

# Continuous Deployment in App Development



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As continuous integration and Continuous Deployment (CI/CD) continue to gain traction, many organizations have adopted this approach to enhance the quality and reliability of their app deployments.

Gartner Peer Insights and Armory surveyed 100 technical decision-makers to understand their organization’s current status regarding deployment reliability, levels of CI/CD adoption, and barriers to innovation.

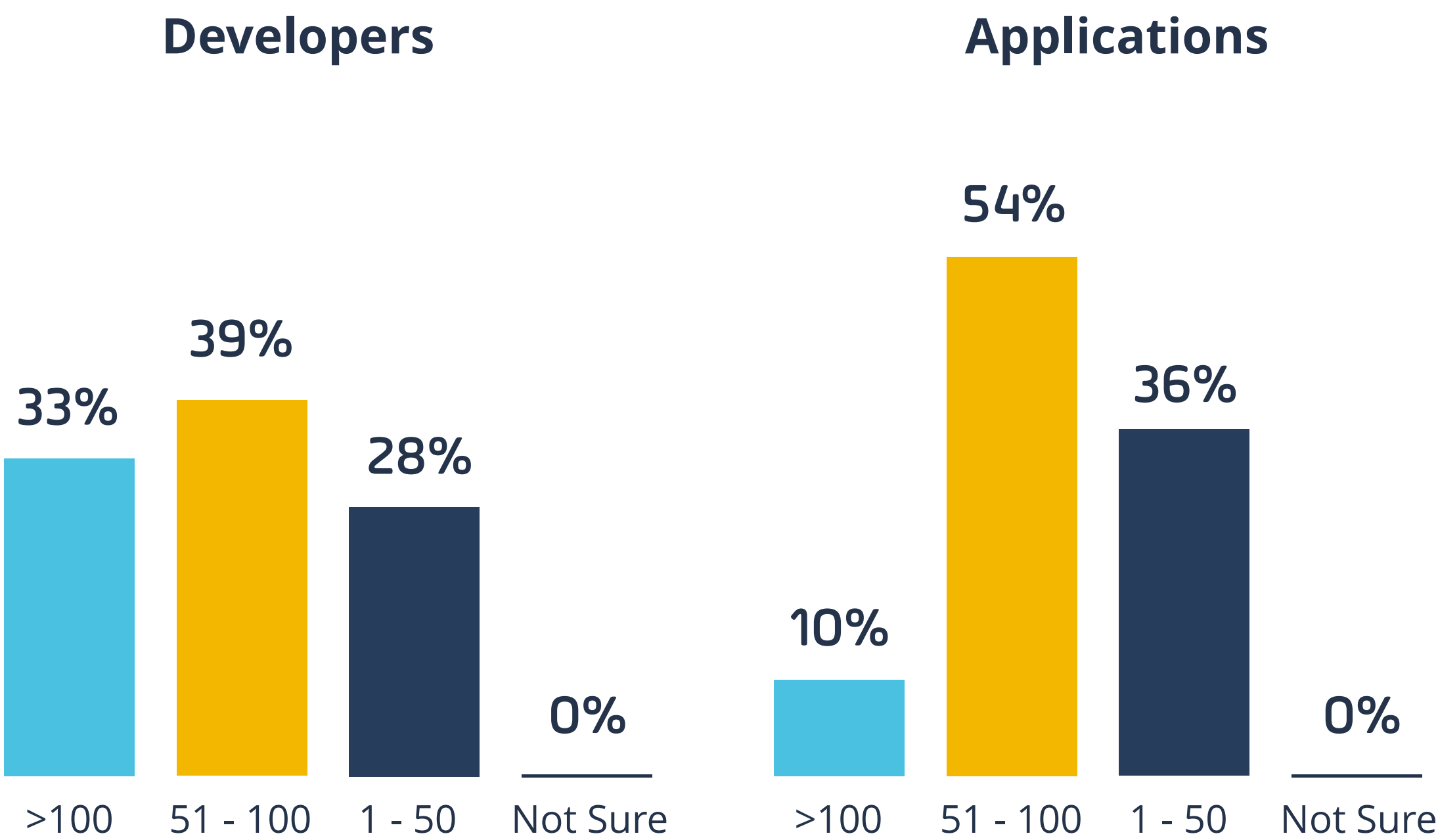
Data collected from March 30 - May 4, 2022

Respondents: 100 IT decision makers in software, finance, and banking

## Organizations are mostly deploying stateful apps on-premises, but Microsoft Azure and AWS are making up ground

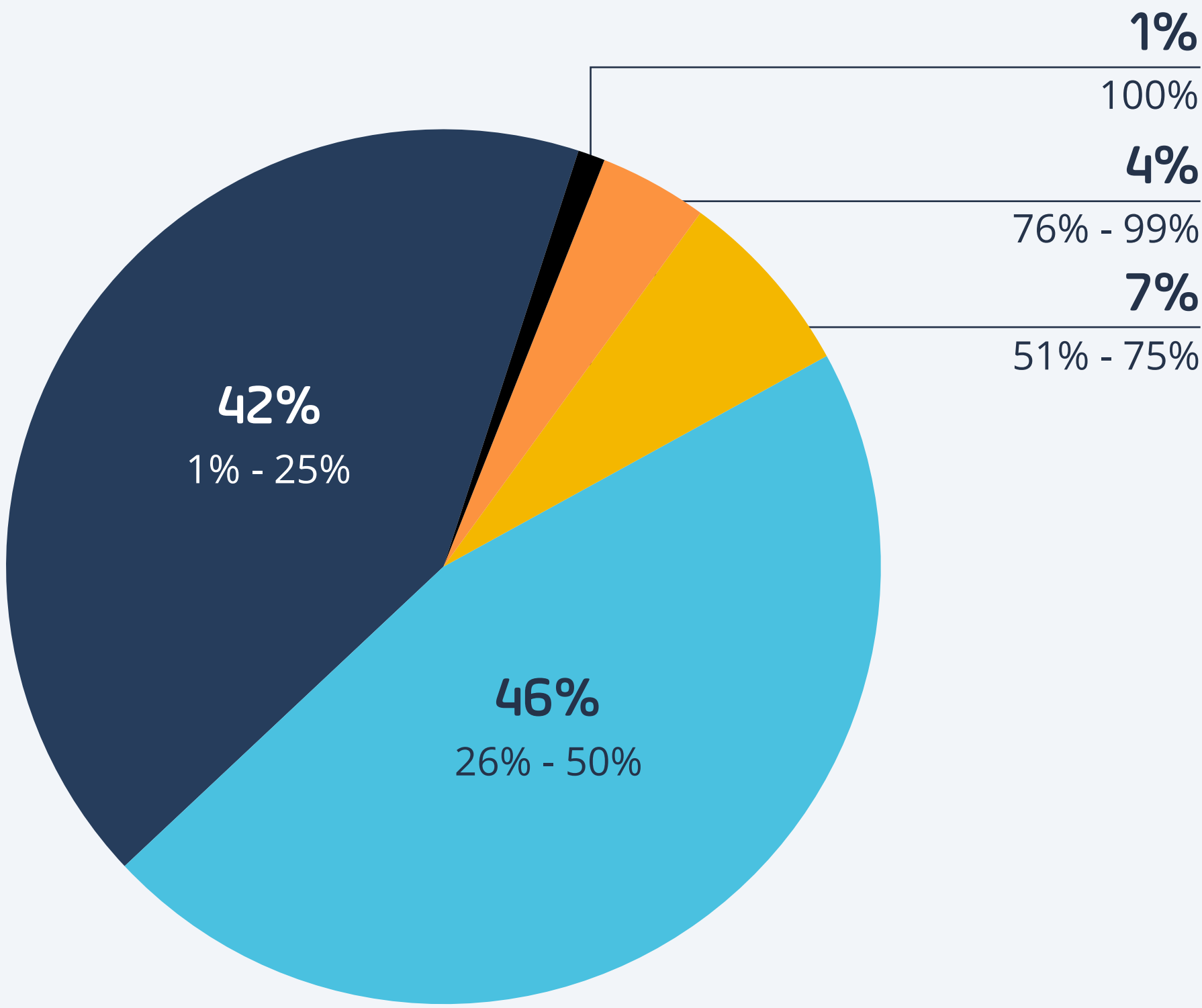
Most respondents say their organization has between 51 - 100 developers, and 51 - 100 applications.

How many developers and applications do you have in your organization?



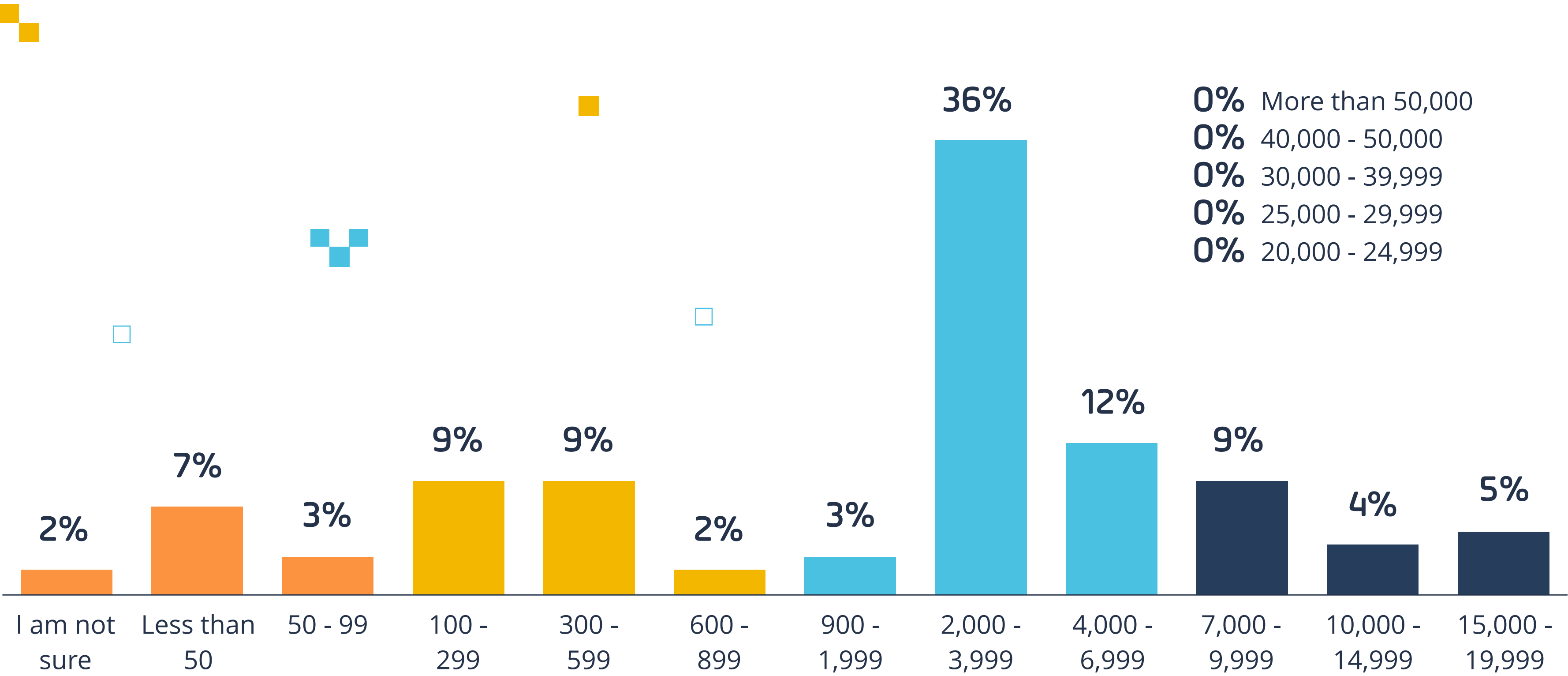
88% of respondents cite less than half of their organization’s apps as stateless.

What percent of your organization’s apps are stateless (i.e., opposite of stateful; no customer data is saved and each session is carried out as if it is the first time. Nothing is dependent on data from a previous session with this customer)?



Most respondents use their Continuous Deployment tool to execute 2,000 - 3,999 deployment pipelines each month, while none exceed 20,000 deployment pipelines.

Currently, how many total deployment pipelines do you execute in a month using your Continuous Deployment tool/platform (like Armory, Spinnaker, GitLab, etc.) to both your production, and non-production environments? (e.g., if you have two deployment pipelines that run 10 times per day, you will have approximately 600 deployment pipelines executed per month [2 runs \* 10 per day \* 30 days])

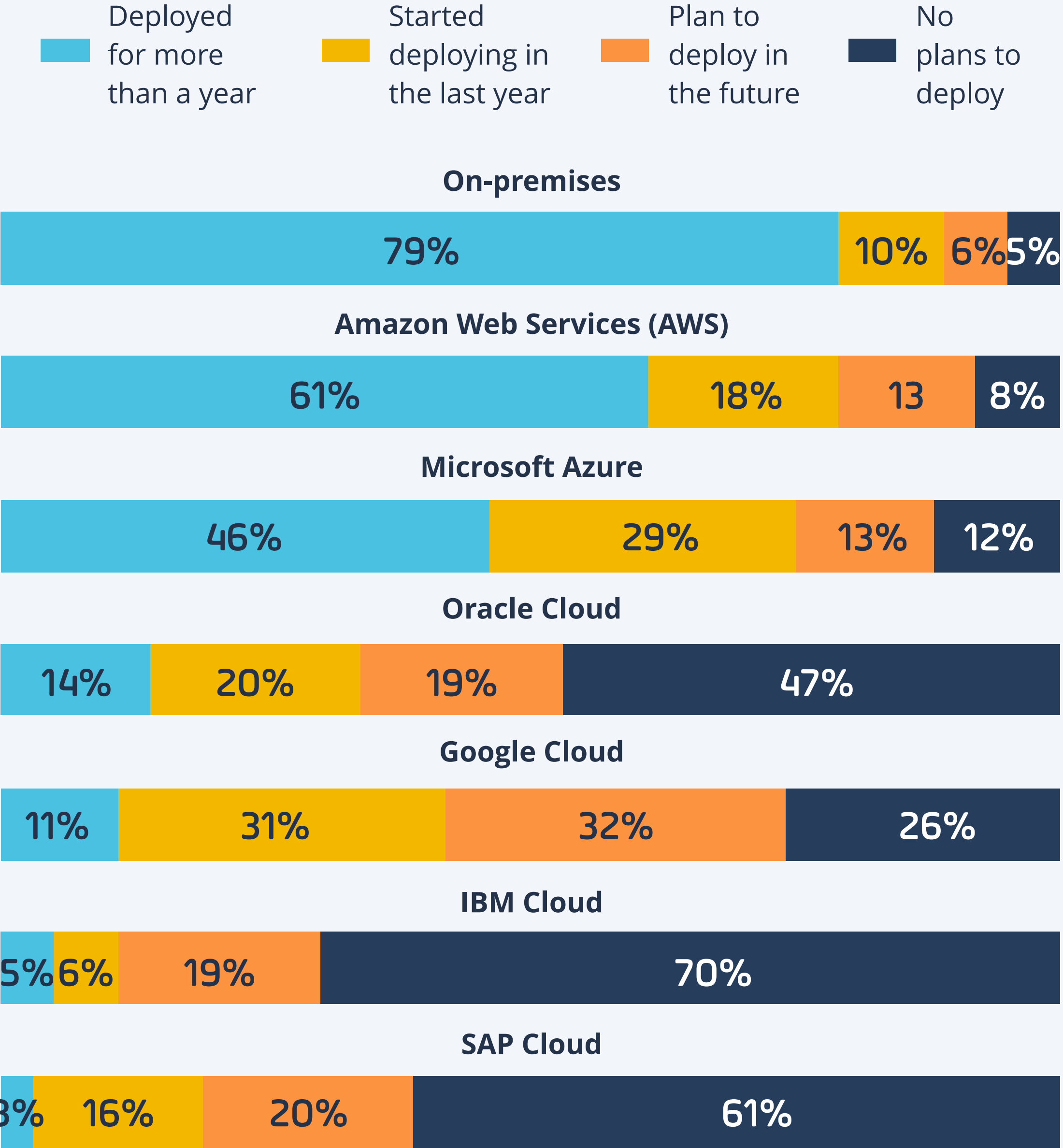


Overall, 9% of respondents use their Continuous Deployment tool to execute 7,000 - 9,999 deployment pipelines each month. **The amount of respondents executing deployments in this range increases 200% when looking at only those with more than 100 developers.**

On-premises, AWS, and Azure are the clear winners for environments where organizations have deployed their apps for more than a year. Google Cloud has made up ground in the past year, with 31% of respondents deploying in the past year, with a further 32% planning to deploy in the future.

How would you describe your app deployment in each of the following environments?

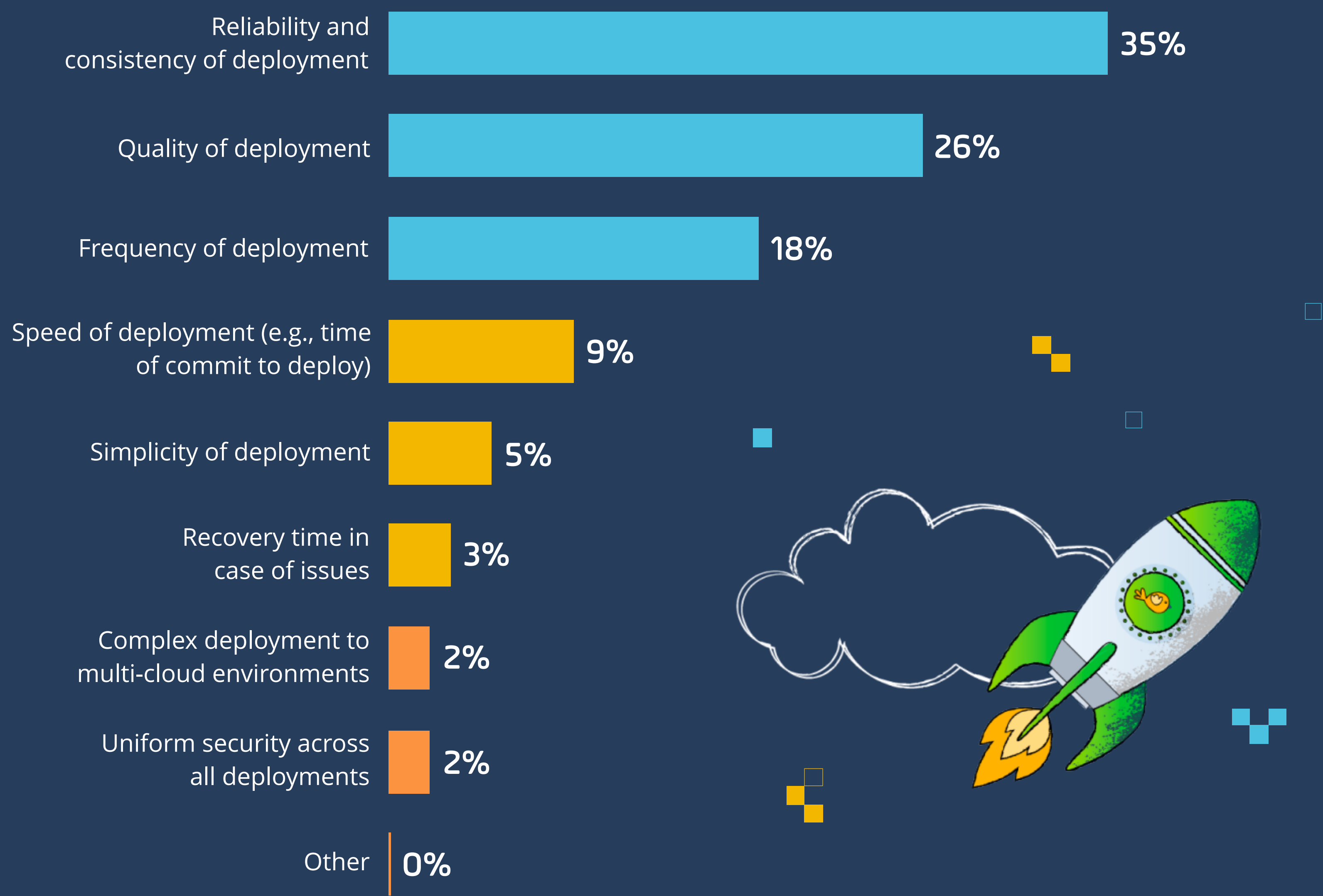
100% of respondents at organizations with more than 100 developers have been deploying on-premises for more than a year.



# As automation drives adoption of Continuous Deployment, reliability and complex multi-cloud deployments remain challenging

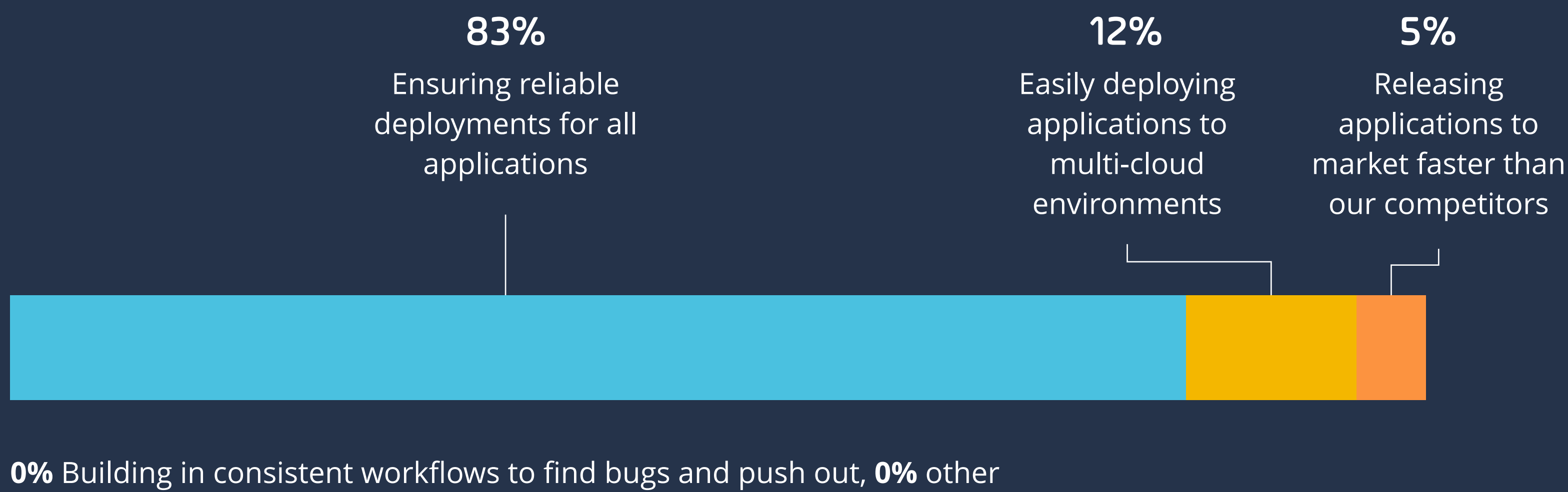
Most respondents’ top pain point with app deployment is reliability and consistency of deployment (35%) or quality of deployment (26%).

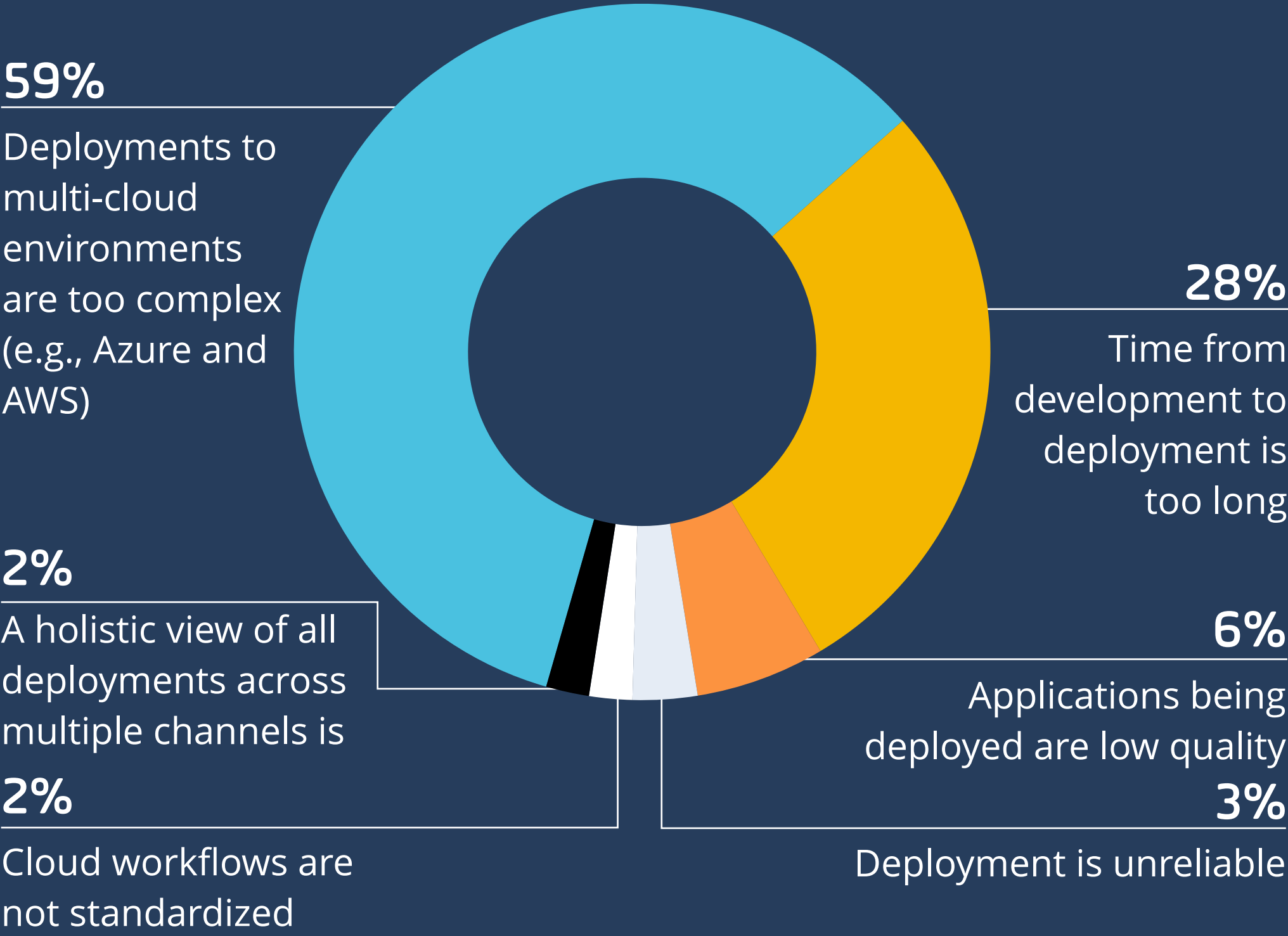
What is your company’s biggest pain point with your current approach to app deployment?



An overwhelming majority of respondents (83%) say their organization’s top app development and deployment priority is ensuring reliable deployments.

What is your organization’s top priority with regards to app development and deployment?

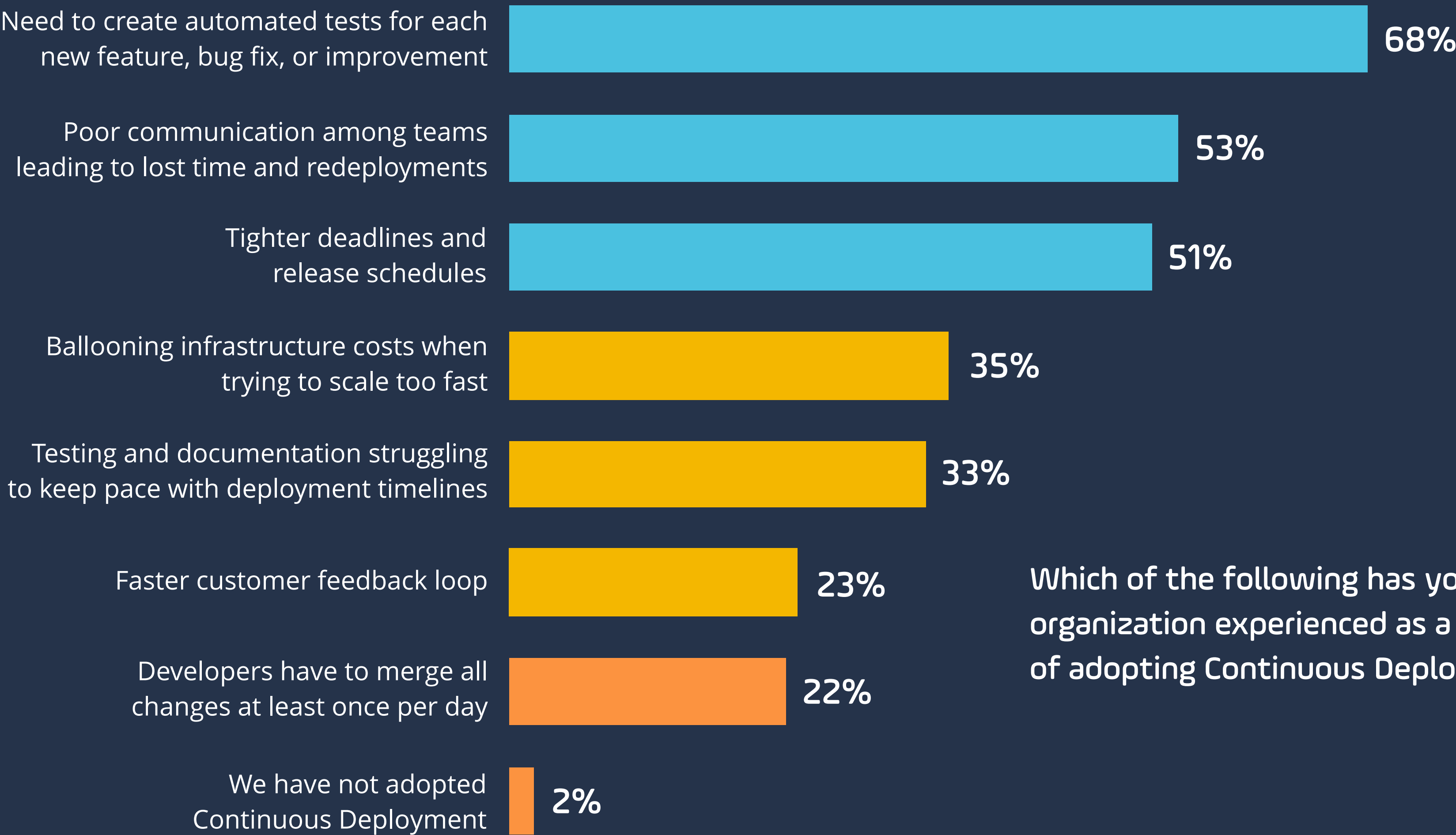




More than half (59%) cite overly complex deployments to multi-cloud environments as the top app development and deployment issue their engineering team needs to address.

What is your engineering team’s top issue that needs to be addressed when it comes to app development and deployment?

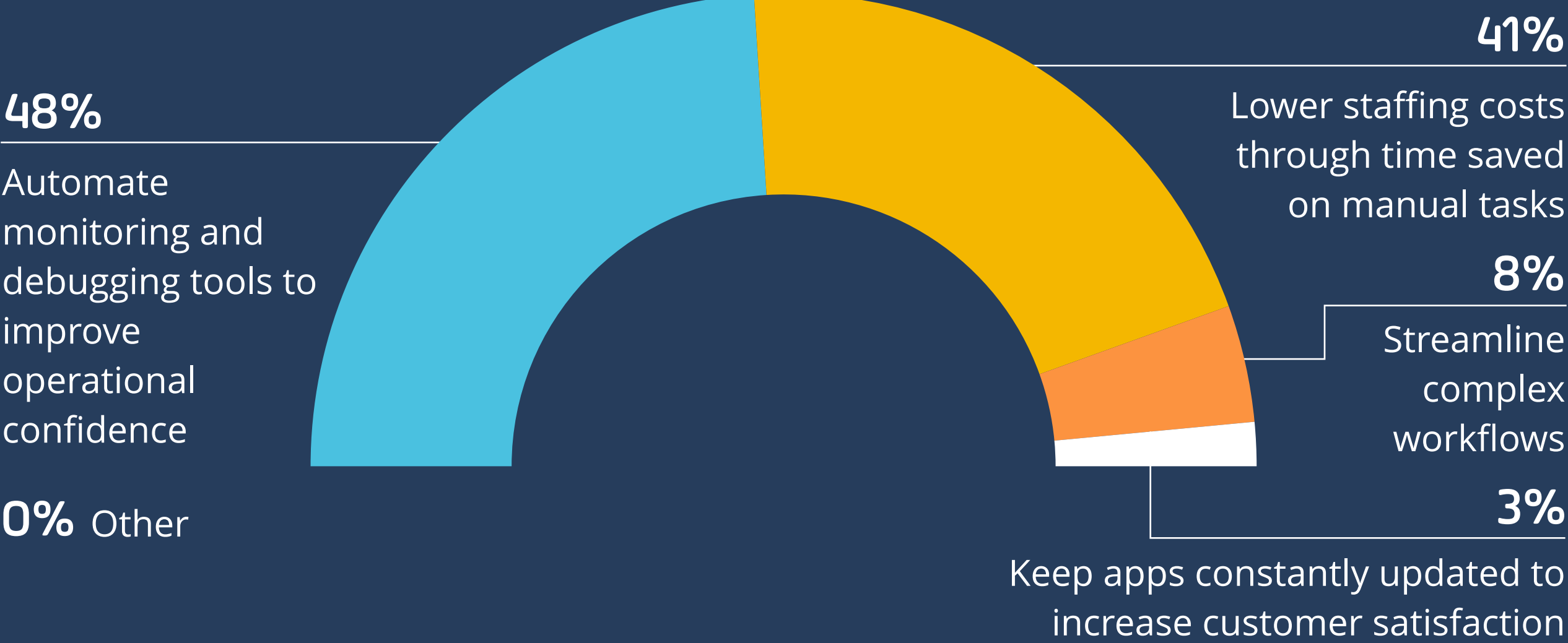
As a result of adopting Continuous Deployment , 68% of respondents say their organization needs to create more automated tests for each new feature, bug fix, or improvement to their apps.



Which of the following has your organization experienced as a result of adopting Continuous Deployment?

Automation is driving the adoption of Continuous Deployment . 48% of respondents are most influenced to adopt Continuous Deployment for automated debugging and monitoring tools, and 41% are enticed by lower staffing costs through time saved on manual tasks.

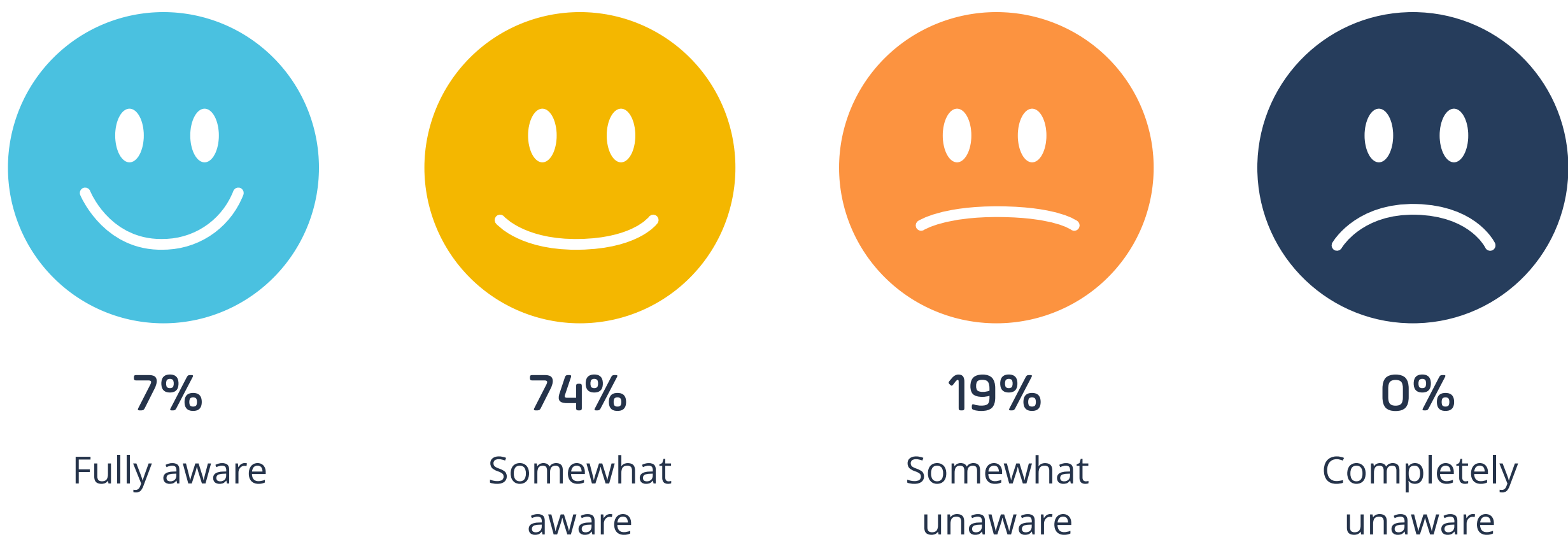
Which of the following features most influenced/would most influence you to adopt Continuous Deployment at your organization?



# While awareness of metrics that determine deployment reliability is high, existing legacy infrastructure is still a cost barrier to deployment innovation

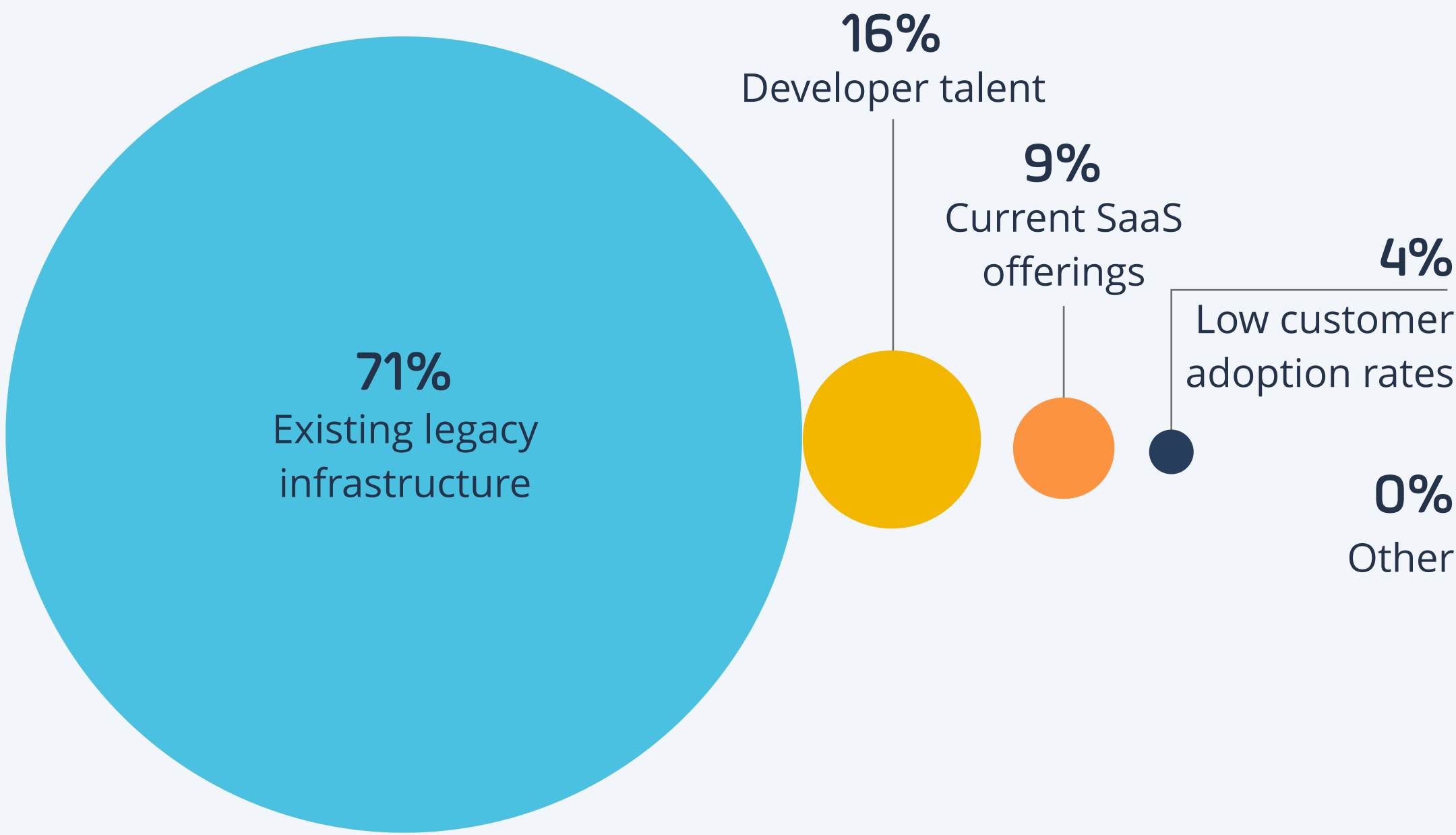
81% of respondents are either somewhat or fully aware of what metrics determine their application’s deployment reliability.

How would you describe your awareness of what metrics determine your application’s deployment reliability?



Existing legacy infrastructure remains the largest cost barrier to deployment innovation among most respondents (71%), followed by high cost of developer talent (16%).

At the speed of current technology and application development, as more and more applications are built, what would you say is your biggest cost prohibition to innovation?



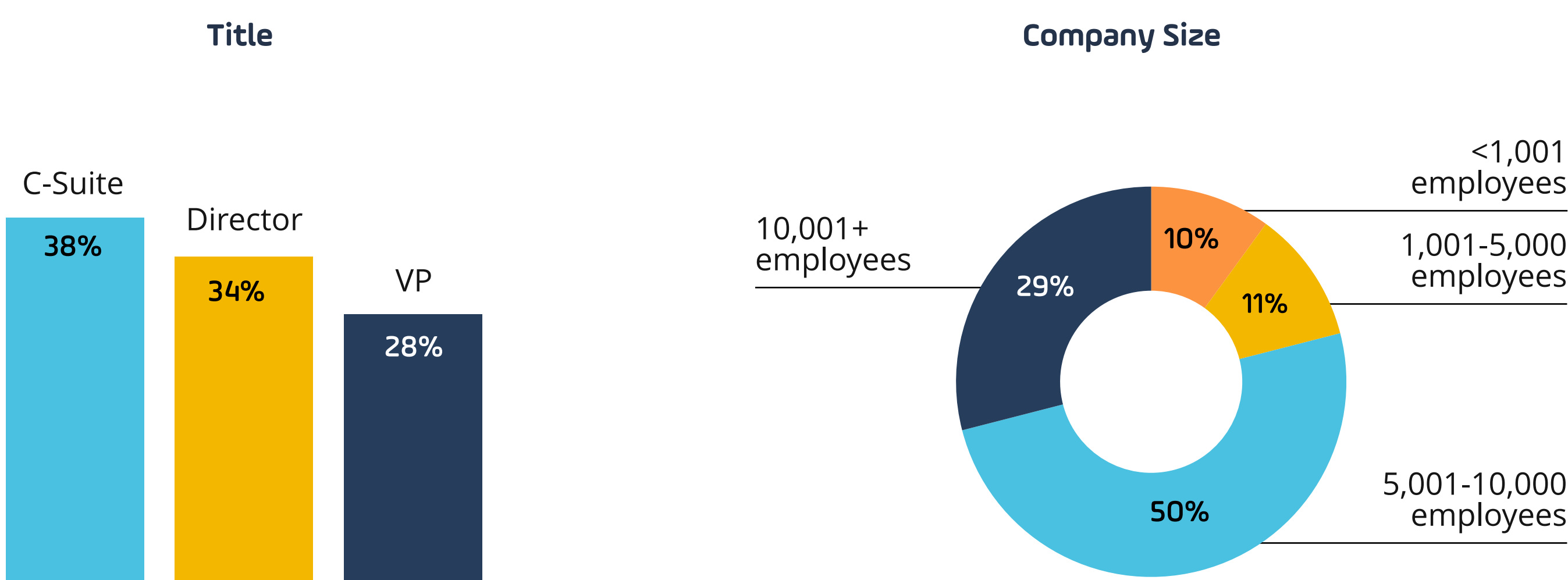
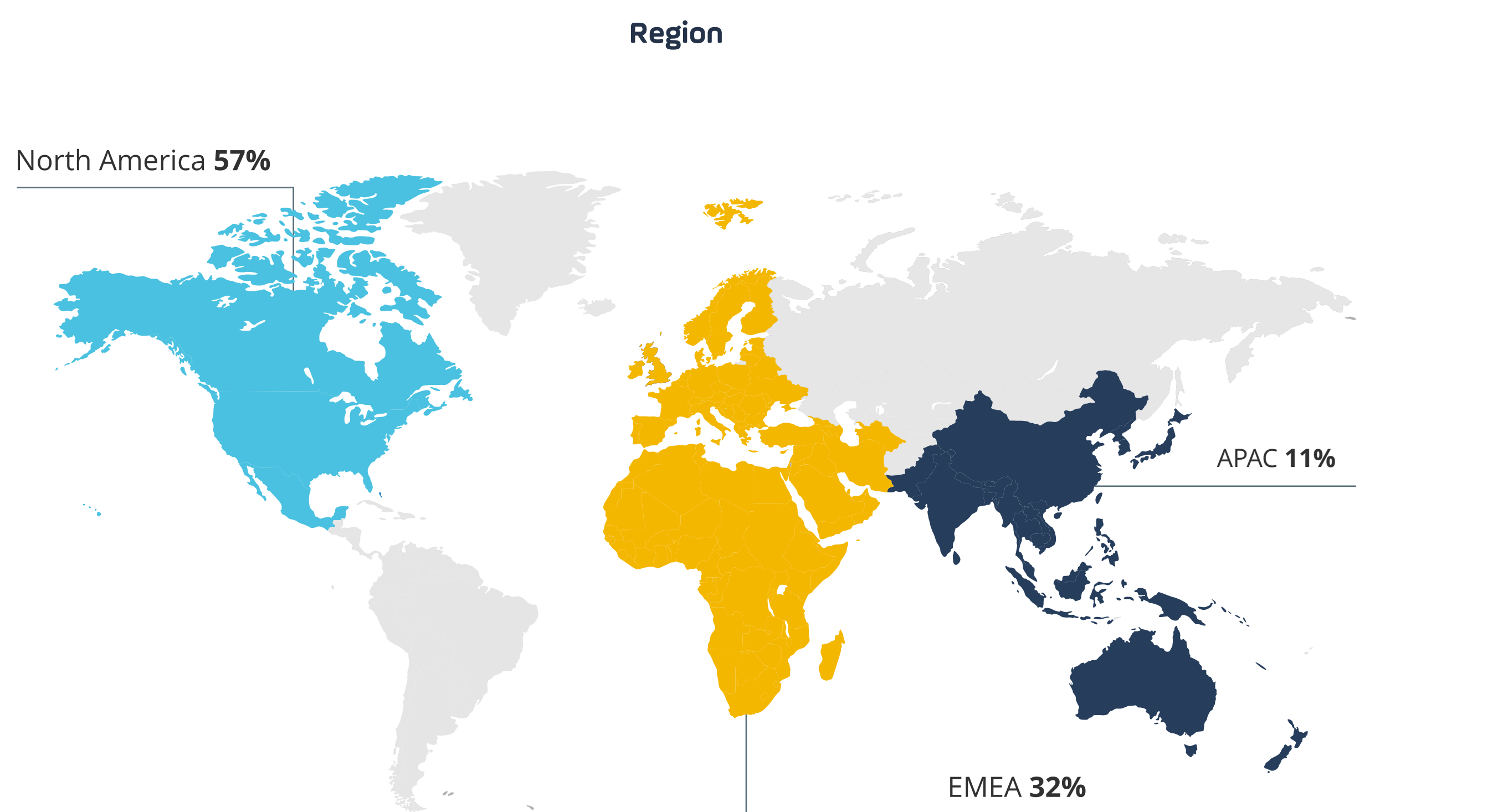
We live in a world today where software is your competitive advantage. Leveraging this advantage results in accelerating your time-to-market, maintaining stability, avoiding outages; always being reliable and available for your customers.

We believe deploying software safely and continuously at any scale is at the center of achieving your competitive advantage. It should be easy to understand, achievable, and effortless for all developers of the world. Write code. Package artifacts. Choose targets. Hit deploy — This is every developer’s dream deployment scenario.

Armory makes this dream a reality by enabling development teams to confidently deploy their software every time; easily, reliably, safely, securely, and continuously.

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# Respondent Breakdown



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Source: Gartner Peer Insights, CI/CD App Development survey

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