



Framework for Discovery-to-Fulfillment Systems Planning in the Context of Big Ten Academic Alliance Resource Sharing

A report to the Big Ten Academic Alliance Library Directors

May 2013

Project Team

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Executive Summary

PURPOSE

In May 2012, the CIC Library Directors commissioned a small project team to report on the range of issues and challenges pertaining to providing modern resource sharing services. A project team comprised of John Butler (Minnesota), Barbara Coopey (Penn State) and Lee Konrad (Wisconsin) was created to undertake this task, working in cooperation with CIC stakeholder colleagues.

The team was asked to pay particular attention to the challenges of creating a more seamless user experience from information “discovery” to “fulfillment.” The challenges of doing so have effectively come to the fore as a result of the recent CIC implementation of UBBorrow, and by a variety of other factors such as the availability of the Rapid ILL service, and the introduction of web-scale discovery tools into our user environments. The team's work led to an exploration of the intersections, dependencies, and practices associated with facilitating discovery-to-fulfillment services within and across our libraries, and an attempt to identify themes and practices that could lead to improved integration of this work at either the local or consortial level.

This final report describes the team’s efforts, detailing stakeholder engagements and the themes that emerged from them, and a series of recommendations that should prove useful to the Directors as a possible framework for creating greater coherence in planning and decision-making processes which will, in turn, improve our collective efforts to improve the user experience within and across CIC libraries.

APPROACH

The CIC Library Directors have indicated a need for greater interplay, planning, and vetting of decisions between public services, resource sharing services, and technology services units to optimize the CIC libraries’ ability to develop and integrate systems and service layers in ways that CIC institutions might benefit.

In exploring these issues and shaping this report, the project team initially drew from relevant professional literature and anecdotal evidence provided by both colleagues and users. The project team then engaged primary stakeholders in an effort to understand their local practices, challenges, and desires with respect to discovery and resource sharing at their libraries.

Using two primary lenses, those being *the public service/patron experience* and *business processes/efficiencies*, the project team identified two overarching questions in response to the challenge:

1. How might an examination of discovery and resource sharing planning and decision-making processes help us identify/determine solutions and approaches for greater coherence and efficiency?
2. What is the potential for common solutions and/or greater integration with respect to resource sharing services and supporting architectures within the CIC?

FINDINGS

A number of themes emerged from the stakeholder engagements shedding light on the complexity of our discovery environments for users and the significant challenges and dependencies associated with the provision of modern resource sharing services. It is clear that the concept of “one-stop shopping” is attractive to users, that there are too many product/service options asserted within the user interface, and that despite our efforts, some complexities will be difficult to conceal from users. The challenge of communication, both with users and with staff working across functional lines, stands out as a primary opportunity for improving both the user experience and our business processes.

The project team determined that a potentially useful course of action would be to develop a framework that CIC institutions and colleagues might find useful in planning for and addressing both institutional and consortial needs and interests. The project team characterized this framework in terms of an “ecosystem” consisting of our users, staff, and three primary functional components, those being: discovery, fulfillment, and technology. Each of these components can be viewed as functioning independently *and* interdependently within the environment. The ecosystem of discovery-to-fulfillment processes, with respect to resource sharing, is unclear and complex to users. Efforts to improve the environment may be realized most effectively through a “systems” approach to planning at both the institutional and consortial levels. The goals of establishing this framework and the recommendations to meet them follow.

GOALS AND RECOMMENDATIONS

1. Develop clear governance and decision-making processes in areas of high interdependency. In highly interdependent operational areas in the CIC (e.g., resource sharing), develop well-understood processes for exploring options, planning, decision-making, and execution. Apply “systems” approaches and safeguard against unilateral actions or commitments that constrain collective action. The goal in mounting functionally-interconnected services is that they are richly responsive to the needs and intentions of each institution, as well as to the consortium.

Recommendation:

Formalize and document standardized processes for CIC resource sharing systems deployments and operational planning, decision-making, and execution.

Elements of a standardized process may include articulation of:

- End user requirements, expectations, and priorities
- Operational requirements
- Financial requirements and implications
- Technology requirements and implications
- Contractual requirements and other institutional commitments or constraints
- Policy considerations
- Decision-making authorities and sign-off processes

2. Support cross-functional planning and information exchange. Strengthen the exchange of ideas and institutional planning information across the consortium (across libraries and among diverse functional stakeholders within each library) relating to discovery-to-fulfillment systems’ ecosystem, integration, and support of service operations, with the creation of a more coherent user experience foremost in mind.

Recommendation:

Establish a small joint subcommittee (3-6 members) of representatives from the CIC committees in the functional areas of resource-sharing, public services, and technology with an initial two-year commitment, charged to oversee integrative coordination within the consortium related to services areas where there is a high level of functional *and* institutional interdependency.

Questions to Consider

- What might be done to ensure a smooth transition between discovery and delivery?
- What might we do to hide numerous, disparate systems from the user?
- What should be the predominant drivers as libraries explore new systems, technologies, practices?
- If tradeoffs must be made with respect to improving the user experience, which factors should be given greater consideration?
- Does fulfillment come at the expense of discovery?
- Does technical integration come at the expense of both?

- If, as Lorcan Dempsey asserts, “discovery happens elsewhere” or at least substantially elsewhere, how do we position our fulfillment services to achieve the seamless experience between “search” and “get it” that users expect?

3. Model an open architectural model for CIC discovery-to-fulfillment systems.

Develop an open architecture model for discovery-to-fulfillment systems for the CIC.

The model, to be conceived of at an abstracted level, would take into consideration the rapidly evolving changes in information discovery environment, variety of specific solutions in use, the discrete role of specific architectural components, the roles of standards, APIs, resolution, and data services to achieve *full* interoperability across our diverse technology environments. The model would serve as an educational and planning vehicle, helping to establish a common understanding of and guideline for such interoperability moving forward.

Recommendation:

Commission an independent analyst to review the overall CIC discovery-to-fulfillment system environment and submit recommendations for maximizing interoperability and complementary use of diverse technologies and systems across the CIC. The model would be presented to the relevant CIC committees and early-referenced joint subcommittee for review, dissemination, and potential action.

4. Strengthen efforts to exert collective influence. Exercise intentional collective influence on external entities (i.e., software and system vendors, publishers and content-providers, standards-creating bodies, policymakers, etc.) that will, in turn, influence the direction and capabilities of discovery-to-fulfillment services moving forward.

Recommendation:

- Strengthen coordinated efforts to identify, prioritize, and communicate CIC requirements of these systems and services to external entities of influence. In areas of critical need or opportunity, engage the Directors in exploring options for collective executive action.
- Continue collaborative work with vendors, such as Relais, the UBBorrow Service vendor, and other consortia who share the CIC’s interest in the development of standards-based open architectures and robust APIs that will, ultimately, enable highly functional discovery-fulfillment system integrations.

FULL REPORT

Framework for Discovery-to-Fulfillment Systems Planning in the Context of CIC Resource Sharing

PURPOSE AND ACKNOWLEDGEMENTS

In May 2012, the CIC Library Directors commissioned a small project team to report on the range of issues and challenges pertaining to providing modern resource sharing services in our consortial context. The team was asked to pay particular attention to the challenges of creating a more seamless user experience from information “discovery” to “fulfillment.” The challenges of doing so have effectively come to the fore as a result of the recent CIC implementation of UBBorrow, and by a variety of other factors such as the availability of the Rapid ILL service, and the introduction of web-scale discovery tools into our user environments.

A project team comprised of John Butler (Minnesota), Barbara Coopey (Penn State) and Lee Konrad (Wisconsin) was created to conduct this task. The team enlisted the help of CIC colleagues who work within the functions of public services, information technology, and resource sharing, working collaboratively to consider the challenge at hand. Ultimately, the team's work led to an exploration of the intersections, dependencies, and practices associated with facilitating discovery-to-fulfillment services within and across our libraries, and an attempt to identify themes and practices that might lead to improved integration of this work at the local and/or consortial level. The team submitted a *Preliminary Report on Resource Sharing Environmental Scan* to the Directors in November 2012, some of which is included here in order to provide context for the recommendations that follow. This final report and its recommendations serve as a suggested framework to guide the CIC libraries as we collectively strive to improve the experience of users as they set about the task of searching and finding information through local and global systems (discovery) and accessing and getting that information through a network of resource sharing providers (fulfillment).

The development of this report and its recommendations was made possible through the collective interest of CIC colleagues and in the key questions and considerations being raised around the interdependencies, challenges, and issues surrounding the provision of resource sharing services in today's academic library environment. The project team thanks its CIC colleagues who contributed insights, comments, and content for the report. In particular, the team thanks the CIC ILL Directors, Public Service Directors, and IT Directors for their efforts to engage in the process of producing this report, and in helping to explore the intersections of resource sharing, public services, and technology. Finally, the team thanks the CIC Library Directors, for the opportunity to consider these questions, and for their desire to lead discussion to identify principles and practices that facilitate improved collaboration across our institutions.

CONTEXT, ENGAGEMENT AND EMERGING THEMES

The CIC Library Directors have indicated a need for increased interplay between public services, resource sharing operations, and information technology units across the consortium to achieve greater harmonization of systems and services. Their overarching goal was to reduce fragmentation of effort and ensure decision-making processes that reflect the Directors' desire to align efforts where possible to meet broad CIC goals and objectives. A shared goal here is to create a coherent experience for our users by facilitating discovery to locally-owned material first, then by providing a seamless transition to resource sharing systems when necessary for fulfillment.

Using two primary lenses, those being *the public service/patron experience* and *business processes/efficiencies*, the project team identified two overarching questions in response to the challenge:

1. How might an examination of discovery and resource sharing planning and decision-making processes help us identify/determine solutions and approaches for greater coherence and efficiency?
2. What is the potential for common solutions and/or greater integration with respect to resource sharing services and supporting architectures within the CIC?

In order to address the questions above, the project team engaged primary stakeholders in an effort to understand their local practices, challenges, and desires with respect to discovery and resource sharing at their libraries. The goal of these engagements was to uncover shared challenges in providing resource sharing services for users, both for individual libraries and across the consortium. *A general consensus was that discovery-to-fulfillment processes, with respect to resource sharing, is unclear, if not unexpectedly complex to users, and that any effort to develop a more coherent set of practices and/or solutions to simplify respective discovery and resource sharing environments will be welcomed by users and staff assisting them.*

Engagement 1: Survey of the ILL Directors

In September, the project team conducted an online survey of the CIC ILL Directors (Appendix A: CIC ILL Directors Survey: Resource Sharing Environmental Scan, September 2012) inquiring whether/which discovery systems are in place or under consideration in their library, how their resource sharing systems are integrated with discovery systems, which stakeholders were involved in the selection and implementation of these systems, and if the libraries participate in consortial resource sharing. Not surprisingly, there are several web-scale discovery systems in use across the CIC including Primo, Summon, WorldCat Local, and locally developed systems. However, *the integration of discovery and resource sharing systems was found to be complex, superficial, and limited.* When selecting discovery and resource sharing systems within their respective libraries, most had task forces or groups with broad library representation. A number of libraries responding to the survey belong to more than one resource sharing consortia including university system, statewide, or other regional

consortia. The ILL Resource Sharing Management software (ILLiad), a product of Atlas Systems and distributed exclusively through OCLC, is the most common software element in CIC interlibrary loan operations.

Engagement 2: CIC Resource Sharing Symposium

In October 2012, the project team was invited to attend the CIC Resource Sharing Symposium in Chicago. The team summarized their charge, presented the results of the CIC ILL Directors' survey, and led a discussion addressing the primary questions under consideration for this report. Participants were asked to think aspirationally about the "ideal" discovery-to-fulfillment resource sharing environment. The session was contextualized as a need to explore stakeholder understanding (and desires) in light of the interplay between traditional operational functions and a consideration of consortial-level solutions related not only to technology and architecture, but also to organization, processes, and governance.

This particular engagement proved to be quite informative on a number of fronts, particularly in discussions on the results and themes that emerged from the survey of the ILL directors. During the Q&A period, and through informal exchanges with colleagues throughout the symposium, the team was able to clarify and affirm their understanding of the emerging themes, and also able to develop a more cohesive and shared understanding of the complexity of operations, pressures, constraints, and nuanced decision-making that goes into providing resource sharing services to users. Perhaps most important, the meeting served as a true affirmation of our collective intent (as institutions and as librarians) to provide the best user experience possible given the challenges posed by available resources and constraints.

Engagement 3: Survey of the CIC Public Service Directors

In October, the project team initiated an online survey of the CIC Public Service Directors (Appendix B: CIC Resource Sharing Environmental Scan – Discovery Service, October 2012), exploring questions pertaining to their perceptions as to how their libraries have integrated their discovery and resource sharing systems, their sense of user expectations with respect to discovery-to-fulfillment, the preferred (or acceptable) number of interfaces/systems a user must navigate to move from discovery-to-fulfillment, preferred methods for making fulfillment options or parameters apparent to users, and instructional materials or sessions offered by the libraries for discovery and resource sharing. *Respondents indicated that users want a seamless interface, without redirects, between discovery and fulfillment.* Some noted that current systems can take up to five "clicks" through pages from discovery-to-fulfillment, and that ideally the system would determine the optimal path for fulfillment and take care of that for the user, or would present the user with fulfillment options.

Emerging Themes: Preliminary Report to the CIC Library Directors and Stakeholder

Feedback In November 2012 the project team prepared a preliminary report for the Library Directors. In January 2013, a copy of the report was posted online, inviting comment from the stakeholder groups who had contributed to the earlier surveys. The objective in seeking comments was to ensure that the project team accurately reflected the range of opinions and issues that emerged from the stakeholder engagements and to gain an understanding of the interconnectedness of these groups when considering services that clear to users and cost-effective to operations.

Not surprisingly, the report recognized a fairly clear consensus, particularly from the Public Service Directors, that in the activities of searching and then getting needed information getting users are confused. This is due in large part to the number and diversity of systems and options now available to them. In general, the Public Service Directors sense that users would welcome greater consistency and/or ease with respect to navigating our discovery and resource sharing systems. *There is a strong sense that the ideal situation, if not growing expectation, would be to have users remain in a single interface from the point of discovery through fulfillment.*

In summary, the following specific themes emerged from the various stakeholder engagements and reaction to the Preliminary Report:

- The concept of “one-stop shopping” is attractive to users, as well as staff supporting them. *Discovery* and *fulfillment* presented as two separate, disconnected, or different things, perhaps even in two distinct places, is confusing to users and staff alike. Users are expecting a seamless and continuous transaction. Anything less is disappointing.
- There are too many product/service options asserted within the user interface. How can this be reduced? Is it possible to improve the explanation of these services or, perhaps more effectively, not let back office complexities drive end-user interfaces and workflows.
- Some complexities will be difficult to conceal from users. Is it possible to clarify for users the distinction between “returnables” and copies (non-returnable) when there is growing expectation for ubiquitous electronic copy? Is it possible to clarify for users what is available immediately (electronically), at the local library (requiring some delay with user or staff time needed to retrieve the item), or from another library (taking at least a few days). Where do new and often idiosyncratic delivery formats, like e-books, fit into this array of delivery options?
- There is interest among some staff and possibly with users whereby searches in discovery systems may be “tuned” or “scoped” to filter on availability/fulfillment parameters. It is worth considering that the ability to do such tuning might logically be extended to our resource sharing systems (e.g., whether at the point of discovery or the placement of a request, might there be ways to present options that have been predefined by users based on parameters such as turnaround time, length of loan

period, possible option to purchase, etc.).

- Communication to the user is a critical service element. As users cross into various institutional service environments, can there be common and user-friendly nomenclature in the “ILL/resource sharing” and other service realms?

In overall reflection of the issues, the UBorrow project and resource sharing in general, it became apparent that *while each CIC library explores technology and service implementations at a local level, it is increasingly important for each to weigh options within the consortial context.*

Recognizing the need for local review and principles, optimal outcomes from CIC may depend on local strategies aligning with consortial strategies towards the continued improvement areas of our various discovery-to-fulfillment services. While local decisions may advance or address particular goals of a single institution (e.g., cost savings, institutional principles), such decisions are rarely without service implications or financial consequences for CIC partners.

A POSSIBLE CIC FRAMEWORK FOR DISCOVERY-TO-FULFILLMENT PLANNING

Following the release of the preliminary report, the project team turned its focus towards developing a response. While the emerging themes and issues were not surprising, the problem space to be addressed was found to be highly complex. The intersection of institutional and consortial decision-making processes regarding services and technologies in this area is a matter of intricate governance. Raising the awareness level of functional and inter-institutional interdependencies *and* effects in our decision-making processes seems necessary. To do so, it is deemed important to foster a common understanding of interconnected service spheres like discovery and fulfillment as a kind of ecosystem -- of users, staff, systems, practices, policies, and institutional philosophies.

To advance this notion, the project team determined that a potentially useful course of action would be to develop a framework that CIC institutions and colleagues might find useful in addressing both institutional and consortial needs and interests. Up front, it's important to acknowledge that the CIC institutions strongly share a general commonality of mission, service intent, and broad strategic direction. The CIC libraries have a deeply-rooted service orientation and ethic, coupled with a commitment to providing high quality information resources to its academic communities. Viewing the totality of resource sharing as an ecosystem intends to facilitate greater understanding of the interdependencies in play as libraries work to create discovery and resource sharing environments that meet the needs and expectations of library users.

A Resource Sharing Ecosystem

Highly effective resource sharing services first depends on a clearer and shared sense of the total environment by the CIC's libraries, decision-makers, and staff. In addition to our staff and users, there are three primary functional components making up a resource sharing ecosystem: they are, discovery, fulfillment, and technology. Each of these components can be viewed as functioning independently *and* interdependently within the environment. Each faces pressures to perform with

operational excellence (smart, cost-effective, efficient operations) while upholding high *quality of service* standards (fast, accurate) to meet the ever-rising expectations of users.

1 - Discovery Layer

The literature and our direct experience with patrons tell us a number of things about the discovery needs of users. Library users seek a clear starting point for finding resources relevant to their research. They also want a single interface to easily search and access everything, and expect discovery and fulfillment services to coincide within this interface. Currently, libraries present a myriad of discovery options to users ranging from web-scale products to aggregator databases, the library catalog, collections lists, and resource sharing catalogs. This confusing environment leads many users to ultimately place an interlibrary loan request for locally-owned material. One improvement, however, has been in the use of web-scale products promoted as a research starting point to facilitate discovery of library resources first. Penn State Interlibrary Loan experienced the impact of their new web-scale discovery service by seeing a 35% reduction in the number of undergraduate requests for locally owned material in the year following the implementation.

While users uncover an abundance of material in web-scale discovery products, some do come to a “dead end” with their particular search terms. These products do not include all of the library’s resources, nor provide a transition to continue the search in a resource sharing catalog. To complicate this further, when a resource sharing product not intended to be the library’s initial entry for discovery has its own public discovery interface, it may not be clear to users when and why to use it. Prompting the CIC Library Directors to request this review and report were reflections on the CIC implementation of UBorrow (Relais) to support unmediated resource-sharing requests. As noted in a recently released report, the UBorrow service has achieved many successes, most notably those resulting in new efficiencies for users and resource-sharing staff. Yet, presenting UBorrow -- primarily a fulfillment service -- to users as a discovery tool has raised a dilemma. On the one hand, it neatly moves closer to the ideal of seamlessness between discovery and fulfillment functions for the user. On the other hand, UBorrow does not rise to meet the new standard of (and user expectations for) web-scale search and discovery services.

2- Fulfillment (ILL/Resource Sharing/Document Delivery Services) Layer

Interlibrary loan (ILL) services, operations and systems are, by their nature, multidimensional and complex; they function within a library environment of discovery and fulfillment silos. Furthermore, interlibrary loan units are expanding services beyond traditional ILL, such as campus book and article delivery, distance education delivery services, e-books, and patron-driven acquisition services. They have (at least) three major compounding dimensions of interconnectedness:

The cross-functional dependencies within the institution. Interlibrary loan collaborates with many library departments to support services. Library IT manages authentication, openURL, Z39.50 protocols, and system connection issues; resolves ILL’s unique hardware and software issues; assists in the setup of

systems, services, and system interface configurations; and maintains and supports in-house e-resource management staff on negotiating favorable licensing terms, and with rights management staff for securing third-party permissions. ILL and Circulation join to check out resource sharing material and manage bills for lost ILL material. ILL supplies lists of request information to assist library selectors. Finally, ILL regularly interacts and plans with local shipping/logistics operations to ensure timely receipt and delivery of physical items.

Service and system dependencies across the CIC institutions. Interlibrary loan units across the CIC libraries have aspects of uniqueness, which manifest in institutionally-specific requirements, resource commitments, technologies, programs, and library resources (staffing and funding). CIC libraries are committed to adherence to information exchange standards. In ILL, the core standards are defined in the CIC Resource Sharing Agreement (Appendix C) which includes a commitment to respond as quickly as possible to requests, and the use of delivery for articles and courier delivery for returnables for expedited delivery. Nearly all CIC libraries use OCLC WorldCat and the ILLiad ILL management tool for fulfillment. Nonetheless, not all use other CIC libraries as a first choice. Those with statewide commitments rely on those networks first; nine libraries use the CIC UBorrow; and less than half of the CICs use RapidILL, a product that automatically sends article requests to RapidILL participants first. *Dependencies on vendors and other externalities.* These dependencies influence the operational and technological environment, now and moving forward. For process efficiencies, resource sharing units are looking beyond the traditional WorldCat catalog to proprietary products that offer specialized services.

For example, UBorrow interfaces directly with CIC libraries' catalogs and then, according to system configuration, chooses a lending library based on item availability, request load leveling, and the library's loan policies.

Since the system is configured to send the request to a library that indicates the item is available, 90% of the requests are filled by the first lending library, (Footnote ---Report to CIC Library Directors. *UBorrow: One Year Later*. Anne Beaubien and David Larsen. April 17, 2013).

Another example is RapidILL (and similarly the Knowledge Base service from OCLC), a union catalog of both print and electronic journal holdings of member libraries. It returns requests that the participating library owns or immediately sends a request to a library holding the needed journal issue. These products, however, may simplify some processes while complicating others, mainly due to limited systems integration. During a routine processing day, ILL operations interface with multiple ILL/resource sharing service products (e.g., Penn State has six), each subject to different policies, consortial agreements, or unique processing protocols or efficiencies. These decisions must be balanced by a nuanced understanding of the product's functionality and the level of

interoperability with local web-scale and database products, the ILS, ILL management system, or other resource sharing products.

3- Technology Layer

At both the local level and across the CIC, there are many technical systems that underlay the patron experience with respect to discovery and fulfillment. These systems are necessarily optimized and configured to integrate with systems and vendors in play at a given institution, and subsequently configured to integrate with consortium partners to the best of the library's ability once local needs have been addressed. *Given the range of local practices, vendors, licenses, and systems in play, there are significant technical challenges associated with realizing the idealized state of seamless resource sharing experience across the CIC.*

GOALS AND RECOMMENDATIONS

The project team proposes that the CIC develop a framework to address highly interdependent needs and interests in the areas of discovery and fulfillment services, but potentially elsewhere as well. In advancing the notion that our institutional and consortial functions as increasingly part of a single ecosystem, such a framework would strive to foster planning and decision-making outcomes that are conscious of the whole. Within this project's focus, approaching the totality of discovery and fulfillment (via resources sharing) would facilitate greater awareness and understanding of the interconnected service components and functions, while striving to meet the needs and expectations of library users.

The goals of establishing this framework and the recommendations to meet them are to:

1. Develop clear governance and decision-making processes in areas of high interdependency. In highly interdependent operational areas in the CIC (e.g., resource sharing), develop well-understood processes for exploring options, planning, decision-making, and execution. Apply “systems” approaches and safeguard against unilateral actions or commitments that constrain collective action. The goal in mounting functionally-interconnected services is that they are richly responsive to the needs and intentions of each institution, as well as to the consortium.

Recommendation:

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2. Support cross-functional planning and information exchange. Strengthen the exchange of ideas and institutional planning information across the consortium (across libraries and among diverse functional stakeholders within each library) relating to discovery-to-fulfillment systems' ecosystem, integration, and support of service operations, with the creation of a more coherent user experience foremost in mind.

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Questions to Consider

- What might be done to ensure a smooth transition between discovery and delivery?
- What might we do to hide numerous, disparate systems from the user?
- What should be the predominant drivers as libraries explore new systems, technologies, practices?
- If tradeoffs must be made with respect to improving the user experience, which factors should be given greater consideration?
- Does fulfillment come at expense of discovery?
- Does technical integration come at the expense of both?
- If, as Lorcan Dempsey asserts, “discovery happens elsewhere” or at least substantially elsewhere, how do we position our fulfillment services to achieve the seamless experience between “search” and “get it” that users expect?

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Develop an open architecture model for discovery-to-fulfillment systems for the CIC.

The model, to be conceived of at an abstracted level, would take into consideration the rapidly evolving changes in information discovery environment, variety of specific solutions in use, the discrete role of specific architectural components, the roles of standards, APIs, resolution, and data services to achieve *full* interoperability across our diverse technology environments. The model would serve as educational and planning vehicle, helping to establish a common understanding of and guideline for such interoperability moving forward.

Recommendation:

Commission an independent analyst to review the overall CIC discovery-to-fulfillment system environment and submit recommendations for maximizing interoperability and complementary use of diverse technologies and systems across the CIC. The model would be presented to the relevant CIC committees and early-referenced joint subcommittee for review, dissemination, and potential action.

4. Strengthen efforts to exert collective influence. Exercise intentional collective influence on external entities (i.e., software and system vendors, publishers and content-providers, standards-creating bodies, policymakers, etc.) that will, in turn, influence the direction and capabilities of discovery-to-fulfillment services moving forward.

Recommendation:

- Strengthen coordinated efforts to identify, prioritize, and communicate CIC requirements of these systems and services to external entities of influence. In areas of critical need or opportunity, engage the Directors in exploring options for collective executive action.
- Continue collaborative work with vendors, such as Relais, the UBBorrow Service vendor, and other consortia who share the CIC’s interest in the development of standards-based open architectures and robust APIs that will, ultimately, enable highly functional discovery-fulfillment system integrations

CONCLUSION

In conclusion, the project team offers these recommendations in the spirit in which it received the assignment; that is to say, a spirit of sincere desire on the part of the Directors to understand the interplay and intersection of the systems, services, and staff comprising modern resource discovery to fulfillment services. Based on input from the Directors and a variety of stakeholder engagements, the project team elected to focus its recommendations on collaboration aimed at enhancing our ability to work together, and individually, in ways that leverage our collective ability to communicate, plan, and provide the high quality research, teaching, and learning services our users expect and value, and on which they depend for their work. A primary goal, then, is the creation of a coherent experience for our users by facilitating discovery to locally-owned material first, then by providing a seamless transition to resource sharing systems when necessary for fulfillment.

While the project team has worked diligently to constrain its thinking and recommendations to a particular subset of library services, the project team submits that there may be other projects, services, or areas of focus that would benefit from a "systems" approach to planning and decision-making, using such a framework or model from the earliest stages of development. In these times of shrinking budgets, demand for efficiencies, desire for innovation, and staff reductions, it stands to reason that now, more than ever, the CIC Libraries will need to embrace and build upon their long-standing commitment to collaboration and the "common good" for our user communities.

The Directors should be heartened to know that the stakeholders who engaged in this exercise were unanimous in their desire to improve the user experience. The project team believes that improving the user experience can only be achieved through greater coherence in our planning, vetting, and decision-making processes. To this end, the project team urges the Directors give these recommendations serious consideration and to work together to build out and implement those that resonate with your collective thinking as to how to leverage the collective strengths and resources of the CIC libraries. The project team can confidently attest to the fact that despite any lack of coherence around the planning and execution of any given project to date, the spirit of collaboration is most assuredly alive and well in the CIC Libraries. The members of the project team are willing and able to assist in taking up any and/or all of the recommendations set forth in this report.

Appendix A: CIC ILL Directors Survey: CIC Resource Sharing Environmental Scan, September 2012

Survey Responses

Does your library have a discovery service (other than the catalog) for your users? A discovery service searches across library content and collections to retrieve and display search results from books, journal articles, digital resources (e.g. Summon, Primo, WorldCat).

Responses: Yes: 12 No: 1

What discovery service are you using? Please feel free to explain your current library discovery environment.

- While we still provide access to our Voyager Classic catalog, we also provide Primo as a discovery tool for our content/resources.
- Primo
- Forward (created in-house) and Primo
- WorldCat Local
- Summon Service from Serials Solutions
- Primo
- Summons (we call it Articles Plus)World CatMLibrary Search goes across Articles Plus, databases, Mirlyn (our online catalog), online journals, research guides, and library webpages
- Ebsco Discovery Service
- III Encore, WorldCat (though our IT director doesn't consider this a discovery tool)
- Easy Search (home built system supported by grants and our Engineering Librarian); World Cat; getting ready to implement Primo; SFX
- UMN's answer to Q1 is actually 'yes' and 'no.' We implemented Primo in 2007 after having been a software development partner with Ex Libris for approximately two years. We continue to run Primo to date, but have not expanded the search index much beyond UMN catalog data. In other words, UMN's Primo has largely served as a contemporary interface and front end to the UMN ILS.
- Encore (Innovative) - this program does not bring up a complete listing but it does add another layer of discovery.
- We currently use AquaBrowser and Ebsco Discovery Service, but are planning to replace AquaBroswer with VuFind.

If you currently don't have a discovery service, are you considering getting one? Please feel free to comment on your progress (Are you in the beginning phase of research, actively pursuing, or implementation phase?) or on the discovery services you investigated.

- We are trying to implement Primo
- We are in the final stages of negotiations with a vendor for cloud-based discovery system that will interoperate with Alma (UMN is an Early Adopter, with implementation scheduled for late CY2013) and eliminate the need for an OPAC interface (supporting transactional function) in addition to webscale discovery services. The vendor was identified as a result of an RFQI process.
- We have looked at other products over the years.
- We are currently implementing VuFind as it gives us the option to configure the discovery interface to meet needs identified during focus groups with users and analysis of usability testing and feedback on current systems. This is the discovery service we plan to implement with Kuali OLE when we migrate to that integrated library service later this fiscal year.

Are there any links from your discovery service to your resource sharing services? If so, please list which resource sharing services are linked, and please include a basic technical description or an example of how the services are technically integrated.

- The integration is superficial at this point and UBorrow and ILL are offered as options on the request pages in our Voyager Classic catalog. Because we have not adopted Tomcat - we were unable to integrate them in a more seamless way. Our request options are limited in Primo as we have not applied a particular patch that overcomes the issues we have had so we have not been able to better integrate there. Hopefully this will be addressed soon. We do, of course, provide ILL as an option through the SFX menu that is revealed in both the catalog and Primo.

- Yes, we have SFX (which can push users to our interlibrary loan and our local document delivery service). We also have a message (Didn't find the books you were looking for? Try UBorrow.) with a link to UBorrow.
- UW System search, on-campus book retrieval, and ILL.
- When a patron searches WorldCat Local, it simultaneously searches our local catalog, our statewide OhioLINK catalog, WorldCat, and 15+ databases (customizable) through a single search box. Limiting is possible from the search results screen. For articles, we have turned on our subscribed collections in the OCLC Knowledge Base so our WorldCat Local users receive direct links to the full text article. For books, users can see availability in WorldCat Local and place holds in both our local and OhioLINK catalogs. If a title is not locally available, a 'Request through Interlibrary Loan' button appears so that the user can request through their ILLiad account (where the form is pre-populated for them). About 75% of all our ILL borrowing loan requests originate from WorldCat Local.
- The Get It link for articles has a consider Interlibrary Loan link with an open url link to ILLiad. In addition, for some records, there is a Request button on the record screen which is an open url link to ILLiad. For books owned by Penn State, there is a link to our catalog. If the item is checked out to another library, there is a link with the message, This copy unavailable, submit request via Interlibrary Loan which goes to the ILL homepage with E-ZBorrow, UBorrow, WorldCat, and ILLiad options
- There are links to ILLiad through our OpenURL resolver (SFX). We also use a tile in Primo to link users to their query within UBorrow (Didn't Find What You Were Looking For? Try UBorrow)
- WorldCat is linked. There is a MGetIt button next to the item in Mirlyn, for ILL that when clicked pre-populates a request form in ILLiad. Our databases also have a MGetIt button that pre-populates ILLiad for local document delivery and we if don't own it doc del refers to ILL. We are in the process of having MGetIt smart enough to pre-populate ILLiad in ILL when appropriate.
- Yes - for each citation we provide a link to IU-Link (our OpenURL resolver) and to ILLiad. This is set up using EBSCOAdmin custom linking which has logic to determine when links appear (ie if there is not full text available/already linked to citation/record)
- Pdfs are included, and WebBridge (link resolver) is used to link to the ILLiad system. III API for the catalog is updated hourly; article discovery is more dynamic - databases are searched with a real time query (API) and harvested with an OAI
- SFX to ILLiad to request an item not in full text or owned; and World Cat to ILLiad for loans not owned.
- Borrowing: In addition to the ILLiad web forms for users to initiate ILL requests, they can also request materials through the following links:
 - * WorldCat: a link to Interlibrary Loan/ILLiad is available on the title level record. The link takes the user to ILLiad where they can click the submit button once they are logged in.
 - * SFX enabled databases: links to interlibrary loan services are provided if the material is not available full text. ILL is an option even if there is a print record because the item may be in use or the issue may not be owned. The link takes the user to ILLiad where they can click the submit button once they are logged in.
 - * UBorrow: while Minnesota is not a member library, ILL borrowing staff can search UBorrow by clicking a link within ILLiad. To do so, we mirror a member library (we act as if we are Penn State due to geographic distance) and if the mirrored library does not hold an available copy, staff can quickly submit an ILL request that contains the shelf location of the copy found to be available within the CIC.
 - * Get It service: offered as part of the Ex Libris Aleph catalog - users are able to request paging of all materials that circulate for a minimum of one week. This includes materials on our Twin Cities, Duluth, Morris and Crookston campuses. Users are able to select their preferred delivery or pick up location. Once logged into their library account, users click the Get It link and input their pick up preferences. Paging slips print at the appropriate location.
 - Lending:
 - * MnLINK Gateway -- Z39.50 interface into the catalogs of Minnesota libraries including the UM collections. Users place requests that are routed based on holdings and availability. Minitex staff process requests that are filled by the UM collection or other locations on the system.
 - * Aleph ILL is used by Minitex to interact with the Crookston and Morris campuses of the UM. We also use it to send and receive requests from libraries in North Dakota and South Dakota. The system uses ISO ILL for this interactions between server sites.
 - * UBorrow requests are received on the ILLiad system and contain shelf location for items held at the UM.
- If the patron finds something that MSU does not own and they are using Encore, they can select a link that takes the to WebBridge and this links them to searching our catalog and requesting interlibrary loan.
- We have several targeted links from our AquaBrowser. One link is to UBorrow, which is displayed as an alternative to recalling when a title is unavailable. Another link is to Scan & Deliver, a document delivery service, that displays when a title is available in the library. We also include links to our SFX OpenURL resolver in AquaBrowser, WorldCat, and our Ebsco Delivery Service; the SFX menu includes links to fulfillment options that include interlibrary loan, UBorrow, and our Scan & Deliver document delivery service. We also have a search box on the Library home page that allows direct searching of Worldcat, local online catalogs, Ebsco Delivery Service, and UBorrow.

Please describe the library units/stakeholders involved in the decision to purchase, the implementation of the discovery service, and the set up for the resource sharing integration.

- We have a set of enterprise systems operational groups and an overarching Enterprise Systems Coordinating Committee in the library and all would be involved in some level of such an initiative - with much involvement from Access Services and Resource Discovery Operations Groups. There would also need to be great buy in from our Library Technology Division and their priorities and support from the administration. If this were supported by the CIC - that would be a plus, I should think.
- A task force was created to evaluate the user interfaces of all the different discovery services. The task force represented all areas of the libraries, although very heavy in public services. The administrative group gave the final approval for the recommendation of Primo. Since we were already using Primo, the switch to Primo Central was very simple and done by our technical staff. Likewise, we already used SFX so that was already implemented.
- Library Admin, ILL, Collection, Technology
- OSU partnered with OCLC to be a pilot library of WorldCat Local in 2008. The pilot was approved by the OSU Libraries' administration and led by our Technical Services/IT associate director at the time. Eventual implementation team members included persons in our catalog systems support, ILL, special collections cataloging, user services, etc. WorldCat Local (rebranded locally as 'WorldCat@OSU') became our default discovery tool on the OSU Libraries home page (pushing our local catalog to a back page) in June 2011. Resource sharing integration was made easy through WorldCat Local's ability to accommodate an OpenURL resolver and connect to ILLiad. Current management of WorldCat Local as our discovery tool is tasked to our Discovery Systems Management Working Group (see: <http://library.osu.edu/staff/administration-reports/DSMWorkingGroup.docx>)
- For the investigation and implementation of Summon, all library units were represented, from public services, to technical, to tech and access services, and campus libraries. Plus there was opportunity for staff to offer feedback. ILL was consulted about having the open url link from within Summon.
- The decision to investigate was made jointly by the Libraries' Operations and Information Resources Councils, investigated by a Libraries-wide task force and implemented by a TF that included IT, User Experience, Tech Services, and Public Services reps.
- AUL for technology to whom head of Systems reports, AUL for Collections to whom ILL reports, The Public Access Resources Committee (PARC)
- The decision to purchase EDS was made by library administration with input from public services and other staff. During implementation, our Digital User Experience (website & discovery) department took the lead, consulting with other units as appropriate, including Reference, Teaching & Learning, Library Electronic Resources Acquisition, and Document Delivery Services. The set-up for resource sharing integration was fairly straightforward as EDS was immediately enabled with settings previously applied to other Ebsco products.
- Library Admin - primary decision maker/purchaser. Computer operations and technical services both worked on implementation. UNL Ctr for Digital Research in the Humanities worked/works on harvesting data.
- ILL/DD; IT; Reference; Library Admin. (I answered no on #5 because I don't have access to these things and our IT department will not assist in this).
- A highly representative task force was charged to investigate discovery system options, produce requirements in support of a rigorous procurement process (initially an RFP, then revised to an RFQI), evaluate responses, and make a recommendation. This followed a series of studies conducted by the Libraries and shared extensively internally (with Libraries staff and the faculty Senate Library Committee) and externally (in white papers and conference presentations). Advancements in discovery services were highlighted to campus in the Libraries Strategic Plan. The decision to purchase was made by Libraries leadership. Since we are still in negotiations for the system, implementation and configuration for resource sharing services have not yet occurred. We expect that design to be informed by perspectives of both end users (via public services staff) and resourcing sharing operations staff (ILL).
- Technical Services, Public Services, InterLibrary Services. Product was purchased by Technical Services. Resource sharing option was part of WebBridge set-up so integration was automatic.
- The evaluation and implementation of Ebsco Discovery Service was a project initiated and owned by our Collections Division, aiming to improve exposure of licenses electronic resources. The project team was chaired by the Library's Web Program Director from the Digital Services Division. Representatives from many departments were involved in this evaluation, including reference librarians, bibliographers, catalogers, electronic resources staff, and systems staff. Access services staff advised on the resource sharing integration in this discovery tool. The implementation of VuFind is being handled similarly to that of Ebsco Discovery Service, again with the Web Program Director as chair of an implementation team comprised of representatives from the three major library divisions (User Services, Collections Services, Digital Services). Opportunities for input will be provided to many library departments, and there are standing groups that advise on the user experience aspects of the tool, and on the representation of collections in the new catalog. We may refine presentation of document sharing options incrementally in the new discovery catalog, but the presentation will likely remain conceptually similar to previous catalog implementations. Resource sharing services will be displayed to the user conditionally in contexts where they are relevant.

Appendix B: CIC Public Service Directors: Resource Sharing Environmental Scan on Discovery Service October 2012

Do you find the integration of your library's discovery service and the resource sharing/interlibrary loan options acceptable or confusing? Please explain.

- Because discovery is typically a separate interface from requesting materials I feel that the user experience can and probably should be improved.
- We do not currently have a discovery service. Integration of our catalog and the various ILL options are VERY confusing to patrons. We are currently running 4 different ILL systems-- ILLiad, MeL, ArticleReach and UBorrow. MeL, the Michigan E-Library is vastly preferred by our patrons because once there is a failed catalog search, the patron clicks on the `get this for me` button, they enter their ID # and the request has been submitted.
- I think it's confusing. The integration happens via OpenURL resolver, which is hidden and non-obvious to many of our users.
- We currently don't integrate resource sharing/ill options in the implementation of EDS (Ebsco) aside from SFX links in EDS.
- It's much improved! The library's discovery service has good integration with sharing options for intra-campus and system inter-campus. Further afield, it's confusing for patrons to know where to log-in to ask for what.
- Acceptable. OSU uses OCLC's WorldCatLocal as its discovery tool and has rebranded it locally as WorldCat@OSU. Search results in WorldCat@OSU display holdings at three levels: local (OSU), consortial (OhioLINK), and global (WorldCat). Users can directly request available physical copies at OSU and in OhioLINK from the WorldCat@OSU interface. A link to ILLiad for ILL requesting only appears when no OSU or OhioLINK copies are available. Users receive direct links to our licensed ejournal articles and ebooks because our holdings have been set in the OCLC Knowledge Base. A direct link to ILLiad also appears in WorldCat@OSU records for requesting articles or book chapters that are not available online.
- I like that the option for ILL appears on the results page when a search returns zero items. I believe the option could be more prominently placed.
- Confusing. Multiple interfaces, library jargon, multiple clicks all make the transition to from one system to another very confusing.
- I think it has been acceptable

What do your users expect from a discovery service?

- They expect to find full-text information and e-books and they most likely would expect one click requesting for items that are not available fulltext.
- One-stop shopping. They don't want to have to know which index to use.
- We recently completed a user study, and found that it is difficult to characterize user expectations of a discovery service. Our users do not have a well-defined mental model of the discovery service, and expect it to return not only results from Libraries collections but also about the Libraries when they search (i.e., not only articles but also hours, directory information, etc.)
- They are looking for a way to discovery and access everything that is available to them via a single interface.
- Easy way to find everything! Also, to request everything from within the same service.
- Ease of searching, finding, accessing, and requesting, with little effort, and with delivery in the shortest time possible. Users also expect to have the ability to uncover collections available locally as well as worldwide.
- Some want the service to show them things we own or subscribe to, for which access is fairly quick and easy. Others want to know what's available broadly and then want an easy way to request items. I believe that more people will want the latter, as we go forward.
- They expect to find things easily and quickly, irregardless of the vendor that's providing the resource.
- I think they expect the service to tell them what we have, if it's available, and if we do not have it how we might get it for them. On the other hand, I'm not sure the phrase `discovery service` means much to the average user.

On the average, how many 'clicks/redirects/webpages' must a user go through from a discovery service to submit a request in a resource sharing or interlibrary loan system? What do you think is a reasonable number of 'clicks/redirects' between the discovery service and placing a request?

- ideally one, maximum 2
- We don't currently have a discovery service, but users will expect two clicks to be consistent with our easy-to-use MeL system. MeL is the Michigan E-Library, a system run by the Inn-Reach software.

- Assuming they choose the right path, it takes 3 steps to get into the resource sharing system. They would go from Primo to SFX, then from SFX to ILLiad, and finally authenticate to ILLiad. I think that three steps probably isn't unreasonable (including authentication), but fewer would be better.
- By using a SFX link attached to a record display in EDS: Click on SFX Choose ILL or Uborrow Log into ILLiad Submit prepopulated request 4 clicks. The number of clicks may not be as problematic as the SFX link displaying in the EDS. We use a button labeled Find It. Our patrons may not understand all of the options available by selecting that button (searching the catalog, finding full text, submitting ILL or Uborrow, exporting the citation, or even finding similar article, or even information about the journal).
- Depends! If in Worldcat, 3 clicks to login, once logged-in a request takes 2 clicks. However, an online index may have no direct link to ILL system. So, have to find ILL page, click, login, fill out info by copying & pasting, then click. Patrons don't find this reasonable.
- From a WorldCatLocal record for a work, only three clicks are needed to make an initial request:
 - One click from the WorldCatLocal record to get to the ILLiad OpenURL logon page.
 - One click to get to the prepopulated ILLiad request form.
 - One click to submit the request. Subsequent requests require only two clicks since a cookie remembers their ILLiad login info.
- Three clicks to get to a form, and then the form must be filled in. One click to signal desire is optimum.
- Between 3-5 clicks depending on the format and the source. Ideally, this would be cut down to 1-2 clicks.
- 4; I would like to see it down to 3

Would you like your users to stay in the same interface as the discovery system to submit their resource sharing/interlibrary loan request rather than being transported to the resource sharing/interlibrary loan interface? Please comment.

- I do want users to be able to stay within the system or at the very least have easy access back to the system
- Absolutely. The goal is to have fewer clicks and prepopulated request forms.
- Yes. This could be less disruptive to the user (workflow, adjusting to different interfaces, etc.)
- Staying in the discovery service is desirable if it would be possible for the patron to authenticate and select which resource sharing service.
 - As long as interface is seamless, doesn't matter.
 - Yes. WorldCatLocal allows users to submit loan requests for local and OhioLINK titles directly from the discovery interface and embeds access to their ILLiad account with a prepopulated request form for easy requesting.
 - I would like the system to know what the user was looking for and take them directly to the appropriate form, with information already entered retained. They can then fill in the rest of needed info. Whatever happens behind the scenes should be unknown to the user. Their experience should be simple and painless.
 - Yes, this would be ideal. The process should be seamless for the user and similarity between interfaces would help this transition.
 - yes; I think it would be less confusing and allow them to continue searching easier

What would be the ideal workflow for a user who starts in a discovery service but needs to use interlibrary loan to obtain an item?

- one click requesting for items that are not available fulltext
- We would like for there to be a single Request It link (like option 2 in question 7) that a user could click to make a request. There probably should be a confirm request step with a simple button.
 - The ideal would be a single button (naming of the button is debatable) to authenticate the patron and place the request. The system would have to be in place to route the request to the best option for the patron (traditional ILL, Uborrow, and possibly BorrowDirect).
 - Ideally, there's an obvious button to request item, clicking goes to ILL system, patron is prompted to login if not already and then taken to request form with bib information already filled in. Once request is submitted, patron is taken back to discovery service.
 - Search results would display online, local, consortial, or worldwide content. An ILL request button would only appear if there was no immediate access to available online, local, or consortial content. If requested through ILL, the form should be filled out for the patron; this saves the patron time and results in more accurate citations. When the patron clicks 'Submit', the request goes out unmediated to potential lenders no matter what day or time the request is made.
 - Described above. Perhaps the system could also take a stab at figuring out what the requested item is, searching against another database, and pre-populate a form, asking the user if this is the right item
 - Ideally the discovery system would have users' credentials plus the information about the item and would pass that onto the ILL system, so a user would see a request form pre-populated and just be asked to review the info and submit.
 - at the point at which it is determined we do not have something or it is not available then it should be clear on what steps to take if the user wants to pursue it

Do you find your library's resource sharing/interlibrary loan options easy to understand and use? What could be improved? Please explain.

- It could be improved by fewer steps within the same system interface
- Having 4 different systems that don't talk to each other is definitely not easy.
- Individually, they are easy enough to use but the problem is that there are too many options. We have UBorrow, regular ILL, document delivery, and other options that I'm probably forgetting. A user shouldn't have to worry about when to choose which option - they generally just want to request something and don't care how it comes.
 - It is not easy to understand as the library provides multiple options for resource sharing.<http://www.lib.uchicago.edu/e/using/ill/> By providing self selecting option, the decision process is not simple.
 - It's confusing to patrons as some items may be requested directly in library discovery system, some other indexes/databases have link to ILL built in and then for other wanted items must go direct to ILL system. I'm not sure this could ever be successfully merged.
 - WorldCatLocal makes discovery and ILL requesting easier. Because users are discovering much more worldwide content, they are now making more ILL requests. At the start of FY2012, WorldCatLocal replaced our local OSU catalog as the default discovery interface on our library's main home page. This change led to an 81% increase in the number of ILL loan requests made compared to the previous fiscal year. Also, only 42% of our users' ILL loan requests originated from WorldCatLocal in FY2011, but were 73% of all loan requests made in FY2012. Because discovery and ILL requesting is easier, users are also finding and requesting more difficult to obtain materials (e.g. titles that are not yet published; only available overseas; held in non-circulating reference or special collections; textbooks, etc.). The number of ILL loan requests needing to be cancelled jumped 181% from FY2011 to FY2012 and went from 29% to 45% of all loan requests received. Other issues:
 - Multiple or duplicate records in our consortial catalog result in users making unnecessary ILL requests for materials that could be directly paged from our statewide catalog system.
 - Users must keep track of items borrowed in two separate systems: their ILS library patron record for OSU and OhioLINK items and their ILLiad patron record for interlibrary loan items.
 - WorldCatLocal options are fairly intuitive, but when interpreting the link resolver it is not always clear where the material is located and how long it will take to receive.
 - From the Libraries homepage (outside of WorldCatLocal), users sometimes have difficulty finding the correct route for requesting material not owned locally.
 - It's fairly easy to understand, but requires a fair amount of input.
 - no, I find them confusing myself. I don't understand or stay up to date on the nuances of a particular borrowing system or consortia...I think we should just be able to request something and have the request 'automagically' be taken care of behind the scenes by someone who knows what they are doing!
 - I find it easy to understand and use;

What would you prefer? 1) A listing of resource sharing/interlibrary loan options for you to choose during the integration from a discovery service to placing a request. 2) A seamless 'behind the scenes' placing of a request ('I just want it and don't care where it comes from') with one click in a discovery system. Do you think these options would differ depending upon user status, such as undergrad or faculty? Please Comment.

- #2 is the preference and I do not think that the options would/should differ
- Seamless. I don't think the options should differ depending on user status. The library reserves the right to choose the preferred lender because of cost/efficiency considerations.
- Number 2 would generally be preferable. I suppose there could be graduate students or faculty who might prefer to choose method of delivery, but I think that UBorrow has helped with this greatly. The primary use case we had heard for wanting to select delivery method had to do with loan periods, which has been addressed in UBorrow.
- Option 2 would be preferable if a system would be in place to maximize the benefits of varying resources sharing agreement for the patron (and the library).
- Patrons would certainly prefer option two. If this could accommodate different borrowing rules/limits of different patron categories, that would be ideal.
- Option B is preferred if turnaround time is not a factor (i.e. the patron is willing to wait for the item no matter how long it takes). Option A, however, helps manage expectations by allowing users to see where an item is and then determine whether or not to make a request depending on when they need the item. Some users only want immediate online or local availability; others are willing to wait a few days for statewide or ILL borrowing. The ability to assess how soon an item may arrive influences the requestor's decision to make a request and lessens the possibility of items arriving later than was needed.
- Again, different people will have different preferences, but I suspect the majority of users will prefer option 2. Some of the differences will be due to status, with faculty typically having a greater understanding of potential choices.
 - #2 for sure! I think everyone except for maybe librarians (but maybe only a few).
 - 2 and status should not make a difference. I think most people don't care where we get something just as long as we get it. I suppose there might be some grad students and/or faculty who do care but not many, in my opinion

How do you instruct users about your discovery service and resource sharing/interlibrary loan service? Please supply the url of webpages of your library instructional material.

We feel that we should not have to instruct users but we provide the following:<http://www.libraries.iub.edu/?pageId=7435>

Our discovery service is new and, to the best of my knowledge, we have not created instructional resources for accessing resource sharing services from it.

There is not a separate instruction webpage for the discover service. ILL guide is

<http://guides.lib.uchicago.edu/content.php?pid=340131&sid=2780672> Uborrow guide is

<http://guides.lib.uchicago.edu/uborrow> Choosing a service: <http://www.lib.uchicago.edu/e/using/ill/> Placing an ILL video tutorial:

<http://youtu.be/xZ0V7VhmZNg>

ILL has multiple pages under <http://library.wisc.edu/delivery/#account-logins> Discover service:

<http://www.library.wisc.edu/help/catalog/#default>

Course instruction is supported by our Teaching and Learning unit; one-on-one assistance is provided by our Reference and Research unit. Online instruction is available at: <http://liblearn.osu.edu/tutor/worldcatatosu/> Additional directions related to

Interlibrary Services are located at: <http://library.osu.edu/find/interlibrary-services/>

There is a tab for Services on the Library's home page and ILL is listed here. There is a library course page for every course on campus and many of these include information about ILL. It is taught in classes as appropriate to anticipated need. A search in the catalog with a zero return offers ILL as an option. <https://umn.illiad.oclc.org/illiad/logon.html>

My sense is that librarians may show the request process during course related instruction. All of our instructional materials on this subject to date are text-based: <https://www.libraries.psu.edu/psul/ill.html>

there are several tutorials at the bottom of the page <http://www.lib.uiowa.edu/services/illdd.html>

Appendix C: CIC Resource Sharing Agreement

Approved by the CIC ILL Directors on November 22, 2011

SCOPE

The CIC Libraries who participate in this agreement consent to give priority to CIC requests and share items from their collections at no charge and as broadly as possible. Restrictions on types of material available for lending should be kept to a minimum in keeping with the philosophy of openness that the CIC libraries value. CIC libraries are encouraged to use this program in whatever fashion they believe will provide the fastest, most effective service for their patrons.

- Certain types of materials (e.g. rare, fragile, non-print or otherwise non-circulating materials) might be lent through a negotiated process.
- Individual libraries may set limits on the number of volumes, reels, fiche etc., which may be sent to fulfill any one request.
- There is no limit to the number of requests a member library may submit.

A list of CIC participating libraries, resource sharing agreement policies and contact information may be found at:
CICResourceSharingMemberInstitutions

CHARGES

CIC Libraries agree to waive rush charges, overdue fines, and fees for photocopying of less than 75 pages. Photocopy requests for more than 75 pages or for special formats may be charged at the lender's discretion with notification to the requesting library when costs are above any limit specified by that requester. If expedited, overnight delivery is needed, the borrowing library will pay the associated costs. No fees pertaining to the replacement of lost materials or repair of damaged materials are covered by this agreement. If possible, processing fees should be waived. CIC libraries will promptly pay the lender's charges for lost or damaged materials.

LOAN PERIOD

The standard CIC loan period for circulating books is twelve (12) weeks. Lenders should account for delivery time by adding six days to the due date to ensure that the user has use of the material for the full loan period. There is a minimum of one four (4) week renewal. The loan period for non-book formats, theses, bound volumes, reference, or special material is at the discretion of the lending library in order to encourage a greater willingness to lend such items.

BEST PRACTICES

- Every effort will be made to give CIC requests the fastest possible service.
- Lenders will fill all requests within two business days and respond as quickly as possible if unable to supply.
- Articles will be delivered electronically unless the legibility will be impaired by using this method.
- Recalls should be exceptions unless there is a good reason such as the material is needed for course reserve.
- Bills for lost material should be sent within a year of the due date.

PACKING AND SHIPPING

- A courier with trackable packaging must be used for shipping materials. These include UPS or Fed Ex.
- Packages should not exceed 30 pounds.
- A paging or request slip (printed from the ILL circulation function or from an ILL request) should be placed inside each item being shipped. Every effort should be made to return the appropriate paperwork with the material.
- Use appropriate wrapping and packaging based on material type and your delivery vendor. For more information on packing refer to Section 4.13 "Shipping" in the Interlibrary Loan Code for the United States Explanatory Supplement.