereof to the other party specifying the matters constituting Force Majeure together with such evidence as it reasonably can give and specifying the period for which it is estimated that such prevention or delay will continue, then the party in question shall be excused the performance or the punctual performance as the case may be as from the date of such notice for so long as such cause of prevention or delay shall continue.

10. ASSIGNMENT

10.1 Except as permitted for under this Licence, neither this Licence nor any of the rights and obligations under it may be assigned by either party without obtaining the prior written consent of the other party, such consent shall not unreasonably be withheld or delayed. In any permitted assignment, the assignor shall procure and ensure that the assignee shall assume all rights and obligations of the assignor under this Licence and agrees to be bound to all the terms of this Licence.



11. GOVERNING LAW AND DISPUTE RESOLUTION

- 11.1 This Licence shall be governed by and construed in accordance with English law and the parties irrevocably agree that any dispute arising out of or in connection with this Licence will be subject to and within the jurisdiction of the English courts.
- 11.2 Parties agree to use best efforts to resolve disputes in an informal manner. Where parties agree that a dispute arising out of or in connection with this Licence would best be resolved by the decision of an expert, they will agree upon the nature of the expert required and together appoint a suitable expert by agreement.
- 11.3 Each party shall provide the expert with such information and documentation as he may reasonably require for the purposes of his decision.
- 11.4 The costs of the expert shall be borne by parties in such proportions as the expert may determine to be fair and reasonable in all circumstances or, if no determination is made by the expert, by the parties in equal proportions.
- 11.5 Parties agree to be bound by the decision of the expert.

12. NOTICES

- 12.1 All notices required to be given under this Licence shall be given in writing in English and sent by courier, or special delivery to the relevant addressee at its address set out below, or to such other address as may be notified by either party to the other from time to time under this Licence, and all such notices shall be deemed to have been received three (3) days after the date of posting in the case of special delivery or despatch in the case of courier:
- if to Operator: [insert details]
- if to Publisher [insert details]

13. GENERAL

- 13.1 This Licence and its Schedules constitute the entire agreement between the parties relating to Bite-Sized Content and supersede all prior communications, understandings and agreements (whether written or oral) relating to its subject matter and may not be amended or modified except by agreement of both parties in writing.
- 13.2 The Schedules shall have the same force and effect as if expressly set in the body of this Licence and any reference to this Licence shall include the Schedules.
- 13.3 The invalidity or unenforceability of any provision of this Licence shall not affect the continuation in force of the remainder of this Licence.
- 13.4 The rights of the parties arising under this Licence shall not be waived except in writing. Any waiver of any of a party's rights under this Licence or of any breach of this Licence by the other party shall not be construed as a waiver of any other rights or of any other or further breach. Failure by either party to exercise or enforce any rights conferred upon it



by this Licence shall not be deemed to be a waiver of any such rights or operate so as to bar the exercise or enforcement thereof at any subsequent time or times.



Annex 4: List of Those Consulted

The views in this report may differ from the views of those listed below, and the authors are wholly responsible for any errors or omissions.

Richard	Adams	digital media expert
	Baden-	
Charles	Fuller	Cass Business School
Miles	Bailey	Choir Press
Paul	Barnett	Strategic Management Forum
Chris	Batt	UCL researcher
Ian	Bennett	Media Systems Ltd
Oliver	Brookes	Valobox
Nick	Canty	UCL Centre for Publishing
Fiona	Carter	Strategic Planning Society
Tom	Clark	Emerald
Estelle	Clark	Lloyds Register
Pat	Coyne	Electric Book
Vince	Desmond	Chartered Quality Institute
Tony	Diggle	SAMI Consulting - author
Paul	Driscoll	Media Systems Ltd
Matthew	Flynn	British Computer Society
Jonathan	Glasspool	Bloomsbury
Robin	Grossman	University of Wales Press
Sally	Hardy	Regional studies Assoc
Paul	Harwood	EBSCO research data, libraries
Ben	Heald	SIFT
Charlotte	Heppell	University of Northampton
Tony	Heywood	Yoodoo
Chris	Histed	Publitas
Emma	House	Publishers Association
Andrew	Hubbard	Closer Partners
Catherine	John	Jisc-Collections
William A	Jones	Global Village
Frank	Joshi	mVine
Paul	Kafno	HD Thames
Charles	Kerrigan	Olswang
Katz	Kiely	Innovation, Communication and Brand Strategist
Jemima	Kingsley	Jemima Kingsley Publishing
Matthew	Knight	Chartered Insurance Institute
Abi	Lamass	Chartered Institute of Marketing
Julia	Lampam	Wiley
Steve	Lane	Libri
Matthew	Lawson	Middlesex University
Anna	Lewis	Valobox



Simon	Liebesny	Pluto Press
Tricia	Lustig	Lasa Development
Helena	Markou	Oxford Brookes
Carlos	Martinez	tizra
Nico	McDonald	New Media
Julie	McNair	Independent consultant
Joy	Mercer	Association of (FE) Colleges
Ben	Moore	Positive Image
Wilhelmina	Mossink	Jisc-Collections
Steven	Plimmer	RIBA
Chris	Quick	ACCA
Samantha	Rayner	UCL Centre for Publishing
Joanne	Roberts	Institution of Civil Engineers
Brian	Runciman	British Computer Society
Laura	Saksena	Society of Authors
Adrian	Shanks	Ashgate Publishing Group
Samuel	Sherwood	Olswang
Bridget	Shine	Independent Publishers Group
Jonathan	Shipley	Wiley - business books
Wayne	Syme	Royal Society of Medicine
Mike	Southon	The Beermat Entrepreneur
Sarah	Thomas	Bodleian Library, Oxford
Liz	Thomson	bookbrunch
George	Walkley	Hachette UK
Toby	Waller	NBN
Huw	Williams	SAMI - telecoms
Laurie	Young	Strategic Planning Society



Annex 5: Some Think Tanks, HE Research and Post-Graduate Groups, and Membership Organisations

Think Tanks

Futurebook	www.futurebook.net/
Future of Publishing:	thefutureofpublishing.com/
Institute for the Future of the Book:	www.futureofthebook.org/
PWC:	www.pwc.com/gx/en/entertainment-media/pdf/the-future-of-B2B-publishing.pdf
JISC:	www.jisc-collections.ac.uk/
NESTA	www.nesta.org.uk/areas_of_work/creative_economy/futureofpublishing
Shatzkin Files	www.idealog.com/about-us/
Smart Planet	www.smartplanet.com/blog/bulletin/the-future-of-publishing-is-micro/9317

Universities -HE Research and Post-Graduate Groups

Anglia Ruskin	www.anglia.ac.uk/ruskin/en/home/prospectus/pg/publishing.html
Bath Spa	www.thePublishinglab.com
City University:	www.city.ac.uk/courses/postgraduate/publishing-studies
Edinburgh Napier	www.napier.ac.uk/sci/Pages/JournalismPublishing.aspx
Kingston University	www.kingston.ac.uk/postgraduate-course/publishing-ma/
Oxford Brookes International Centre for Publishing Studies	publishing.brookes.ac.uk
Plymouth	www.gradschools.com/.../university-of-plymouth/publishing-234622_1
Stirling	www.publishing.stir.ac.uk
UCL Centre for Publishing:	www.ucl.ac.uk/publishing
University of Central Lancashire	uclan.ac.uk/courses/ma_pg dip_pgcert_publishing.php
University of The Arts:	www.lcc.arts.ac.uk/courses/courses-by-level/ma-publishing/

Professional and Trade Membership Associations

Association of Learned and Professional Society Publishers:	www.alpsp.org/Ebusiness/Home.aspx
Association of Online Publishers:	www.ukaop.org.uk/
CILIP	www.cilip.org.uk/jobscareers/qualifications/accreditation
Digital Book World:	www.digitalbookworld.com
Independent Publishers Guild	www.ipg.uk.com/
Professional Publishers Association	www.ppa.co.uk/marketing/future-of-publishing/
Publishers Association	www.publishers.org.uk/
Publishers Content Forum	staging.ppa.co.uk/legal-and-public-affairs/publishers-content-forum
Society for Editors and Proof-readers:	www.sfep.org.uk/pub/train/publcourses.asp
The Booksellers Association	www.booksellers.org.uk/specialistbooksellers
The Independent Alliance	www.faber.co.uk/about/trade/independent-alliance/
The Writers Guild:	www.writersguild.org.uk/
UKOLN: now UKOLN Informatics at the University of Bath	www.ukoln.ac.uk/
UKSG:	www.uksg.org/
Research Libraries UK:	www.rluk.ac.uk/