Libraries in Lean Times
Increasing Efficiency, Improving Services, and Cutting Red Tape

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Why You Should Care

What is Lean?
Lean is...

An approach developed to refine manufacturing processes by

- Reducing waste (in terms of time, energy, and resources)
- Streamlining operations
- Increasing efficiency
- Maximizing value for customers
Five Principles of Lean

1. Specify value as defined by the customer whose needs are served by this work process, analyze all activities from the customer's point of view, and identify any wasted effort that does not serve the customer’s needs.

2. Identify a value stream by using flow charts or other tools to examine every step, to categorize each step as either value-added or non-value-added, and to eliminate blatantly wasteful steps.

3. Generate flow in the process to prevent bottlenecks and batching.

4. Utilize pull processing (Just-In-Time processing) practices.

5. Pursue perfection through continual review and improvement of the process.

(Womack and Jones 16-26)
Lean in Libraries…

Can be used to build employee confidence and increase their capacity for change

(Tornquist and Steinlicht 2)
Types of Waste

People Waste
“refers to the category of wastes that occurs when universities fail to capitalize fully on the knowledge, skills, and abilities of employees and workgroups” (Huber 184)

Process Waste
“refers to the cluster of wastes that occurs due to shortcomings in the design or implementation of university processes” (Huber 186)
Types of Waste (cont.)

Information Waste

“refers to the category of wastes that occurs when available information is deficient for supporting university processes” (Huber 191)

Asset Waste

“refers to the cluster of wastes that occurs when the university does not use its resources (human, facilities, and materials) in the most effective manner” (Huber 194)
Librarian pulls each item off the cart for review

Rec. Weeding?

Yes

Librarian gets a weeding slip and fills out the relevant sections

No

Why have a Librarian do this?

Why are we using paper forms?
Look for book in stacks

Found?

Yes


No

Check once/month for 1 year

Look one more time

Why search so long?

Search again?!
Searching for Simplicity

Lean and Lost Book Handling
Why Lost Book Handling?

- Affected all library units
- Lacked written procedures
- Had a backlog of lost & missing items
- Affected accuracy of the catalog and patron accessibility to materials
First step...a hardy breakfast!
Training to get “lean.” Briggs Library volunteers meet for breakfast.
Next steps...

- 11 staff members; 4 half-days; Jan.-May 2013
- Detailed all possible outcomes for a Book identified as lost or missing
- Whiteboard lists and Post-it notes
- Flow charts
Before

Bursts represent dead ends or uncertainties
4 Similar Processes Analyzed

- Missing books – not on loan, not on shelf
- Lost books – reported as lost, or missing for a year
- Long overdue books - not yet billed, replaced or removed from the catalog
- “Claimed Returned” books

3 subcommittees tackled them in painstaking detail.
Circulation Dept. Procedures

31-60 day report

31-60 day overdue report every 2 weeks

Circ Supr checks item in on patron record and checks out to cashier for replacement with due date of 60 days

Circ Supr sends Excel file to cashier with patron name, student ID, and total owed

ALEPH generates lost notice for Cashier patron

Item status changed to replacement and placed on search and notify spreadsheet

Circ Supr gives notice to tech services and updates spreadsheet

Circ Supr prints Circ Supr summary letter from patron record and files

Bill and letter sent by Circ Supr

Patron receives Bill

Patron pays within 30 days

Circ Supr removes fines from patron record

Find substitute asset for patron (UL, or e-text)

Patron reports missing from stacks

Item returned

Patron claims lost or damaged

Patron claims returned

END

Still on loan

Patron present in library

Yes

No

Tell patron you will check stacks

END

 Enter data in Search and Notify

Update record and files to reflect payment and replacement

END

Book checked in found

Check stacks

Returned

END

Not found

END

Not found

END

Check stacks

Patron claims in

END

Descarcated and replaced

Notify tech services

Explain "notice lag time"

END

Double check with patron

END

Enter data in Search and Notify

Enter data in Search and Notify

Circ Supr prints bill and letter and updates spreadsheet

Patron takes tablet to check shelves

Circ Supr runs 31-60 day overdue report every 2 weeks

Circ Supr checks item in on patron record and checks out to cashier replacement with due date of 60 days

END

END

H. M. Briggs Library Lost Book Process

Issue: Lost items remain in lost status too long. Library patrons are not getting items in a timely manner. Our current process has non-value added steps taking time and resources.

Goal: To have a more efficient lost book process leading to a more accurate and useful catalog.

Results: Less time in lost status, uniform process across functions, assets recovered more quickly, less non-value added activity resulting in less faculty and staff effort and saved resources.
Significant Discoveries

- Many steps missing from written procedures
- Long waits for materials found in catalog
- Lost items, lost far too long
- Search & Notify process
  - slow, duplicate efforts, unnecessary steps
Significant Changes

- Complete set of written procedures
- Immediate ILL for lost or missing items
- Faster turnaround for lost or missing items: search for 6 months, then replace or remove from the catalog
- Disappearing backlog of lost and long overdue items
- Paperless Search & Notify
Shaping Up and Slimming Down

Lean and Weeding
Why Apply Lean to Weeding?

The collections desperately needed weeding, however

- Existing procedures were incomplete
- Process was complicated and lengthy
- No inducement to carry it through to completion
- Weeding became low priority
Identifying Value

- Remove outdated materials
- Remove materials that no longer support the University’s programs
- Make it easier for patrons to locate suitable resources
- Ensure the collections are aligned with the teaching and research priorities of the University
Processes Analyzed

- Circulating collections
  - Main circulating collection
  - Oversize collection
  - Audio/visual collection
- Reference materials that are new editions on standing order
- Reference materials that are new editions not on standing order
- Reference materials that are not new editions
Identifying the Wastes

- Critical differences existed for each of the different collections’ weeding procedures
- Items remained on weeding review until reviewed by the required librarian, sometimes as long as a year
- Filling out handwritten weeding and relocation slips was tedious and prone to error
- Expectations for assigned subject areas were not established
Applying Lean Principles

- Aligned procedures for different collections to minimize the differences between them
- Limited the amount of time for review to 3 weeks
- Replaced handwritten slips with a spreadsheet populated by information from the ILS
- Shifted repetitive and simple tasks to student assistants
• Required only the subject librarian to approve relocation of items
• Required only two librarians to approve weeding of items
• Assigned each LC subclass to a pair of librarians to ensure equal responsibility and attention
• Assigned oversight to the Head of Public Services
Implementation and Results

• Piloting currently in process

• Full implementation set to roll out in the coming weeks
Our Insights and Recommendations for Trimming Down

Employing Lean in Your Library
Collaboration is Essential

- Most library processes affect multiple departments and require teamwork
  - Ex. Reshelving of returned materials by Stacks personnel requires they first be checked in by Circulation staff
- All departments’ needs and concerns need to be addressed in a Lean review
- Also including ‘outsiders’ in the review can be very beneficial
  - May be better equipped to spot waste and question long-held practices
Collaborative Nature of the Process: The Opportunities

- Work with different people
- Build working relationships
- Learn about different library processes and workflows
- Develop greater appreciation for coworkers and the work they do
- Foster enthusiasm for the change and help overcome any resistance
- Distributed sessions give time for reflection
Collaborative Nature of the Process: The Risks

- Dependent on the goodwill and engagement of many people
  - Fear of losing status or becoming unnecessary can complicate
  - Ideally will not ‘downsize,’ but shift time and assets to where they are most beneficial
- Potential for personality conflicts
- Defensive reactions to wastes identified in someone’s workflow
- Project mission drift
- Scheduling issues
Practice! makes perfect.
Lean and Mathematics

- Addition
  - http://youtu.be/KxJ4nbqx8CY

- Dominos
  - http://youtu.be/PlWJV6M3it8

- Carepackages
  - http://youtu.be/eLemMLzYjUM
Questions?
Works Cited


