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
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.
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
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

1. Post (re-)design
2. Get feedback
3. Get more feedback
4. Tweak (possibly) finalize
5. Post re-design
Web developer with UX experience

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

We Preserve Access

Collect and share your research and scholarly work with the Penn State community and the world. Safeguard your work, ensuring that future generations of scholars will be able to locate, use, and build on your discoveries. Adjust your privacy and access settings to control who can find, see, edit, and download your content.

Learn More about ScholarSphere

Recently Uploaded

Science Graphic Novels for Academic Libraries
John J. Meier
keywords: pre-print, graphic novels, comics

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!
Collect and share your research and scholarly work with the Penn State community and the world. Safeguard your work, ensuring that future generations of scholars will be able to locate, use, and build on your discoveries. Adjust your privacy and access settings to control who can find, see, edit, and download your content.

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Science Graphic Novels for Academic Libraries
John J. Meier
keywords: pre-print, graphic novels, comics

Saving the Things Said - Aristotle and the History of Philosophy
Christopher Philip Long
keywords: philosophy

Gordon Neeld Fleming
keywords: future of quantum theory

Highlight Resources
Compassion Satisfaction, Burnout, and Secondary Traumatic Stress in Heart and Vascular Nurses
Jennifer Young
keywords: Penn State Hershey Nursing, Compassion, Traumatic Stress
Dedicated Marketing

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

Opportunity for promotional campaign & we jumped at it

=> UX hack
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
THANK YOU!

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THANK YOU!