Web = Publishing

The 5 transformations in Web Publishing

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Who is W3C

- Standards body for Web technology
- Founded in 1994 by Web inventor Tim Berners-Lee
- Full-time staff of ~80 people
- ~400 Members, community of thousands
- Focus on the Open Web, as well as specific industry requirements brought by industry segments
Web Publishing: The 5 transformations

1. Web as a new form of publishing introduced in 1989
2. Publishers took limited content to the Web as addition to print (e.g. newspapers)
3. All publishing is moving to the Web as technology matures
4. Ebooks rely on HTML and CSS leading to Portable Web Publications
5. Convergence of book and Web, hybrid forms with dynamic content

With 3 and 4 happening already, 5 is only starting...
#1: 20 Years Ago
The Web Changed Publishing
Early Publishing Revolution

- Everyone is an author
- Instant publishing to the world
- Low barrier to entry for sites
- Global distribution of linked documents
- Non-linear reading habits
- But, poor typography
Technical Limitations: No Substitute for Print

- Low-resolution screens
- Rudimentary layout, fonts, style
- Static, read-only
- Assistive technology lock-outs
- Low bandwidth

Observation: The early Web was useful for publishing, but its relevance to the industry was not sufficient for publishers to participate in core standards development.
#2: The Web Grew as Print Companion
Slowly more publishing migrated to the Web

- Traditional Publishing progressively moves to the Web
- Businesses flocked to the Web to push content
- Revenue models appeared (e.g., pop-up ads, search engine ads)
- Tools lowered cost of publishing by more people (blogs, wikis)
Significant Impact on Publishing

- “After 79 years in print, Newsweek goes digital only”
- Google Ad Revenue Now More Than U.S. Print Publications Combined
- 25% of Americans own a tablet
- E-Books See Triple Digit Growth As Paper Book Sales Dive
- Pew: Survey Finds Rising Reliance on Libraries as a Gateway to the Web
Consumer Behavior Paradigm Shifts

- Rich content anywhere, anytime, across multiple devices
  - “[Mobile phone] users under age 50 are almost 3 times as likely as their older counterparts to get news on the go…” (Pew)
  - “Google Research: No Mobile Site = Lost Customers” (Forbes)
  - Human activities (work, play, family) overlap

- Social, customized
  - “News is becoming a shared social experience as people exchange links and recommendations as a form of cultural currency in their social networks.” (Pew)
  - “33% of people 18-24 use social media in the bathroom” (Nielsen)

- Time-slicing
  - “The youth of 2020 will enjoy cognitive ability far beyond our estimates today [but also] by their ability to share immediately any information.” (William Schrader in Pew survey)
Many industries migrated to the Web

- Automotive, government, health care, etc. serve their own intrinsic purposes
- Web has an impact on delivery of those services, but is secondary
- Business model changes in Entertainment, telecommunications, etc.
- But, Web is more “intimately” tied to the intrinsic purpose of publishing
#3: Publishing = Web
Web Trends Will Further Alter Landscape

- **Web will improve**
  - Screens, typography, and layout will grow in power

- **Web will add value**
  - Links will raise asset value exponentially
  - Rich media will enhance ebooks, news, education
  - Data will power journalism; curation

- **Web will spur business model innovation**
  - Many eBooks will become (mobile) apps, including ads
Building on the Open Web Platform

- Web pages are more beautiful, interactive and intelligent
- HTML5 provides cross-browser interoperability and all major browser vendors plan to support it; **now complete and stable**
- Is the most interoperable platform in the industry
- Has tools for social networking (privacy, security, identity)
- Video is a first-class citizen
- Simplifies data integration
- Supports accessibility
- Runs on many devices
Core Themes for Convergence

A. Match current publishing practices
B. Leverage value-add of the Web
C. Support diverse business and distribution models
D. Satisfy diverse consumer behaviors
A. Match Current Publishing Practices

- Screens, typography, high quality fonts, colors
- Advanced layout
  - adaptive layout for diverse devices; user needs
  - multi-column
  - pagination
  - media integration
  - formatting of the world’s scripts
- Readability of long texts

Photo: behance.net
B. Leverage Value-Add of the Web

- Links raise asset value, foster sharing, bookmarks
- Rich media for ebooks, news, education
- Data integration for journalism, book ids, catalogs, specialized search, discovery, curation, annotations
- Cross-device support at lower cost
- Accessibility, internationalization
- Customization, specialized content for niche audiences
C. Support Diverse Business and Distribution Models

- Revenue generation
  - Subscription
  - Ad insertion in eBook apps
  - Social sharing
  - Product placement

- Web Payments

- Content protection
  - One device
  - One user
  - None
D. Satisfy Diverse Consumer Behaviors

- Rich content anywhere, anytime, across multiple devices
  - news on the go
  - content portability (across devices)
  - mobile ads, payments

- Social, customized
  - niche audiences
  - sharing to drive marketing, revenues
  - reviews

- Time-slicing
  - integrate reading experience with Web (dictionaries, references, etc.) and other activities
#4: Packaged Web Publications
Reading a Book like a Web Page

- On a desktop computer
  - follow links “out” of the book
  - create bookmarks, annotations
  - use powerful text analysis, etc.
- On a dedicated reading device
- On the go…

This is the same book!

Scholarly Publications like a Web Page

- Online paper...
- ... available for download
- Layout adaptable to reading environment
- May contain video, audio, data, programs, etc.
- Annotations
- Adaptable for cognitive support
What is a Packaged Web Publication?

- EPUB and PWP contents are the same
- Based on W3C standards (HTML, CSS, SVG, etc.)
- Content (HTML, SVG, MathML) + administrative files (manifest, metadata, rights) + auxiliary files (PNG, CSS, JS) = packaged portable format
- Use of WAI-ARIA for accessibility structure and semantics
- Zero separation between online publishing and offline package
- One PWP, several ‘states’
#5: New Experiences for Publishing

Photo wallconvert.com
“Books can learn from the web that huge value—for readers, for learning, for knowledge, for society—can be unlocked when we allow networked digital content to be itself, to do what it does well—to be liquid, moveable and multidimensional, to be reproducible, sharable, findable, and linkable. And most importantly, to be built upon.”

Hugh McGuire, April 2016
What is a Book and What is the Web?

- **Beautiful difference between book and Web**
  - Boundedness: A book is a curated collection of text (and other media) transmitted to readers in various formats
  - Unboundedness: A website is an unbounded, uncurated linked collection of information

- Convergence opens possibilities

- A 5th transformation that may happen and some are already thinking about

Photo: *E-180 MAG*
Hybrid Forms

- Curation of Content and live updates
- Dynamic Content
- Cross-linking books
- Annotations and rich metadata
- Interactive text books with links to videos and images from actual historical events and original research data
- Social marketing and reader engagement
Newspapers with audio, video, animations

Screenshot from nytimes.com
Catalogs and magazines with beautiful, interactive layouts and typography
Books with third-party service integration

Screenshot from techwhack.co about Google ebooks

applied Tickler to further investigation. She concluded by showing me. I often served her as a connubial missile at Joe, who, glad to get hold of me on any terms, passed me on into the parlour quietly and fenced me there with his great legs.

"Where have you been, you brute?" said Mrs. Joe, stamping her foot. "Tell me directly what you've been doing to wear me away with..."
And run on any device

Screen shot from bradfrostweb.com
Keep the Conversation Going
Let’s Build a Web for Publishing