DEVELOPING AND RESOURCING A MOBILE APPLICATION STRATEGY

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Bucknell University

- Bucknell University, located in Lewisburg, PA, is a highly selective, private university founded in 1846.

- 450-acre campus includes more than 100 facilities

- Approximately 3500 students, 360 faculty and 850 staff members
Mobile Project & Strategy

– Mobile Application Project Objective
  • Develop and implement a mobile application strategy that is
    – Supportable
    – Risk-Informed
    – Brand-Enabled Consistency
    – Comprehensive and Flexible

– Strategy/Approach
  • The strategy must support academic, administrative, and social purposes while providing a managed approach to common and customizable uses for all community members.
  • Library & IT collaborated with Communications to develop the following approach in early Summer 2010.
Supportable

- Need to maintain university-specific applications diverse mobile environment
  - Leverage the commonality of a browser interface rather than device-specific toolkits
- Formal evaluation and approval of any third-party web-based or device-specific application ensures that a formal hand-off to L&IT support teams (including code reviews if not vendor-supported) occur.
- Applications that are not approved by L&IT for on-going support will not be permitted in the environment.
Risk-Informed

• Valuable intranet content for faculty, staff students involves additional effort due to privacy and security concerns
  – Example: Mobile access to a student’s schedule and grades
  – Existing processes used to govern access and availability will be used
• Establish an evaluation and approval of all mobile content as part of Bucknell’s data security plan
Brand Enabled/Consistent

- Must adhere to the Bucknell public and internal branding
  - Design, organization of content, and color palette.
- Adhere to the security and stewardship standards by which Bucknell governs the use of institutional proprietary data.
- All third party applications must be approved by Bucknell’s L&IT and Communications Offices.
Comprehensive and Flexible

- Browser-based approach (mobile web) to mobile development allows for conversion of the portal and public web services to a mobile interface
- Model allows for the incorporation of vendor or student-developed browser-based applications.
- Device specific applications can also be approved.
  - Not be supported by L&IT
  - Will not have access to Bucknell data that is not publicly available.
Building Blocks of the Bucknell Strategy

L&IT Mobile Web Apps
Approved Third-Party Web Apps
Approved Third-Party Device-Specific Apps

Web Svcs Mobile Web Apps
Approved Third-Party Web Apps
Approved Third-Party Device-Specific Apps

Mobile Supportability and Security Risk Assessment

Bucknell Mobile Framework - m.bucknell.edu

Intranet Apps - Log-In Launch
Public Apps – Open Access Launch

Existing Web Application Entry Points

Intranet-Enabled (my.bucknell) Non-Mobile Applications
Internet-Enabled (bucknell.edu) Non-Mobile Applications

Bucknell Core Infrastructure (Platforms, Network, and Security)
MIT Mobile Framework

• In June 2010 we decided to create the first Bucknell Mobile Web utilizing this framework developed by MIT and support through the iMobileU (http://imobileu.org) community.

• The framework leverages Bucknell’s existing technical capabilities, both developers and infrastructure, to extend and expand the existing service portfolio to a mobile device environment.

• The current iteration of this framework is called Kurogo 1.0 by the MIT start-up Modo Labs.
Bucknell Mobile Web

http://m.bucknell.edu
Campus Service Examples

Library Services, Dining Services and others

http://m.bucknell.edu
Banner Integration
Final Grades, Schedule & Message Center

http://m.bucknell.edu
What does the future hold?

- Evaluation of our strategy
  - MIT Framework or Vendor?
  - Device specific apps – iPod/iPhone/iPad, Android
- Expand into other areas of campus and audiences
  - Admissions
  - Development Alumni Relations
The University of Mississippi

Located in Oxford, Mississippi, Ole Miss opened its doors in 1848 as the state's first public institution of higher learning.

Over 16,000 students attend classes across three campuses, with support from 1,976 faculty and 1,806 staff.
Mobile implementation supports the WebKit technology incorporated into most mobile browsers.

The particular theme is iWebKit with minor branding.

Javascript redirects mobile users to the mobile site, but they may also opt for the full site.
m.olemiss.edu

UM Home: custom page

News, blogs, calendar: mobility support in the product used (WordPress, Helios)

E-mail: a webmail interface with mobility support

myOleMiss Mobile: custom built on top of the SAP Enterprise Portal Platform

Directories and Campus Map: custom
myOleMiss Mobile

Enhanced the existing campus portal (SAP Enterprise Portal) to also render a mobile friendly version based on the user’s browser.

Upon sign in, a list of applications are presented to the user based on the user’s affiliation with the University.

Portal applications are built using the model view controller (MVC) paradigm and they are made mobile-friendly by adjusting the view depending on the user's browser and preference.
myOleMiss Mobile

Midterm Grades for Spring Semester 2010-2011

Math 121 - College Algebra
Grade: B+
Credits: 3
Scale: AB+-
Absentees: 3
Note From Instructor: Come see me. I need to talk with you about how the projects need to be formatted because it looks like you have a problem following my instructions.
myOleMiss Mobile

More than 85,000 hits since myOleMiss Mobile go-live in October, 2010

9,848 unique visitors (9,453 students)
Upcoming: Mobile Asset Management

A mobile solution to enable the auditing process in asset management.

Mobile application is being developed for a Motorola device to:

• Call a Web service to pull info on devices to reconcile and populate local database.
• Scan bar codes on devices to audit and reconcile.
• Upload results of audit back into asset management in our ERP system.
Upcoming: Native Apps

Ole Miss runs the SLCM module along with the other ERP modules from SAP.

SAP is interested in leveraging its recently acquired Sybase mobility platform to create mobile business content for the Higher Education Market.

Ole Miss and SAP are collaborating this summer on a project to generate native applications on mobile devices for higher education.