

OpenStack Strategic Research

The OpenStack Foundation
October 4, 2018

Methodology

- **Global Quantitative Survey**

- August 24-September 1, 2018
- 501 Respondents
- Role: Operations & Architects (30%), Developers & DevOps (20%), IT Managers (25%), CIO/CTO & Line of Business Leadership (25%)
- Fielded in 10 countries (US, China, Germany, Canada, India, Singapore, Ireland, Japan, South Korea, Hong Kong) and in 5 languages (English, Chinese, German, Japanese, Korean)
- Evenly distributed across 3 regions (North America 33%, Asia 33%, Europe 33%)

- **Global Qualitative Research**

- 4 focus groups: Seattle, Beijing
 - Ops, DevOps, Sys Admins, Architects (total 31 participants)
- 4 In-depth interviews with open source influencers
 - Representatives from Baidu, Google, Microsoft, and Tencent

Key Findings

- I. OpenStack's reputation is as a powerful, flexible, and, yes, difficult-to-master technology
 - *OpenStack's brand health is solid with strong majorities giving it a positive favorability rating.*
 - *The more people know about OpenStack, the more they like it.*

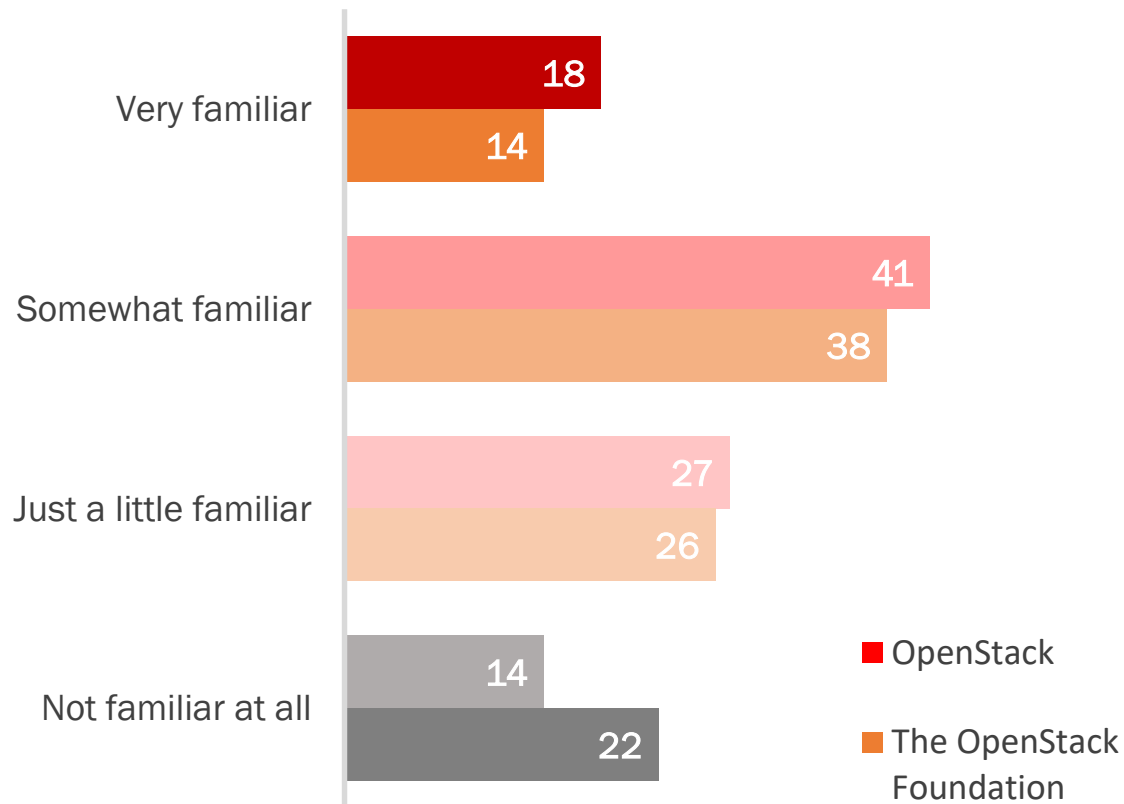
- II. The ideal for Foundations is curate projects and provide guidance to users navigating open source infrastructure.
 - *Most are focused and interested in the projects, like OpenStack, more than the activities of the Foundation.*
 - *OpenStack Foundation can become the home for open infrastructure, first by defining what open infrastructure means and what it can do for users.*
 - *Changing the Summit's name is an opening to signal more inclusivity and more projects.*

- III. Open source is our North Star.
 - *Open source technology is unlocking opportunity for users and companies.*
 - *OpenStack Foundation must articulate a vision for the future of open source.*
 - *The goal must be to help users leverage the power of open source to create custom solutions.*

I. OpenStack is a Healthy Brand

OpenStack Awareness

How familiar are you with **OPENSTACK/THE OPENSTACK FOUNDATION?**



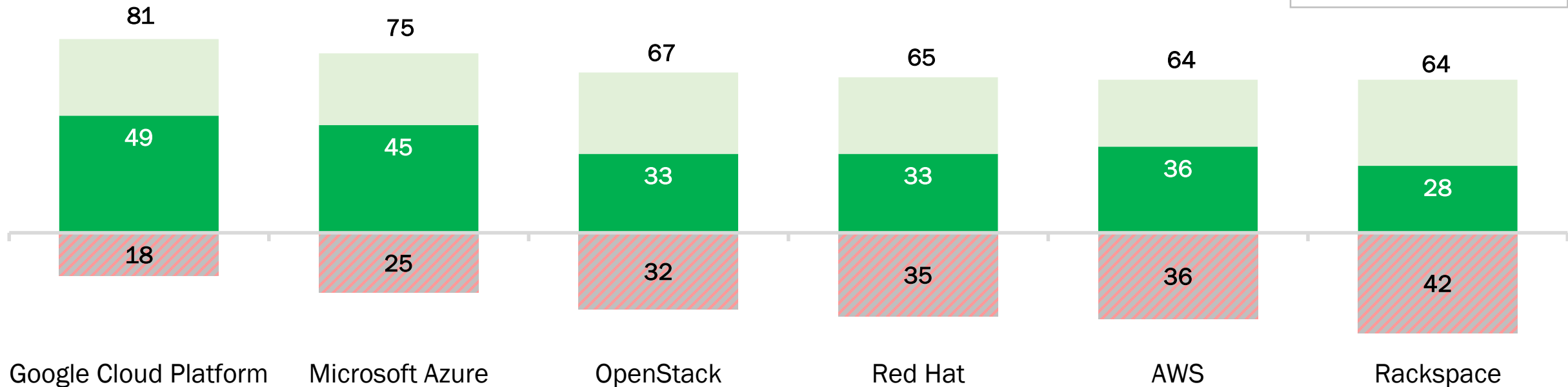
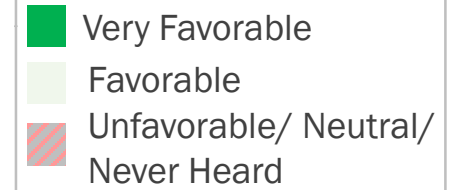
“OpenStack was the beginning of the evolution toward corporate contributions to open source, in my estimation. That was the first time I saw large companies publicly dedicating large amounts of developer work to a nascent project.” – Open Source Influencer

“(With OpenStack) You have full control. It is safer. You can customize everything. Less constraints. Less limitations. But migration is very tough.” – Ops, Beijing

- When probing deeper in qualitative research, participants understand the power and promise of OpenStack, they acknowledge it requires both resource commitment (“You have to raise or keep a technical team to keep development”) and technological prowess to master (“You better know your stuff”).

OpenStack Has Positive Favorability

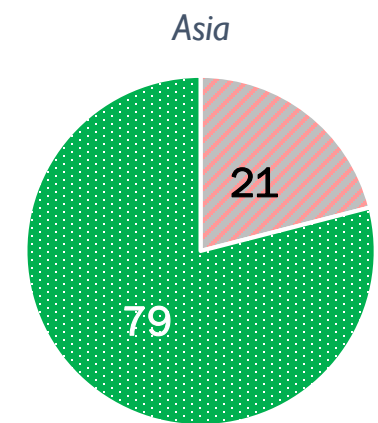
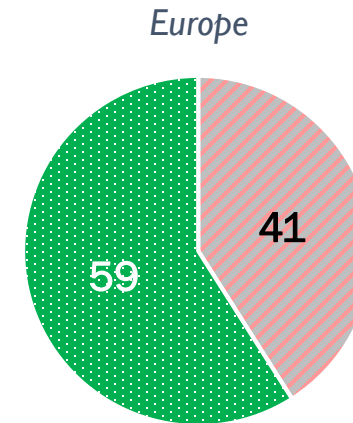
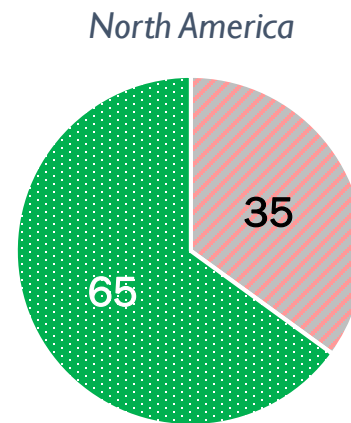
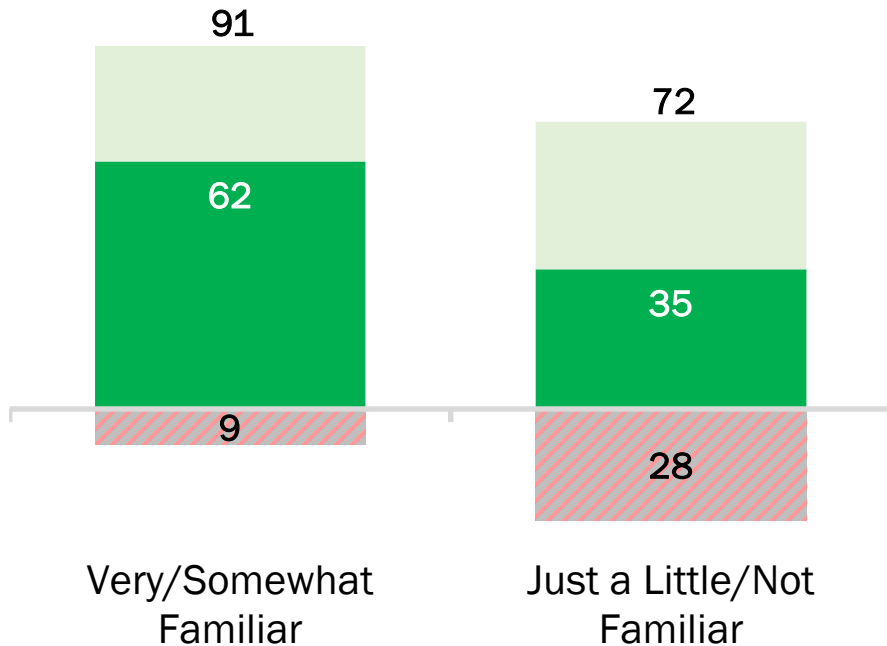
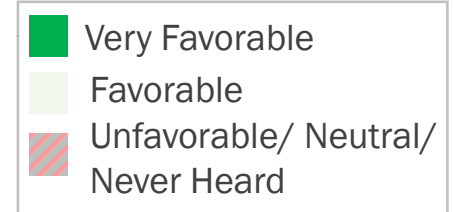
Rate your feelings toward some organizations, projects, and technologies with 10 meaning your feelings about this organization are VERY POSITIVE, 0 meaning your feelings are VERY NEGATIVE, and 5 meaning NEUTRAL.



- OpenStack's image is keeping pace as an important and well-liked player in the industry.
- It is behind some of the big tech players, but exactly in line with similar technologies/organizations
- OpenStack outpaces Kubernetes and several Chinese companies tested, including Alicloud, Baidu, Huawei, and Tencent, all of whom have higher neutral ratings, suggesting respondents do not know enough to have a strong opinion.

The More You Know OpenStack, the More You Like OpenStack

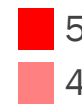
Rate your feelings toward some organizations, projects, and technologies with 10 meaning your feelings about this organization are VERY POSITIVE, 0 meaning your feelings are VERY NEGATIVE, and 5 meaning NEUTRAL.



- China is particularly favorable to OpenStack with 82% favorability and the US is also disproportionately favorable with 69% favorability.
- CIO/CTOs like OpenStack more with 75% favorability—while other roles are on average with IT Managers (68%) followed by Dev/DevOps/Ops (63%).
- Enterprise likes OpenStack more than non-Enterprise companies at 71% favorability to 65%.

Community, Heavyweights Top List of Proof Points

Now you will see some statements about OPENSTACK. For each one, please indicate how compelling a reason it is for your company to use OPENSTACK from 0 to 5 where 0 means not at all compelling and 5 means very compelling.



With over 100 active user groups supported by over 92,500 members representing 187 countries, the OpenStack community is one of the largest, most active open source communities in the world.



Increased speed, more flexibility, and lower costs are among the top reasons hundreds of global businesses trust OpenStack to run their private cloud.



OpenStack providers collectively represent the broadest public cloud footprint, with more than 60 availability zones across more than 20 countries.



OpenStack is supported by the OpenStack Foundation and some of the leading names in business technology, including AT&T, Intel, Rackspace, NASA, BMW, and Verizon.



AT&T, Tencent, BMW, China Telecom, JP Morgan Chase, and CERN run their public, private, and hybrid clouds on OpenStack.



OpenStack is designed to easily integrate with and support the latest tools and technology, including containers and CI/CD tooling.

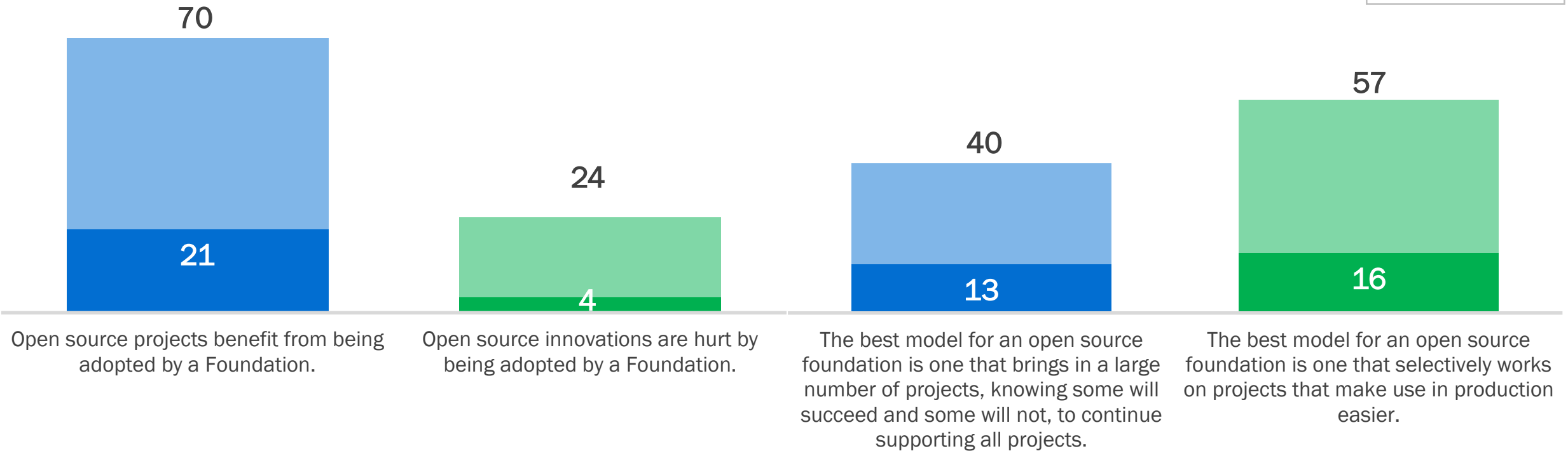


- Less compelling statements about OpenStack were about the foundation myth, and narrow case studies.

II. Expectations of an Ideal Foundation

Foundations are Good for Open Source

Which statement comes closer to your opinion, even if it's not exactly right?



- Three out of four IDI participants also agreed that the best model for open source is one that selectively works on projects. These open source influencers agreed Foundations that support projects with a common thread best serve users, who in time develop trust in their preferred Foundation and come to expect consistency from its projects.

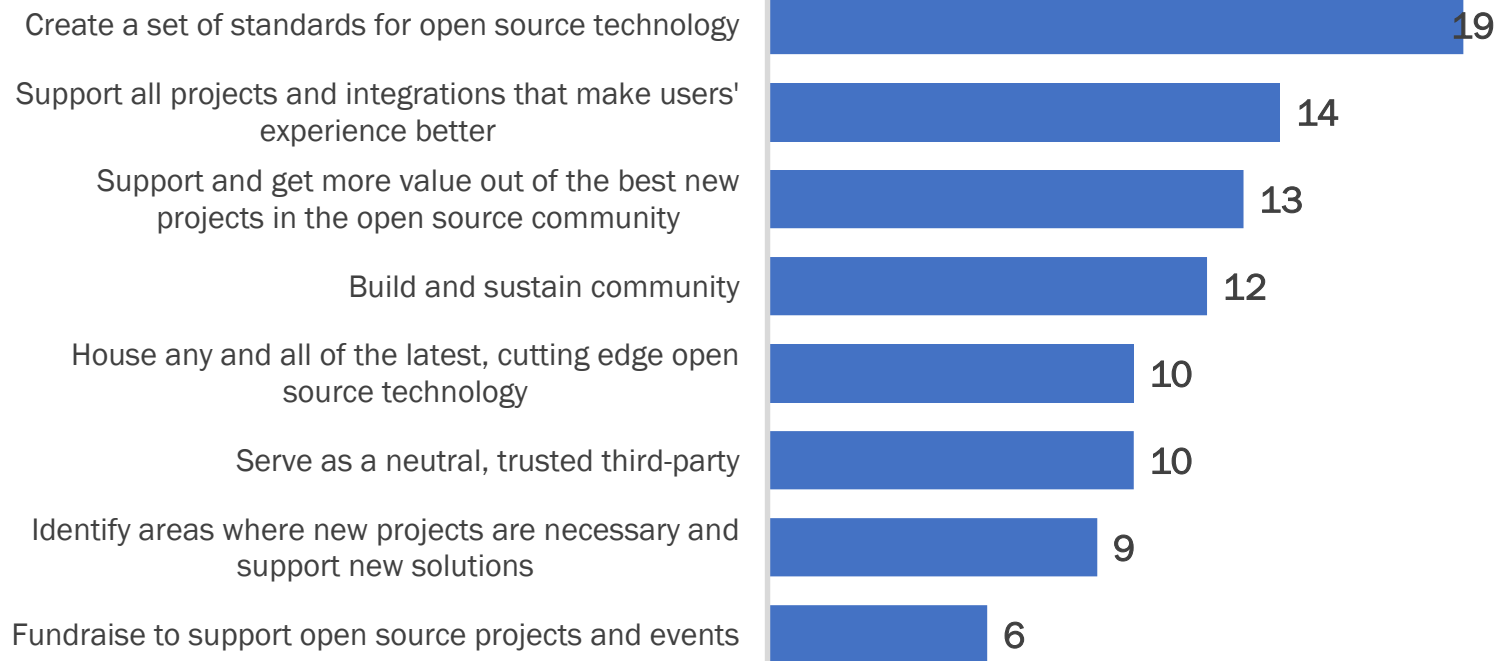
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“I don't think we want just a single foundation, foundations ought to be focused on a particular thing.” – Open Source Influencer

Ideal Characteristics of a Foundation

- Muddled sense of a Foundation's primary role suggests no single role to perform and it's up to the Foundation to articulate its purpose and vision.
- Qualitatively we heard the following ideal characteristics:
 - *Narrow the overwhelming number of choices and lend credibility to the caliber of projects.*
 - *Support a cohesive project portfolio.*
 - *Create standards to facilitate frictionless integrations.*
 - *Provide projects the support and visibility they need to thrive.*

What is the primary role of a good open source foundation?



“That is one of the reasons the Foundations are so important, everyone has limited energy and time, we have to prioritize jobs.” – Ops, Beijing

All OSF Projects Have Strong Appeal with OpenStack Leading the Way

Now you will see descriptions of the current projects supported by the OpenStack Foundation. Would you say this is something you would consider evaluating and adopting?

Would definitely consider
Would probably consider

OpenStack is an open source infrastructure as a service platform that allows users to deploy bare metal, virtual machines and container resources—all on a single network.



Zuul drives continuous integration, delivery, and deployment systems, allowing users to automate large parts of their software development cycles.



Starling X is open source software that provides cloud infrastructure for the most demanding applications in edge, industrial IOT, and telecom use cases.



Kata Containers combines the security of lightweight VMs and speed of container infrastructure, can be run on most infrastructures, and works with both Docker and Kubernetes.



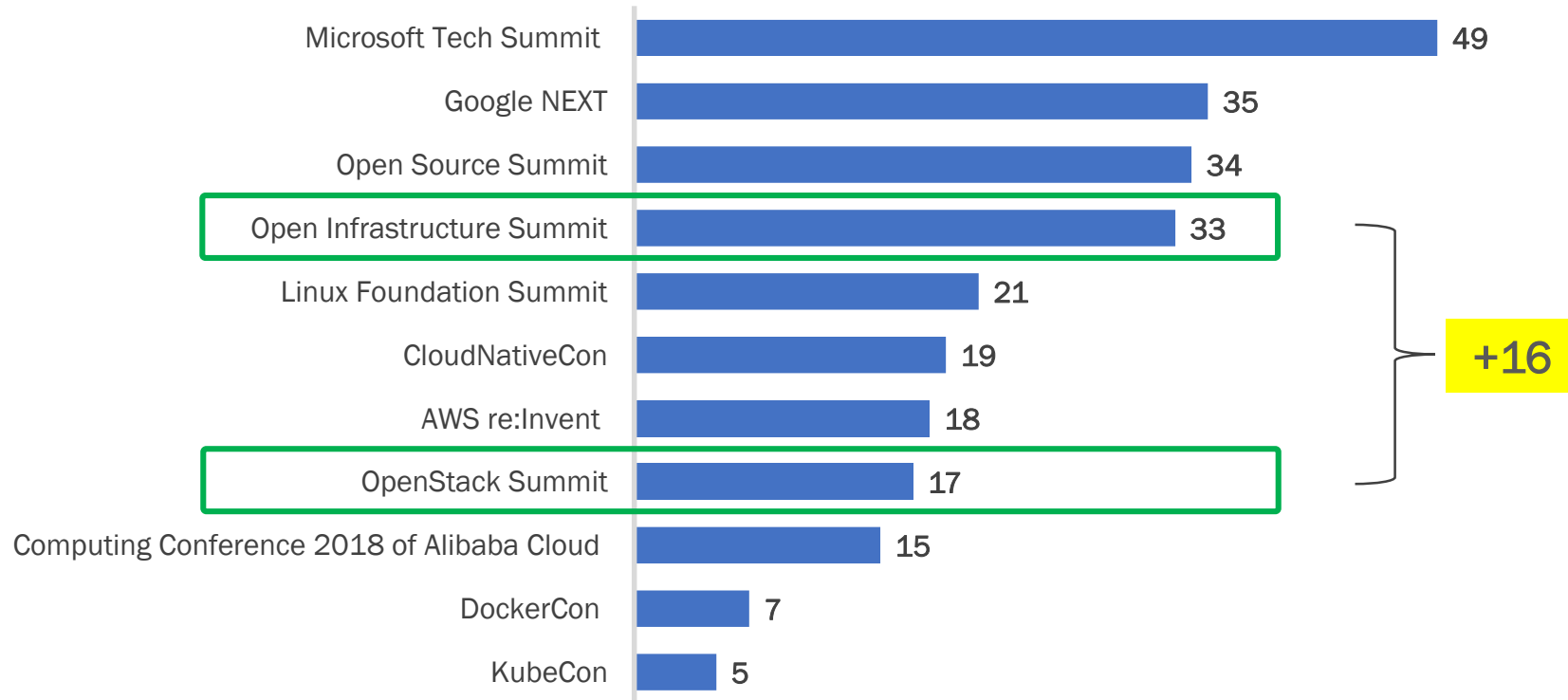
Airship operates cloud infrastructure declaratively, where all updates are managed via a single unified workflow, and where absolutely everything is a container from the bare metal up.



- All of the OpenStack Foundation projects have majorities who would consider evaluating or adopting—a good reminder that the power of the Foundation is in its projects.
- The OpenStack Project is strongest, suggesting the Foundation can continue to amplify its foundational project even as new projects enter the fold.

The Name for Summit Could Be a Good Opportunity for Signaling

Which of the following events would be appealing to you? Some of these do not currently exist, but please select all that you find appealing.



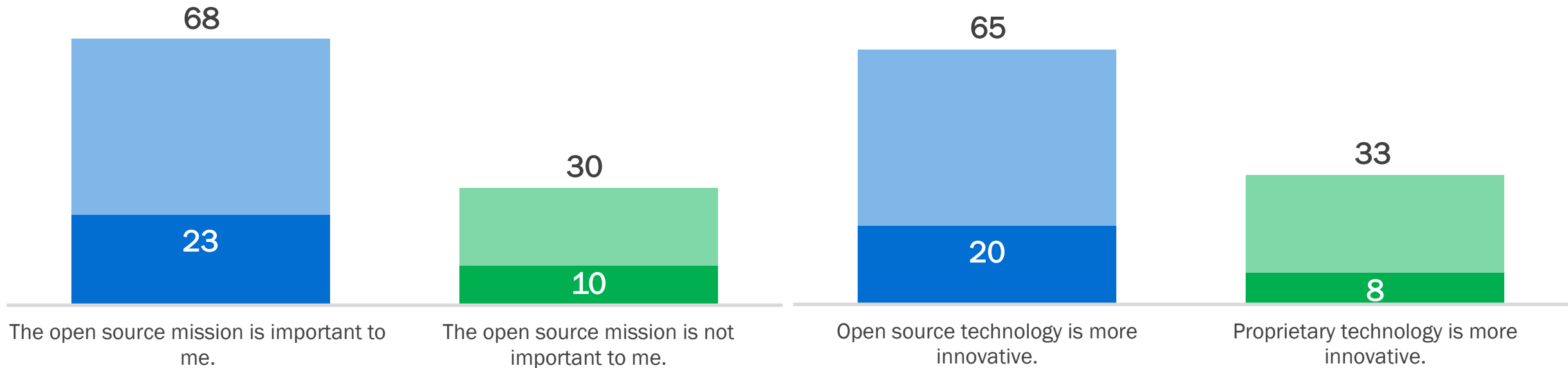
“I think you’re in the very early days of having to define (open infrastructure) and explain why and what that means. Doing that will have to be throughout the messaging of the Summits.”
– Open Source Influencer

- The Open Infrastructure Summit is nearly 2X as appealing as OpenStack Summit
 - 56%(!) of Chinese respondents would be interested in Open Infrastructure Summit to just 17% for OpenStack Summit.

III. The Power of Open Source

Open Source is Our North Star

Which statement comes closer to your opinion, even if it's not exactly right?

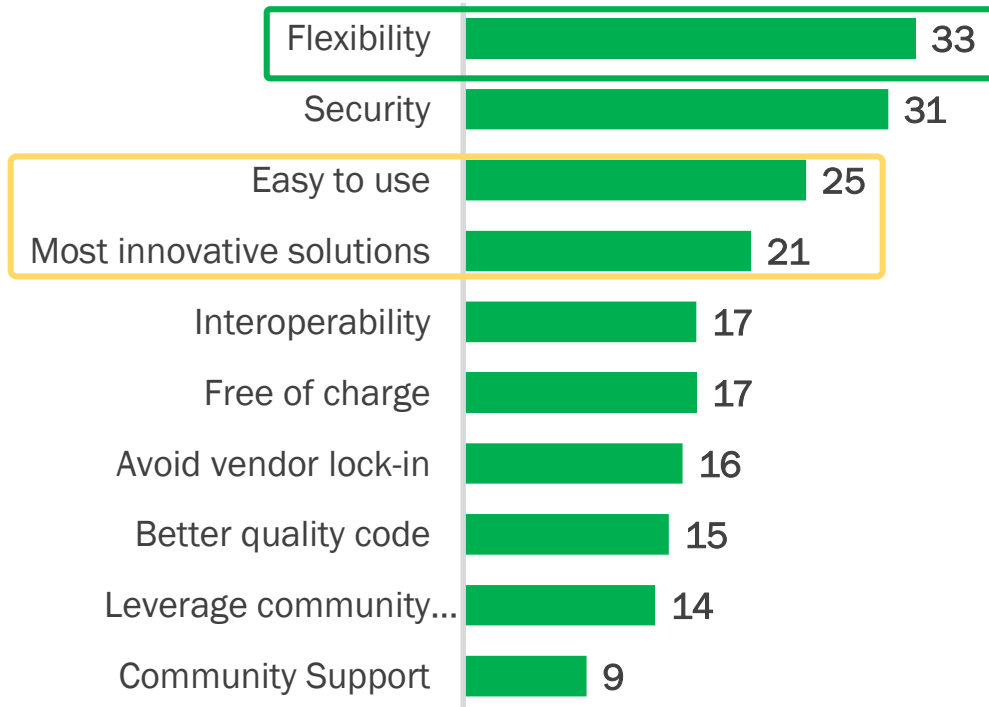


- Across regions and roles, participants stand behind the open source mission.

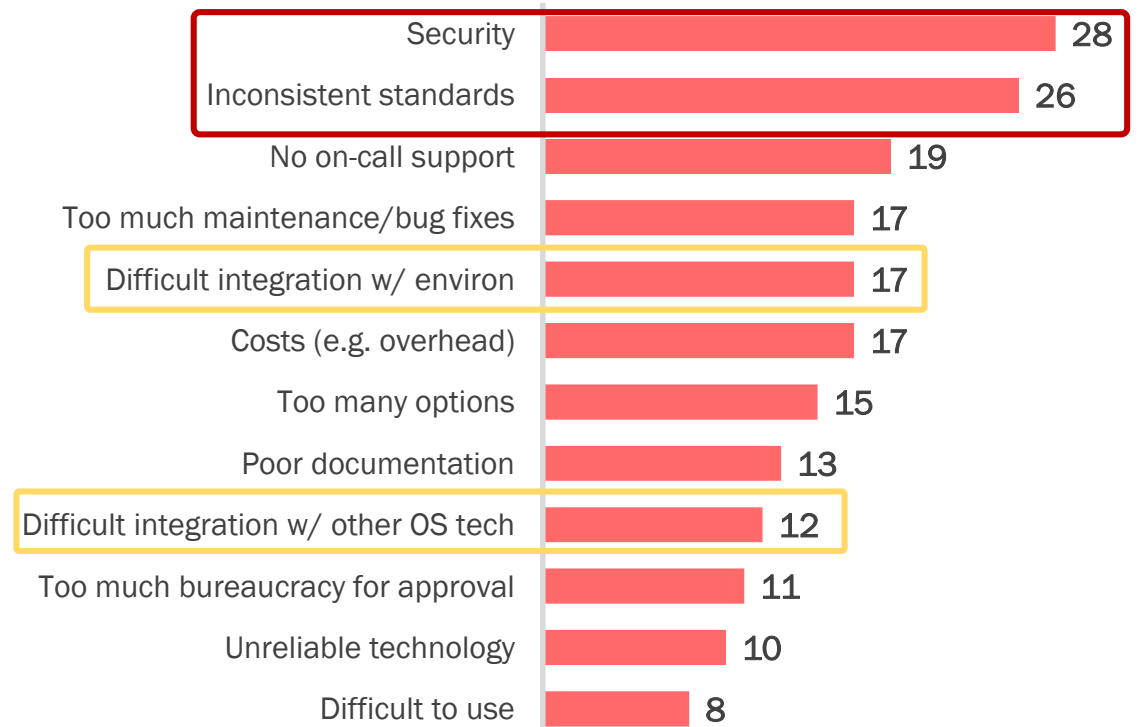
“When you look at the open source community, the options are out there. There's like 25 different ways maybe for you to do one thing. And there's more and more released every day.” – Ops, Seattle

Open Source Benefits and Challenges

Which are the TWO top benefits of using open source technology in production?



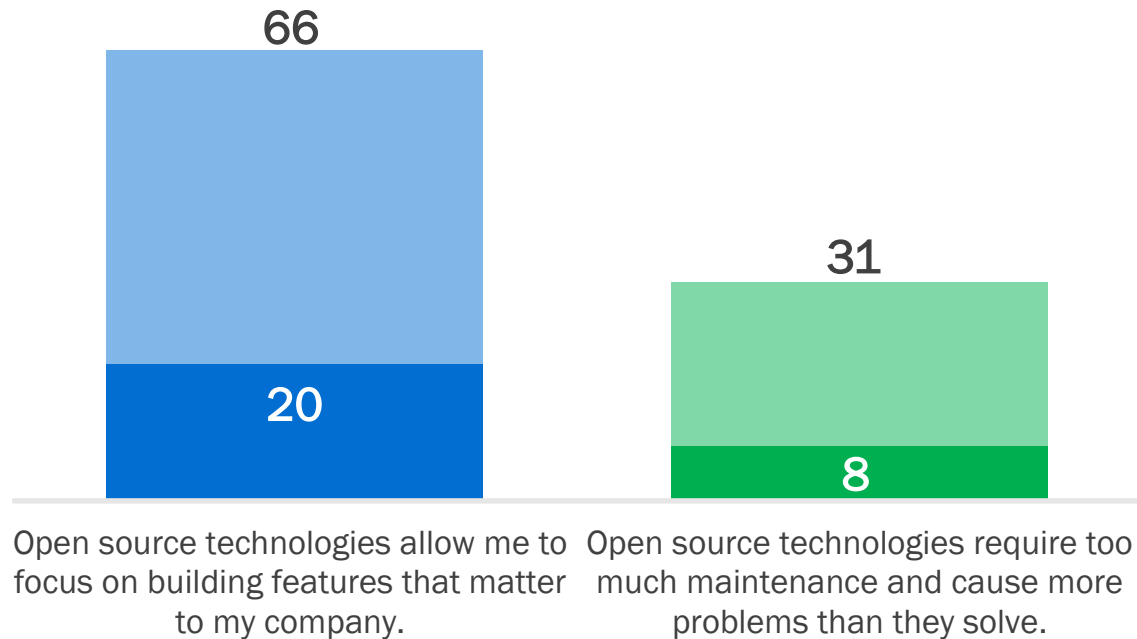
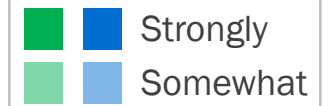
Which are the TWO most significant drawbacks to using open source tech in production?



- Benefits of open source are not only about cost or lock-in, especially when framed in technical terms.
- Rather, open source offers users the freedom to easily access and customize the latest innovations to fit their company's needs.
- 61% say proprietary technology is more secure, vs. 37% who say the same of open source technology.
- Combined, integration challenges account for 29% of reported drawbacks—making integration challenges the greatest drawback to using open source.

Still, Open Source Empowers Users to Unlock Value for Their Companies

Which statement comes closer to your opinion, even if it's not exactly right?

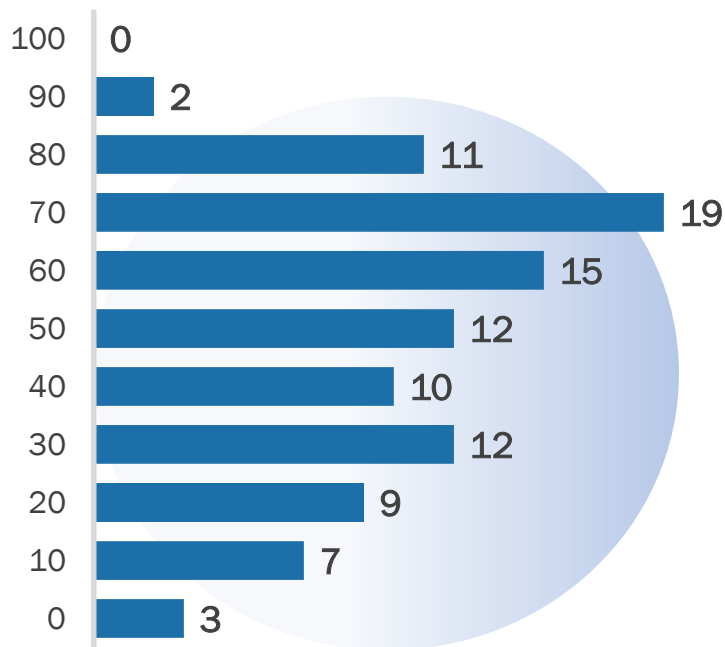


“It's definitely a lot more fun to operate in an open source environment where you can make dramatic changes and somebody's used to something doing X,Y, and Z and now you can make it do a whole rainbow of things starting from the same base.” – Ops, Seattle

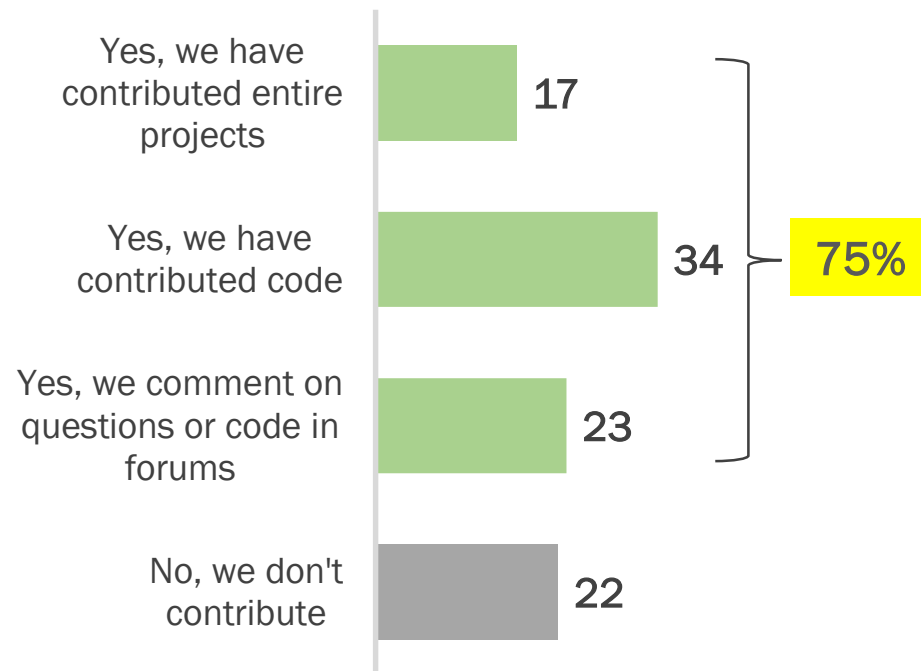
- Open source is increasing productivity and adding value.
- 57% say their open source solutions easily integrate with their current environment, but 3/4s of those individuals are soft in their opinion, suggesting a need for better solutions.

Companies are Leveraging Open Source and Contributing Back to the Community

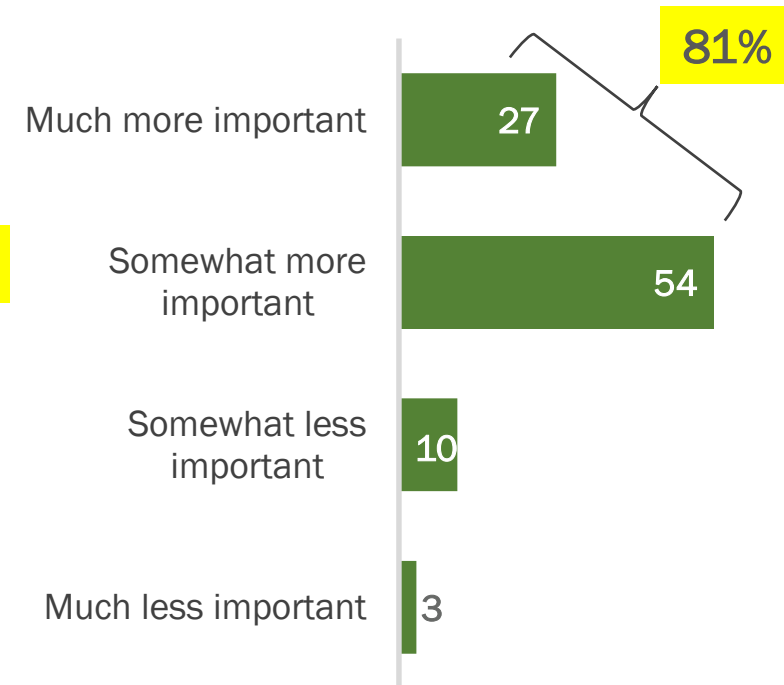
Approximately what percentage of your company's applications are developed using open source technology?



Does your **COMPANY** contribute to open source projects?



In the next few years, do you think open source technology will become more or less important to your company?

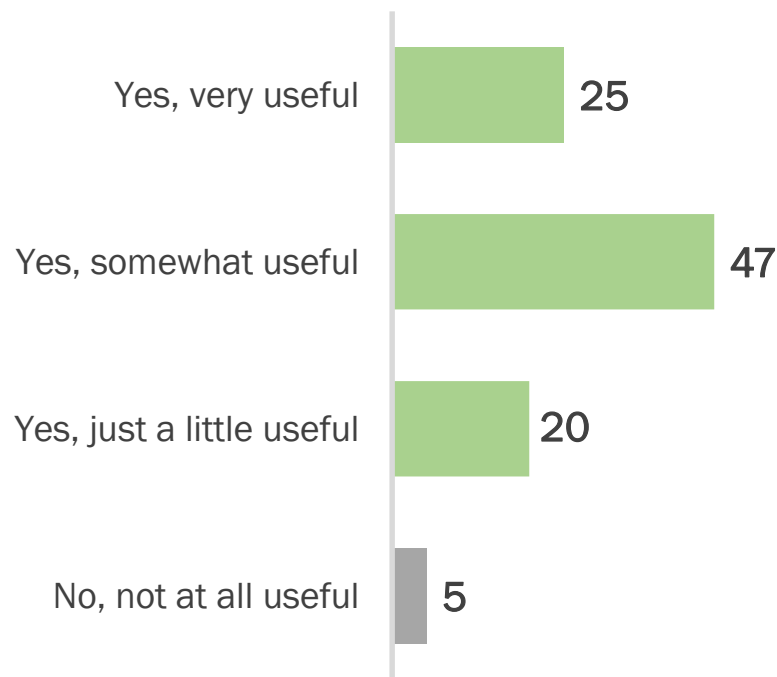


- Approximately half of participants (48%) report their company develops over 50% of its applications using open source technologies.
- Three in four participants work for companies who contribute to open source, more than the 69% of participants who have personally contributed.
- Chinese participants report open source is of even greater import to companies today than the overall market—37% say open source technology is Very important and another 55% say open source is somewhat important.

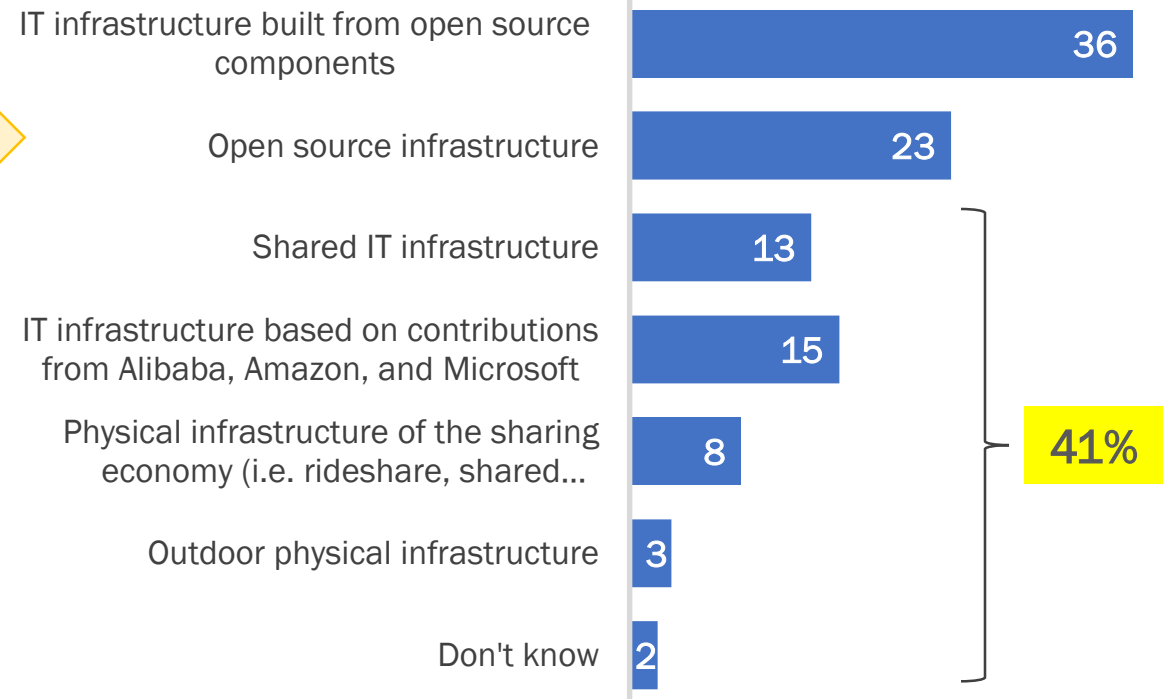
OSF's Strategic Openings to Maximize Position

“Open Infrastructure” Not Well Defined, But Seen as Useful

For the purposes of this survey, we will use the following definition of open infrastructure: “Open infrastructure is the catchall phrase for open source infrastructure—IT infrastructure built from open source components.” Based on this definition, is open infrastructure useful to your workflow?



Based on what you know, which of the following phrases best describes open infrastructure? (Yes, very useful)

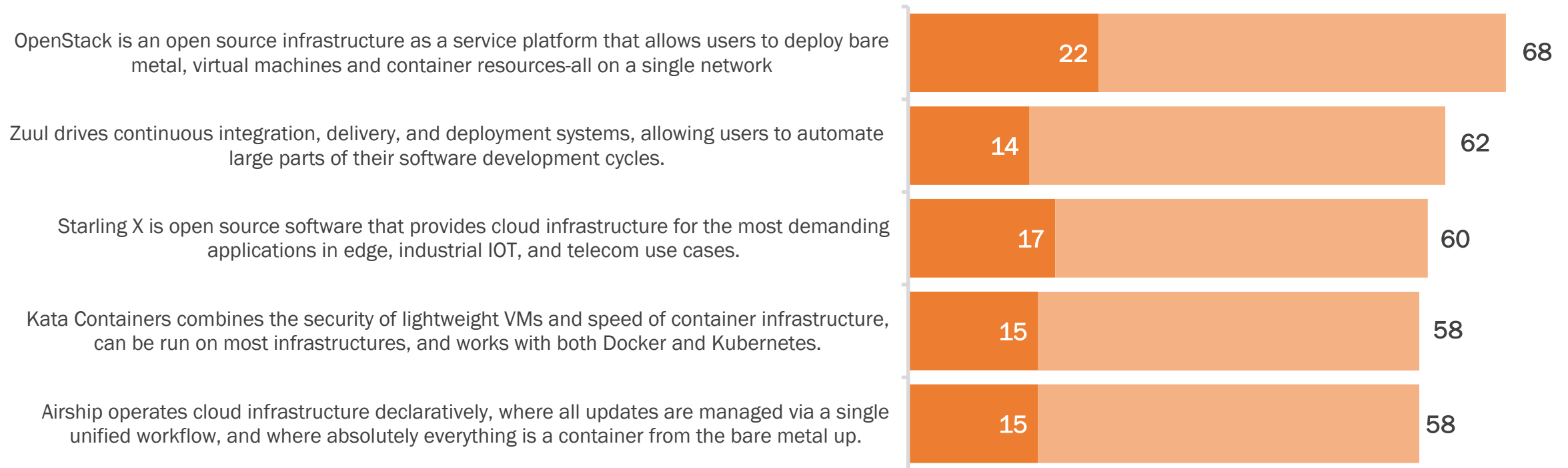


- While most participants are only somewhat familiar with the term open infrastructure (46%), a majority is able to define the term as open source infrastructure (56%).

New Projects Can Attract New Users

Now you will see descriptions of the current projects supported by the OpenStack Foundation. Would you say this is something you would consider evaluating and adopting?

Would definitely consider
Would probably consider

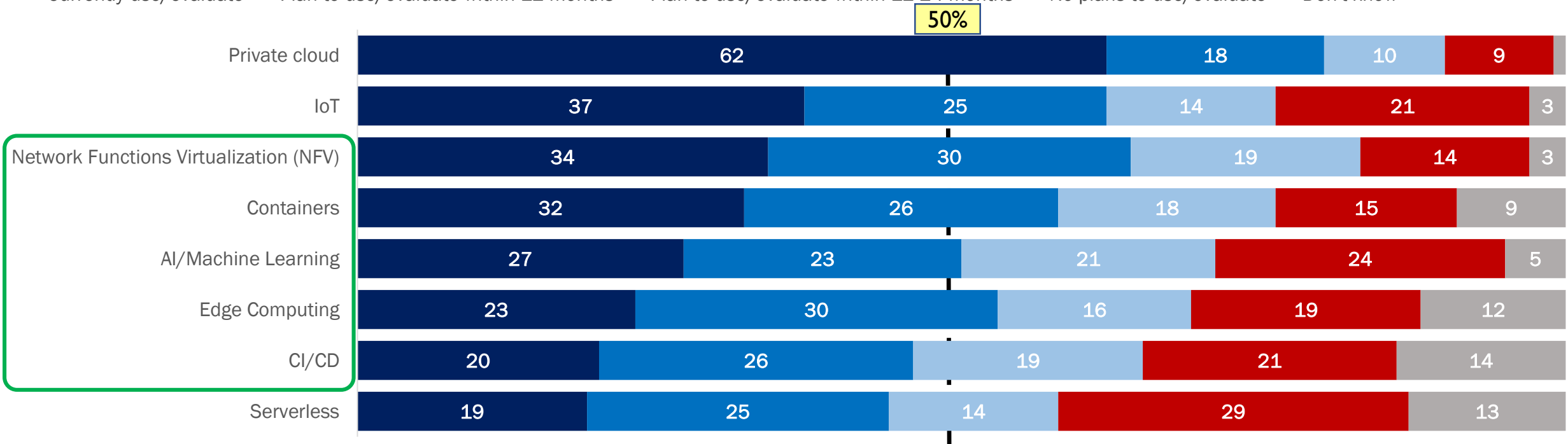


- Of those who would definitely consider Zuul, Starling X, Kata Containers, and Airship, consistently one-in-two participants would also consider adopting OpenStack—meaning one-in-two would not.
- Highlighting additional open infrastructure projects in the context of advancing open source offers proof points for why the Summit needs a new name.

SFAs on the Near Horizon

Now you are going to see some questions about different technologies and trends in the IT industry. For each of the following technologies, tools, and processes please indicate if this is something your company is currently using/evaluating, plans to use/evaluate within the next 12 months, plans to use/evaluate between 12-24 months, or has no plans to use/evaluate.

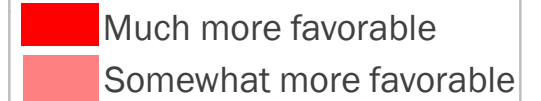
■ Currently use/evaluate
 ■ Plan to use/evaluate within 12 months
 ■ Plan to use/evaluate within 12-24 months
 ■ No plans to use/evaluate
 ■ Don't know



- For almost every SFA, over half of teams are either currently using/evaluating or plan to use/evaluate each technology within the next 12 months.
- CI/CD is the exception, with 46% of teams using/planning to use within 12 months.

Articulating a Clear Vision Around Open Source, Open Infrastructure Solutions

Now you will see some different statements from THE OPENSTACK FOUNDATION about its mission. For each one, please indicate how the statement makes you feel about THE OPENSTACK FOUNDATION.



ADVANCE OPEN SOURCE

The OpenStack Foundation works to ensure that IT infrastructure is increasingly open source, built by community, following the use cases to where they live—be that in a single cloud, multiple clouds, the enterprise data center, or somewhere in between.



CURATED PROJECTS

The OpenStack Foundation aims to be the home for open infrastructure, where people who build open source infrastructure work together to create real solutions for any modern stack, so open source users can find curated projects they can trust.



FILL GAPS

The OpenStack Foundation is focused on advancing infrastructure solutions that fill in the gaps in open source infrastructure. From container architecture to edge computing, CI/CD to data center infrastructure, the OpenStack Foundation is adopting good open source projects in production to create a better user experience.



Review of Findings

- I. OpenStack's reputation is as a powerful, flexible, and, yes, difficult-to-master technology
- II. The ideal for Foundations is curate projects and provide guidance to users navigating open source infrastructure.
- III. Open source is our North Star.
- IV. Strategic Openings for OpenStack Foundation
 - *Starting with the Summit broadening OSF's scope to be inclusive new project around open infrastructure can be appealing to the market.*
 - *Articulate an aspirational vision for the future of open source and open infrastructure*
 - *Elevate new projects to welcome new communities into the fold*