E-Books Down Under

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Abstract

Australian libraries have been early adopters of groundbreaking e-book initiatives for the past 10 years, helping to build and shape some of the innovative models and tools we use today. There has been a significant shift to e-preferred collection policies and e-book acquisition programs (including demand-driven acquisition [DDA]) are generally substantially larger and more established in Australia than North America.

In 2006, Swinburne was the first ever library to load the full EBL catalog into its library OPAC and make all titles available for immediate access using EBL's DDA model. Evidence from University of Western Australia (UWA) shows that DDA is more effective in selecting relevant material for the collection. As a result, UWA is currently implementing an e-preferred strategy across all monographic acquisition processes.

This presentation will present and discuss studies from two institutions that have shaped e-book collections in Australia and look back at the bold beginnings of demand-driven acquisition and to where Australia is now—where a markedly more established e-book purchasing market exists.

Introduction

Swinburne University of Technology and the University of Western Australia are very different kinds of institutions, far apart both in geographic location and in their history and character as universitie,s. However they are both, in their own ways, moving towards strong e-preferred strategies and an increasing reliance on e-books.

The University of Western Australia (UWA), established in Perth in 1913, is a member of the Group of Eight, a coalition of leading Australian universities. These are, generally speaking, the longest established universities in Australia with intensive research outputs and comprehensive teaching profiles. Located in Melbourne, Swinburne University of Technology traces its history to 1908 and became a university in 1992. With a focus on science, technology, innovation, business, and design, it is one of Australia's dual-sector universities, offering courses at higher education and vocational level and with an expanding research profile.

Swinburne was an early adopter of a strong e-preferred strategy generally, and was the first library in the world to launch a complete implementation of EBL's demand-driven acquisition (DDA) model in July 2006. Seven years later, Swinburne's e-book strategy is still largely built around that original DDA e-book model, now much expanded, with the addition of e-book aggregation collections, publisher packages, and title-by-title e-book acquisition. In 2010, for the first time, Swinburne purchased more e-books than print books and, in 2013, provides more than twice as many e-books as print books in its collection.

The University of Western Australia took the plunge much later, only piloting DDA through EBL in the first semester of 2010. Being later to implement DDA, UWA was able to benefit from the experiences of Australian universities that were already EBL-DDA customers (Swinburne among these). UWA loaded approximately 110,000 titles into the catalog, and the results were overwhelming. During the 5 month trial period, over 6,000 UWA staff and students used the service, and the feedback was positive. The pilot report recommended the continuation of EBL-DDA, and the ongoing success of the model was a contributing consideration in the proposal of an e-preferred strategy across the various modes of monographic acquisition. UWA are now in the process of preferencing electronic books across title-by-title acquisition, via collection

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profiles (for approval plans), and across publisher and aggregator collections, with acquisition triggered by usage the preferred method of acquisition.

The E-Book Story at Swinburne

While researching the background for this paper, it came to us somewhat as a surprise to find that Australia played a pivotal role in the beginnings of DDA of e-books in academic libraries. Kari Paulson has described (2011) how EBL's DDA model evolved initially through a collaboration with Alison Sutherland, then at Curtin University in Perth. The idea was a logical extension of the experience of many Australian libraries in implementing publisher "big deal" e-journal collections which began in the mid-1990s. These deals in the early days usually involved maintenance of existing journal subscriptions, although often converted from print to e-journals, which could then be expanded to provide access to the publisher's complete portfolio of journals for an additional fee.

As a smaller library with a relatively modest collection of print journals, we were able to use these developments, together with the arrival of large aggregation databases, to massively expand the number of journals available to our users, but when we looked at the usage of these large bundle e-journal collections, we were often surprised to find that usage was spread across the range of journals rather than being clustered in the journals to which we had previously subscribed. It was often difficult to see a correlation between usage of an e-journal and whether or not it had previously been a subscribed title.

We know that our experience at Swinburne was shared by colleagues at other Australian libraries. The librarians at Curtin University had also noticed that e-journals that had not previously been selected by the library were attracting high usage, and Alison Sutherland wondered whether this might similarly be the case for books. Rather than librarians attempting to select the e-books they thought the library users wanted and at least sometimes getting it wrong, Alison was thinking of ways to replicate the benefits of the "big deal" collections but for e-books rather than journals, offering a large universe of e-books for discovery and allowing users to choose the ones they wanted. Alison and her colleagues at Curtin began working with Kari Paulson from EBL on a prototype. Paulson wrote that "Sutherland's insights were in many ways the key to developing DDA" (2011, p. 65).

Sutherland's vision was only partially implemented at Curtin University, but she spoke about it at the VALA Conference in Melbourne in early 2006, and Swinburne's Associate Director, Gary Hardy, was in the audience. At Swinburne we had discovered through usage analysis of our e-journal packages that whether or not a journal had been selected by a librarian did not generally determine whether or not a journal was ultimately used, and we found similar results in one of our early e-book databases. We were coming around to the idea that, as with e-journals, maybe we should move away from trying to select individual titles that we hoped our users might want and instead put our efforts into what Rick Lugg has described as "curating a discovery environment" (2011, p. 17) so that our users could find what they wanted within a large collection of collections.

It seemed that what was holding back widespread adoption of the demand-driven model was concern over how it would play out, and Swinburne offered to test the concept in a real world implementation to see how it would work. Kari Paulson has written that "it was this 'suck it and see' approach of its librarians that made Australia the perfect test bed for piloting a radically new acquisition model" (2011, p. 64).

In July 2006, Swinburne loaded the entire EBL list of 34,000 e-books into the library catalog and made them all available for short-term loan with automatic purchase on the fourth loan. We wanted to test DDA in its broadest sense, so we chose not to use profiles which has remained Swinburne's approach with DDA to the present day. It would be up to our users to choose the e-books they wanted to use. The number of e-books added in the pilot seems quite small now, but at the time it was a massive expansion of e-book availability at Swinburne.

Over the years, Swinburne has continued to use EBL's DDA model as the primary component of its e-book collection policy with the addition of other publisher collections and title-by-title acquisition. In 2011, the number of e-books surpassed the number of print books in our collection for the first time. Our philosophy has been to provide a wide universe of e-books for discovery, so Swinburne does not use selection profiles as part of its DDA model and loads any nonfiction e-book with a purchase price up to US $300, the only other exclusion being for purposes of deduplication.

Increasing use of e-books over the past few years at Swinburne has changed the way we have approached purchasing single book titles, and print books in particular. Where once liaison and reference librarians would spend considerable time selecting single book titles for firm order based on selection profiles, single-title selection is now focused largely on selecting a much smaller number of single titles identified as high-use candidates because they are on reading lists, linked from the learning management system, or identified as high-demand titles through reports of active hold requests in the library management system. Just as the number of single-title journals we subscribe to has shrunk dramatically following widespread adoption of aggregator and publisher collections, so we now also focus on evaluating and selecting collections including e-book aggregations, publisher packages, and the pool of titles available through DDA to provide the universe of discovery for a general use collection.

The proportion of e-book loans in the purchased DDA e-books over nonpurchased DDA e-books is increasing over time and, in 2013, accounts for 77% of all loans. Although we have purchased only a very small number of e-books through DDA, these e-books selected by our users continue to generate high use for which we pay no further charges following purchase.

In 2013, an interesting accident gave us some valuable insight into the use of patron-selected versus librarian-selected e-books. In the first half of the year there was some miscommunication, and our reference and liaison librarians, using selection profiles provided through our library book vendors, began selecting for firm ordering e-book titles that were actually available through EBL DDA. By the time the error was discovered, 1,128 e-books had been firm ordered by our librarians while almost exactly the same number, 1,123, had been autopurchased by our users. The most startling statistic we found after doing some analysis was that 100% of the autopurchased e-books had recorded use following purchase, while only 21% of the librarian-selected e-books recorded any use at all, and autopurchased e-books recorded much higher average use. The average number of loans across the librarian-selected e-books was 2.57 while the autopurchased

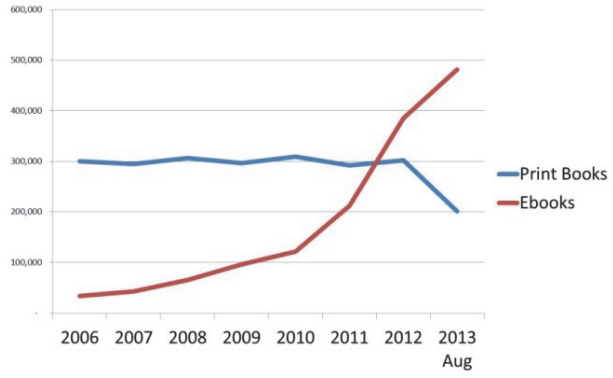

Figure 1. Swinburne Holdings of Print and E-Books 2007–2013

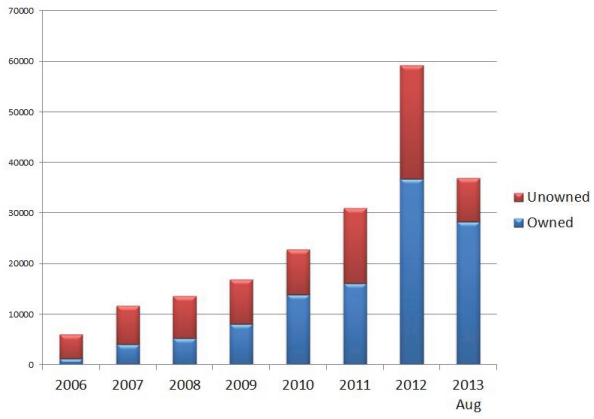

Figure 2. Swinburne DDA Loans in Owned and Unowned E-Books July 2006–August 2013

e-books averaged 6.67 loans following purchase, or 9.67 loans in total if we include the three short-term loans prior to purchase.

We stopped the librarian selection of EBL e-books in June 2013 and since then have relied on DDA for general selection together with our other e-book collections. Title-by-title librarian selection tasks are now focused on identifying known high-demand e-books for manual purchase through liaising with academic staff to ensure we know about e-books linked from the learning management system or on core reading lists. This is an area where librarian selection activities and liaison with our academic staff enhances the DDA model by ensuring that we can retain access to high-demand titles into the future by manually purchasing these titles for perpetual access, and we can also purchase high-use e-books which might be available via multiple providers under the most effective access model.

The E-Book Story at UWA

In contrast to Swinburne University's "suck it and see" (or more experiential) approach to DDA for e-books, the philosophies underpinning the processes and policies of e-book acquisition at UWA were somewhat slower to evolve.

In late 2009, UWA developed a plan for piloting DDA with EBL in 2010. The plan outlined the type of purchase model to be used; the scope of the EBL catalog to be made available; the funding model and budget allocation; ordering and invoicing processes; the management of EBL titles within the OPAC, the Electronic Resource Management (ERM) module of our Library Management System, and in SFX (our open URL resolver); and the timeframe and resourcing requirements. Having the benefit of other institutions' experiences in making these plans, the pilot proposal advocated an unmediated purchase model with purchase triggered by the fourth loan, and only a small number of exclusions placed upon the range of EBL titles made available.

We ran the pilot for Semester One of 2010 (15 February–20 June). Over 110,000 titles were added to the catalog at the outset, and over 6,500 UWA staff and students utilised the service. This uptake was impressive given that promotion of the pilot was kept to a minimum (so as to better create a "natural" environment in which to monitor usage and expenditure for the pilot report). An e-mail address was also set up enabling users to send through any queries or feedback on the EBL content, and the majority of e-mails received were positive. A comparison was also conducted of the usage of the EBL-DDA titles purchased during the course of the pilot and print titles purchased over the same period. This comparison revealed that 77.8% of the EBL-DDA titles saw further use after purchase in contrast to only 29.1% of the print titles purchased over the same period. On the back of this popularity, the overwhelming recommendation to come out of the pilot report was to implement EBL DDA on an ongoing basis with limited mediation and to continue with purchase upon the fourth loan.

With the success of EBL DDA we considered how the model might be implemented across other vendors and other areas of the collection. Before taking that step, however, it was felt that an overarching collection principle needed to be established which defined the University's book preferences in relation to format, e-book models, and mode of acquisition. This became the e-book strategy. The development of the e-book strategy identified numerous advantages that e-books held over print for both the end user and for Information Services. The advantages to the end user centered on ease of access and use. E-books offer 24/7 access to anyone with an Internet connection, allow for concurrent usage, and can be accessed from most portable devices. E-books are also easier to search, and the font can be adjusted to suit the user's personal preferences. From Information Services' point of view, e-books presented reduced accessioning and collection maintenance work, provided greater scope for servicing remote clients, and allowed for the repurposing of collection space into collaborative learning areas. On the strength of this and the positive experience of the EBL pilot, the strategy recommended the University preference purchasing electronic books over print where they are available either simultaneously or within 12 weeks of publication of print.

Once an e-preferred strategy was established, further work was then conducted on establishing which of the various e-book models on the market would provide the best fit for the University. When analysing the various models, it was recognised that each model had a number of key elements including those found in Table 1.

A primary concern in selecting preferred e-book models was to establish which was the most cost effective. In order to do this, analysis was carried out of the usage and expenditure figures for 2012 across titles purchased via EBL DDA, titles purchased on a title-by-title selection basis, titles available in aggregator and publisher collections. and print titles. Interestingly, it was discovered that, of all the various e-book elements, the selection model was the one that had the most influence on cost effectiveness.

The analysis began by examining titles purchased through EBL-DDA program in 2012, and it revealed that titles selected via this method saw continued use at a much higher percentage (99.58%) than titles acquired by any other means. The continued use of these titles after autopurchase greatly improved the cost per use figure.

In comparison, those e-books purchased through title-by-title selection did not see as high a continued use figure and, of those titles purchased in this manner in 2012, 48.34% were

E-Book Element	Values
Simultaneous usage	▪ Single user ▪ Multiuser ▪ Unlimited user ▪ Nonlinear lending/Access model
Acquisition	▪ Via a book vendor ▪ Direct from the publisher ▪ Via a third party vendor
Selection model	▪ Title by title ▪ Collection level (publisher or aggregator) ▪ Demand driven acquisition (DDA)
Purchase model	▪ Outright purchase ▪ Subscription ▪ Short-term loan (STL)—rental option
Viewing options	▪ Browse—allows a short period of free access to assess if the book is what the user wants ▪ View online—triggers a purchase or loan of the book for the user to use over an extended time ▪ Download (for multiple days)—allows the e-book to be downloaded onto a portable device for viewing on the go

Table 1. Points of Consideration in Evaluating E-Book Models

No. of titles purchased	3,863
No. of titles loaned	19,909
No. of loans	21,230
% of titles with use after purchase	99.58% (average of 7 accesses post purchase)
Average cost of a loan	A$12.78
Average cost of an e-book	A$117.98
Overall cost per use	A$25.99

Table 2. EBL-DDA Selection Model 2012

never borrowed. Of the titles that were used, these were largely because they were part of a reading list and their high usage made them more cost effective.

UWA holds around 40 publisher collections. These collections were generally purchased as backfiles and as an outright purchase. Analysis of the 2012 usage of four of these collections revealed that usage tended to be limited to a select few titles within the collections generally resulting in a much higher cost per use figure. Analysis of cost per use for the print titles purchased in 2012 was also conducted. Although the average cost of a print title was lower than the average cost of an e-book, the overall usage of the title was low. This resulted in a cost per use figure that was significantly higher than for e-books.

This analysis confirmed the cost effectiveness of e-book models over print selection and thereby provided further foundation for our preference for electronic over print. It also highlighted the cost effectiveness of DDA over other methods of selection. The only part missing from our analysis was a consideration of third-party aggregation subscription models, and this was because UWA did not subscribe to one. To address this, we conducted a title overlap analysis across titles loaned and purchased via the EBL catalog from 2010–2012 and content in two aggregator collections. This analysis found that approximately 8,800 titles that were either short-term loaned or autopurchased via EBL-DDA were also available in the aggregator collections.

No. of titles purchased	211
No. of titles loaned	109
No. loans	729
% of titles with use after purchase	51.66% (average of 6.68 accesses post purchase)
Average cost of an e-book	A$104.04
Overall cost per use	A$30.11

Table 3. Title by Title Selection Model 2012

	Publisher A	**Publisher B**	**Publisher C**	**Publisher D**
No. of titles in collection	233	84	4,674	333
No. of titles loaned	43	46	891	127
No. of loans	610	398	5,111	658
% of titles that saw no activity	81.55%	45.24%	80.94%	61.86%
Average cost of an e-book	A$104	A$182	A$27	A$88
Average cost per use	A$40	A$38	A$25	A$44

Table 4. Publisher Collection Model 2012

No. of titles purchased	13,938
No. of titles loaned	6,309
No. of overall loans	24,247
% of titles that saw no activity	54.7%
Average cost of a print book	$59.77
Overall cost per use	**A$126.81**

Table 5. Print Collection Model 2012

	DDA	Title by title (e-book)	Publisher Aggregation				Title by title (print)
			Publisher A	Publisher B	Publisher C	Publisher D	
Cost per title (AUD$)	$117.98	$104.04	$104	$182	$27	$88	$59.77
Cost per use (AUD$)	**$25.99**	**$30.11**	**$40**	**$38**	**$25**	**$44**	**$126.81**

Table 6. Cost Per Use Across Various Selection Models

	Package A	Package B
Number of DDA titles loaned which were also in Aggregator collection	8,769	8,837
Cost of titles via Aggregator (subscription + purchasing high use titles)	US$81,300	US$138,320
Cost of titles via DDA (short term loans + auto purchases)	US$108,770	US$103,422

Table 7. Aggregator Collection Model 2012

E-book Element	Preference	Notes
Simultaneous usage	▪ Nonlinear lending/Access model	The nonlinear/access model provides a good balance between price and simultaneous access
Acquisition	▪ Via UWA's preferred vendor	Allows integration with the profiles and provides a single platform for selection and acquisition
Selection model	▪ Demand-driven acquisition (DDA)	Usage statistics support the relevance of DDA
Purchase model	▪ Outright purchase ▪ Short term loan (STL)—rental option	Outright purchase affords perpetual access and ensures the growth of the collection Short-term loan serves as a vehicle for DDA and ensures the relevancy of the collection
Viewing options	▪ Browse—allows a short period of free access to assess if the book is what the user wants ▪ View online—triggers a purchase or loan of the book for the user to use over an extended time ▪ Download (for multiple days)—allows the e-book to be downloaded onto a portable device for viewing on the go.	Access to all three viewing options would better support user needs: free browse time in which to assess the relevancy of the title; view online for those instances where only a chapter or two are necessary; download for ongoing access for the length of the loan

Table 8. UWA E-Book Preferences

Cost analysis was then conducted comparing the cost of purchasing these titles via DDA against the cost of subscribing to them via the aggregator and purchasing the high-use titles at the end of the subscription period. The results showed that it would have been cheaper to provide access to these titles through Aggregator A rather than through DDA. Aggregator B, however, would have been more expensive. As such, it was clear that third party aggregation could prove to be a cost effective way to purchase e-books depending on the annual cost of the subscription.

The analysis also looked at a number of other elements of the e-books model, especially in relation to the cost benefit of various simultaneous usage models and the benefits of owning e-book content outright over exclusively renting. Armed with all of these data, we developed a raft of preferences across the various e-book models available.

We then sought to devise an e-book implementation strategy that satisfied these preferences, and to achieve this, it was decided to look at collections in terms of a frontfile and a backfile with a different strategy for each. The frontfile would represent those more recently published titles with the backfile covering the last 4–5 years of content. For the backfile, we decided that the most cost-effective strategy for us was to combine EBL DDA with Aggregator A, suppressing any title overlap in EBL and purchasing outright any titles identified as high use at the end of each subscription period. Not only would this expose a considerable amount of new and unique content, it would also capitalize on the two most cost effective ways of providing e-book content.

For the frontfile, the focus was on how the collection profiles that had been developed for the University's print approval plan could be redeployed to provide a profile for delivering new DDA e-books from various vendors into the discovery layer. If the title recommended by the profile is available electronically, our first preference would be to make the title available via DDA in our discovery layer and let usage decide its purchase.

If the title is not available for DDA, but is available as an e-book, we have developed a hierarchy of e-book model preferences based on the number of users available and the price. If outright purchase is the only option, then the following models are preferred in this order:

1. Nonlinear Lending model (equivalent to list price)
2. 3 user models (between 1.5 to 2 times list price)
3. Single user models (equivalent to list price)

If a title identified by the approval plan is not available in electronic format at the time of the recommendation, we want to be able to "shelve" the recommendation for 12 weeks to allow for the electronic edition to be published, and only then, if it is still not available in e-book format, we will purchase the print edition.

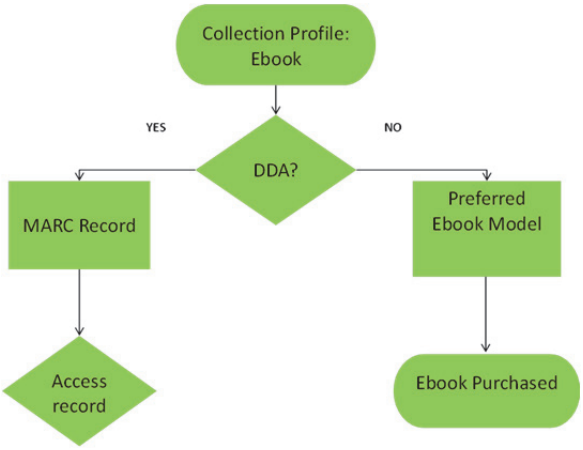

Figure 3. Collection Profile Workflow E-Book Scenario

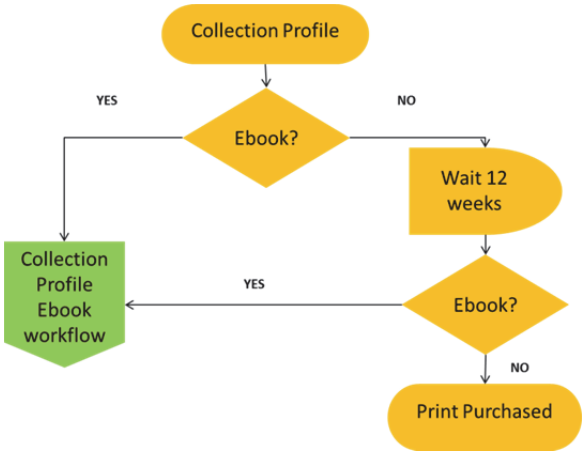

Figure 4. Collection Profile Workflow Print Scenario

Conclusion

Swinburne University, albeit inadvertently, became the first library to successfully implement DDA with EBL. Analysis of usage statistics for e-journal packages and e-book databases, prior to taking the plunge with DDA, had indicated that material previously identified and selected by library staff was not necessarily seeing the bulk of use. DDA not only provided an opportunity for Swinburne to let their users select the material appropriate to their information needs but it also massively increased the number of e-books made available to their users. The uptake was swift and tremendous with the usage statistics continuing to climb. Being early adopters of EBL-DDA, Swinburne has had 7 years to develop their e-book collection policies around the success of DDA and they now find that the wealth of their usage occurs across their owned content. It is the usage that occurs after purchase is automatically triggered that is the most compelling feature of DDA.

Although later to implement DDA, UWA also found the uptake impressive and began to investigate whether this selection model could be used with other vendors and across other parts of the collection. They undertook usage and costing analysis in a bid to establish a cost per use figure across the various modes of selection. They also developed a framework of e-book elements against which to measure the various e-book models available from which they developed a hierarchy of preferred usage models. From this analysis, they developed a strategy for e-book acquisition at UWA which was both cost-effective and which satisfied the needs of their users.In this way, DDA has shaped the e-book (or indeed monographic) collection policies of both of these institutions.

References

Hardy, G., & Davies, T. (2007). Letting the patrons choose—Using EBL as a method for unmediated acquisition of e-book materials. Proceedings from Information Online 2007*: The 13th Australian Library and Information Association (ALIA) Exhibition and Conference.* Sydney, New South Wales: Australian Library and Information Association. Retrieved from http://hdl.handle.net/1959.3/5065

Lugg, R. (2011). Collecting for the moment: Patron-driven acquisition as a disruptive technology. In D. A. Swords (Ed.), *Patron-driven acquisitions: History and best practices* (pp. 7–22). Berlin, Boston: De Gruyter Saur. http://dx.doi.org/10.1515/9783110253030.7

Paulson, K. (2011). The story of patron-driven acquisition. In D. A. Swords (Ed.), *Patron-driven acquisitions: History and best practices* (pp. 63–78). Berlin, Boston: De Gruyter Saur. http://dx.doi.org/10.1515/9783110253030.63