



2016 User Survey Report

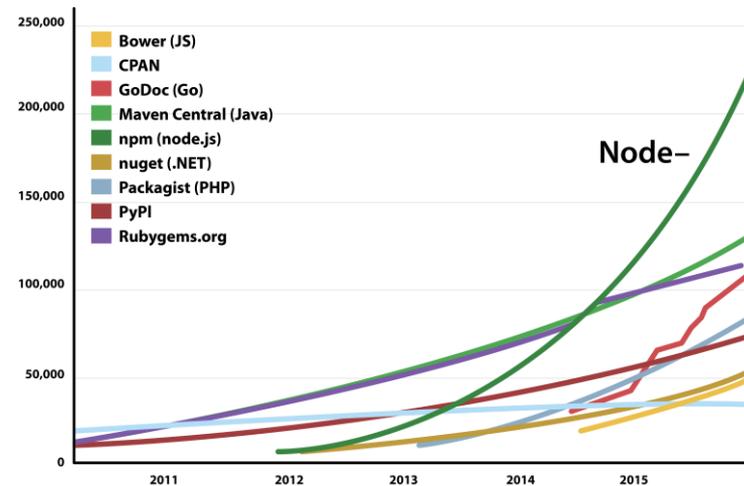
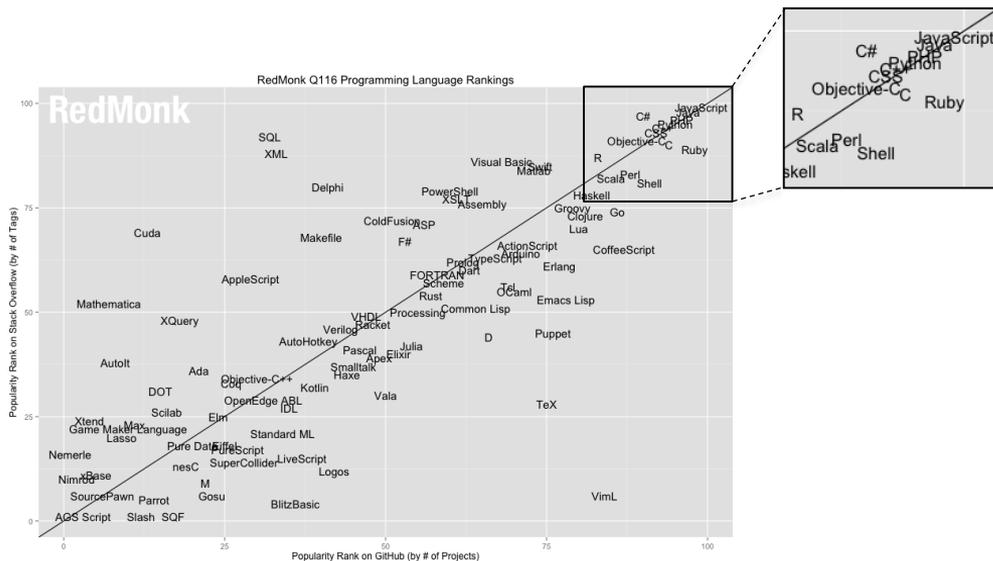
April 2016

Purpose of Survey



- The purpose of the 2016 Node.js User Survey was to better understand Node.js users:
 - what type of development work they use Node.js for
 - what other technologies they use with Node.js
 - where they are located
 - how many years of experience they have
 - how they learn new languages
 - how the Node.js Foundation can help them get more out of Node.js
 - what version of Node.js they use
 - more
- In addition to revealing interesting insights about the current state of play and trends in web development, the survey provided important information to help The Node.js Foundation be more successful in our mission “to enable widespread adoption and help accelerate development of Node.js and other related modules...”
- Survey insights are being used to inform training materials and documentation, to plan events and meet-ups and create resources to assist developers, enterprises, and tech leaders do more with Node.js

Executive Summary



By many measures, Node.js is the fastest growing and most significant development language right now. With 3.5 million users and an annual growth rate of 100%, Node.js is truly everywhere.

This survey reveals the type of development work Node.js users do, the other technology they use with Node.js, which languages they plan to use more of, and which they plan to use less of in the coming months, and more.

Key Findings



Node.js: A Universal Language

The full stack is no longer "front end and back end" but rather "front end, back end and connected devices," everything from the browser to your toaster all powered by JavaScript and Node.js.

Node.js and Containers Take Off

Both Node.js and containers are a good match for efficiently developing and deploying microservices architectures.

Full "MEAN" Stack Explodes

Real-time, social networking and interactive game applications use MongoDB, Express, Angular.js and Node.js to address concurrent connections and extreme scalability.

Node.js Pervasive in Enterprises

More than 45 percent already using the Node.js Long Term Support release (v4) geared toward medium to large enterprise users.

IoT Developers Using Node.js Stand Out

IoT developers using Node.js have more experience than their front end and back end counterparts and tend to use more Node.js across their stack.

How Survey Was Conducted



The survey was open for **15 days**, from January 13 to January 28, 2016. During this time, **1,760 people** from around the world completed the survey. The survey was promoted by Node.js Foundation members, through Node.js social media accounts and by email to attendees of the 2015 Node Interactive conference.

Node.js User Survey Basic Stats



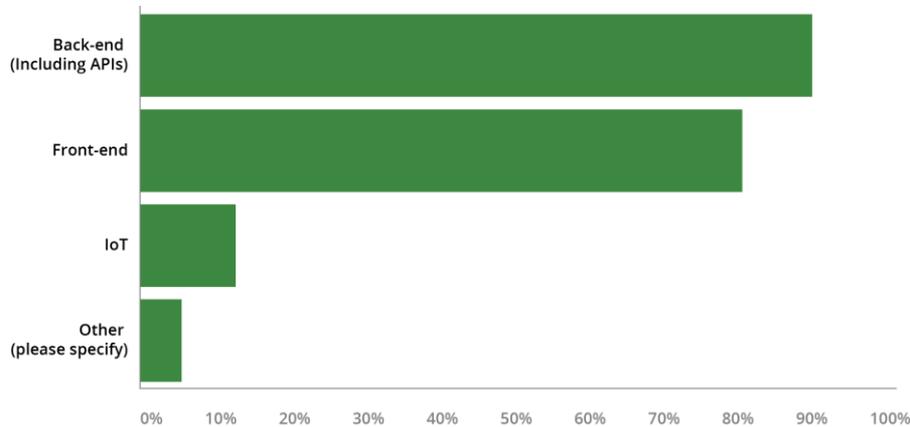
- 1,760 respondents, of which 1,124 (64%) run Node.js in production
- ~70% Developers, 22% Technical Management
- 824* Node.js Developer Respondents
 - 62% do both Front End and Back End development
 - 9% do Front End, Back End and IoT development
- 35% from US, 22% from Continental Europe, 6% India, 6% UK
- ~15% of all respondents from large enterprises

* Developer respondents that run Node.js in production

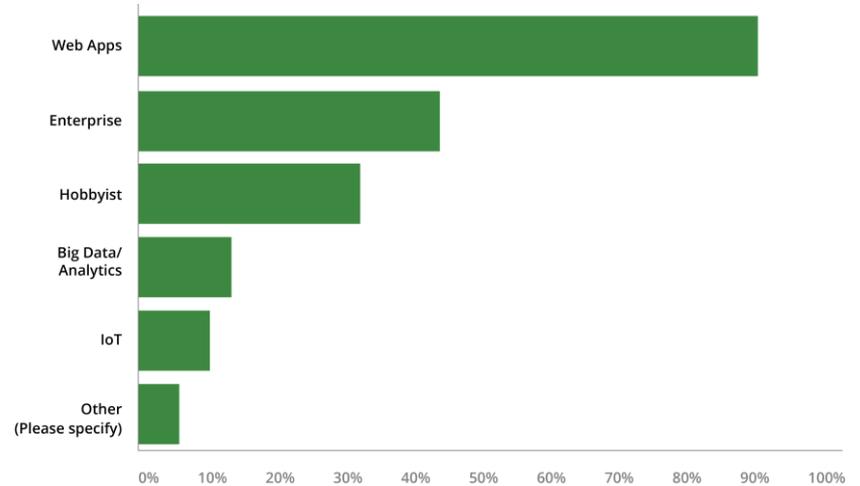
Type of Development Work



What areas of development are you focused on?



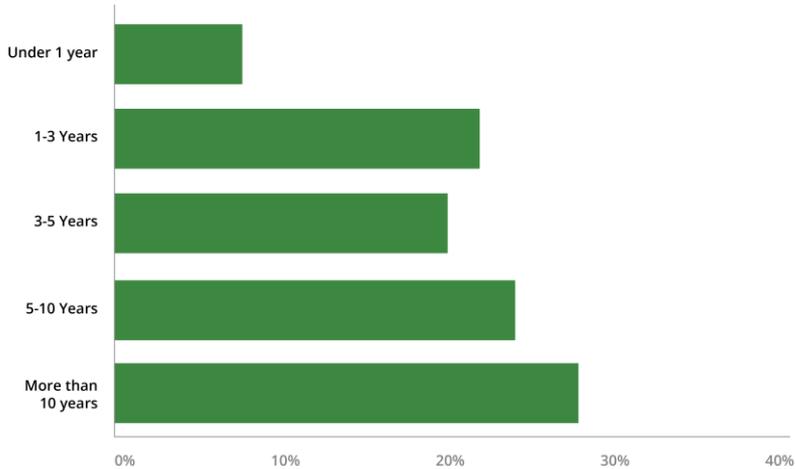
Select the type of development work you spend most of your time on.



Average Years Experience

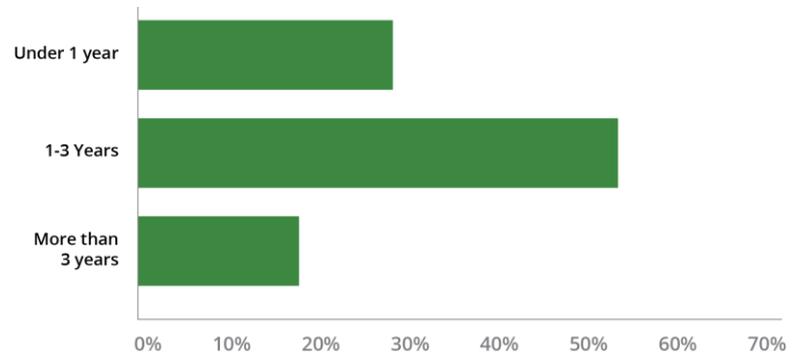


Total Years of Professional Development Experience



52% have 5+ years

Years of Node.js Experience

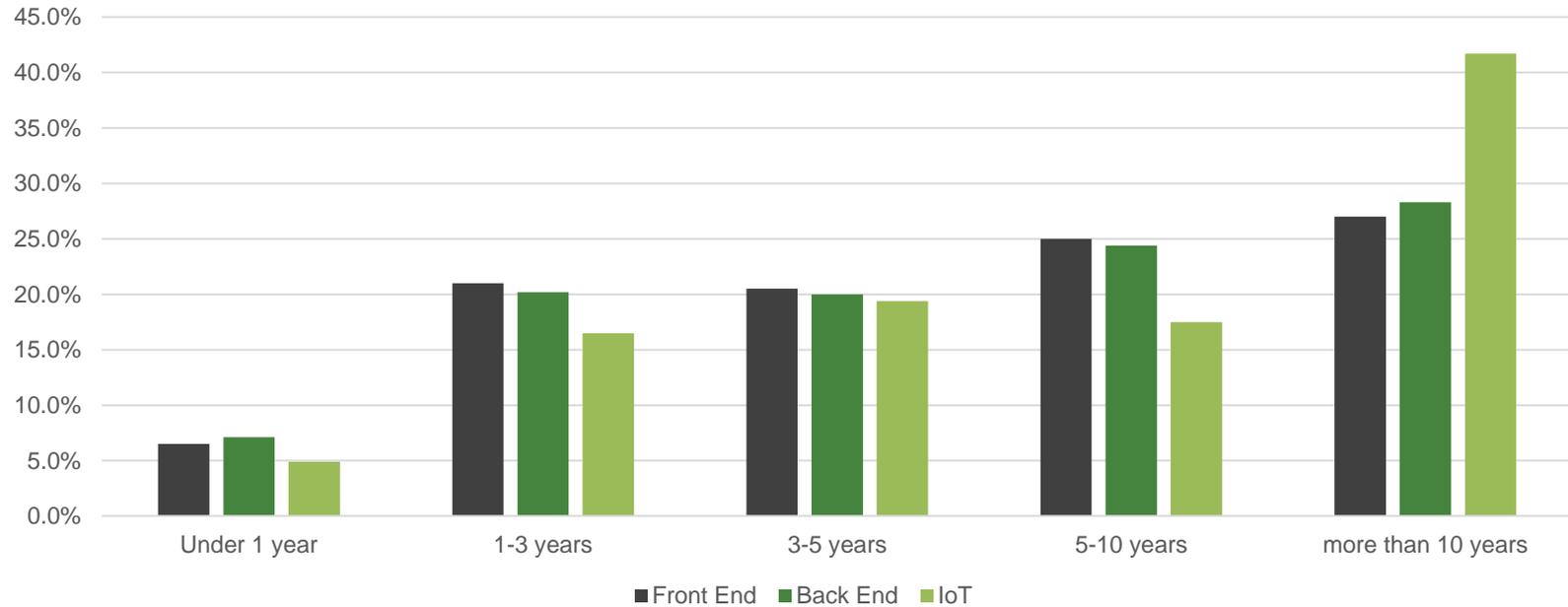


81% 3 years or less w/ Node.js

Average Years Experience by Dev Type



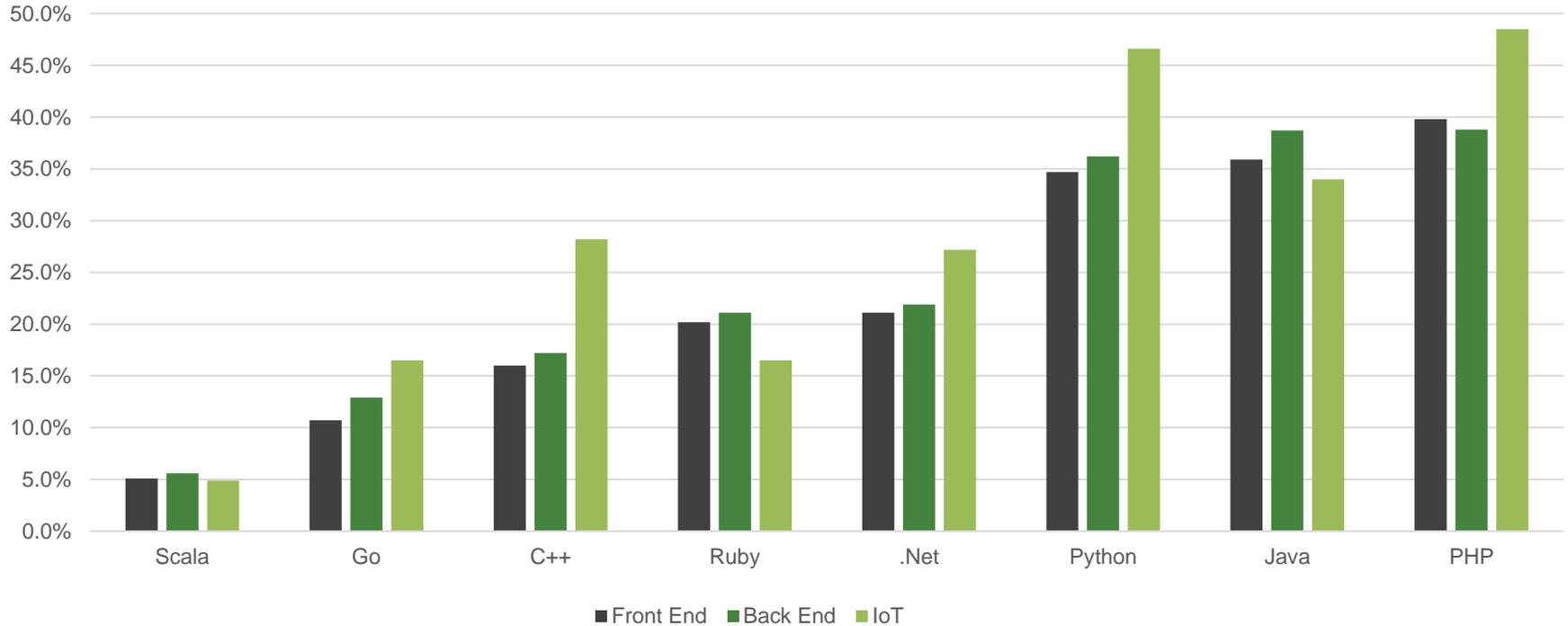
Years Professional Development Experience by Development Focus



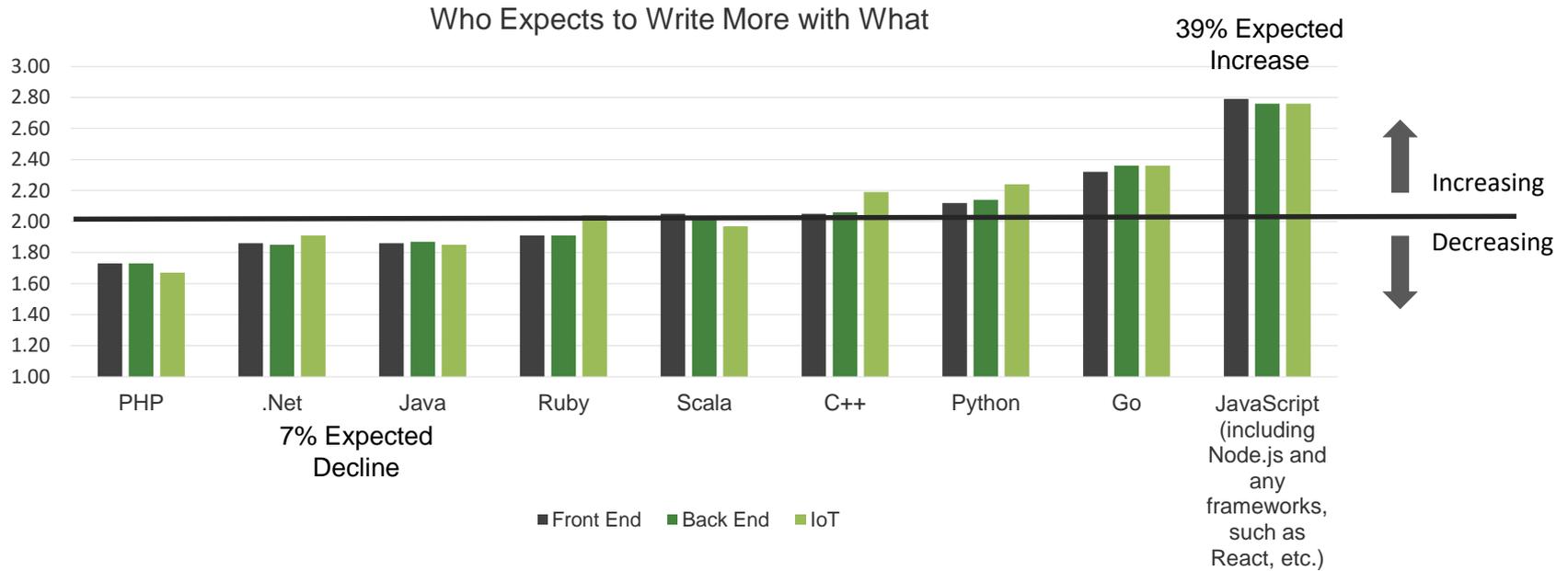
Language Use - Front End, Back End, IoT



In addition to Node.js/JavaScript, Language Popularity by Developer Type



Language Use Forecast – Front End, Back End, IoT

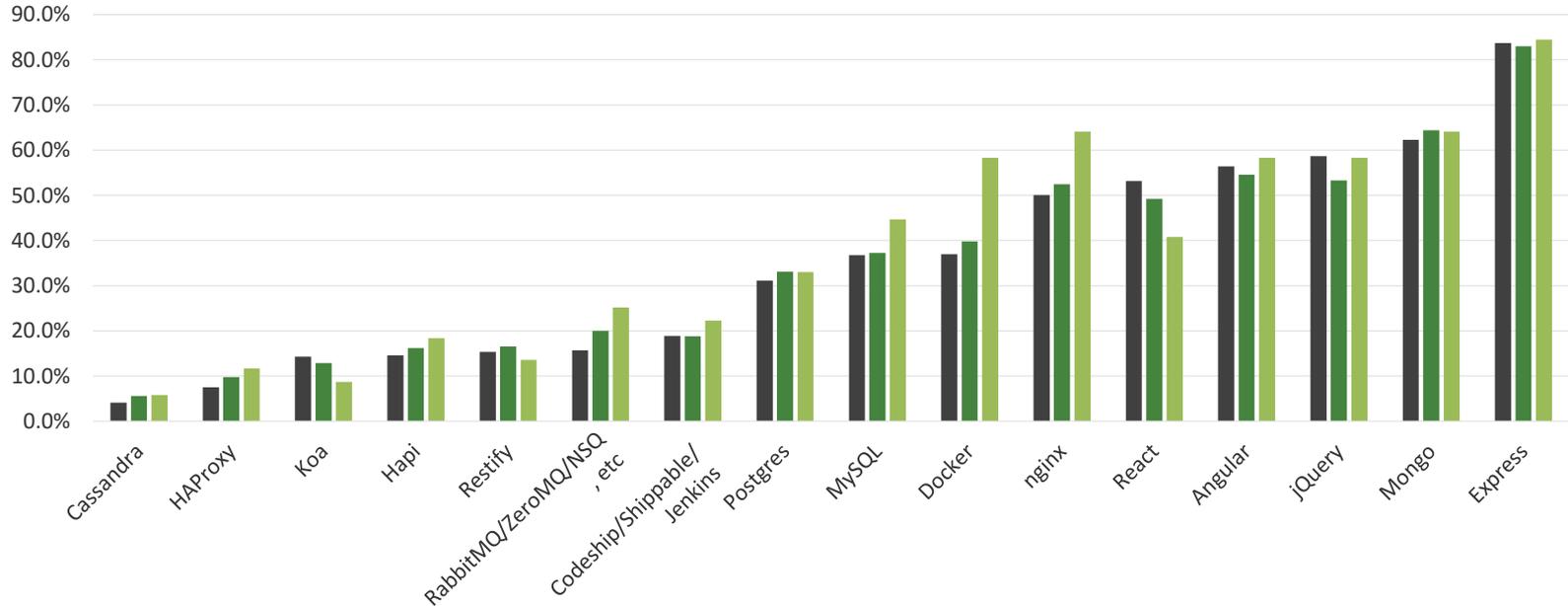


Tech Use with/in Node – Front End, Back End, IoT



What Tech Do Different Developers Use with Node.js

■ Front End ■ Back End ■ IoT

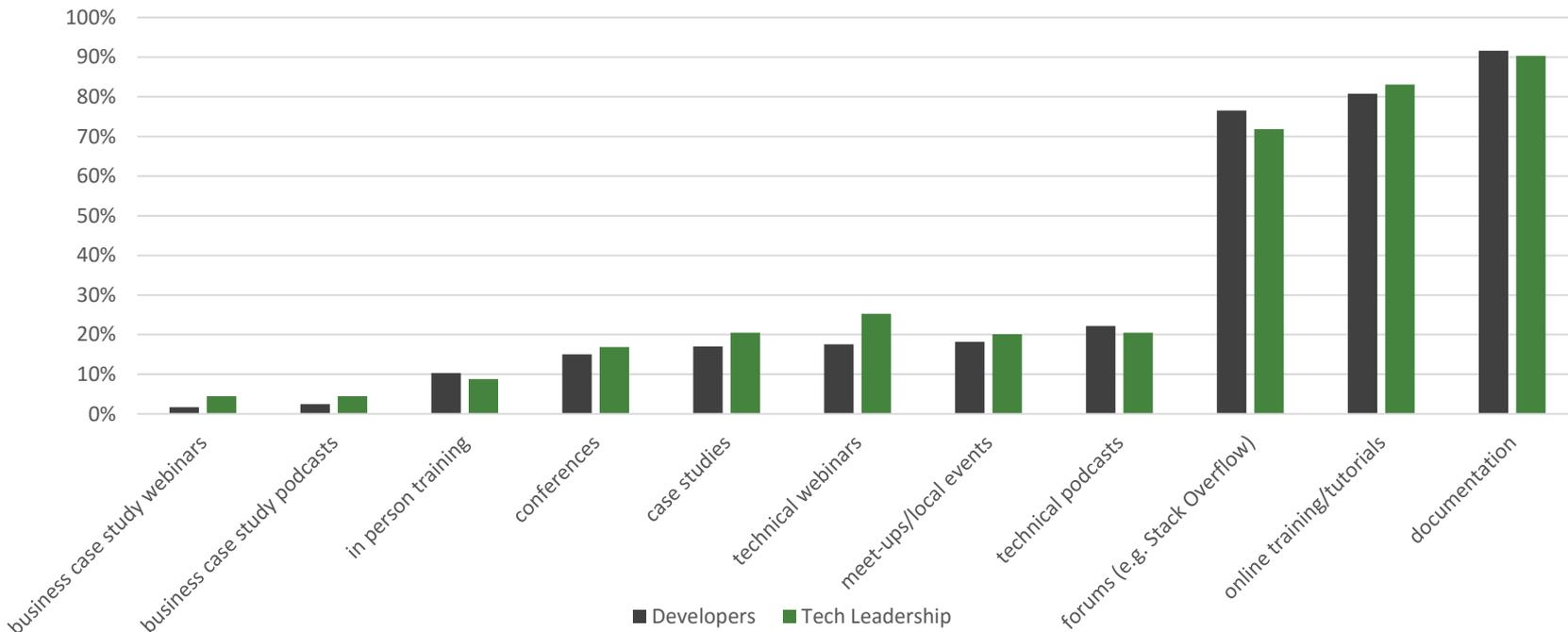


~45% of Developer Respondents use Node.js with Containers

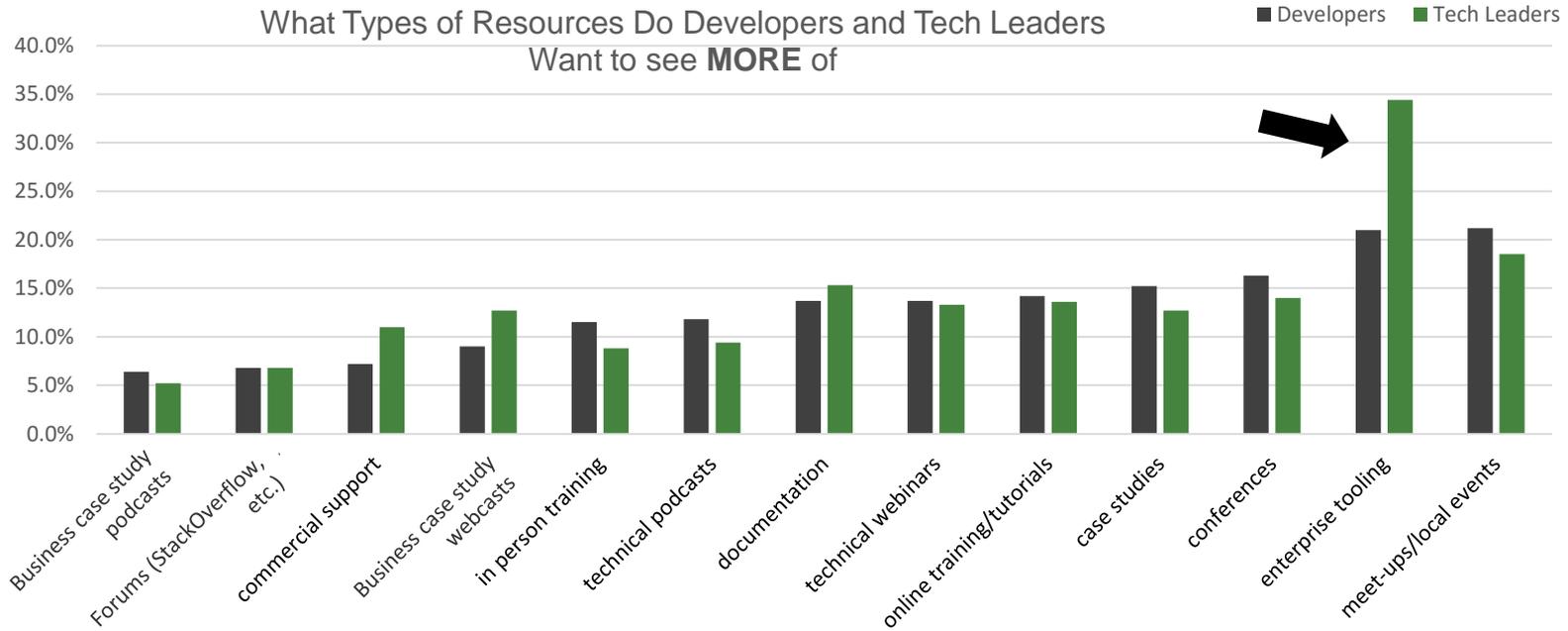
Resources Developers and Tech Leaders Rely on



Resources Developers and Tech Leaders Use



Resources Developers and Tech Leaders Want More of



Strong interest in Enterprise Tooling among Tech Leaders is an indicator of Node's growing role in the enterprise

Experience Learning Node.js



Experience Learning Node.js (10 Easy)



Survey Comment Themes

Positive

Background in other scripting languages makes adopting Node.js straightforward

Strong MongoDB stack resources

Needs Work

More resources for advanced Node.js techniques, especially for large Enterprise projects would help

More explanation of asynchronous models and handling callbacks

Resource Availability (10 Excellent)



Survey Comment Themes

Positive

Large and active community produces large volume of high-quality resources

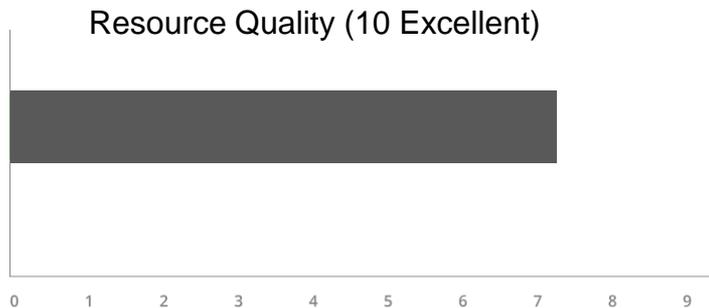
Excellent availability of introductory Node.js resources

Needs Work

More API resources would be beneficial

Greater availability of large-scale, enterprise and cloud-ready resources would be helpful

Experience Learning Node.js



Survey Comment Themes

Positive

High-quality resources

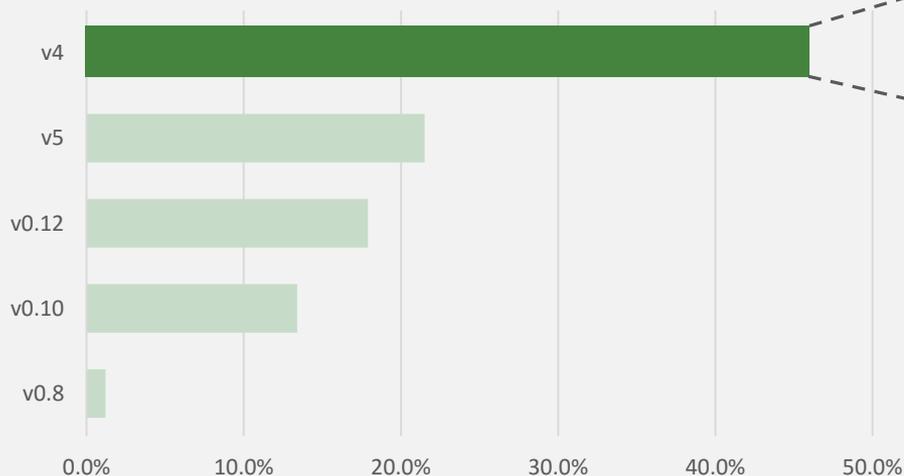
Needs Work

Rapidly evolving state of the art requires rapid resource iteration

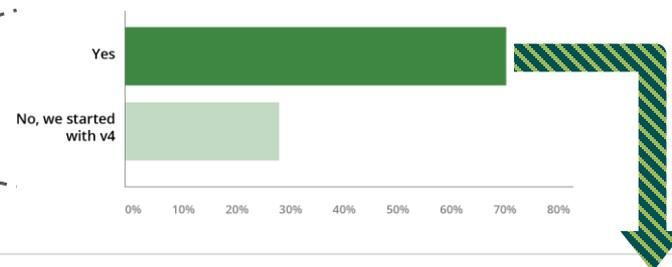
Version of Node.js in Production and Upgrade Plans/Path



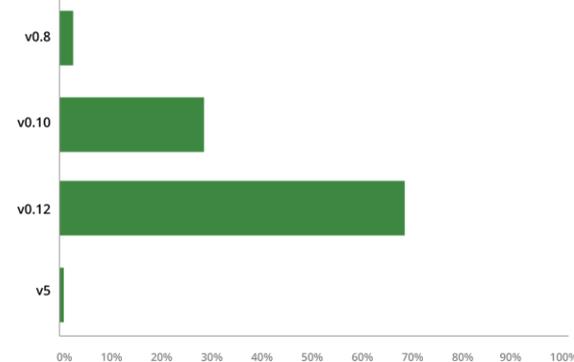
What Version Do You Run in Production?



Did You Upgrade to v4?



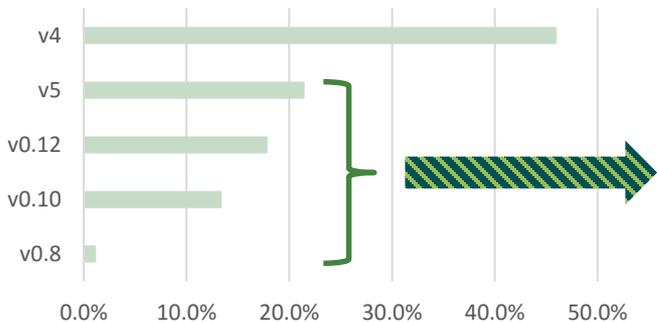
What version did you upgrade from?



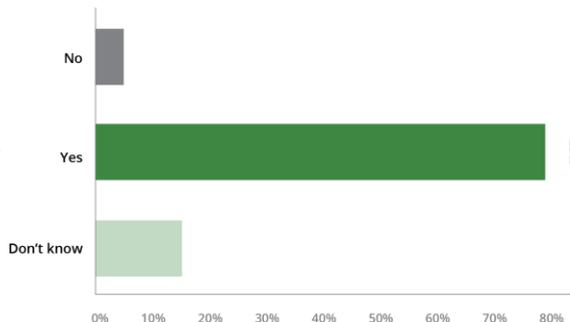
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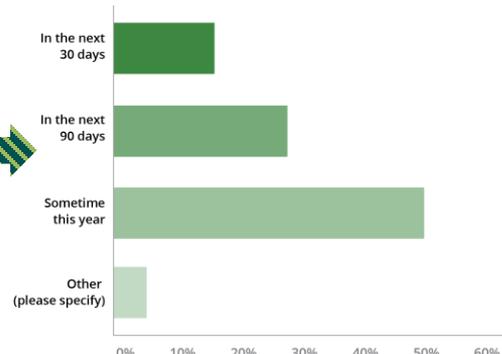
Node.js Version in Production



Plan to Upgrade to v4?



When Upgrading?



Detailed feature comparisons and matrices across versions will improve clarity

How Can The Foundation Help Clarify Versions?



Survey Comment Themes

Positive

Versions are well described

Changelog is good

Needs Work

Help/encourage frameworks to migrate to LTS promptly

Expand tutorials/guides/ matrices to assist users make the best choice for their needs and prepare for issues they may face



Thank you!

www.nodejs.org