Tablets for dissemination of digital scholarly editions

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Overview

• Some relevant results from my user study on tablets

• What’s currently available for tablets? What’s in development?

• Technological considerations for the creation of the various publication formats: eBooks, native apps, responsive websites
Why study tablets?

- Proliferation of handheld TUI devices
- Digital Scholarly Editions slow to adapt?
- Potential new avenues for dissemination?
Users

• Importance of understanding users

“despite the popular image of the luddite humanities scholar who does not know what they need or how to use it, we have found that users have very complex models of their information needs and environment; they are thoughtful and critical about the affordances of physical and digital resources” – Claire Warwick

(“Studying Users in the Humanities” in Digital Humanities in Practice, 2012, p6)

• If we also want to target users who are not scholars per se, then user studies become even more vital and more complex
User study on tablets for DSEs

Methodology:

Online Survey
- 222 completed responses from 22 countries (84% completion)
- Humanities Scholars, Lecturers, Uni Students, High School Teachers

Interviews
- Cross-section of 7 respondents

Work habits, technology usage and valued aspects of editions among all levels of users
Q4 Which of the following electronic devices do you use? (Please select all that apply.)

Answered: 222   Skipped: 0

- Laptop Computer: 99%
- Smartphone (e.g., Samsung): 69%
- Desktop Computer: 64%
- Printer: 62%
- Tablet computer (e.g., iPad): 58%
- E-book Reader (e.g., Kindle): 32%
- MP3 Player (e.g., iPod): 28%
Q8 Which software have you used for work/study reading?

Answered: 222  Skipped: 0

- PDF reader (e.g. Adobe): 98%
- Internet browser (e.g.): 94%
- Microsoft Word: 78%
- Google Docs: 66%
- ePub readers: 41%
- Adobe Digital Editions: 36%
- iBooks: 34%
- Kindle: 27%
- Notepad/TextEditor (e.g. Blocc...): 27%
- Other (please specify): 14%
Desired functions on tablet

Q35 What types of functionalities do you wish you had in a digital edition on a tablet?

Answered: 179  Skipped: 43

- Notes / Annotating: 82%
- Bookmarking: 78%
- Highlighting: 75%
- Citation tools: 67%
- Download: 63%
- Social features: 22%
- Drawing: 17%
- Other (please specify): 11%
Usage patterns

Device Preferences Throughout the Day
Most Weekday Tablet Usage Occurs Between 8pm and 9pm

Share of Device Page Traffic on a Typical Workday

- LATE NIGHT (12AM - 7AM)
- EARLY MORNING (7AM - 10AM)
- DAYTIME (10AM - 5PM)
- EARLY EVENING (5PM - 8PM)
- PRIME (8PM - 12AM)

91% of mobile internet access is to socialize...
...compared to 79% on desktops
Mobile growth

Mobiles overtaking desktop?

Not quite yet, but this has happened in a number of countries in 2014

**2014: YEAR OF THE MOBILE REVOLUTION**

MOBILE INTERNET USE WILL OVERTAKE DESKTOPS THIS YEAR.

Source: ComScore
Operating systems

Survey respondents:
• 68% iOS
• 40% Android
• 3% Windows
  (Some owned more than one device)
Apps or Browsers for Digital Editions?

• 70% of tablet owners had never attempted to open a DSE on a tablet before
  • Why?

• 20% more respondents said they would prefer a responsive website over a native app for a digital edition

• But, 87% also wanted to have it available offline.
  • How to resolve?
Main outcomes of the study

Tablets can definitely play a role in dissemination and usage of DSEs!

- **Diversification** of publication formats desired
- **Reading editions**
  - Users showed frustration with readability of digital editions as they are presented on a website.
- **Teaching & Learning**
  - 74% of tablet users had used it for learning
  - 72% lecturers & teachers used editions for teaching
- **Engagement & Outreach**
  - Public digital editions
  - Games
- **Social approaches**
  - Social editions
  - Social reading editions
What about mobiles?

• Not part of the initial user study
• Realistic as a reading/usage environment? Apparently yes
• Many survey respondents expressed interest
• People in developing nations access many literacy programmes via mobile devices
• INKE group “Small books and Small Screen” worked on creating edition mobile display for historically small format books (thumb bibles etc)
Fun Fact
So what has been created already and what is under development?
The Waste Land

- Built by commercial publisher TouchPress
- Sold over 27,000 units at €12 each

http://vimeo.com/63324590
CantApp
Canterbury Tales, Peter Robinson, Uni. Saskatchewan and Scholarly Digital Editions

- Teaching & Learning
- Public outreach
- Awareness

• Not exactly ‘scholarly’ but the structure of the apparatus is roughly the same as would be for scholarly edition

• Includes various interactive learning and contextualising features
Digital Dubliners iBook
Boston College Students
Geolocation opportunities

Location functionality of handheld TUI devices opens up some different possibilities to increase engagement

JoyceWays (Boston College)

HistoryPin
Online collaborative reading communities beginning to flourish?

*Reader’s Thoreau* built using social tools CommentPress and Commons in a Box to create a space for social annotation and discussion. Responsive design.

Social Editions?

Digital knowledge communities?
Technological Considerations
Building Apps and eBooks

- **ePub3** - these interactive eBooks can be created in lot’s of different places including InDesign. OxGarage allows conversions to normal ePub.

- **iBooks** - built in iBooks Author but also possible to build ePub3 and release

- **Android Apps** - can be built in several different software development environments (SDKs) but Eclipse is most common, written in Java

- **iOS Apps** - built in Xcode environment using Objective-C language

- **Cross Platform apps** - there are some SDKs that allow you to build for both at same time such as Titanium, using Javascript. But can be difficult to make consistent

- Adobe PhoneGap is another multiplatform framework which also allows you to package a HTML5 website as an app
Choosing an Operating System (OS)

- Principle decision is between iOS and Android or both
- Ethical concerns with corporate control
- Large readership or scholarly freedom
- Accessibility. Developing world and most of Asia are almost exclusively Android users
Responsive Design?

• Needs to be considered early in the process of building a website
• Frameworks for building responsive sites like Foundation Framework by Zurb
• ‘Mobile first’ is best approach, then expand outwards
• Can be as simple as setting ‘break points’ for a variety of screen sizes
• Awareness of technologies that don’t work on some TUIs such as Flash
• Some work being done at Arizona State on responsive design for dealing with inline footnotes in a digital reading context [http://andrew.pilsch.com/blog/2014/12/05/stylish-markdown-footnotes-w-jquery/](http://andrew.pilsch.com/blog/2014/12/05/stylish-markdown-footnotes-w-jquery/)
• W3C is working on a web standard to that will allow offline/portable usage of websites by easily saving webpages – called EPUB-WEB project
Thank You

Aodhán Kelly

The anonymised raw data of the survey is openly accessible via Google Docs at: http://goo.gl/zgOrDw