

The Interactive Experience: Exploring Technologies for Creating Touchscreen Exhibits

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Simpson Library | University of Mary Washington

The Convergence Center



The Convergence Gallery



Photo by Cartland Berge

Joan Blaeu's *Nova Virginia Tabula* (Map of Virginia), 1643



<http://umwdigitallab.org/map.html>

Opportunities and Challenges

Opportunities

- Showcase content in new ways and reuse it on many platforms
- Bring collections out of the archives to where the patrons are
- Good PR for the archives to show people our collections and services, leads to collaboration
- Can learn new systems, tools


Challenges

- Same issues inherent in all exhibit creation: identifying subjects, gathering images, writing text copy, and organizing content
- Finding the right platform or system for the exhibit topic
- Marketing exhibits to community, increasing awareness and usage
- Must learn new systems, tools



Exhibit and Menu Design ---> Implementation ---> User Testing ---> Refinement

Key Insights

- Take advantage of free content hosting and organization tools like Google Drive and Flickr, and free and open source exhibit-building programs
 - Reuse content from other exhibitions and initiatives by remixing and editing
 - Increase the value of exhibits by providing access on other platforms
 - User testing for exhibit design and functionality is very important
 - Web analytics provide a wealth of insightful, actionable information
 - Use built-in touch functionality to create interactive exhibits without a lot of customization, although customization can increase functionality
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The Convergence Gallery

About the Gallery

Technology through Time

UMW Libraries: A History

Nova Virginia Tabula

World War I Posters



Enter Exhibit

What do you need for an exhibit like this?

- Touchscreen monitors and kiosk base
 - We used an Elo 24” touch monitor with multitouch support
- Computer
 - We used a Dell desktop with Windows 7 installed
- Internet connection

- Expensive, proprietary, complicated, hard-to-use software? (Adobe Flash)
 - Free, open-source, complicated, hard-to-use software? (Gestureworks OpenExhibits)
 - A programmer?
 - A server?
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Advantages

- Inexpensive
- Removes limits on who can contribute content
- Flexible
- Reusable content
- Reusable standard web skills and tools



It's just a website

- Use free, easy-to-use, online tools, as many as you want
 - TimelineJS - <https://timeline.knightlab.com/>
 - StorymapJS - <https://storymap.knightlab.com/>
 - Prezi - <https://prezi.com>
 - RevealJS - <http://lab.hakim.se/reveal-js/>
- Make your own



Setup and Design

- Kiosk mode: make sure the user can't escape
 - iframe sandbox attribute for external content
- Large buttons for easy navigation
- No keyboard, no scrolling, no hovering, no right-clicking
- Needs to be intuitive
- Pinch to zoom, swipe



Challenges

- Touch events don't always just work
 - Hammer.js <http://hammerjs.github.io/>

```
hammerjs.on('swipeleft', function(ev) {  
    $(' .nav-next').click();  
});
```

- Free online tools use iframes, Flash, which are hard to manipulate with code



Thanks!

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View all of our exhibits online at
<http://umwdigitallab.org/kiosk.html>