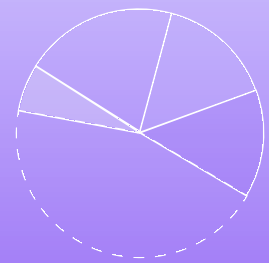


Decoding Engineering Productivity 2025



Introduction

In late 2025, we surveyed several hundred engineering professionals to understand the current state of engineering productivity. The results reveal an industry navigating significant pressures while simultaneously showing signs of improvement.

Engineering teams are contending with reorganizations, economic constraints, and the rapid introduction of AI tools. Survey respondents used words like "chaos," "churn," "whiplash," and "toxic" to describe their work environments. Nearly half report centralized leadership structures, and developer hiring has decreased at one-third of organizations surveyed.

Despite these challenges, engineering effectiveness has improved dramatically: 78% of organizations now report being somewhat or very effective, up from just 42% in 2024. Developer burnout, while still present, shows a downward trend. And AI is emerging as what many describe as a "force multiplier" for engineering productivity.

This report examines how engineering organizations structure their teams, measure productivity, address developer experience and burnout, and view AI's role in their work. The data offers benchmarks for engineering leaders navigating similar challenges.

Executive summary

Engineering teams are under pressure

From reorganizations to layoffs, economic pressures, introduction of new tools like AI and intense competition, respondents used loaded words like “chaos”, “churn”, “whiplash”, “toxic” and more to describe their work environments. This is something management needs to keep in mind.

Centralized leadership

Nearly half of organizations surveyed reported a single leader—like a VPE or CTO—ran the engineering team.

Developer hiring

About 40% of respondents said their organizations have maintained the pace of developer hiring but one-third have decreased it. Only 26% reported more devs are being hired. Survey takers largely blamed the economy and AI for the cuts in hiring.

Diversity in engineering

It’s still largely a man’s world in engineering, particularly in engineering management: 89% of survey takers had between 0 and 1 female or nonbinary vice president of engineering and 85% did not have a woman and/or nonbinary CTO.

Engineering productivity on the upswing

This year just over 78% of respondents said their engineering organizations were somewhat or very effective; in 2024, only 42% of respondents felt that way.

The burnout is still around, but decreasing

This year the majority of respondents said fewer than 25% of their developers were burned out; last year the majority reported the burned out percentage was substantively higher, between 25% and 50%.

Can we talk about tech debt?

In nearly every open-ended question we asked, respondents called out the burdensome problem of tech debt and the need for teams to deal with it.

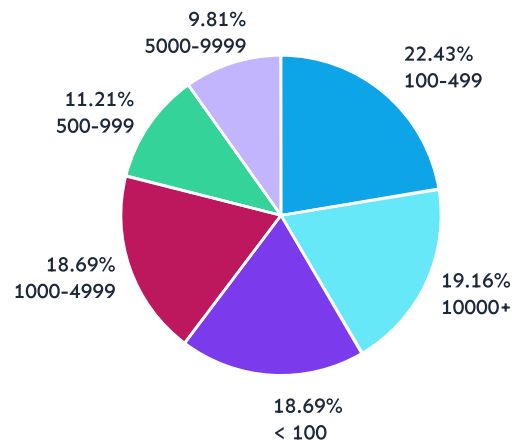
AI as a “force multiplier”

Survey takers are largely optimistic about the role AI can play in improving engineering productivity and their work lives. Most believe it can tackle both mundane tasks and also larger challenges, freeing engineers for more creative value-added work.

Demographic snapshot

This year several hundred engineering professionals responded to our survey; 86% said they were engineers, and 4% were in product and IT respectively. Just over 36% identified as “managers,” 22% were directors, 12% were VPs, 11% were ICs, and 6% sit in the C-suite. The majority of our survey takers (22%) worked in companies with between 100 and 499 employees, but the spread splits evenly after that: roughly 19% were employed in enterprises with more than 10,000 employees, organizations with between 1,000 and 4,999 workers, and companies with 100 or fewer employees.

Company size
(Number of employees)



Developers and development organizations

The gap between large and small development teams may come as somewhat of a surprise. Just over 28% of respondents said their organizations employ less than 50 developers, while 23% said they have more than 1500 developers. The area in between those two extremes was relatively evenly split: 14% had between 50 and 99 developers, 13% reported 250-499, and 11% had between 100 and 249. To look at it another way though, just shy of 66% of survey takers have 499 or less developers in their organizations.

How are the engineering organizations structured? Almost half of survey takers (48%) said they have centralized leadership with a single executive like a CTO or VP of engineering. Just about one-third (30%) have just the opposite: decentralized leadership where multiple leaders oversee different technical domains/product areas and have significant autonomy. Just under 10% reported their teams are led by a hybrid approach with both centralized and decentralized leadership, while 8% have a matrix structure where the leaders operate with dual reporting lines and shared responsibilities.

Almost 70% of respondents said their most senior engineering leader had the title of CTO while 43% said it was VP of engineering, and 21% reported chief product officer (CPO).

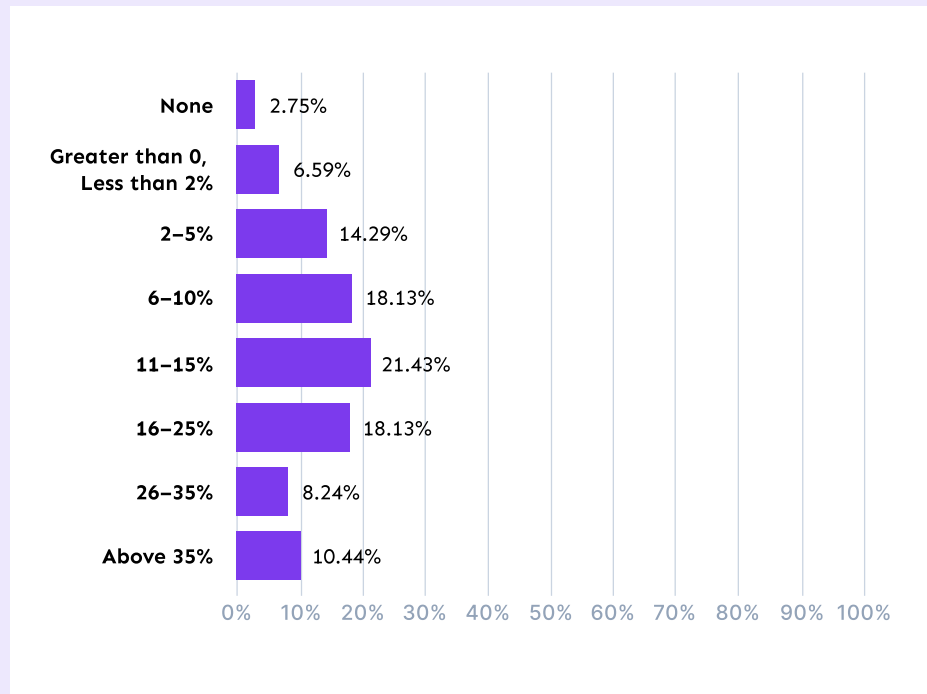
When it comes to the rather touchy subject of developer hiring, 40% of those surveyed said their employers have maintained the pace of developer hiring, but exactly one-third reported developer hiring has decreased. Just 26% said developer hiring has increased.

Developer hiring is down for several reasons, mostly relating to the economy and AI, survey takers told us. Here's a sampling in their own words.



Diversity and engineering

What percentage of your engineering team is women/non-binary?
(2025)



When asked how diverse their engineering teams were, the largest number of survey respondents (22%) said that between 11% and 15% of their colleagues identified as women and/or nonbinary. To put this in context, a 2024 global developer survey cited by Statista found 80% of developers around the world identified as men and roughly 19% said they were women. The next largest group in our survey, 18%, said women and nonbinary individuals made up both 6% to 10% of their engineering teams and between 16% and 25%. Roughly 10% of survey takers said the percentage of women and nonbinary colleagues exceeded 35%.

Women and nonbinary individuals are also under-represented in engineering leadership, particularly in top management. Just under 19% of respondents said between 6% and 10% of their engineering managers were women and/or nonbinary while 15% said there were fewer than 2% and 12% said there were none. Just over 29% of respondents said they had no women and/or nonbinary directors of engineering, while 20% said they had between 2% and 5%. Just over 16% said they had less than 2% of women and/or nonbinary directors of engineering.

The vast majority of those taking our survey (56%) said they had between 0 and 1 VPs of engineering, and 19% said they had more than 5. But those VPEs are most likely to be men: 60% of respondents said they had no women and/or nonbinary VPEs, and 29% had 1.

The picture is largely the same when it comes to the CTO role: over 80% of respondents had a CTO and 85% said their CTO does not identify as a woman or nonbinary.

Unfortunately those statistics are unlikely to change soon. When asked if their organizations had plans or practices in place to increase diversity in hiring, 59% of respondents either said no or that they were unaware of any. Almost 41% said their companies did have plans in place to increase diversity.

Engineering productivity and effectiveness

Despite appearances to the contrary, not everything in engineering is gloomy today, particularly when it comes to productivity and effectiveness. This year just over 78% of respondents said their engineering organizations were somewhat or very effective; in 2024, only 42% of respondents felt that way. In fact only 9% of survey takers said their teams were somewhat or extremely ineffective compared with 42% in 2024.

And survey takers were also bullish about how their work impacts their organization and its goals. Just over 67% of respondents said their efforts increase company revenues AND reduce costs, while 26% said their contributions simply reduce costs. Just 2% said their coding doesn't reduce costs or increase company revenues, which perhaps reflects a good understanding of their role in the business cycle.

Engineering teams measure their productivity in a wide variety of ways. Almost 43% of those surveyed said they have frameworks in place, 35% regularly discuss productivity in meetings and 28% track certain metrics. But surprisingly 26% of respondents said their employers don't track productivity at all. When engineering productivity is measured, it is

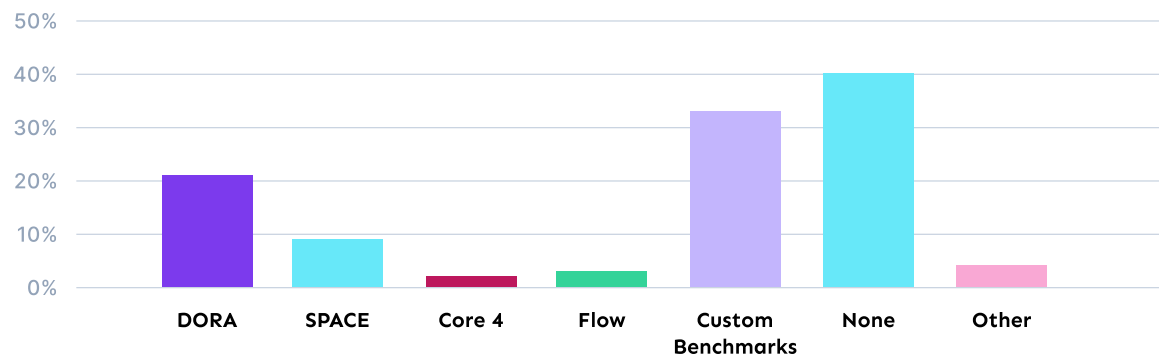
mostly likely to happen quarterly (28%), followed by monthly (26%), and weekly (21%). Only 2% pay attention to productivity daily, and 16% don't track it all.

Slightly more than 74% of survey takers said their organizations take developer satisfaction and feedback into consideration when it comes to assessing tools and processes.

When it comes to the most popular engineering productivity benchmarks, it turns out the clear winner is...none. Over 40% of those surveyed don't use benchmarks at all, and the teams that do prefer their custom solutions by a wide margin (32%) over anything else. The most popular "off the shelf" option is DORA at 21%, followed by SPACE at 9%.

Even if they're not using benchmarks, survey takers report their employers are taking steps to improve engineering productivity including fostering cross-team collaboration (69%), providing the right tools for the task (58%), and proactively minimizing disruptions and context switching (56%). (Survey takers could choose all that apply.) Just 13% said their companies have not improved productivity., a 4% decrease from 2024.

Which engineering benchmarks does your team rely on to enhance productivity?



The biggest productivity challenges

The single biggest barrier to better engineering productivity is a lack of clear goals or objectives, according to 46% of survey takers. But there are other hurdles as well: 37% cited the lack of effective measurement frameworks and the effort involved in regular measurement, 34% pointed to data gaps or deficiencies in data accuracy and 32% blamed it on a lack of leadership buy-in.

Respondents told us in their own words about the biggest productivity challenges facing their employers. In short, engineering teams are being asked to produce, and adjust to, a lot.



We also asked respondents for one thing their organizations could begin doing to boost engineering productivity and their responses ranged from improved clarity to better metrics and “less chaos.”



Developer experience or DevEx

Developer experience, or DevEx, encompasses the tools, workflows, and cultural factors that enable engineers to do their best work. How organizations define and measure DevEx reveals their engineering priorities and maturity—whether they emphasize output metrics, developer satisfaction, or collaboration.

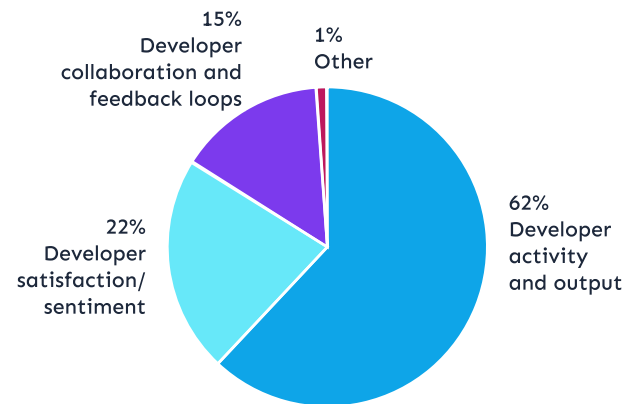
Slightly less than 67% of survey takers said their organizations take developer experience, or DevEx, into consideration when it comes to engineering productivity; that figure is down 14 points from 2024. If companies do pay attention to DevEx, 36% said it is weighted the same as output metrics, a 36% decrease from last year's survey. A full 28% said output metrics were considered more important than DevEx (up 16% year over year), while just 4% said DevEx was more important than output metrics, down 16 points from last year.

What does DevEx look like in 2025? A majority of those surveyed (41%) said it was a "focus on developer activity and output" while the remainder were evenly split between "developer satisfaction and sentiment" and "developer collaboration and feedback loops." Clearly the concept of DevEx is evolving over time: last year 62% said DevEx was a focus on developer activity and output, while slightly less than 22% chose developer satisfaction/sentiment, and 15% described it as a focus on developer collaboration and feedback loops.

Just shy of 73% of respondents said their organizations have not built or adopted an internal developer platform (IDP). The 27% that have an IDP had mixed responses on its usefulness: 54% said it improved productivity *a little,* 24% believe it *greatly* improved productivity and 22% don't think it's had any impact on productivity.

We asked respondents to tell us what DevEx looks like in their organizations (spoiler alert: lots of surveys).

What is DevEx?



"Part centralized (stds/tools), part application/product team centric."

"Quarterly surveys, discussed at the team level, also reviewed with the leadership at org level / company level insights."

"It is individual team effort, we measure by the outputs from them."

"A centralized team trying to measure and provide insights to the rest of engineering leaders."

"We have a dev productivity team that makes developer experience better as one of their goals."

"We have a team, certain measures are define in excel sheet, all orgs fill the number every month, they are reviewed, and DevEx team take the actions."

"It's not a significant focus—we survey in general employee experience surveys but don't have a developer-specific setup."

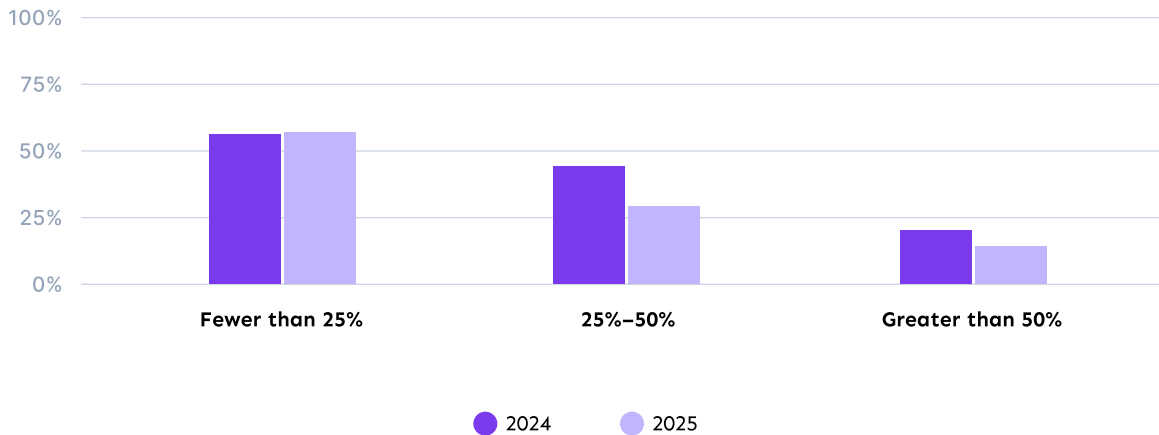
"Define success metrics, measure it regularly and continuously improve based on feedback."

"We have survey and check-ins to understand gaps with tools, processes and culture."

"We have a separate organization in charge of providing tooling and enablement."

Developer burnout

Percentage of developers experiencing burnout: 2024 vs 2025



Almost 60% of survey takers said their organizations do not track developer burnout, a marked change from last year when it was just 22%. For those companies that do pay attention to burnout, they approach it in several ways including using internal surveys (42%), retention metrics (17%), satisfaction metrics (15%), and productivity/efficiency metrics (10%). These methods have shifted since 2024 when just 17% of companies were using internal surveys and instead relying primarily on satisfaction metrics (38%) and retention metrics (27%).

Developer burnout continues to be an issue in 2025, but the number of people affected appears to be trending down. This year the majority of respondents (57%) said fewer than 25% of their developers were burned out; last year the majority (44%) reported the burned out percentage was substantively higher, between 25% and 50%. In this year's survey, 29% thought the burnout percentage was between 25% and 50%, and 14% thought more than 50% of developers were burned out, down 6 points from last year.

Organizations are tackling burnout prevention in a variety of ways although, disturbingly, 29% of respondents reported their employers aren't doing anything at all about the problem. Companies are most likely to promote work/life balance (46%), provide mental health resources (44%), offer continuous learning opportunities (39%), address potential toxic work environments (21%), and train managers on burnout identification and prevention (18%).

The role of AI in engineering productivity

With artificial intelligence in widespread use in engineering, we wondered how practitioners felt it could improve their work lives. Respondents had a lot to say on the subject.



"Developing AI solutions for tier 1-2 solutions and tasks such as patching and self-reporting failures will be critical in shifting engineering teams left."

"AI can dramatically increase ability to generate code but it does not immediately solve for bottlenecks elsewhere (PR reviews, product, etc)."

"AI will have a huge impact on our productivity. We need to continue experimenting and then adding in AI workflows that we can scale across the team."

"AI will be and should be used to improve productivity. Tools need to be readily available and integrated."

"I view AI not as a replacement for engineers, but as a force multiplier—enhancing creativity, velocity, and quality when used thoughtfully. It also challenges us to evolve how we think about code ownership, ethics, and collaboration."

"AI should help find the patterns and bottlenecks and address them. Automate tedious tasks so engineers can focus on collaboration and problem-solving in more critical areas."

Conclusion

The 2025 survey data reveals engineering organizations under pressure but showing measurable improvement. Effectiveness ratings increased 36 percentage points year over year, and fewer developers report burnout compared to 2024.

Key challenges persist: tech debt emerged repeatedly in open-ended responses as a major productivity barrier. Nearly half of survey takers cited unclear goals or objectives as the biggest obstacle to productivity. And while 78% of organizations report effectiveness, many still struggle with measurement frameworks, data accuracy, and leadership buy-in on productivity initiatives.

Organizations taking developer experience into consideration dropped 14 points to 67%, with output metrics increasingly prioritized over DevEx. The majority of teams (60%) don't track developer burnout, and nearly one-third aren't taking any steps to prevent it.

AI represents both opportunity and uncertainty. Survey respondents are largely optimistic about AI's potential to handle mundane tasks and tackle larger challenges, but successful adoption requires clear workflows and integration into existing processes.

For engineering leaders, the path forward involves addressing tech debt, establishing clear goals and priorities, implementing effective measurement frameworks, and treating developer experience as a strategic consideration rather than an afterthought. The data in this report provides benchmarks for organizations looking to assess their current state and identify areas for improvement in 2026.
