Good Things Come in Small Packages

MOBILE-READY RESPONSIVE DESIGN AT MACEWAN UNIVERSITY

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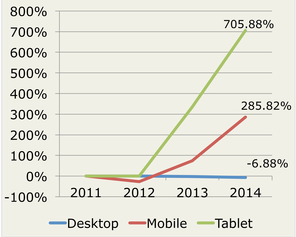
Why is mobile-ready responsive design important?

Where are our users?

- Mobile broadband subscriptions reached 2.3 billion worldwide in 2013[1]
- Desktops and laptops are still very common, and tablets are the fastest growing market.[2]
- Users may be interacting with our online space with multiple devices in a single day.

% Growth in Site Visits: 2011 – 2014: MacEwan Library Website



1. International Telecommunication Union. (2014). The world in 2014: ICT facts and figures. Retrieved from http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2014-e.pdf
2. Gartner, Inc. (2014, Mar. 27). Gartner says worldwide traditional PC, tablet, ultramobile and mobile phone Shipments are on pace to grow 6.9 percent in 2014. Retrieved from http://www.gartner.com/newsroom/id/2692318

How can we provide services and resources to multiple devices?

Apps are fast, powerful, and integrate seamlessly with devices. But development for multiple platforms was too expensive and difficult for us to maintain. We turned to Responsive Web Design for a solution to these issues.

> "Responsive web design (RWD) is a web development approach that creates dynamic changes to the appearance of a website, depending on the screen size and orientation of the device being used to view it." [3]

RWD ensures that users can access online library services and resources from all devices, and the interface remains consistent and predictable. Time and costs for maintenance can be significantly reduced and accessibility improved.

3. Schade, A. (2014, May 4). Responsive web design [RWD] and user experience. Retrieved from http://www.nngroup.com/articles/responsive-web-design-definition/

How can we improve the user experience across environments?

Prior to redesign, how many interfaces did students need to navigate in order to …

…place a hold on a book? 3

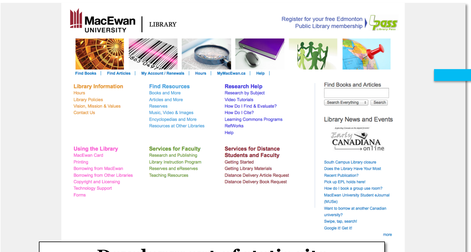
…view a PDF article? 4

4 **…request an inter-library loan?**

2 **…read a research guide?**

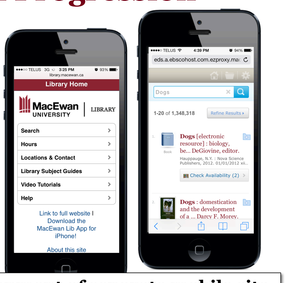
- Reducing the number of complex interfaces users have to interact with to complete a task reduces confusion.
- Integration with vendors' APIs and Web services, or developing our own, ensures that we can provide a consistent and intuitive environment across all platforms.

MacEwan University Library's Redesign Progression



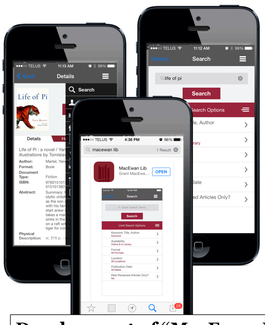
Development of static site

- x No mobile access
- x Multiple interfaces link out to vendor-supplied services



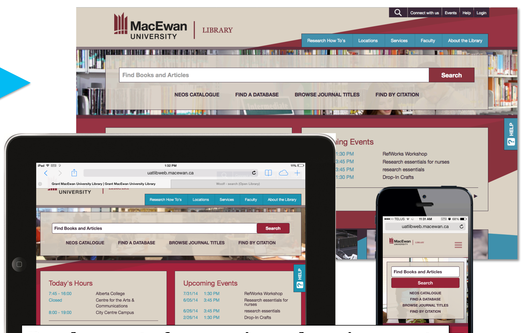
Development of separate mobile site

- ✓ Easy mobile access
- x Multiple interfaces link out to vendor-supplied services
- x Different experience in mobile and desktop environments



Development of "MacEwan Lib" iOS app

- ✓ Integrates vendor services in single interface
- x Only accessible on iOS devices
- x Different experience in mobile and desktop environments



Development of responsive web environment

- ✓ Accessible from all devices
- ✓ Integrates several vendor services in single interface
- ✓ Same experience across all devices

Technical Details

- Ebsco Discovery Service API
- Custom Search Function API
- Custom authentication to all services
- Room Booking Drupal module
- Library Hours Custom API
- SIRSI Web Services account functions: Holds, renewals, fees
- Custom Account Function API
- Event calendar Drupal module
- eReserves Custom API
- Ares eReserves

Issues

- Impractical to integrate all vendor-supplied services
- Requires high levels of technical knowledge and support to maintain
- Complexity of systems creates multiple interdependencies for future development
- Time consuming

But …

- We gain interface independence and control, and
- Dramatically improve the user experience

MacEwan UNIVERSITY | LIBRARY

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