

Adobe/ZoomOn Position on Mobile Web Initiative

Jon Ferraiolo, Adobe Systems, Inc.
Bradley Sipes, ZoomOn

Summary Position

- 1. One Web** - The Mobile Web is on a trajectory to offer all of the same features and value propositions as the traditional (desktop) Web. Users will want to browse the same web sites from mobile devices as they do from desktop devices. There needs to be only one Web, not separate Webs for desktop and mobile devices. The key differences is that mobile devices will have greater constraints in terms of screen size, bandwidth, lack of a pointer device, and client-side computing power, but greater opportunity due to continuous availability, location-awareness, and the embedded camera.
- 2. Allow “web” content handlers to be used in non-Web contexts** - Many W3C "web" technologies are appropriate technologies for mobile applications that go beyond Web browsing. XHTML, SVG, SMIL, and DOM technologies all can play key roles in mobile messaging, channel broadcasting services, device-to-device communications, embedded user interfaces, and games, just to name a few. Some of these application areas leverage the Web for some of the workflow, but not necessarily all of the workflow. A key requirement for unlocking innovation and new customer value-add in the mobile space is to separate out content type handling (e.g., XHTML content handlers and SVG content handlers) as reusable services which can be deployed for all mobile requirements, not just browsing.
- 3. Some ability to predict the future** - The Mobile Web will support new features and value propositions over the traditional (desktop) Web, some of which can be predicted today (e.g., features that take advantage of mobility, such as GPS integration or built-in cameras) and others which cannot be predicted.
- 4. Focus on incremental enhancements to existing W3C mobile standards** - Existing W3C mobile standards (e.g., XHTML-Basic, SVG-Tiny, SMIL-Basic, CSS-Mobile), in conjunction with other open standards, supply the majority of the technology needed by the Mobile Web. The W3C only needs to be responsive to the mobile community, to enhance existing W3C standards incrementally and to define integration standards between existing W3C standards to serve the future requirements of the Mobile Web. It is not necessary to embrace major new W3C standards efforts.
- 5. Focus on incremental enhancements to existing content adaptation standards** - Device adaptation is usually application-specific. As such, the W3C should focus on low-level facilities which enable application-specific custom adaptation algorithms, versus attempting to embark on device-independence research projects within a standards organization. The preferred approach is to do the hard work to make incremental changes to existing technologies more successful (e.g., CC/PP, UAProf, XHTML, SVG, SMIL).
- 6. Focus on royalty-free, open standards** - Adobe hears repeatedly from its mobile partners that a key advantage to W3C standards is that they are open and royalty-free. The W3C should stay focused exclusively on royalty-free, open standards which are defined and controlled by standards organizations.
- 7. Mobile Web Initiative should focus on certification services and mobile test suites** - To achieve higher levels of compliance and conformance, the most critical missing component are good interoperable test suites for mobile workflows using W3C's mobile standards. Our recommendation is that the Mobile Web Initiative should focus its work on certification efforts and building a robust set of test suites for open, standards-based, royalty-free formats and protocols.

Responses to selected workshop questions

- ***Uses cases for the mobile Web***

In no particular order: messaging, digital camera and image management, document viewing, browsing, location-based services, web-connected applications, embedded applications, channel broadcasting services, subscription services, entertainment and games.

- ***How is the mobile user experience different from the fixed user experience?***

The key differences is that mobile devices will have greater constraints in terms of screen size, bandwidth, lack of a pointer device, and client-side computing power, but greater opportunity due to continuous availability, location-awareness, and the embedded camera. Also, there will be innovative new mobile workflows which are only partly Web-based.

- ***How can we enable the Web to be made as seamless, uncomplicated and reliable an experience on mobile devices as it is on desktop devices?***

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- ***How can we make more users "light up" the mobile devices they already have to access the Web?***

Same answer.

- ***Is it possible to accomodate the need for a different user experience on mobile platforms while avoiding Web fragmentation?***

Yes, but this is an application-specific problem. The W3C should work on enabling technologies that content creators can leverage in an application-specific manner.

- ***How can we enable a higher level of compliance and conformance of mobile Web content?***

Incremental improvements to existing standards, new integration standards, and test suites.

- ***How can we ease the burden of browser and handset configuration testing?***

Same answer. It is also important to ensure that key content handling technologies (XHTML and SVG) can be tested in both browsing and non-browsing contexts.

- ***How can users discover web sites that work well on mobile devices? Do we need a new "virtual library" for the mobile Web?***

In the not too distant future, more people will be browsing the web from mobile devices than desktops. Just as what happened in the 1990s when virtually every organization built a web site to adapt to the emerging Web, organizations in the next few years will adapt their web sites to ensure they work well with mobile devices.

- ***How can we make mobile Web content easier for content and service providers?***

Incremental improvements to existing standards, new integration standards, and test suites.

- ***How can we make better use of existing technologies and specifications? Are there gaps? Is there a need for new technologies?***

We do not see the need for new technologies, with the exception of integration standards like the Compound Document initiative.

- ***What technologies are needed to enable uniquely mobile capabilities that go beyond browsing?***

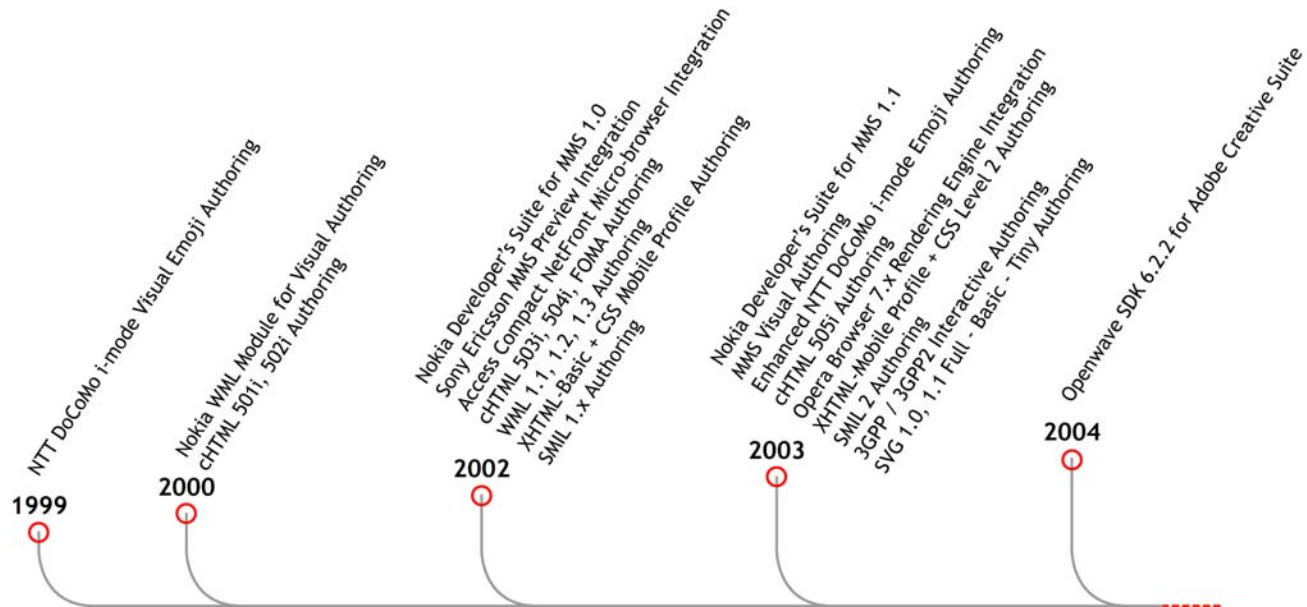
We believe the key standards around the necessary mobile technologies are already in place. Some technologies need incremental enhancement, and integration standards might be necessary. Also, it is important that future architectural direction take into account the notion of componentizing content type handlers (e.g, XHTML and SVG) such that they are available both within browser contexts and without non-browsing contexts.

Adobe Background and Experience

Adobe has considerable institutional expertise and experience in the mobile content space. Here is a partial list of Adobe products that are commonly used in mobile content creation or viewing.

Product or Technology	Description
Adobe GoLive CS	Professional class design, development, and visual emulation for mobile open standards based on XHTML Mobile Profile / Basic / 1.1, CSS level 1 and 2 with Mobile Profile, CHTML, all NTT DoCoMo i-mode Profiles, WML 1.x - 1.3, SVG 1.1 Tiny and Basic, SMIL 1.0 and 2.0 full specifications, MMS visual authoring, and 3GPP / 3GPP2 / MPEG-4 interactive video authoring and optimization. Extensible application SDK API's built upon XML and ECMAScript enabling mobile device manufacturers and carrier 3rd parties to rapidly build evolving mobile capability support for emerging standards.
Adobe Illustrator CS	Leading vector design tool for creating for SVG graphics, including SVG graphics targeting mobile devices (e.g., SVG-Tiny).
Adobe Photoshop CS	Market leading image design tool with authoring support for WBMP, GIF, PNG, JPEG and JPEG 2000.
Adobe Reader	PDF viewers available on a variety of mobile platforms, including Nokia Symbian s60 Smart Phone devices such as 6670.
Adobe Photoshop Elements 3.0	Leading consumer photo editing and management suite with MMS publishing capabilities.

Partial list of Adobe's mobile-enabled products and technologies



ZoomOn Background and Experience

ZOOMON Mobile Solutions delivers Mobile Scalable Vector Graphics (SVG) software for existing and future mobile devices and network technologies. The ZOOMON SVG Player product for SVG Mobile is specifically developed to meet the unique requirements for mass-market mobile phones requiring a minimum of CPU and memory capacity. The ZOOMON SVG Player solution is easily integrated into any HW platform operating system environment.

ZOOMON also provides the market-leading tool for professionally composing SVG Mobile content the SVGT Animator. The SVGT Animator allows wireless developers to create, design, and deploy professional mobile SVG content for mass-market mobile phones. It integrates seamlessly into the Adobe® Creative Suite, providing efficient, direct access to the mobile animation toolset from within the application.

ZOOMON operates in a global market and has built active relationships with key industry players in Europe, North America and Asia-Pacific. ZOOMON is based in Stockholm with offices in London. For more information on ZOOMON please visit, www.zoomon.com.