# 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



Duke University
North Carolina Central University
North Carolina State University
University of North Carolina Chapel Hill

Search TRLN (current)



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.

<u>Availability updated every hour.</u>

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

Rrequires 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

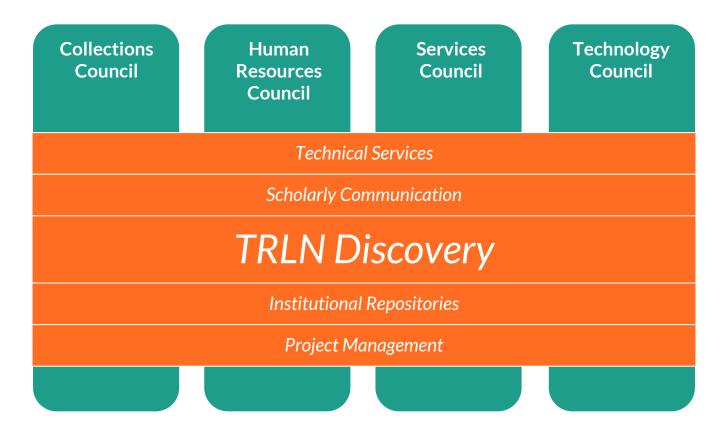
### Discovery impacts multiple TRLN Councils

- 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

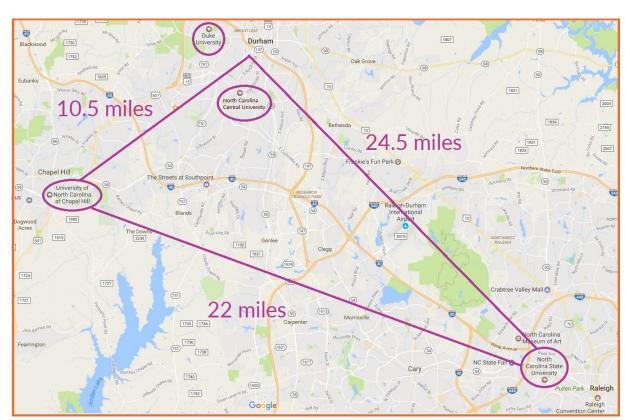
Reducing group size, forming scrum development team

# TRLN Organizational Structure



# 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

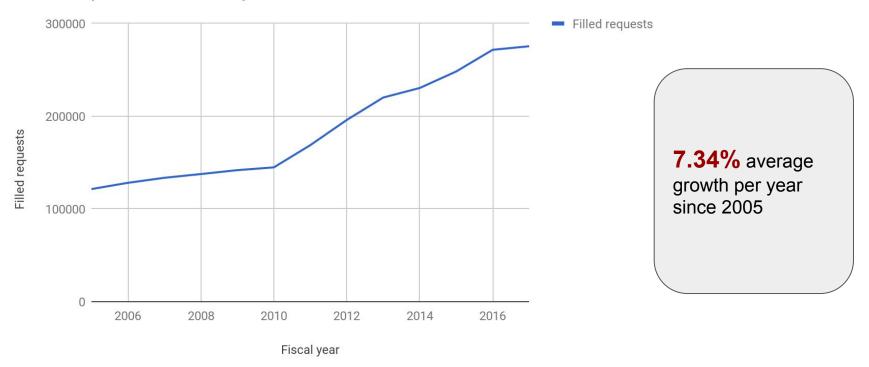
### What is **BorrowDirect**?

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



### Filled requests vs. Fiscal year





### BorrowDirect | Service of the Ivy Plus Libraries Partnership

**13** Institutions

19 Committees & Groups

4 Staff

2 Programs

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

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** 

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Web Resources Collecting Librarian (Columbia)

Jean Park

Bibliographic Assistant, Web Collecting Program (Columbia) **BorrowDirect Resource Sharing Service** 

Ivy Plus Libraries Web Resources Collecting Program

# BorrowDirect Today | Why so successful?



No library can collect everything.

Not enough money.

Not enough **space**.

Not enough **time**.

2

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



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

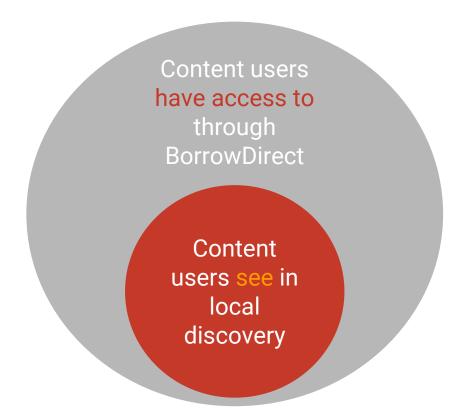
### Search Results Issues

- Inconsistent Data Indexing
- · Poor Search Results
- Lack of faceting

# Inablility 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



# Proposed Solution: Borrow Direct Shared Index Build upon concept of TRLN and ReCAP Index-based Discovery:



4 institutions, 20 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

Standalone BD Search Web Site

Local Discovery (Load 70 million items)

(API calls to BD Index)



**API Services** 

# **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**

Hire Consultant

Develop RFP for Shared Index

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

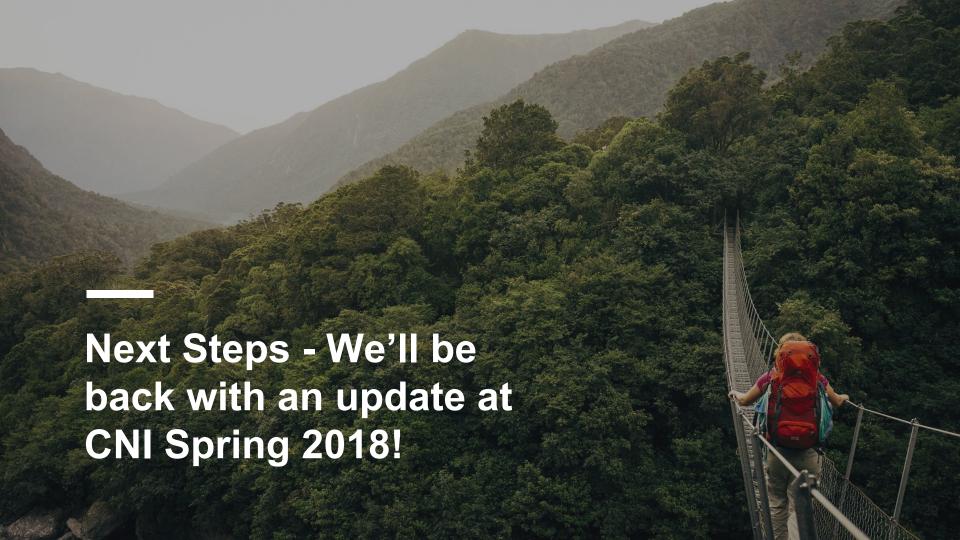
### Strategy: Inverted Triangle

- 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



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# **References & Credits**

Slide - "What is BorrowDirect?" Nance, Heidi. Book Stacks at Yale's Beinecke Rare Book Library. 2017. JPEG.