Discovery to Delivery
Ideas for creating a better experience for users

Minitex ILL Conference, May 17 2017
Melissa Eighmy Brown, Amy Drayer, Chris Rose
Topics of Discussion

- Big Ten Academic Alliance Discovery to Delivery Initiative
- Overview of University of Minnesota discovery/delivery systems
- Usability Testing Results
- Vision for Implementing the Ideal Future State
- Questions
- Multiple e-resources to choose from lead to dead ends
- or Item is checked out
- or you've landed on a publisher site with a paywall
- or you aren't sure if you should recall it (and how long will that take?)
- or you have a long list of items you want, but you appear to need to submit each request separately
- or you have a huge list of results but none of them are what you need
- and you aren't sure what Interlibrary Loan means...
Big Ten Academic Alliance (formerly CIC)

Indiana University
Michigan State University
Northwestern University
Ohio State University
Pennsylvania State University
Purdue University
Rutgers University
University of Chicago
University of Illinois-Champaign/Urbana
University of Iowa

University of Maryland College Park
University of Michigan
University of Minnesota
University of Nebraska-Lincoln
University of Wisconsin-Madison
A Brief History of the Discovery to Delivery Initiative

- CIC Discovery to Delivery group formed in 2012
- Framework for D2D Systems Planning report released in May 2013
- Discovery to Delivery Phase II Final report released November 2015
A Recommendation of D2D Phase II report

Aggressively pursue an overall unified technology strategy for the Interlibrary Loan component of the BTAA Discovery to Delivery supply chain, in ways that are readily extensible to larger scale national and international resource sharing endeavors.
BTAA D2D Action Report Charge based on recommendations of D2D Phase II Final Report

- Priority Elements for Ideal Future State Design
  - Unified User Interface: one option in discovery that supports ILL and local paging
  - Unified User Accounts: one account for users, regardless of backend system used for fulfilment.
  - User Notifications, Delivery Estimations and Tracking (communicate better and more often!)
  - Increase visibility and ease of use
BTAA D2D Action Project Committee Members

Ken Varnum (Library IT University of Michigan)
Bruce Barton (Library IT University of Wisconsin)
Zoe Chao (User Experience Librarian Penn State)
Kurt Munson (ILL Northwestern)
Melissa Eighmy Brown (ILL University of Minnesota)

*Functional Requirements group: Angela Davis (Sci Eng Librarian Penn State), Kurt, Melissa and Bruce.*
Context of D2D Committee Action Report...

ILL is in a state of flux due to OCLC’s impending move of ILLiad to a cloud-based platform.

Therefore, the BTAA D2D Project Action Report outlines:

- Expectations for a next-generation resource sharing system
- The current state, desired state and architectural implications
- Recommended actions using currently available technologies

*A Vision for Next Generation Resource Delivery: Report of the BTAA Discovery to Delivery Action Committee* (Released November 2016)
Core Recommendations of D2D Action Report:

1. Ensure clear delivery options in the discovery platform for ILL and document delivery, in addition to local paging: Make it simple and make it smart.

2. Whatever backend systems manage patron transactions, present all loans, requests, fees, and associated actions in a single library account interface.

3. Allow room for innovations in citation input: OpenURL, parsing of listed data to request forms, link resolvers that look for local content, open access content and easy (Amazon-like) delivery options. APIs for shipping info, real-time statuses...
How to...

● A platform neutral “get it” functionality for the patron to initiate the delivery process / avoid competing service options
  ○ Ensure a patron-centric application.
● Unify the patron’s library services; ILL, document delivery and local paging
  ○ API Web Services (we can leverage, but we also need vendor development!)
  ○ NCIP (NISO Circulation Interchange Protocol) Circ of ILL transactions in ILS
● Visioning...
  ○ Simply consulting our library’s discovery platform will not always answer the patron’s question. What if they don’t begin there?
  ○ We envision a browser application open to all BTAA library systems that is available to the user regardless of where their research is initiated.
    ■ Open Access Button / Unpaywall
Recommended Near-Term Actions

1. Exert our collective influence on vendors.
   a. OCLC Tipasa Advisory Board/Sharing report with OCLC, Relais, Ex Libris, EBSCO, Conferences, Consortia (GWLA, Ivy +)
   b. Lists of requirements

2. Make use of currently available technologies and best practices.
   a. NCIP
   b. Web Services for unmediated requests to consortia
   c. OCR documents for accessibility, teaching and learning.

3. Experiment with user experience design and behaviors, and share those findings.
Endorsements and Reports

Read & Endorse the report here!

z.umn.edu/btaad2d
Applying BTAA Recommendations at U of Minnesota
University of Minnesota Background
University of Minnesota Background

- Ex Libris’ Alma is the Library Management System
- Ex Libris’ Primo is the Library Discovery System (MNCAT)
- Within Alma, Minnesota is one institution with multiple campuses
- Duluth & Twin Cities have multiple libraries within their campus
- Intercampus Lending exists within Alma so that users can request (most) print resources to be paged for delivery to the pickup library of choice
University of Minnesota Background

Requesting Available Resources in Discovery

The judge who hated red nail polish: & other crazy but true stories of law & lawyers
Ilona M. Bray 1962-; Richard Stm; Nolo (Firm)
1st ed., Berkeley, Calif. : Nolo 2010
Available at TC Law Library General Collection (K184 .B73 2010)

<table>
<thead>
<tr>
<th>Location / Call Number: TC Law Library General Collection</th>
<th>K184 .B73 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability: (1 copy, 1 available, 0 requests)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barcode</th>
<th>Type</th>
<th>Policy</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>31951D030235157</td>
<td>Book</td>
<td>13 Week</td>
<td></td>
<td>Item in place</td>
</tr>
</tbody>
</table>
University of Minnesota Background

Requesting Unavailable Resources in Discovery
University of Minnesota Background

- Twin Cities is implementing a Document Delivery service for locally held TC print resources to TC users
- Service is for digitization of articles & chapters
- Document Delivery would be run through ILLiad
- Users should be able to request Document Delivery in Discovery (MNCAT)
How to Introduce Document Delivery to Users?
Usability Testing

A third button in the catalog?
What do they mean?
How do you choose?
Why??
Usability Testing

- **Usability Lab Testing**
  3 participants use the website to walk through scenarios to solve specific tasks. A group observes and takes notes of each participant’s actions and comments via screensharing.

- **Paper Prototypes**
  In person paper print outs of possible buttons in the catalog with a set of questions to determine the clarity and perception of the options.
INTERLIBRARY LOAN

Interlibrary loan (ILL) offers free access to materials needed for course work and scholarly research that are not currently available within the University of Minnesota Libraries.

Create a New Delivery Request

Submit a request using a blank form based on format:

- Article
- Book
- Book Chapter
- Thesis
- Other

Or search for a title to place the request:

Books and media

- WorldCat FirstSearch
  (look for interlibrary Loan link)
- UBSorrow
  (wait for the Request link)

Articles

- Licensed databases for articles
  (request using Find It link)
- How to find articles
  (help get started finding articles)
Requests

Books and media average 4-10 days to arrive.
Articles average 1-5 days to arrive.

<table>
<thead>
<tr>
<th>Request</th>
<th>Type</th>
<th>Title</th>
<th>Author</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1228975</td>
<td>Book</td>
<td>The book of the dead</td>
<td>Origuchi, Shinobu</td>
<td>7/20/2017</td>
</tr>
</tbody>
</table>

For renewal options click the request number.

Available Online

<table>
<thead>
<tr>
<th>Request</th>
<th>View</th>
<th>Size</th>
<th>Title</th>
<th>Author</th>
<th>Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No digital requests

Contact Us

Main Office
65L Wilson Library
309 19th Avenue South
Minneapolis, MN 55455
Phone: 612-624-1806
Email: wilsll@umn.edu

Hours
Monday - Friday
8:30 a.m. - 5 p.m.
Except U Holidays

Law library
Phone: 612-625-9534
Email: x-gasp@umn.edu

Law library Request
(for those in the Law School)
<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unavailable Book Request</td>
<td>You need the book “Storyworlds across media: toward a media-conscious narratology” for a project. <strong>Find a way to get the book.</strong></td>
</tr>
<tr>
<td>Internal Available Chapter Request</td>
<td>Your professor wants you to read Chapter 4 (pages 70-89) from the book “The cinematic life of the gene”, and you’d like to read it on your computer. <strong>Find a way to get just the specified reading.</strong></td>
</tr>
<tr>
<td>Catalog Print-only Article</td>
<td>You need the article “Ethnography, intertextuality and the end of description” by Stephen Tyler in the journal “The American Journal of Semiotics” (v.3 no.4 1985 p. 83-98) but cannot get to it to make a copy. <strong>Find a way to get a copy of the article sent to you.</strong></td>
</tr>
<tr>
<td>Blank Form Other Request</td>
<td>You are doing a character analysis of horror movies and have selected Crimson Peak. <strong>Find a way to request movies from other universities.</strong></td>
</tr>
<tr>
<td>Navigate to ILLiad</td>
<td>You want to see the status of the articles and book chapters you have requested. <strong>Find the list of all your recent requests.</strong></td>
</tr>
<tr>
<td>Access Online Article in ILLiad</td>
<td>You received the following notification that one of the requested articles is now available to read online: ... <strong>Find the article to read online.</strong></td>
</tr>
</tbody>
</table>
## Usability Testing: Lab Results

<table>
<thead>
<tr>
<th>Observed issue</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The label &quot;Interlibrary Loan&quot; does not encompass the concept of digitizing copies via &quot;Document Delivery&quot;</td>
<td>Suggest finding a more inclusive service name</td>
</tr>
<tr>
<td>&quot;Get a Chapter&quot; may imply the user can get immediate access to it</td>
<td>Consider less immediate sounding language such as &quot;Request a Chapter&quot;</td>
</tr>
<tr>
<td>On the article form, participant put article title in the first field, which was for journal title, then had to move to the correct field</td>
<td>Consider putting the article fields before journal fields on article form</td>
</tr>
<tr>
<td>Expected the ILL requests to be in Primo My Account</td>
<td>Consider adding Interlibrary Loan menu link in Primo My Account, or a link on the Primo My Account Requests tab</td>
</tr>
</tbody>
</table>
Usability Testing: Label Paper Prototyping

<table>
<thead>
<tr>
<th>With Recalls</th>
<th>Without Recalls</th>
</tr>
</thead>
</table>

**With Recalls**
- Hillbilly Elegy: a memoir of a family and culture in crisis
  - J. D. Vance
  - Not currently available at TC Law Library General Collection (HD8073.V37 A3 2016) and other locations

<table>
<thead>
<tr>
<th>Location / Call Number</th>
<th>Availability</th>
<th>Location / Call Number</th>
<th>Availability</th>
<th>Location Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC Law Library</td>
<td>1 copy, 0 available, 2 requests</td>
<td>TC Law Library</td>
<td>1 copy, 0 available, 2 requests</td>
<td></td>
</tr>
<tr>
<td>General Collection</td>
<td></td>
<td>General Collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC Law Library Books</td>
<td>1 copy, 0 available, 1 request</td>
<td>TC Law Library</td>
<td>1 copy, 0 available, 0 requests</td>
<td></td>
</tr>
<tr>
<td>General Collection</td>
<td></td>
<td>General Collection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UM CROCKSTON Library</td>
<td>1 copy, 0 available, 2 requests</td>
<td>UM CROCKSTON Library</td>
<td>1 copy, 0 available, 2 requests</td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td></td>
<td>Books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>305.56 V277h</td>
<td></td>
<td>305.56 V277h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UM DULUTH Martin Library</td>
<td>1 copy, 0 available, 2 requests</td>
<td>UM DULUTH Martin Library</td>
<td>1 copy, 0 available, 2 requests</td>
<td></td>
</tr>
<tr>
<td>Book</td>
<td></td>
<td>Book</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UM MORRIS Briggs Library</td>
<td>1 copy, 0 available, 0 requests</td>
<td>UM MORRIS Briggs Library</td>
<td>1 copy, 0 available, 0 requests</td>
<td></td>
</tr>
<tr>
<td>Best Sellers and Hot Picks</td>
<td></td>
<td>Best Sellers and Hot Picks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Usability Testing: Paper Prototyping Results

74 respondents, a third of them sophomores and about a quarter were juniors

Main reason to select an option: speed

Document Delivery “Request a chapter” is expected to be immediate (but it may be better than “Get a chapter”, previously tested)

“Interlibrary Loan” is expected to take from 1-2 days up to 7-10 days, the problem is scope (most respondents did not think materials were coming from off campus, and those that did thought they were from local libraries)

The availability summary and holdings in the catalog record affect user’s understanding of scope and speed, they need to be better positioned, better worded, and use clearer language

Avoid the words “get” (implies immediacy), “rent” (potential cost association), “library” (scope too ambiguous)

“Button should only be visible if the title’s available, so the button wouldn’t work”
### Usability Results: Time

<table>
<thead>
<tr>
<th></th>
<th>0 sec</th>
<th>10-30 sec</th>
<th>1-2 min</th>
<th>3-5 min</th>
<th>10-30 min</th>
<th>1-2 hr</th>
<th>3-6 hr</th>
<th>1-2 days</th>
<th>3-5 days</th>
<th>7-10 days</th>
<th>2-3 wks</th>
<th>1+ mo</th>
</tr>
</thead>
<tbody>
<tr>
<td>book</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>chapt.</td>
<td>13</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ILL</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>10</td>
<td>15</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total | 18    | 5         | 10      | 9       | 6         | 2      | 3      | 26       | 17       | 24        | 2       | 1     |
### Usability Results: Language

<table>
<thead>
<tr>
<th>Get It</th>
<th>Interlibrary Loan</th>
<th>Another Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>get</td>
<td>7 another or different library</td>
<td>12 on campus</td>
</tr>
<tr>
<td>reserve</td>
<td>6 within U of M library system</td>
<td>6 UMN library/listed</td>
</tr>
<tr>
<td>request</td>
<td>4 not U of M</td>
<td>6 outside University</td>
</tr>
<tr>
<td>check out</td>
<td>3 loan</td>
<td>6 off campus</td>
</tr>
<tr>
<td>buy</td>
<td>3 borrow</td>
<td>5 MN/US</td>
</tr>
<tr>
<td>pick up</td>
<td>3 request</td>
<td>5 MSP public</td>
</tr>
<tr>
<td>borrow</td>
<td>1 access allowed/ non-member</td>
<td>4 not listed</td>
</tr>
<tr>
<td>hold</td>
<td>1 find</td>
<td>1 close/nearby</td>
</tr>
<tr>
<td>order</td>
<td>1 paging</td>
<td>1 not Law</td>
</tr>
<tr>
<td></td>
<td>delivered</td>
<td>1 elsewhere</td>
</tr>
<tr>
<td></td>
<td>online rental</td>
<td>1</td>
</tr>
</tbody>
</table>
Usability Results: Geography

<table>
<thead>
<tr>
<th></th>
<th>Within U of M system</th>
<th>Outside U of M/ nearby or local</th>
<th>Outside U of M/ non-university</th>
<th>Unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Interlibrary Loan”</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>“Another library”</td>
<td>13</td>
<td>6</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>
Usability Testing: Label Recommendation

“Providing better labels is not going to resolve the bigger issue of selecting the correct delivery service. The matter of time, which is dynamic based on user permissions, Alma availability and capability, UBorrow affiliate holdings and availability, and general material access cannot be accurately represented in the interface.”

The ideal interface is one button that sends the user’s request to the best (quickest) delivery service option based on the data we can pull from our isolated systems.

That said:

<table>
<thead>
<tr>
<th></th>
<th>Recall</th>
<th>Interlibrary Loan</th>
<th>Document Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>With public recall</td>
<td>Request from U of M</td>
<td>Request from another institution</td>
<td>Request a chapter (PDF)</td>
</tr>
<tr>
<td>Without recall</td>
<td></td>
<td>Request the book</td>
<td>Request a chapter scan</td>
</tr>
</tbody>
</table>
Implementing the Ideal Future State
What Problems Can We Solve?
Should a User Need to Sign In to Request?
Hansa

True-to-life Great Dragon

Price: $18,240.00 & FREE Shipping

In stock.
Get it as soon as May 12 - 17 when you order Shipping at checkout.
Ships from and sold by Phoenix Toys Online.

- Hand-crafted
- Luxuriously soft
- Cuddly
- Eco-friendly
- 114.17 in. L x 39.37 in. W x 96.46 in. H (132.28 lbs.)

Compare with similar items

New (1) from $18,240.00 & FREE shipping.
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Compare with similar items

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Improve Alma’s Title-Level Requesting

- Alma defaults to title-level requesting; a request is not tied to a particular copy and the first available copy will fulfill the request.

- If multiple copies are available, Alma randomly selects a library to fulfill the request.
  - Exception: If the patron’s pickup library owns an available copy, Alma selects it.

- Overall, we like title-level requesting at Minnesota.
Improving Alma’s Title-Level Requesting

- Holdings Notes present a challenge; Alma interprets the holdings note as unique and the user must choose between copies.

Mittens for kittens and other rhymes about cats
Lenore Blegvad; Erik Blegvad
Available at IN STORAGE: MN Lib Access Ctr U of M Twin Cities (813B6155 OM) and other locations

Find or Request  Details

Check Locations Below Or: Interlibrary Loan/ILLiad

Location / Call Number: IN STORAGE: MN Lib Access Ctr U of M Twin Cities 813B6155 OM

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
</tbody>
</table>

Barcode: 31951000950936Z
Type: Book
Policy: 13 Week
Description: Item in place (0 requests)
Status: Get It
When to Recall?

- Recalls inconvenience the first borrower with a truncated due date
When to Recall?

Unless the first borrower never returns it

Recall Return Rate

- Returned On Time
- Late 1-7 Days
- Late 8-14 Days
- Late 15-30 Days
- Late 31+ Days

- UMTC employee
- UMTC graduate
- UMTC undergraduate
When to Recall?

- Recalls inconvenience the first borrower with a truncated due date
- Recalls are not always returned on time
- After return, items still need to be delivered to the pickup location
- Interlibrary loan is typically a faster solution
PLAN:
Our Plan (Ideal Future State)

● Users should not need to Sign In to request

● Users should only see one button to request
  ○ Alma can be configured to display a specific button for a selected genre
  ○ Have multiple request forms for different genre, but a user only sees one option for a selected resource

● After requests are submitted, leverage Alma APIs to select the fulfillment service that will deliver the resource the fastest
Our Plan (Ideal Future State)

- Make intelligent decisions on behalf of users
  - If a citation is an article, assume the patron wants digitization
  - If a search is for a journal title, assume the patron wants digitization
  - Assume users will want circulating copies from ILL instead of locally available non-circulating materials

- Recalls should only be made as a last resort
Questions?

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Amy Drayer, User Interface Developer: adrayer@umn.edu
Christopher Rose, Data Systems and Services: rosex051@umn.edu

Read & Endorse the BTAA Discovery to Delivery report here!

z.umn.edu/btaad2d