
Embedding QR codes in the Bournemouth University print collection

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Bournemouth University (BU) has a strong collection of e-resources. Enhancing the availability of networked electronic information is deeply enshrined in our collection development activity¹ and has resulted in the growth of the number of e-books from just ten in 2002/3 to 90 000 at the start of 2012. Despite this heavy investment in e-resources, we still hear student perceptions that 'there aren't enough books in the library'. Questionnaire surveys can be blunt instruments and the question 'The library resources and services are good enough for my needs'² gives us little to work with when explaining that the print resources, which students strongly associate with the library as a place, are just part of the rich information landscape that the library provides. As the National Student Survey (NSS) scores become even more visible to the coming generation of discerning students with Key Information Sets (KIS) we need to look for ways to direct our readers from the highly visible physical library spaces that they inhabit to the wealth of e-resources provided by the library.

During the 2011/12 academic year, Library and Learning Support (LLS) at BU have been working on a project to embed QR codes within the library print collection to highlight available e-books from heavily used areas of the shelves.

PROCESS

Reading lists are at the heart of the process: using reading list content to drive code generation ensures that the QR codes are academically-led, covering the subject areas that academics are teaching. It also ensures that the codes are student-focused, providing e-resource discovery

Scan to your
smartphone



Or visit...

<http://bit.ly/tqQrSf>

...in your web
browser to find
ebooks on:

Corporate
strategy

658.4012

at the parts of the print collection students are most likely to access.

Reading lists are analysed to identify the subject area of the unit of study. By looking at the printed books on the reading list, we determine the Dewey number where students studying the unit are most likely to be looking for printed books. This sometimes challenges our professional judgement of which Dewey numbers relate to the subject but we are careful to locate the QR codes where students are actually looking for books on their reading list rather than where we (as librarians) *think* they should be looking.

The next step is to generate a search on the library catalogue for e-books in the subject area of the reading list. With a collection of 90 000 e-books we are finding that e-book coverage is good for the vast majority of subjects. Initial searches are carried out by administrative colleagues who have been given training in searching the catalogue. Searches are then validated by a subject librarian for quality control. All details are recorded on a spreadsheet for later use in producing QR code labels.

At this stage, a QR code and shortened URL for the catalogue e-book search is generated using 'bit.ly' (<http://bitly.com>). Bit.ly was selected as the URL shortener because the shortened URLs it generates are persistent and because it provides analytics on usage of the shortened URLs. Bit.ly also automatically generates a QR code for the URLs it shortens. The Dewey number, subject term, QR code and URL are then used to produce a label for an index block that is then shelved in the appropriate place in the library.

In order to cut down on the workload involved in producing the labels, mailmerge is used to create batches of labels from the data in the spreadsheet. Before printing the labels, they are checked for duplication against codes that have already been produced. For some subjects a single block displaying a code on the shelves is enough. In areas where there is a lot of material at the same Dewey number, duplicates are printed so that multiple blocks can be displayed within that classification. This ensures that the blocks have a visual impact in what can sometimes be bays of books with the same Dewey number.

DESIGN CONSIDERATIONS

QR codes are ideal for taking users with mobile devices from physical space to a virtual environ-



Shortened URL



Unshortened URL

ment but they are prone to misuse – even by experienced marketing companies. For our QR code campaign to be effective we have made a number of design considerations. The size and density of the code are important as they determine how easy it is for a device to scan the code. One of the reasons for shortening the URL of the catalogue search is that shorter strings of text produce ‘blockier’ QR codes that don’t have fine-grained pixels and are easy for mobile devices to scan.

Before production, the codes were tested on a number of devices and apps to ensure that they could be easily scanned. Shortened URLs are also included on the labels for those students who don’t have smartphones. Although research shows that the vast majority of students own a mobile phone³ and a recent survey found that 75% of BU students own smartphones, we felt it important to provide alternatives for those who don’t or who have not yet engaged with using QR codes.

Including white space around the code also helps it to be scanned easily. Text on the labels was deliberately kept to a minimum and colleagues from Additional Learning Support (ALS) were consulted to ensure that the fonts and colours used on the labels were accessible to those with additional learning needs.

Another consideration is to ensure that QR codes are pointing users to appropriate mobile content. The project outlined here coincides with the launch of the mobile version of BU’s library catalogue (we use Talis Prism) giving us a ‘mobile-friendly’ target to point our QR codes at.

ADDITIONAL BENEFITS

Analysis of the statistics provided by bit.ly show that students are already starting to use the codes

to access e-books. We expect this usage to increase as more blocks are added to the library shelves and users become more familiar with using QR codes to access links on their mobile phones. The 2011 Gartner Hype Cycle predicts that mass adoption of QR codes won’t happen for 2–5 years.⁴ That the technology has potential longevity helps to justify the effort involved in embedding the codes in the collection but there are also other benefits:

- Increasing academic awareness of e-resources: we intend to feed back the searches generated by the project to academic colleagues with the suggestion that they might like to consider adding the e-books to their reading lists. Facilitating e-rich reading lists is a key consideration in our collection development plan¹
- Mapping the collection: this is useful during stock work. This project will map the Dewey numbers where the different schools are most likely to have print material and we will therefore be better informed about which subject librarians need to be involved in collection management;
- Identifying areas of the collection where there are few e-books: this information is fed back to subject librarians to enable development of our e-book collections.

CONCLUSION

QR code technology enables us to capitalise on the pervasion of mobile technology in the lives of learners to highlight the availability of e-resources from our print collections. Administrative colleagues can provide valuable support and input from professional librarians can be shared across subject teams. In addition to improving the student experience of finding e-books, data generated from projects such as this can be used

to increase academic awareness of e-resources, improve collaboration in stock work and identify collection development needs.

REFERENCES

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