Executive summary

Customer expectations are high in libraries – they want to be able to borrow books around the clock, browse for both digital and physical titles from one website and have access to the library building at times that suit them.

In this white paper we will look at how technology can help libraries to deliver these services to their customers while still tackling increasing budget pressures. We will show how libraries are modernising their services for the better – by using staff time more effectively, by communicating with customers in different ways, by taking services out of the building and into shopping centres, by embracing e-books and by attracting new readers while still keeping returning ones interested.

“Technology changes the way we present things.”
Julie Bell, county library manager, Lancashire County Council
The raison d’être for any public library is the customer – helping them find the information they want, the book they need, the access to the internet or other services they cannot access elsewhere, or a calm, purposeful area in which to study.

However, with the recent extensive cuts to services, much energy has instead had to focus on reducing costs and finding different ways to engage with the community as the sector makes sense of how to move forward.

This time of adjustment has started to pass. Those that work in the public libraries sector know the budget reductions are here to stay and what instead is emerging is a lighter, more flexible model of library management.

The shock is over and the focus is back on the customer again, along with a new determination to find innovative ways to keep delivering the services that citizens need. The key now is innovation and involvement with the customer in new ways despite the smaller budgets.

"As an authority we are getting used to doing more with less. We have been very lucky that the library service was keen to embrace the challenge.

“The cuts have become a bit of an opportunity for us to look at different ways to deliver services. We are reaching new audiences but at the same time it is making savings for the council as a whole."

Angella Parker, operational manager, Customer Access Team, Rotherham Metropolitan Borough Council

The answer increasingly lies with technology – in particular technology that allows a reduced post-cuts workforce to do more. Self-service kiosks, web payments for charges and online joining and reservations all cut down on manual administration freeing librarians to focus on customer service.

In addition, more recent technological developments are increasing the options open to libraries to change the way they operate.

This white paper will examine just how all these technologies are being implemented in libraries today to ensure they can continue to deliver excellent service to existing customers as well as attract new ones.
The liberated library

Long gone are the days when the librarian was stuck behind a counter with a barrier between themselves and the customers.

Today’s library is a social hub where children and adults are encouraged to explore and learn. Social inclusion is hugely important and librarians might be just as easily called upon to help someone get online to fill in a benefit form as be asked for the location of a physical book title.

As the librarian’s job becomes more complex, technology can help reduce administrative or repetitive tasks so that the time helping customers can be increased.

This technology can take the form of radio frequency identification (RFID) self-service stations within the library itself, tablet computers offering access to the catalogue and management system, or a website that allows customers to carry out functions themselves at home.

1. Effective use of the cloud for staff

Customers want to be able to speak to their librarians but they don’t want to stand in line. The modern library is more informal than before and there is no reason why different transactions should have to take part in different zones.

Aberdeenshire Council wanted to do away with the traditional enquiry desk and look at how the use of tablet devices could support staff.

“We really liked the idea of roaming between shelving, checking borrower status, or being out and about in the mobile library vans, and still being able to access our database immediately on an iPad,” says Gavin Leggat, systems support officer, Aberdeenshire Council.

They implemented a web and cloud-based staff application, which allowed them to access their Library Management System (LMS) from anywhere inside or outside the library. Now, as well as issuing books and making reservations, the system also makes recommendations on items which may interest customers, so librarians can instantly see what other books might appeal.

“Our staff will have instant access to information via their tablets wherever they are within the library. That means they will be able to deal with the customers there and then.”

Angella Parker, operational manager, Customer Access Team, Rotherham Metropolitan Borough Council.

“It is not uncommon for libraries to have someone sitting behind a counter waiting for enquiries and someone shelving on the floor. If a customer with a query approaches the librarian who is shelving, they may be told to go and join the queue at the counter.”
2. Self-service terminals

While there are some customers who want to have face-to-face contact with a member of library staff, there are many others who simply want to borrow, return or reserve in the minimum amount of time. For those, the self-service RFID terminals are ideal.

“In the sites where self-service is most successful, as many as 80 per cent of issues are processed through our self-service terminals.”
Sandra Sharp, electronic services manager, Leeds City Council.

The more sophisticated RFID terminals also have the advantage of automatically sorting returned books into bins for various departments, speeding up the process of returning books to shelves and reducing the amount of work for the librarian.

In addition, RFID can be combined with fully automated ordering and invoicing so that any new stock goes through a sorter on arrival, is scanned remotely, receipted as being in stock and can be on the shelves in a fraction of the time it used to take.

This technology has become pretty well established in public libraries in the UK already, however, the future will undoubtedly see the concept of self-service extend even further with customers able to use their smart phones to scan a book and check it out.

With numbers of people owning smart phones now over 70%* and increasing all the time, near-field communications could see phones replacing library cards and customers using them to issue out books for themselves. The cumulative result is librarians with more time to focus on the more consultative tasks.

3. User-focused website design

January 2014 saw the launch of a brand new version of Your Library, Edinburgh Libraries’ gateway site to its online resources and services. Featuring links to more than fifty websites and apps, the revamped Your Library makes it easier than ever for library members to find information, learn new skills and pursue their interests.

People are using the site to download magazines with a free subscription to Zinio, test their driving proficiency with Theory Test Pro, and search for sources of funding with edinburgh4community or simply for renewing their library books.

While not many library websites can rival Edinburgh’s for versatility, most have come a long way from simply listing opening hours. However, there is often still some way to go when it comes to joining up the processes offered on the website directly to the back office in order to provide a seamless and completely automated service to the customer.

“Previously we had an online joining form on the website which the customer completed then it would go into the back office to be processed. There could be up to a week’s delay.

“Now it is fully automated so they can access all our online resources immediately. As a result we are capturing a new user group who might not necessarily want to come into a physical building to use us.”
Angella Parker, operational manager, Customer Access Team, Rotherham Metropolitan Borough Council.

Some libraries are finding that they can use their website to display not only their catalogue of physical books, but also integrate it with their catalogue of e-books and even incorporate other searchable databases and archives that they might hold.
This is the case for Lancashire County Council.

“We work closely with Lancashire archives and museums in collaborative heritage projects with the aim of enabling customers and researchers to find information and access our physical and digital collections.

“They can see collections of photos and other archive materials online, alongside the relevant physical books and e-books. This has been especially useful for those interested in their family history. They can search for information seamlessly and all resources are presented to them on the same page.”

Julie Bell, county library manager, Lancashire County Council

Rotherham Metropolitan Borough Council have implemented an online single-sign on service which allows customers to view and manage some personal accounts, such as their council tax, business rates and benefits information as well as seeing what they have on loan from the library or the status of a reservation – all from one page, with one set of logins.

Personalisation and communicating with the customer is an important way of engaging with users and ensuring that the service is meeting their needs. Many libraries are integrating reviews of the books they are reading via their library management system or links with social media sites, such as Facebook or Twitter.

These collaborative tools energise the dialogue with readers and have the added benefit of attracting new people to the library as they inform the wider public of the services offered.

In addition, it provides a two-way channel of communication with customers so ideas and feedback are provided online.

“We want that communication, for readers to talk among themselves,” adds Julie Bell. “We encourage readers to have their own voice, it ties everything together, and then we can promote the books that have been reviewed.”

No library is an island – Orkney Library and Archive

“We have integrated our website with social media since 2009 and we have also got an archive which has got its own blog. It has completely changed the way in which we keep in touch with our users.

“It has been especially useful for arranging library events and getting into contact with book publishers and we have managed to get some quite famous authors to come and talk at the library simply through social media contact.

“We have 9,500 followers on Twitter, which is quite unusual for a small local library. In the past five years we have had Twitter followers from all over the world come on holiday to Orkney and then come specifically into the library to say hello because they have been following our Tweets!

“Locals who live in Orkney use our website and social media pages to make book requests or just use as a means of contacting us. Whereas before they would phone, now they send a message via Facebook asking about the time of the story telling event, or asking us for a specific book. It means any response not only benefits them but the other viewers of the post too.

“We have been completely revolutionised by it. It has breathed new life into our service; making the library a more vibrant place to be and a service which is very engaged with what our customers want.”

Karen Walker, principal librarian, Orkney Library and Archive
4. Online payments

Libraries still face the challenge of how to improve income collection from its services. After all, on average, libraries generate over £400,000 income a year from library fines, overdue charges, hire of AV material or room hire.**

This is a lot of money. So, the challenge is to provide the most efficient and effective method to collect revenue, as collecting and handling cash securely is expensive.

The majority of local authorities are already using the internet to collect payments for services such as council tax. According to Socitm’s Better Connected report, 71% of councils meet Socitm’s best practice guidelines for taking online payments for council tax. The report also shows that 51% of councils ensure library books can be renewed online. It is a small step therefore for libraries to offer not only the chance to renew books but to also to pay library charges online too.

This would rapidly help meet efficiency drivers and improve the citizen experience. It is a practice that has not been taken up rapidly in public libraries but is already very well established in academic libraries with good results. Public libraries can adapt this method of collection to meet their own needs.

“We are really keen on online payment,” says Julie Bell, county library manager, Lancashire County Council. “We know that some people who have fines to pay are put off ever coming back into the library, which can mean their family are denied the chance to use the service. The face-to-face conversation may be difficult for some people so if they could pay their fines online that would be avoided. To be honest, these days it is something that customers expect to be able to do.”

5. Patron-driven acquisition

Allowing customers to choose the books that they want to read is something that libraries have been facilitating since they first opened their doors, however, e-books are opening up possibilities to extend this service.

Libraries allow users to choose which books to read, so why not enable customers to choose which items to buy too? This becomes a real possibility with e-books.

Patron-driven acquisition (PDA) was first introduced into libraries in 1998, with the first service being provided by NetLibrary. Since that date, a number of increasingly sophisticated systems have come to market to provide libraries with the tools to enable users to trigger the rental or purchase of e-books for the library.

Its use is growing rapidly in the academic sector with about 400-600 academic libraries now using such systems (**Source: Joseph Esposito, Scholarly Kitchen, October 2012**) and it seems likely to be only a matter of time before the possibilities are harnessed in the public library sector. It will certainly help ensure reduced budgets are spent on titles for which there is a proven demand.

6. Big data

Linked with PDA is the topic of ‘Big Data’. Libraries have massive amounts of data on their catalogues and their borrowers dating back for years. There are great opportunities to mine that data in order to find out more about the customer and help inform decisions on which books to purchase. With data privacy taken into account, this is a new way of ensuring that accurate recommendations can be made to customers.

The technology to achieve this is already available and uses artificial intelligence to find patterns in the data held in the LMS. Once the patterns or trends appear, they can be analysed more easily.

The records searched remain anonymous but valuable information can be gathered from it to see peaks and troughs in borrowing patterns and gauge the cause of them. Essentially this is supermarket-style analytics, which can be used to great effect to decide on promotions and other marketing strategies.
If a library’s management system can be accessed via the internet, libraries themselves can become effectively mobile. This offers great opportunities for authorities to go out into the community and demonstrate their services to them, wherever they may be.

Of course, the possibilities don’t end with promoting the library service, it can effectively turn any other location into a library, without the expensive overheads. "We’ve been able to plan innovative initiatives such as a pop-up library at the Visit Scotland centre in Braemar, which gives us brand new premises without expensive rental rates to consider. “As well as issuing books and making reservations, one of the things we really like is the way our system records borrowers’ interests and their previous transactions. We get many requests for recommendations and now librarians can instantly see what might appeal. “We’re looking forward to going to places we’ve never been before. We are now looking at using this system at our library service at a prison where accessing the network can be fraught with difficulties.”

Gavin Leggat, systems support officer, Aberdeenshire Council

In addition, this remote access technology has the possibility of transforming the traditional mobile library and housebound services, which uses vans to deliver books to those who can’t access the library building. “When we’re at someone’s house, we can easily see how many books they have previously borrowed. If they are returning seven, but it should be eight, we can immediately prompt them,” says Sarah Kennedy, home visit librarian, Lambeth Council. “Borrowers often say ‘Oh yes, I’d forgotten about that. It’s upstairs, I’ll go and get it.’’’

Sarah adds: “There’s no doubt that it makes us more efficient. Everything used to take twice as long – we would write everything down with a pen and paper while we were on location, then come back to the office and wait for a PC to be free to type it all up. Now we can do everything while we’re out, so we come back and just shelve the books. Managing stock has become much easier.”
E-lending is growing rapidly in UK public libraries. The advantages are obvious; no physical books to hand out, take back, shelve or replace. There are no fines to be accrued as books simply disappear off devices when their time is up – and of course they can be downloaded from anywhere.

A completely bookless library may not be a desirable outcome for everyone but it is certainly possible.

Leading supplier of e-books to public libraries Askew and Holts, sales director, Andy Holland, believes that it is only a matter of time before all libraries offer the service.

“There are a few who haven’t yet gone down the route of e-books but that number is diminishing and in 12 months I believe every library service will be providing them,” he says.

He explains that it is the growth of the tablet that is prompting the change.

“When Kindles were first introduced, the market was still fairly niche but now there are many other devices with e-readers such as tablets and smart phones, and these are driving demand.”

And despite e-lending only being available on some titles that has not stopped growth.

“Our figures for lending e-books were up 22% year on year,” says Andy.

With e-book borrowing increasingly an attractive option for libraries, the remaining challenge is to make the public aware that they can access this service.

The message needs to be put to existing library customers, but also those who may not have visited the library building for years, and are maybe too busy to do so, as this opens up a brand new market of library users.

“There is definitely more expectation from customers that e-books should be provided. We also have a population spread out over a number of islands so e-books give us an opportunity to access more readers easily.”

Karen Walker, principal librarian, Orkney Library and Archive.

“Libraries services are evolving, and e-lending represents one of many technological developments that can help them meet the increasingly high expectations of their membership.”

Ed Vaizey MP, minister for culture, communications and the creative industries
Electronic and indeed audio books are not only ideal for those who are hard-pressed for time to come into the library. They are also invaluable for those who need a little more help with their reading, whether they are young and reluctant readers or older with failing eyesight or conditions that make holding a traditional book burdensome.

The rise of e-books has widened the choice for those with poor eyesight because they are able to make the font as large as they like.

"In the past books with large print tended to be either romances or westerns because they catered for what they saw as the key older customer. But it’s not necessarily the case that those who struggle with their eyesight are interested in these books. Now with e-books and the audio books we offer, this audience has a choice across all genres."

Julie Bell, county library manager, Lancashire County Council

"We went live with e-books and we saw it as a great chance to attract new users. We achieved an increased take up of 108% with so many new borrowers that we won an award for it up against libraries in Europe and US.

"We seemed to attract a lot of people who were working; those who would traditionally not have time to come into the library to borrow books or bring them back. For them borrowing online is a great advantage.

"We are keen to start a project with our home library users. At the moment they are being delivered 12 quite big books every other week by a van. We would like to get them a basic e-reader and download as many books as they want onto that. The obvious advantage is that those with poor eyesight can change the font size and we can stop carting loads of bags of books around.

“Thinking towards the future, we are also looking to how we can use e-book readers to release space in existing buildings so we don’t have as many hard copy books and then we can use the space for other activities.”

Angella Parker, operational manager, Customer Access Team, Rotherham Metropolitan Borough Libraries
The un-staffed library

We have looked at how many operations within the library can be automated in order to reduce the administrative burden to the librarian. We have also looked at how many functions can be moved online in order to extend library services beyond the building itself. Another, more radical, concept is to provide the public with access to the library building on a completely self-service basis.

Un-staffed libraries could be the solution for small communities where usage does not warrant a full-time member of staff. It is also a great way for some authorities to extend their opening hours.

Lenders in Charge - Leeds City Council

“We are running a pilot for an unmanned library scheme which is extending our opening hours. It means customers can access the library one hour earlier in the morning and we stay open later in the evening too.

“Initially we were concerned about security – wondering whether the building or the stock would be damaged – but we have had not had a single issue of vandalism.

“Although it is still a small pilot at the moment it has already proved popular enough that customers have asked us to open extra hours on Saturday as well.

“It is really well-liked by mums who can now visit after dropping off children at school in the mornings – we give them a code to access the building and the rest is done via our self-service terminals. It is also useful for those who want to come in to use the IT services rather than borrow books.”

Sandra Sharp, electronic services manager, Library and Information Service, Leeds City Council
Conclusion

What libraries will increasingly be valued for by the public, and which is unique, is providing local physical spaces; for people to meet, read, share digital skills or equipment, make, create and learn, helped by each other and by library staff.


The time of austerity – unwelcome as it was – has, by necessity, led to changes in the delivery of public services. Innovation, either using new technology or by introducing new ways of working, has become the norm. This has led to an acceptance that change will happen and that this change is evolving the library service into something more virtual, more flexible, and that can be accessed anytime and anywhere.

“It’s about changing everyone’s perception of what is the best use of library staff and perhaps it isn’t stamping books out – it is talking to people, encouraging them to read an e-book, engaging with them on social media or teaching them how to use a computer.”

Julie Bell, county library manager, Lancashire County Council

Customers now have mobile access to the library’s catalogue and can borrow or download books at the click of a button. Although this changes everything in terms of how libraries used to work – in fact it changes nothing.

There is so much more to libraries than lending – they are non-judgemental spaces where people can learn, research and enjoy literature.

Technology is helping libraries meet this need and crucially, enabling them to move away from being thought of as a physical only space. The “digital library” is with us now, and the signs are that this will increasingly become the way in which the public library interacts with its customers. Communication with the library through the web is what customers expect – whether this is via a PC, tablet, smartphone or other mobile device.

“I think the solution to delivering a good service to our customers is to be as open and as inclusive as we can possibly be and technology is enabling this process. We need to carry on that traditional role of literacy and knowledge but take it into that digital age – across the generations. So that maybe we can spark the imaginations of the authors, the business leaders or great academics of the future.”

“Technology changes the way we present things,” says Julie Bell from Lancashire County Council. “Library staff can sometimes think that if someone doesn’t come through the door to borrow a physical book they will lose their job. But an e-book is still a book.”

References
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