



## Interlending & Document Supply

User analysis in the Borrow Direct marketplace  
Peter D. Collins

### Article information:

To cite this document:

Peter D. Collins , (2015), "User analysis in the Borrow Direct marketplace", Interlending & Document Supply, Vol. 43 Iss 4 pp. 179 - 181

Permanent link to this document:

<http://dx.doi.org/10.1108/ILDS-08-2015-0025>

Downloaded on: 31 October 2016, At: 23:14 (PT)

References: this document contains references to 3 other documents.

To copy this document: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

The fulltext of this document has been downloaded 96 times since 2015\*

### Users who downloaded this article also downloaded:

(2015), "Assessing the Borrow Direct engineering e-book pilot", Interlending & Document Supply, Vol. 43 Iss 4 pp. 174-178  
<http://dx.doi.org/10.1108/ILDS-08-2015-0026>

(2015), "To each his own: how to provide a library user with an article respecting licence agreements", Interlending & Document Supply, Vol. 43 Iss 4 pp. 199-206  
<http://dx.doi.org/10.1108/ILDS-07-2015-0022>

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

### For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit [www.emeraldinsight.com/authors](http://www.emeraldinsight.com/authors) for more information.

### About Emerald [www.emeraldinsight.com](http://www.emeraldinsight.com)

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

\*Related content and download information correct at time of download.

# User analysis in the Borrow Direct marketplace

*Peter D. Collins*

University of Pennsylvania, Philadelphia, Pennsylvania, USA

## Abstract

**Purpose** – This paper is an analysis of user demographics in the Borrow Direct resource sharing service. The paper looks to determine who uses the service and to what extent.

**Design/methodology/approach** – Five years of user data was culled from the system and analysed by user status and number of transactions.

**Findings** – Borrow Direct is a core service for supporting graduate level research across the twelve partner institutions.

**Originality/value** – This analysis indicates that resource sharing remains a vital resource, particularly for graduate level research, even at top-tier academic libraries.

**Keywords** User studies, Library users, Academic libraries, Consortia, Demand, Interlibrary lending

**Paper type** Research paper

## Overview of Borrow Direct

Borrow Direct [1] is an unmediated library resource sharing partnership encompassing twelve Ivies Plus\* academic institutional library systems. It was founded in 1999 by Columbia University, University of Pennsylvania, and Yale University. The partnership expanded to seven member institutions in 2002 with the addition of Brown University, Cornell University, Dartmouth College, and Princeton University. In 2011 Harvard University and the Massachusetts Institute of Technology joined the partnership; the University of Chicago in 2013, Johns Hopkins University in 2014 and Duke University in June 2015. The combined holdings available through Borrow Direct are around 70 million volumes.

The Borrow Direct service facilitates the discovery and delivery of research material across partner libraries. Since its inception in 1999, Borrow Direct has supplied over two million requests for monographs, music scores, CDs, and DVDs. Real-time shelf status and a load leveling algorithm distribute requests evenly across the partnership, and expedited delivery ensures a 3-5 day turnaround time for all requests. Borrow Direct integrates with the disparate library systems to provide local circulation of borrowed material and integrated resource management through the lifecycle of the transaction (Figure 1).

Borrow Direct has been described and analysed a number of times in the literature since 1999, principally in (Collins, 2012), (Nitecki and Jones, 2004) and (Krall, 2000).

## A resource sharing marketplace

Borrow Direct is like interlibrary lending in the same way that Amazon.com is like a store. Library resources are exchanged between institutions, but the mechanism for facilitating these transactions is akin to an online marketplace. Just as an online marketplace aggregates products from third party suppliers, Borrow Direct aggregates the library holdings from these twelve massive research libraries.

Calling Borrow Direct an online marketplace is not just semantics. Without the concept of an online marketplace, the Borrow Direct service would not exist. An online marketplace is a type of business where product descriptions and availability information is aggregated from third party retailers. Transactions for these goods are managed through the online marketplace while being supplied by the third party retailers. This was the design ethic upon which Borrow Direct was conceived.

Borrow Direct uses ISO and NISO standards to link library catalogs and circulation systems, thereby streamlining and automating the process of requesting and loaning library material across a group of autonomous libraries. These standards form the communication protocol that allows Borrow Direct to serve as the third party aggregator for this group of twelve supplying libraries.

Using Z39.50 (ISO standard 23,950), Borrow Direct is able to carry out a simultaneous search across the twelve stand-alone library catalogs, de-duplicate the result set, and display a list of library resources by relevance, date, or title. Data returned through Z39.50 allows Borrow Direct to calculate the available inventory for each resource just as an online marketplace would calculate the inventory for a product from a variety of third party suppliers. Borrow Direct

The current issue and full text archive of this journal is available on Emerald Insight at: [www.emeraldinsight.com/0264-1615.htm](http://www.emeraldinsight.com/0264-1615.htm)



Interlending & Document Supply  
43/4 (2015) 179–181  
© Emerald Group Publishing Limited [ISSN 0264-1615]  
[DOI 10.1108/ILDS-08-2015-0025]

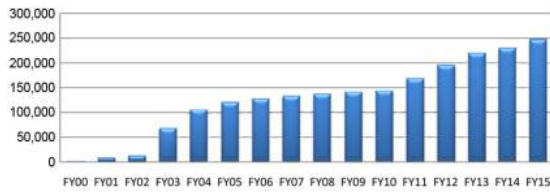
\*Ivies Plus is a group of large research libraries in the USA, part of the Ivy League.

Received 10 August 2015

Revised 10 August 2015

Accepted 26 August 2015

Figure 1 Total borrowing by fiscal year



displays in real-time how many copies are available and offers the user a single-click request option. Subsequent user messaging and delivery of “orders” follows the example of an online retailer: request confirmation email, item shipped email, and item delivered email.

Using the NISO Circulation Interchange Protocol (NCIP), Borrow Direct is able to manage users and inventory across the twelve stand-alone integrated library systems (ILS). Upon logging into Borrow Direct, a user is authorized against their library’s ILS to make sure that they are eligible for the service, and that they are in good standing with their library. Books requested through Borrow Direct are tracked throughout the lifecycle of the transaction. Serving as a hub, the Borrow Direct system will mediate the transaction between the third party systems. Borrow Direct uses NCIP to check-out the requested item at the supplying library. When the book arrives at the patron’s library, Borrow Direct will create a brief bibliographic and item record in the ILS and place a hold on that item for the user. The book will then circulate to the patron as if it was owned by the patron’s library. Making use of the local library’s inventory control, user messaging and overdue/replacement protocols enhances the experience for the user and greatly reduces the oversight responsibilities for the borrowing library. Upon return, Borrow Direct manages the check-in and tracking as the item makes its way back to the owning library.

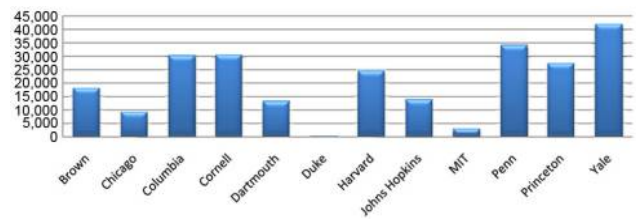
By making use of communication protocols and industry standards, Borrow Direct is able to serve as a *de facto* integrated library system for the purposes of resource sharing at these twelve independent libraries. Using the model of the online marketplace, Borrow Direct eliminates the need for all of the libraries to join together to run a single ILS while offering the ability to manage inventory and the user experience within each library’s established management system.

### Who needs Borrow Direct

The twelve institutional library systems that participate in Borrow Direct are each in their own right great academic research libraries with collections ranging from approximately 2.5 million volumes at Dartmouth College Library to 18.9 million volumes in Harvard University’s library system. With such massive local collections, the need for expedited resource sharing might seem superfluous. A look at the numbers quickly eclipses this assumption (Figure 2).

In this last fiscal year alone, Borrow Direct circulation reached one quarter million volumes. Several of the largest library systems in Borrow Direct generate the largest number of transactions each year. The importance of Borrow Direct to the research community at these institutions is not diminished

Figure 2 Borrowing requests by library – FY2015



by an abundance of local resources but continues to meet an important need. This need is equally evident at institutions that do not generate the same volume of transactions. The collective collection accessible through Borrow Direct allows each member library to offer their users access to one of the largest circulating library collections in the world.

### The Borrow Direct customer

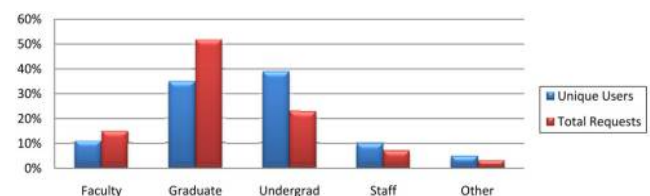
Borrow Direct is available to faculty, graduate students, undergraduate students, university employees, and a variety of affiliated scholars and researchers associated with each institution. For purposes of analysis, these categories have been reduced to: faculty, graduate, undergrad, staff, and other. Looking at use of Borrow Direct over the last five academic years, the number of users from each demographic seems to be in proportion to their numbers at the institution. But comparing user status with the number of requests submitted paints a quite different picture (Figure 3).

This analysis compares 115,313 unique users with the 1,038,451 items circulated to those users through Borrow Direct. Though undergraduates make up 39 per cent of unique users, they only account for 23 per cent of all requests. Half of all undergraduate users have only borrowed one or two items through Borrow Direct. The average number of requests per undergraduate user is just over 5. These figures indicate that the service is there as a resource for residual reading or core requirements, but for many undergraduates it would appear that their campus libraries are able to meet the majority of their research needs.

The situation for graduate students is much different. While graduate students make up only 35 per cent of unique users in Borrow Direct, they account for 52 per cent of all transactions. The average number of requests per graduate user is over 13. It is clear from these numbers that Borrow Direct serves an important research purpose for the graduate student population. Borrow Direct offers these users the ability to delve deeply into their specialized area of study to access the most esoteric ephemera from across the collective collection.

The amount of material requested by faculty may at first appear to be low, but the faculty population is much smaller

Figure 3 Unique users vs number of requests



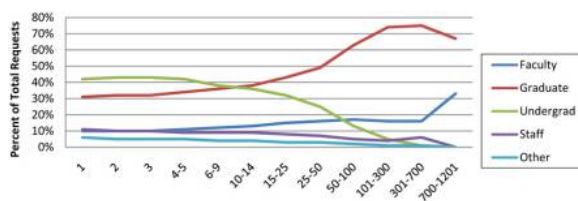
than the combined student body of graduate and undergraduate students. This population is also more constant. Over the course of this study, new graduate and undergraduate students are joining the ranks each year while the faculty population at the beginning of the study is much the same as at the end. Even so, 11 per cent of all users are faculty members, and they account for 15 per cent of all transactions. It is also significant when considering that faculty work closely with library bibliographers to build local collections to meet their teaching and research needs. Despite the high level of collaboration between libraries and their faculty, Borrow Direct remains an important component for meeting faculty research needs. On average, faculty members request over 11 items per user.

These conclusions are further illustrated by a look at the distribution of high volume users in Borrow Direct. By looking at the percentage of users who submitted only one request compared to users submitting 50 or 100 requests, it is even more evident that graduate students and some faculty find Borrow Direct to be fundamental to obtaining research material beyond the scope of their local collection (Figure 4).

The number of transactions represented by each grouping on the horizontal axis of this graph diminishes as the numbers grow. For example, 35 per cent of users have only submitted one request, and only 1 per cent of users have submitted over 100 requests. What this does demonstrate is that high volume users are almost predominantly graduate students and faculty members. It is these high volume users that skew the request per user averages when viewing the system as a whole. While the average number of requests per user system wide is almost 10, that number tells us little without the demographic breakdown above.

This demographic analysis makes it clear that Borrow Direct fills a variety of needs for member libraries, and in some respects, those needs differ by user status. The majority of users come to Borrow Direct a few times over the course of their studies, but otherwise find the local collection sufficient for their research needs. A smaller but still significant number of users have come to rely on Borrow Direct for access to the plethora of material across the collective collection that is far beyond the scope of any single institutional library to maintain.

Figure 4 Request distribution by status



## Conclusion

By joining together to create a platform for searching, requesting, and management of interlibrary lending, the twelve Borrow Direct partner institutions have created one of the largest collective collections in the world. Utilizing principals of the online marketplace, the Borrow Direct software serves as access point and inventory control management system for the collective collection. Material circulated through Borrow Direct integrates seamless with the local user experience at each library.

Despite comprising some of the largest academic research libraries in the USA, the amount of material requested by each of those libraries through Borrow Direct demonstrates that this service fulfills a very important role in meeting their academic research needs. The size of the local collection in no way diminishes the amount users rely on Borrow Direct to support their research.

The greatest number of unique users of Borrow Direct are graduate and undergraduate students, but their use of the service and the role it plays differs greatly. Undergraduates make up the greatest single demographic, but on average, they do not generate very many transactions per person. Graduates students are by far the heaviest users of the service with faculty members not far behind. These figures demonstrate that Borrow Direct fills a vital need for both the casual user and the most ardent researcher.

## Note

- 1 [www.borrowdirect.org/](http://www.borrowdirect.org/)

## References

- Collins, Peter (2012), "Fear and loathing in cooperative collection development", *Interlending & Document Supply*, Vol. 40 No. 2, pp. 100-104.
- Krall, R. (2000), "Get it fast, and get it cheap – What's an ILL librarian to do?", *American Libraries*, Vol. 31 No. 10, pp. 41-42.
- Nitecki, Danuta, A. and Jones, Carol, L. (2004), "Borrow Direct: its impact on service quality at Yale university library", *Interlending & Document Supply*, Vol. 32 No. 3, pp. 146-151.

## About the author

**Peter D. Collins** specializes in library resource sharing and has served the last six years as the Project Manager for the Borrow Direct partnership. Peter has a Masters in Library and Information Science from Syracuse University in New York state. Peter is active in national and international interlending organizations including serving as Chair of the D2D Users Group and a member of the IFLA Document Delivery and Resource Sharing Standing Committee. Peter D. Collins can be contacted at: [pcoll@pobox.upenn.edu](mailto:pcoll@pobox.upenn.edu)

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgroupublishing.com/licensing/reprints.htm](http://www.emeraldgroupublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)