Considerations for Your Mobile Library

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TLA Annual Conference
Houston, TX
April 17, 2012

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What kind of mobile devices do YOU have?

What do you do on them?

Have you ever tried being a mobile user in your own library?

Should the resources and services that are in your physical building and on your website also be offered on your **mobile website**?

Mobile friendly databases

Reference services

RSS feeds from blogs

Open access resources

Library instruction

QR codes

Your library website here

SMS services

Location guides or floor maps

Event calendar

Research or homework guides

Catalog

Videos

Social media

Augmented reality

Audio tours

Image collections

With **so many options**,
how do you begin
to plan for a mobile website?

Get to know your users

- Conduct surveys or interviews of library users who use mobile devices

- Ask in different geographic regions and cover all your demographics

- Understand their mobile habits

- Learn their device ownership trends

Ask questions

Why does your library want a mobile presence?

What are your peer libraries doing?

Do you know what your users want?

What defines success?

Which do you choose?

mobile website
or
native application

	Mobile Application	Mobile Website
Performance	• Runs locally, resulting in quick loading time	• Relies on the Internet, resulting in slower load and response time
Access	• An app has to be developed for each platform, pushed to each platform's app store, and then downloaded to a smartphone for users to access	• Device agnostic, so only one website needs to be built • Access is through a web browser • Can be viewed on many devices, including feature phones
Supportability	• Updates are deployed through an app store that has a multi-week submission and approval process • Updates require users to download new versions	• Relatively simple to support as there are less things to go wrong on the user's device • Potential to become more complex • No interaction with an app store • Updates to server are instant for users
Application Evolvement	• Mobile platforms such as Android, Apple iOS, Symbian, RIM and Windows Mobile are evolving rapidly	• HTML standards evolve more slowly

	Mobile Application	Mobile Website
Quality of User Experience	• Runs locally, resulting in quick loading time • Made for mobile so it has fluid interaction and intuitive interface • Can access sensors such as GPS and accelerometers • Can take advantage of touch screens and gestures • Can take advantage of augmented reality	• Potentially less satisfying depending on Internet connection and speed • If a mobile stylesheet is applied, users might have usability issues with access to webpages that are not mobile-friendly • With the exception of social media and games, users still prefer mobile sites over apps
Technical Risk	• More risky because they can be more complex, riskier to develop and harder to test	• Less risky because site exists • A mobile version can be created by applying a mobile stylesheet or by building a simplified site
Testing	• Testing for native apps is slower and more complex if multiple platforms are supported • Testing might involve UX such as touchscreens or GPS	• Only one site has to be tested • Quality assurance and usability testing is simpler because there is less involved

	Mobile Application	Mobile Website
Cost	• More investment because it requires more resources, time and skills • Have to develop for multiple platforms	• Less investment because it's quicker and easier to build • Can support any device that has a web browser
Marketing	• Thousands of mobile apps available on each platforms's store, making the audience smaller and more focused	• Users can find your mobile website via search engines, links from other websites, and links embedded in emails
Operational Issues	• Must have room on the smartphone to download	• Good cellular or wifi signal is required
Skill Set	• Application development demands more sophisticated skills • Developers with these skills are harder to find	• Knowledge of HTML and CSS for basic mobile theming • Skills in HTML5 and PHP are useful for creating more engaging websites, but not all smartphone browsers support HTML5 yet

Which is best for **your** library?

✓ You know what's on your website

✓ You know the needs of your users

✓ You know what tech skills you have available to you

✓ You know the limitations of your library's wifi

Options for building mobile native **apps**

- Native platform SDK (software development kit)

- General purpose multi-platform tools - attempts to "write once, run anywhere"

- Outsource the development, or hire a developer with mobile app development experience on each platform you want to create

developers

SDK

Options for building mobile **websites**

- Develop a mobile CSS

- Do nothing - users will still see your site, but it won't be optimized for the best mobile user experience

- Google sites - mobile templates

    - http://sites.google.com/mobilize

- Have an open-source cms like Wordpress or Drupal that power your website? Find a mobile friendly theme

Google sites

Mobilize your business

Your customers are mobile; how about you? With Google Sites, you can build a professional mobile landing page in just minutes.

You can also visit GoMo, an initiative by Google, to learn more about why mobile matters, test how your current site looks in mobile and get a free report with personalized mobile site recommendations.

GO MO Mobilize your site now.

1 Choose template:

Restaurant	Local Business	Lead Generation	Social	eCommerce	Custom

The **restaurant** mobile template creates an easy way for your patrons to find info about your restaurant. This template's multiple pages let you include separate pages for special offers, your menu and directions. Learn more ...

2 Select color:

Try this template

Options for building mobile **websites**

- Mobile application tool with web capability

  - Completely home-grown approach

- JavaScript framework and code libraries

  - jQuery Mobile, iUI, jQtouch, iWebKit

- Use Chad Haefele's Mobile Site Generator
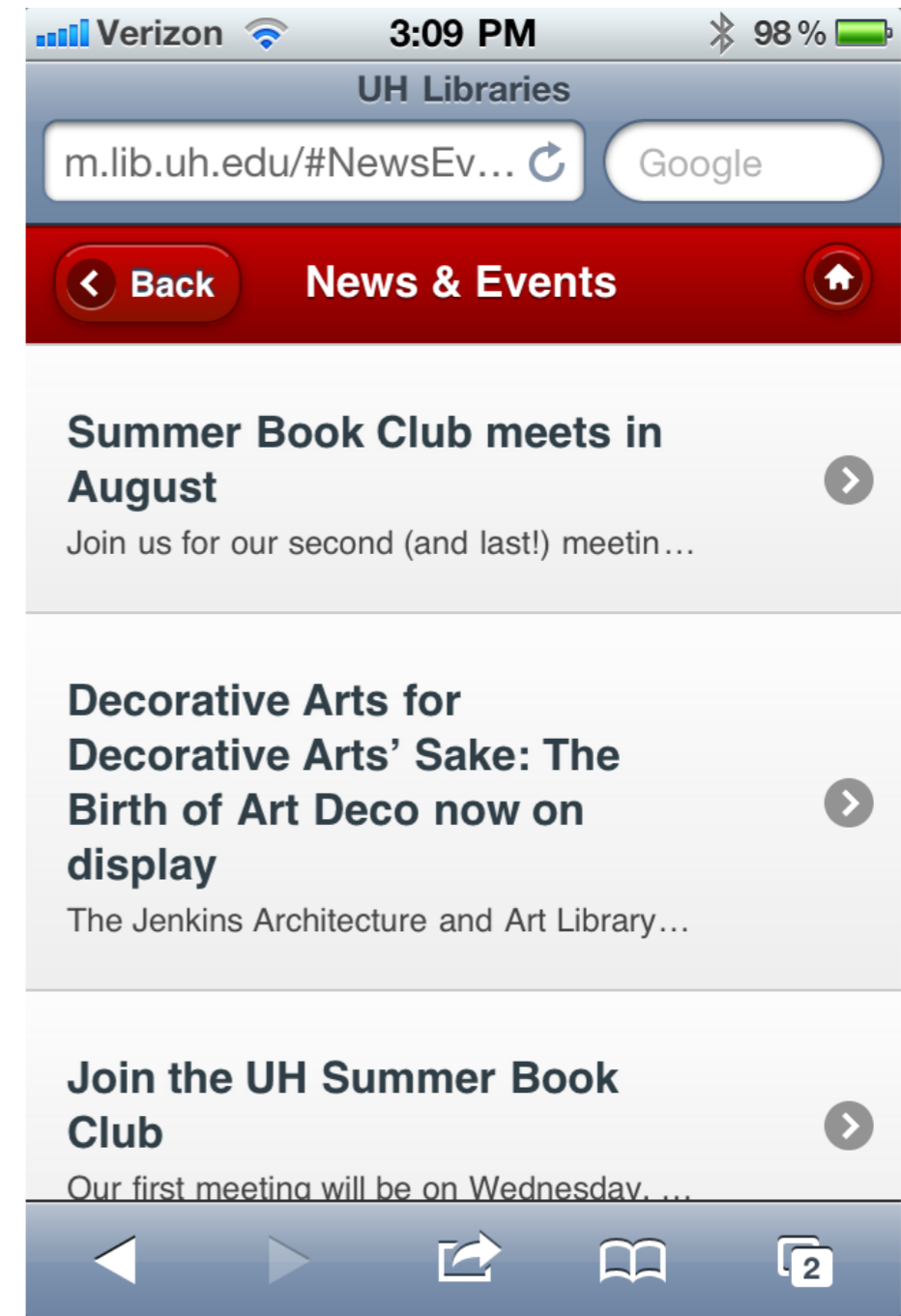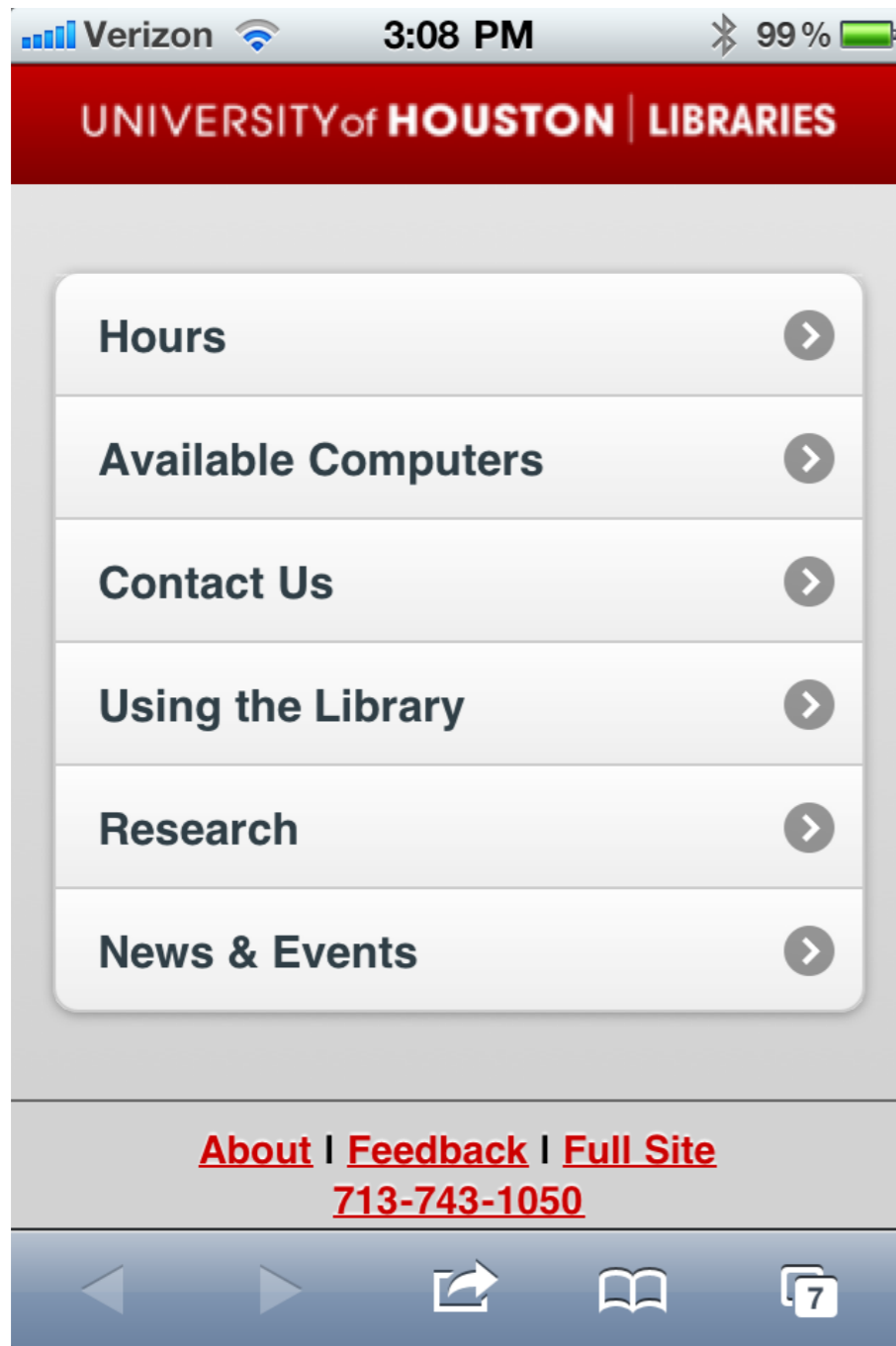
  - http://www.hiddenpeanuts.com/msg/

Managing your mobile site

- Design & Functionality

  - Can be determined by the stylesheet or the framework chosen

  - Keep your branding consistent

- Content

  - Have a strategy for maintaining the content

  - Pull in content from other systems if you can (RSS feeds, APIs, etc.)
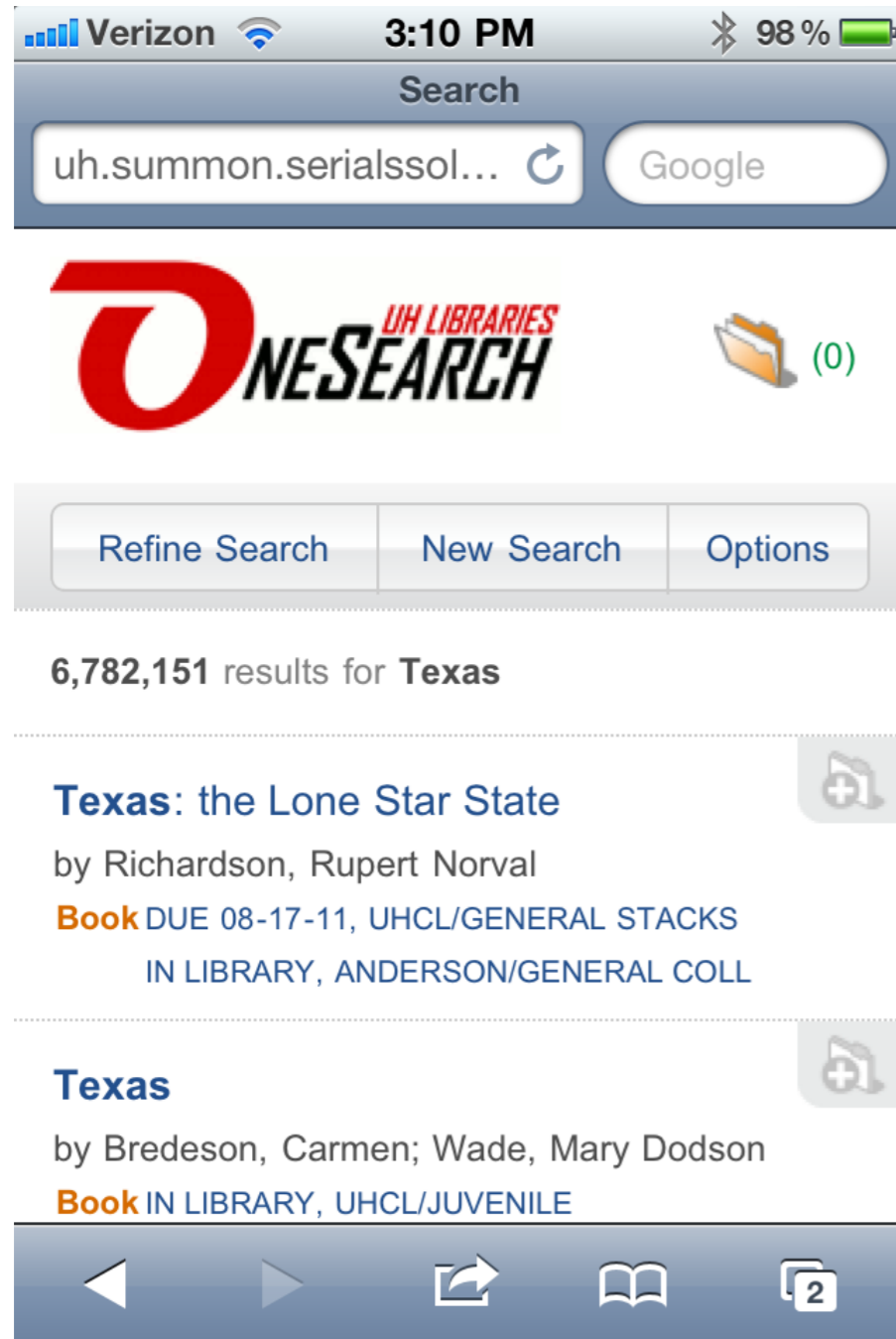
UH Libraries
Mobile Web Presence

UH Libraries Mobile Website - m.lib.uh.edu
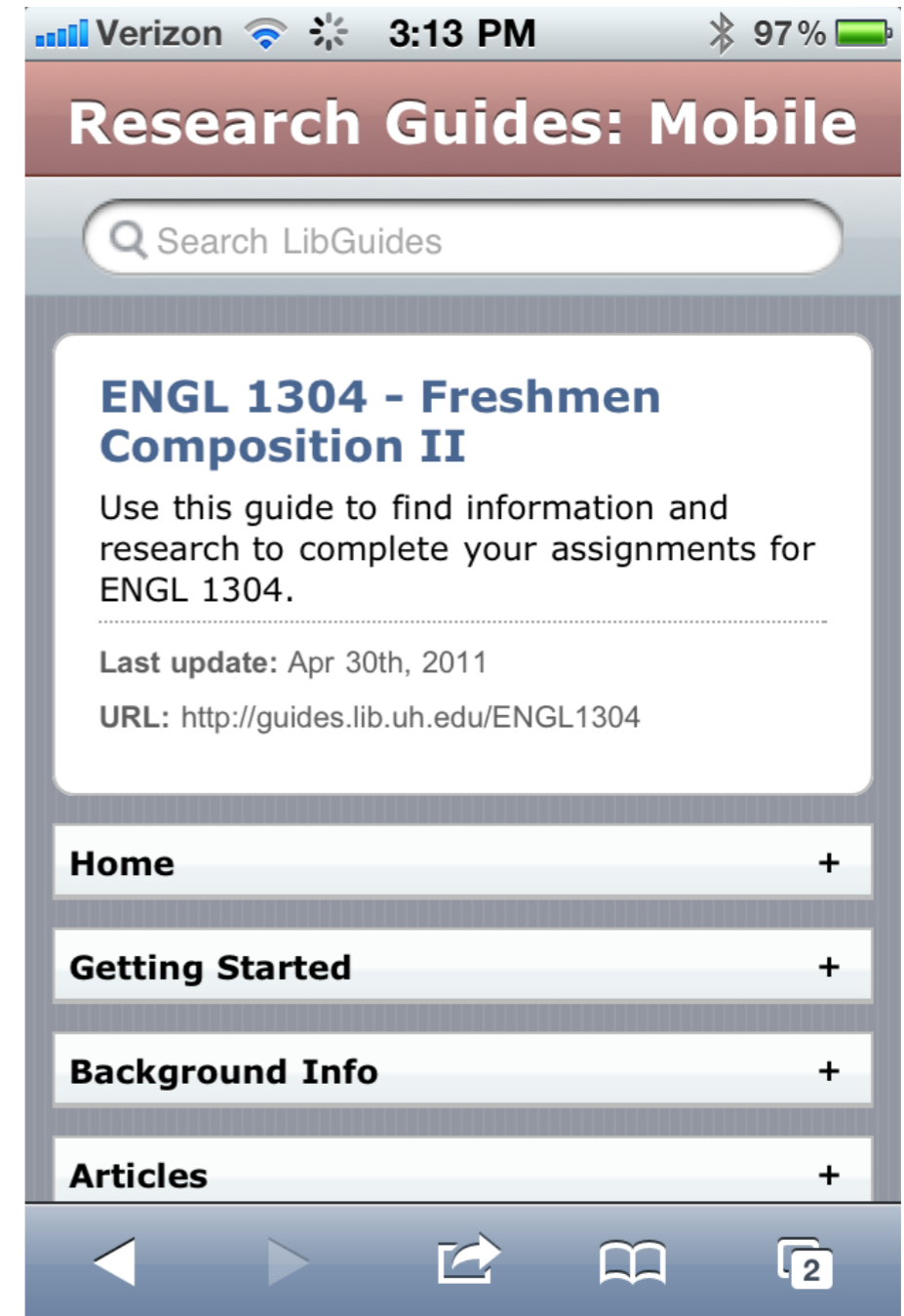

Think differently about the hierarchy of your homepage

RSS feeds are quick and easy but have limitations
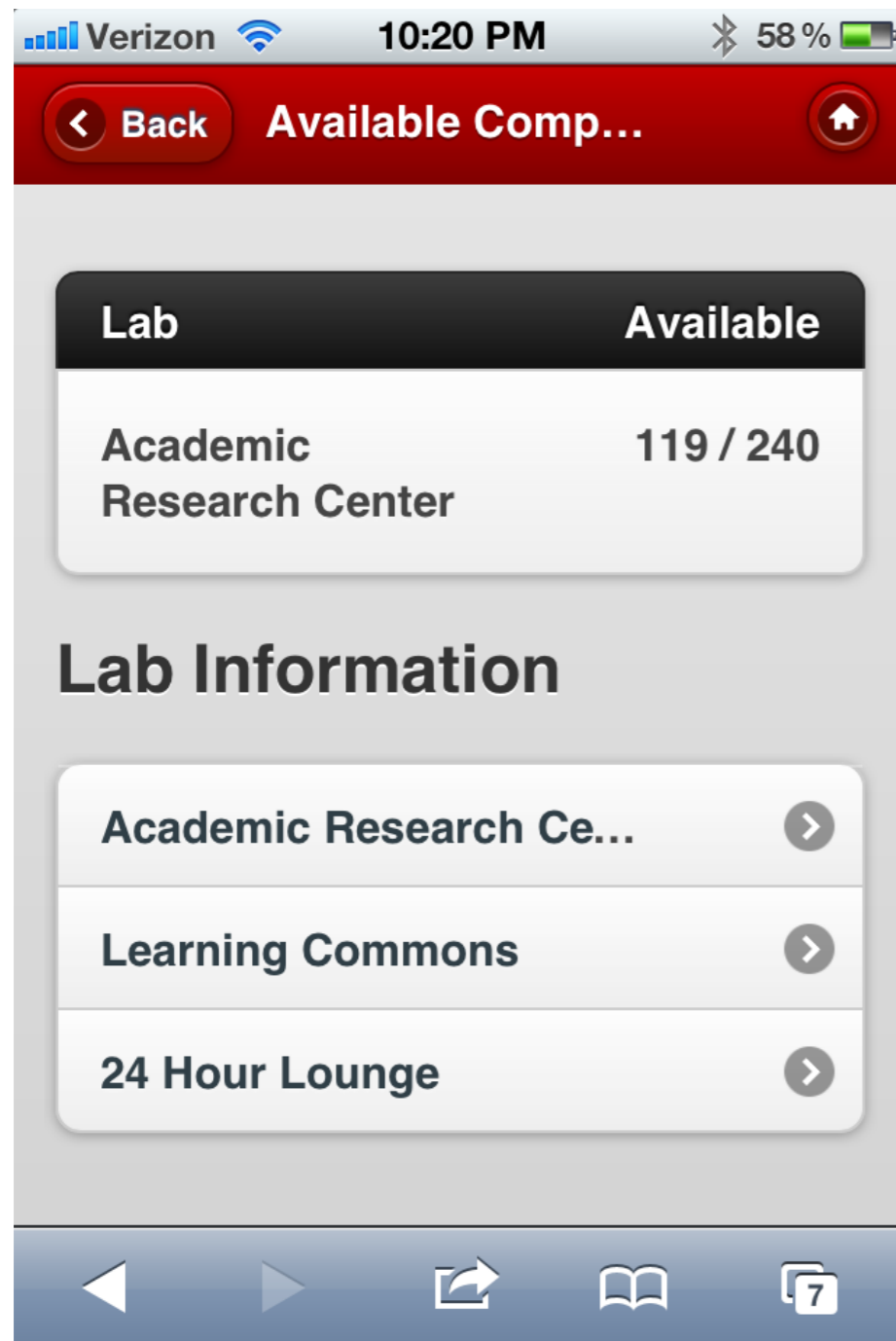
UH Libraries

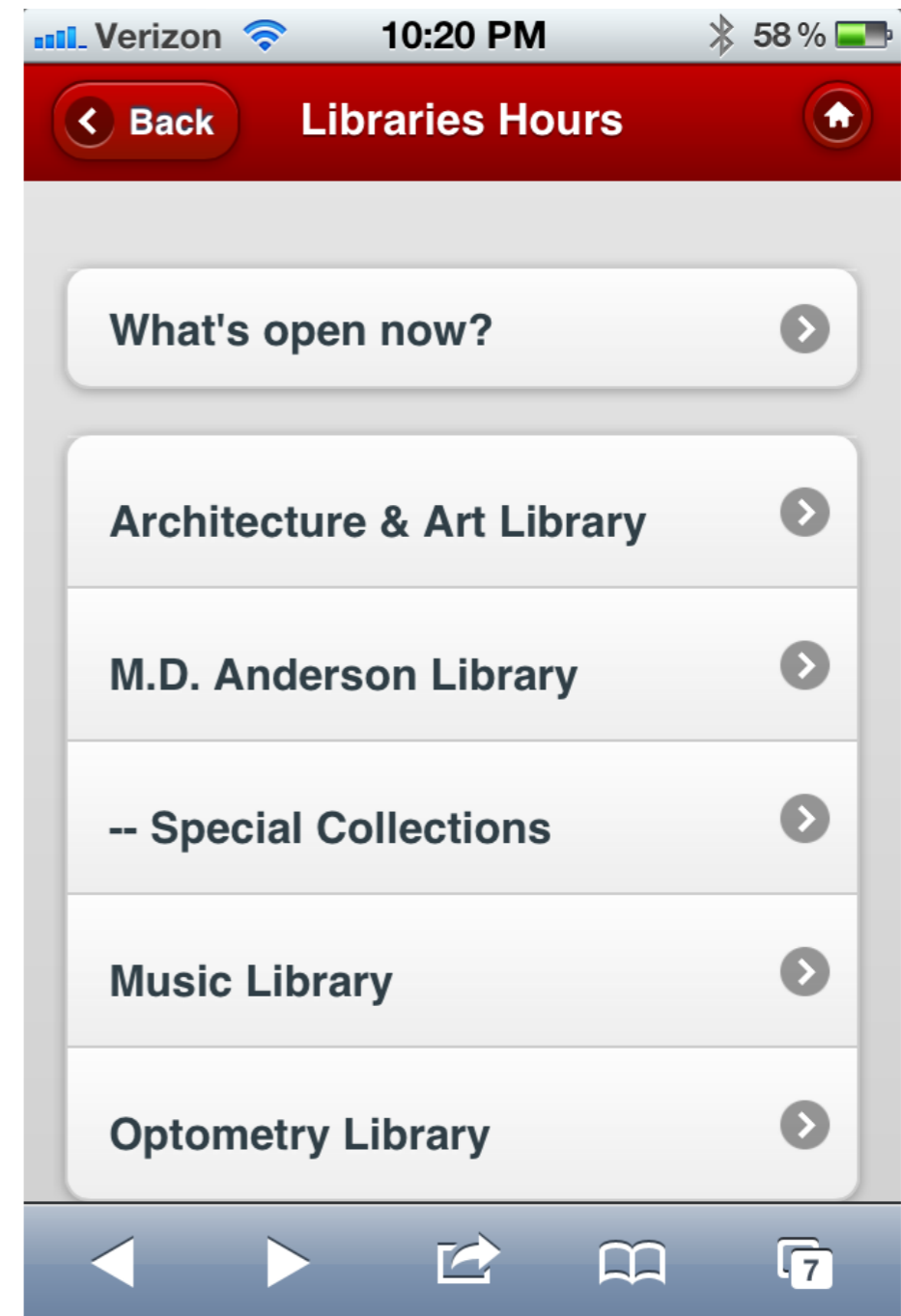Include catalog and/or discovery platform, but be clear on tool's purpose

LibGuides comes with a mobile interface, too
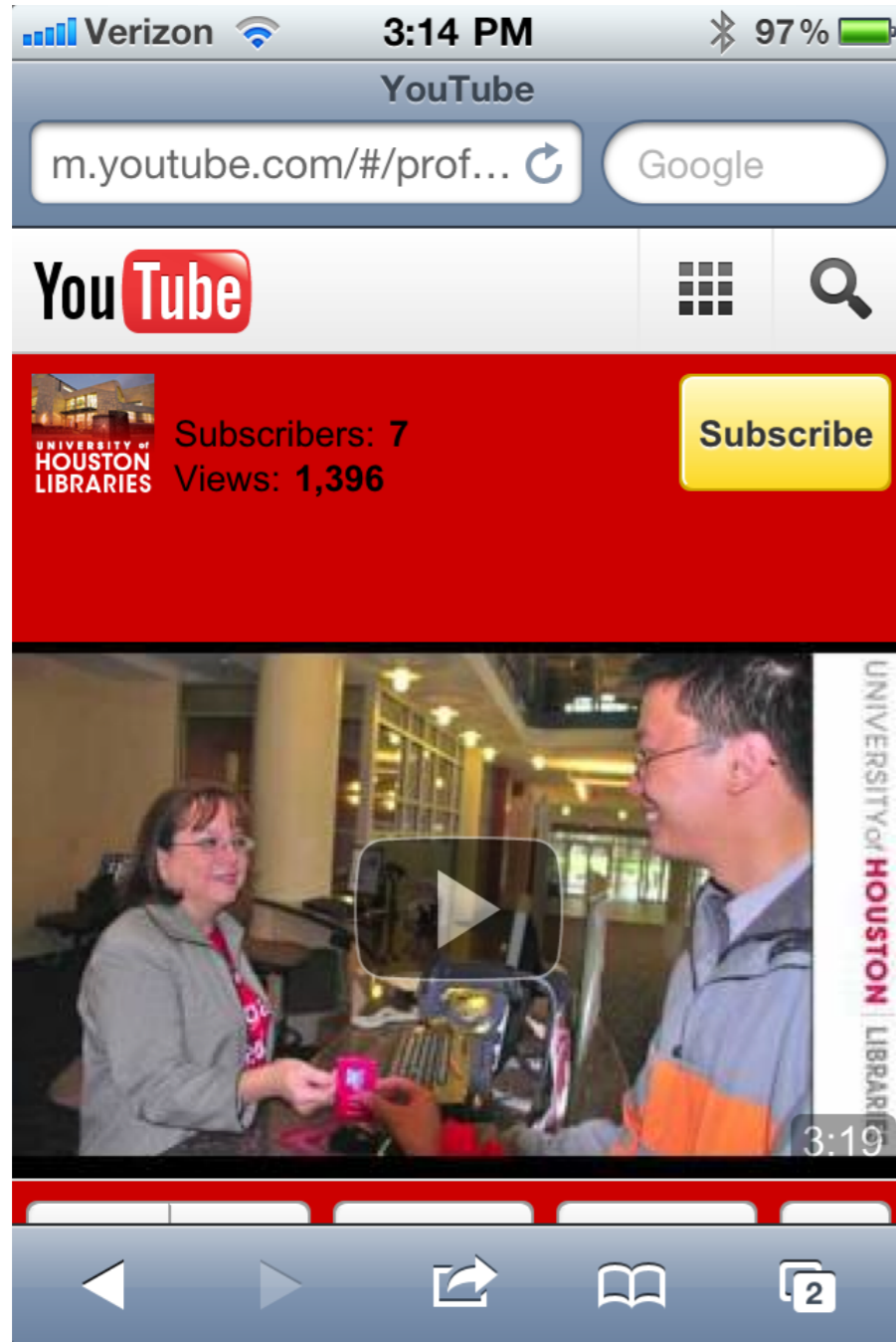
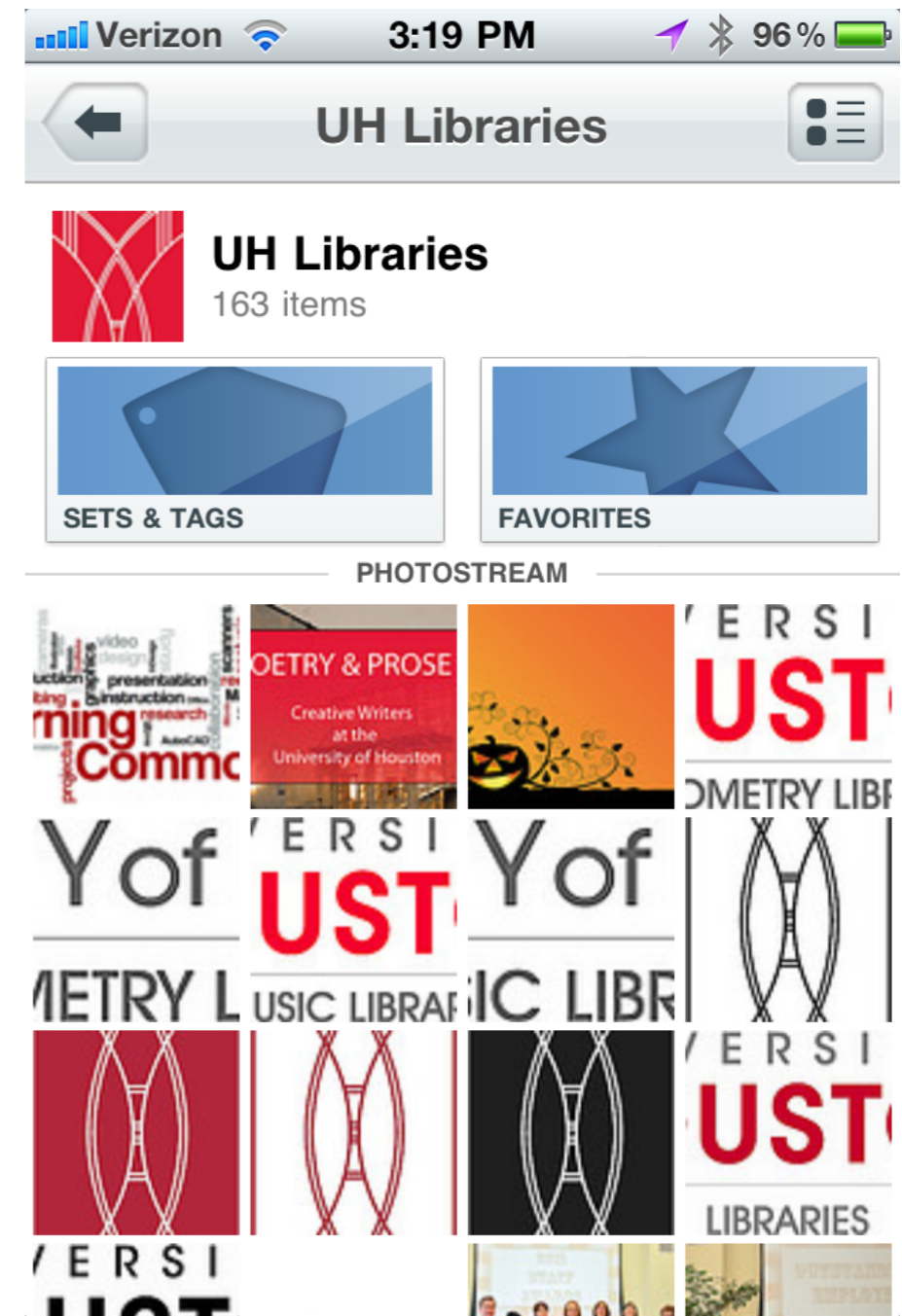# UH Libraries

Pulling in computer availability

What's open now? Hours also pulled in with API
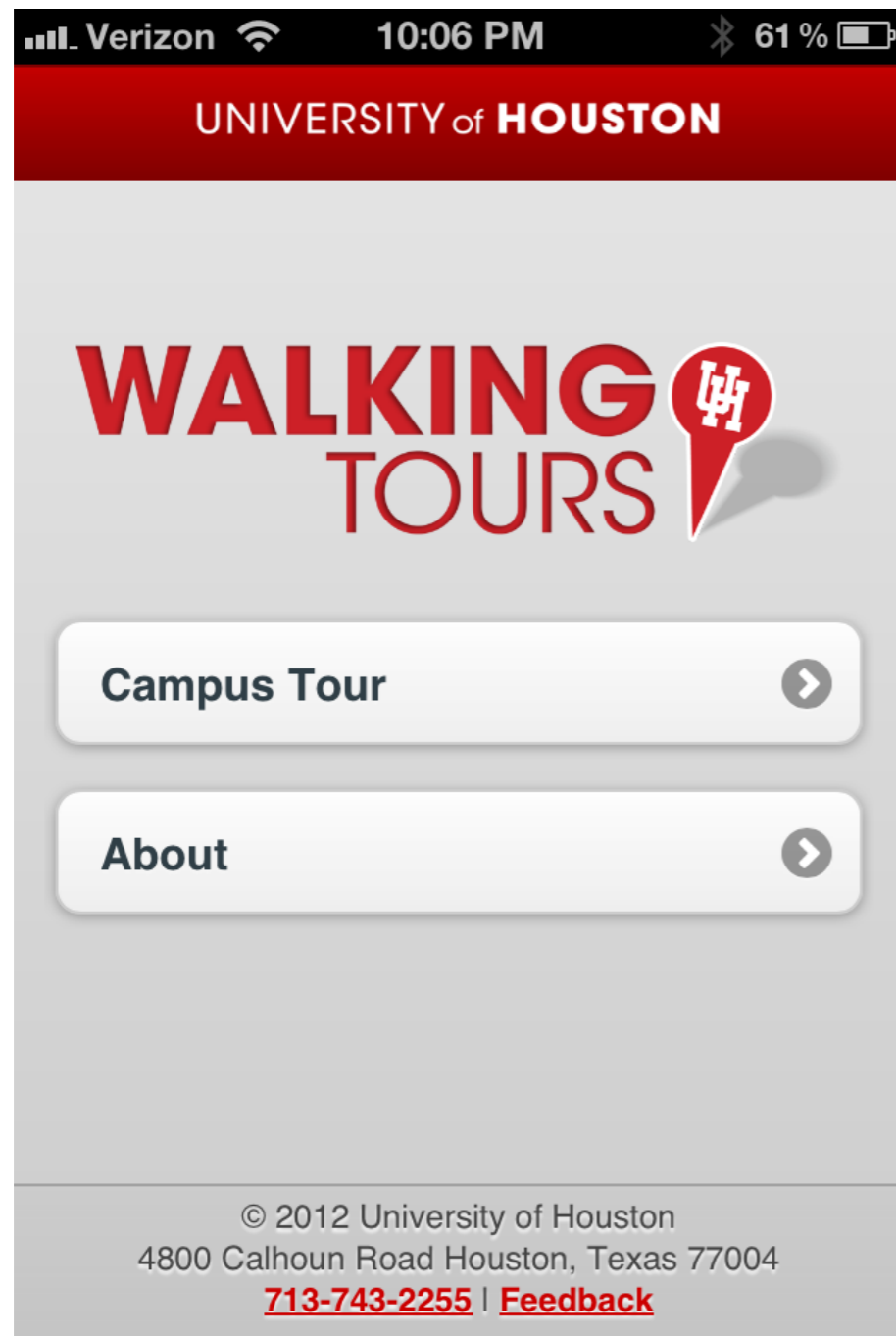
UH Libraries

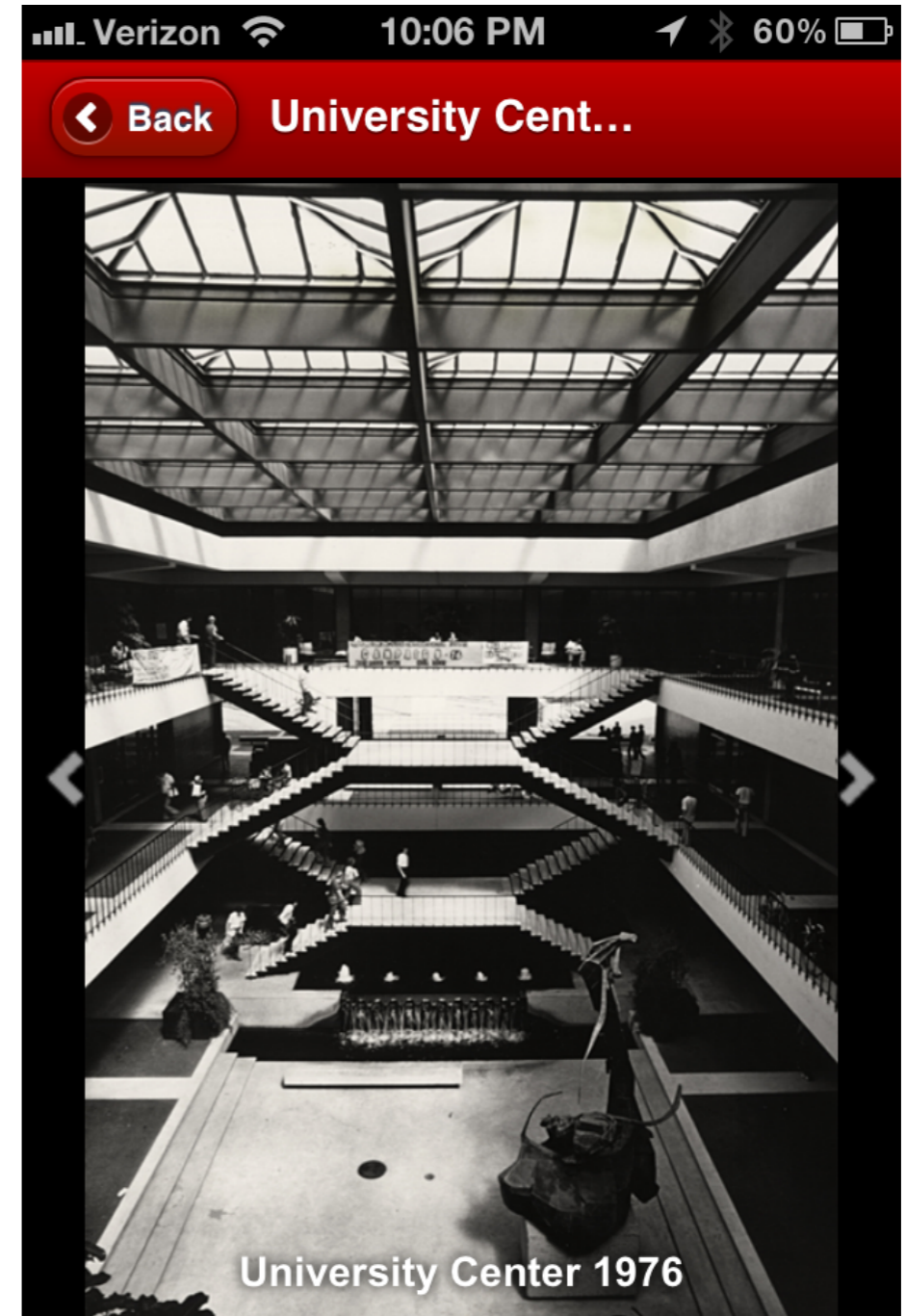You have videos? Create a channel and include them

Show off your images on your library's Flickr site

Walking Tours – uh.edu/uhtours

Collaborated with Admissions to create campus walking tour

Highlighting images from the Digital Library

Connecting physical to virtual in exhibits

Used QR codes for Spanish to English translations, and for video interviews

Future Services

- Mobile version of the Digital Library

- Mobile-friendly databases

- Learning Commons equipment availability

  - Cameras, video cameras, laptops, tablets, etc.

- Room/computer reservation

- More social media integration

- Augmented reality layar

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Final thoughts

- Understand your users mobile behaviors and needs before you decide between a mobile app or website

- Sometimes a simple mobile stylesheet is a good enough place to start

- Don't just recreate your entire website in a whole new mobile website

- Start small, add more complex features over time

- Walk a day in your users' shoes to get a feel for what services might be helpful on a mobile device

Resources

- "Choosing Between Native and Mobile Web Applications." Gartner Report by Analyst Nick Jones. February 23, 2011.

- M-Libraries, Library Success Wiki - http://www.libsuccess.org/index.php?title=M-Libraries

- Chad Haefele's Mobile Site Generator - http://www.hiddenpeanuts.com/msg/

- Google Mobile Sites - http://sites.google.com/mobilize

Thanks!

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