

## **LITA Mobile Computing IG meeting**

June 26, Sunday, 10:30 am – 12pm. Intercontinental New Orleans - Poydras room

### **Case Studies: Developing Mobile Access to Digital Collections**

Carmen Mitchell, Loyola Marymount University ([carmenmitchell@gmail.com](mailto:carmenmitchell@gmail.com))

Daniel Suchy, University of California at San Diego ([dsuchy@ucsd.edu](mailto:dsuchy@ucsd.edu))

#### **• Background**

The seed for these in-depth case studies came from a more general July 2010 survey in which we asked a wide library community for input about their efforts (or lack thereof) in building a mobile access layer to their existing digital collections. As our abstract describes, unlike mobile websites in general, this is an area which hasn't received a lot of research attention, and many folks are just now starting to add mobile access. The survey went out to broad technology-minded groups such as LITA, and also to smaller more focused communities (DLF, Code4Lib, etc).

We received about 25 responses, which we summarized and presented at CurateCamp in Berkeley in August 2010 with our colleague Cristela Garcia-Spitz, also from UCSD. CurateCamp is a series of unconference-y sessions focused on digital curation. This a good venue for anyone interested in the gamut of curation, from storage to description to the end-user interface and experience.

After that presentation, we then took some of those respondents (plus Nancy Proctor) and conducted in-depth phone and email interviews. What resulted was some useful lesson learned, which might be valuable to folks here who are interested in expanding their mobile offerings.

The original survey questions may be seen here: <http://goo.gl/1ujA>.

#### **• Participants**

1. Tito Sierra, Associate Head, Digital Library Initiatives North Carolina State University Libraries
2. Jason Clark, Head of Digital Access and Web Services at Montana State University Libraries
3. Sean Aery, Web Designer, Digital Experience Services Dept., Duke University Libraries
4. Nancy Proctor, Head of mobile strategy and initiatives for the Smithsonian Institution

#### **• Questions asked**

1. What is the appropriate approach for development of mobile access to digital collections?
  - a. Was this an in-house project or an outside vendor?
  - b. To what extent did you leverage your existing DAMS? Does it provide any means for mobile access? Did you have to take assets out of it and into a separate system (CMS, etc) to provide mobile access?
  - c. What mobile framework did you use? What language(s) did you use?
2. Who are you designing for?

3. What features are incorporated? (basic viewing vs. advanced features)
4. Did you think a mobile version of digital collections needs to be managed differently than a regular mobile site? If so, how?
5. How did you gain institutional support? Was it different for mobile vs. other initiatives?
6. How will you measure the level of acceptance, satisfaction, and usage of the site?
7. What would you have done differently/lessons learned?

- **Lessons learned**

**Nancy: Learn not to freak out at the first bit of criticism.**

The Neanderthal Application: started with a lot of chips stacked against it. High level funder. Wanted an interactive exhibition...wanted an app created for it. She would pay for it, Si had 72 hours to say yes, and 6 weeks to deliver the app. Not positioned to be a strategic project. The Natural History team was able to put it together...but not everything was in place to support the app.

The stated goal was to drive visitors to the website where they could learn more about the species. But, the website was developed before the mobile app was created, and it was not optimized for mobile.

Eve Klein app: started by the webmaster at the Hershorn. Had heard about a WYSIWYG editor for apps. Took the website and created an app...learned how to repurpose the app for other purposes. Not a great app for folks with low vision. Font sizes are fairly small.

Most rewarding work has been done with access guides. Most proud of this. Worked with a developer at Deutsche Bank – had product development principles. Should really “foreground access” creating apps that help to increase access for disabled patrons/users. **“Products developed for access always revolutionize everything else we do.”**

**Jason:** I might have started building the mobile app first and then added complexity for the desktop browser app version. Working within mobile development requirements makes you ask tough questions about needed features and forces you to streamline and optimize your code in a good way. By the end of this project, we had reworked and improved the performance of our search page code and ended up bringing that code forward into our desktop app search routine. Going forward, I would also look to use some of the full features of advanced javascript mobile frameworks like SproutCore or jQuery mobile. In the time since we built our app, these frameworks have emerged which provide the look and feel of native mobile applications in the browser.

**Tito:** We have learned that deploying iOS apps (getting a license, setting up devices for testing, and publishing to the App Store) is more complicated than we thought it would be (or should be). This took some adjustment as our team experience is primarily focused on developing web applications that do not have these encumbrances.

We were somewhat surprised to see that the ongoing usage of WolfWalk is disproportionately higher on the iOS platform than on the open mobile web platform, despite the functional similarity of the two versions.

It's not worth investing too much time in any specific mobile development framework or architecture, as it is likely to become outdated in 6-12 months time. Nimbleness is a virtue in the mobile space.

**Sean:** I think we had several successes, regardless of how frequently or infrequently the app is accessed:

1. Notable timely innovation is good PR for the library: we got lots of attention in the blogosphere & at national conferences
2. The approach of attaching a library interface onto an existing campus-wide application (rather than building our own thing and hoping people find it) has been generally seen as beneficial
3. In our case, latching our content onto an existing campus project with its own development budget made this virtually a zero cost initiative for the library.
4. Attention gained via the DukeMobile project has helped spur the library toward more explicit and extensive planning for mobile content & services. It has also helped to educate staff/administrators about mobile library interfaces and get people excited about the potential.
5. Early returns on digital collections iPhone interface led to development of a library catalog interface in DukeMobile a few months later.
6. This was a great proof of concept for why it's important to provide a useful API to your digital collections data for other developers to access. We will be taking this several steps further in the new platform we are building.

I don't know if there is much we would do differently if we had it to do over again. Though as we look forward, we will likely focus more on in-house mobile web interface development and much less—or perhaps not at all—on vendor-developed platform-specific apps. That will give us more control of our display, mitigate some of the problems working within the app framework, and will also help us reach many more users.