Jennifer Vinopal keynote presentation at OCLC DevConnect 2017
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Title: IT projects as drivers of organizational change

Abstract: The "apartness" of Library IT within the modern research library is related to the kinds of mythologizing, stereotyping, and storytelling about both IT and libraries that we see in popular culture and reproduce in our own settings. Even as we continually rethink "the research library for the 21st century," these mental models can prevent the change we want to see. This talk explores the possibilities for rethinking IT and library initiatives to advance a more holistic, systemic way of understanding, envisioning, and accomplishing our work together.

Speaker Notes:

I want to start by noting that I try to minimize text on my slides.
But when there is text I will read it out loud.
I don't assume that everyone in the room can see the screen well.

===SLIDE: VENN===

Over the course of my career in the library profession I've worked at the intersection of collections, public services, digital scholarship, and digital library initiatives. I consider myself, essentially, a public services librarian, which is, I think, an interesting background and perspective for an Associate Director of Library IT.

I started my career as a subject and reference librarian. I spent over 20 years building user services to help scholars use technology for teaching and research. At the same time, I worked as a project manager and business analyst in NYU's digital library.

So perched at the nexus of these various areas of library work, I have had the opportunity to see and study and to develop intersections and interactions among these functional areas, and to think about the ways that they complement and support each other and how they've work worked well together.

And how they haven't.

I don't know if any of you remember this, but way back in the 1990s, when the World Wide Web was first born, and the Digital Library Federation was being founded, and the Internet Archive came into existence, and OCLC's Worldcat became a thing,

===SLIDE: FREAKING OUT LIBRARIAN===

librarians were **freaking out** about the impact that technology would have on the library profession.

Do any of you remember that??

I mean, OCLC's Worldcat was all well and good. But for some, the introduction of technology *and especially digitization* into the day to day workings of the library was perceived as an existential threat. "Death of the Library" was a phrase I heard more than once back in the day.

In 1998 Michael Gorman, then Dean of Library Services at California State University, Fresno, and who would later become president of the American Library Association, wrote:

===SLIDE: FREAKING OUT GORMAN QUOTE===

Every single last one of these [core library] values is explicitly or implicitly **under attack** from those who tout the 'virtual library,' 'the library without walls', and all the other **vapidities of the digerati**.

One encouraging development is the number of recent publications that have begun to question the **digital fantasies of the elites**.

It's also worth noting here that subsequent articles with similar themes written by Gorman in the mid 20-aughts (including one entitled "Revenge of the Blog People!") elicited criticism and argument across the profession, with pearl clutching about the future of libraries and handwringing about the harm of backward-looking librarianship.

I'm not telling you this to pick on Michael Gorman. (In fact, in that 1998 article he goes on to discuss the enduring value of libraries and the values that underpin our profession, and he's right about those.)

I'm telling you this because you need to understand that this "Death of the library" period is relatively recent trauma that we as a profession are still recovering from.

The popular media hasn't helped us any, either, trading in stale stereotypes for facile humor. We know the trope of the dusty library and the shushing librarian, both dreadful impediments to our brave, new, modern and digitally enhanced future.

===SLIDES: LIBRARIAN STEREOTYPES===

What we're also seeing play out here in these tired, overused stereotypes is the opposition between librarianship as a feminized and devalued (anal-retentive, hoarding, controlling, repressed) profession and IT as a masculinized and highly valued professional space and activity.

===SLIDE: GOOGLE LIBRARIAN===

Here's what shows up if you google Librarian: Nearly all are women surrounded by books, a few computers but still books everywhere, and a little girl pretending to be a librarian shushing us. (That's some terrific career model, right?)

===SLIDE: GOOGLE INFO TECH JOBS===

And here's what you see if you google "Information Technology Jobs"

===SLIDE: GOOGLE ENGINEER===
Then you can select "Engineer"

===SLIDE: GOOGLE TECHNICIAN===
Or select "Technician"

It's mostly men hard at work building, fixing, and producing.

===SLIDE: WRITING IN THE AIR===

Some of these men have a magical ability to write in the air with their fingers! They map and plan and point the way toward a bright future the rest of us can hardly comprehend.

They definitely aren't dusty or musty or shushing or fossilized or hoarding, are they?

We internalize these cliches, the way anyone who is constantly labeled and categorized and lauded or mocked will eventually start to internalize, or even embrace, these ideas.

I mean, you do realize that we actually have

===SLIDE: LIBRARIAN ACTION FIGURE===

our own Librarian Action Figure, with amazing Shushing Action?

Like, let's just take a minute and compare these two slides. (**SHOW BOTH SLIDES)**

Rather than using her finger to write in the air and plan and point toward the future, she's using it to tell other people to be quiet, to suppress their self-expression.

I mean, this is not to denigrate the real librarian, Nancy Pearl, on whom this action figure is based. (And I happen to own one of these action figures). But let's just consider for a moment the differences in the kinds of "actions" and agency displayed in these not atypical images, and what that says about how we imagine and value the work of the people depicted.

So somewhere in the enormous gulf between these overdetermined and harmful sets of cliches is the reality in which we actually work.

And yet the cliches also originate from some fundamental truths about our work, don't they?

===SLIDE: ALA DEMOGRAPHICS===

Librarianship is a feminized profession. The 2017 American Library Association Demographic Study shows that librarianship is 81% female (that's their word not mine -- they should have said "women" instead of "female" since they're focusing on Gender and not sex) and 19% male (again, they're confusing sex and gender). I also note that they don't account for people who don't self-identify with the gender binary.

Librarianship is also in some ways very "conservative" -- a fundamental value of our profession is..

===SLIDE: STEWARDSHIP===

 "stewardship" which Michael Gorman defines as "preserving and transmitting the records of humankind on behalf of future generations."

In fact we aren't hoarding, we're conserving our cultural heritage.

And as for IT work, the work of IT professionals, when done right, effaces itself, doesn't it? Isn't that what you strive for? It seems a kind of wizardry, like writing in the air!

As you well know, the core principles of software development include:

===SLIDE: SOFTWARE CORE PRINCIPLES===

Simplicity
Efficiency (this is why you refactor your code)
readability (why you comment your code)
modularity (so you can replace parts of the system as you need to without having to trash and rewrite or rebuild the whole thing)
Extensibility (so systems can be modified and grow easily, gracefully)

===SLIDE: USER DELIGHT===

Add to that the "user delight" that comes from successful design and you're well on your way to a magical experience for the user.

You work hard to design systems and interfaces that make it look easy.
If you didn't, you wouldn't be doing your jobs right.

===SLIDE: SEAMLESS===

So this is really a conundrum for IT, isn't it? The success of your work is predicated on making everything SEAMLESS, on making your own work disappear:
- using APIs and other technologies to connect disparate systems so they appear to the user to work as one
- querying data from multiple sources and presenting coherent, unified results to the user
- Reducing response time down to milliseconds to maintain the illusion of effortless retrieval

And frameworks like IIIF are just going to make it worse, won't they? I mean, with IIIF now we can display images from around the world side by side in our virtual workspace and treat them as a single collection to be annotated and manipulated as we need.

===SLIDE: IIIF===

Here's an example of two manuscripts side by side in Mirador, a IIIF compliant viewer: one from the Houghton Library at Harvard and the other from the Walters Museum in Baltimore via Stanford University.
Aside from the small and somewhat inscrutable labels over the manuscripts, you don't have any sense of where these books come from, the actual physical distance between them, and the amount of effort required to bring them virtually together here on my screen.

So why is this a problem? This is what we've been clamouring for since the dawn of the internet and the World Wide Web, right?

Well, remember, we work with other people. In libraries we work with many people who aren't quite as savvy as you are about what your work consists

of, who don't fully understand the amount of work that goes into making something technical or computational look easy. They may just not fully grasp what you do. And even those who do think computationally don't necessarily understand exactly how the work is done.

===SLIDE: EASY KEY===

You may get asked questions like: "Why is it taking so long for you to make this simple change?"

And you may launch into an explanation, likely with far too much detail, that sounds to the uninitiated like mystical incantations from some wizard's handbook, with magical words like: Tomcat and Apache, mysql and sparql, VMs, forks, restful APIs, containerization, sprints.
I'm sure you can think of more yourselves.

And their eyes may glaze over, and they may either walk away bewildered or ask you again: "But why is it taking so long?"

===SLIDE: WING QUOTE===
Jeannette Wing who has written extensively about "Computational Thinking" defines it as

> "the thought processes involved in formulating a problem and expressing its solution(s) in such a way that a computer—human or machine—can effectively carry out."
> "computational thinking is not just about problem solving, but also about problem formulation."

The way that you think, the way you ask questions, the way you formulate problems and try to solve them is not magical.

It's a learned skill that anyone can acquire.

But it *is* important to recognize that your way of thinking is different from that of people who aren't trained to think computationally.

A colleague from another institution recently said to me about an interaction with colleagues:
"I forget that they don't think relationally."

Thinking relationally or not can mean the difference between, for example, having a fruitful conversation about a content management system or a database or structured data or description and encoding standards, and an exercise in frustration.

===SLIDE: OCLC REPORT COVER ===

A new OCLC report just came out called "Demystifying IT: A Framework for Shared Understanding between Archives and IT Professionals."

This report is aimed at archivists and other library staff, to help them better understand how IT works and how to collaborate effectively with people like you. It's intended as a kind of a primer in how to talk to and work with IT staff.

A caveat: Now I want to make clear that I'm going to talk about and critique this report as an example of thinking that is widespread in libraries. And I'm doing this in order to help us open our eyes and push ourselves to do better in our work and to do right by our colleagues.

The premise of this report is that to work effectively with you, your colleagues need to recognize that your work and communication styles, how your work is scoped, planned, prioritized, organized, funded, documented, tracked, and carried out are fundamentally different from theirs. ***Unusual*** even. Or unusual enough to warrant suggestions like this:

===SLIDE: OCLC REPORT BULLETS===

- IT prioritizes core functions
- IT resources are not limitless
- We should clarify terminology & intended meaning
- We should follow designated procedures (e.g., ticketing)
- IT should be involved from the outset on IT-related projects and acquisitions.
- IT prefers formal project management and projects that are well scoped
- never lose your temper or become impatient

I would suggest that, aside from the point about formal project management, I don't know of a library department that doesn't hew to these premises.

This report puts the onus of identifying and navigating differences in organizational culture and practice, and of understanding and adapting to the **peculiarities** of IT culture, on the rest of the organization. It posits that your IT organizational culture is **fundamentally different** and **apart** from that of the rest of the library, as something in need of demystifying and decoding.

This kind of thinking further reifies and strengthens the unhealthy split between "IT vs. the rest of the organization." This is not going to get us where we want to go.

===SLIDE: SENGE BOOK===

I've recently been reading Peter Senge's "The Fifth Discipline: The Art and Practice of the Learning Organization."

Senge's goal is to uncover the kinds of thinking, what he calls the five disciplines, that will help us excel in our work. While he talks about mental models, personal mastery, building shared vision, and team learning, as required for organizations to succeed, the skill that underlies them all is what he calls the fifth discipline: Systems Thinking.

He says systems thinking "is the discipline that integrates the disciplines, fusing them into a coherent body of theory and practice."

===SLIDE: SENGE QUOTE===

"Generative learning cannot be sustained in an organization where event [or short-term] thinking predominates. It requires a conceptual framework of "structural" or systemic thinking, the ability to discover structural causes of behavior. Enthusiasm for "creating our future" is not enough."

Our ability to solve problems is tied to how we think. Senge advocates a "shift of mind" from seeing parts to seeing wholes, *reducing* the separation between ourselves and the rest of the system in which we are acting, and recognizing that "our own actions create the problems we experience." It's not possible for us to say there's a problem over there but it doesn't affect us here.

According to systems thinking, solutions to the apartness of IT in libraries must destabilize a mindset that further articulates and entrenches the split of "us vs. them."

So how can we do this?
How can we imagine and better integrate IT with the rest of the organization, and what are some opportunities and responsibilities for us as IT professionals to affect organizational change that will enhance and elevate our work and that of the organization?

I'll give you a few suggestions and then wrap up:

===SLIDE: ENGAGE, UNDERSTAND… ===

- First, be willing to Engage:
  - I've seen some IT departments or divisions that are really quite protected from the rest of the organization: maybe physically separated in some way, or their time is protected--for example

from committee involvement--in a way that sends a powerful signal to the organization.
- Culture is created through *shared* experience. Developing and maintaining a healthy organizational culture is a shared responsibility.
- If we're not really engaging with the work and the life of the organization in a meaningful way--except when they have an idea for something they'd like us to work on--we're not positioning ourselves to participate in the development of the organization. And we're passing on an opportunity to influence.

- Understand and Value:
  - Be curious about what's going on in the rest of the organization and the institution, and the people in it.
  - Visit people in their own spaces. Learn what they do. Ask "why" and "what if" questions. It's the only way to build trust.
  - It's often the case that when we hire IT staff we're hiring people who come from outside the library profession, or even from outside higher ed. They may be baffled by the practices and culture of libraries.
  - Only after understanding the customs and context for library work can we really engage with it, look critically at it, and collaborate effectively.

- Be willing to investigate and engage with problems that "aren't yours"
  - What's happening around the rest of the organization is more closely tied to your own work than you might think.
  - Develop a tendency when you find a problem to look more deeply and more broadly at the context and what other connections you might find.
  - For example: what may seem like a relatively insignificant problem way over there may actually be having a considerable impact on your own work, and you might not even realize it.

- ○ Why not dig around to find out more about that problem over there and see what other things it's connected to. You might be surprised when you do this that you uncover some more fundamental problems that could solve larger organizational issues. This is systems thinking.
- ○ I'm not suggesting that everyone become a meddler in everyone else's business. I'm just saying that you should look for patterns around you. And if you notice a red thread, follow it to see where it leads.

- Communicate with respect:
  - ○ Like Goldilocks, we should seek a way of communicating that is just right for our interlocutors. We should avoid using highly technical language with those who don't understand it. But we should also avoid the condescending "you don't need to understand or worry about that." (Yes, I've heard this).
  - ○ There is no benefit in concealing what it is that we do (either intentionally or inadvertently). That only comes back to bite us.
  - ○ Effective communication requires putting ourselves in others' shoes and trying to understand what information they need and how they might need it.
  - ○ This is the foundation of UX work, right? You can't know what your users, or in this case your colleagues and partners, want and need unless you ask them!
  - ○ Let's expose our work to the extent that we can and let others enter into our workspaces, understand our practices, concerns, and dilemmas, and get a better sense of what and how we do what we do.
  - ○ This will also expose computational thinking in action to those who might not really understand it. It will help others understand and appreciate your work, and possibly think differently about their own.
  - ○ Over the next day and a half, think about how you're going to talk about this work with your colleagues.

- Treat IT projects as Library projects, and vice versa
  - This sounds so simple, dumb, really. But it's a subtle mind shift that can have a significant impact on our work.
  - A story: when I started working at OSU Libraries last November, I was presented with two significant "IT projects" (website redesign and developing a new approach to library discovery). Everyone kept asking me about these IT projects. How were they going? What was IT working on? When would they see a product?
    - Well, they weren't progressing - I was holding them back on purpose. Something seemed off to me.
    - These weren't IT projects!
    - It wasn't until I started thinking and talking about them and framing them in the minds of others as "Library projects" that I was actually able move them into a space where *everyone* in the organization felt responsible for their success. We want no surprises and sniping from the sidelines as we roll out products. Everyone needs to be invested in making these initiatives successful.
  - When we frame a project or a problem as an organizational responsibility, we develop buy-in, engagement, and cut down on the possibility of developing solutions that only work for a subset of the organization.

- Finally - Learn collaboratively:
  - Do After Action Reviews or Retrospectives, including others in the organization as appropriate (product owners, sponsors, key stakeholders, etc.).
  - Learn from past successes and mistakes. Make this a regular practice and disseminate it as an organizational practice.
  - Include in your after action review questions about communication amongst yourselves and with the rest of the organization: What worked well? What didn't? Who wasn't informed? Who was confused about what was going on?

- And don't think of problems as one offs. Look for patterns and red threads.
- ?Do local or immediate problems suggest larger issues that should be pursued?

So what I'm suggesting here is that, while you may have special knowledge and skills and ways of working, so do others in our organizations.

Holding ourselves apart--either through behavior or mindset or language or by allowing stereotypes to persist--prevents us from full engagement with the life and mission of our organizations, and will ultimately impede our success.

In IT we have developed valuable ways of formulating problems and solving them. But they're not the only ways.

To have influence and impact we need to appreciate, understand, and connect with others and be open to being influenced as well.

This is how we're ultimately going to make our collective work successful.

===SLIDE: CREDITS ===

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