

Leaning into Sustainability at University of Alberta Libraries

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UAlberta Context

Students:

38,733

FROM 147

Countries

200

Undergraduate
Programs

170

Graduate
Programs

18

Faculties



UAlberta Libraries Context

- Key principles: open, sustainable and responsive
- Second largest research library system in Canada
- National leader in areas of research data management, scholarly communication, and digital preservation

4.7 million titles
8.7 million volumes
5,336 seats
4.8 million visitors
118,000 questions
500 classes
to over 18,000 users

Lean Design

- Core principle is to design operations to maximise customer value while minimising waste
- Value defined by customer
- Focuses on product flow, high visibility and continuous improvement
- Balances workflow by focussing on small batch work within context of large scale and small scale operations
- Applied to UAlberta Libraries
 - Large scale: Research Collections Resource Facility [RCRF]
 - Small scale: Specialized Library Services Project

RCRF Project

- New high-density storage library facility
- Will house bulk of Libraries' physical collections
- Capacity of 5 million volumes
- Circulating collection delivered to 10 UAL and 17 NEOS library locations
- Non-circulating collection used on-site in reading room
- Includes digitization centre



Fig. 1. Aerial photograph showing proposed RCRF building and site (outlined in red).
University of Alberta. RCRF Design Development Report submission – January 11, 2016.
Stuart Olson/HFKS Architects, Inc.

RCRF Project Timeline

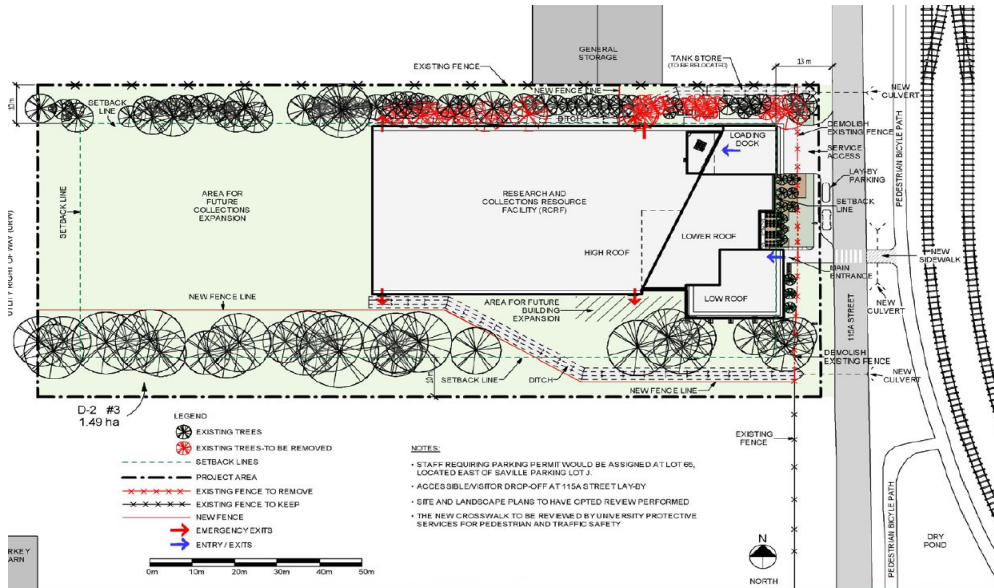


Fig. 2..Site layout plan. University of Alberta. RCRF Design Development Report submission – January 11, 2016. Stuart Olson/HFKS Architects, Inc.

- Nov 2014: University approval of the project in principle
- Jul 2015: Selection of consultants Stuart Olson Construction Ltd and architects HFKS Architects Inc
- Fall 2015:
 - Lean design consultant hired
 - Community consultation
 - Weekly project team meetings
- Jan 2016: University endorsed a Design Development Report

RCRF Building Process

- Modified design-build project
- Lean principles applied to service delivery to, from, and within facility
- Goal to ensure design of building, services, processes and workflows efficient and sustainable
- Analysis of current workflows to implement improvements in process and space design now / at RCRF
- Revised task design already saving staff time and work space



Fig. 3. Proposed east elevation. University of Alberta. RCRF Design development Report submission - January 11, 2016. Stuart Olson/HFKS Architects, Inc.

Opportunity and Alignment

Consultant Opportunity

This is a rare opportunity to build your facility around the process and it would be nice to have a process that is optimized to produce the results your customers are looking for. ... Whether it is speed, accuracy, or volume; the process or system needs to be tuned to produce exactly what the customer wants when the customer wants it. Using Lean Manufacturing techniques we can work with you and your team in the planning, design, and implementation of Lean process that will improve your level of service while reducing the overall cost of operations.

ISP Alignment

We promote a culture of continuous improvement in administration and governance, and ensure that our resources are used and sustained effectively to ensure the long-term vibrancy of our institution. We do this to the benefit of Campus Alberta as a whole: we share critical research infrastructure, provide systems and services to smaller institutions, facilitate student mobility, and build partnerships across the province to ensure that all Albertans have access to their provincial university and the benefits we offer

Specialized Library Services Pilot



- Base is strong UAL liaison librarian model
- Liaison role includes instruction, consultations, research projects
- Scott Library has 5 librarians, 3 sessionals, and had 1 sessional on contract with Faculty of Nursing to provide embedded research librarian support
- Embedded librarian offered core and specialized services to researchers in a highly integrated way
- Contract ended August 2015 due to budget
- Fee for service model requested
- Prompted reflection on fee-based service models

Pilot Parameters



- Scott Library developed new fee-based service model Summer of 2015
- Articulated core, free services and specialized, fee-based services
- Sessional librarian hired for two years to provide capacity
- Pilot launched September 2015
- Provides Scott Library and UAL opportunity to
 - meet existing and new, in-depth, priority research needs of faculty
 - test a team- and fee-based approach to service
 - assess its sustainability and scalability for the future

Articulated Services

Fee-based Services

- Librarian systematic review support with/without co-authorship as a priority; librarians do searching
- Publishing support including providing customized reports on appropriate journals
- Finding appropriate open access journals
- Customized mediated literature searches
- Preliminary screening of references for systematic reviews
- Current awareness services
- Research impact analysis and reports

Core Services

- Librarian systematic review collaboration with co-authorship as capacity permits
- Librarian systematic review instruction and advising on search methodology, sources, and strategies; users do searching
- Research data management
- Basic and extended reference
- Information literacy education
- Collections management
- Support for accreditation processes
- Promotion of library to user communities

Applying Lean

- Key part of pilot is assessing model's sustainability and viability as ongoing service from financial, human resources, and service perspectives
- Review of project in relation to lean design principles outlined by Womack & Jones provides useful framework for reviewing its first year
- Five principles include:
 - defining value for each product/service
 - making value flow to the customer
 - eliminating unnecessary steps in each value stream
 - knowing that the customer pulls all services
 - pursuing perfection continuously



Source: <http://www.agilearts.nl/wp-content/uploads/2012/10/LeanPrinciples.jpg>

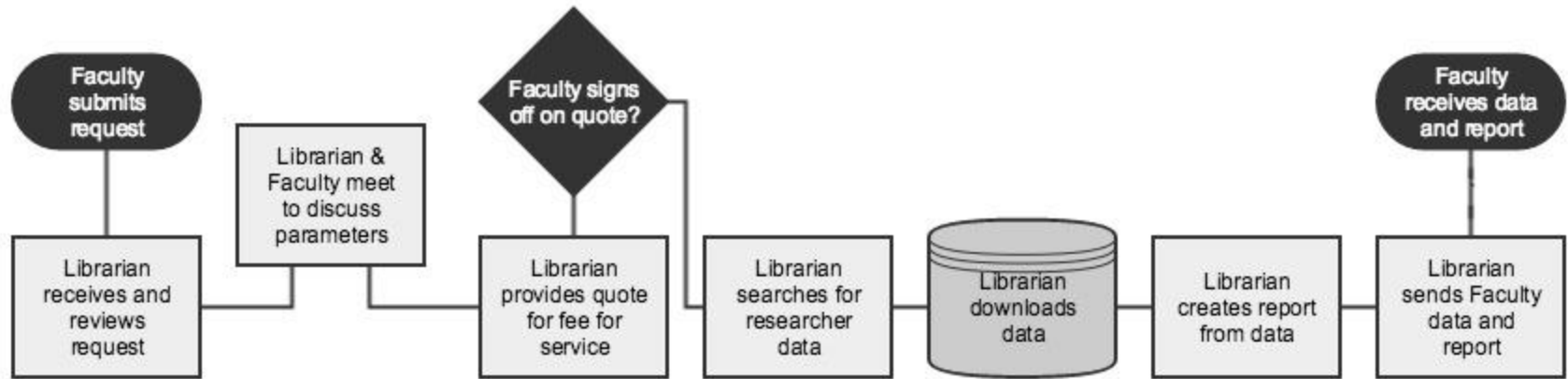
Defining Value

- FoN expressed interest in fee-based model based on perceived value of service provided and on expertise of their librarian
- Systematic review searching provides support for grant-funded research
- Current awareness services provide mechanism for weekly updates
- Research impact reports benchmarks team against others nationally
- Value of systematic review support extends to all health sciences disciplines
- Value of research impact work extends to campus more broadly
- Libraries invited to contribute as partner to Presidential Visiting Committees



Making Value Flow

Through the first year of this pilot project, as well as the PVC work completed to date, the flow of value has been refined. The below image captures the workflow related to one of the specialized services, research impact analysis



Reducing Waste



Source:
<https://www.leansignmacorporation.com/wp/wp-content/uploads/2014/10/Muda1.png>

- Most common wastes related to defects, waiting and extra processing
- Task of identifying researchers at benchmark institutions via web scraping can result in poor data
- Name disambiguation and de-duplication increases processing
- Librarians balancing fee-based request with core service requirements can result in wait times

Pulling from the Customer

- Providing specialized services for a fee ensures Scott Library only delivering what our users are willing to pay for
- While many of our core library services are responsive to historical expectations of service and the expressed needs of our users, others are designed to anticipate needs and grow over time
- In addition to specialized services we are offering in pilot, we already have feedback from some researchers in the FoN that they have additional demands that are not being met

Seeking Perfections



- Already engaged in a continuous improvement process to expand fee-based support team
- In previous model, embedded librarian provided all aspects of all services
- In new model, she is part of a broader, team-based approach to service
- While there is single point of contact for fee-based service requests, work is distributed among three-person team

Conclusion

An analysis of this pilot from a lean design perspective has been a useful exercise as we near the end of our first year and consider what changes may be required to continue to provide excellent and sustainable service. The findings of this review will inform the work of UAL's new Research Metrics Working Group, which will investigate, define and propose a service, or set of services, that we can offer more broadly to the UAlberta user community.