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Digitisation Benchmarking Project Report

December 2013

1. Acknowledgements

We would like to thank the Head of Client Services, Heather Green at the University of Warwick for supporting the proposal of this project and allowing us time and funding for research and meetings.

Thank you to the thirteen institutions who happily shared their information and time to provide data for the project. The participating institutions are: Abersytwyth University, Anglia Ruskin University, Aston University, Brunel University, University of Hull, University of Leicester, University of Manchester, Middlesex University, Nottingham Trent University, University of Salford, Sheffield Hallam University, University of Sussex and the University of Warwick.

Thank you to Gareth Johnson, Chair, Forum for Interlending and Information Delivery (FIL) 2012 for disseminating our request for project participants.

Finally, thank you to the University of Warwick for leading on the project and for their hospitality.

2. Project Summary

Enabling access to digitised, copyright cleared texts on module reading lists is a highly valued service to students and academic staff. However it appears that there is very little ability to measure the effectiveness of this service or to identify a benchmark in order to understand whether a good service is being provided to customers. This project was set up to address this by aiming to understand the digitisation service in different institutions, establish robust measurements and a realistic initial benchmark.

Thirteen institutions took part in the year-long project. The recorded activity included collecting data for all new and renewal digitisation requests and the average time it took to make the item available online. This was done across four sample weeks within the academic year.

This data has identified the peaks in service across all the institutions and established an average turnaround time of 7.6 days which can be used to benchmark our services; something we did not have before this project.

In addition, the recorded activity has resulted in several immediate impacts for a number of the institutions. These include:

- upskilling staff to deal with peaks or bring the scanning in-house
- employing temporary staff to deal with backlogs
- investing in new scanning equipment
- researching potential software solutions and in one case the purchase of a software package

For all institutions the project has enabled them to really focus on their service in order to identify where improvements can be made which ultimately benefit the customers.

The future is a little harder to determine, particularly with the ever-changing digital information landscape. However, the project has created a community of digitisation service professionals who are now connected and have shared their knowledge and their experience to increase their own understanding of digitisation in their own and academic institutions.

3. Project Report

This section of the report highlights the details of the project, the outputs, what was delivered and the impact of the project's work.

3.1 Project outputs

3.1.1 Background

Digitisation is the process of providing digital copies of course readings identified by academics. The PDFs are usually delivered via a Virtual Learning Environment or reading list software package. Academics and subject advisers can request items for digitisation from their institutions' library which will then try to obtain a PDF. Scanning of texts can either be done in-house from the library's own stock, or outsourced to a document supply service such as that provided by the British Library. This digitisation process must be carried out in accordance with copyright law. In UK higher education institutions this is usually done under the terms of the CLA Higher Education Licence,¹ which must be purchased.

For the duration of this benchmarking project two different licenses were available, Basic and Comprehensive, with the Comprehensive license allowing scanning of digitally published materials.² Four of the participating institutions had the Comprehensive license. In August 2013 these two licenses were consolidated into a single Higher Education License.

Benchmarking allows institutions to compare their services, highlighting previously unconsidered ways of making improvements. This project provided an opportunity to compare standard metrics which had not existed before.

3.1.2 Project outputs

Output	Deliverable
1. Attract a minimum of ten academic libraries to the project	Thirteen academic libraries contributed to the project
2. Identify suitable recording methods	Consistent recording method established using Excel spreadsheet (Appendix 6.1)
3. Record digitisation activity across the academic year	Digitisation activity recorded by all institutions on four sample weeks throughout the academic year
4. Establish a turnaround time as a comparator benchmark (time taken to fulfil a request and make available a PDF copy)	Turnaround times established for individual institutions and as a comparator

3.2 How we achieved our outputs

3.2.1. Attract a minimum of ten academic libraries to the project

We were keen to attract a range of libraries, both those for whom digitisation was a relatively new service and also those who were more established and wanted to understand the effectiveness of their service.

We approached the Forum for Interlending and Information Delivery (FIL) and Gareth Johnson, who chaired FIL in 2012 and was very positive in supporting the project. He shared our call for participants on the FIL email list. We also used our own email lists to invite people to join us on the project.

Eighteen institutions expressed an interest, thirteen of which confirmed they were able to commit to the project. This exceeded our output of ten institutions but remained a manageable number of participants.

3.2.2 Identify suitable recording methods

At the project's initial meeting in July 2012 the group discussed what statistics collection methods they already used at their institutions, whether substantive targets and measurements were currently in existence, suitable times of the academic year to collect data, frequency of data collection and use of software solutions.

It was agreed that we would record one sample week, four times throughout the academic year. The recording would take place in September 2012, January 2013, May 2013 and July 2013 and we would use a spreadsheet for each institution to record the following information:

- The number of requests each institution received
- The number of renewal requests received and whether full CLA checks were made
- The number of fulfilled and unfulfilled requests
- The number of requests scanned in-house
- The turnaround time in calendar days from request received to item being available online

The data recording spreadsheet is available in Appendix 6.1.

3.2.3 Record digitisation activity across the academic year

All thirteen institutions returned data for the sample weeks, providing a record of activity across the academic year which is illustrated in the following charts. Institutions have been anonymised.

It is worth noting that one institution recorded high levels of requests in comparison to other institutions. To ensure that the data is displayed clearly the charts are duplicated to show recorded activity that includes the institution and charts that have this institution's data removed.

Figure 1: The number of requests (new and renewals) received by all institutions in the September sample weeks

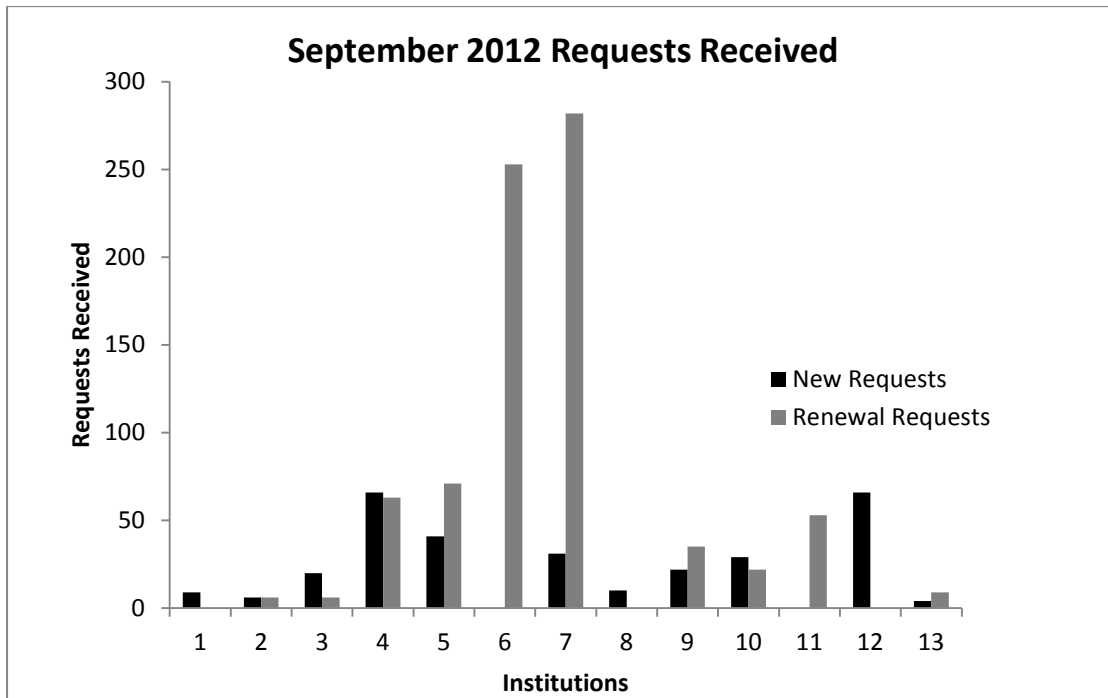


Figure 1a: The number of requests (new and renewals) received by all institutions in the January sample week

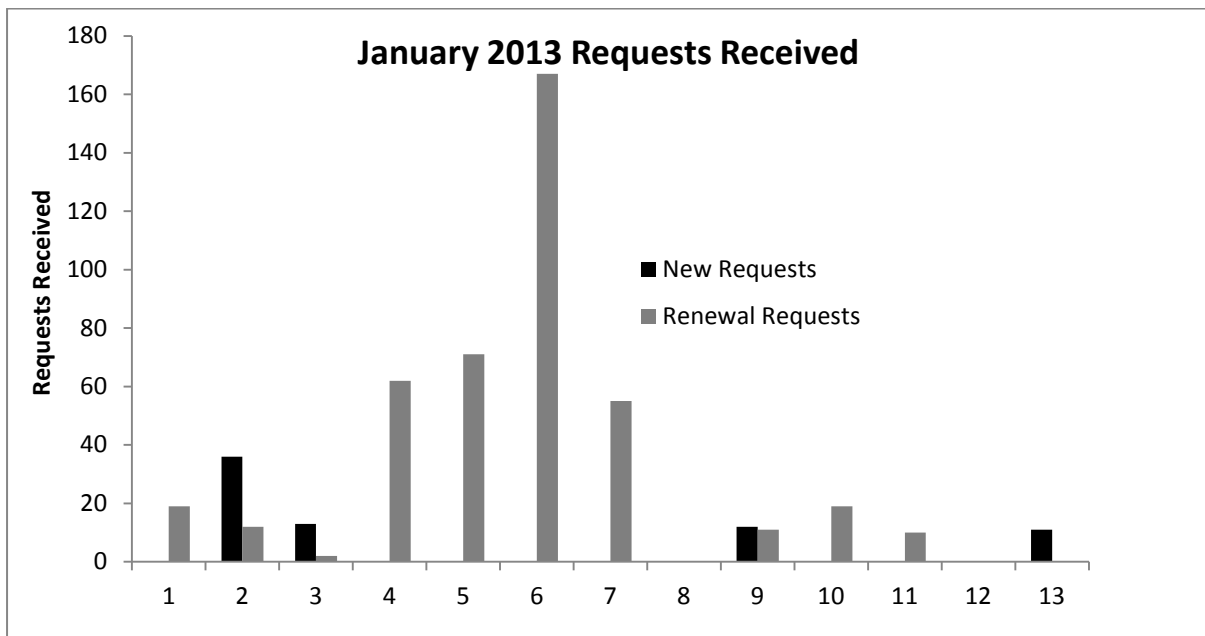


Figure 1b: The number of requests (new and renewals) received by all institutions in the May sample week

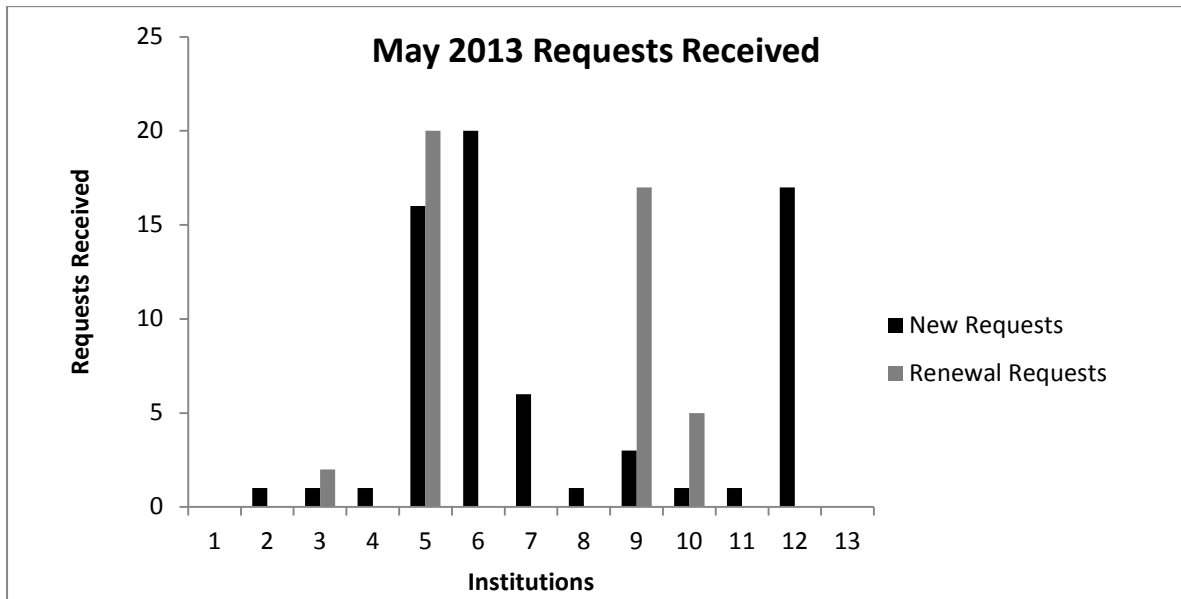


Figure 1c: The number of requests (new and renewals) received by all institutions in the July sample week

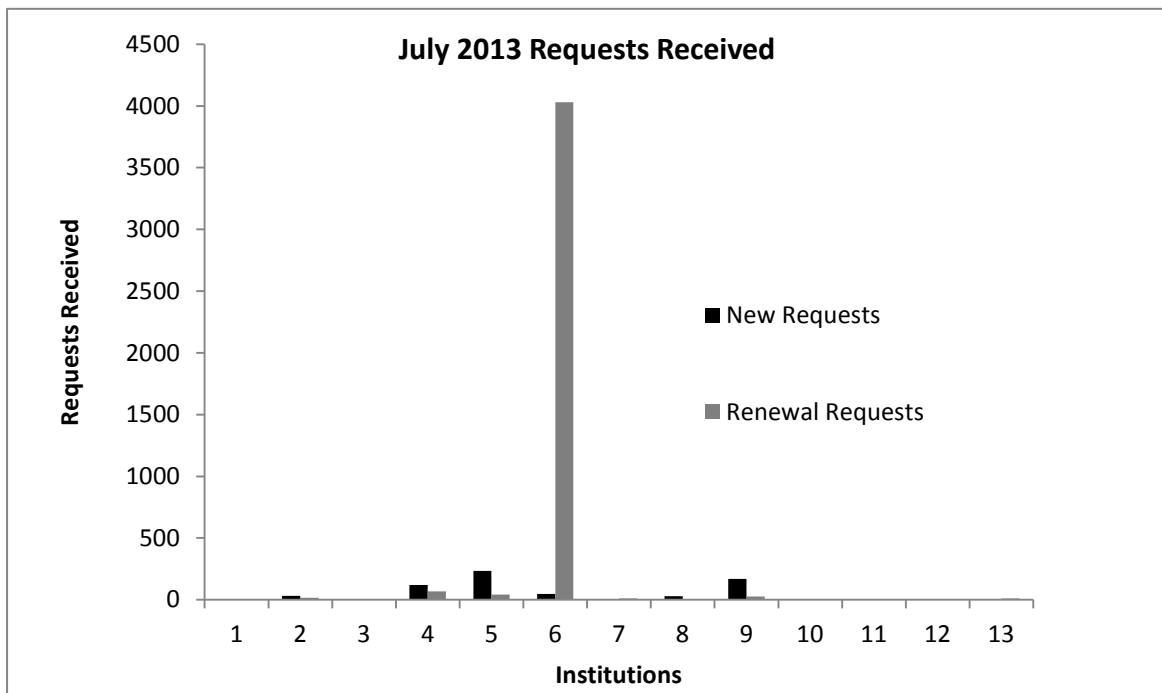


Figure 1d: The number of requests (new and renewals) received by all institutions in the July sample week excluding an outlier

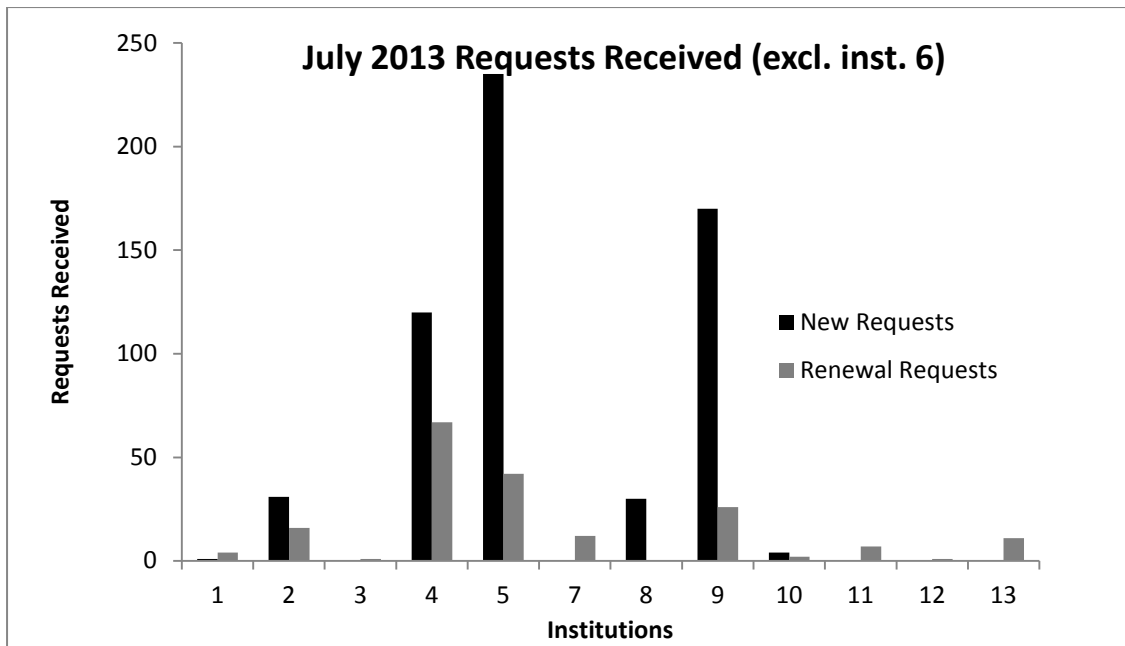


Figure 2: The total requests received, both new and renewal requests, by each institution throughout the project

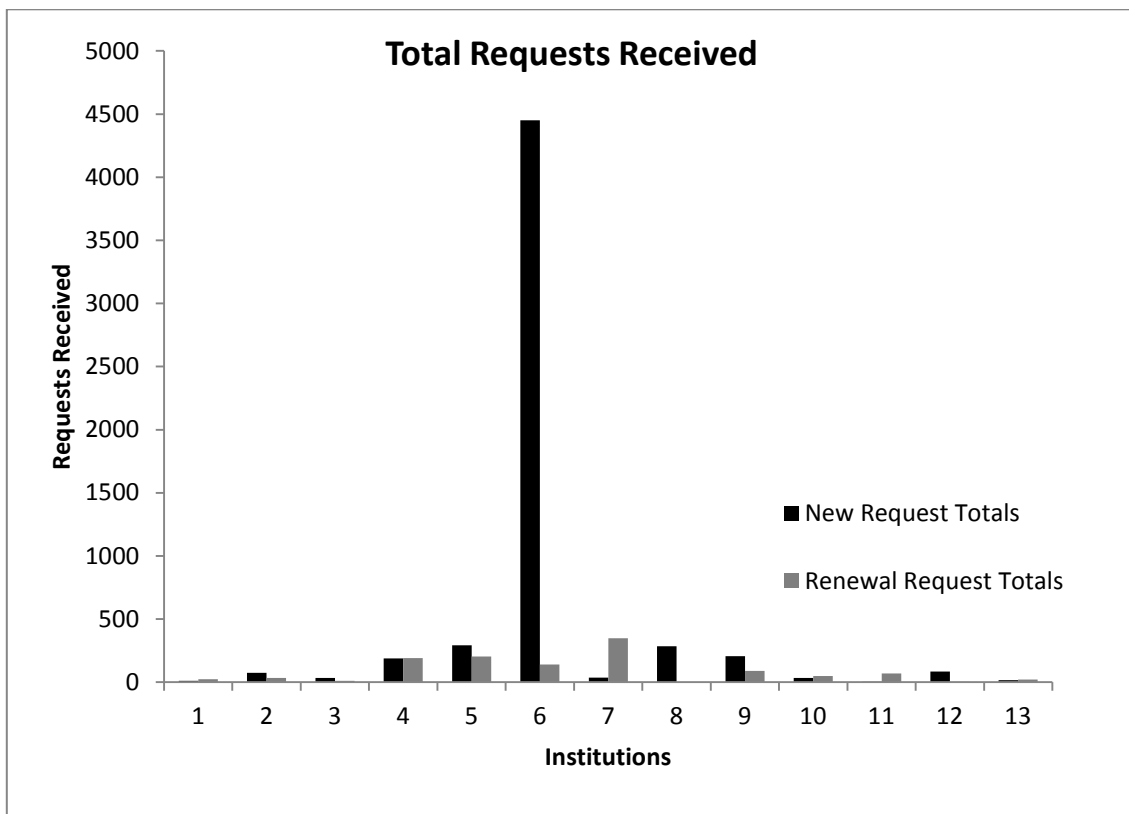


Figure 2a: The total requests received throughout the project, excluding the institution with the highest number of requests

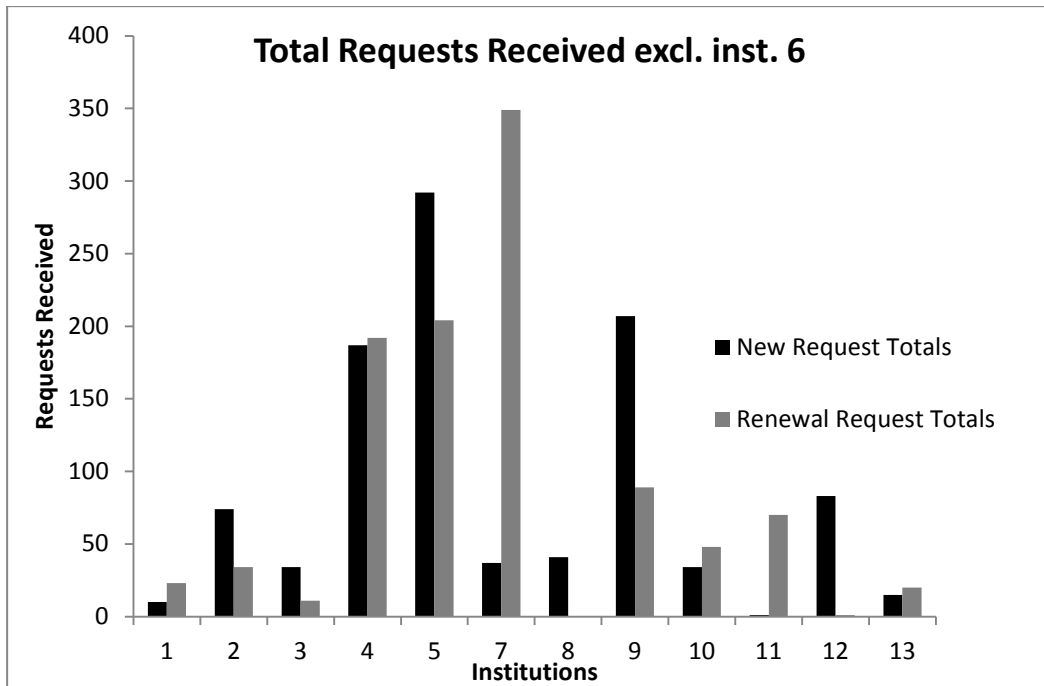


Figure 3: The total fulfilled requests over the sample weeks by all the institutions

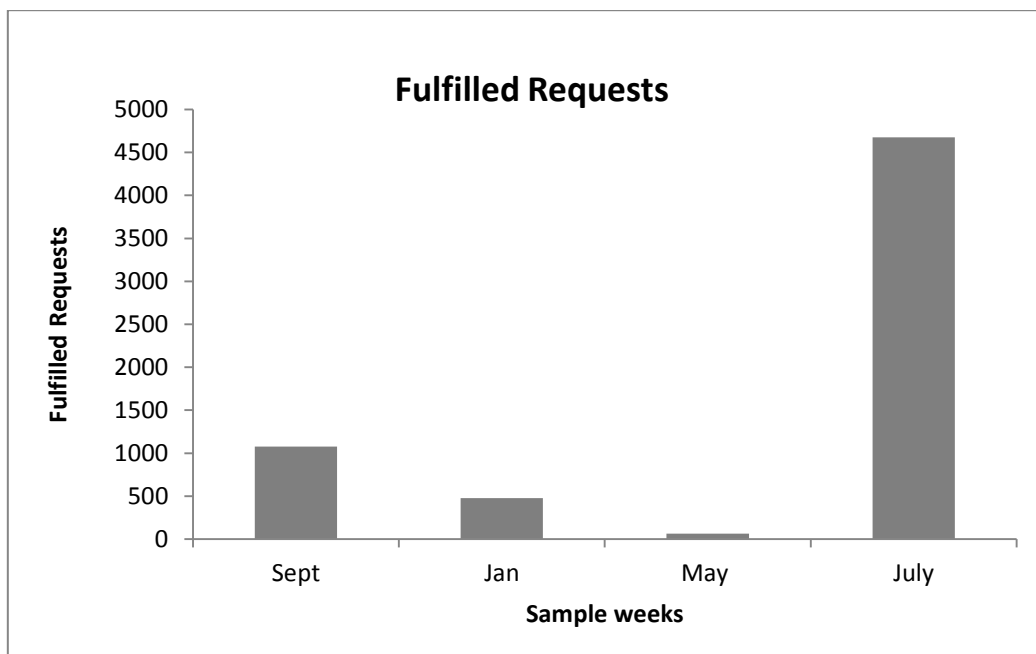
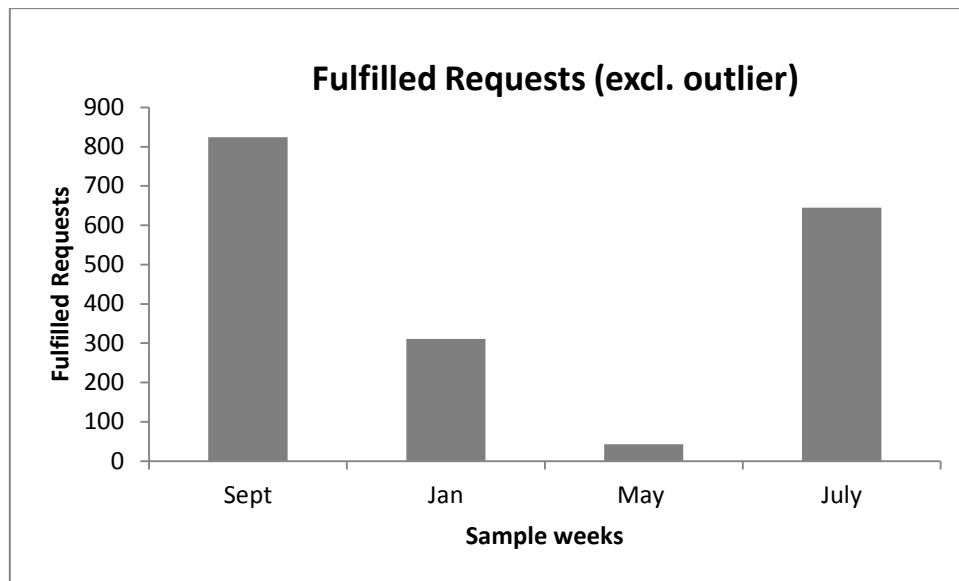


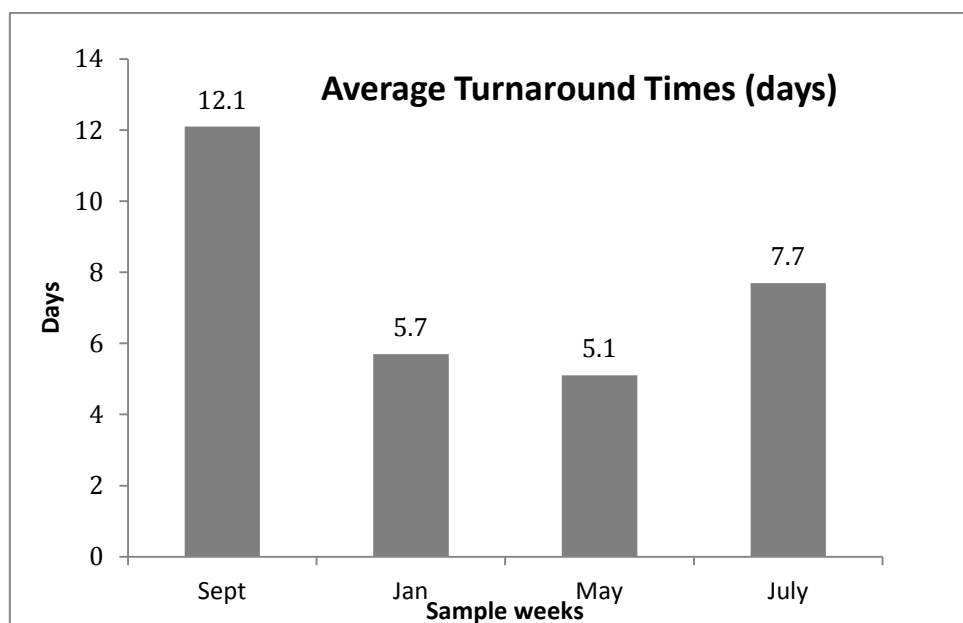
Figure 3a: The total fulfilled requests over the sample week, excluding the institution with the highest fulfilled requests



3.2.4 Establish a turnaround time as a comparator benchmark

Figure 4 shows the average turnaround times for all the institutions during each sample week. The average across all the sample weeks is 7.65 working days. Each institution can choose whether to use a benchmark which varies according to the place in the academic year, e.g. September was particularly busy for all institutions and correlates with the higher number of turnaround times, or they could apply the 7.65 working days as their benchmark for each month.

Figure 4: The average turnaround times from when the request was received and made available online across the sample weeks



3.3. What did we learn?

Working with thirteen institutions highlighted our many different approaches to our digitisation services. The key themes are discussed below.

3.3.1 Team organisation

Digitisation services can be found in a variety of teams in library organisational structures. The thirteen institutions who took part in this project had digitisation services located within:

- Customer Services
- Digital Services (e-resources and repositories)
- Information Resources
- Subject teams
- Document Supply and Copyright
- Collections Management
- Technical Services

There was little consistency across the teams and in one case there was no digitisation team as such; one aspect of the service, checking and recording, was completed by the lending team with some in-house digitisation being completed by the Media and Sales team.

Also of note is how some institutions had organised complimentary work areas such as reading list management and digitisation to provide a more cohesive and proactive service. Institutions not organised in this way have commented that they see this as an example of good practice and a proactive approach to digitisation.

It is not unusual for academic libraries to be organised in different ways but it may be a reason why digitisation activity has not previously been recorded or benchmarked systematically.

3.3.2 Impact of licensing requirements

Completing the checking/compliance requirements of the CLA Licence on all requests, new and renewals, had a significant impact on the turnaround times.

However, institutions found software solutions for managing digitisation, such as PackTracker³ or Talis Aspire Digitised Content,⁴ very helpful, especially for checking compliance with the CLA Licence, and this may have impacted on turnaround times.

3.3.3 Interpretation of data

At the first meeting the institutions agreed on when to have the sample weeks, which data to collect and how it should be interpreted. Once the project was underway it was clear that the sample weeks chosen were not the busiest for all institutions and that some data was more difficult to collect. It should be noted that the data in this report is just a snapshot of activity and not representative of a full academic year within a digitisation service.

3.3.4 Peaks in service

The project identified peaks in services and confirmed our assumptions of when digitisation services are at their busiest. [Figure 3](#) shows the peak as July; however one institution recorded a high number of requests received during this sample week. This is attributable to the amount of work their team had done in liaising with academic colleagues to encourage them to inform them of online readings which needed to be renewed for the coming academic year.

[Figure 3a](#) shows the peak for the remaining institutions as September, with July as the second busiest time of the year. This suggests that digitisation services are busy at the end of the academic year (July) and just before the start of the next year, making core reading material available online.

3.3.5 Turnaround times

Institutions were able to establish turnaround times for their services by recording how many days it took between receiving a request and the item being available online. Each institution has their own turnaround times which, individually, they can look to improve upon.

One of the objectives for this project - to establish turnaround times in order to set a benchmark - was achieved. The average turnaround time across all the sample weeks was 7.65 days. However, there is a difference across the academic year. [Figure 4](#) shows that the average turnaround time in September was 12.1 days when the service was at its busiest. This drops to 5.1 days in May when services are less busy.

It should be noted that turnaround times may have been affected by availability of source text. It may be on loan and awaiting return for scanning, it may be on order from the supplier, or it may be requested from the British Library. A few of these instances in the sample week would impact on the results.

3.4. Immediate impact

The project held three meetings over the course of the year; an initial meeting in July 2012, one in January 2013 and a final meeting in October 2013. At each meeting we discussed the recorded data and at the final meeting it was clear that there had been some immediate impact on the resources, quality management and services as a result of this project.

3.4.1 Resource impact

Staffing is a key resource in digitisation services. Their tasks can include liaising with academic colleagues, completing CLA compliance checks, logging all requests for CLA data reporting, and scanning and uploading documents. This project's recorded activity enabled one institution to employ a temporary member of staff to reduce their backlog whilst other institutions have upskilled their staff, bringing digitisation in-house to improve their turnaround times.

Equipment was also identified as another major resource, with one institution investing in a new overhead scanner.

3.4.2 Quality impact

The project's impact on quality has been achieved because institutions have really focussed on their service. There has been the opportunity to share best practice, particularly with regard to the CLA license and completing checks on renewal requests.

This focus has also encouraged services to be more proactive rather than reactive; ensuring they are providing a good customer experience.

One institution had a publicised KPI turnaround time of ten days. After recording their digitisation activity they realised they were consistently turning items around in seven days, three days less than their stated KPI. This has now been reduced to reflect their actual time, which they can continue to improve upon.

3.4.3 Service impact

Inevitably the project has had an impact on the service for some institutions. One of the major impacts can be seen from the institution which has decided to establish their digitisation service as a 'back of house' function. Prior to this project digitisation was conducted front of house whilst staff performed other duties. This change was made as a result of being able to share experiences and best practice through this project.

For other institutions the project's activities and recorded data has provided the impetus for change and the opportunity to rethink the digitisation service process.

3.5 Future impact

The future impacts are a little harder to determine. For example will the growth and popularity of digitisation carry on at a similar trajectory or will the requests plateau as institutions purchase more ebooks and ejournals?

An alternative scenario to this could be the developing area of publishers' ebook access models. These range from single or multi user (often limited to three users) access to their ebooks or credit based systems. These limitations may lead to digitisation in preference to ebooks.

This aside, institutions felt confident they would be able to use the data from this project to look at future software, licensing and quality solutions.

3.5.1 Software impact

A number of the institutions are already using software solutions for their digitisation activities; these include PackTracker and Talis Aspire Digitised Content. A by-product of this project has been the ability to share experiences of these products and provide detailed information to senior managers if they are considering purchasing.

All of the institutions looked forward to affordable software solutions which would provide a greater integration with reading lists. This may be achieved through the next generation of library management systems.

3.5.2 Licensing impact

The introduction of one CLA HE Licence which covers scanning from print and copying from born digital could have a wider impact. For example, if copying from born digital material increases this is likely to be mirrored in a drop in the usage of the born digital sources as users are going to the copy rather than the source. This could then be relevant when looking at usage figures for the e-resource to evaluate their use.

Licensing and copyright is complex and as was discussed at the CILIP Umbrella Conference 2013,⁵ the digital information landscape, and its future, increases the complexity. Digitisation services need to keep up to date with requirements. However greater collaboration is required between university administration, academics and libraries to increase understanding and ensure compliance. For the digitisation services this could include supporting academics to navigate the landscape.

3.5.3 Quality impact

All institutions were keen to continue assessing the quality of their services. For some this meant a continuation of the project's recording of digitisation activities, for others it was to look at measuring the level of access to digitised texts in order to understand usage and inform future improvements.

The overall goal for institutions is to improve the service for students, obtain quicker turnaround times and improve customer satisfaction.

3.5.4 Service impact

The future for services focussed on increased collaboration, for example with other library teams for reading lists and acquisitions to improve efficiency but also included wider university services such as disability services.

A further future development could be 'scan-on-demand'. This would need a boost in staff at peak times to ensure the service could be maintained.

Finally, there may be the opportunity to share KPIs for future benchmarking. One institution is currently looking at individual views of digitised items to establish the cost per user which could be used as evidence in showing impact of digitisation. This could also be useful in determining whether there is any correlation between student satisfaction and high levels of readings available through the digitisation services.

4. Conclusion

In conclusion, the project has been very useful in broadening our understanding of digitisation in other institutions and providing insights into activities and issues across the sector.

It achieved the main objectives: to identify peaks in service and establish turnaround times which can be used as benchmarks.

The impact of the project is also being felt in some institutions, from upskilling and increasing staff, investing in equipment and software solutions, through to re-thinking processes. In addition,

institutional representatives are using the recorded data in reports to inform strategic planning of senior managers.

The future impacts are dependent on the digital information landscape, future licensing requirements and developments in library management systems. That said, participating institutions feel that the project has given them information which they can use in collaborating with other library teams to improve processes and ultimately the customer experience. They now have a community of digitisation professionals to share their ideas, knowledge and experiences with in order to do this.

5. References

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Authors:

Sharon Tuersley, University of Warwick

Stuart Lawson, Anglia Ruskin University

Contributors:

Dorothy	Atherton	Nottingham Trent University
Nia	Ellis	University of Aberystwyth
Elizabeth	Kensler	University of Aberystwyth
Geoff	Lewis	University of Warwick Library
Caroline	Long	Aston University
Annette	Moore	University of Sussex
Georgina	Parsons	Brunel University
Esther	Platt	University of Salford

Linda Purdy Sheffield Hallam
 Tania Rowlett University of Leicester
 Chris Shipman University of Warwick Library
 Martin Snelling University of Manchester
 Kate Vasilli Middlesex University

6. Appendices

6.1 Data recording spreadsheet

This is the data which was required by all institutions. Some also recorded further information to support local activities. These included whether the request was simple or complex and staff processing time in minutes.

Institution Number	Number of Requests Received	Number of Fulfilled Requests	Number of Unfulfilled Requests	Number of Renewal requests	Number of New Requests	Turnaround Time



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