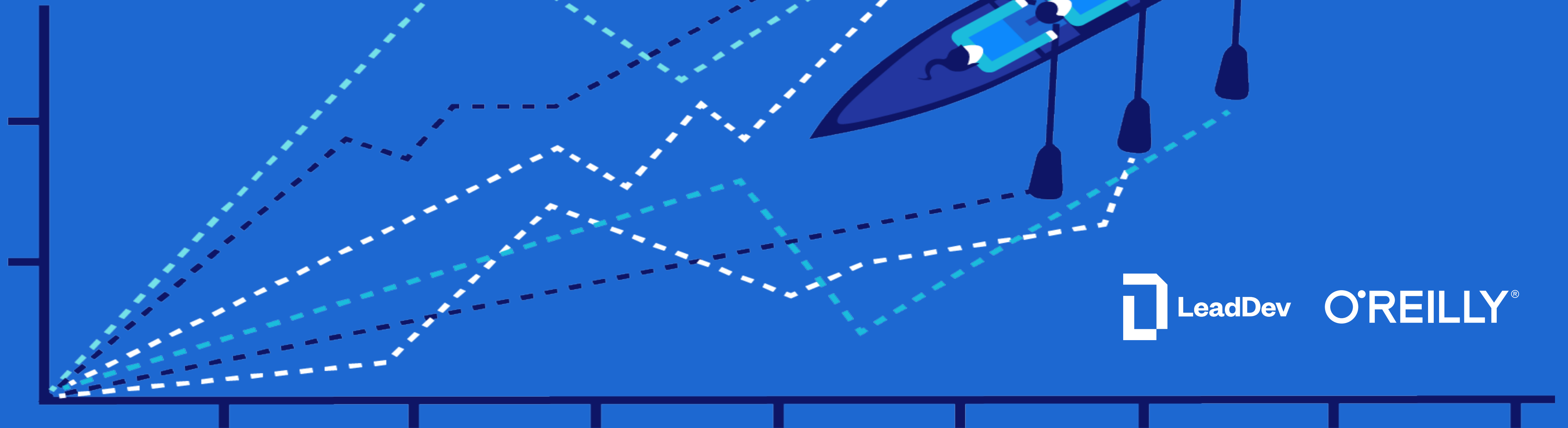
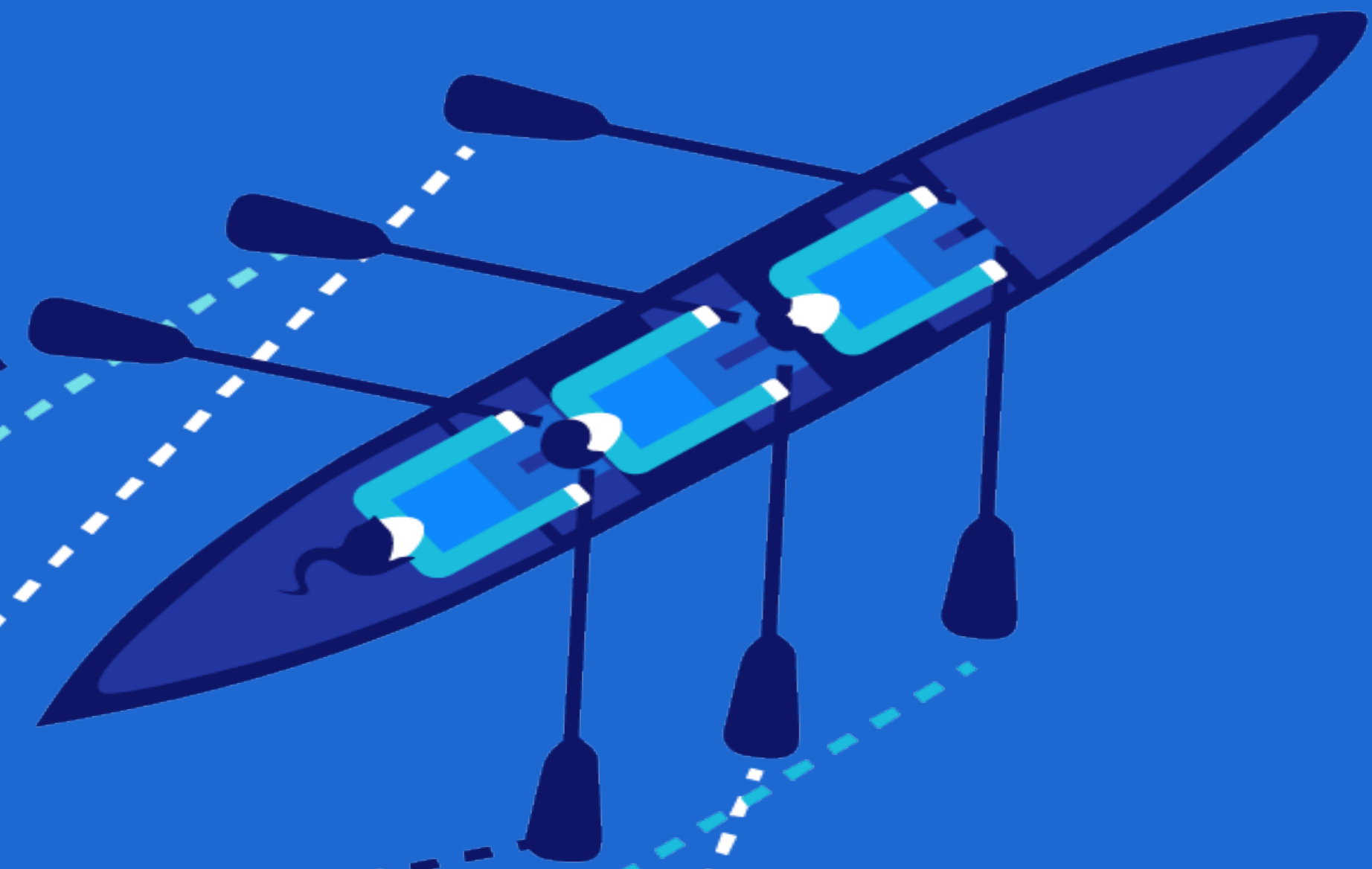


THE LEADDEV

Engineering team performance report 2024



LeadDev

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Foreword

It's been one of the hottest-debated topics in tech circles over the past few years: can you effectively measure and optimize software engineering team performance?

While DORA and SPACE frameworks are gaining traction, there is still no single way to measure developer team performance. As such, engineering leaders are left bearing the cognitive load of quantifying their team's output against wider company goals, with no one true approach.

Last year's *LeadDev Engineering Team Performance report* aimed to clarify how leaders go about understanding team performance. Now, one year on, can we start to define best practices for engineering managers? Which measurement methods are rising and which are falling? Is your message getting through? And how can you boost team performance when times are tighter than before?

In October, we surveyed nearly 1,000 engineering leaders to find out how organizations measure their team performance and their biggest challenges. We hope this helps you identify where you are in your team performance journey, and perhaps spark some ideas on how to drive meaningful improvements.

Thank you for reading.
Now go build epic teams!

Scott Carey

Editor in Chief, LeadDev



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Key takeaways

1

Cycle time was ranked as the most useful engineering productivity metric for the second year running

30%

Are using their **own dashboards** to measure team performance

78%

Want to **plug technical knowledge gaps** in their teams through upskilling

70%

Actively avoid **measuring lines of code**

Awareness and satisfaction with the

DORA & SPACE
frameworks is growing

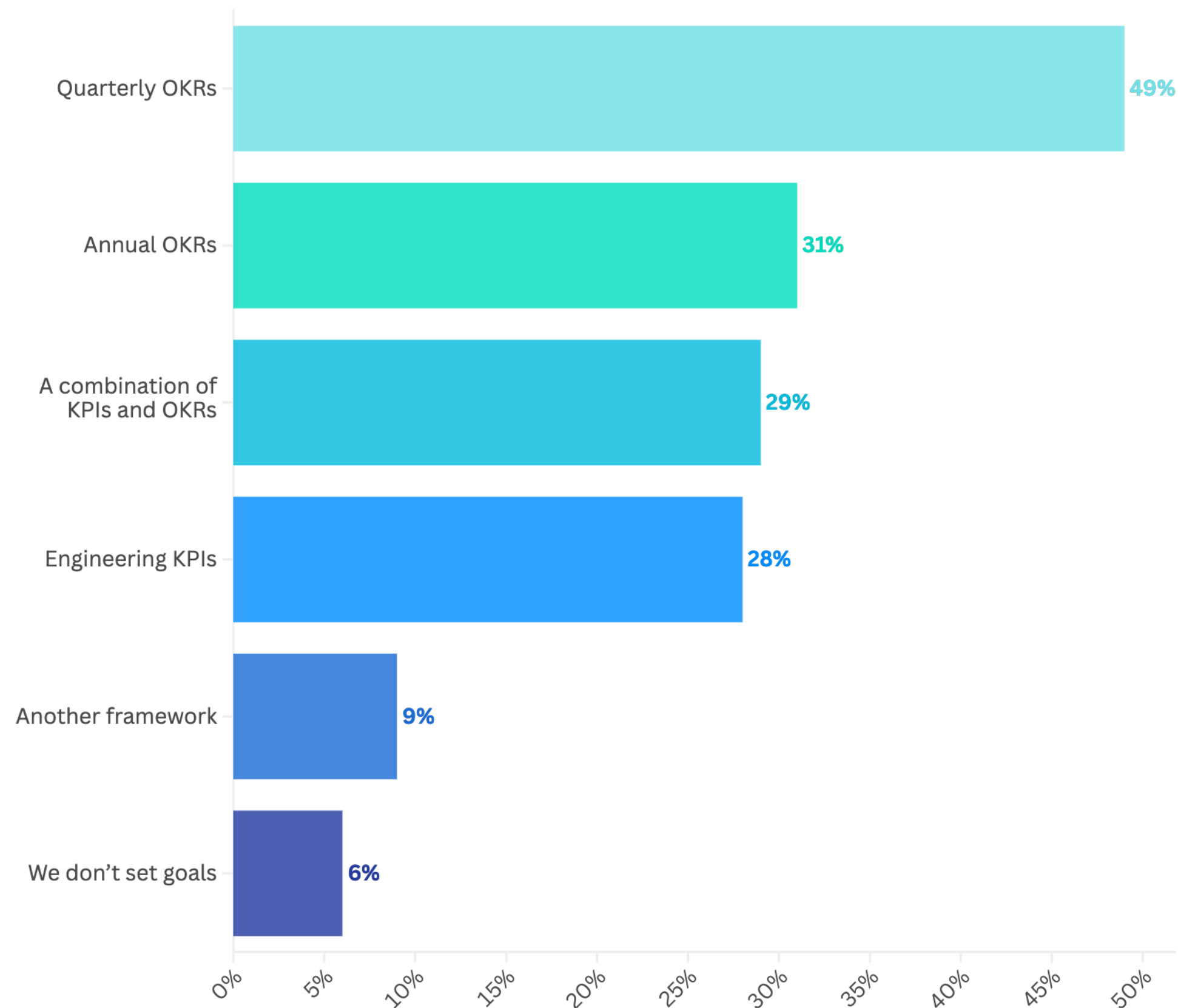


SECTION 1:

Goal setting

Goals

What's your process for setting goals with your team? ↓

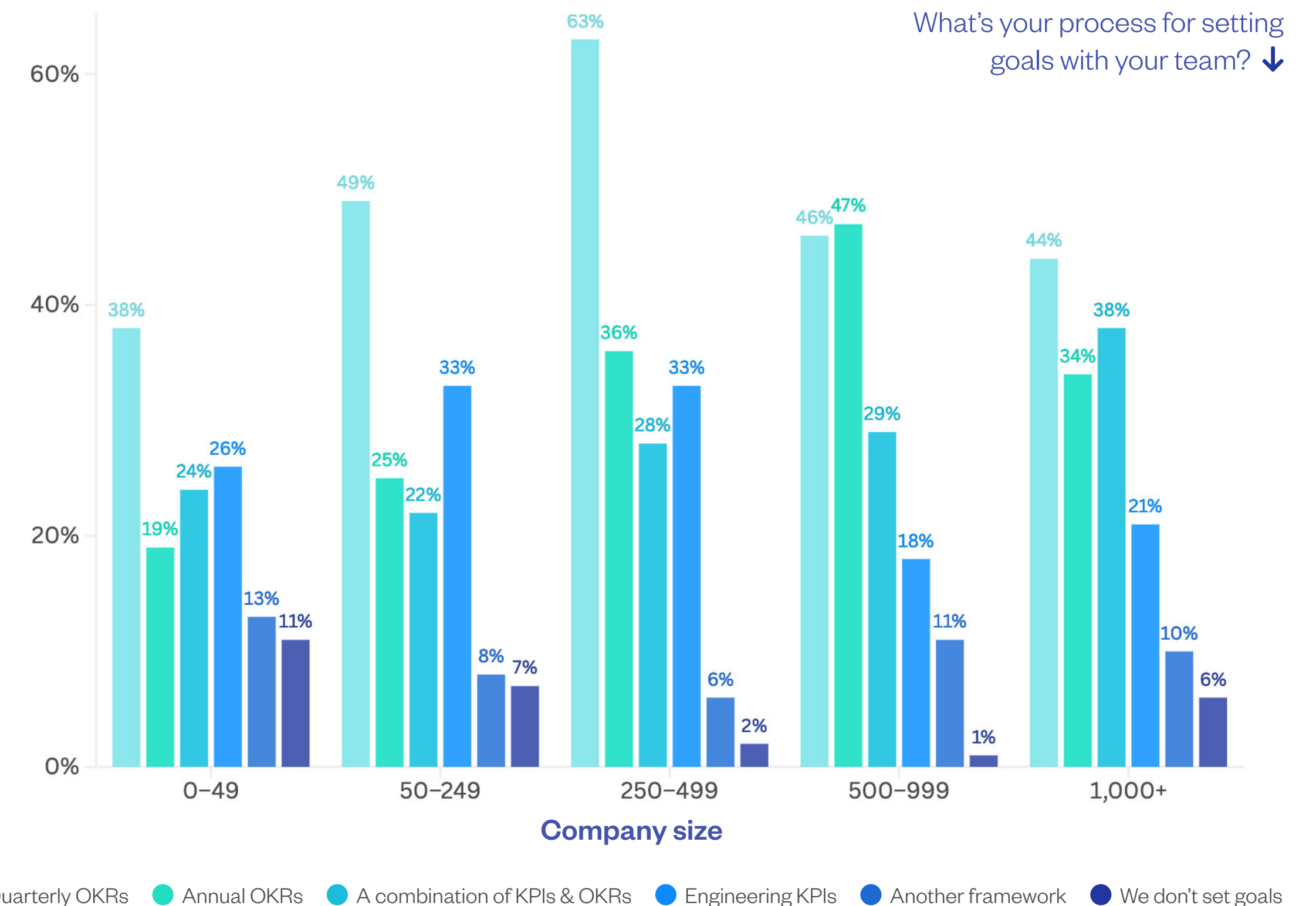


Goals and objectives provide the structure within which engineering teams work and measure their success. Before developers even touch a keyboard, they need to know why they are sitting at their desks in the first place.

Company-wide objectives and key results (OKRs) appear to be the way to define and communicate business goals, though the cadence varies across businesses. **Half of respondents set quarterly OKRs**, while nearly a third do so annually.

The other key framework for setting goals was key performance indicators (KPIs), which 28% of

organizations rely on, up from just 14% last year. Another 29% use a combination of OKRs and KPIs, making it the third most popular approach. A surprising 6% don't set any goals at all, many of whom identified themselves as working for small start-ups or software consultancies.

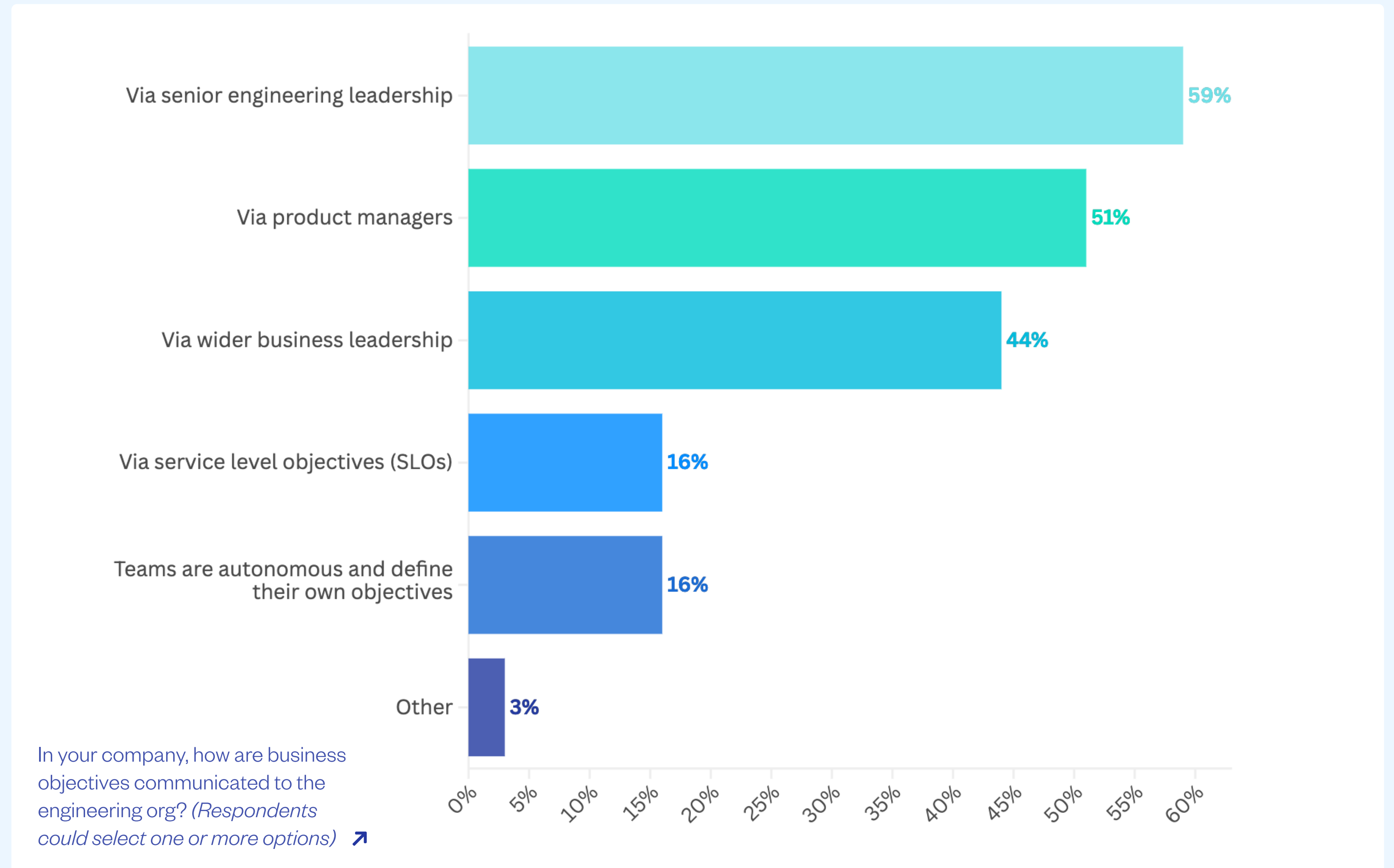


Communicating business goals

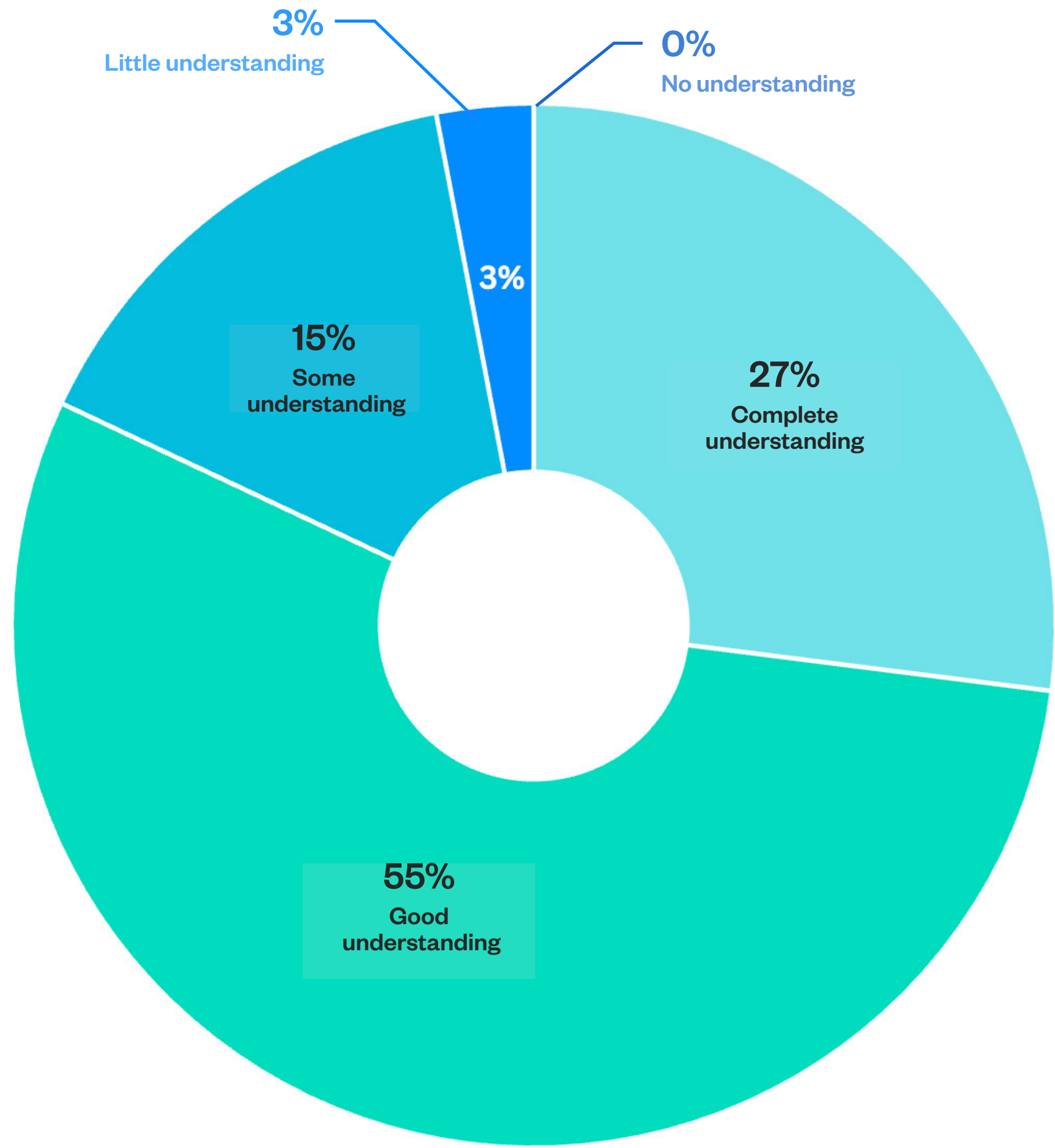
OKRs, KPIs, or a combination, are useless if they aren't communicated effectively.

While all goals must be communicated widely and often, senior leadership is responsible for communicating business objectives in 59% of respondent organizations.

Product managers are also responsible for conveying objectives at half of organizations, where wider business leadership is responsible 44% of the time. A small but not insignificant 16% of respondents have teams set their own goals and objectives autonomously.



How well do you understand your company's strategic business goals? ↓

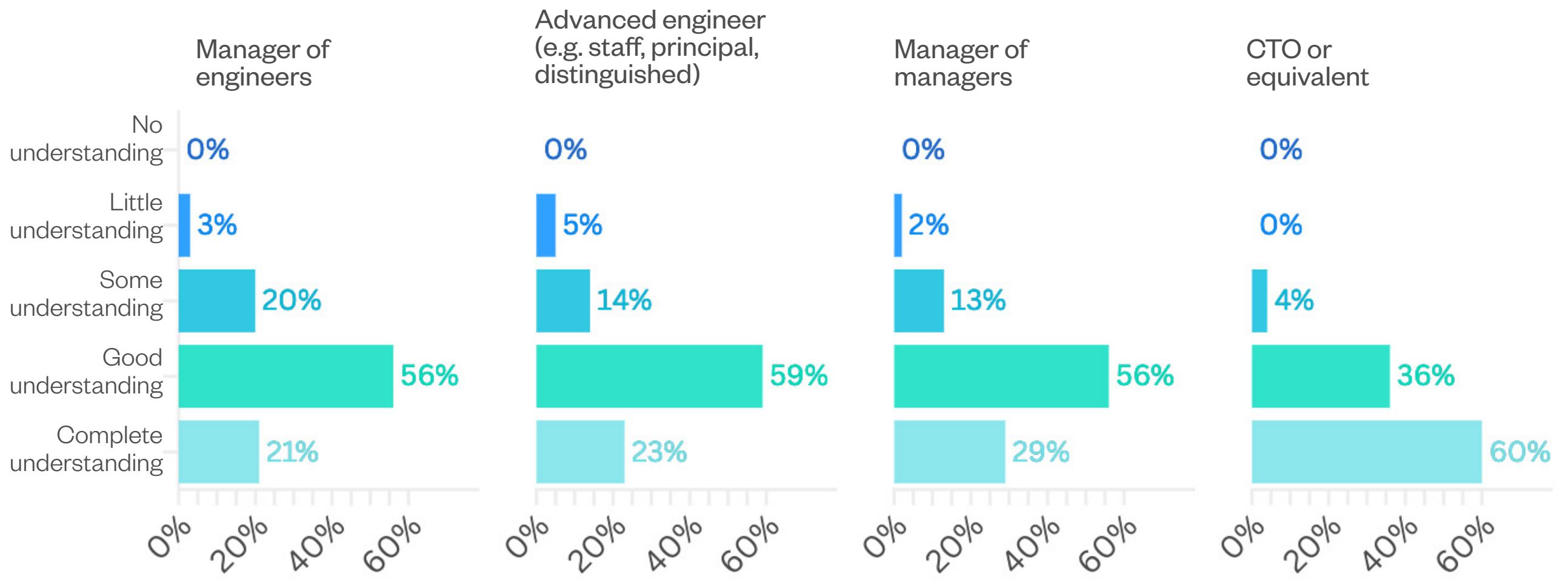


But is the message getting through? Just 27% of respondents say they have a “complete understanding” of their organization’s strategic business goals, with almost 55% saying they have a “good understanding.” That leaves a worrying 15% with just “some understanding” and 3% in the dark about their company’s strategy.

There are signs that the message isn’t filtering down for most organizations, too. While 60% of respondents at the CTO or equivalent seniority level have a complete understanding of strategic business goals, this drops to 29% for managers of managers, and 21% for engineering managers.

This task also becomes harder the bigger your organization is. While 50% of respondents at small companies have a complete understanding of strategic business goals, this drops to 18% at companies of 1,000+ employees.

How well do you understand your company's strategic business goals? (By role) ↓



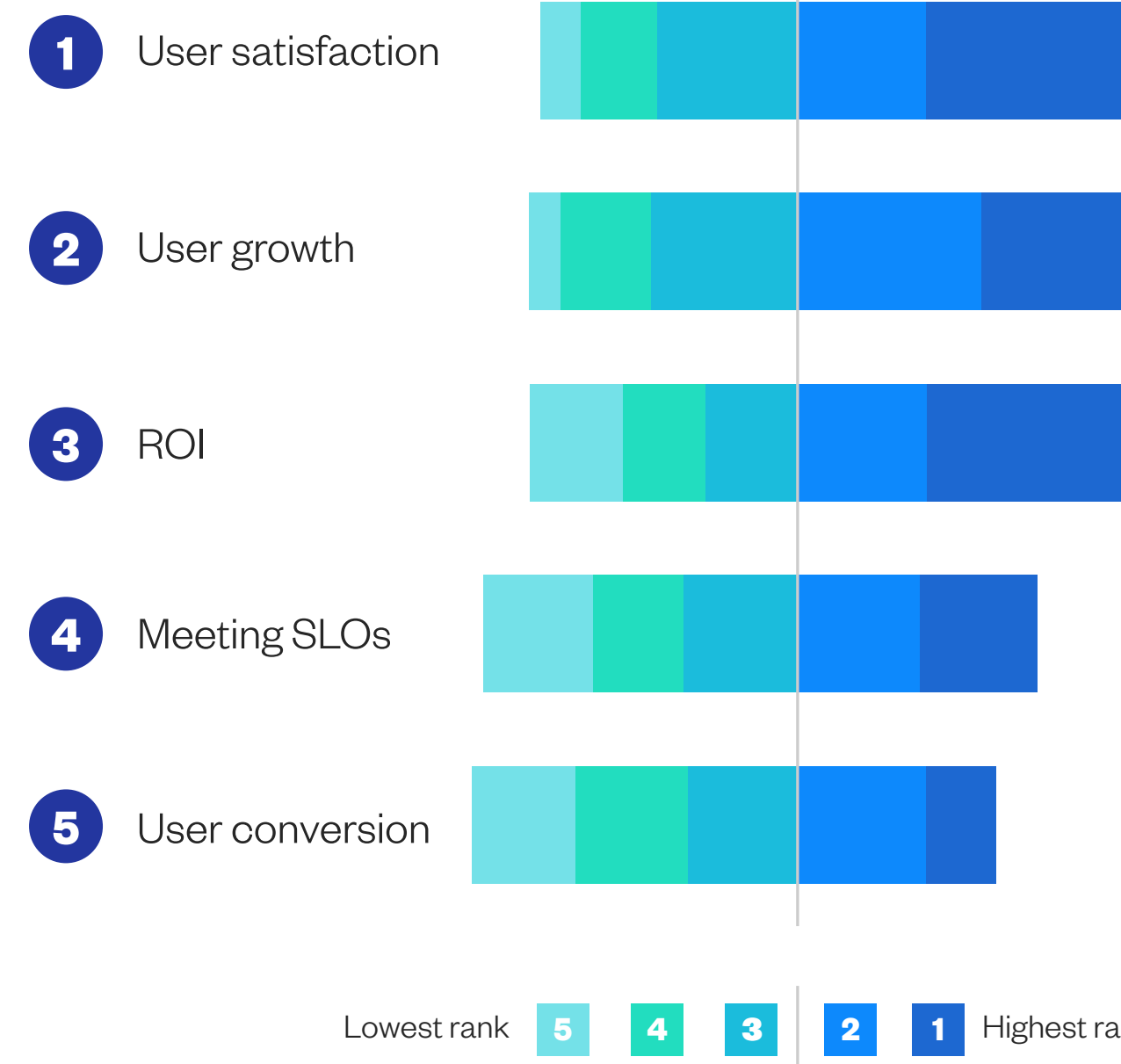
Measuring progress

A big part of engineering leadership involves gauging the impact teams have on the company's bigger goals.

The first place many leaders look is customer response. The highest-ranked metric for measuring impact was **user satisfaction**, overtaking the more quantitative measure of **user growth** from last year. Next came return on investment (ROI), with meeting SLOs ranked fourth.

But those aren't the only measures teams are watching, with some choosing to measure more commercial metrics like revenue and annual recurring revenue churn, retention rates, Net Promoter Scores (NPSs), and lifetime value (LTV).

Which of the following metrics are used in your engineering org to measure impact? ↓



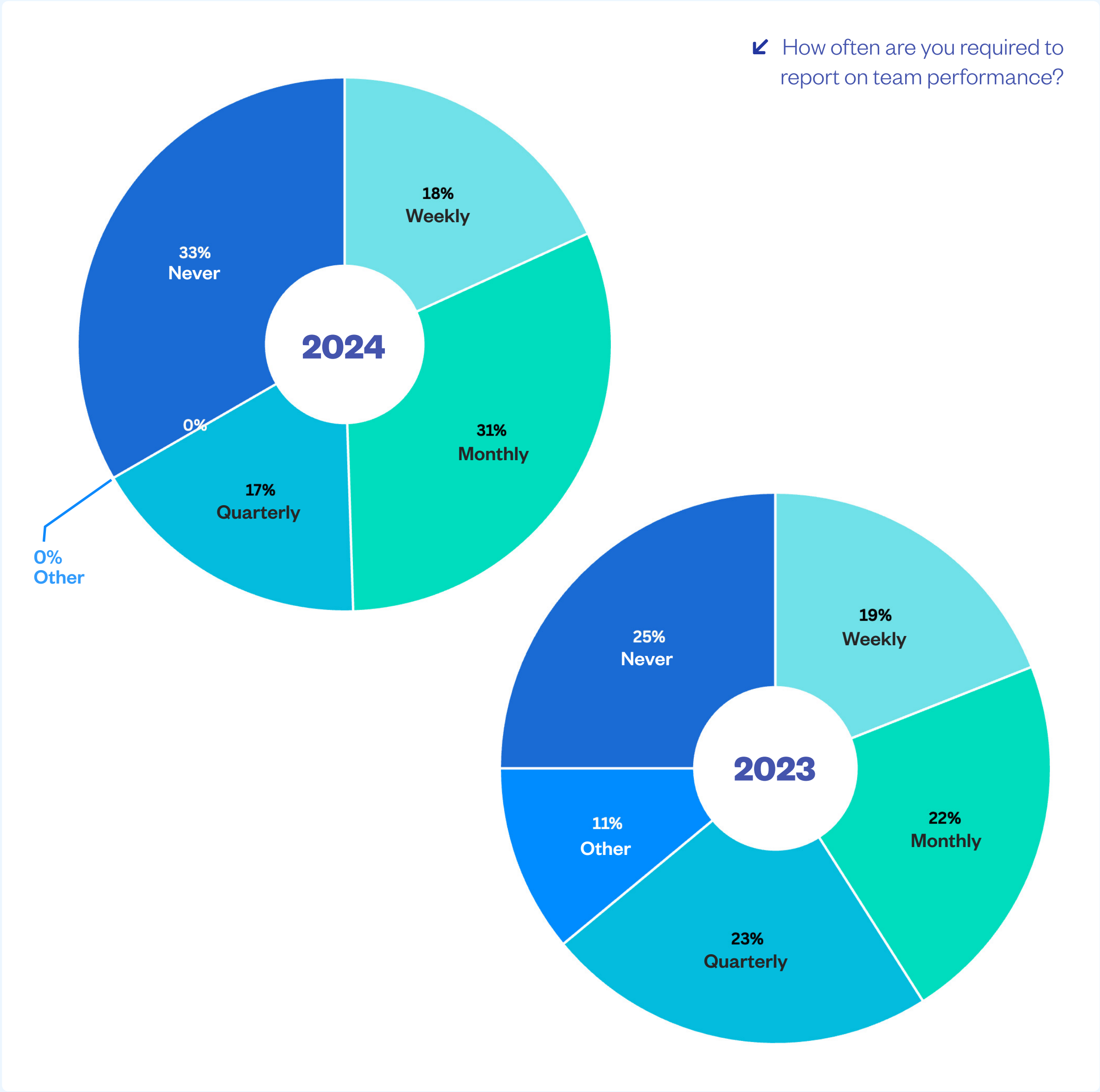
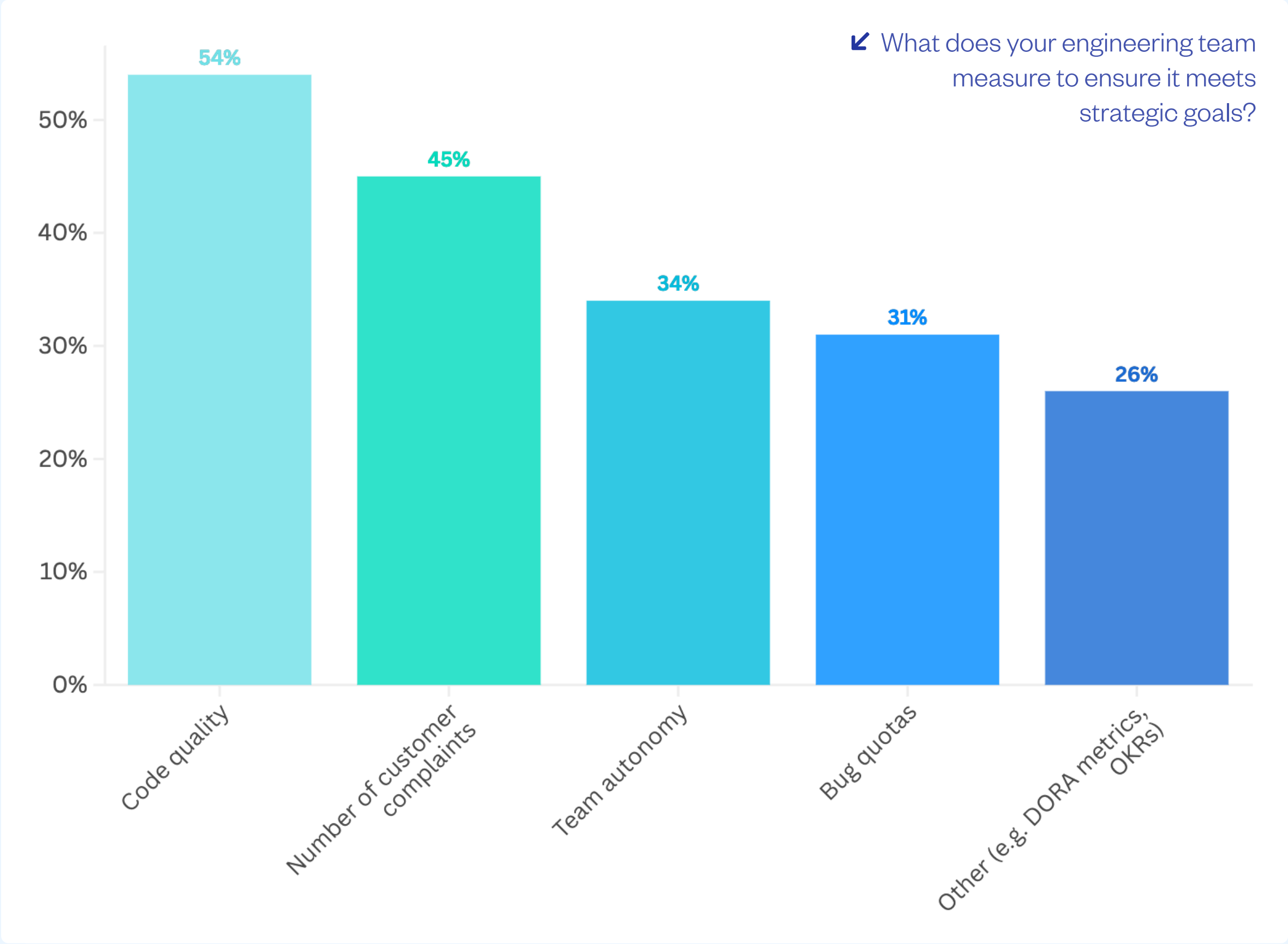
How to read this rank scale

Respondents were asked to rank their responses in order of importance, where 1 was the most important. They were asked to only rank items which were important to their engineering org.

The size of each block in the scale corresponds to the number of rankings in that position.

In terms of measuring **how they are meeting broader strategic goals**, code quality is the most popular measure of success at 54%, with the number of customer complaints coming in second at 45%. Bug quotas are a useful measure for 31% of respondents. Then 34% of respondents look to measure the level of team autonomy. The numbers

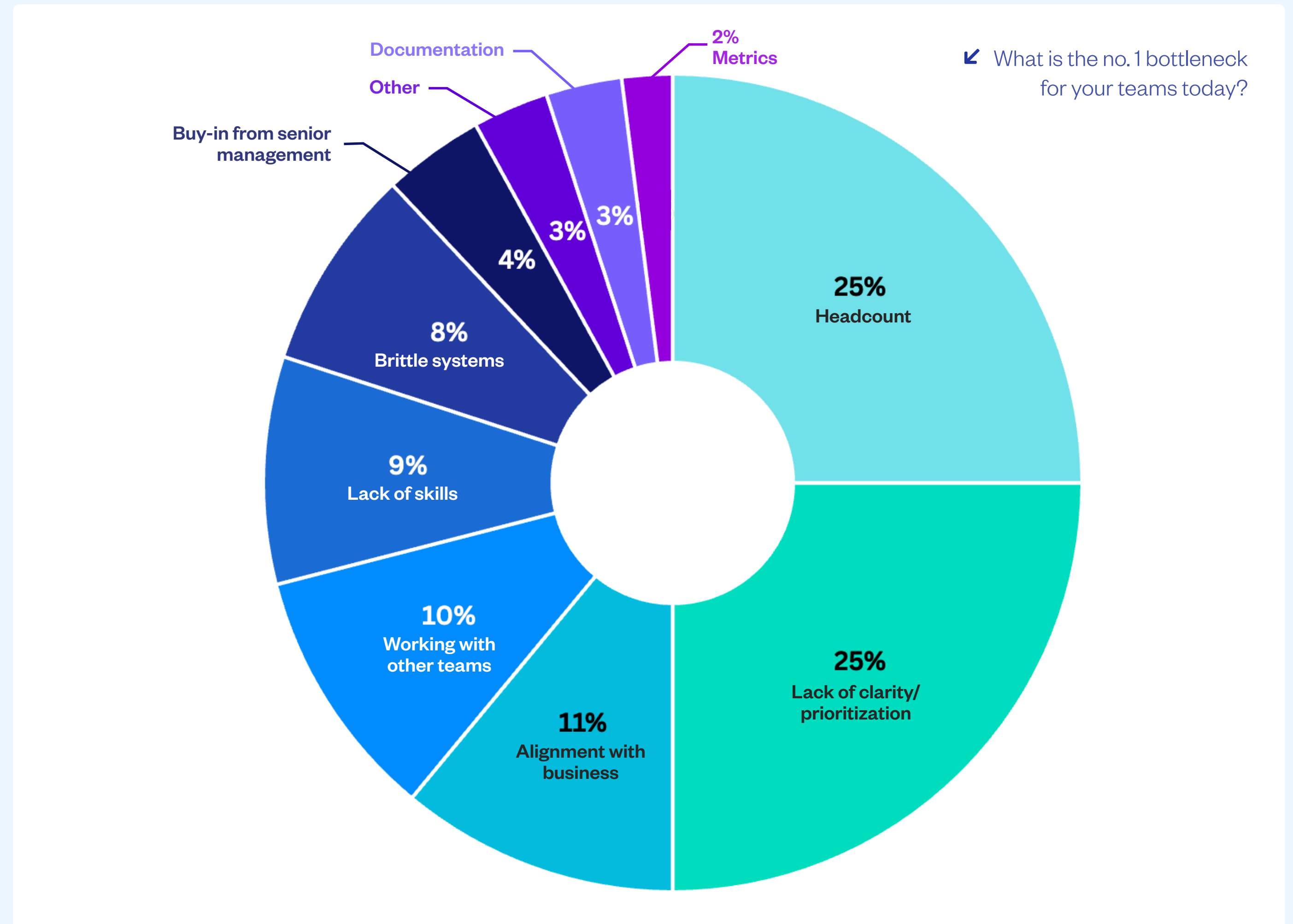
show most organizations rely on a combination of some of these metrics to gauge impact. A third of respondents do not report on their team’s performance at all. Of those who do, **31% favored monthly reviews**. A further 18% of respondents report on performance weekly and 17% quarterly, down from 23% last year.



Bottlenecks

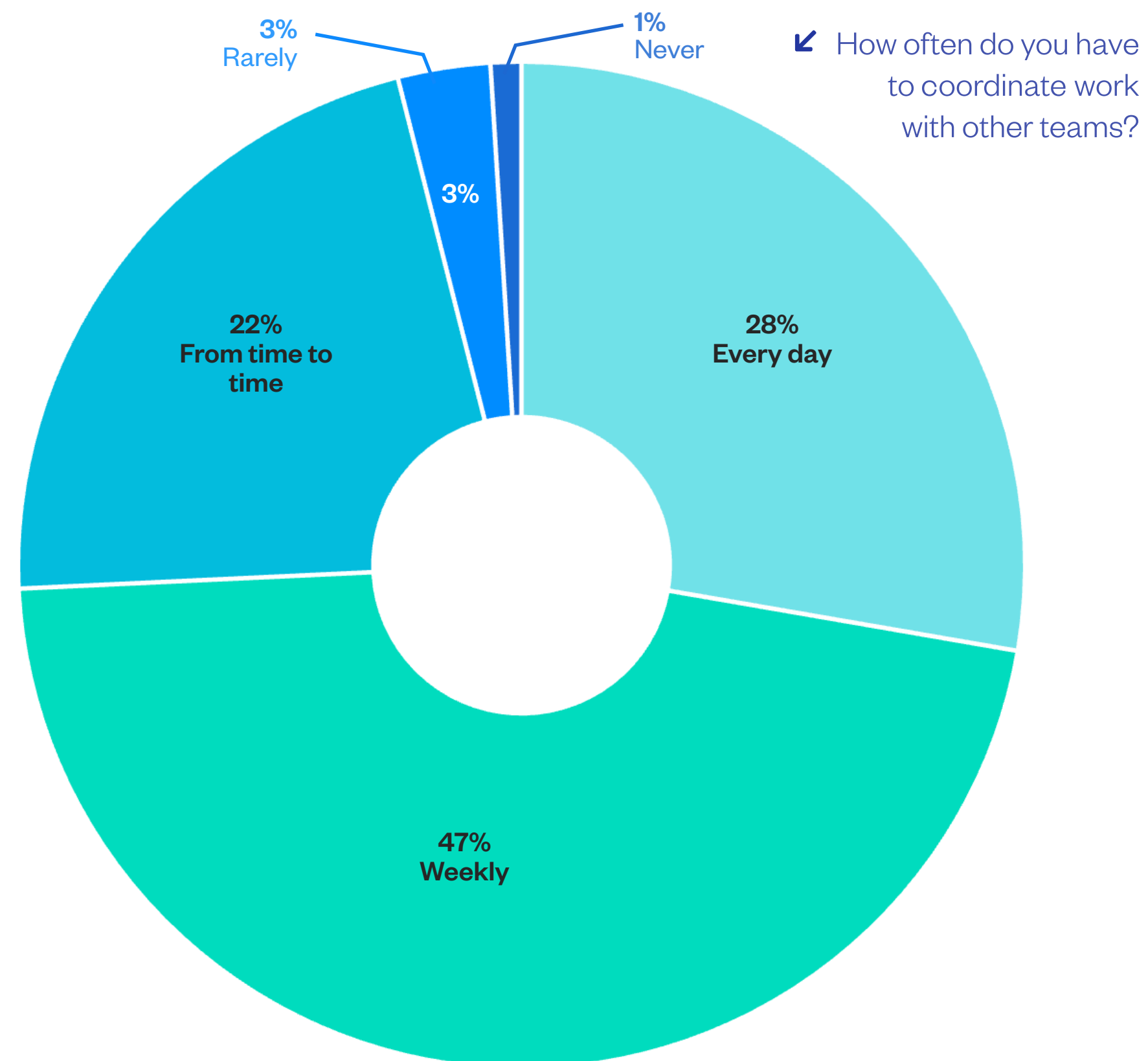
When respondents were asked to identify the number one bottleneck for engineering teams today, two key factors emerged: **lack of clarity and prioritization** and **headcount and staffing**, each being cited by 25% of respondents.

Additional bottlenecks, such as working with other teams and aligning with the rest of the business, were cited by 10% of respondents, while metrics themselves were an issue for just 2%.



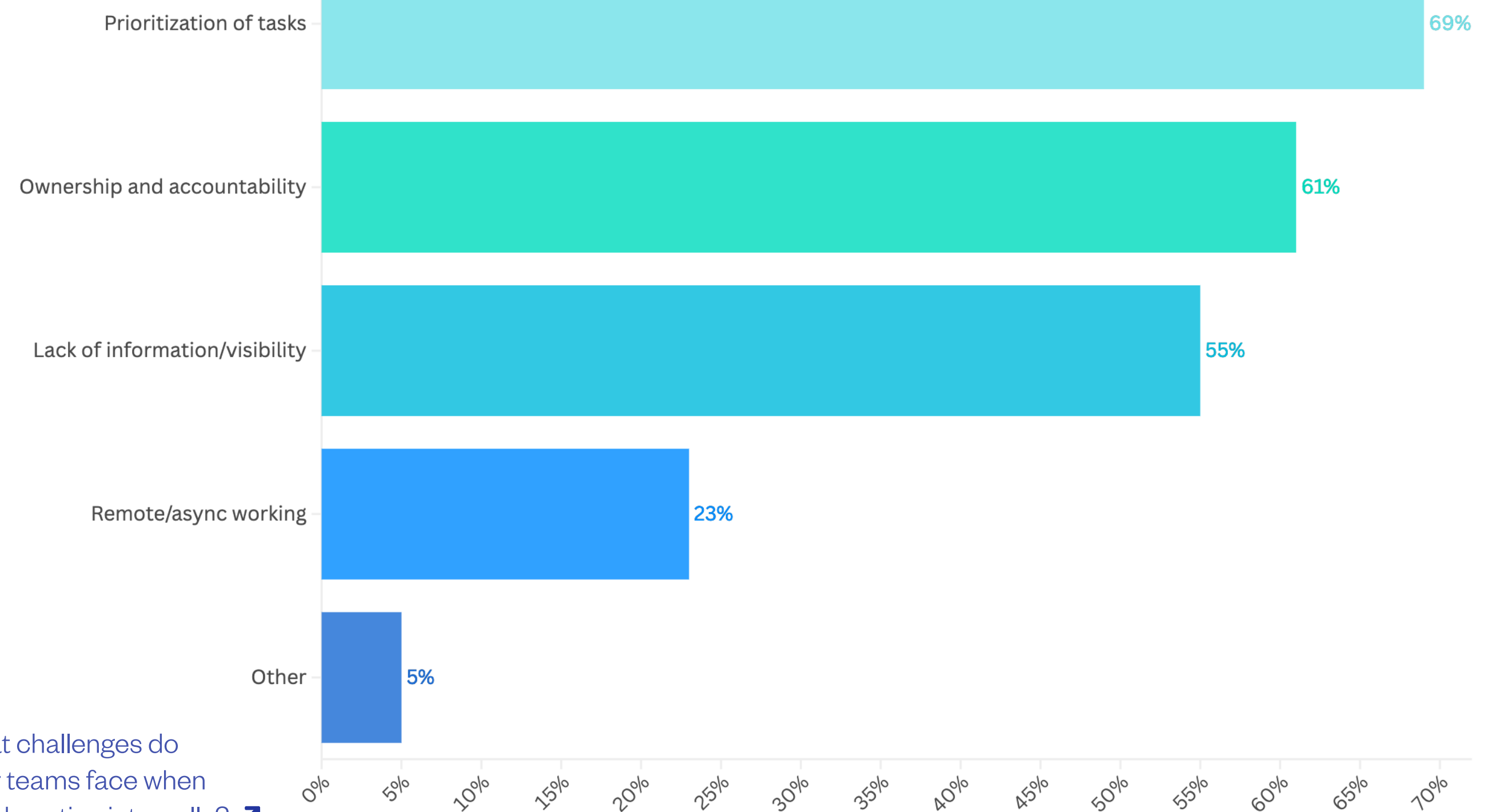
Team coordination

No team exists in complete isolation, with 47% of respondents coordinating with other teams weekly, and 28% daily. That leaves 22% doing so occasionally and just 3% doing so rarely.



But collaboration isn't straightforward. Prioritization of tasks was cited as a key challenge to collaboration by 69% of respondents, while ownership and accountability was next at 61%.

Lack of information and visibility was an issue for just over half of respondents. But, for all the debate over remote or synchronous working, just 23% of respondents saw this as an issue.



SECTION 2:

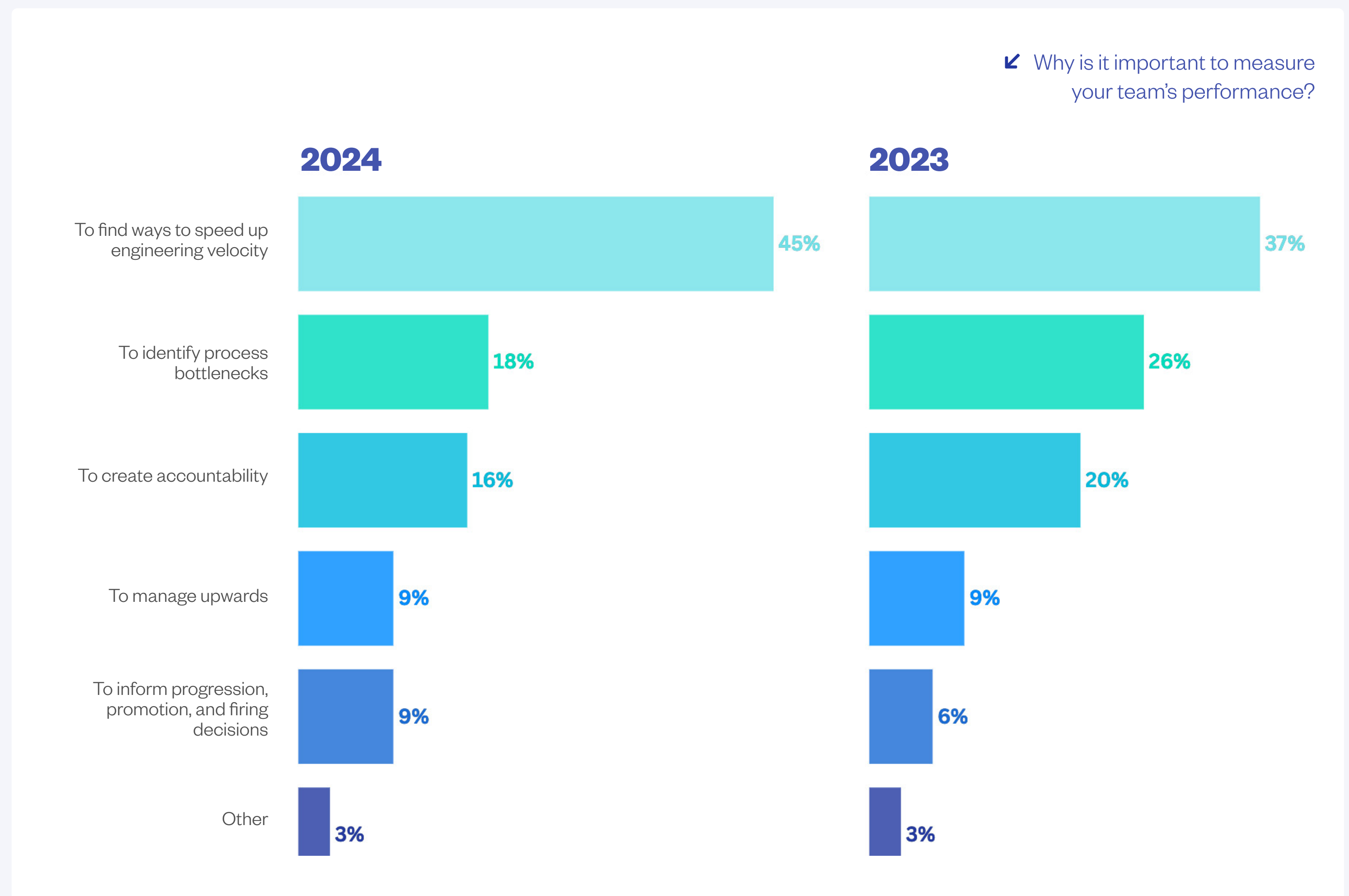
Performance metrics and measurement



Performance metrics and measurement

Engineering leaders have multiple reasons to measure team performance, but **finding opportunities to increase velocity** is the most important to 45% of respondents, up from 37% last year.

No other reason came close. Pinpointing bottlenecks was the next most cited reason at 18% and fostering accountability at 16%, but this rises to 27% if you just asked your CTO. Just 9% saw metrics as a way to inform progression, promotion, or firing decisions.

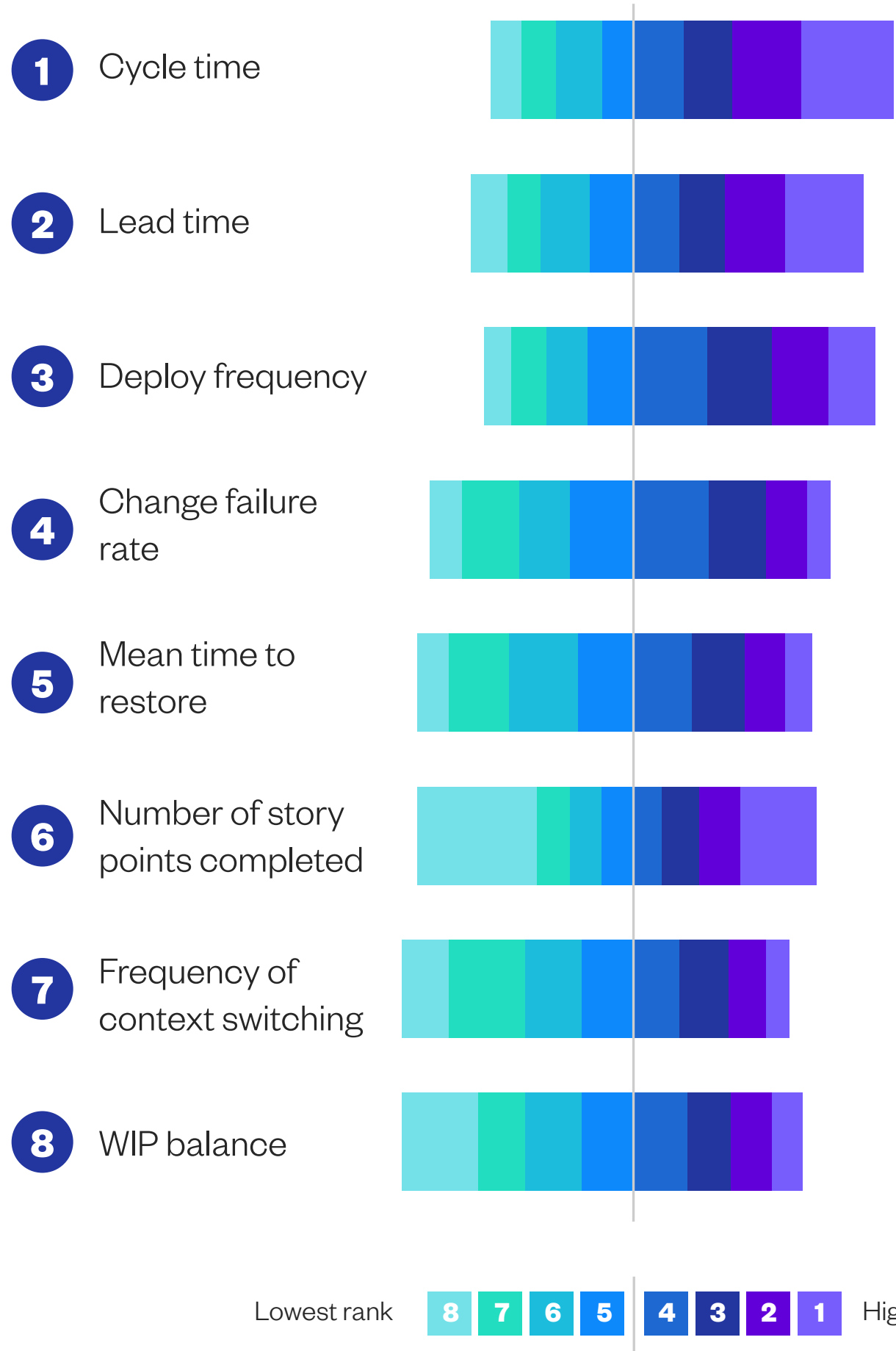


For the second year running, cycle time was ranked as the most useful productivity metric.

Originating with agile software development, cycle time aims to measure how long it takes to complete a certain task.

It was closely followed by lead time and deployment frequency. At the bottom of the list was work in progress (WIP) balance and the number of story points completed, as as results took priority over effort-based metrics.

Rank these productivity metrics in order of usefulness ↓



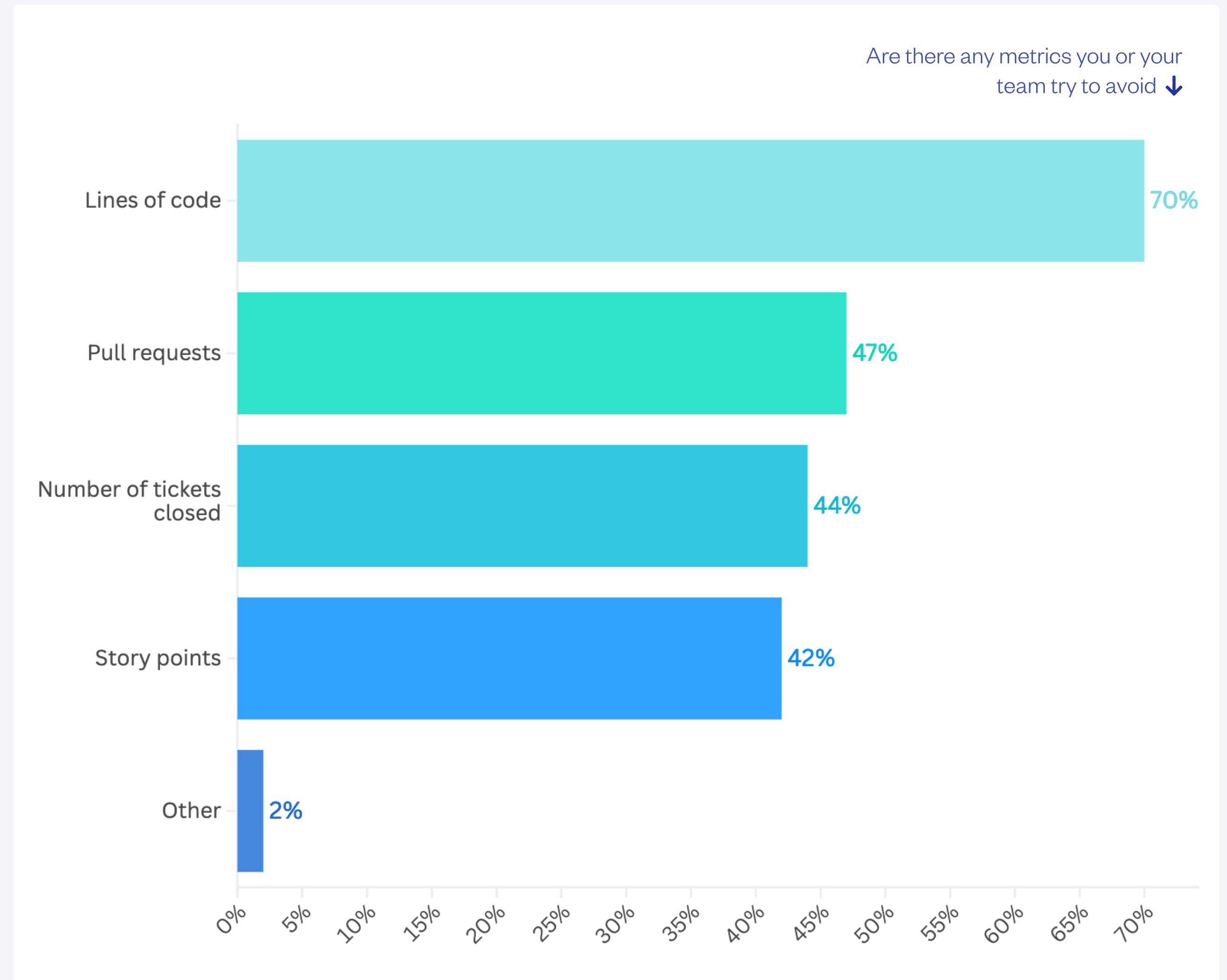
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When respondents were asked which **metrics they might avoid** and why, lines of code was cited by 70% of respondents. Then story points, pull requests, and the number of tickets closed all elicited similar feelings, with 42-47% not liking these measures in isolation.

When asked why they were suspicious of these metrics, their ability to be “gamed” or manipulated, inherent lack of context, and a misplaced focus on output over outcomes were all cited.

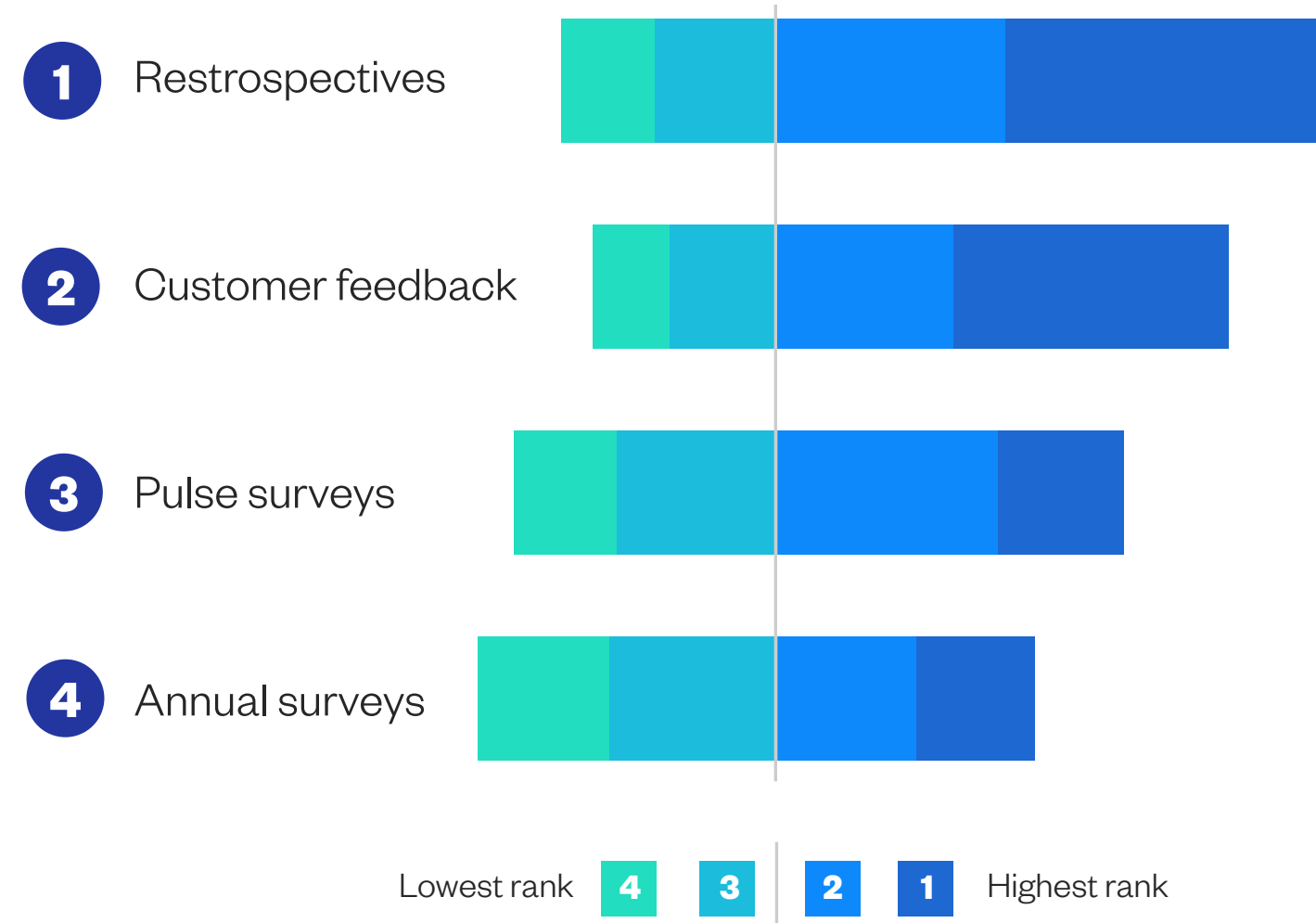


Qualitative metrics

In terms of methods to measure team performance, the trusty retrospective was the most popular, far outpacing customer feedback, pulse surveys, and cumbersome annual surveys.

When it comes to the most useful methods to gauge **developer experience**, a combination of 1:1 meetings and a continuous feedback mechanism was favored by 70% of respondents. Developer satisfaction surveys were also cited as useful by 56% of respondents.

Rank the methods that you typically use to measure team performance at your organization ↓

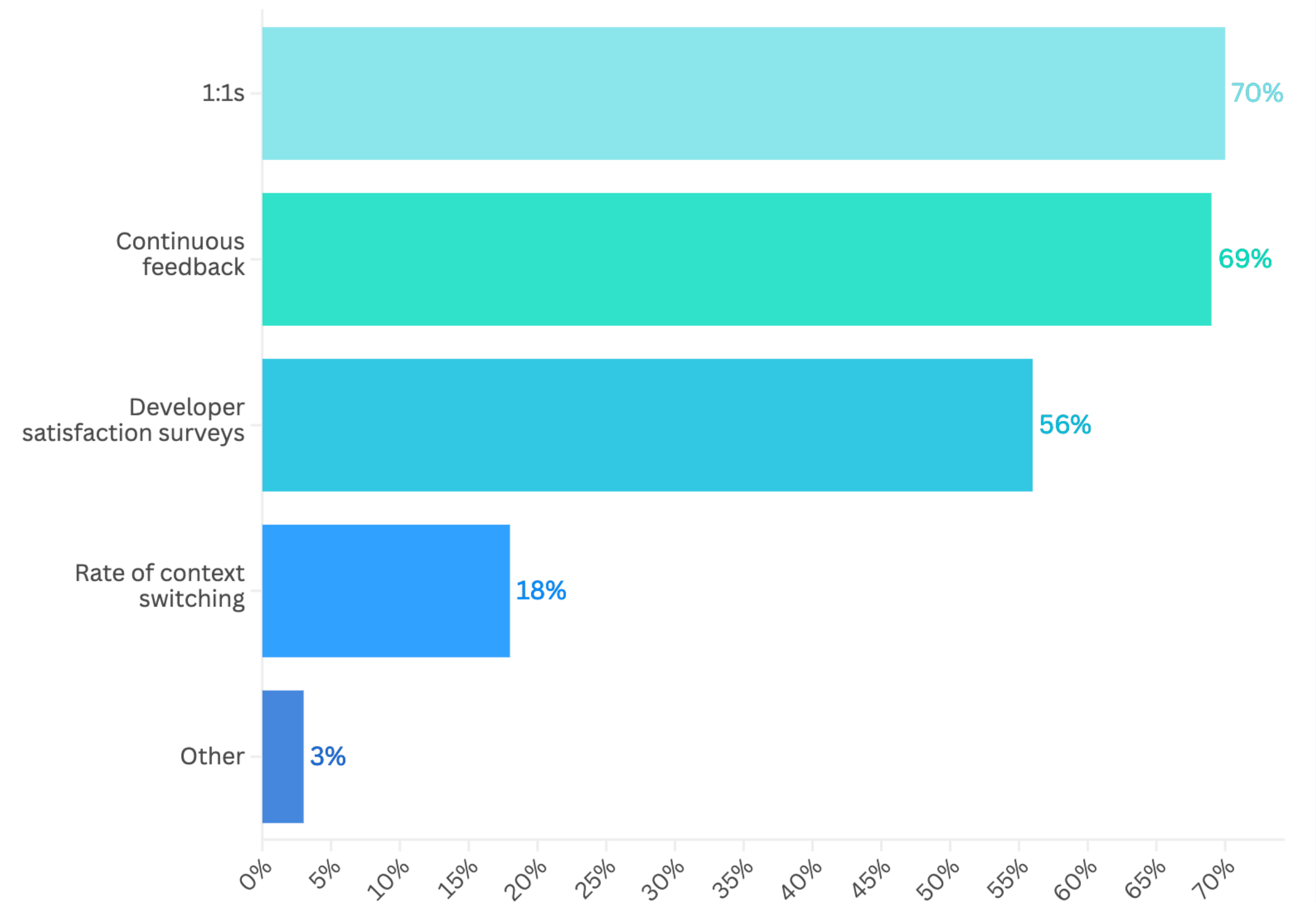


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Which methods have you found the most useful to measure developer experience?

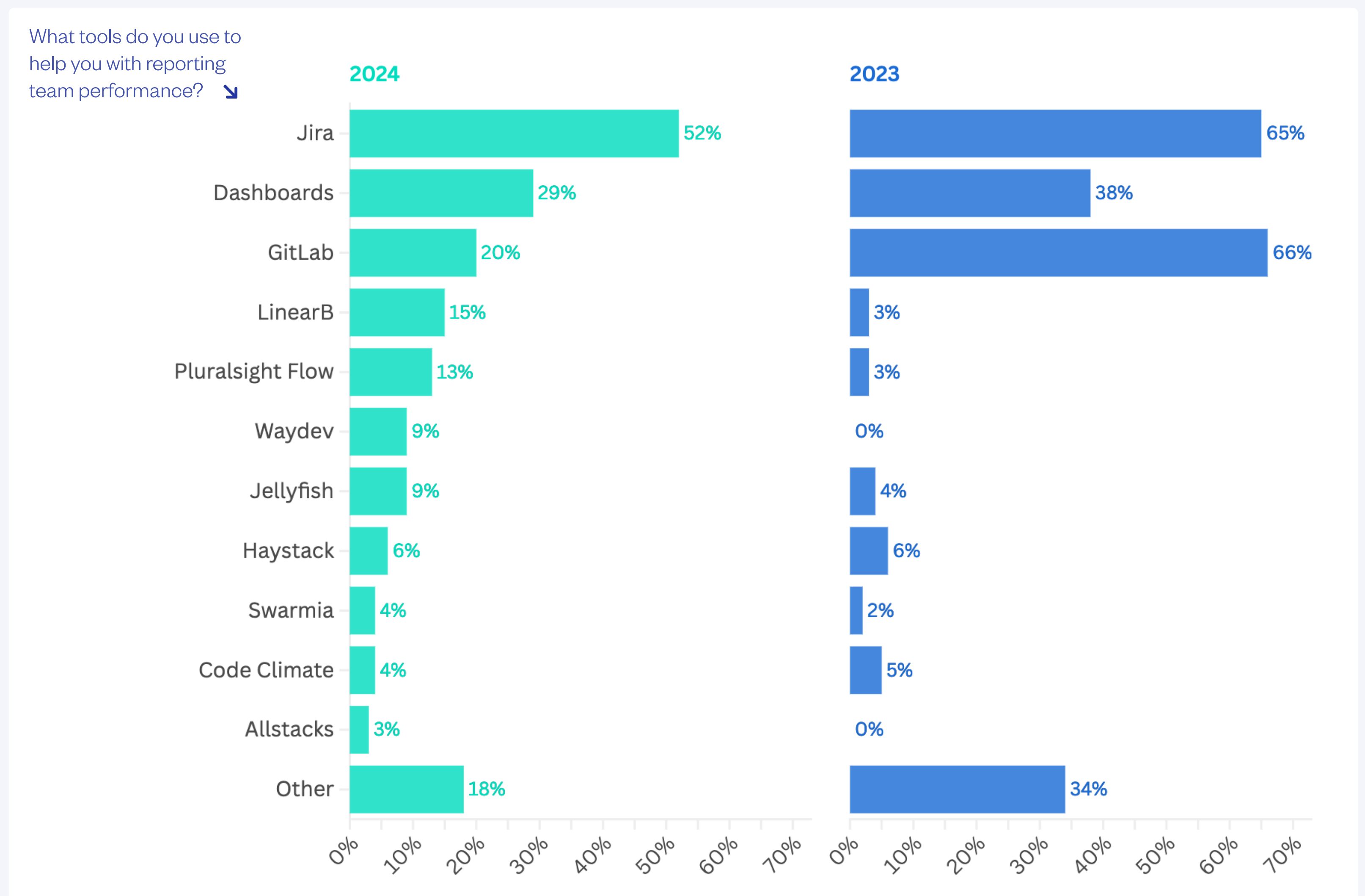


Popular tools and metrics

When it comes to reporting tools, there is plenty of choice for engineering managers. Despite a wave of new entrants to this market, there are still two clear standouts: JIRA (52%) and the humble dashboard (29%).

That being said, we saw a huge shift in reporting tool usage between 2023 and 2024. GitLab dropped from 66% usage to 20% this year, with a slew of best-of-breed tools filling the gap. LinearB rose from 3% to 15%, Pluralsight Flow from 3% to 13%, and Jellyfish jumped from 4% to 9%.

Waydev was a new entry to our list this year and is already being used by 9% of respondents to report on team performance. Of the 18% that use a different tool, reporting within GitHub, Plandek, Asana, and Sleuth all received honorable mentions.

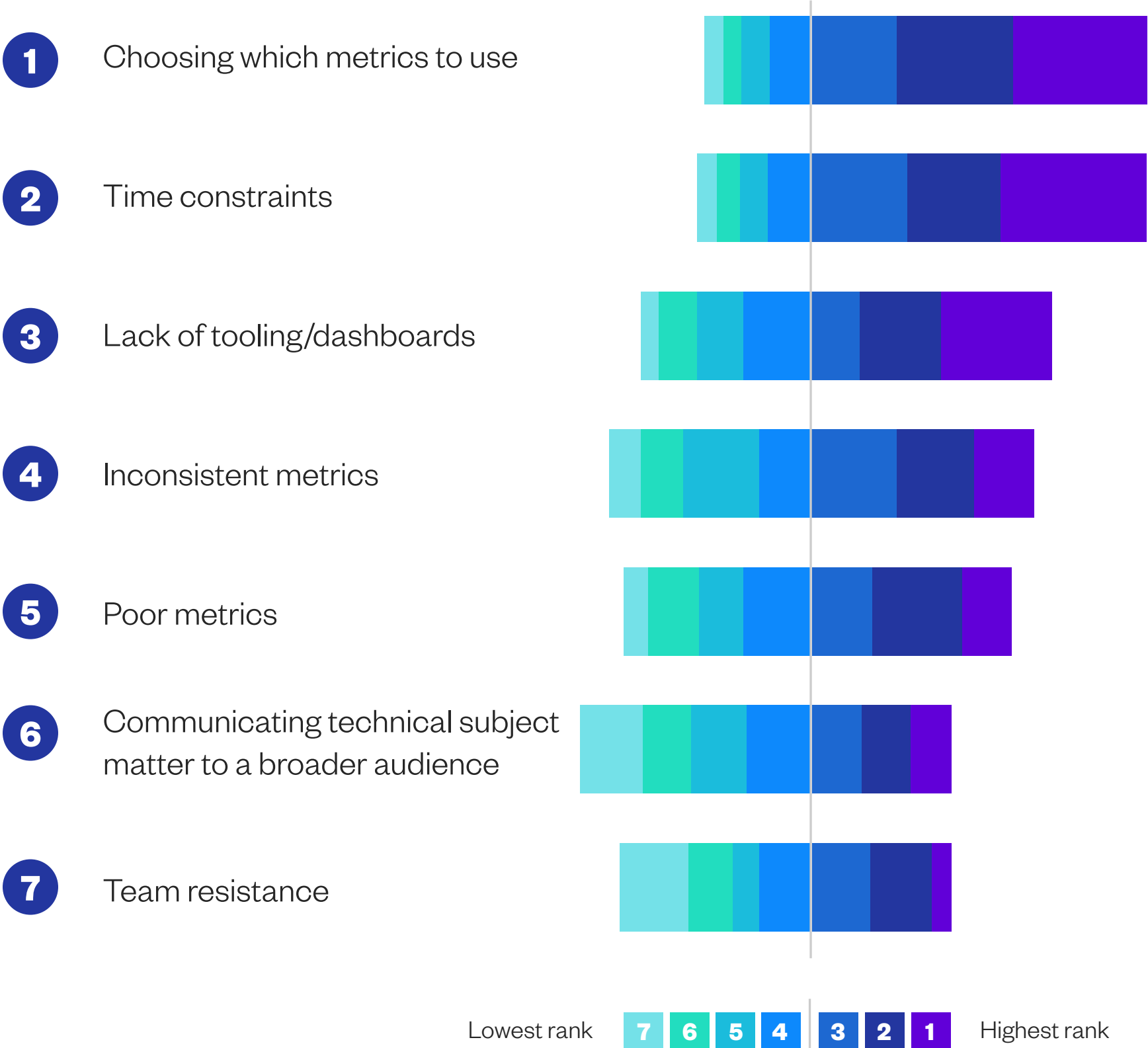


Choosing the precise metrics to measure team performance was the biggest challenge cited among respondents. This was closely followed by time constraints.

Interestingly, very few engineering leaders identified “team resistance” to being measured or “communicating technical subject matter to a broader audience” as particularly challenging.

The main challenge with reporting team performance is **choosing which metrics to use.**

What primary challenges do you encounter with reporting on team performance, if any? ↓



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The rise of DORA and SPACE

Many of these performance measures will look familiar to anyone who has come across DevOps Research and Assessment (DORA) metrics. First released in 2014, these metrics track how well organizations unite their developers and operations teams to deliver better software, faster.

However, these metrics tend to focus on raw outcomes, and don't account for overall team health and effectiveness. Then, in 2019, some of the original DORA authors developed the satisfaction, performance, activity, communication, and efficiency (SPACE) framework to provide a more holistic picture of team performance.

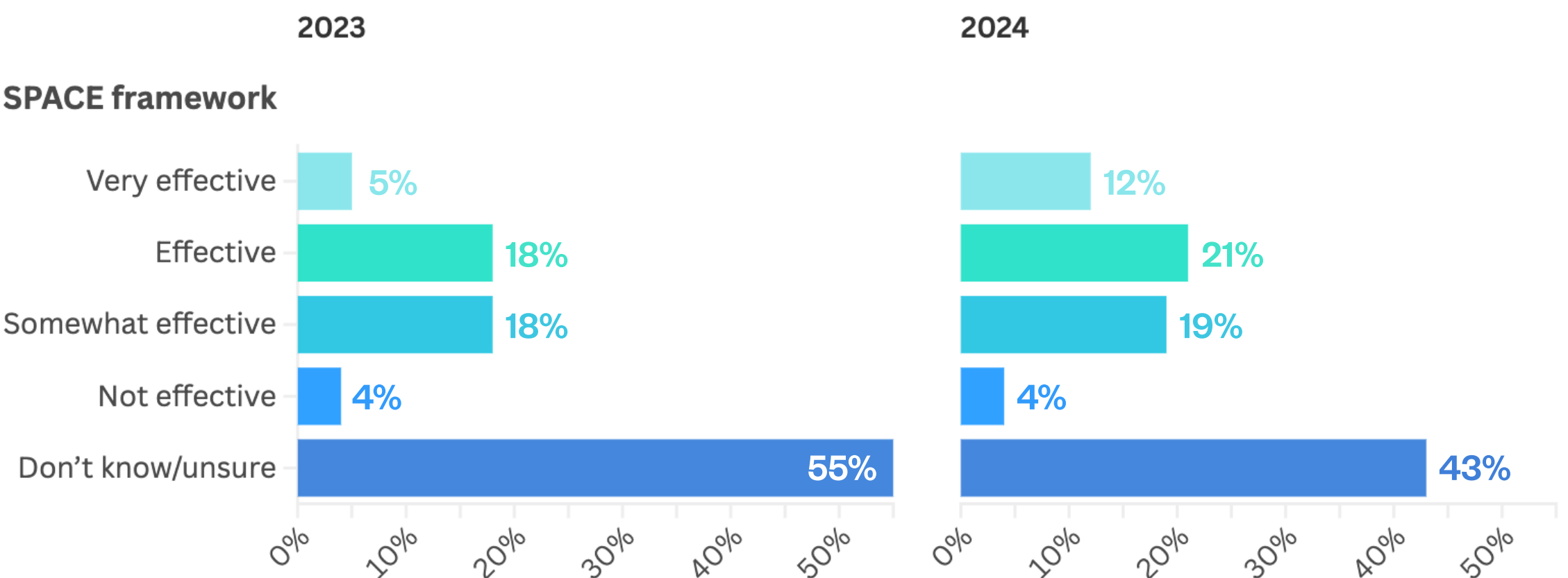
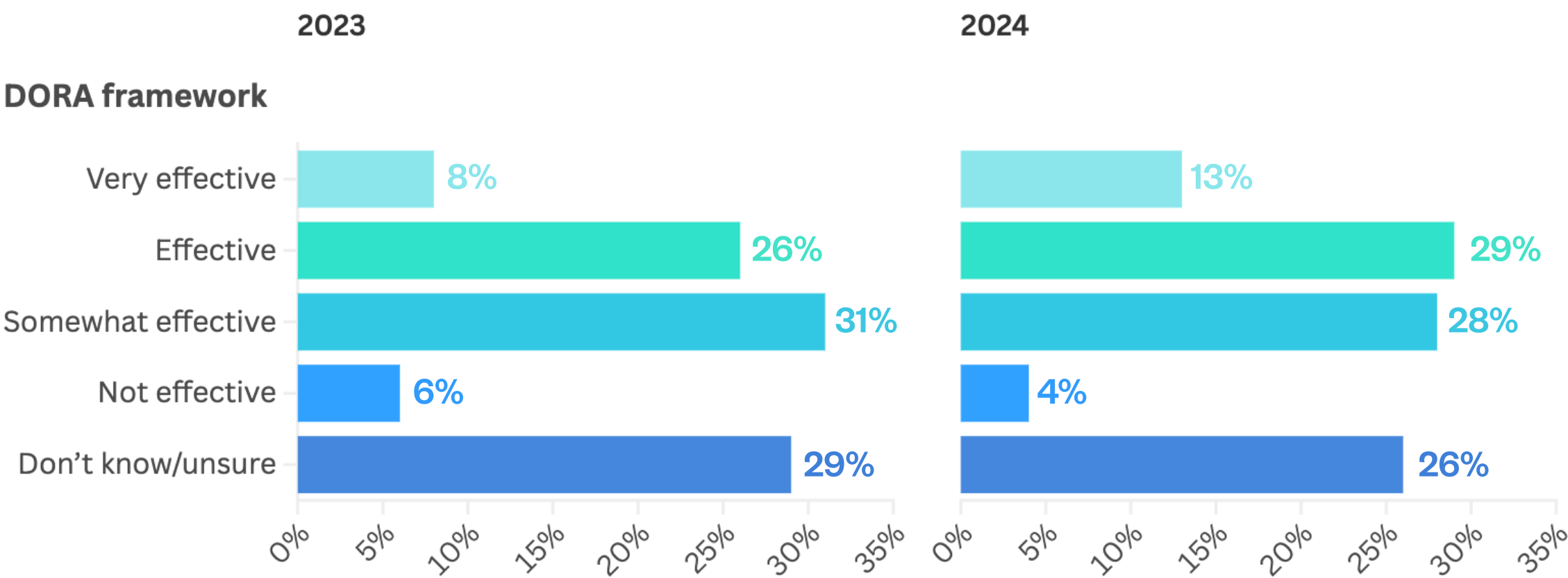
When asked about the effectiveness of DORA metrics in measuring performance, 42% said it was a very effective or effective framework, up

from 34% last year. Still, 26% of respondents said they didn't know or were unsure about its efficacy. This is likely because they hadn't heard of or used the framework themselves.

Then, for the newer SPACE framework, 33% saw it as a very effective or effective framework, up from 23% last year. Still, 43% were unable to give an opinion on its efficacy, down from over half last year.

Just 4% of respondents saw one or both frameworks as ineffective.

How effective are the following at measuring team performance? ↓



SECTION 3:

Learning and development



Learning and development

70%

of respondents say that **learning and development** for engineers is a priority for their organizations.

Learning and development becomes key as engineering leaders look to remove bottlenecks and increase velocity in challenging times.

70% of respondents said that learning and development is a current priority, mainly to retain talent and maintain developer satisfaction, closely followed by improving team performance.

Technical expertise is the most common development area focused on, with 78% looking to plug technical knowledge gaps by upskilling their teams. Developing leadership and strategy skills was a focus area for 41% of respondents, similar to communication and interpersonal skills, at 39%.

What are the reasons behind investing in learning and development? ↓

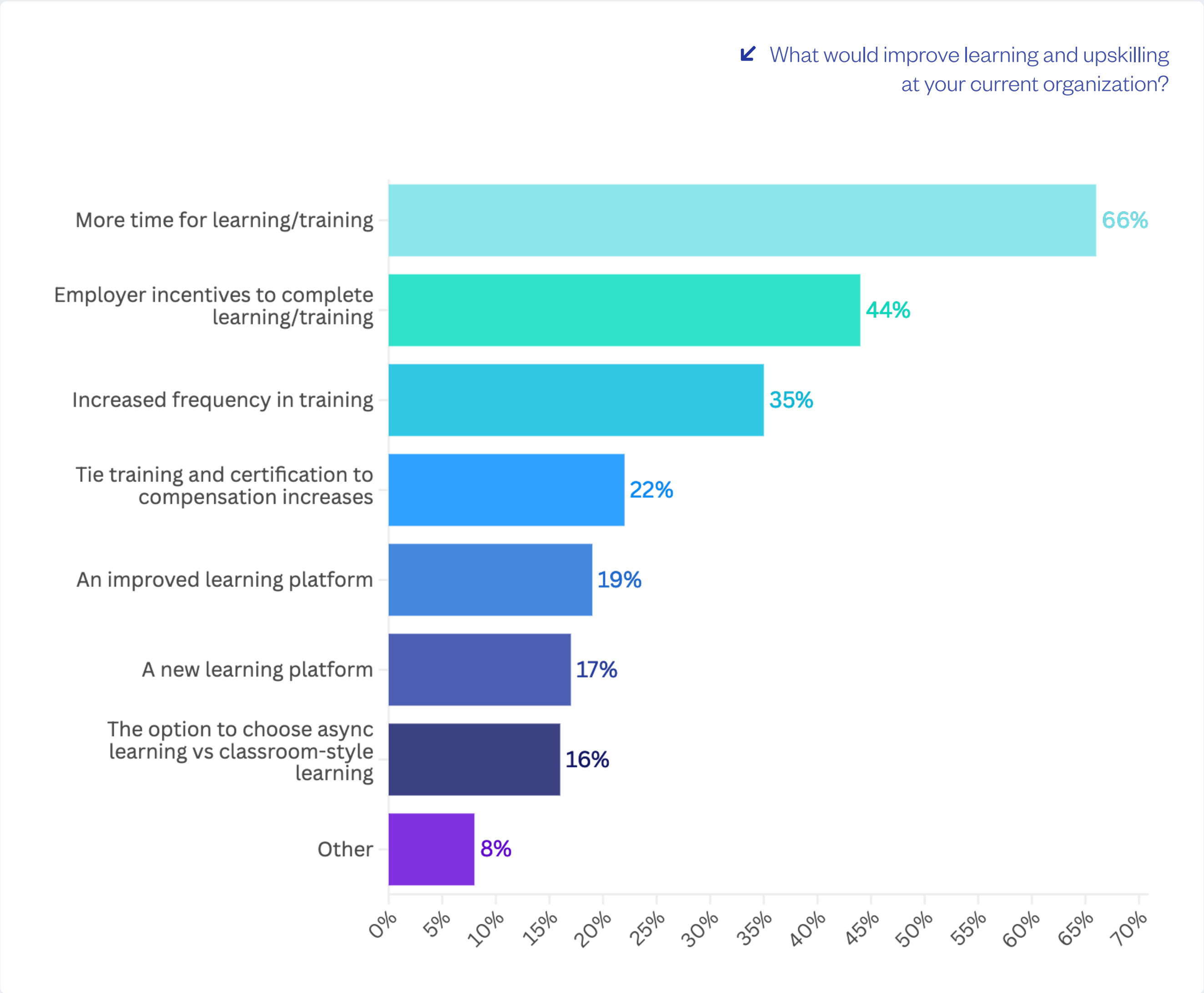
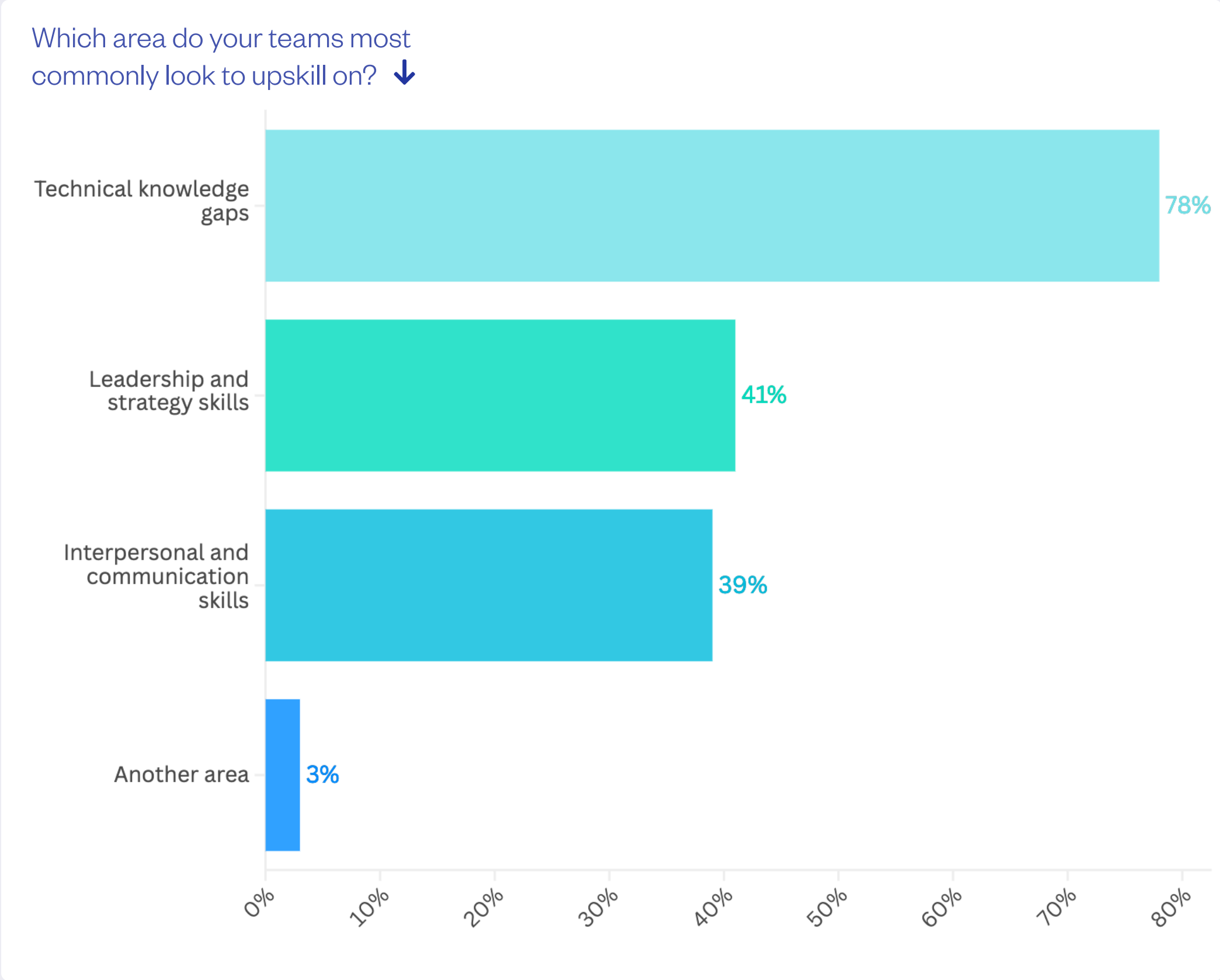


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We all know that finding the time and resources to focus on learning and development can be difficult. 66% of respondents want more time to focus on learning and training, and 44% want their employer to incentivize such efforts, with 22% wanting it to be directly tied to their compensation. 35% crave more training opportunities, and 17% would like a better or new learning platform.



Methodology

This survey was conducted between October 18 – November 3, 2024, and we received 978 completed responses.

