A small-scale patron-driven acquisition (PDA) study at the University of Huddersfield is discussed in this article. The authors briefly describe the background to PDA at Huddersfield before discussing data from the 2014 PDA pilot with the e-book supplier Ebook Library (EBL). The pilot produced two sets of data, usage reports using COUNTER statistics and a short questionnaire designed by the Library. These results led to a major alteration to the collection management and development policy, where PDA is now embedded into the Library book fund.

The customer is always right?
Assessing the value of patron-driven acquisition at the University of Huddersfield

Introduction

The University of Huddersfield has been experimenting with the use of patron-driven acquisition (PDA) or demand-driven acquisition (DDA) since 2010. In this time, the Library has evaluated a number of suppliers with varying levels of success. In 2013/14 it was decided that the Library would establish a much larger trial with Ebook Library (EBL), amounting to over £100K, as part of a co-ordinated approach to improve user experience. This paper will briefly explain the background to PDA at Huddersfield before looking at the results of the 2014 PDA pilot and how these have led to a major shift in the collection management and development policy, which sees the use of PDA as a major part of Library book fund expenditure going forward.

Although this represents a fairly small-scale study at a medium-sized university in the UK, the authors believe that there are valuable insights to be gained from the study, which complements the larger studies of e-book use in general as discussed below.

Background and literature review

A common comment from student panels and in the National Student Survey (NSS) feedback is that there are not enough books in the library⁴, and this has led to libraries spending a good deal of time trying to tackle the issue. One such way is PDA.

There has been much discussion over a number of years of the merits of expert selection versus patron-driven selection, indeed this predates the e-book²,³. Price and Macdonald⁴ describe the two methods of book purchase as ‘user selected’ (those titles purchased by the patron after a number of uses by a library user) and ‘pre-selected’ (books purchased by librarians before being used by library users).

Evidence from the 2010 PDA pilot at Huddersfield and from other studies⁵,⁶,⁷ is that pre-selected acquisitions are not well used in comparison to user-selected titles. Indeed, previous pilots at Huddersfield found that PDA titles from the 2010 pilot were used twice as much as e-books in the purchasing year. In a study at Kent State University⁸, although 100% of PDA titles were used in the first year, 40% of all print books in the...
collection had never been used at all. Kent State suggested that the unit cost of a PDA title would be less than a print book over a longer time period, although it is still too early for most PDA trials to report conclusively on value for money over more than one year. It should be noted, however, that when comparing usage of e-books and print, print books cannot generate as much usage over a given length of time, e.g. a print book may be loaned for two weeks, constituting one use, whereas an e-book may have many user sessions in this period.

PDA trials vary in their scale and, while this is a factor of the budget available, it is also influenced by the amount of mediation and control exerted by the library. Profiling of PDA can range from the entirely unmediated to the tightly controlled, even down to specific subject areas. This amount of profiling will have a clear effect on the use of the collection, which is not something that has been considered in the large-scale usage studies. For example, does tighter control lead to a greater percentage of purchases against the whole PDA collection as the pool is smaller? What we are unable to tell from Levine-Clark’s study of arts and humanities titles is whether the higher-than-average use of arts material was a factor of this. Fischer suggests that higher usage may be down to the familiarity of e-book use amongst certain groups of users and this could explain the averages for arts and humanities versus other subjects. The study at Huddersfield tries to develop this idea further, allowing general comparisons to be made at a subject level between classification of the e-book and the user.

As noted above, Huddersfield has been experimenting with PDA since 2010. The varying levels of success of the first pilots from 2010-2013 were, in part, caused by the time of the academic year that the pilots took place – usually in the third term – although both Huddersfield and Cambridge came to similar conclusions that the exam revision period was an appropriate time to run a pilot.

The 2010, 2011 and 2012 pilots were with the same supplier, which gave the Library a large amount of usage data to look at in order to see how PDA titles performed against the rest of the Library’s e-book collection. Figure 1 shows the average use per title of the first three pilots versus all titles in the collection.

This data allowed the Library to justify further pilots of PDA going forward, and it also allowed the Library to understand the importance of profiling in the setting up of PDA. It is interesting to note that far more control was exerted over the areas selected for the 2012 trial and this is the one where titles have performed the worst of the three pilots, showing consistently lower use overall when compared to other years. Data from the 2013 pilot could not be compared with the first three years as the supplier used COUNTER BR2 reports instead of BR1. In the 2013/14 academic year, it was decided that the pilots had given the Library enough information to establish a far larger trial with a new supplier, EBL.

![Figure 1. Average use per titles for the 2010-12 PDA pilots](image)
The EBL pilot

The EBL trial ran from 7 February to 13 April 2014, during which time a total of £103.5K was spent. It must be said that neither Huddersfield nor EBL forecasted that this amount would be spent in such a short space of time, but it should also be noted that, unlike previous pilots, the PDA pilot was deliberately launched in the busiest term and the Library set up a marketing campaign to promote the trial.

Using lessons learned from the previous trials, the Library made a conscious decision not to exert too much control over the books that would be used; profiling of the titles was therefore kept to a minimum. This was done in order to give users as much choice as possible and to allow the data to be analysed as a ‘whole collection’. Parameters were set up to include all subjects but only titles published after 1 January 2010, the only exception to this being law and computing titles where, due to course requirements, only titles published after 1 January 2013 were selected. EBL titles that had already been purchased as an e-book from another supplier were de-duplicated to prevent purchase of existing e-titles. The maximum price was set at £120, and readership levels were restricted to undergraduate and postgraduate. Titles were uploaded to the knowledge base in order to be available via Summon, the Library’s web-scale discovery system.

Data analysis

The pilot analysed two sets of data, COUNTER reports were tracked via Dewey number and a short questionnaire was completed by users the first time they logged on. The questions were designed by the Library with advice from EBL:

- Subject area?
- School?
- Readership level?
- Do you have a preference for reading electronic or print books? (with an option: print, electronic, or no preference)
- Will you be accessing this book on a mobile device – if yes, what type?

The analysis looked at 637 titles (only 635 have Dewey numbers). It should also be noted that there was a minor issue with the survey: it was not turned on in time for the launch, resulting in some data being lost on the first users accessing EBL titles.

Dewey range

The Dewey numbers used below are based on the ten main classes and hundred divisions. For further information, please refer to documentation at OCLC.

Figure 2 shows that the spread of subjects leans heavily towards the social sciences, with relatively small numbers from the sciences, humanities and arts. Of titles purchased, 75% were in the 300s and 600s.

Drilling down, the purchases in the 000s were mostly media titles. Only two computing titles were bought; however, psychology titles were reasonably popular, accounting for 4% of purchases. Unlike previous PDA pilots at Huddersfield, only 19 ‘research skills’ titles were purchased (001.4 and 300.72), the vast majority of purchases in the 300s being in sociology. Education was the second highest subject to receive purchases, accounting for 14% of the total titles. Figure 3 shows that economics and social services were also well used.

Figure 4 shows the other top three subject areas: medicine/nursing received the most purchases (15%), with business and management coming third (13%) and very few engineering titles purchased.
Art received very few purchases; music only 11 and these were very eclectic choices, ranging from music education and Debussy to punk and black metal! Purchases in the 790s were shared between sport and cinema, each accounting for about 50%.

There were minimal purchases in the areas of religion, language, science, literature, history and geography.

**Usage by School**

Figure 5 may lead to the assumption that purchases were dominated by one or two Schools, i.e. health and business. However, this chart shows that the distribution of users was perhaps a little more representative of the student body (based on 625 users who listed their School). It appears that health students’ purchases fell into four broad...
areas (150-159, 303-309, 360-369, 610-619), which accounted for around 25% of all purchases. Education’s use almost matches the purchases in the 370s; however, music, humanities and media is spread out across far more areas, which reflects the diversity of subjects taught in the School.

Figure 6 shows that the only real differences in use of PDA when compared to the average undergraduate FTEs at Huddersfield (2010-2012) are in health (higher use) and the arts, and computing and engineering (lower use). Interestingly, the humanities PDA use is slightly above their representation in the University, which is not evident from the Dewey data.

Usage by patron type
Figure 7 shows that the majority of purchases were made by undergraduate students, with staff making up a very low amount (based on 625 who left details). Taught postgraduates (PGT) are reasonably high but, as can be seen below, these are heavy users in Schools with high PGT populations, e.g. business and education.

Figure 8 shows that the highest users of PDA are third-year undergraduate students (with the exception of art, design and architecture, and computing and engineering – both very low users of PDA).

Format type and mobile use
As part of the survey, users were asked for a preference for format type. There were only 527 meaningful responses and there was no clear preference for a format. However, we can conclude that e-book use is certainly established for those that used the pilot (Figure 9).
However, answers to the question regarding mobile use revealed that of the 586 replies received, the majority were not mobile users. Of those that did name a specific device, the majority of users preferred either an iPhone or iPad.

**Costs**

During the nine weeks of the pilot, 6,071 titles were accessed from a pool of nearly 133,000 titles; 637 of these were purchases. In total, a little over £50K was spent on purchasing these titles. Short-term loan (STL) titles, those accessed but not purchased, represented the rest of the expenditure. At the time of the trial, the Library was paying around 10% of the purchase cost for a one-day STL. If the STL titles were only used once (and many were used twice), this works out at £8.70 per title.

The average cost of a title purchased was £79.48, although this varied greatly between publishers and disciplines. Costs for purchases from the Schools of Computing and
Engineering and Applied Sciences were slightly above this, Art, Design and Architecture titles slightly below (Figure 10).

**Publishers**

The purchased titles came from a spread of 90 publishers. However, just four publishers accounted for 64% of the titles purchased (Figure 11).

**Year of publication**

Figure 12 shows that users preferred more recent titles (seven titles fell outside the profile) for all Schools apart from Art, Design and Architecture. This implies that publication years could be reduced without too much impact on the users.
Discussion

The pilot at Huddersfield was profiled using a relatively light touch in order to give users maximum choice. It appears that the Dewey range broadly maps onto the FTE numbers per School with the notable exceptions of the Schools of Art, Design and Architecture, and Computing and Engineering. However, when compared to the findings of the research carried out on student use of Library services by discipline as part of the Library Impact Data Project (LIDP)\textsuperscript{17}, this result could be predicted, as those two Schools are low users for both print and electronic material, Health being the highest user overall in both sets of data.

Previous trials in the UK have asked questions about demographics, for example Kelly\textsuperscript{18} assumed that many titles not on reading lists were purchased by research students rather than undergraduates. The data from Huddersfield shows that researchers and academic staff were relatively low users and that it was final-year undergraduates who drove the usage. The implication here is that many of the books could be for dissertation use, which would also explain why they are not already in the Library’s collection. This gives another strong argument for the adoption of PDA in improving student satisfaction, as it would have been unlikely that Library-based acquisition would have purchased these titles. It has also been noted that the highest users of PDA at Huddersfield are the very students who are completing the NSS questionnaire.

The Huddersfield pilot was far larger than the Cambridge trial, which spent £9,784.75 on 117 titles. However, the average cost of a title was similar (£83.63 compared to £79.48) despite the Cambridge trial having a higher price threshold of £200 compared to £120 at Huddersfield.\textsuperscript{19} Fischer\textsuperscript{20} suggests that higher usage could be the result of more books being available in a given subject area. It would have been possible for the Huddersfield pilot to analyse a complete set of data from the whole collection of 133,000 titles, which would have given a picture of the number of titles in each subject area but, unfortunately, time constraints meant that this wider analysis could not be carried out. This would have allowed the pilot to see if titles selected bore a relationship with the total collection and the remaining STL titles. Indeed, conclusions were drawn about art subjects that were not fully investigated, e.g. there was a lack of titles available so use was always going to be low. Results from the study by Levine-Clark\textsuperscript{21} suggest that this needs to be investigated in more detail in future. If there is a breadth of material available to the arts subjects, it may be our preconceptions as librarians that could be preventing usage – we could be doing far more to promote e-books to arts students, for example. This will be developed as part of further investigations resulting from the outcomes of the LIDP research.

Kelly suggests that ‘some, at least, of the PDA purchases were titles stumbled upon and browsed out of passing interest, very much like browsing the shelves of print books’\textsuperscript{22}. While this paper is not suggesting that serendipity was not a factor in some of the purchases, analysis of the data at Huddersfield suggests that towards the end of the pilot, the number of purchases was growing at a faster rate than the number of STLs, suggesting that a distinct group of titles was of interest to the user group. For future PDA, it will be interesting to see if this pattern persists.

In recent months, many publishers have announced that STL charges are due to rise\textsuperscript{23} and this will undoubtedly affect future PDA purchases. The Huddersfield pilot settled on two STLs before a purchase cost, which was approximately 120-150% of the e-book price, and it was thought that this provided value for money. However, if this rises to 180-200% of an e-book purchase, the model will have to be changed, for example to one STL, to reduce costs, as the budget is finite. Ultimately, if publishers insist on increasing these costs, future profiling will have to exclude certain publishers completely. It should be noted that purchases via PDA actually mean extra revenue for publishers; these titles were almost certainly not going to be purchased in the ‘pre-selected’ model. Therefore, an increase in
Conclusion and further plans

Fischer’s study of PDA at Iowa suggested that the results were ‘sufficiently positive’ to continue the experiment and that PDA could become part of the Library’s collection development programme; the results from the Huddersfield pilot concur. PDA books have become embedded in the collection – the 2010 titles have been used consistently since purchase and appear in the top 20 downloads every year. Titles from other years also continue to be used and compare well even against the very heavily used reading list titles. In addition, the EBL data shows that use is predominantly by third-year undergraduate students and that overall usage broadly matches the student population of the University.

From the basis of this study, it does appear that the customer is right as analysis of the data has enabled Huddersfield to conclude that PDA should no longer be regarded as a pilot, attracting patchwork funding, but be embedded into the collection management and development policy. It is now also part of the book fund. The 2014/15 PDA programme will look to learn from the data analysis. For example, in order to stretch the budget further, the 2015 PDA profile will reduce the publication date to the last two years for all subject areas. For the 2014 pilot, this would have reduced the number of titles purchased by a third.

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