



Provided by the author(s) and University of Galway in accordance with publisher policies. Please cite the published version when available.

Title	E-Books Challenges and Opportunities
Author(s)	Cox, John
Publication Date	2004-10
Publication Information	Cox, J. 'E-books: challenges and opportunities.', 'D-Lib Magazine', 10 (10), October 2004.
Publisher	D-Lib Magazine
Item record	http://hdl.handle.net/10379/25

Downloaded 2024-05-18T03:32:07Z

Some rights reserved. For more information, please see the item record link above.



D-Lib Magazine October 2004

Volume 10 Number 10

ISSN 1082-9873

E-Books

Challenges and Opportunities

[John Cox](#)

Deputy Librarian

National University of Ireland, Galway

Galway, Ireland

<john.cox@nuigalway.ie>

Abstract

E-books are commonly perceived as offering great potential for learner support but also as struggling to compete with print due to poor on-screen presentation, restrictive licencing and limited range of titles offered. The experience of a group of Irish university libraries shows that, with the right combination of product and subjects, e-books can thrive among students and faculty, while librarians can create more dynamic, relevant and flexible collections than for print. Subscription management is demanding for libraries, however, and licencing issues remain highly problematic, representing a formidable obstacle to full exploitation.

Introduction

Online journals have firmly established themselves as essential resources for libraries and their users, but—despite the primacy of the book as an information source in most disciplines—electronic books (e-books) have not found the same favour. The potential of e-books to support learning activity has been acknowledged, and new services have emerged (and disappeared) in recent years, but uptake has been slow. Snowhill's overview [1] in the July/August 2001 issue of *D-Lib Magazine* noted that some elements key to the success of the e-books market were still taking shape, and this article, while primarily a case study, updates progress in many of these areas and reports actual user experience in academic libraries.

In summer 2001 the Librarians of the Conference of Heads of Irish Universities (CHIU) established a working group to assess the e-books market and to examine the potential of this medium for university libraries, along with any constraints. The key findings of the group in April 2002 were that the market was in a state of flux, uptake was inhibited by poor on-screen presentation and limited availability of titles while licencing models were highly varied. There was, however, a definite feeling that e-books could support learning activities in certain subjects (e.g., business, law, computer science) where information is structured in relatively discrete blocks and where a high premium is placed on currency. The group recommended a one-year subscription to an e-books service, and it was decided to focus on business and computing, two closely linked areas with strong teaching programmes at all seven universities [2]. *Safari Tech Books Online* emerged as the unanimous choice. The

group committed itself to using the subscription period to explore issues for libraries, particularly access, licencing and cost-effectiveness, and for users, emphasising the exploitation of *Safari* for teaching and learning. This article reports findings from library and user perspectives, seeking to relate them to other studies and services and to future e-book development. It begins with an overview of the *Safari* service.

Safari Tech Books Online

Safari [3] is owned jointly by Pearson Education and O'Reilly and offers the full text of 2,000 titles, growing at about 50 books monthly. O'Reilly is a leading information technology (IT) publisher while Pearson has a number of well-known imprints in IT and business, including Addison-Wesley, Prentice Hall and Sams. There is an unmistakably practical rather than theoretical focus, reflecting the origins of *Safari* as a service targeted at individual IT professionals rather than the multi-user academic market. The service is delivered via the Web with text in HTML format, requiring no add-on software or specialist hardware. Its interface (Figure 1) is clearly presented, facilitating searching of all subscribed titles simultaneously or of the currently selected title only. A navigation bar on the left of the screen enables users to browse by book subject or by section of the current book. Display of results shows the most relevant sections within any matching book. Text is presented in sections, typically corresponding to three pages of the printed book. This gives faster download times but prevents access to a whole chapter at once and inhibits printing or saving to disk, a *modus operandi* that suits publishers better than users.

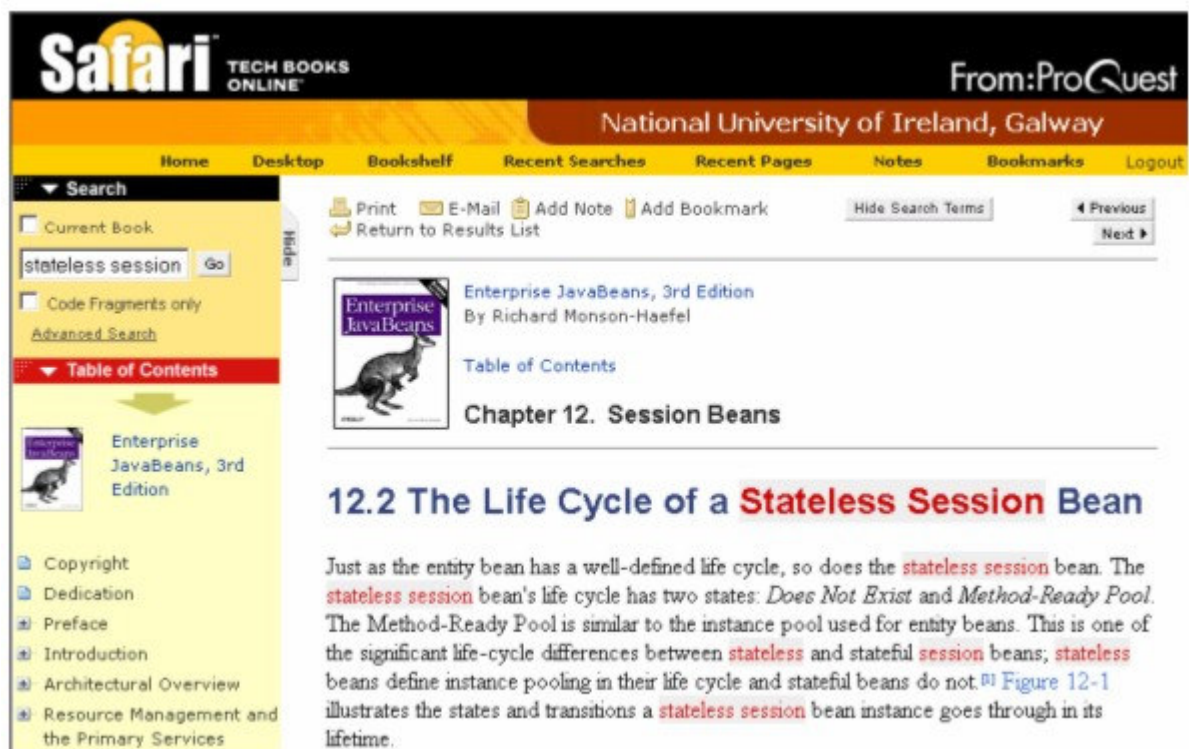


Figure 1. Sample full-text display in *Safari*

As already noted, *Safari* is offered to individual and corporate subscribers, including over 400 academic libraries [4]. Bond University in Australia offers an interesting study of both library and individual student subscriptions [5]. Users can fit the number of titles subscribed to their budget. Thus the Irish universities, each with an allocation of €2500, have typically purchased a year's access to about 50 titles unique to each institution. In fact subscribers purchase "slots" rather than titles, each book being assigned any value from half to three slots according to factors such as its date of publication, topicality and print cost. Unlimited concurrent user access is not offered, and there is a trade-off to be made between the numbers of titles and user licences purchased. A real plus in the subscription model is the

opportunity to swap any title after 30 days. This feature is unique to *Safari* and offers the flexibility to delete low-use titles in favour of replacements likely to be in higher demand or to vary the subscription between semesters. There is no option to purchase titles outright or to retain access to subscribed editions beyond the subscription period.

Managing a Library E-Book Subscription

A variety of considerations for libraries emerged in managing the subscription, notably customer support, limited concurrent usage, cost-effectiveness, resource discovery and usage monitoring.

Customer support

A lengthy supply chain has been a source of communication difficulties. The owners of *Safari* have opted to delegate marketing to libraries to ProQuest Information and Learning. ProQuest in turn until recently concentrated support expertise for this service in the US and required customers in Ireland to route all queries through its UK office. This created significant delays in resolving queries, with an inordinate amount of time consumed in e-mail correspondence and in clarifying what one party wanted or another was advising. The complexity of the licencing model and the origins of *Safari* as a service for individuals rather than libraries exacerbated these problems, leading to expectations, misunderstandings or issues of scalability that required input from staff at *Safari* Books Online, LLC itself. A simple example is the inability of the customer to change the inactivity timeout setting to facilitate better licence usage in a multi-user environment. The recent transfer of support expertise to the UK has shortened the chain, but there has been a considerable time cost in reaching this situation.

Concurrent usage

Unlimited concurrent user access has become the norm for library e-resource subscriptions. Users are not accustomed to being debarred from a database or e-journal because all licences are in use. For e-books the situation is different. Publishers are protective of the market for student textbooks and fear its erosion through online access. Thus *Safari* subscribers must decide how many concurrent user licences to purchase, knowing that at peak periods this will never be enough and that more licences will mean fewer titles, assuming that there is a fixed budget. Users must also experience the frustration of having books presented on screen in small chunks rather than whole chapters in order to prevent "irresponsible" printing or saving to disk. There is a strong perception that the interests of publishers are being served at the expense of those of users who are in some way mistrusted. Such restrictions inhibit the uptake of e-books.

Users at a site with three concurrent users, as is the case at National University of Ireland (NUI), Galway, can expect to experience a lot of turnaways at busy times. In Galway's case one session in four has been unsuccessful on average. The onus is on library staff to monitor usage carefully, adjusting the inactivity timeout period downwards at peak periods. As already noted, such a change requires a support call when immediate local action is really needed. Our user survey showed that a third of respondents experienced turnaways, and many commented on this as a particular source of dissatisfaction. For libraries there has been a need to engage in lengthy dialogue with the supplier in order to clarify and lobby for improvements in *Safari's* session management model.

Cost-effectiveness

Safari has proved tremendously popular with users at each of the Irish universities. Usage

statistics for NUI Galway show over 10,000 hits (i.e., book sections retrieved) in two semesters. It is interesting to compare the online subscription with the traditional print model in terms of cost-effectiveness. Returning to the concurrency issue, the comparison may appear unfavourable for e-books. NUI Galway initially purchased a three-user licence for 54 titles at a cost of €2,610 annually. The cost per title is therefore €48.33. Because licencing is applied to the whole subscription rather than on a per-title basis, it only needs three active users to render the rest of the collection inaccessible. This contrasts with print where every title or each copy of every title could be in use simultaneously. The cost of Galway's annual subscription would purchase outright a significant number of printed titles that the library would own. On this basis, print would seem to offer better value for money.

This comparison with print is, however, too literal. A printed book is often inaccessible to other users through its removal from the shelf for borrowing or in-library consultation. By contrast the average length of a user session in *Safari* is seven minutes according to our supplier. In fact, this figure is just below five minutes for NUI Galway and has not been exceeded at any of the other six universities. The result is that many more users can access a particular title in any 24-hour period than for print. The facility to search for text in all subscribed titles at once brings more titles into play, enabling fuller exploitation of the online collection. A notable finding in our user survey is that just over half of the respondents indicate that they use a wider range of titles in *Safari* than they would consult in the library.

The ability to swap subscribed titles after 30 days provides the opportunity for dynamic collection management. To take another local example, a lecturer at NUI Galway wished to add two new titles on Java at the start of the second semester. The library substituted these for two low-use titles identified by the lecturer. One of the new additions has established itself as the most used title in the subscription, while nobody has queried the loss of access to the titles replaced.

Title swapping in *Safari* is straightforward, taking about a minute per book. This is much faster than ordering print books and satisfies user demand promptly even when, as often happens, the library is informed of new course needs at very short notice. In a fast-moving field where books date quickly (for example, texts about specific versions of individual software packages), content may be viewed as disposable after a certain period. It may make sense to provide access online rather than to process the printed version, give it expensive shelf space and subsequently (often belatedly) withdraw it from stock as part of a labour-intensive weeding programme. There will also be ongoing savings in terms of activities such as lending, shelving and repair [6]. In general, our project has found that swapping works very well in IT subjects and that the ability to generate dynamic and well-exploited online collections makes for a good return on investment.

Resource discovery

E-books need to be discoverable, and one obvious route is via the library catalogue. *Safari* supplies MARC records for subscribed titles at no extra charge, each including an 856 field linking to the full text, and some of the Irish universities opted to use these. Initially the records supplied were not of full MARC standard, and local editing was required to correct some basic deficits (e.g., author name supplied as shown on title page rather than inverted). From a customer perspective this was clearly unsatisfactory, but full MARC records are now provided. The process of downloading records from the *Safari* Back Office administration system and uploading to local catalogue databases can be cumbersome, and regular swapping necessitates familiarity with this operation along with deletion or suppression of records for titles dropped from the subscription.

Provision of title-level access via library or other Web sites is more straightforward. Administrators can use Back Office to generate an alphabetical list in HTML format of subscribed titles with embedded links to each book. This listing supplements standard links to the *Safari* home page on library Web sites. Interestingly, our user survey showed the library Web site as by far the most popular route of access to *Safari*. Over 60% of respondents regularly access the service via the library Web site, some distance ahead of the library catalogue at 19%. Given the greater investment of staff time involved in providing catalogue records, their relatively minor role as a route of access is disappointing. This contrasts with the experience at University of Texas at Austin [7] where the addition of catalogue records was found to boost e-book usage significantly. Also disappointing is the finding that only 13% of users regularly access *Safari* via their lecturer's course Web site. The project has been particularly interested in promoting access via Virtual Learning Environments (VLEs) such as Blackboard and Web CT. VLEs are increasingly popular at each institution and offer an ideal opportunity to bring *Safari* to the attention of students, not least because links can point to the exact section of a book relevant to any given point in the course.

Usage statistics

Generating reports using Back Office is a straightforward process. Administrators can set any reporting period required, copy data to other applications and provide output as XML. *Safari* offers a range of reports, of which those most commonly used have been hits per title, number of turnaways and a summary table of session activity, including average length and number of queries and section retrievals. An example is shown in Figure 2. In general the statistics supplied have assisted the identification of peaks, troughs and major shifts in patterns of uptake. For example, usage at NUI Galway more than doubled in the second semester as *Safari* became more established with students and faculty alike, and the profile of most heavily used titles changed completely, an experience noted by other consortium members also.

Account Usage Summary : 81406-National University of Ireland, Galway	
From: 09/01/2003 to 05/31/2004	
Total Number of Sessions	1,526
Average Session Length (minutes)	04:43
Concurrent Session Limit	3
Number of Rejected Session Requests	374
Total Number of Section Retrieval	941
Successful Queries	882
Unsuccessful Queries	59
Total Number of Section Retrieval	11,167
View Detail	
	By Book
	By User

Figure 2. Sample account usage summary

Usage statistics have been another area for extensive discussion with the supplier. Incorrect

counting of turnaways has proved a major obstacle to accurate licence monitoring for some time. This has been due to users being routed to a preview version of *Safari* when all licences are in use, with no turnaway registered as a result. Following lengthy dialogue, it is hoped that recent session management changes will eliminate this problem.

There is also an oddity in the counting of hits per book. One of the uses of this report is to identify low-use titles that might be swapped in favour of new titles. Strangely, this report is unable to capture titles that have registered zero usage, leaving users to identify these by elimination. Also surprising has been the inclusion of non-subscribed books in the reports generated at each institution. It appears that these are included when a user is diverted to the service preview mode instead of being turned away, as discussed earlier. Preview mode presents users with the full range of *Safari* titles as does a visit to O'Reilly's *Safari* Web site [8], resulting also in unsubscribed titles being counted in the statistics. This problem is due to be rectified shortly but has been a source of frustration and further points up the need to monitor usage statistics carefully.

It is difficult to compare the usage of e-book volumes with the usage of printed titles. Loans are the primary data for the latter, although this metric does not represent in-library use. Lending is not part of the equation in *Safari*, which counts all "hits" for each title, regardless of the length or location of consultation. A "hit" means the retrieval of a section, representing about three pages of the printed equivalent. Summary usage reports for NUI Galway suggest an average of 5 sections retrieved per user session, perhaps indicating that users typically consult a single chapter. This is speculation, however, and it is clear that usage statistics have limitations in terms of identifying the actual nature of use of any e-books service—indeed of any e-resource. The project group decided early on that a user survey was essential for a better understanding of the role and effectiveness of *Safari* in supporting learning activity.

***Safari*: the User Perspective**

As the mid-point of the subscription approached, the libraries took a snapshot of user experience with *Safari*, conducting a Web-based survey simultaneously at all seven universities for a week. The project team subsequently published the survey data [9]. Co-operation with faculty was vital in promoting the survey selectively among classes known to be using *Safari*. There were 186 responses from actual users, fairly evenly spread across all seven universities and primarily comprised of undergraduates (37.6%), postgraduates (26.9%), faculty (12.4%) and library staff (11.3%). As expected, computing and IT disciplines dominated the survey with almost half (45.7%) of the respondents, followed some way back by business at 12.4%. Respondents typically used *Safari* weekly (25.8%) or monthly (40.9%). This was enough to inform opinions and comments throughout the survey but noticeably less frequent than for other library electronic resources that 62.3% of respondents used at least weekly. These figures provide further evidence that e-books remain somewhat less established with users than resources such as e-journals.

The survey questionnaire [10] sought views on a range of issues, including satisfaction with *Safari*, reasons for use, comparison with print and use for learning. In addition to offering rating scales and single- or multiple-response questions, there was an opportunity to make free-text comments on most and least liked features in *Safari*, and these often shed further light on findings.

Satisfaction with Safari

Respondents expressed a strong sense of satisfaction with *Safari* under a number of headings

(Table 1), with relatively low dissatisfaction throughout.

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Don't Know
Subject coverage	1.1%	11.9%	16.8%	47%	22.2%	1.1%
Quality of books	1.1%	1.6%	8.6%	48.4%	38.2%	2.2%
Searching	0.5%	3.2%	20.5%	45.4%	28.1%	2.2%
On-screen presentation	1.1%	8.2%	15.8%	41.8%	36.2%	0.5%
Printing	1.6%	9.7%	20%	30.3%	17.8%	20.5%
Saving to disk	2.2%	10.9%	24.6%	25.1%	10.9%	26.2%
E-mailing	2.2%	3.8%	30.2%	22.5%	11%	30.2%
Bookmarking	2.2%	3.8%	23.9%	31.5%	16.3%	22.3%
General ease of use	1.1%	3.8%	6.5%	49.5%	38.7%	0.5%
Quality of on-screen help	1.1%	5.4%	24.3%	34.1%	12.4%	22.7%

Table 1. Rates of satisfaction with *Safari* features

Quality of books and general ease of use, both critical determinants of success, scored highest and, along with searching, registered very little dissatisfaction. Respondents supported these views with comments such as "easy to use and generally find what I was looking for", "high quality technical content" and "the search facility is amazingly powerful". Subject coverage and on-screen presentation were in the main highly rated. Some users observed thin coverage primarily because each library typically only offered a limited selection of 50 titles spread across a range of topics. Dissatisfaction topped 20% for academics but was negligible among undergraduates, perhaps reflecting different expectations. Although on-screen presentation scored well, the restriction to viewing only a section at a time attracted unfavourable comment, typified by "having to keep clicking Next when reading a chapter" and "it makes viewing and printing extremely tedious".

There are noticeably high combined "neutral" and "don't know" scores for printing, downloading, e-mailing, bookmarking and on-screen help, suggesting low or non-use of these features by some respondents. To some extent this may be due to lack of awareness or insufficient training. Surprisingly, printing, saving and e-mailing are not covered in the on-screen help. The cumbersome nature of printing and downloading one section at a time may dissuade use. Although, as discussed later, printing appears to be preferred to on-screen reading, a number of comments highlighted associated costs. E-mailing is of limited value in *Safari* in that the recipient only gets a URL and must go online—and indeed be a recognised subscriber—in order to see the text. Bookmarking has been underused in our subscription because access is based on IP ranges at each university rather than individual accounts, meaning that all subscriber bookmarks appear in one consolidated file. This feature, along with annotation, only applies properly to individual subscriptions.

Reasons for using Safari

The survey questionnaire offered a range of possible uses, from which respondents could choose as many as appropriate. In analysing the findings it proved instructive to compare

responses from students, who dominated the survey, with those from faculty. Some interesting differences emerged.

For students (undergraduates and postgraduates combined), over 75% of respondents used *Safari* to find material for a project or essay. Surprisingly, reading a recommended course book came a fairly distant second at 43%. However, examination of the titles selected by faculty at each institution showed a definite majority of titles, typically three-quarters of the total, that were not replicated in print format in the library. While evaluating *Safari* prior to subscription, lecturers commonly noted its practical focus and its potential for supporting project work. When it came to selecting titles, they largely avoided the temptation to supplement core textbooks with further online copies and instead opted for a wider range of titles in certain subjects. Student use clearly aligned itself with this tendency, and some specifically commented that they welcomed access to titles not held in print by the library.

Unsurprisingly, a different pattern of use emerged from faculty responses, with 65% indicating lecture preparation as their most common reason for consulting *Safari*, followed fairly closely by support for academic research work at 56%. An area of commonality for both groups was reference use, and a third of respondents in each category cited looking up the answer to a specific question. This accords with *Safari*'s practical focus and the potential for keyword searching across all subscribed titles.

Safari versus Printed Books

This section of the questionnaire produced some predictable response patterns (Table 2).

	Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly	Don't Know
It takes longer to find information in <i>Safari</i> than in a printed book	14%	57.5%	14%	8.1%	5.9%	0.5%
It is easier to read an electronic book in <i>Safari</i> than in print	17.2%	46.2%	21.5%	9.7%	3.8%	1.6%
I usually print rather than read on screen	6.5%	26.3%	15.6%	29%	22.6%	0%
I prefer <i>Safari</i> to printed books on my subject	11.4%	27.6%	44.9%	13.5%	2.2%	0.5%

Table 2. *Safari* in relation to printed books

Users were definite in their opinion that they could find information faster in *Safari* than in a printed book. Comments clearly attributed this to the facility to search books individually and collectively. As one user noted, "Fast, accessible, cross-searching of books is a really useful feature". A healthy consequence is that users come to view *Safari* as a collective reference resource instead of being too wedded to one or two texts as tends to occur in print. Searching also scored very well in a survey at Bond University [5] which included *Safari*. Also compatible with Bond's experience is the strong view expressed in the Irish survey that it is harder to read online, with many users commenting on eye strain. This was the most predictable finding in the survey and shows the need for continued improvements in screen technology. One would expect the strong preference for reading print to result in an equally strong tendency to print material rather than read it on screen, but this is not so. Just over half of respondents have this tendency, but almost a third do not. There appear to be two

reasons for lower than expected printing activity. Firstly, users often consult *Safari* to look up the answer to a specific question. If the answer is brief and factual, they may not feel the need to print in such circumstances. Secondly, there are costs associated with printing, and students in particular commented on these in the survey, with one noting "it's too expensive to print all the chapters I would need".

Despite acknowledging the strengths of *Safari* in terms of speed of access, quality of content and ease of use, respondents prefer printed books. Only 15.7% expressed a preference for *Safari*. However, the neutral vote was very high at 44.9%, providing clear evidence of a hung jury on this issue. It appears that many users have not made up their minds about e-books yet. This is especially the case for academic staff, 56.5% of whom remained neutral in this survey. Faculty support will be critical in promoting e-books generally and, while there is still a long way to go in achieving this, the door at least remains open. In general comments for all user groups indicate that the main reason for preferring the printed book is a lack of enjoyment in reading from a screen. If the reading experience can be improved, this survey indicates that lots of people are prepared to give e-books a chance.

Safari: Learning Support

The previous section of the survey focused on issues of functionality. The emphasis of the next section was on content and general effectiveness of *Safari* in support of learning activities (Table 3).

	Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly	Don't Know
I need to use printed books in addition to <i>Safari</i>	1.1%	4.9%	9.9%	56.6%	26.9%	0.5%
I use a wider range of books in <i>Safari</i> than I would consult in the Library	5.9%	23.8%	18.9%	40%	10.3%	1.1%
I usually only need to consult one chapter	1.6%	26.9%	21%	43%	7%	0.5%
Access to <i>Safari</i> has improved my work	0.5%	4.3%	26.5%	53%	14.1%	1.6%
<i>Safari</i> has saved me time	1.1%	5.4%	13.4%	59.1%	19.4%	1.6%
<i>Safari</i> has saved me buying a book	1.6%	11.9%	16.2%	35.7%	31.9%	2.7%
I would be interested in other electronic book services besides <i>Safari</i>	0.5%	2.2%	8.6%	43.5%	43.5%	1.6%

Table 3: Use of *Safari* to support learning

There emerged emphatic support (83.5%) for the need to use printed books in addition to *Safari*. Given that each library would have had far more IT books on its shelves than the 50 or so subscribed *Safari* titles, this is not surprising, although it is reassuring to note that users recognise that not everything is online. In light of this the finding that just over half of the respondents use a wider range of books in *Safari* than in the library may appear paradoxical. User comments indicate that searchability and physical convenience are key factors here.

Cross-title searching brings more books into play. Many respondents noted the advantages of not having to leave their computer to consult a book, while others considered online browsing easier and faster than its equivalent at the shelves, not least because no titles are out on loan. That *Safari* users spread themselves thinly is borne out by the finding that half of the respondents usually only need to consult a single chapter.

Responses to the remainder of the questions in this section showed a very positive user perception of *Safari* as a learning support tool. Clear majorities agreed that their work had been improved and time saved. All groups, but particularly undergraduates, believed that access to *Safari* had saved them buying a book and considered this to be a major positive. There was huge interest in access to other e-books services, as expressed by 87% of respondents. In a subsequent section of the survey, *Safari* itself received an almost unanimous seal of approval, with 98.4% of respondents wanting the library to continue its subscription.

Safari has proved itself a real success as a learning support tool in this project. Levels of engagement have been strong, coverage and functionality (especially searching) have achieved high ratings, and user needs have been satisfied for faculty and students alike. This has been achieved with limited user training. The success of *Safari* must in large measure be attributed to its ease of use and well targeted content, which together facilitated student uptake and attracted support from faculty. Content ultimately is king and, if relevant and suitably packaged, will be used. These attributes notwithstanding, there remain problems with regard to licencing and onscreen reading that are relevant to a wider discussion of e-books.

Discussion

There is evidence that the e-books market has been prospering of late. A recent two-part feature in *Library Journal* [11,12] examined 15 services in a range of disciplines, commenting favourably on their functionality and coverage. A flurry of new product developments was highlighted in Information Today's *NewsLink* [13] service, including Amazon's innovative A9 service [14] which incorporates full-text retrieval from over 120,000 e-books in its search results. Coyle [15] in a review of the e-book industry notes increased sales, lots of technology developments and exciting prospects for the next decade.

Leading aggregator services have shown significant growth in the past two years, with *netLibrary* [16] up from 40,000 to over 65,000 titles and *Ebrary* [17] offering over 25,000 books and 20,000 other documents compared with a previous total of 5,000. New services continue to emerge, notable recent examples being book series from Elsevier via *Science Direct* [18], *Gale Virtual Reference Library* [19] and *Oxford Scholarship Online* [20]. There would appear to be plenty of opportunities for the Irish university libraries to build upon the initial success of *Safari* and to satisfy user interest in other e-book services. It will be particularly interesting to assess uptake in other disciplines, notably the humanities. *Safari* is very much a niche product targeted at an audience that is comfortable with IT. Our experience suggests, however, that e-books will attract users if the content is essential and easy to access.

There is a balance to be struck between ease of use and added value. *Safari* is well presented, but its main added value comes from features such as cross-title searching and highly current coverage. In the main it focuses on transferring good content to an online environment. There is room for greater innovation, as exemplified by the *Knovel* [21] service, which offers true interactivity online by enabling users to perform a range of calculations on the data presented. This need not detract from simplicity of use for less

advanced users. A common criticism of online full-text services has been a tendency simply to mimic their print equivalents without capitalising fully on the possibilities for extra functionality online. Snowhill's observation in 2001 that "future development needs to recognize the potential scholarly significance of increased integration of unconventional media with e-books" [1] remains valid.

Our user survey indicates a somewhat traditional approach in which *Safari* is commonly used simply as a delivery tool, with the printer replacing the photocopier for copying. More adventurous use of e-books will depend not only on innovative services but also on the leadership role taken by faculty, who in turn need librarians to promote awareness. Collaboration between library staff and faculty is vital, and e-books complement online course delivery, with linkage from VLEs an obvious route to exploitation of online texts. Technology can help too, and *eXtend* [22], a set of XML-based application programming interfaces (APIs) from *Ebrary*, is an encouraging example. *eXtend* aims to provide seamless access to *Ebrary* content via any interface, including VLEs, and offers welcome compliance with Open URL and z39.50, facilitating resource discovery via multiple access routes and federated searching respectively. Other services need to commit similarly to content integration.

There is some way to go before faculty view e-books on a par with print, but our survey indicates that many are open to persuasion where the right combination of content, functionality and technology emerges. An attractive onscreen reading environment is vital to wider uptake, particularly in the humanities. Ideally online reading needs to emulate the experience of reading a printed book. In this regard the development of Sony's Librie [23] e-book reader appears to hold promise, although the immediate need is for today's most pervasive delivery devices, desktop and laptop computers, to offer a superior and non-proprietary on-screen reading experience. Easy reading of e-books would build successfully on acknowledged strengths, notably speed of retrieval and convenience of access at any time or location.

Licensing is another key area for improvement. Publishers in many instances are defensive about revenues from the printed textbook market, resulting in restrictive licencing models for online equivalents, difficulties with output of text, non-ownership and limited concurrent user access. This is a frustration for librarians and users alike, inhibiting full exploitation and compromising the opportunity offered by online access to meet the demands of large classes much more efficiently. As a member of faculty commented in our survey, "Max number of permitted users makes it difficult for facility to be used in a computer lab setting (where it would be especially useful)". As noted earlier, over a third of our survey respondents experienced at least one turnaway, although short user sessions still gave access to more users at peak times than for print. For subjects in which longer consultation of material is required, a licencing model like *Safari*'s will not offer value for money.

Other approaches may not be any better. The need to purchase one user licence per copy of a book for *netLibrary* [16] is expensive for libraries, while *Ebrary* [17], although offering unlimited user access, places extra cost on the user by charging a premium rate for printing. Librarians and users will need to exert pressure on publishers for better licencing conditions. The "slice and dice" approach, whereby wider access is facilitated to individual chapters (e.g., *Cavendish eCompile* [24]) or to compilations of material from different sources (e.g., *XanEdu* [25], *SafariU* [26]), may become more prevalent. Some publishers may cut libraries out of the chain altogether. *Safari* itself offers a recent example with its announcement of *SafariX Textbooks Online* [27]. Pearson Education and O'Reilly Media will market this service directly to students, offering any of 300 texts for subscription at half the price of purchasing the printed version.

A recent product announcement offers some encouragement on licencing. An Australian company, Ebooks Corporation Ltd., has been working with a number of advisors, including publishers and libraries, to develop an e-books lending platform called *EBL* [28] that promises multiple concurrent use, online and offline access and chapters for electronic reserve circulation. Licencing models will include outright purchase of books but, while pricing was not yet determined at the time of writing, there will be a recurrent maintenance fee. *EBL* was expected to launch with over 10,000 STM titles from major publishers such as Taylor and Francis, Cambridge University Press and Kluwer. Its progress will be closely monitored.

Managing an e-book subscription is challenging for libraries. In the case of *Safari* certainly, the need to monitor licence usage consumes a lot of time and has required detailed scrutiny of usage statistics and extensive liaison to rectify inconsistencies. The facility to swap books every 30 days provides the opportunity for highly dynamic changes but involves liaison with a number of parties to ensure that the right decisions are made. Catalogue records also need to be added and deleted dynamically, with links correctly embedded in the MARC 856 field and tested for accuracy. Other links, including title-level access via the library Web site, are needed to make e-books more discoverable, and these too must track subscription changes. Monthly swapping at Bond University is seen as creating significant extra work [5]. Because e-books are still establishing themselves in libraries, it is essential that staff invest effort in understanding the nature as well as the volume of usage. This calls for regular discussion with faculty, while user survey activity will also contribute. Establishing the cost-effectiveness of this relatively new service is an additional challenge and requires a wider perspective than literal comparisons with use of printed books.

Another point to consider is the positioning of e-books among other e-resources offered by libraries. Do we, and should we, market them distinctively to users, or are they simply another source of content which happened to originate as printed books? *Safari*'s creators see it as very much a collective reference resource rather than a set of individual titles, and the popularity of cross-title searching in our survey indicates that users may incline towards a similar view. It must also be emphasised that the Irish universities' project has focused on a particular type of e-book service, textbook provision, specifically aimed at IT subjects. There are other types of service, notably reference collections and early printed books, which interest other audiences (particularly researchers), in different disciplines.

Reference collections such as *Oxford Reference Online* [29], *xreferplus* [30] and *Gale Virtual Reference Library* [19] typically aggregate over 100 titles such as dictionaries and encyclopaedias. These services make very effective use of the online environment to support quick reference and should ultimately replace rather than replicate parts of libraries' printed reference collections. Collections of early printed books such as *Early English Books Online (EEBO)* [31] and *Eighteenth Century Collections Online (ECCO)* [32] have also emerged as highly significant sources for scholars in a range of disciplines, but particularly the humanities. These collections are expensive but are offered for purchase rather than annual subscription, although there are some recurrent maintenance costs. They hugely extend the collections of holding libraries. Licencing conditions are better, but issues such as cataloguing and on-screen presentation apply as much to these collections as to textbook services like *Safari*.

Conclusion

The Irish e-books project has yielded encouraging results for academic libraries, at least in technology and business subjects. Where content matches need, e-books can support the academic mission effectively, saving time and adding value as a collective online reference

resource rather than a set of individual titles. There is a definite synergy with e-learning. For libraries they require considerable staffing input but open up possibilities for dynamic and cost-effective collection management. At this stage they can certainly supplement and successfully co-exist with printed books, although Snowhill's comment that "It is not clear that academic libraries can replace print with e-books as a long-term goal" [1] continues to hold true. New products, technologies and opportunities continue to emerge, however, and the future for e-books looks bright, especially if easier on-screen reading and more flexible, customer-oriented, licencing can be realized.

Acknowledgements

I wish to acknowledge the invaluable contributions of my colleagues in the CHIU E-Books Working Group: Lisa Callaghan (Dublin City University), Mary Delaney (National University of Ireland Maynooth), Arlene Healy (Trinity College Dublin), Peter Hickey (University College Dublin), Mícheál Ó hAodha (University of Limerick) and Máire Domhnat Kirakowska (University College Cork). I am also indebted to the members of the local e-books working group at NUI, Galway, Monica Crump, Patricia Ffrench, Trish Finnan and Jane Mulligan, as well as to Peter Corrigan, Head of Library Systems.

Notes and References

[1] Snowhill, L. "E-books and their future in academic libraries: an overview". *D-Lib Magazine*, 7 (7/8), July/August 2001. <[doi:10.1045/july2001-snowhill](https://doi.org/10.1045/july2001-snowhill)> [accessed 4 October 2004].

[2] Dublin City University, National University of Ireland, Galway, National University of Ireland, Maynooth, Trinity College Dublin, University College Cork, University College Dublin and University of Limerick.

[3] Safari® Books Online, <<http://www.safaribooksonline.com/>> [accessed 4 October 2004].

[4] Power, C. "Online publishing is king in geek's book" *The Irish Times*, 2 April 2004. <<http://www.ireland.com/newspaper/finance/2004/0402/2011169420BWWIRED02.html>> [accessed 4 October 2004].

[5] Abbott, W and Kelly, K. "Sooner of later! — Have e-books turned the page?". VALA 2004: Breaking Boundaries: Integration and Interoperability. 12th Biennial Conference and Exhibition, 3-5 February 2004, Melbourne Convention Centre. <<http://www.vala.org.au/vala2004/2004pdfs/46AbbKel.PDF>>. [accessed 4 October 2004].

[6] Connaway, L.S. and Lawrence, S.R. "A comparison of the functions and processes associated with identifying, selecting, acquiring and organizing paper books and electronic books". ACRL 11th National Conference: Learning to make a difference, Charlotte, North Carolina, 10-13 April 2003. <<http://www.ala.org/ala/acrl/acrlvents/connaway.PDF>> [accessed 4 October 2004].

[7] Dillon, D. "E-books: the University of Texas experience, part 2". *Library Hi Tech*, 19(4), 2001, pp.350-362. <<http://konstanza.emeraldinsight.com/vl=8912548/cl=79/nw=1/fm=docpdf/rpsv/cw/mcb/07378831/v19n4/s5/p350>> [accessed 4 October 2004].

[8] Safari® Bookshelf, <<http://safari.oreilly.com/>> [accessed 4 October 2004].

[9] Survey: Irish Universities Safari Electronic Books User Survey,

<<http://140.203.12.136/survey/ebooksall/>> [accessed 4 October 2004] .

[10] Irish Universities Safari Electronic Books User Survey,
<<http://www.library.nuigalway.ie/survey/ebooks.htm>> [accessed 4 October 2004].

[11] Golderman, G and Connolly, B. "Bundles of Books" *Library Journal*, 15 October 2003.
<<http://www.libraryjournal.com/article/CA323335>> [accessed 4 October 2004] .

[12] Golderman, G and Connolly, B. "Bundles of Books, part 2" *Library Journal*, 15 January 2004. <<http://www.libraryjournal.com/article/CA371209>> [accessed 4 October 2004].

[13] Hane, P.J. "Getting into deep content". *NewsLink*, 55, May 2004.
<<http://www.infotoday.com/newslink/newslink0405.htm#SpotLight>> [accessed 4 October 2004].

[14] A9.com home page, <<http://www.a9.com/>> [accessed 4 October 2004]

[15] Coyle, K. "E-books: it's about evolution, not revolution". *Library Journal*, 15 October 2003. <<http://www.libraryjournal.com/article/CA323334>> [accessed 4 October 2004].

[16] *netLibrary* home page, <<http://www.netlibrary.com/>> [accessed 4 October 2004].

[17] *ebrary*® home page, <<http://www.ebrary.com/>> [accessed 4 October 2004].

[18] ScienceDirect Info,
<http://www.info.sciencedirect.com/sd_updates/press/archive2004/new_product_line.shtml>
[accessed 4 October 2004].

[19] Gale Virtual Reference Library(sm) home page, <<http://www.gale.com/gvrl/>> [accessed 4 October 2004].

[20] *Oxford Scholarship Online*, <<http://www.oxfordscholarship.com/oso/public/>> [accessed 4 October 2004].

[21] *Knovel*® <<http://www.knovel.com/>> [accessed 4 October 2004].

[22] *ebrary*® News and Events, <<http://www.ebrary.com/news/040623.jsp>> [accessed 4 October 2004].

[23] Lyttle, J.M. "Library without books". *The Guardian*, 22 April 2004.
<<http://www.guardian.co.uk/online/story/0,3605,1197495,00.html>> [accessed 4 October 2004].

[24] Cavendish Publishing FAQ,
<<http://www.cavendishpublishing.com/html/eCompilefaqs.asp>> [accessed 4 October 2004].

[25] Project *Xanedu*® <<http://www.xanedu.com/>> [accessed 4 October 2004].

[26] *Safari*®U <<http://academic.oreilly.com/safariu-more.csp>> [accessed 4 October 2004].

[27] *Safari*®X, <<http://www.safarix.com/>> [accessed 4 October 2004]

[28] Ebooks Corporation Launches Library Platform: EBL offers a pioneering approach to ebook lending, Press release: June 26th, 2004,

<http://www.ebl.ebooks.com/news_events.asp?news=7> [accessed 4 October 2004].

[29] *Oxford Reference Online*, <<http://www.oxfordreference.com/pub/views/home.html>> [accessed 4 October 2004].

[30] *xreferplus* home page, <<http://www.xreferplus.com/>> [accessed 4 October 2004]

[31] *Early English Books Online*, <<http://eebo.chadwyck.com/home>> [accessed 4 October 2004].

[32] *Gale Eighteenth Century Collections Online*,
<<http://www.gale.com/EighteenthCentury/>> [accessed 4 October 2004].

Copyright © 2004 John Cox

[Top](#) | [Contents](#)
[Search](#) | [Author Index](#) | [Title Index](#) | [Back Issues](#)
[Editorial](#) | [Next article](#)
[Home](#) | [E-mail the Editor](#)

[D-Lib Magazine Access Terms and Conditions](#)

doi:10.1045/october2004-cox