

Developer Technology Trends Research Results Summary

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What's on the rise? Who maintains market dominance? And what technologies show "mindshare velocity?"

Periodically, we conduct surveys of our site visitors to understand what technologies they are both using and planning to adopt. Who are our site visitors? Developer Media focuses entirely on content for developers – attracting only those interested in that content. 97% of visitors to our quality sites, communities and projects are developers: over 23 million unique visitors every month.

In December 2013, we asked these developers to help us understand what they're using now and what is on the rise. In some cases, we compared these answers to our preceding technology trends survey from February 2013 to provide perspective on what has changed. (For survey details, see end notes.)

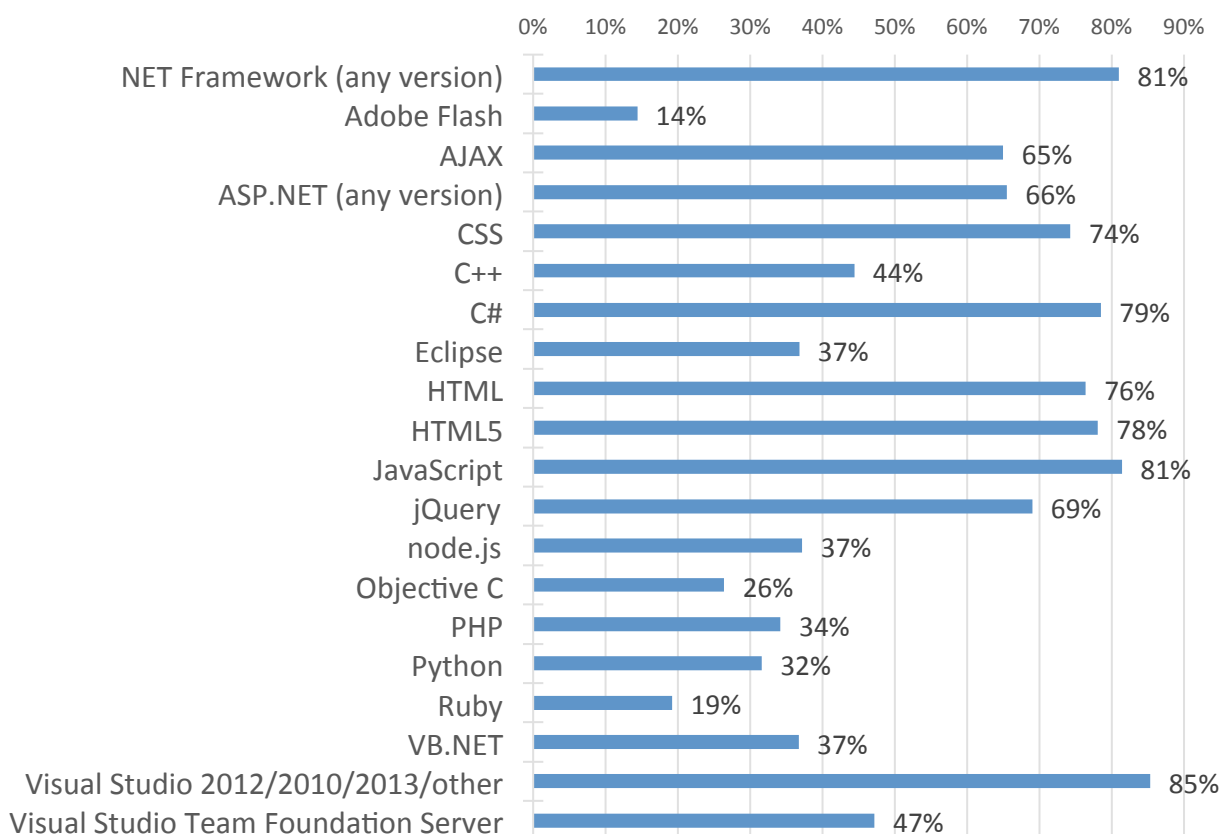
Technologies and Tools

Key insight: even developers who were traditionally ".NET developers" use a variety of tools in their day-to-day development. Nearly every developer focuses on many different technology stacks, even if they are traditionally seen as a "Microsoft developer."

Technologies in the Web and mobile areas show the most significant growth year over year. For example, node.js, CSS and HTML5 each show 28% growth over 2013. Right behind these in growth rates (all between 20-24%) are JavaScript, jQuery, and Python. Objective C, an iOS-focused language, also shows almost 21% growth. (Remember, in these first three sections we're looking at use and plan to use together).

This chart shows trends that are well above the potential margin of error, suggesting a 99% level of confidence for these numbers:

Technologies Used/Planned to Use in 2014



Comparing this to the early 2013 survey, the only tools/technologies that remain relatively “flat” – but still with dominant market share – are .NET Framework and Visual Studio. Three key factors explain this ongoing strength: there’s still no better IDE available, Visual Studio dominates enterprise development, and Microsoft has done an excellent job making Visual Studio embrace other languages and technology stacks.

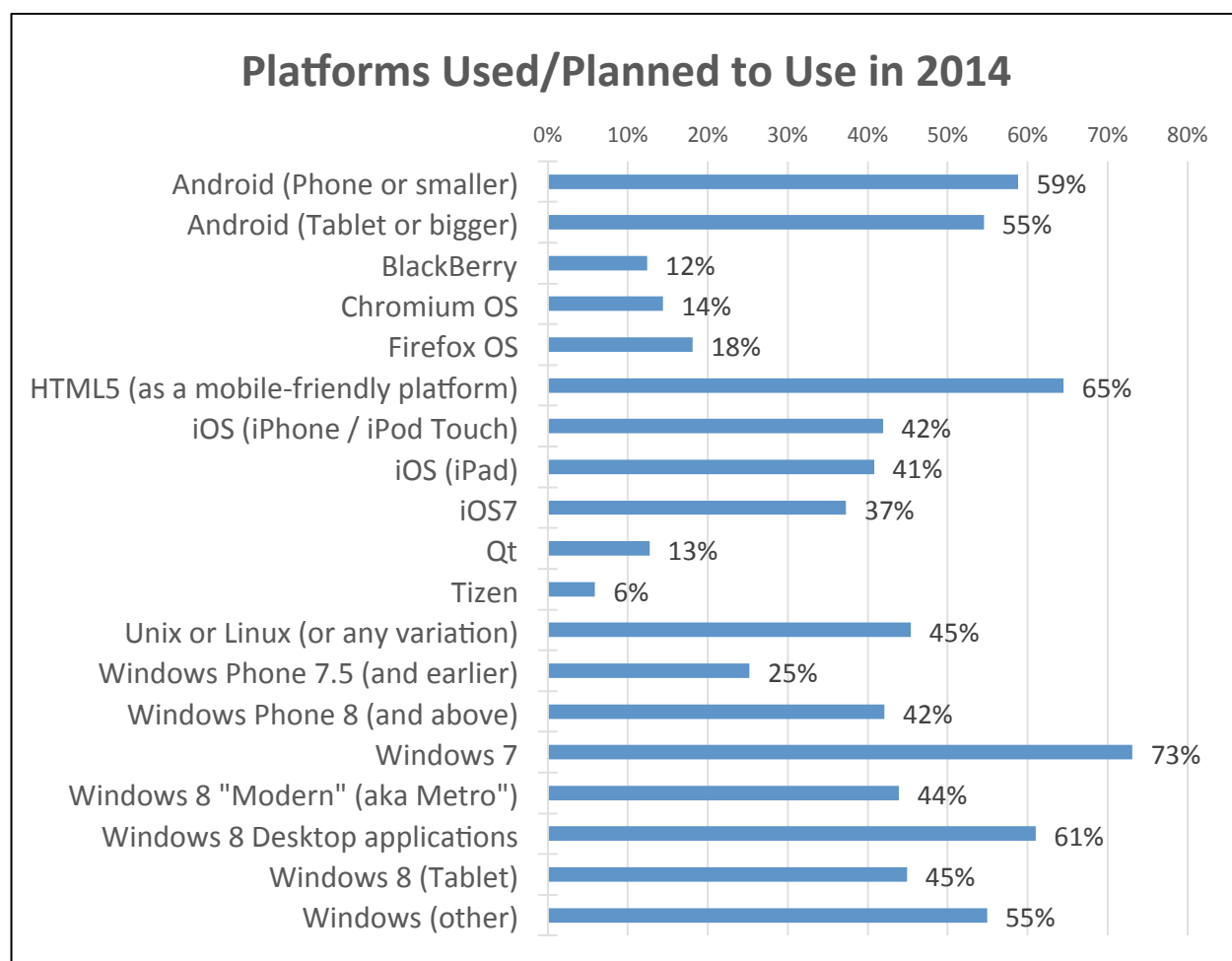
Speaking of those other technology stacks, we see significant increases (in the range of 20-30%) for Web- and mobile-oriented technologies. Web technologies, for example, include AJAX, CSS, HTML, HTML5, JavaScript, jQuery, node.js, and Python. Mobile technologies may include some of the Web technologies listed above as well as Objective C.

We also see significant growth (25% increase) for Visual Studio Team Foundation Server, suggesting a significant increase in development workflow acceptance and adoption. (And perhaps significant wins for Microsoft’s enterprise licensing sales.)

Operating Systems and Platforms

Key insight: Leading platforms continue to lead. Windows 7 remains the leading target, with HTML5 close behind.

For this question, we combined mobile, desktop and other operating systems to get a sense of what developers target. The result? The leading mobile platforms, as we reported in our recent, detailed mobile research briefs, remain the leaders. Windows 7 still dominates desktop platforms, with growth in Windows 8 varieties.



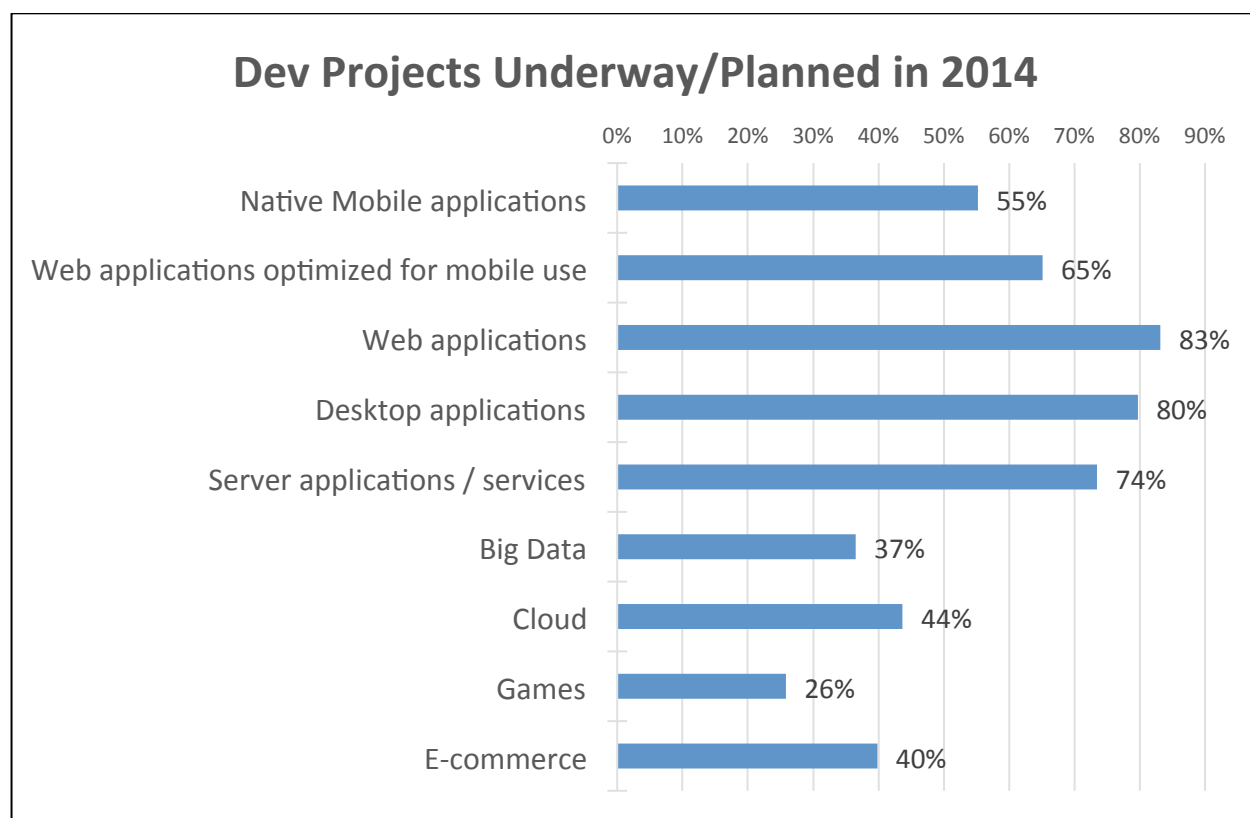
Android (both phone and tablet), HTML5 (as a mobile-friendly platform), iOS (iPhone and iPad), and Windows 8 (in "modern" and tablet use) each reported a 25-28% gain over the same numbers in 2013. Windows Phone 8 reported a nearly 20% increase. Windows 7 (desktop) reported a statistically insignificant increase, however, it remains the largest targeted platform (see numbers above). For details on the mobile platforms, our analysis and advice for each, see our recent mobile reports.

We see a tiny bit of interest – just barely statistically significant – in Chromium OS, Firefox OS and Qt. Tizen just barely shows on the radar. Still, this illustrates developers’ interest in alternative operating systems and willingness to explore new solutions.

Types of Development Projects

Key insight: The more things change, the more they stay the same: server/cloud development shows significant growth even as “client” development (mobile, web, desktop) dominates.

Finally, we like to hear from developers about the *types* of development projects they’re planning: Web, mobile, desktop, server, and so on. The results? Developers are developing a wide variety of different kinds of applications and solutions. Web and desktop applications are still dominant. Server, big data and cloud projects, however, showed the most growth from 2013 (30% growth each).



We also noted significant growth in Web applications (20%), Web apps optimized for mobile (26%), and e-commerce (28%). Games showed growth – 18% over 2013, as did native mobile apps – 16% over 2013. Desktop applications showed growth as well, but showed the least growth: only 11% over 2013.

What's on the Rise? Introducing “Mindshare Velocity”

Key insight: Market leader Visual Studio remains the leader, but a variety of other technologies are capturing the interest of some segments of the developer population, presenting potential market opportunities worth exploring.

To help us better get a sense of what technologies are starting to capture developers' attention, we're introducing a measurement called “mindshare velocity” in this report. “Mindshare velocity” simply means the size of the increase between developers stating they're using a technology and those who state they plan to use it this year. As we'll discuss below, it's important to keep this number in perspective, since it may represent only a small slice of the developer landscape.

Space prohibits an in-depth analysis of the potential benefits or aspects of these technologies that are appealing to developers, but we recommend that marketers keep a close eye on those that relate to their markets. Marketers and product teams may want to conduct brief analysis or brainstorming to identify opportunities and threats.

On the Horizon

These technologies and platforms have fairly insignificant market share, but show a high increase from “using” to “plan to use;” thus a high “mindshare velocity.” We are not quoting the exact numbers because they are *barely* statistically significant. However, we feel these small blips on the radar could become significant in the future.

We call these “on the horizon” technologies because they have just appeared on the horizon, but they are so distant that it is difficult to ascertain their size or significance. Still, marketers will want to note them to make sure they sail the ship, so to speak, in the proper direction.

- AppleScript
- Clojure
- CoffeeScript
- Erlang
- Chromium OS
- Tizen

Lagging just behind these is Firefox OS, which has what we'd call a “middling” velocity – still interesting, but, as we noted in our mobile briefings, its geographic restrictions and lack of developer outreach are hampering its adoption and mindshare velocity.

Still on the Rise, High Mindshare Velocity

Some accepted technologies, tools and platforms are still on the rise. Their mindshare velocity suggests, while perhaps not for every developer, these technologies have not yet reached their market potential. We believe these remain of interest because they don't have dominant market share (i.e. over 50%), but have significant market share (generally between 20-40%) and show at least half that number planning to use the technology who are not already. These include:

- Java (we were surprised, too)
- PHP
- Shell script (c shell, bash, PowerShell, etc.)
- Visual Studio Team Foundation Server
- Android (both phone and tablet)
- HTML5 (as mobile platform)
- iOS (both phone and tablet)
- Windows Phone (7.5 and 8)
- Windows 8 (in all flavors: "Modern," desktop and tablet)

Established Players

Some have high velocity; others low. It's essential to note that established brands and products like Visual Studio, although they have an extremely low mindshare velocity, still dominate the market. Mindshare velocity is a measurement that helps identify interesting up-and-comers and helps identify fading technologies, but it is not a substitute for the numbers discussed earlier in the brief. Visual Studio, as we said earlier in this paragraph, is an excellent example. Its use/plan to use number is at 85% for our 2014 survey, up 5% from the 80% in 2013. Only 7% of that 85% is "plan to use," meaning that of the 22% not currently using Visual Studio, 7% have planned adoption. No matter how you look at it, it's impressive that Visual Studio has retained this kind of interest among developers. (Our take: its embracing many non-Microsoft technologies combined with iterative improvements has paid off.)

Market dominators with low mindshare velocity that still indicates continued, if slow, growth are:

- .NET Framework
- AJAX

- ASP.NET
- CSS
- C#
- HTML & HTML5
- JavaScript
- jQuery
- Visual Studio
- Windows 7

It's important to note that these technologies show a positive mindshare velocity, indicating continued strength in these technologies, at least in 2014.

About Developer Media

Developer Media is the world's leading media company focused entirely on software/app developers. They help tech vendors and advertisers, from startups to multinationals, build results-driven marketing programs especially designed to drive awareness and adoption of their developer tools, APIs and platforms.

Developer Media reaches well over 20 million unique software developers each month across over 4000 influential, dev-centric websites, blogs, projects and voices: the largest selection of quality, developer-focused media in the world. Each site is hand-selected for quality, content and performance.

Through its flagship site, CodeProject, and other leading sites like CodeCall forums, CodePlex, W3Schools (developer-specific areas), and many more, Developer Media delivers awareness, understanding and engagement to its clients. A well-stocked arsenal of marketing programs and products help clients move prospects through the marketing and sales funnel to become customers.

The Developer Media audience is worldwide, reflecting the general developer population. Visitors to its sites work for companies of all sizes and use many different tools and platforms. Professional developers, the overwhelming majority of the Developer Media audience, use not only Microsoft tools for enterprise development, but also tools and languages most suited for Web and mobile development (Ruby on Rails, Objective C, NoSQL, Python, HTML5/CSS3, etc.)

As the "tech marketing experts," the Developer Media team brings decades of experience in the developer market -- on top of its exceptional reach into the developer space. They offer a mix of proven advertising options as well as unique solutions tailored to each client's goals. For more information, see www.developermedia.com.

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Notes on Methodology

All statistics not otherwise noted are from proprietary Developer Media surveys, based on a sample of over 20 million unique monthly developers who visit our sites. Our December 2013 and February 2013 surveys had 441 and 460 respondents, respectively. Projecting those samples against a population of approximately 20 million unique monthly visitors, we estimate about a 4% margin of error at a 95% confidence level and a 5% margin of error for a 99% confidence level. In this report, we generally highlight trends well above these possible margins of error.

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