Mobile Apps, Mobile Web, and Other Cool Tools
Overview

• Trends in mobile
• Different mobile strategies
• UW-Madison mobile approach
• UWM mobile approach
• Vibrant discussion about other approaches
13 yrs.

Average age thought appropriate for a child to own a mobile phone

26%

of respondents said they feel guilty if they don’t promptly respond to work-related messages outside normal work hours

66%

of all respondents said they would take their wireless mobile device to work instead of their lunch

65%

of parents believe their devices make them better parents
Where do you place your mobile device while sleeping at night?

- **IN THE CAR**: 1%
- **IN THE BEDROOM**: 16%
- **NEXT TO MY BED**: 68%
- **IN A DIFFERENT ROOM FROM WHERE I SLEEP**: 13%
- **OTHER/VARIIES**: 2%

Source: Time Magazine, 8/27/2012
How often do you check your mobile device? (U.S.)

- A few times a day: 38%
- Less than every 5 minutes: 14%
- 10 minutes: 4%
- Every 30 minutes: 16%
- Once an hour: 17%
- More than once an hour: 3%

Does your mobile device come at times between you and your spouse?

Source: Time Magazine, 8/27/2012
Mobile Strategies

Mobile Apps vs Mobile Web
Mobile Apps (native)

An app for a certain mobile device (smartphone, tablet, etc.) They’re installed directly onto the device. Users typically acquire these apps through an online store or marketplace such as The App Store or Android Apps on Google Play.
Mobile Web

Internet-enabled apps that have specific functionality for mobile devices. They’re accessed through the mobile device’s web browser (i.e. on the iPhone, this is Safari by default) and they don’t need to be downloaded and installed on the device.
# Mobile Apps vs Mobile Web - Strengths

<table>
<thead>
<tr>
<th><strong>Mobile Apps</strong></th>
<th><strong>Mobile Web</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Typically perform faster than mobile web apps</td>
<td>• Have a common code base across all platforms</td>
</tr>
<tr>
<td>• App store approval processes can help assure users of the quality and safety of the app</td>
<td>• Users don’t have to go to a store or marketplace, download the app and install the app</td>
</tr>
<tr>
<td>• Tools, support and standard development best practices provided by device manufacturers can help speed up development</td>
<td>• Can be released in any form and any time as there isn’t an app store that has to approve the app</td>
</tr>
</tbody>
</table>
Mobile Apps vs Mobile Web - Weaknesses

**Mobile Apps**

- Are typically more expensive to develop, especially if you’re supporting multiple mobile devices
- Supporting multiple platforms requires maintaining multiple code bases and can result in higher costs in development, maintenance, pushing out updates, etc.

**Mobile Web**

- Mobile web apps can’t access all of the device’s features (yet)
- Supporting multiple mobile web browsers can result in higher costs in development and maintenance, etc.
- Users can be on different mobile browsers and can make your app harder to maintain and provide support for
## Mobile Apps vs Mobile Web – Delivery Method

<table>
<thead>
<tr>
<th><strong>Mobile Apps</strong></th>
<th><strong>Mobile Web</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Downloaded onto a mobile device</td>
<td>• Accessed through a mobile device’s web <code>browser</code></td>
</tr>
<tr>
<td>• Installed and runs as a standalone application (no web browser needed)</td>
<td>• No need to install new software</td>
</tr>
<tr>
<td>• Users must manually download and install app updates</td>
<td>• Updates are made to the web server without user intervention</td>
</tr>
<tr>
<td>• There are stores and marketplaces to help users find your app</td>
<td>• Since there is no app store for the Mobile Web, it can be harder for users to find your app</td>
</tr>
</tbody>
</table>
Mobile Apps vs Mobile Web – Development

**Mobile Apps**

- Each mobile application development platform (e.g. iOS, Android) requires its own development process

- Each mobile application development platform has its own native programming language: Java (Android), Objective-C (iOS), and Visual C++ (Windows Mobile), etc.

- Standardized software development kits (SDKs), development tools and common user interface elements (buttons, text input fields, etc.) are often provided by the manufacturer of the platform

**Mobile Web**

- Runs in the mobile device’s web browser and each may have its own features and quirks

- Mobile web apps are written in HTML5, CSS3, JavaScript and server-side languages or web application frameworks of the developer’s choice (e.g. PHP, Rails, Python)

- There are no standard software development kits (SDKs) that developers are required to use to make a mobile web app
Mobile @ UW-Madison
MobileUW & m.wisc.edu
Oh, My!!!
Hybrid Approach

• Mobile friendly portlets in MyUW portal
• Authentication and authorization exists
• JASIG – community source (uPortal)
• Device independent
  o Mobile, desktop
• Platform independent
  o Android, iPhone, etc
Registrar functions – Final Grades

• “Sexy” final grades
• Very specific business need
• Designed for a mobile device
• Spring 2012 initiative
Registrar functions - Courses
Registrar functions – Course Grid
Registrar functions – Course Grid
Registrar functions – Course Map
Registrar functions – Courses Map
### Registrar functions – Course Map

The image shows a mobile application interface with a list of courses and their locations. Here are the details:

**Biochem 507**
- LEC 001
- 3024 Engineering Hall

**Biochem 507**
- LAB 001
- 2317 Engineering Hall

**Biochem 692**
- 2340 Humanities

**Comp Sci 699**
- 2650 Humanities
Registrar functions – Courses Map
Mobile UWM & Beyond
Background

- Native app launched Fall, 2011
- iOS and Android
- Campus funded, internally developed
  - Appcelerator
- Initial cost: $25,000
- 20,000+ downloads
Features

- People search
- Campus map
- Course lookup
- Shuttle tracking
- Calendars
- Laundry tracking
- Computer lab availability
- Safety information
- External links
Features: People Search

Michael S Hostad
IS Supervisor 2, Communication & Media Relations

Email: mhostad@uwm.edu

Map Office: Sabin Hall 391

Call Office: (414)229-3212

Privacy Information
## Features: Laundry & Labs

### Cambridge Hall
- Washers Available: 13 of 18
- Dryers Available: 21 of 24

### KNW Square
- Washers Available: 10 of 10
- Dryers Available: 9 of 10

### Purin Hall
- Washers Available: 2 of 2
- Dryers Available: 2 of 2

### Riverview
- Washers Available: 14 of 14
- Dryers Available: 18 of 18

### Sandburg Hall-East
- Washers Available: 32 of 33
- Dryers Available: 28 of 28

### Sandburg Hall-North
- Washers Available: 23 of 24
- Dryers Available: 20 of 26

### Bolton 225B
- Computers Available: 27 of 48

### Curtin 187
- Computers Available: 15 of 15

### Learning Commons North
- Computers Available: 74 of 120

### Learning Commons South
- Computers Available: 82 of 120

### Sandburg 255
- Computers Available: 12 of 18

### Union W199
- Computers Available: 19 of 52
### Student Success Resources

<table>
<thead>
<tr>
<th>Day</th>
<th>Course</th>
<th>Description</th>
<th>Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Psych254</td>
<td>Physiological Psychology</td>
<td>Lapham Hall 162</td>
<td>9:00 AM - 9:50 AM</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Psych578</td>
<td>Psych of Race, Ethnic &amp; Health</td>
<td>Chemistry 170</td>
<td>11:00 AM - 12:15 PM</td>
</tr>
<tr>
<td></td>
<td>Psych454</td>
<td>Psychopharmacology &amp; Addiction</td>
<td>Bolton Hall B46</td>
<td>3:30 PM - 4:45 PM</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Psych254</td>
<td>Physiological Psychology</td>
<td>Lapham Hall 162</td>
<td>9:00 AM - 9:50 AM</td>
</tr>
</tbody>
</table>
Features: Registrar Functions

- Lapham Hall 162
- 3209 North Maryland Ave.

- Your advisor: Dana J Northrup
- Your mentor: Ashley McDermott
- Student Success Center
- Student Accessibility Center (SAC)
- Panther Academic Support Services (PASS)
- Writing Center
- Center for Student Involvement
- Center for Volunteerism and Student Leadership
Features: Registrar Functions

Dana J Northrup

Email: northrup@uwm.edu

Map Office: Holton Hall 142

Call Office: (414)229-4654

Ashley McDermott

Email: mcderm29@uwm.edu
Strategy: Mobile PeopleSoft

• Increased mobile functionality

• Decision points:
  o Native v. mobile web
  o Buy v. build
  o Oracle v. 3rd party

• Surveying students
Strategy: Responsive Web

• All UWM school/college pages being redesigned

• New templates will be responsive

• Goal: 100% of academic web content responsive by 2014
Strategy: Curriculum Integration

• School of Information Studies - Spring, 2012

• Students can achieve mobile developer certification

• Milwaukee County partnership

• Cohort: 15 students, 4 County employees
Strategy: Mobile Accelerator

• Highest achieving students

• Mobile development for researchers, community, start-ups

• Goal: student company spin-offs, creation of local jobs

• Accelerator launch: Spring, 2013
Group Discussion – Other Mobile Strategies?
Questions?
Sources

• Time Magazine, 8/27/2012
• http://sixrevisions.com/mobile/native-app-vs-mobile-web-app-comparison/
Thank You!!!

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