

Imagining the Near Future: Technology Forecasting for Your Library

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About Me

- Led web development group at U-M Library
- Implemented lots of new technologies
- *DIDN'T* implement many others

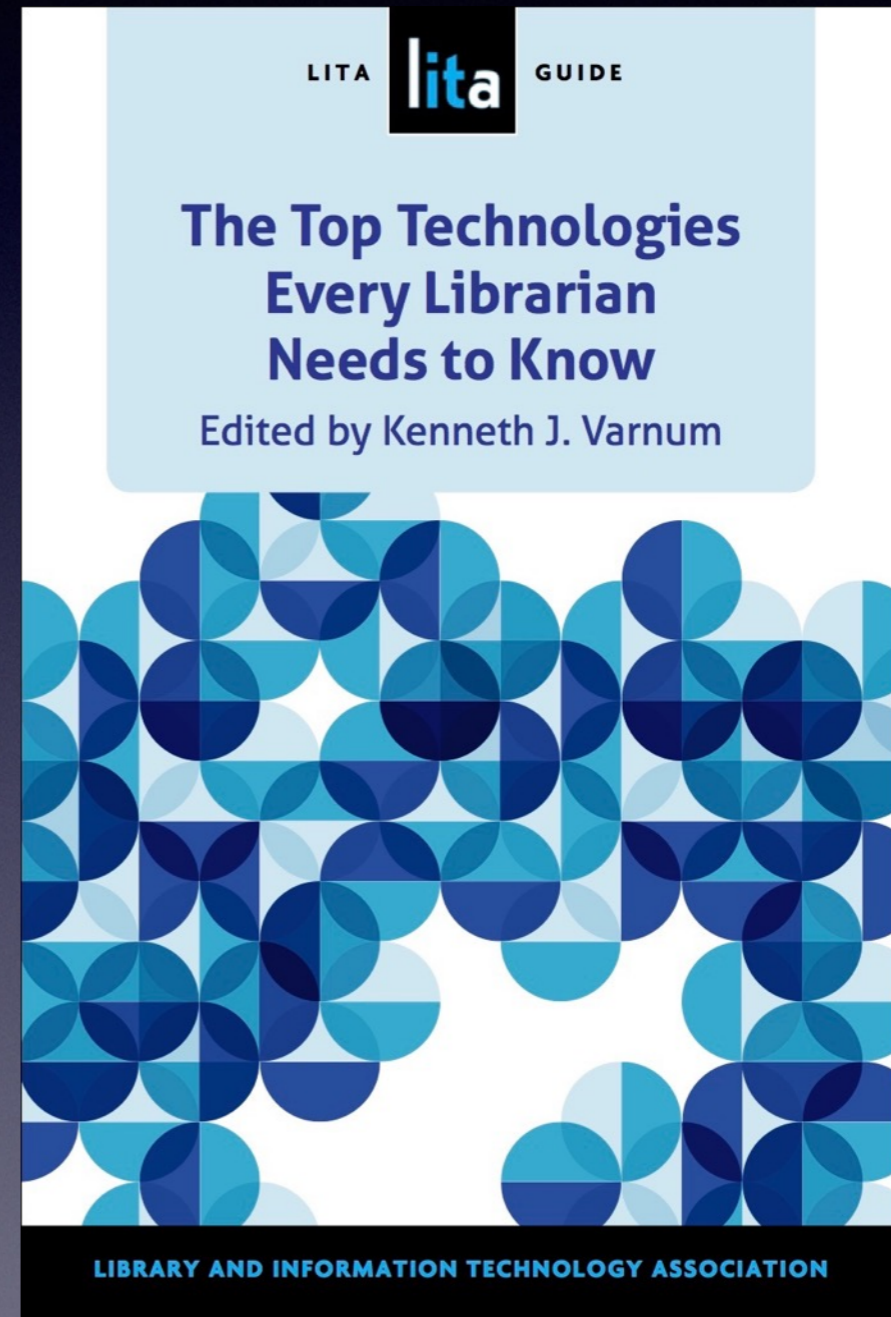
Overview

- Technology Forecasting
- Your Library's Needs & Capacity
- Planning for the Near-Term Future
- Break
- Workshop — Matching Technologies to Needs

Technology

About the Idea

- 3-5 year time horizon
- Gave authors an outline
- Suggested connections and overlaps among contributions



Five Questions

1. What is the technology?
2. Why does the technology matter in general, and to libraries in particular?
3. What are early adopters doing?
4. What does future trend look like?
5. Having embraced this technology, what would the library of 3-5 years away look like?

Project Flavors

	To Improve the Old	To Do the New
Update an Old System	ZZZZ	Bread & Butter
Build a New System	Bread & Butter	WHEE!

Two Examples from the Book

“The Future of Cloud-Based Library Systems,” by
Steven Bowers & Elliot Polak

<http://digitalcommons.wayne.edu/libsp/78/>

“Libraries and Archives Augmenting the World,” by
William Denton

<http://yorkspace.library.yorku.ca/xmlui/handle/10315/27527>



Understanding Needs

It's about Seeing the Patterns that Matter

We Hear about Needs

Needs are often not solvable problems

- There's the stated need...
- ...and there's the actual problem we can try to solve

Hey! That sounds like a reference question. Any librarians in the room?

Translate Needs to Problems

Involves constant observation and learning

- About your real world users
 - Library colleagues
 - Patrons
- About the magical world of technology

Aim for Unicorns

That is, a perfect product that ...

- ... meets everyone's needs...
- ... with little effort to create or maintain.



<https://pixabay.com/en/unicorn-horn-horse-equine-animal-1289541/>

Avoid Creating Zombie Unicorns

No.

Just no.



<http://shirtminion.com/wp-content/uploads/2014/10/Zombie-Unicorn.jpg>

Drawing Boundaries



https://upload.wikimedia.org/wikipedia/commons/b/b9/Kudzu_field_horz2.JPG



<https://www.flickr.com/photos/remembertobreathe/4286095686/>

Capacity

How Much Can Fit through the Pipeline?

Capacity Concept

Total capacity is the white box



Capacity Concept

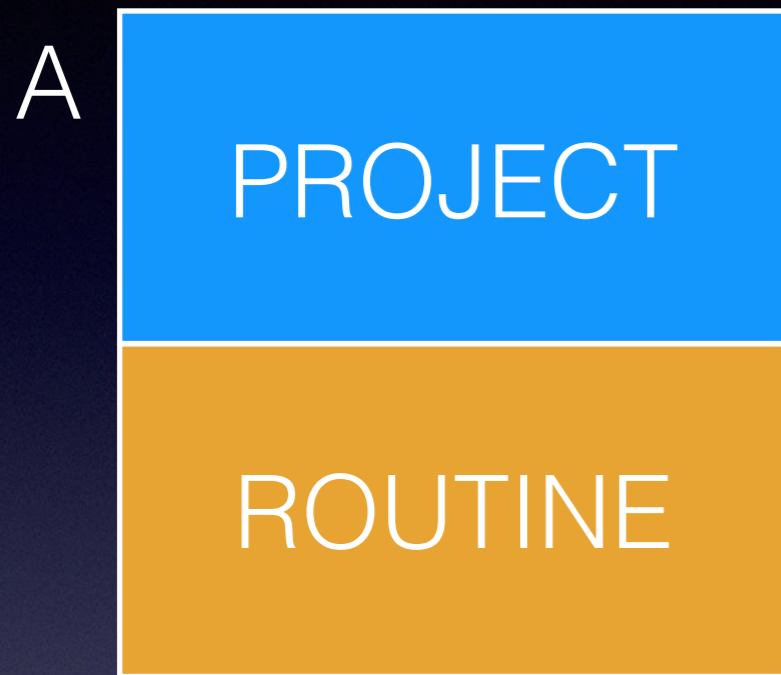
You spend a portion of your time working on the “keeping the lights on,” routine, work (orange)

ROUTINE

You want capacity to do projects (blue)

PROJECT

Capacity Examples



Capacity Constrains Solutions

- Your capacity is a constraint, often overlooked
- It defines the scope of what you can take on

Identify a Solution

- A technology solution is not necessarily built from scratch
- In many cases, there are perfectly satisfactory solutions out there to buy or license

Build or Buy

How do you know which is the right option? Think about your capacity

- For building something great
- For maintaining something that was great when it launched
- For replacing it when it's no longer great



Planning

It's about Finding the Right Settings

Plan the Solution

Figure out reasonable “chunks” of work

- That can show progress
- That solve pieces of the need
- That are achievable in more-or-less equal time chunks

Phases, Sprints, Stages

- These are all ways to think of the project.
- Can you do **enough** now to meet the need?
- Can you do **more** later when the need evolves?

MVP

- Define project in bite-sized chunks
- Figure out the Minimum Viable Product (MVP)
 - The simplest set of functions that will satisfy the basic need
 - NOT a stopping point (necessarily)
- Something to build on for the next sprint

Translating Capacity

- You may know how capacity you have
- But do you know when that capacity is available?

Planning at U-M Library

- List everything we do
 - Operations
 - Project
- Estimate how much time each takes (1/4 FTE units)
- Look at all the incoming requests
- Estimate time needed for each
- Fill in the slots and say “yes” or “no”

MAY

Project In-Box
PROJECT TEAM: Search Beta [LIT]

Projects
PROJECT: Create new functionality in Datamart [OPS]

Projects
PROJECT: Design Labs Website [I&T]

CF

Services
Workstation Refresh Cycle Management Tool [LIT]

Investigations
Monitor EAD/archives support in Hydra [HTP-920]

✓CP

Investigations
Epistles of Paul App- Interface and hosting support [COL] [TASC] [HTP-975]

✓JM RE

Investigations
MPub Mellon Hydra strategy [HTP-925]

Projects
Continued implementation of ASpace [COL] [HTP-960]

✓DLPS CP

Projects
PROJECT: Transfer of funds form [B&P]

ES

Services
Aleph - stats on Get This requests [OPS]

Investigations
Investigating the applicability of DPLA rights statements to our digital collections [DPLA] [LIT] [HTP-966]

✓KO

Investigations

Services
Re-implement patron file data feed to use MCommunity data [LIT]

Let's Do It!

- So you've done your due diligence
- You understand the need, and you know what solution to apply to it
- You're ready to go, right?

But First... A Break





Workshop

Your Turn!

Workshop: Overview

1. Break into groups of 3-5 people
2. Identify a problem
3. Define the actual need
4. Figure out your capacity
5. Plan a solution
6. Report
7. Discuss

Workshop Step 0

Break into groups of 3-5 people

- One person in a group from the same institution
- Ideally with similar libraries (e.g., public; academic; school) in one group

Workshop Step 1

Identify a problem you can solve together

- Something all of you think needs solving
- Ideally, at least half of each group would like a solution

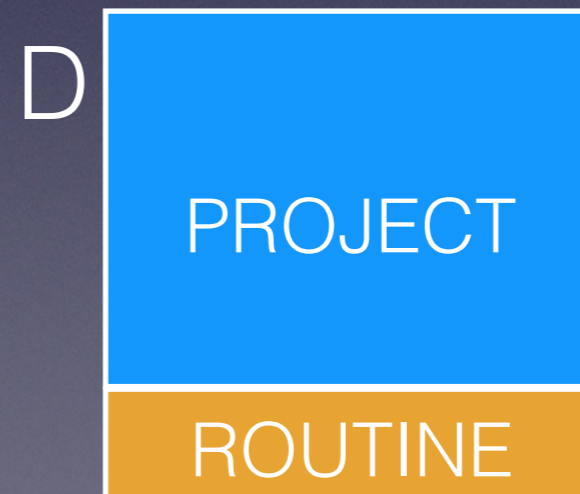
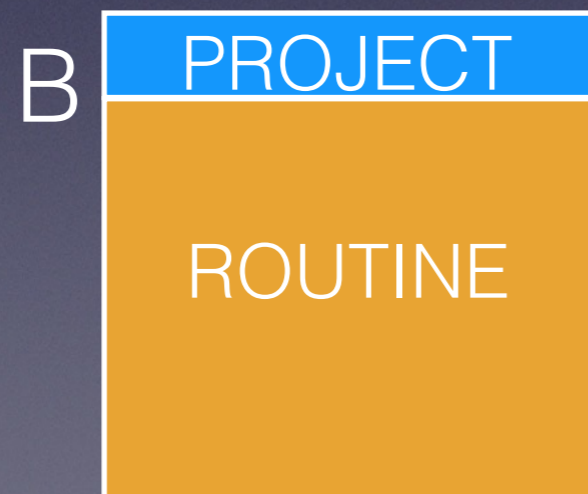
Workshop Step 2

What is the actual need the problem represents?

- Translate the problem into a need statement **that can be solved**

Workshop Step 3

Decide What Kind of Capacity You Have



Workshop Step 4

Given your capacity and the kind of project...

- What is a solution
 - Try for realistic optimism — assume you can direct your available resources without interference or conflict
 - Build and buy are both allowed
- What is the MVP and a second stage?

Report Out

2-3 minutes per group, share:

1. Problem
2. Need
3. Capacity
4. Kind of Project
5. MVP

Let's Talk

- What was easy?
- What was hard?
- Does thinking about “project capacity” help?

Contact Me

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