

69% of Enterprises Use a Mix of Open Source and Cloud-Based Software to Power AI Initiatives

Enterprises around the world are using artificial intelligence (AI) and machine learning (ML) in a variety of ways to generate significant business benefits. Despite a large number of different AI/ML vendors and architectures to choose from, most technology leaders are using open source tools and cloud-based infrastructure to power their AI/ML projects—and most (78%) of these initiatives are deployed using hybrid cloud infrastructure.

Red Hat and Pulse surveyed 100 enterprise IT and data leaders who use AI and ML to uncover why they implemented the technology, the types of AI/ML tools they rely on, and the most popular initiatives they're investing in.

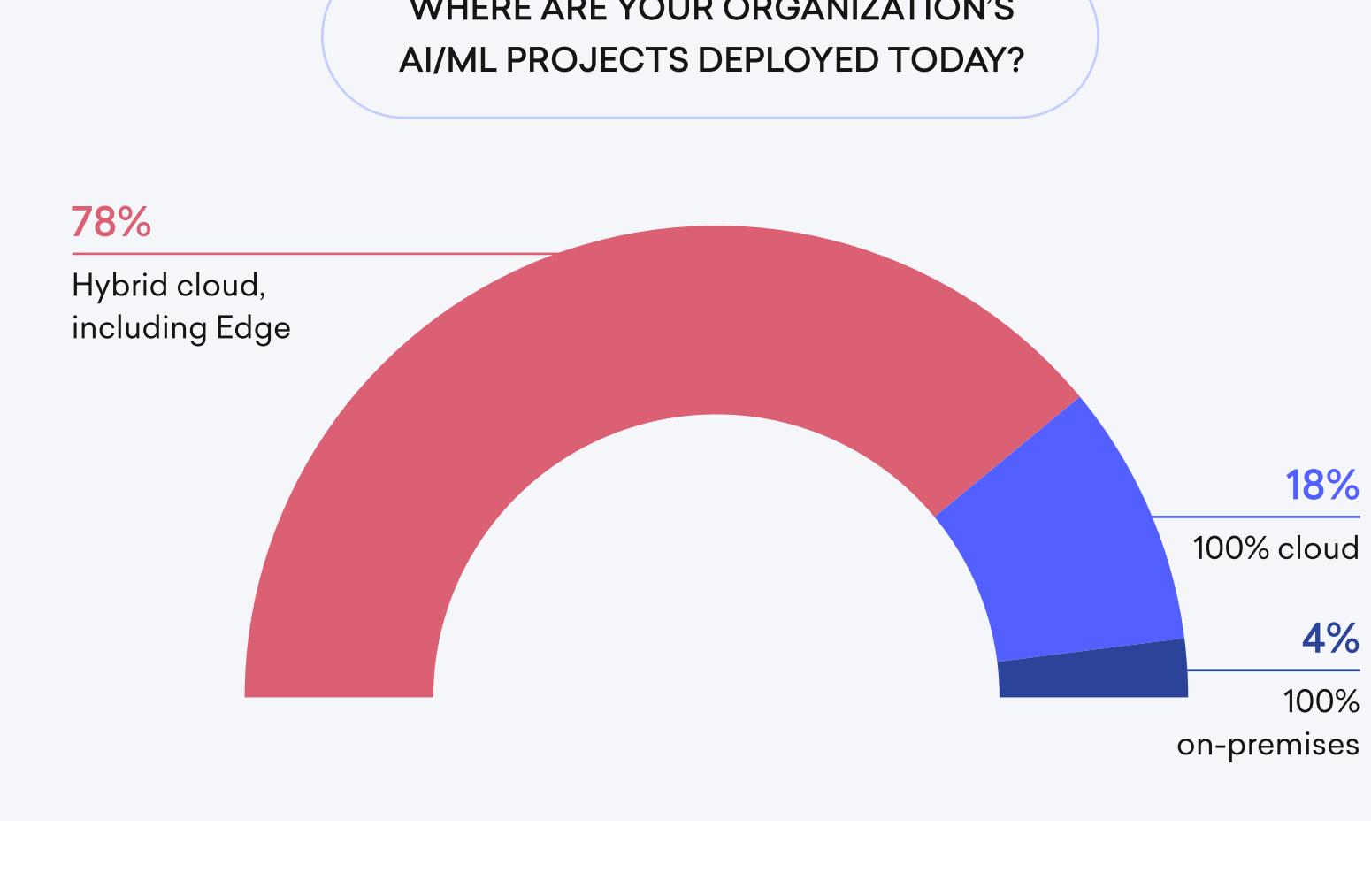
Data collected from Dec. 16, 2020 - Jan. 22, 2021

Respondents: 100 enterprise IT and data leaders

ENTERPRISES ARE USING AI TO BOOST PRODUCTIVITY AND GENERATE PREDICTIVE ANALYTICS

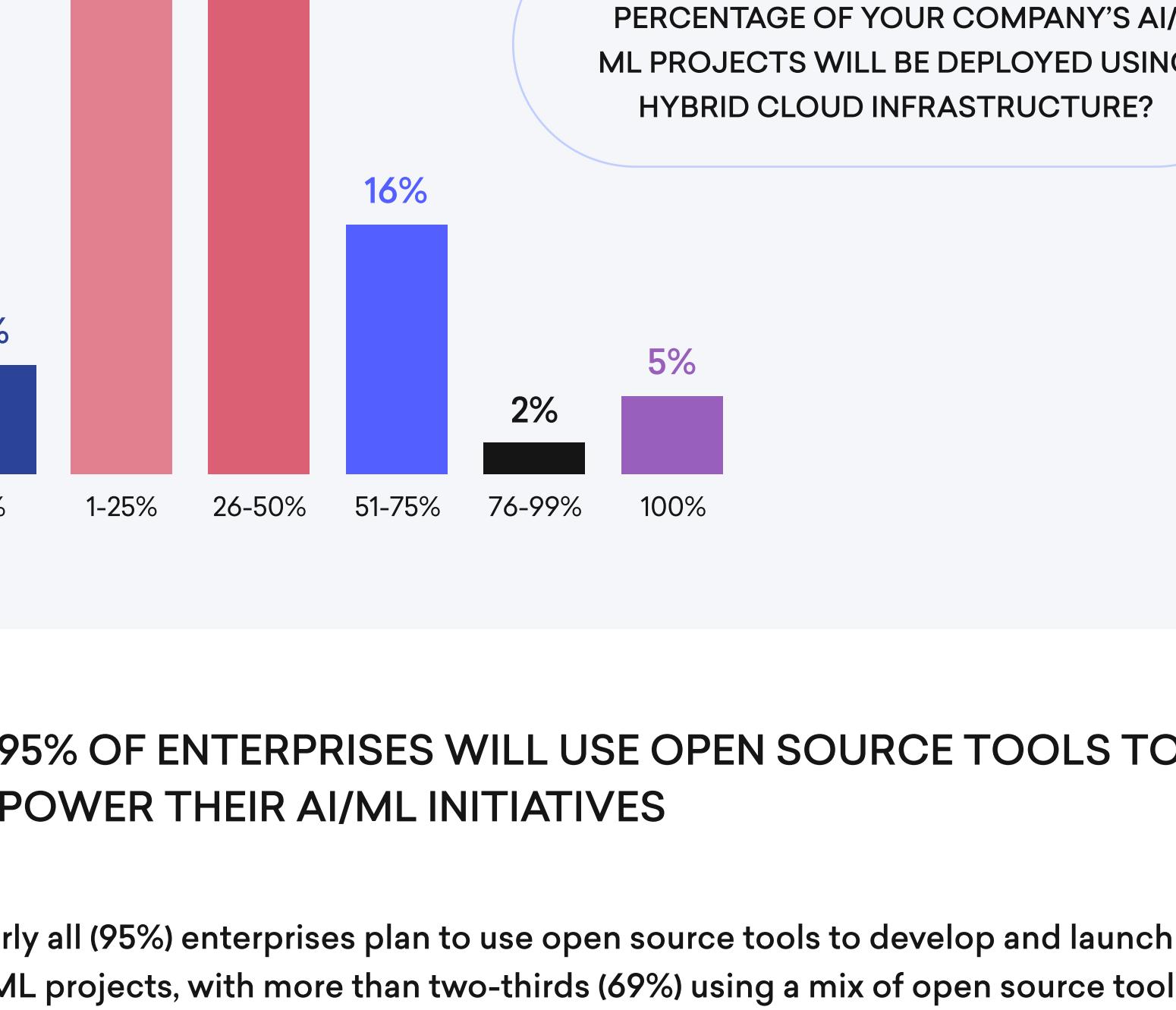
The top reasons today's enterprise technology leaders are using AI and ML are to improve worker productivity (59%), improve product or service quality (58%), and lower costs (51%).

WHAT ARE THE TOP BUSINESS DRIVERS BEHIND YOUR ORGANIZATION'S ADOPTION OF AI/ML?



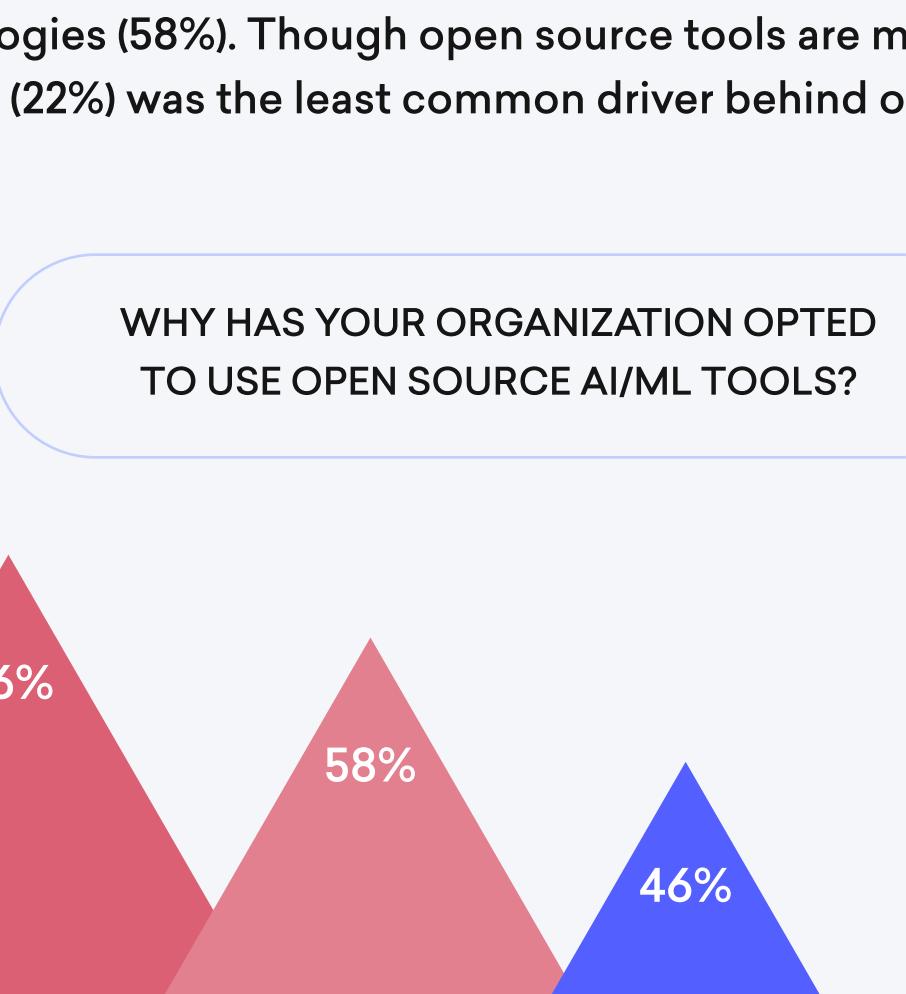
To achieve these goals, the main initiatives they're powering with AI and ML are predictive analytics (70%), customer analysis (57%), and digital security (53%).

WHICH OF THE FOLLOWING USE CASES ARE YOU LOOKING TO GAIN INSIGHT ABOUT/SOLVE USING DATA FROM YOUR AI/ML INITIATIVES?



More than three-quarters (82%) of enterprises are relying on existing human resources to manage their AI/ML initiatives—the most common individuals being those on DevOps (53%) and cloud infrastructure (50%) teams.

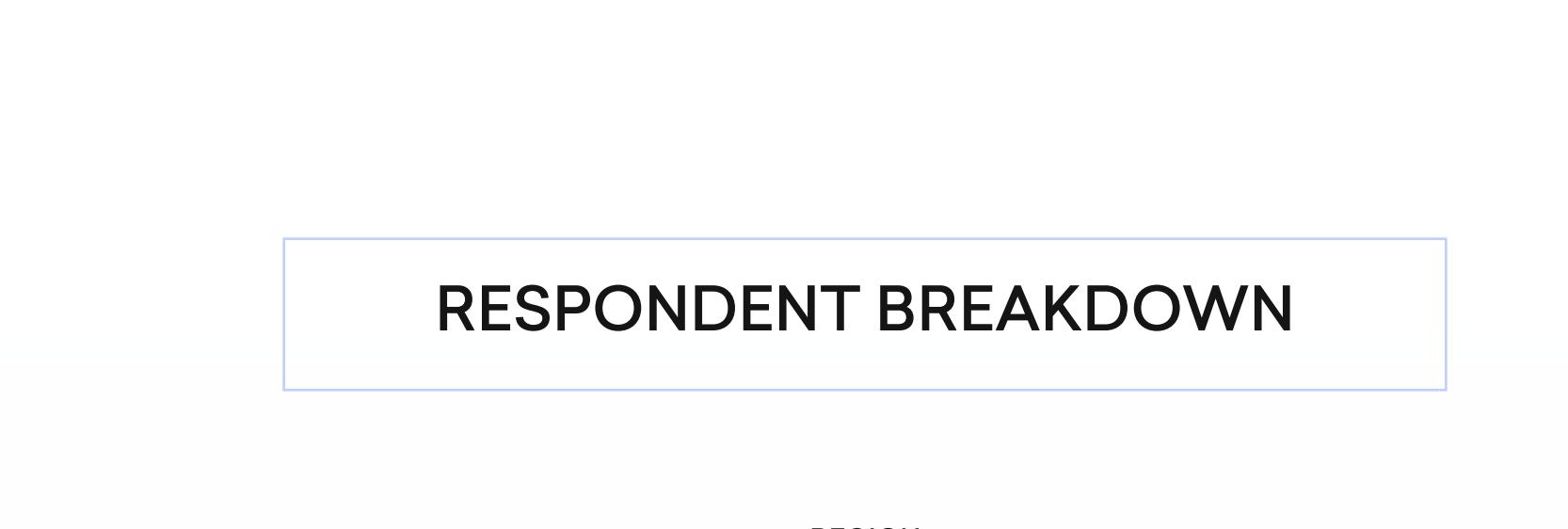
WHICH DEPARTMENTS OR TEAMS AT YOUR COMPANY ARE PROVIDING OPERATIONAL MANAGEMENT FOR YOUR AI/ML INITIATIVES?



HYBRID CLOUD IS THE MOST COMMON INFRASTRUCTURE POWERING AI

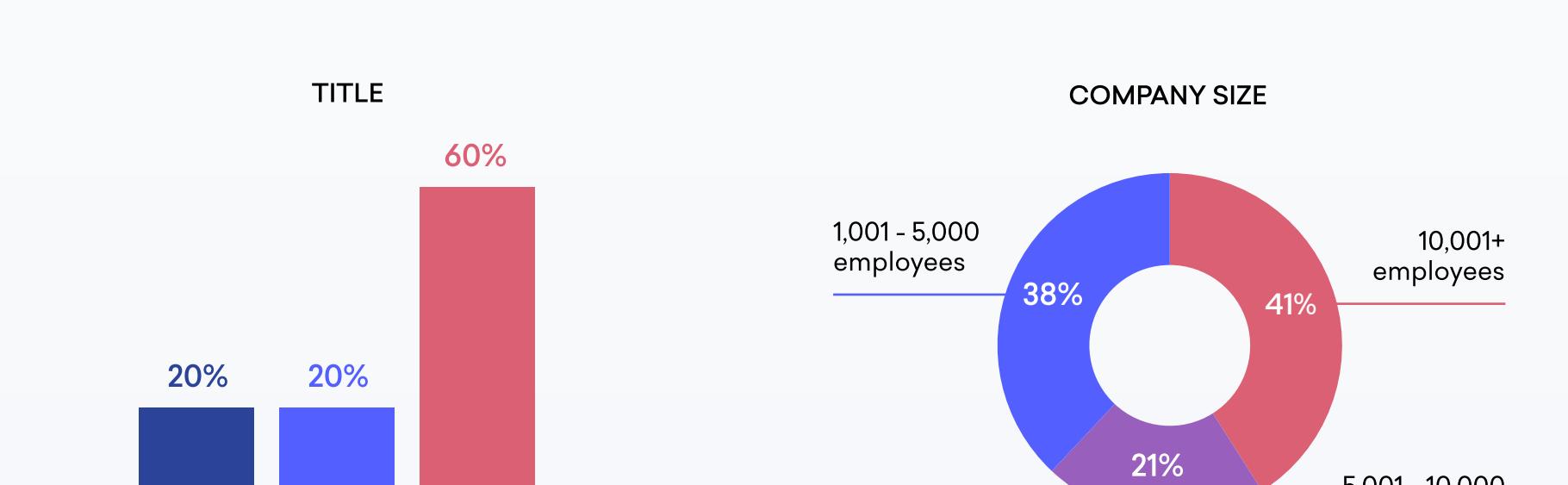
Today, 78% of enterprise AI/ML projects are deployed using hybrid cloud infrastructure. Only 18% of all projects are deployed solely in the cloud.

WHERE ARE YOUR ORGANIZATION'S AI/ML PROJECTS DEPLOYED TODAY?



Of the organizations using some cloud-based infrastructure, most (51%) use two public or private clouds.

HOW WOULD YOU BEST DESCRIBE YOUR AI/ML CLOUD FOOTPRINT?



And, over the next 12 months, 60% of enterprises say more than one-quarter of their AI/ML projects will be deployed using hybrid infrastructure. And, nearly one-quarter (23%) of the respondents said they won't use hybrid cloud infrastructure at all.

OVER THE NEXT 12 MONTHS, WHAT PERCENTAGE OF YOUR COMPANY'S AI/ML HYBRID CLOUD INFRASTRUCTURE WILL BE DEPLOYED USING HYBRID CLOUD INFRASTRUCTURE?

95% OF ENTERPRISES WILL USE OPEN SOURCE TOOLS TO POWER THEIR AI/ML INITIATIVES

Nearly all (95%) enterprises plan to use open source tools to develop and launch their AI/ML projects, with more than two-thirds (69%) using a mix of open source tools and cloud-based services.

WHAT TYPES OF TOOLS WILL YOUR TEAM USE TO DEVELOP AND LAUNCH YOUR AI/ML PROJECTS OVER THE NEXT 12 MONTHS?

And, while less popular than traditional virtual machine environments, Kubernetes is fast becoming an alternative platform for deploying AI/ML workloads. A surprising 31% of respondents use Kubernetes as part of their AI/ML initiatives today, while 57% use Kubernetes.

OVER THE NEXT 12 MONTHS, WHAT PERCENTAGE OF YOUR COMPANY'S AI/ML HYBRID CLOUD INFRASTRUCTURE WILL BE DEPLOYED USING HYBRID CLOUD INFRASTRUCTURE?

RESPONDENT BREAKDOWN

REGION

North America 8%

EMEA 8%

APAC 3%

Latin America 1%

Other 1%

Total 100%

COMPANY SIZE

1-100 employees 38%

1001-5000 employees 41%

5,001+ employees 21%

Total 100%

TITLE

C-Suite 20%

VP 20%

Director 60%

Total 100%

Red Hat