

Hacking User Experience in a Repository Service: ScholarSphere as a Case Study

Open Repositories 2014

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Outline for the Talk

Context

- UX defined, state of UX work in IRs

Making the case

- UX support in IRs

Unpacking our hacking

- What we did, what you can do

Future plans

- Final takeaways

SEARCH

Q Go

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What is ScholarSphere?

ScholarSphere is a secure repository service enabling the Penn State community to share its research and scholarly work with a worldwide audience. Faculty, staff, and students can use ScholarSphere to collect their work in one location and create a durable and citeable record of their papers, presentations, publications, data sets, or other scholarly creations. Through this service, Penn State researchers can also comply with grant-funding-agency requirements for sharing and managing research data.

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Alexander
Siedschlag



Mission-Space Driven...

HLS_siedschlag.pdf

Homeland Security, All-hazards approach, iMPS-HLS, Emergency Management

Timothy
Dwight
Pyatt



Security Without...

SecurityObscurityFinal...

born-digital archives, personally identifiable information

CONTEXT AND SOME CONTESTING

UX defined

"User experience" encompasses all aspects of the end-user's interaction with the company, its services, and its products.

Jakob Nielsen and Don Norman

How to do high quality UX, per Nielsen and Norman

- Seamless merging
- Engineering
- Marketing
- Graphical and industrial design
- Interface design

General state of UX work in IRs

- Major focus
 - Content recruitment
 - Engagement of faculty
- Minor focus
 - Usability
 - Personae development
 - User expectations

Why is attention to UX in a
repository service important?

MAKING THE CASE

UX is about people



People want simplicity and elegance.

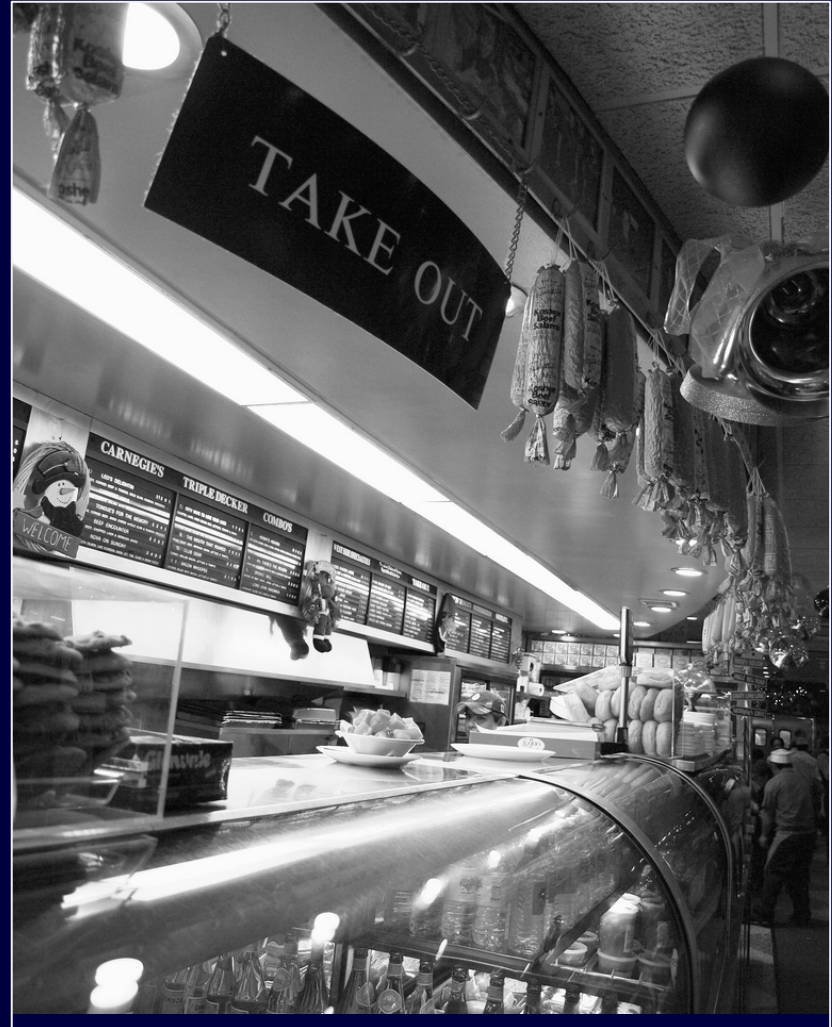
Takeaway: Build simplicity and elegance into your repository.

People produce content.

Repositories want content.

Takeaway: Repositories need people. Build what people want into your repository.

UX is also about service, and a repository is a service



People want, need, expect good UX.

People have a stake in UX.

Repositories have a stake in people.

Takeaway: Participation = Buy in.

Build UX into your repository.

Users are integral to the repository ecosystem

But what if you have these constraints:

- No one who officially does UX
- Tight timeline of *9 months* to production
- You need *a lot of people*, and **FAST**, to inform features and functionalities

You hack UX!



Part 1: ScholarSphere 1.0
UNPACKING OUR HACKING

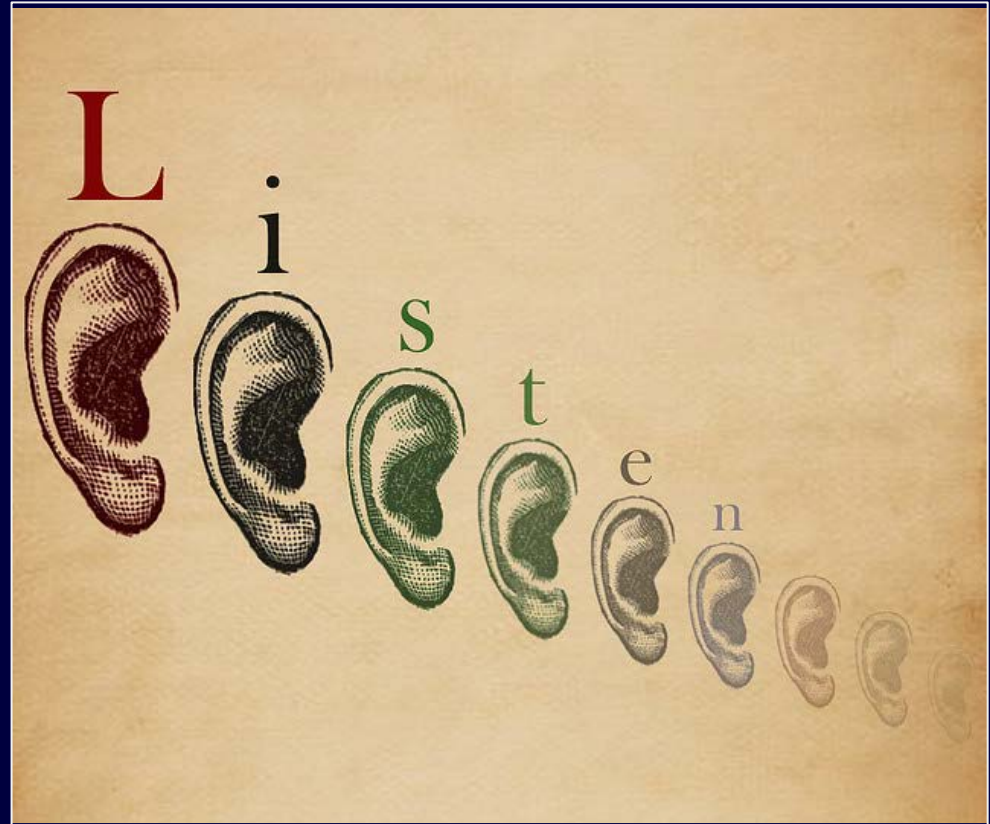
Calling all liaison librarians!



[“Organizers at the bullhorn”](#) CC BY 2.0 – JacobRuff via Flickr

Stakeholder engagement – “high touch” vs. high tech

- Stakeholder group
- 24 librarians
- Bi-weekly
meetings: use-
case driven, LOTS
of listening
- Developers at
most meetings –
CRUCIAL



[“Listen”](#) CC BY 2.0 – Ky via Flickr

Usability testing

- Liaisons helped communicate out about the testing
- Conducted like a focus group
- Developers were present at most sessions

*Engineering + interface
design = UX hack
(half-way “seamless
merging”)*



[“test”](#) CC BY 2.0 –
David Bleasdale via Flickr

What was the hacked UX in ScholarSphere 1.0?

Gave as much control to users as possible:

- No account set-up required
- Self-deposit system by design
- Open to the ENTIRE Penn State community



[“DeArmond Tremolo Control Front 2”](#)

CC BY 2.0 – Germanium via Flickr

Part 2: Beyond ScholarSphere 1.0

UNPACKING OUR HACKING

Versions

<https://scholarsphere.psu.edu/versions/>

Version 1.10 (April 10, 2014)

- Adding pagination on collection show and edit pages
- Displaying file permissions on the generic file show page
- Changed resource type "Master's Thesis" to "Thesis" on the Descriptions (metadata) template.

Version 1.9 (February 13, 2014)

- Fixed bugs with Facets not displaying in Safari
- Added validation to Collections to require a Title
- Included query links on GenericFile Show page
- Fixed user profile page to display the correct number of deposited files
- Made highlighted files easier to remove and thus manage
- Added relative date to notifications page

Version 1.8 (November 26, 2013)

- Enhancements to the deployment process.

Version 1.7 (July 9, 2013)

- Users can upload files on behalf of other users for approval.
- Users can designate others to be authorized to upload files for them to by pass a case-by-case authorization process.
- Files that have been uploaded to ScholarSphere can be logically arranged into collections.
- Users can authenticate to their Dropbox account from the ScholarSphere upload screen and import files into ScholarSphere.

Version 1.6 (May 29, 2013)

Since the beta launch in 2012, there have been ten versions of ScholarSphere. Frequent releases speak to the responsiveness of our user experience design.

Created new features based on user feedback after beta release

“My files are bigger than the maximum allowed size.”

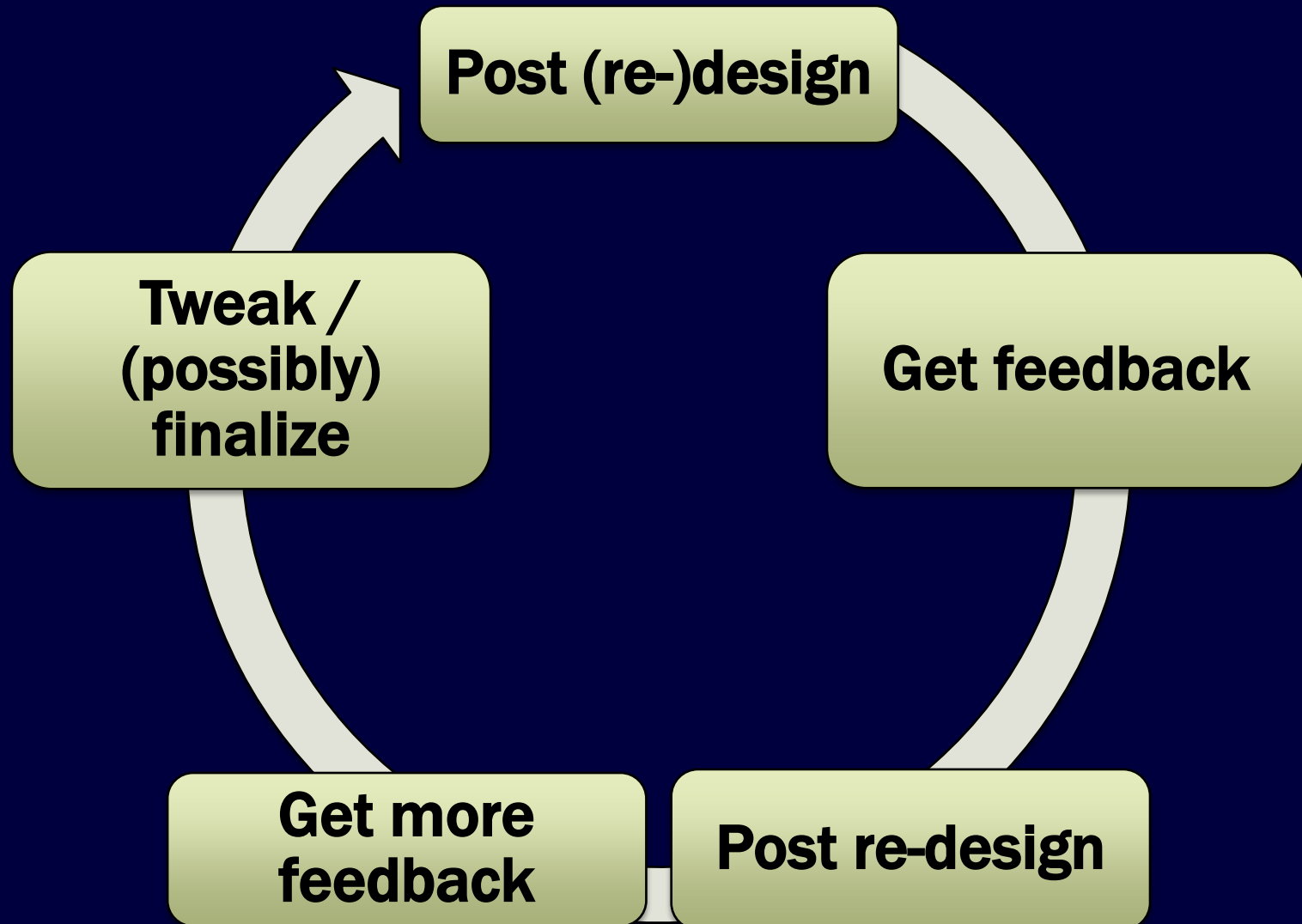
“I don’t have time to deposit all my files.”

“I would like to be able to group my files.”

Established the ScholarSphere Users' Group (SUG)

- Core set of diverse users
- Participatory design
- Direct access to service development
- Insight into user behavior, expectations, goals
- Shared coordination of SUG activities

SUG and Redesign Process



Web developer with UX experience

- Interaction with Project managers
- Work with development team
- ScholarSphere Users' Group
- Mockups and wireframes

My Dashboard

Hello Professor Xavier !



Upload



Create Collection



View Files

Charles Francis Xavier

Professor, Head

Xavier's School for Gifted Youngsters

814.865.8399

chuck@xsgy.edu

[View Profile](#)

[Edit Profile](#)

User Activity

Message	Date
User Charles Francis Xavier has edited his or her profile	3 days ago
User Charles Francis Xavier has uploaded mutant_potluck.xls	5 days ago
User Charles Francis Xavier has edited 3rd_quarter_bills.xls	1 mo. ago

[>> View more user activity](#)

Your Statistics

52	Visits to Your Profile by Others
34	Downloads of your Files by Others
16	Assets you've Deposited into ScholarSphere
28	People are following your work
17	Individuals you've decided to follow

User Notifications

Message	Subject	Date
frankfurter ham hock drumstick	Batch Complete	1 mo. ago
kielbasa beef ribs boudin leberkas	Batch Complete	3 mo. ago
blarg, blarg, balargie, blarg...	Batch Complete	6 mo. ago

[>> View more user notifications](#)

Proxy Activity

Message	Date
Michael Anthony Tribone has uploaded jquery.js	6 mo. ago

Featured Researcher



Dr. So-and-So
This Dept or College
Type of Research

Bacon ipsum dolor sit amet flank shankle frankfurter turducken, drumstick ground round turkey beef ribs. Drumstick filet mignon bacon biltong meatball ribeye shank pork capicola flank pastrami spare ribs brisket. Sausage pork loin doner leberkas short ribs pig biltong brisket shankle turducken strip steak short loin filet mignon tri-tip.

[Check Out my Wicked Dataset](#)

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Experimenting with Words and Length

Professor Honeydew

keywords: microscopes, beakers, ruler, calculator, science

I'm a Long Title about Science

Professor Honeydew

keywords: microscopes, beakers, ruler, calculator, science

Latest News

We upgraded something

Useful things happening in the basement

Tablets on up can be used

Major decision making in the past 2 months

We like pickles as much as you do

Tweets

Dr. G @guertin

That's me! MT @pmhswe: Talked w/ marine geologist abt @ScholarSphere. Very enthusiastic about using it 4 excellence in student scholarship!

Video Tour



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Citable, Durable Record



Create Collections



Track Versions



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Christopher Philip Long

keywords: philosophy

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Highlighted Resources

Compassion Satisfaction, Burnout, and Secondary Traumatic
Stress in Heart and Vascular Nurses
Jennifer Young

keywords: Penn State Hershey Nursing, Compassion, Traumatic Stress

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doner leberkas short ribs pig biltong brisket shankle

Dedicated Marketing

- Autumn 2013 –
Phase 1: mainly
faculty
- Spring 2014 –
Phase 2: students

*Opportunity for
promotional campaign
& we jumped at it
=> UX hack*



*It's good
to share.*

ScholarSphere can help.

What you can do to hack UX

FINAL TAKEAWAYS

You can . . .

- Build **relationships** with champion users
- Form a **users' group**
- Do user **interviews**
- **Share** responsibilities for UX
- Partner with **PR/marketing** office, **etc.**
- Prioritize **communication** with users
- Dedicate time to **user services** programming
- Work in concert with **developer** team

Future Plans

- **ScholarSphere 2.0 set for release this fall:** communication, programming
- **Next up:** Prototyping Hydra head for ETDs; mediated deposit, Zotero plugin
 - all will require UX requirements gathering & participatory design

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THANK YOU!