

TV TechCheck

The Weekly NAB Newsletter for TV Broadcast Engineers



HTML5 Technology Trends

HTML5 is the latest revision of HTML (HyperText Markup Language), a markup language to present content on IP devices such as computers, tablets and cell phones. HTML5 is the product of [collaboration](#) between World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG). The goal of HTML5 is to support multimedia content without plugins making the platform more ubiquitous.

Because HTML5 can be deployed across multiple platforms in the form of a browser, only a single [source code](#) needs to be developed per application. This not only reduces the software development and maintenance cost, but also shrinks the software development time and improves time to market by leveraging mature development tools and a large community of Web developers. HTML5 supports video and audio without needing any plugins. W3C is currently working on adding broadcast-centric capability such as EAS and closed captioning into HTML5. This all-encompassing and platform-agnostic nature shows great promise for multimedia delivery in the future, especially for mobile devices.

HTML5 has already achieved substantial [market penetration](#). According to a 2012 Appcelerator/IDC study, 78% of the organizations were using HTML5. Today nearly 60% of mobile app developers are interested in HTML5 development. Figure 1 shows that general public's interest in [HTML5 has trumped ActionScript](#), the programming language for Adobe Flash. All the major new browsers support HTML5 today. It is estimated that 1 billion HTML5 enabled devices will be sold in 2013. HTML5 is being incorporated into major interactive TV standards such as HbbTV and OIPF "Hybridcast." The performance of HTML5 will keep improving with the improvement of JavaScript performance. Gartner Inc., an information technology research and advisory firm, predicts that HTML5 will be the go-to [enterprise application](#) development tool in 2014.

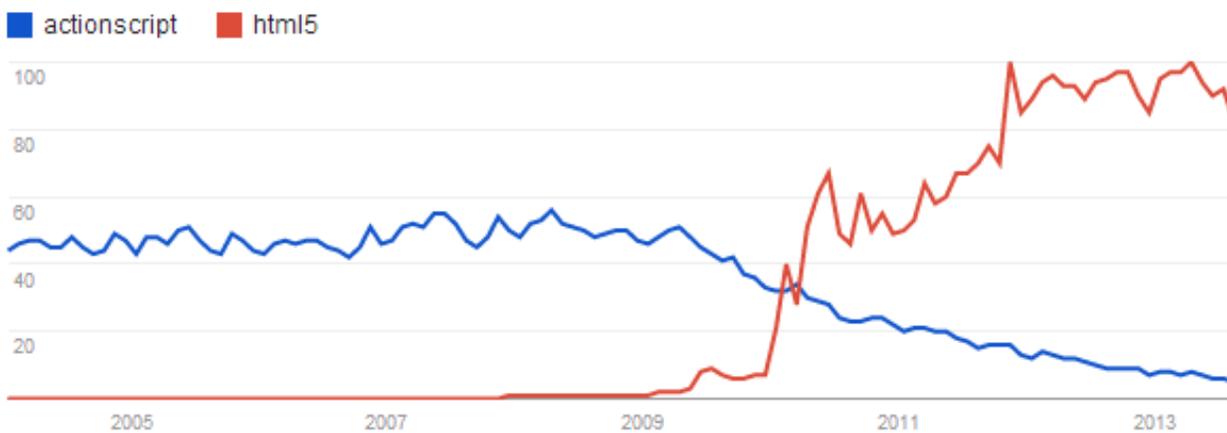


Figure 1: HTML5 trumps Adobe's ActionScript (source <http://www.html5canvastutorials.com/articles/web-graphics-trends-in-2013/>)

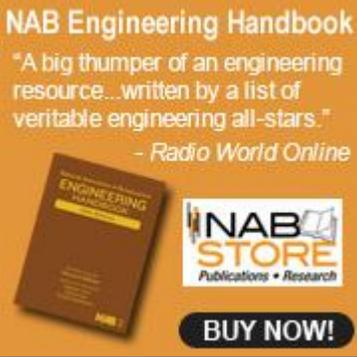
[Trends](#) show that HTML5 will gain steam with the gaming industry, which will exploit the multimedia and graphics integration capability. Blogging tools like WordPress may likely benefit from cleaner markup functionality. Interactive infographics, a way to interact with data to enhance user experience, could also become more popular in the future. HTML5's enhanced Responsive Web Design feature, which makes a webpage more readable on smaller screens, is also predicted to be widely adopted.

Despite all the promise, HTML5 has run into some snags. Technology trendsetters like [Facebook](#), [LinkedIn](#), and [Netflix](#) have recently adopted native coding instead of HTML5. These companies argue that the native coding can better exploit the hardware features of target devices and thereby enhance the user experience. [Apple](#) is also not promoting HTML5 because its strategically important app store sells native language-based apps.

On the other hand, media companies and news organizations are emerging as leaders of HTML5 adoption. HTML5 offers them the promise of reaching every potential viewer on every hardware platform with uniformly authored multimedia content, and without the need to develop and support platform-specific apps. The European Hybrid Broadcast and Broadband TV (HbbTV) standard should also help drive the HTML5 adoption. Many technologists are predicting that HTML5 will be the future of both mobile devices and TVs.

NAB Online Resource Guide [CLICK HERE](#)
The people, products and services that support the broadcast business.

The next issue of TV TechCheck will be December 9, 2013



NAB Engineering Handbook
"A big thumper of an engineering resource...written by a list of veritable engineering all-stars."
- Radio World Online



NAB STORE
Publications • Research

BUY NOW!



CHANNEL OPPORTUNITY
The Way to Play in a Digital World

NABSHOW
Where Content Comes to Life

April 5-10, 2014 • Las Vegas, NV

GET YOUR FREE PASS ▶