A Tale of Two Collaborations: Shared Discovery through the eyes of TRLN and BorrowDirect

Coalition for Networked Information
Fall 2017 Membership Meeting
December 12, 2017
Introduction

- Panelists from **two different consortia** that each aim to provide shared discovery of collections across multiple institutions
- **Benefits** and **challenges of collaboration** in respective contexts, including:
  - Formal vs. informal organizational structures
  - An upgrade project vs. a new initiative
  - Use of dedicated staff vs. consultants
  - Geographic proximity vs. dispersion
- **TRLN & Borrow Direct** - strong inter-library collaboration
- **Rising Patron Expectations** - fast, faceted, easy search
- **Proven Technology Approaches** - for discovery & fulfillment
- **Planning, Process, Governance**
TRLN Discovery

A collaborative software development project to implement a modern and open-source discovery layer

- Replacement for Search TRLN (powered by Endeca)
- Shared index and shared user interface framework
- Improved discovery and enhanced delivery
Search TRLN (current)

Content users can **FIND**

Content users can **ACCESS** without staff mediation
Search TRLN (current): Services

Discovery: Provided by Search TRLN (Endeca). Shared index + union catalog and local skins.

Availability: Provided by shared index. Availability updated every hour.

Fulfillment: Interlibrary lending via ILLiad. Relais D2D implemented but mediated.
Project Challenges

Performance Issues
- Endeca version is proprietary software that is EOL
- System failures increasingly difficult to resolve
- Host only supports the server and OS

Staffing Issues
- Ongoing vacancies, key vacancy in central office
- Requires shared commitment of developers from multiple libraries
- Range of skills and contributions across member institutions.

Patron Expectations
- Can discover things, but cannot directly access all materials
- New system must provide level of discovery patrons are accustomed to
- Inconsistent fulfillment practices among libraries
TRLN Discovery - Organizational Structure

● **Organizational Structure**
  ○ MOU, longstanding history of collaboration
  ○ Programmatic Councils, Committees
  ○ TRLN Central Staff - 4 positions

● **Discovery impacts multiple TRLN Councils**
  ○ Created TRLN Discovery Advisory Team with AUL representation from Technology, Collections and Services Councils to oversee the project
  ○ Benefit: causing us to re-evaluate our structures and staffing

● **Challenges of large representational groups**
  ○ Reducing group size, forming scrum development team
TRLN Organizational Structure

Collections Council

Human Resources Council

Services Council

Technology Council

Technical Services

Scholarly Communication

TRLN Discovery

Institutional Repositories

Project Management
TRLN Geographic Proximity

- All members within 25 miles
- TRLN Van delivering materials
- Central meeting space available
TRLN Discovery - New spin on existing collaboration

- **Endeca and Search TRLN**
  - 10 years of supporting shared discovery

- **Shared Index**
  - Critical to our One Collection, One Community vision
  - People know and use; patron expectation already set

- **Challenges**
  - Existing project BUT new software stack
  - Not all institutions can contribute same amount of staffing
  - Have to produce something better than system being replaced
  - Retiring a system for which TRLN received much attention
TRLN Discovery - Staffing

- **Development team, as of May 2017**
  - TRLN central office: 1 lead product owner, 1 scrum master / lead developer
  - Member libraries: 3 institutional product owners [UNC, DUKE, NCSU], 3 developers [UNC, DUKE, NCSU], 1 user experience expert [NCSU], 1 metadata expert [UNC]

- **Staffing challenges**
  - Vacancies: currently down 1 developer and 1 scrum master
  - Development team still committed to other local work
  - Currently investigating consultants to fill development gaps due to staff vacancies
  - Development team dispersed, face to face once every two weeks
TRLN Discovery - State of the Project

- Project started June 2016
  - Broad committee established to scope the project
- Scrum framework implemented May 2017
  - Small development team with lead and institutional product owners
- First release to product owners August 2017
- Second release for library staff expected Spring 2018
  - Working prototype; hosted with AWS, 300k records in shared index, expect 2+million records Spring 2018
  - Shared code in github repository
  - Local installations at Duke and NCSU
- Production launch late Fall 2018
What is **BorrowDirect**?

BorrowDirect is an **unmediated library resource sharing partnership** encompassing thirteen Ivy Plus academic institutions.

- **275,412** items in FY 17
- **4-day** average delivery time
- **95%** fill rate

- **Brown** University Library
- **Columbia** University Library
- **Cornell** University Library
- **Dartmouth** College Library
- **Duke** University Library
- **Harvard** University Libraries
- **Johns Hopkins** University Libraries
- Massachusetts Institute of Technology Libraries (**MIT**)
- **Princeton** University Libraries
- **Stanford** University Libraries
- **University of Chicago** Library
- **University of Pennsylvania** Libraries
- **Yale** University Library
Filled requests vs. Fiscal year

7.34% average growth per year since 2005
BorrowDirect | Service of the Ivy Plus Libraries Partnership

13 Institutions

- Brown University Library
- Columbia University Library
- Cornell University Library
- Dartmouth College Library
- Duke University Library
- Harvard University Libraries
- Johns Hopkins University Libraries
- Massachusetts Institute of Technology Libraries (MIT)
- Princeton University Libraries
- Stanford University Libraries
- University of Chicago Library
- University of Pennsylvania Libraries
- Yale University Library

19 Committees & Groups

- Academic Business Library Directors
- Archives & Records Management
- Art & Architecture
- Assessment
- BorrowDirect Operations
- BorrowDirect Policy
- BorrowDirect Systems
- Collection Development
- Communications
- Development
- Discovery
- East Asian Libraries
- Latin American Studies
- Heads of Library IT
- Music
- Preservation
- Heads of Science & Engineering
- Libraries
- Technical Services
- University Librarians

4 Staff

- Galadriel Chilton
  Director of Collections Initiatives (Yale)

4 Staff

- Heidi Nance
  Director of Resource Sharing Initiatives (Penn)

4 Staff

- Samantha Abrams
  Web Resources Collecting Librarian (Columbia)

4 Staff

- Jean Park
  Bibliographic Assistant, Web Collecting Program (Columbia)

2 Programs

- BorrowDirect Resource Sharing Service
  Ivy Plus Libraries Web Resources Collecting Program

- Ivy Plus Libraries Web Resources Collecting Program
BorrowDirect Today | Why so successful?

1. No library can collect everything.
   Not enough **money**.
   Not enough **space**.
   Not enough **time**.

2. BorrowDirect is **faster** than traditional Interlibrary Loan systems.

3. BorrowDirect is **more accurate** and **reliable** than traditional Interlibrary Loan systems.
BorrowDirect Today | Service Offerings

- **Discovery**: provided by OCLC / Relais Discovery to Delivery (D2D)
- **Availability**: provided by OCLC / Relais Discovery to Delivery (D2D)
- **Fulfillment**: provided by a mix of OCLC / Relais Discovery to Delivery (D2D) & local loan tools
BorrowDirect Today | Shortcomings

- **Performance Issues**
  - Z39.50 is slow

- **Search Results Issues**
  - Inconsistent Data Indexing
  - Poor Search Results
  - Lack of faceting

- **Inability to integrate with other consortia**
  - **Chicago** - Big Ten Academic Alliance (UBorrow)
  - **Duke** - Triangle Research Library Network (TRLN)
  - **Penn** - Pennsylvania Academic Library Consortium (EZBorrow)
BorrowDirect Today | Discovery Silos

Content users have access to through BorrowDirect

Content users see in local discovery
Proposed Solution: Borrow Direct Shared Index

Build upon concept of TRLN and ReCAP Index-based Discovery:

- TRLN: 4 institutions, 20 million items
- ReCAP: 3 institutions, 14 million items
- Borrow Direct: 13 institutions, 70 million items
Borrow Direct Shared Index: Scope

- **Index** - High-performance, SOLR-based
- **Decouple** - Discovery from Availability and Fulfillment
- **Develop** - Open solution - open source, open data
- **Share Records** - centrally aggregate catalog records
- **Stability** - Commitment to maintain Relais for at least 3 years
- **Extensible** - provide ability to extend use of database
Three Discovery Options

- **Standalone Discovery** - Separate Borrow Direct Search Site
- **Local Discovery** - Metadata harvest, local index
- **Bento Box Discovery** - Discovery via API calls to central index

![Diagram showing the relationships between Standalone BD Search Web Site, Local Discovery (Load 70 million items), Local Bento Box (API calls to BD Index), and API Services connected to a Shared Index - 70 million items.](image)
Shared Index Project - Fits and Starts

- Project originated in the BorrowDirect Policy Committee
  - BD Policy Committee is long-standing, cohesive group generally composed of Heads of Public Services
  - Well-positioned to understand the service need
  - Not well-positioned to commit necessary resources/move project forward
  - Existing BorrowDirect IT Committee focused on problem-solving current implementation

- Ivy Plus Collections Committee became interested from a collection analysis and collaborative collection development perspective

- Ivy Plus IT Directors started meeting twice a year

- Solution: Joint Committee (We’ve never met in person)
  - 3 Ivy Plus IT Directors
  - 3 BorrowDirect Policy Committee members
  - 3 Ivy Plus Collections Committee members
Project Design

1. Hire Consultant
2. Develop RFP for Shared Index
3. Create Shared Index

Easy, right......
Step 1: Hire a Consultant

● Rationale
  ○ No one had the time to do the necessary legwork
  ○ Neutral party to help resolve differences
  ○ Member institution success with this approach

● Process
  ○ Write RFP for consultant, which meant we had to...
    ■ Articulate (aka agree on) project goals
    ■ Define scope of work and process
    ■ Resolve governance issues

● Scope of Work for Consultant
  ○ Review the current market landscape
  ○ Interview each institution to understand technical issues with each ILS and to establish local functional needs and implementation goals
  ○ Create Share Index Project Plan
  ○ Write RFP for the creation of a Shared Index
Governance Issues

● Challenges
  ○ Who make decisions?
  ○ Lack of formal governance structure for BorrowDirect and for Ivy Plus

● Goals
  ○ Wide input so that the shared index meets member needs
  ○ Several stages of check-in with consultant to ensure plan/RFP is going in the right direction
  ○ Timely feedback to consultant so that they are not waiting for weeks and falling behind on timelines

● Strategy: Inverted Triangle
  ○ Initial Input Gathering: Wide consultation
  ○ Response to Preliminary Plan Draft: Targeted input from key stakeholders
  ○ Final Project Plan: Borrow Direct Shared Index Working Group
  ○ Approval of Project Plan and decision to move forward: Ivy Plus Library Directors
Steps 2 & 3: RFP and Creation of Shared Index

- Governance Issues x 2
  - Stakes higher with 2nd RFP (for the creation of the Shared Index) - getting agreement on responses to RFP may be more difficult
  - New workflows will be required - how do we ensure members commit appropriate resources to this project?
  - Where does the shared index live?
  - What gets indexed (back to the question of the use of the index...)
  - Ongoing financing
  - Staffing needs?
  - Shifting sands in the ILL landscape
Next Steps - We’ll be back with an update at CNI Spring 2018!
Presenter Contact Info

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References & Credits