



A TELERIK/KENDO UI SPONSORED SURVEY

# HTML5 Adoption Fact or Fiction

DEVELOPERS WADE THROUGH THE HYPE

#### **SUMMARY**

Kendo UI, a division of Telerik, surveyed 4,043 software developers in the period between September 5th and September 26th of 2012 regarding their usage, attitudes and expectations surrounding HTML5 and its adoption for mobile development initiatives. The main objective was to determine real world adoption patterns of HTML5, separating hype from reality in order to get an accurate picture of real world use. The survey also sought to measure the impact of recent industry news--such as Facebook's decision to "go native" or the W3C/WHATWG standards split--on overall adoption rates and attitudes towards HTML5 in the next calendar year.

#### THE KEY FINDINGS REVEAL:

- HTML5 is far more than hype; with the majority of developers surveyed (82%) believing it is important to their job within the next 12 months, a finding that contradicts other reports, such as the Gartner Hype Cycle for Emerging Technologies (2012), which pushed widespread HTML5 adoption 5 to 10 years in the future.
- Facebook's decision to convert most of their mobile iPhone app from HTML5 to native code has had little-to-no effect on developer attitude towards HTML5 adoption (73%).
- Developers prefer W3C's "snapshot" HTML5 standard compared to the WHATWG "living standard" nearly 4:1.
- Sixty three percent (63%) of respondents are already actively developing with HTML5. Most are leveraging the technology and most have stated that this is due to the familiarity of language, cross-platform support and performance.

82%
OF DEVELOPERS FIND HTML5 IMPORTANT TO THEIR JOB WITHIN THE NEXT 12 MONTHS

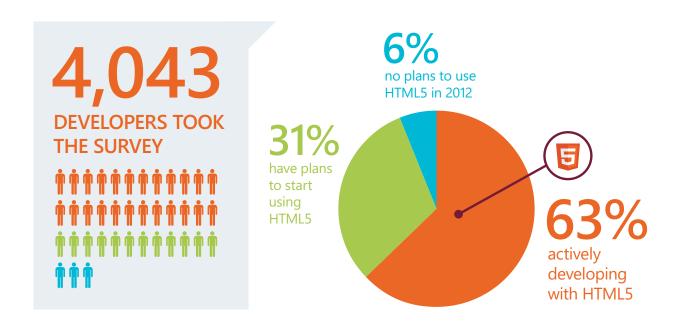
INTRIPORTANT TO THEIR JOB WITHIN THE NEXT 12 MONTHS



### THE CURRENT STATE OF HTML5

HTML5 has quickly become one of the most discussed and polarizing software development topics in history. Used for both modern websites and mobile apps, HTML5 arrived with great fanfare and promised to create an open platform that would solve many problems created by the proliferation of mobile operating systems and desktop browsers. Lately HTML5 has been at the center of new and sometimes ongoing debates, particularly around its ability to compete with "native" mobile app development and its ability to avoid the kind of fragmentation that prevented previous generations of web standards from being fully usable for software development. These debates have given way to new questions about HTML5's adoption in the real world. Is the technology being widely adopted, or is it just a hype machine being ignored by developers?

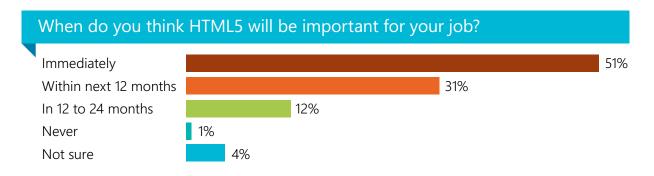
To help answer these questions, Kendo UI surveyed 4,043 developers, asking a range of questions about their attitudes towards HTML5 and plans for near-term adoption. The survey found that approximately 63% of developers are already actively developing with HTML5 and an additional 31% plan to do so by the end of 2012. A mere 6% have no plans to take advantage of the technology in 2012.



#### IN STARK CONTRAST

In July 2012, Gartner predicted that wide adoption of HTML5 is still 5 to 10 years out.¹ Gartner's findings, however, are in stark contrast to that of the Kendo UI survey, as well as research by both Forrester Research and Strategy Analytics. For example, in December 2011 the research firm Strategy Analytics forecasted that the sales of HTML5 compatible phones will top 1 billion in 2013.² This compares to 400 million iOS and 400 million Android devices sold all time. In August 2012, Forrester Research issued a report noting, "HTML5 is no longer an emerging toolset for mobile and tablet development. Instead, it is fast becoming the de facto standard for web experience innovation across touch points."³

To delve a bit deeper into the importance of HTML5, the Kendo UI survey asked developers, "When do you think HTML5 will be important for your job?" The responses indicate that widespread HTML5 adoption is well underway and will continue to be for the foreseeable future. Fifty one percent (51%) of respondents already regard HTML5 as important to their jobs, and an additional 31% indicate that HTML5 will be important for their job within the next 12 months. Only 1% feel that HTML5 will never be important to their jobs.



Going further, when the 63% of developers already actively developing with HTML5 are considered in isolation, the importance of HTML5 is predictably higher (73%). On the flip side, the 6% of surveyed respondents who claim to have no plans for HTML5 in 2012 still say it will become important to them in the next 12 to 24 months, a much shorter window than indicated by Gartner's July "Hype Cycle" study that projects a 5-to-10 year time frame.





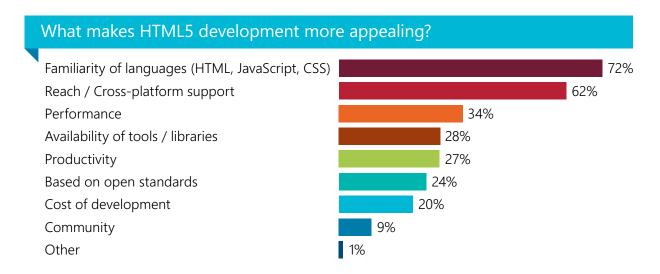
<sup>&</sup>lt;sup>1</sup>Gartner, "Hype Cycle for Emerging Technologies, 2012," July 31, 2012, Hung LeHong, Jackie Fenn

<sup>&</sup>lt;sup>2</sup> CNet, "HTML5-enabled phones to hit 1 billion in sales in 2013," December 8, 2011, Lance Whitney

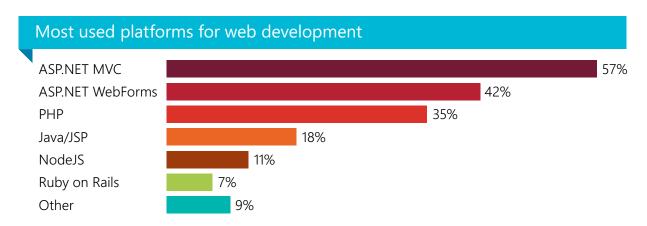
<sup>&</sup>lt;sup>3</sup> Forrester Research, "The Coming Of HTML5," August 3, 2012, Peter Sheldon, Michael Facemire, Zia Daniell Wigder, Lily Varon

## WHY HTML5?

When asked what makes HTML5 development more appealing than other options for writing software, most developers call out the familiarity of languages (72%), reach/cross-platform support (62%) and performance (34%) as the biggest benefits.



Related to the benefits of cross-platform support, the survey also asked which platforms are most used for web development initiatives in determining how HTML5 usage spans traditional developer communities. The majority, 57% listed ASP.NET MVC as their top platform, 42% noted ASP.NET WebForms and 32% said PHP. Less than half of all respondents (45%) only use one platform for web development, with the majority (55%) using on average two-to-three different platforms for their projects. These results reinforce the idea that developers are pragmatic when it comes to picking platforms with HTML5, and are willing to use multiple solutions to get the job done.



The economic benefits HTML5 development offers versus that of native development were also highlighted by 20% of respondents. According to Jeffrey Hammond, principal analyst of application development and delivery for Forrester Research, "Mobile app developers we've worked with report porting costs of 50% to 70% of the cost of the original native app for every new mobile operating system an app needs to run on."<sup>4</sup>

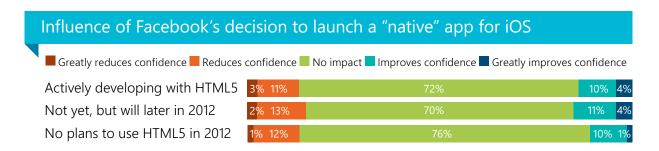
With strong grassroots developer support and unprecedented unilateral industry support, from the likes of Microsoft, Google, Adobe, AT&T, SAP and more, HTML5's momentum and on-going mass adoption appear to be incontrovertible trends, above the threshold of being considered hype.

#### CONTROVERSY ALIVE AND WELL

In addition to determining HTML5 adoption patterns, the survey inquired about the various controversies that have been widely covered regarding HTML5 to see how they have impacted developer opinion. Most notable was last month's frenzy surrounding Facebook's decision to launch a "native" version of the Facebook app for iOS.

While this decision received a tremendous amount of media attention, the survey found it had little-to-no effect on software developer confidence on future HTML5 adoption for both web and mobile for the vast majority (73%) of developers.

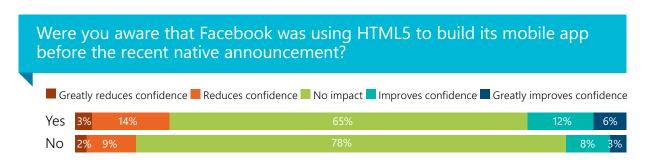
As a matter of fact, only 13% of the developers who already actively develop in HTML5 claim some levels of confidence loss (14%) after Facebook's decision, while 14% of the same group perceived the situation reversely – their confidence in HTML5 for mobile apps development has increased! For the most part (73%) of developers were unfazed. The same held true for those looking to leverage HTML5 in the near future.



Not only did Facebook's decision to provide a "native" Facebook iOS app fail to change the surveyed developers' attitude towards HTML5, but 52% of respondents were not even aware that the social networking site was using HTML5 to build its iOS mobile app until the recent native iOS app announcement. This underscores HTML5's ability to be indistinguishable from native mobile apps, even to the trained eyes of HTML5 developers.

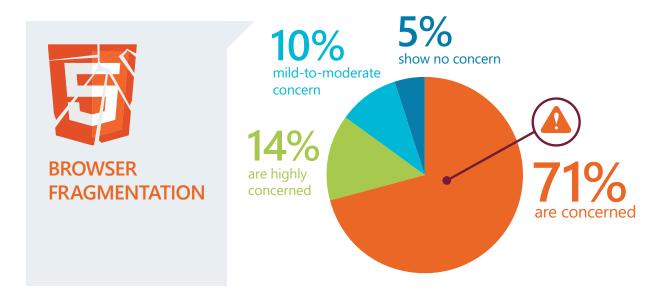


When you dig deeper to analyze the relationship between awareness of the HTML5 Facebook app and change in trust in HTML5 for mobile development, the results are mixed. Predictably, those aware of Facebook's HTML5 development lost more confidence (17%) in HTML5 to build mobile apps than the group unaware of Facebook's HTML5 usage (11%). At the same time 18% of the "aware" group indicated improved confidence in HTML5 for mobile apps. These seemingly conflicting results are likely the byproduct of impassioned developer opinion towards mobile app development, with proponents and opponents of HTML5 strengthening their resolve following Facebook's news, while casual observers treated Facebook's news as a non-event.



## THE TRUE CONCERNS

Platform fragmentation is a real concern for any technology, whether it is HTML5 or Android. Web standards have a history of fragmenting browsers that have traditionally posed challenges for widespread adoption of new standards and technologies. These concerns of the past persist in developers' minds as they evaluate HTML5. When asked on a scale of 1 to 10 (with 10 being the highest) of how concerned they are about browser fragmentation, 71% of developers voiced concerns rating 6 or above. Fourteen percent (14%) of respondents are highly concerned (10 rating) while only 5% selected show no concern (1 rating).



In addition to browser fragmentation concerns, the survey asked respondents how much the split between the W3C and WHATWG, the two standards bodies responsible for maintaining the HTML5 standard, impacts their HTML5 adoption decision-making. Also, respondents were asked which approach they prefer: the W3C's slower "snapshot" approach to updating the HTML5 standard at fixed intervals, or WHATWG's "living standard" that is constantly evolving as new pieces of HTML5 are added. The survey shows that developers are not depending on the standards bodies to make decisions about HTML5. While 27% of survey respondents had some-to-a lot of concern over the split, 35% demonstrated little-to-no concern and 38% were unsure whether the change would impact their decision-making.



More surprising, when asked about preferences for W3C versus WHATWG, 42% noted a preference for W3C, only 17% selected WHATWG and 41% had no preference whatsoever, leaving the research to indicate that developers prefer the slower, more disciplined approach to evolving web standards over the fast moving WHATWG. What remains to be seen is whether the preference for W3C or WHATWG will shift based on the recent news surrounding W3C's plans to finalize HTML5 by 2014.<sup>4</sup>

DEVELOPERS PREFER THE SLOWER, MORE DISCIPLINED APPROACH TO EVOLVING WEB STANDARDS





# IN CONCLUSION

While there is much hype and controversy surrounding HTML5, it is clear that developers are not taking a "wait and see" attitude. Rather, adoption and usage is on the rise for both mobile and desktop apps, and few developers doubt HTML5's importance over the next several years. Further, outside influencers have little impact on the development decisions being made for HTML5, across small and large enterprises. Issues such as ease of use, flexibility and economies of scale will drive the success of the standards-based platform. What remains to be seen is the long-term impact of HTML5 as the standard is finalized, and the changes in attitudes as HTML5 is put to the test in full-scale web and mobile development by a majority of the software industry.

<sup>&</sup>lt;sup>4</sup> Plan 2014 - dev.w3.org/html5/decision-policy/html5-2014-plan.html



#### **ABOUT KENDO UI**

Kendo UI is a complete solution for JavaScript and HTML5 developers that provides web and mobile developers with all the necessary components for building HTML5 and JavaScript mobile apps and sites. Based on jQuery, Kendo UI delivers a rich UI for the web, HTML5-powered data visualizations, and tools for building native mobile apps with HTML5. This leading edge framework delivers everything in a unified, compact package, backed by industry leading professional support.

#### **ABOUT TELERIK**

Telerik is the market-leading provider of end-to-end solutions for application development, automated software testing, agile project management, reporting, and content management across all major Microsoft development platforms. Telerik is trusted by more than 100,000 customers worldwide for its innovation and industry best technical support.

#### **REPORT INQUIRIES**

Todd Anglin Vice President, HTML5 Web & Mobile Tools Telerik phone: 888-365-2779 Todd.Anglin@kendoui.com

Sasha Krsmanovic
Director of Marketing
Telerik
phone: 888-365-2779
Sasha.Krsmanovic@telerik.com

#### **MEDIA INQUIRIES**

Erica Burns
Manager, Media & Customer Relations
Telerik
phone: 888-365-2779 ext. 154
Erica.Burns@telerik.com

Carmen Hughes
Ignite PR
phone: 650-227-3280 ext. 101
c: 650-576-6444
Carmen@ignitepr.com



Copyright Telerik 2012. All rights reserved. Kendo UI is registered trademark of Telerik AD. All other trademarks are properties of their respective owners. All information believed correct at time of printing.