

» FLEXERA™

2024 State of the Cloud Report

AI experimentation outpaces usage;
SaaS and cloud costs high but improving

AWS and Azure continue to battle for dominance



flexera
TM

» Table of contents

Report highlights	4	Public cloud adoption continues to accelerate	21
Organizations embrace multi-cloud	4	What's your current annual public cloud spend?	21
What challenges do you face in migrating workloads to public cloud?	5	What's your current annual SaaS spend?	22
Does your company have a FinOps team to advise, manage or execute cloud cost optimization strategies?	5	Non-SaaS software costs by vendor	23
What public cloud providers does your organization use?	6	Non-SaaS software purchase methods	24
Use of generative AI (GenAI) public cloud services	6	Do you track licenses for software running in the cloud?	25
Cloud cost optimization and sustainability prioritization	6	Workloads in public cloud	26
Methodology	8	Data in public cloud	27
What size is your organization?	9	What's your approach for migrating data to public cloud/SaaS?	28
What's your company's industry?	10	What challenges do you face in migrating workloads to public cloud?	29
Where are your headquarters located?	11	Cloud initiatives and metrics	30
What's your role?	12	Which of the following initiatives are you planning to make progress on in the next year?	30
Where in the organization do you work?	13	Top cloud initiatives by cloud usage for all organizations	31
What's your company's usage level of public cloud?	14	What are your top metrics for assessing progress against cloud goals?	32
What's your involvement with cloud in your organization?	15	Organizations are embracing multi-cloud	16
Organizations are taking a centralized approach to cloud	33	Organizations embrace multi-cloud	16
Does your company have a central cloud team or CCOE?	33	Hybrid cloud strategies	17
Does your company have a FinOps team to advise, manage or execute cloud cost optimization strategies?	34	Use of multi-cloud architectures by all organizations	18
Who in your organization leads cloud cost management responsibilities?	35	Use of multi-cloud tools	19
Utilization of MSPs for managing public cloud for all organizations	36	Public vs. private cloud usage	20
Enterprise vs. SMB MSP utilization for managing public cloud	37	Top challenges are security, spend and expertise	38
Top cloud challenges	38		

» Table of contents (cont.)

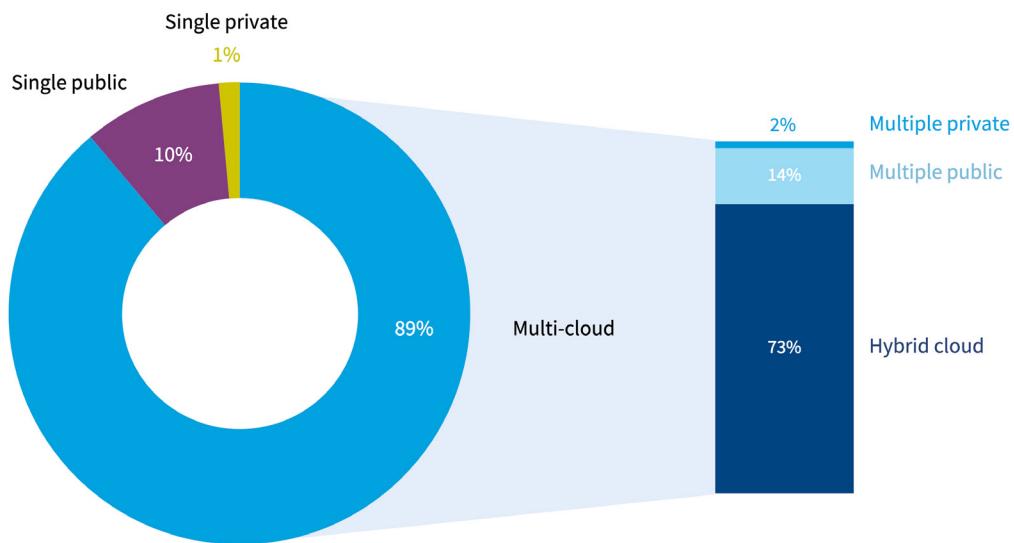
Organizations struggle to control growing cloud spend	39	Private cloud plays an important role	58
What's your organizational spend on public cloud?	39	Private cloud technologies used by all organizations	58
What's your estimated wasted cloud spend on IaaS and PaaS?	40	Enterprise private cloud technologies	59
What's your estimated wasted software spend in the cloud?	41	SMB private cloud technologies	60
Which provider discounts do you use?	42	Does your organization have a defined sustainability initiative that includes carbon footprint tracking of cloud use?	61
What types of policies do you use to optimize cloud costs?	43	Cloud cost optimization and sustainability prioritization	62
Management of SaaS and software costs compared to IaaS/PaaS costs	44		
Does your organization use a unit economics model for cloud cost analysis?	45		
Public cloud adoption is evolving	46	State of the Cloud Report: European spotlight	63
What public cloud providers does your organization use?	46	European respondents by organization size	63
YoY public cloud provider adoption rates for all organizations	47	European respondents by industry	64
Enterprise use of public cloud providers	48	European respondents by country	65
YoY enterprise public cloud adoption	49	European respondents by role	66
SMB use of public cloud providers	49	European respondents by where in the organization they work	67
YoY SMB public cloud adoption	50	European respondents by cloud usage level	68
How much do you spend on each cloud provider?	51	European adoption of central cloud team or CCOE	69
Enterprise public cloud spend	52	Cloud migration challenges for European organizations	70
SMB public cloud spend	53	Cloud initiatives for European organizations	71
How many VMs do you have in each cloud provider?	54	Public cloud provider adoption rates for European organizations	72
Use of public cloud PaaS services is increasing	55	Does your company have a FinOps team to advise, manage or execute cloud cost optimization strategies?	73
Public cloud services used for all organizations	55	Does your organization have a defined sustainability initiative that includes carbon footprint tracking of cloud use?	74
Public cloud services used by enterprises	56	Utilization of MSPs for managing public cloud for European organizations	75
Use of generative AI (GenAI) public cloud services	57		
Cloud initiatives move full speed ahead	76		
About Flexera	76		

The *Flexera 2024 State of the Cloud Report* sheds light on cloud computing trends and the pressures facing IT professionals and the strategic initiatives they're utilizing to remain competitive in today's dynamic and evolving landscape.

Report highlights

Here's a sample of key findings from this year's report based on a survey of 753 cloud decision-makers and users from around the world.

Organizations embrace multi-cloud

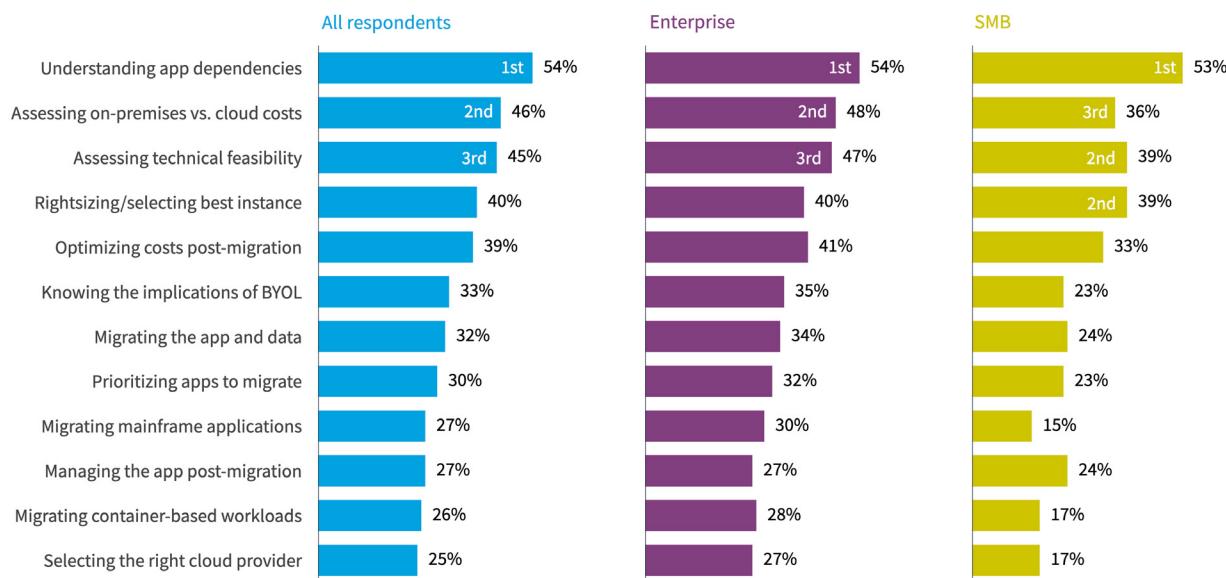


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 8)

flexera

What challenges do you face in migrating workloads to public cloud?

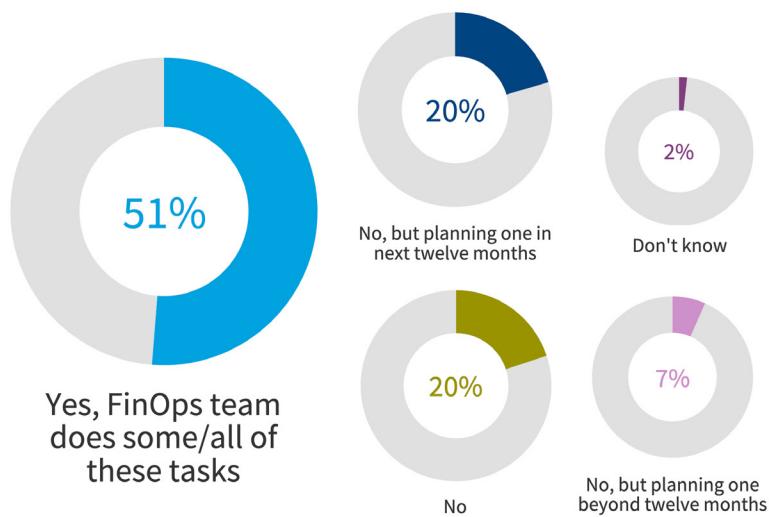


All: N=753, Enterprise: N=621, SMB: N=132

Source: Flexera 2024 State of the Cloud Report (Figure 21)

flexera

Does your company have a FinOps team to advise, manage or execute cloud cost optimization strategies?

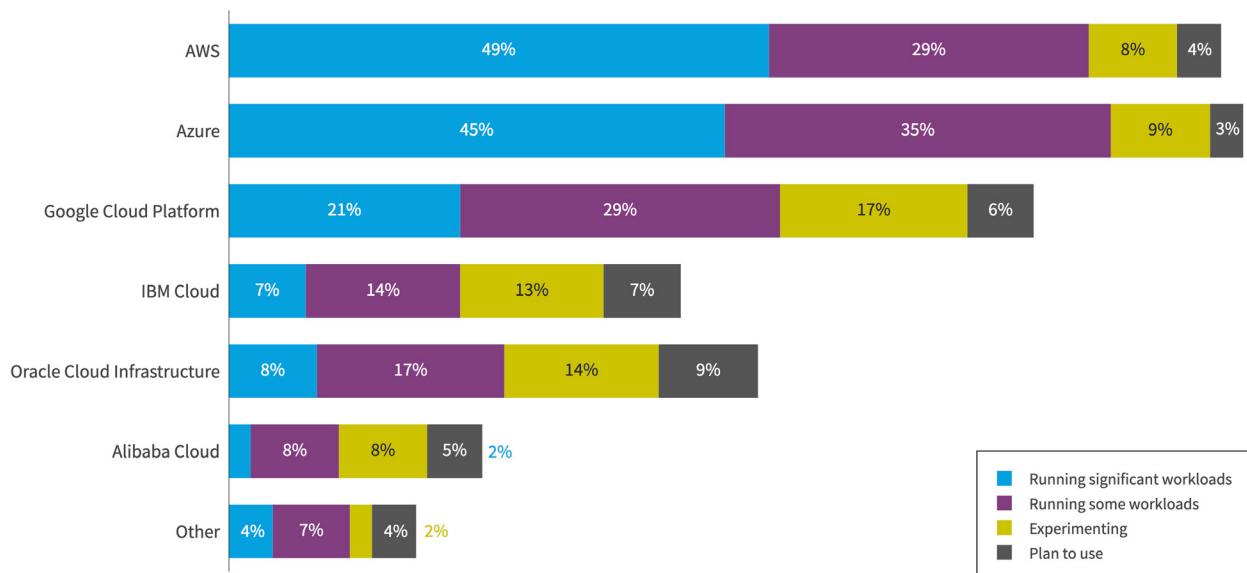


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 26)

flexera

What public cloud providers does your organization use?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 38)

flexera

Use of generative AI (GenAI) public cloud services

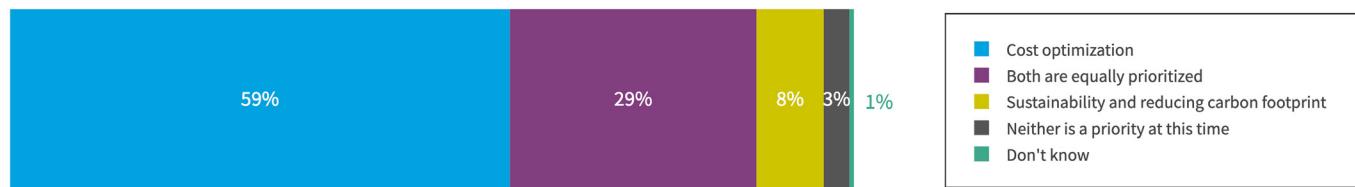


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 50)

flexera

Cloud cost optimization and sustainability prioritization



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 55)

flexera

In the face of ongoing economic uncertainties, many organizations are investing in transformative initiatives such as generative AI (GenAI) and sustainability. At the same time, managing costs effectively remains a top priority—and trying to find a balance between the two is a formidable challenge. Despite this, cloud usage is on the rise, while wasted spend is decreasing. Hybrid cloud strategies are evolving, with a notable increase in the number of businesses adopting a more comprehensive view of cost management for hybrid deployments, including the licensing of software used in the cloud.

Cloud spending remains substantial, as nearly half of all workloads and data are now in the public cloud. For the second year in a row, managing cloud expenses has emerged as a more pressing challenge than security, highlighting an intensified focus on FinOps practices and tools for optimizing cloud costs and enhancing efficiency. This trend is consistent with the broader adoption of multi-cloud strategies, the increased use of cloud services, and the establishment of cloud centers of excellence (CCOEs) in more than half of the organizations surveyed, signifying a shift toward more centralized and strategic cloud management.

The Flexera 2024 State of the Cloud Report reveals:

- Organizations are embracing hybrid cloud
- Public cloud adoption continues to accelerate
- SaaS adoption is at an all-time high, as are SaaS governance challenges such as cost management
- Organizations are taking a centralized approach to the cloud
- Top challenges are spend, security and expertise
- AWS and Azure continue to battle for the lead
- AI/ML has not yet taken flight, but experimentation is high
- When asked to prioritize cloud cost optimization and sustainability, companies overwhelmingly prioritize cost optimization
- European spotlight

Methodology

The Flexera State of the Cloud survey tapped 753 technical professionals and executive leaders worldwide in the winter of 2023. The network includes professionals across industries and context areas.

Flexera sources participants from an independent panel that is rigorously maintained and is comprised of vetted respondents with detailed profiles. All numbers and percentages are rounded to the nearest whole number.

At numerous points throughout the report, we've provided our own interpretation of the data as Flexera Points of View.

SMBs: Businesses with fewer than 1,000 employees

Enterprises: Organizations with more than 1,000 employees

Large enterprises:
Organizations with more than 10,000 employees

Reuse

We encourage the reuse of data, charts and text published in this report under the terms of this [Creative Commons Attribution 4.0 International License](#). You are free to share and make commercial use of this work as long as you provide attribution to the *Flexera 2024 State of the Cloud Report* as stipulated in the terms of the license.

This year's survey leans toward enterprises, with 68% of respondents in organizations with more than 2,000 employees. Eight percent have more than 100,000 employees.

What size is your organization?



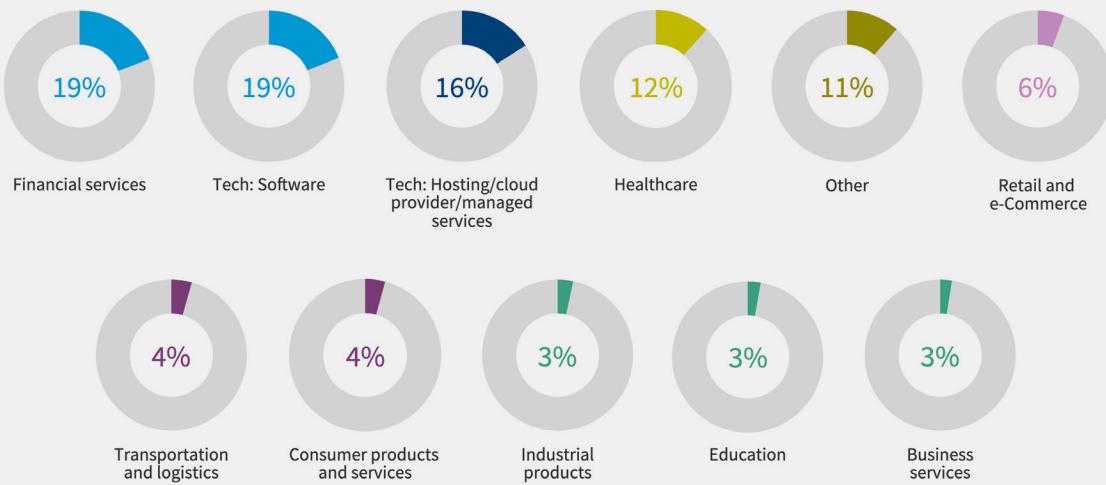
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 1)

flexera

Tech-related industries (35% between *software, hosting/cloud provider/managed services*) and *financial services* (19%) lead respondents' industries, followed by *healthcare* (12%).

What's your company's industry?



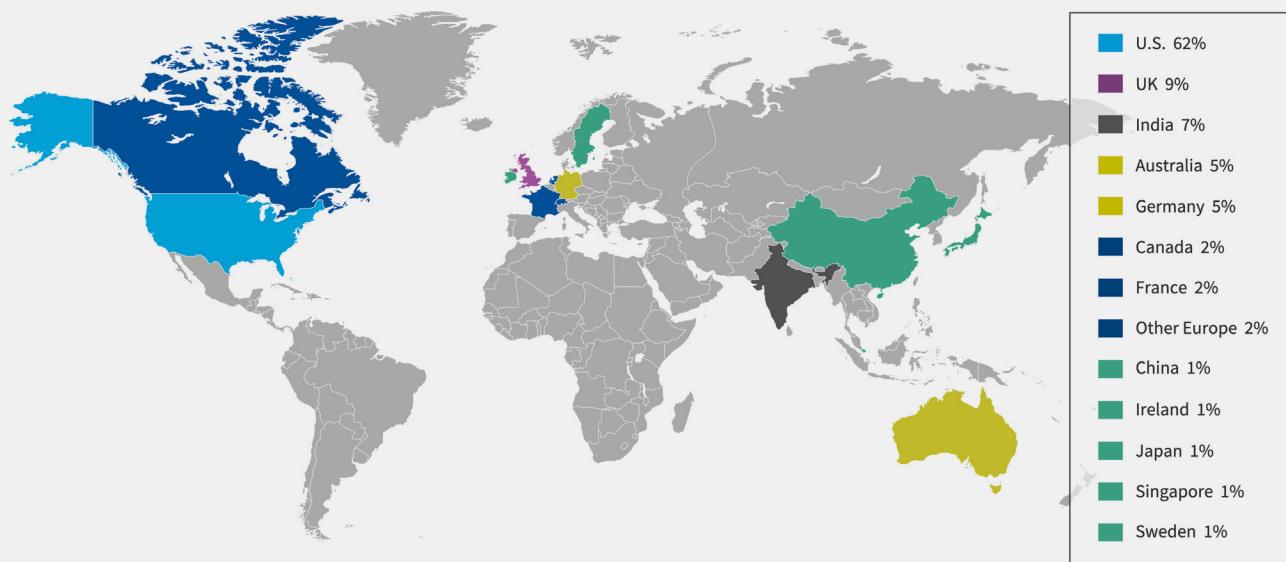
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 2)

flexera

Similar to last year, nearly two-thirds of the respondents are from the Americas (62% are from the U.S.). Respondents from Europe made up 20% of the total, with the UK accounting for 9% of that group.

Where are your headquarters located?



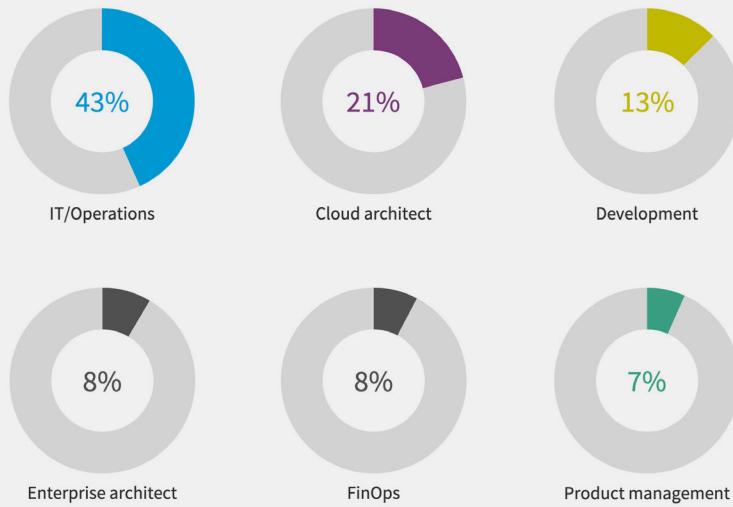
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 3)

flexera

The following figures indicate the breakdown of respondents by business role and where they work within their organization. Twenty-one percent of respondents are *cloud architects*, and 8% report being in a *FinOps* role. There was a large gain in respondents who said they work in central cloud teams (CCOE or similar), increasing to 50% this year from 35% last year.

What's your role?

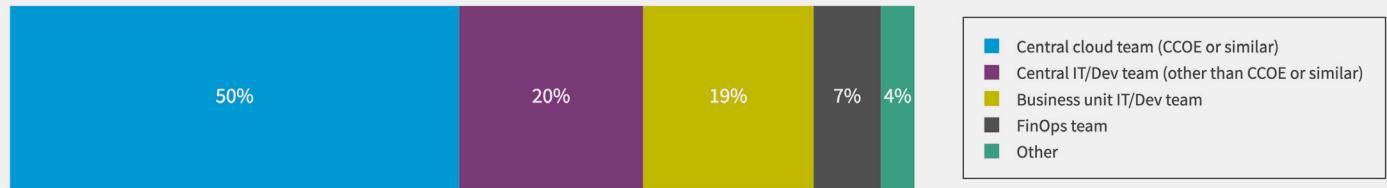


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 4)

flexera

Where in the organization do you work?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 5)

flexera

There is a significant increase in organizations
creating and staffing a CCOE

Cloud adoption continues to become more mainstream. *Heavy* users now represent 71% of respondents, up from 65% last year.

What's your company's usage level of public cloud?



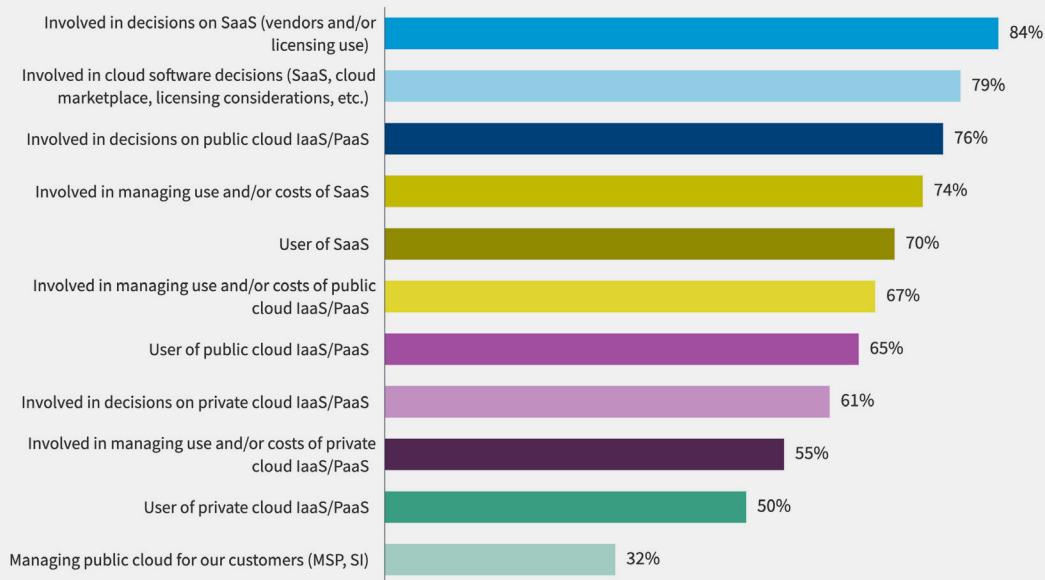
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 6)

flexera

Most respondents have a significant influence on both IaaS/PaaS and SaaS, with a particular increase in SaaS decision-making (84%) as well as usage and costs (74%). SaaS users also increased from 63% to 70% year over year (YoY).

What's your involvement with cloud in your organization?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 7)

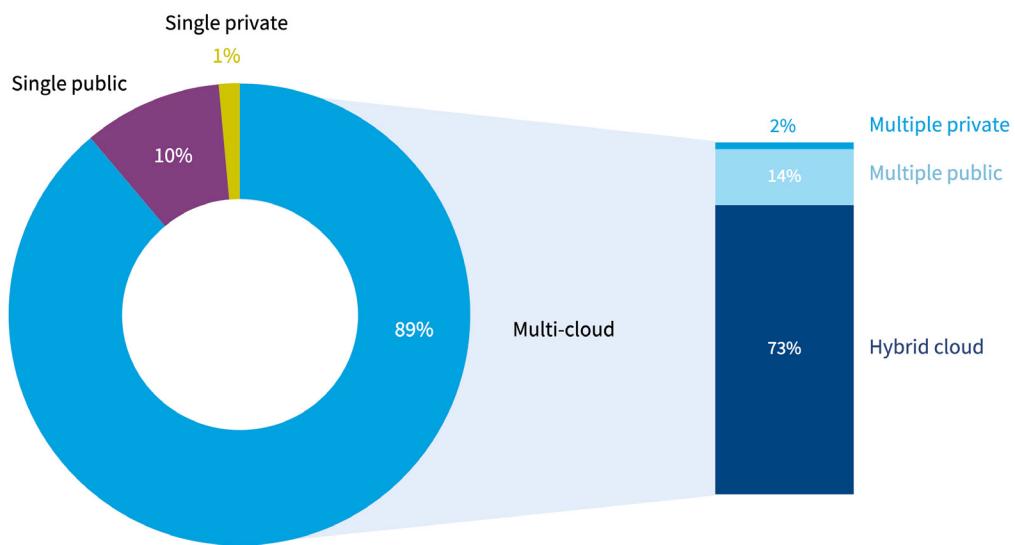
flexera

Users are increasingly gravitating toward the ease of use and maintenance of SaaS offerings

Organizations are embracing multi-cloud

Most organizations have employed multi-cloud, with 89% of respondents reporting having a multi-cloud strategy (a slight increase from 87% in 2023). Some respondents continue to consolidate on a single cloud: 10% report a single public cloud this year, the same as 2023.

Organizations embrace multi-cloud



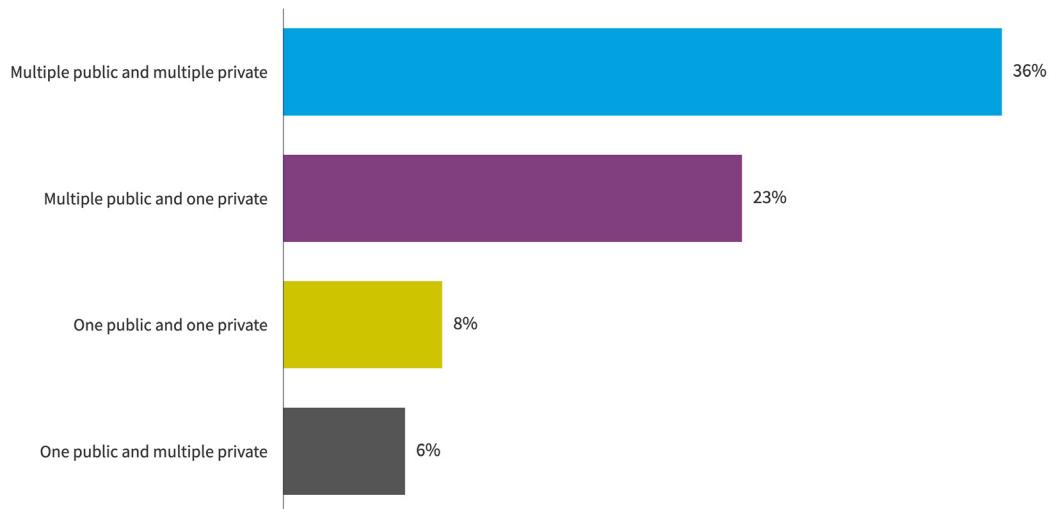
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 8)

flexera

More than half (59%) of respondents use multiple public clouds. Fourteen percent use a single public cloud.

Hybrid cloud strategies



N=753

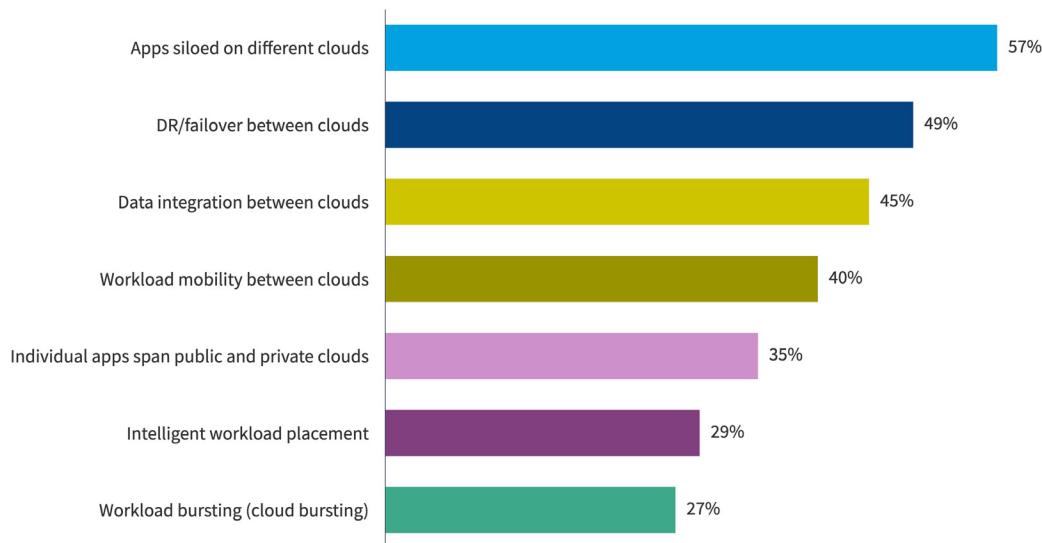
Source: Flexera 2024 State of the Cloud Report (Figure 9)

flexera

A growing percentage of respondents use multiple public and one private cloud (up from 19% to 23% YoY)

Apps siloed on different clouds and DR/failover between clouds remain the top two multi-cloud implementations. *Apps siloed on different clouds* increased the most (up to 57% from 44% YoY). *Data integration between clouds* increased to 45% from 37% YoY as organizations look for the best fit for applications and data analysis.

Use of multi-cloud architectures by all organizations



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 10)

flexera

» FLEXERA POV

Organizations continue to factor in cost and performance prior to deploying workloads in the cloud. Enterprises continue to find the best fit, often running applications in a single cloud, which simplifies configuration, maintenance and security. A growing number of organizations find use cases for data analysis in clouds separate from the one an application is running in.

Security tools remain in the top spot this year for all organizations, followed closely by *cost optimization (FinOps) tools* and *management tools*. A higher percentage of large enterprises use *security tools* (61%) and *FinOps tools* (57%).

Use of multi-cloud tools



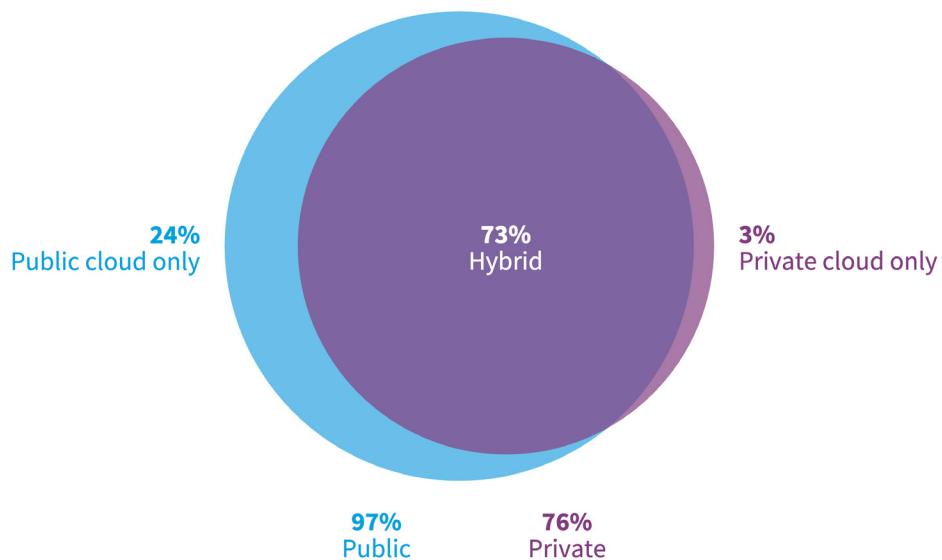
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 11)

flexera

Hybrid, public cloud only and private cloud only remained similar YoY.

Public vs. private cloud usage



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 12)

flexera

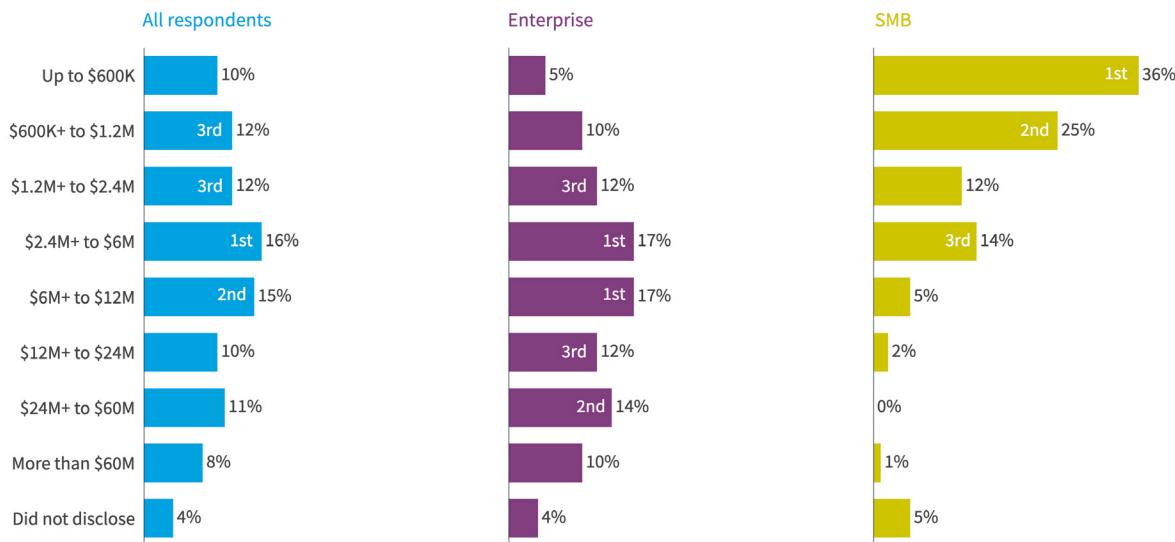
» FLEXERA POV

Similar YoY cloud usage indicates that organizations have achieved a steady state; they've identified what works for them.

Public cloud adoption continues to accelerate

Nearly a third of all respondents (29%) are currently spending more than \$12 million a year in public cloud, up from 24% in 2023. Thirty-six percent of enterprises spent more than \$12 million a year, up from 29% last year.

What's your current annual public cloud spend?



All: N=753, Enterprise: N=621, SMB: N=132

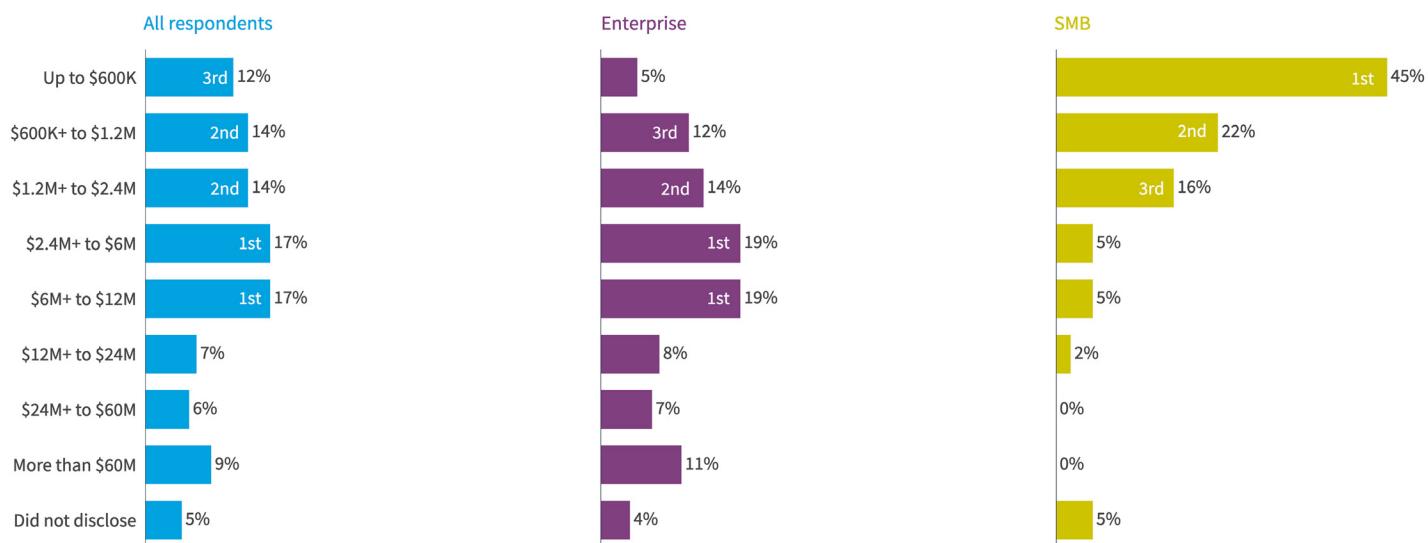
Source: Flexera 2024 State of the Cloud Report (Figure 13)

flexera

There's a 21% increase YoY in organizations spending
\$1 million or more per month on cloud

Nearly a quarter of respondents (22%) are currently spending more than \$12 million per year on SaaS. This increases to 26% for enterprises.

What's your current annual SaaS spend?



All: N=753, Enterprise: N=621, SMB: N=132

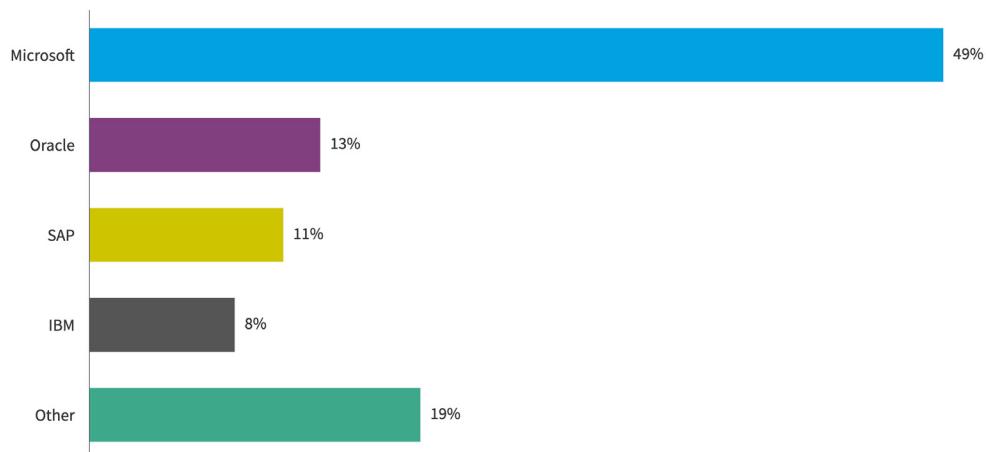
Source: Flexera 2024 State of the Cloud Report (Figure 14)

flexera

More than a quarter of respondents spend over \$12M per year on cloud (29%), and nearly a quarter (22%) spend that much on SaaS

For the first time, Flexera asked respondents for non-SaaS (cloud and on-premises) software costs by vendor. *Microsoft* is by far the most common non-SaaS software vendor (49%).

Non-SaaS software costs by vendor



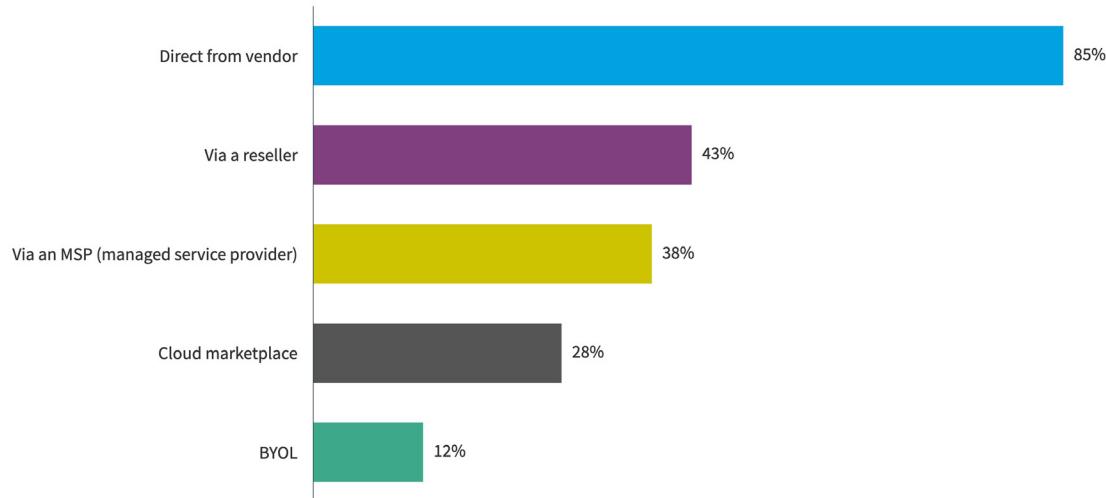
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 15)

flexera

In addition, the vast majority of non-SaaS software purchases are made directly from the vendor (85%), with the primary vendor being Microsoft. These purchases are most likely made under an existing enterprise agreement (EA).

Non-SaaS software purchase methods



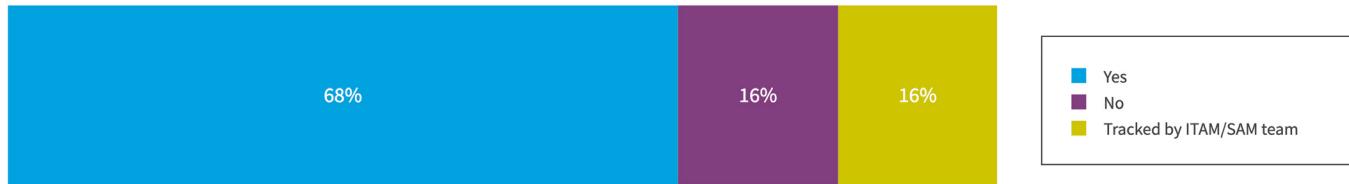
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 16)

flexera

It's promising that 84% of respondents track software licenses in the cloud.

Do you track licenses for software running in the cloud?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 17)

flexera

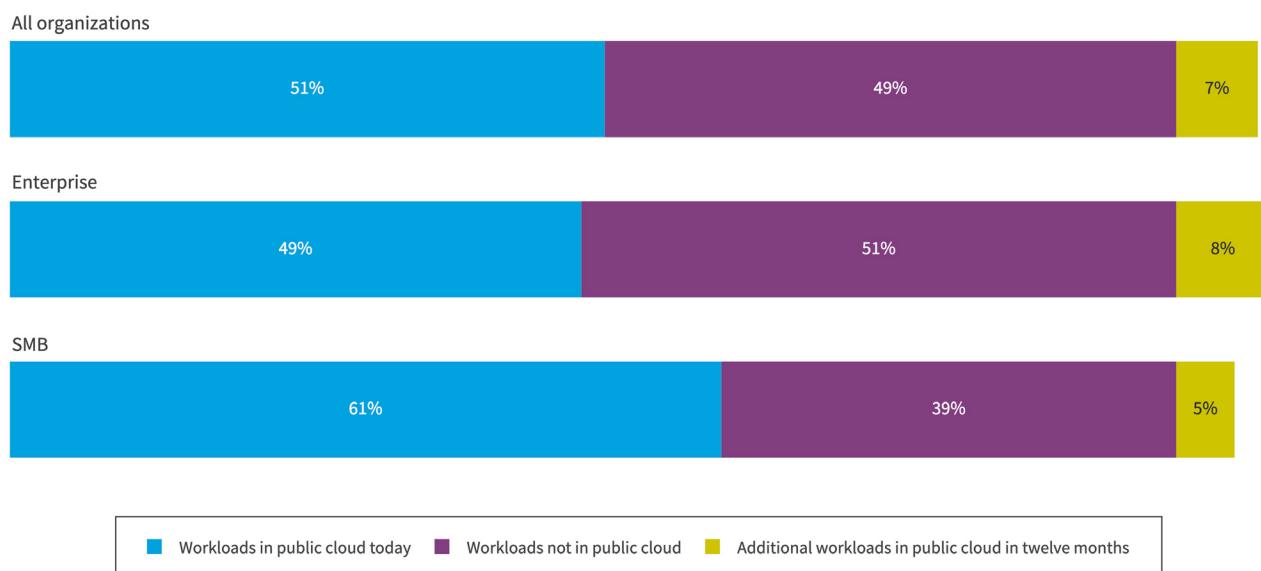
» FLEXERA POV

Cloud costs are impacted significantly by software licenses. In some instances, specific licenses can be more than quadruple the costs of the cloud infrastructure on which the applications run. Organizations need to not only factor in cloud costs, but consider the associated software licensing costs as well.

For all respondents, 51% of *workloads* are *in the public cloud* today, with an additional 7% expected in the next twelve months. Half of all organizations have data in the public cloud today, with an extra 7% expected in the next twelve months. Enterprises have more complex environments but slightly lower usage rates, with 49% of *workloads* in public cloud and 48% of *data* in public cloud.

SMBs are the highest cloud adopters but fell off slightly from the previous year, with 61% (a drop from 67% last year) of *workloads* and 60% of *data* in the public cloud for both years.

Workloads in public cloud



All: N=753, Enterprise: N=621, SMB: N=132

Source: Flexera 2024 State of the Cloud Report (Figure 18)

flexera

Data in public cloud

All organizations



Enterprise



SMB



■ Reduction of data in public cloud in twelve months ■ Data in public cloud today ■ Data not in public cloud ■ Additional data in public cloud in twelve months

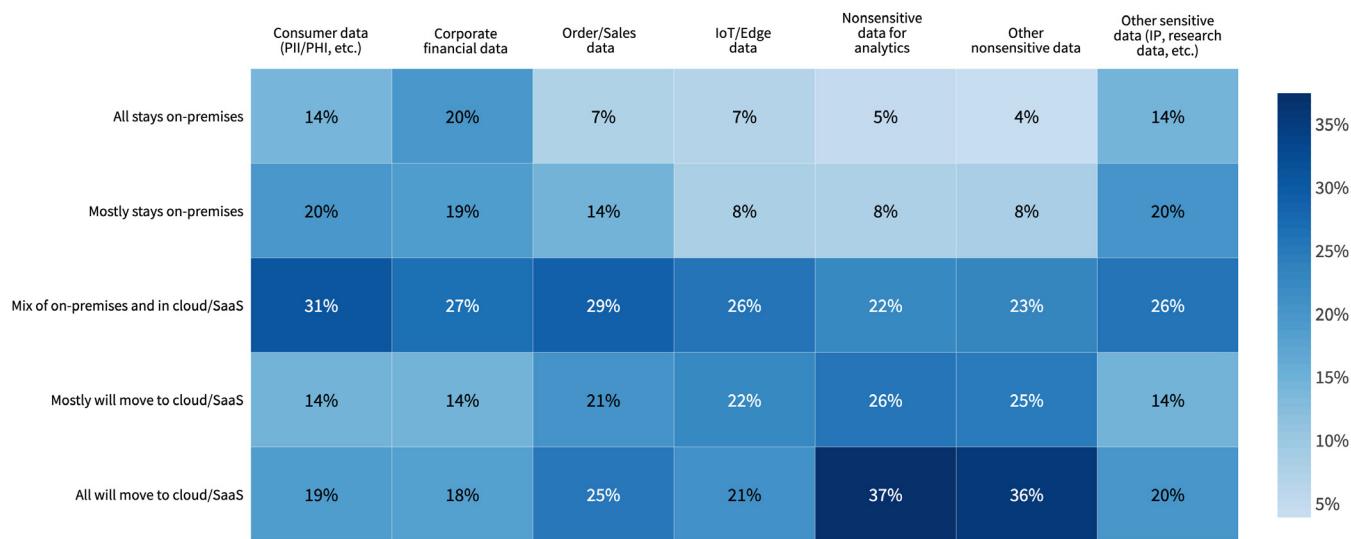
All: N=753, Enterprise: N=621, SMB: N=132

Source: Flexera 2024 State of the Cloud Report (Figure 19)

flexera

More than half of respondents said they'll consider moving at least some *consumer data* or *corporate financial data* to the cloud. Nineteen percent said *all consumer data will move to cloud/SaaS* (up from 17% in 2023), and 18% said *all corporate financial data will move to cloud/SaaS* (the same as in 2023).

What's your approach for migrating data to public cloud/SaaS?



N=753

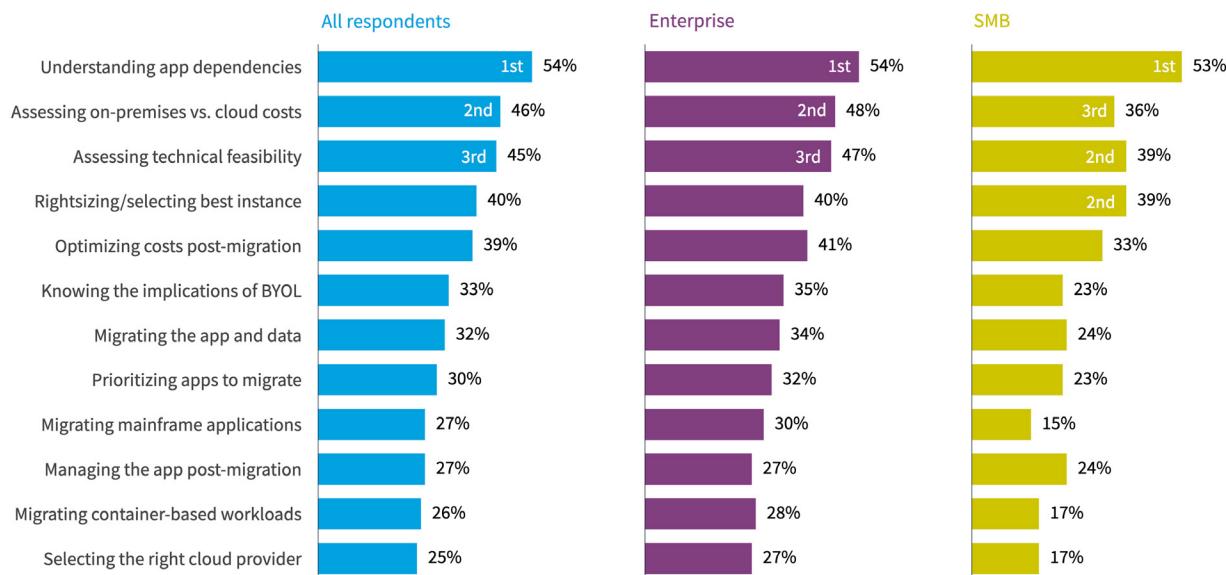
Source: Flexera 2024 State of the Cloud Report (Figure 20)

flexera

More than one-third of respondents indicate all nonsensitive data will move to the cloud and nearly one-fifth say they will move all sensitive data to the cloud

Mapping all the relationships across apps, hardware and networking devices for each IT-delivered service is notoriously difficult to do. Over half of respondents reported *understanding app dependencies* (54%), *assessing on-premises vs. cloud costs* (46%) and *assessing technical feasibility* (45%) as the top three cloud migration challenges.

What challenges do you face in migrating workloads to public cloud?



All: N=753, Enterprise: N=621, SMB: N=132

Source: Flexera 2024 State of the Cloud Report (Figure 21)

flexera

Nearly half of respondents cite assessing on-premises vs. cloud costs as a challenge

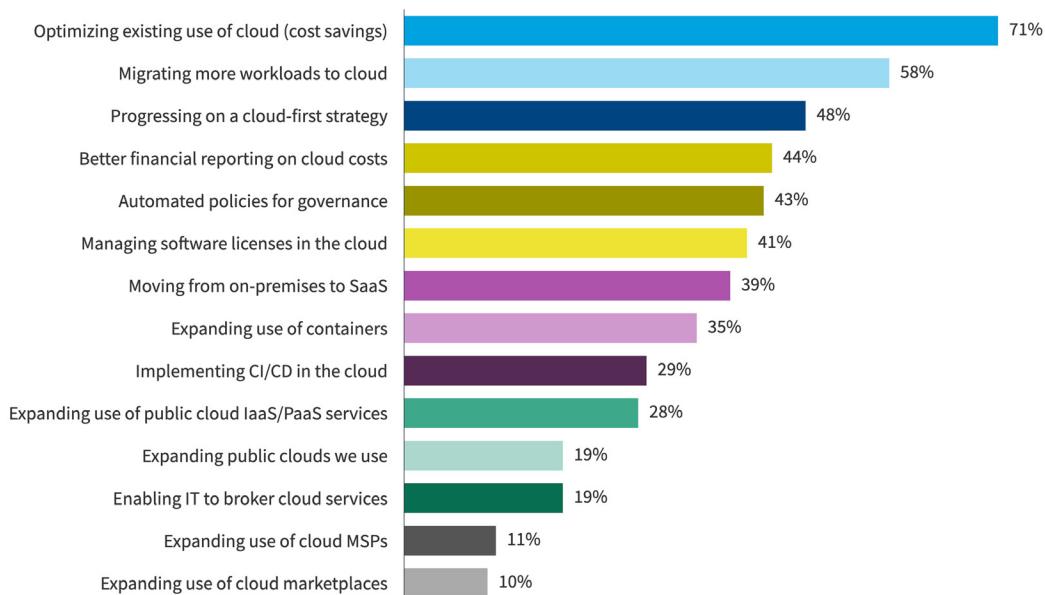
» FLEXERA POV

A YoY analysis of sensitive consumer data shows a slight continuation of movement away from on-premises toward cloud and SaaS, indicating organizations continue to become more confident in the security controls that cloud provides.

Cloud initiatives and metrics

This is the eighth year in a row that *optimizing the existing use of cloud (cost savings)* is the top initiative (increasing from 62% to 71% YoY). Notably, *progressing on a cloud-first strategy* dropped to 48% from 55% YoY. *Migrating more workloads to cloud* increased from 44% to 58% YoY. A high percentage of heavy cloud users (73%) see *optimizing the existing use of the cloud (cost savings)* as a top initiative.

Which of the following initiatives are you planning to make progress on in the next year?

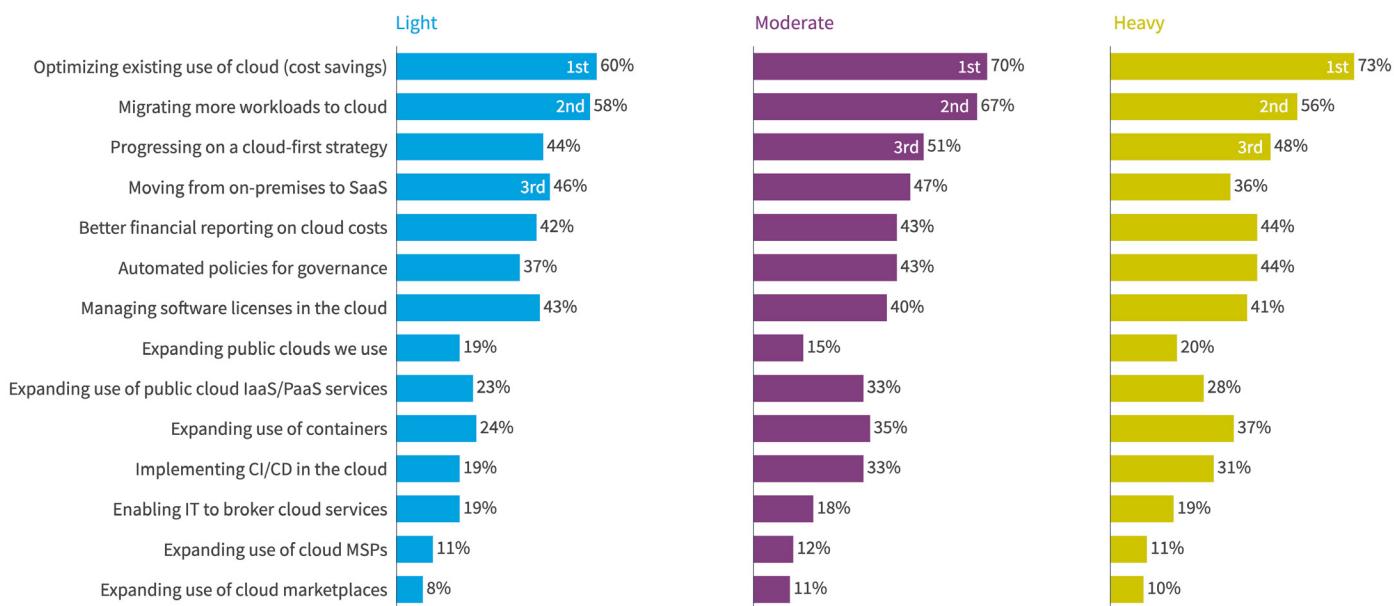


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 22)

flexera

Top cloud initiatives by cloud usage for all organizations



N=753

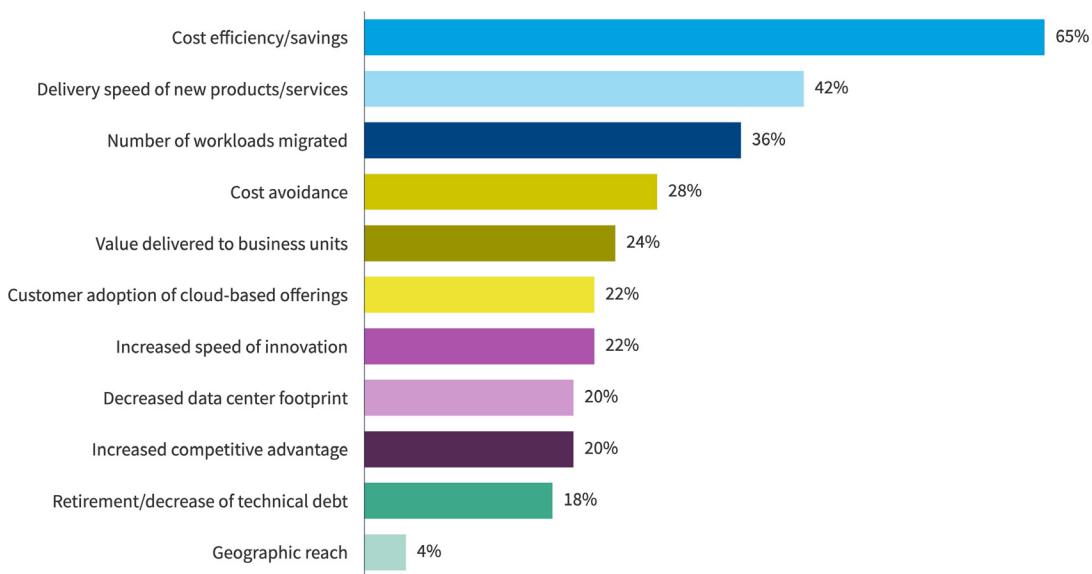
Source: Flexera 2024 State of the Cloud Report (Figure 23)

flexera

Optimizing existing use of cloud and migrating more workloads to the cloud are the top initiatives, regardless of usage level

The top metric for measuring progress in the cloud has been *cost efficiency/savings* for the past six years. This year, it has increased to 65% from 60% YoY. The *number of workloads migrated* to the cloud has also increased YoY from 31% to 36%.

What are your top metrics for assessing progress against cloud goals?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 24)

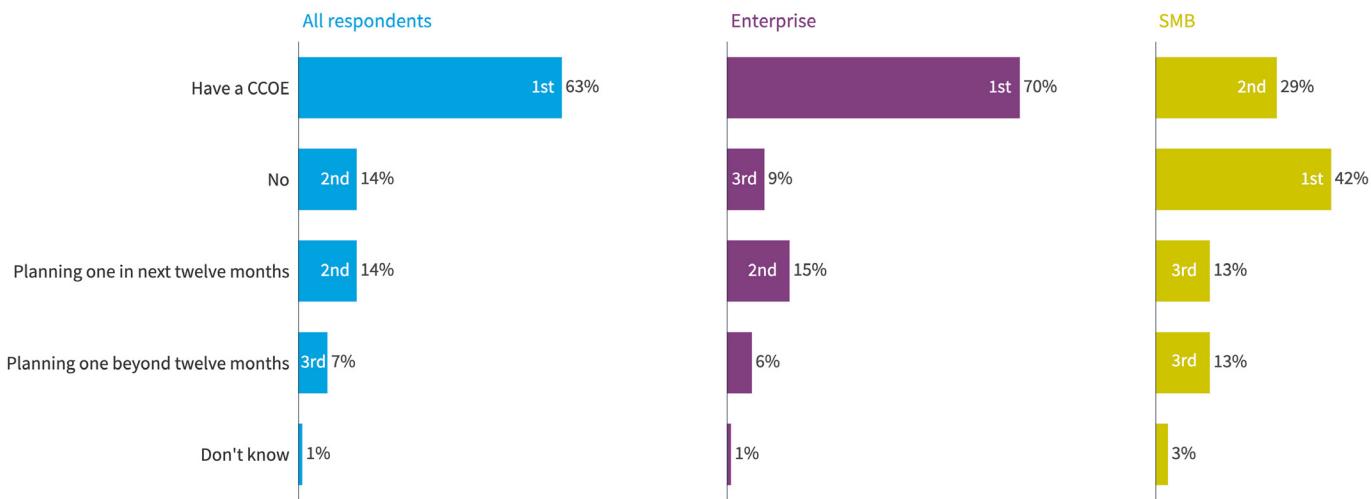
flexera

The continued prioritization of cost and workloads migrating to the cloud emphasizes the importance of cost optimization and efficiency

Organizations are taking a centralized approach to cloud

Most organizations (63%) have a CCOE or plan to create one within the next year (14%). Seventy percent of large enterprises already have a CCOE, whereas only 29% of SMBs do. Fifteen percent of enterprises expect to add a CCOE in the next twelve months, and 6% expect to add one beyond that time. Just over a quarter (26%) of SMBs are planning to have a CCOE in the future.

Does your company have a central cloud team or CCOE?



All: N=753, Enterprise: N=621, SMB: N=132

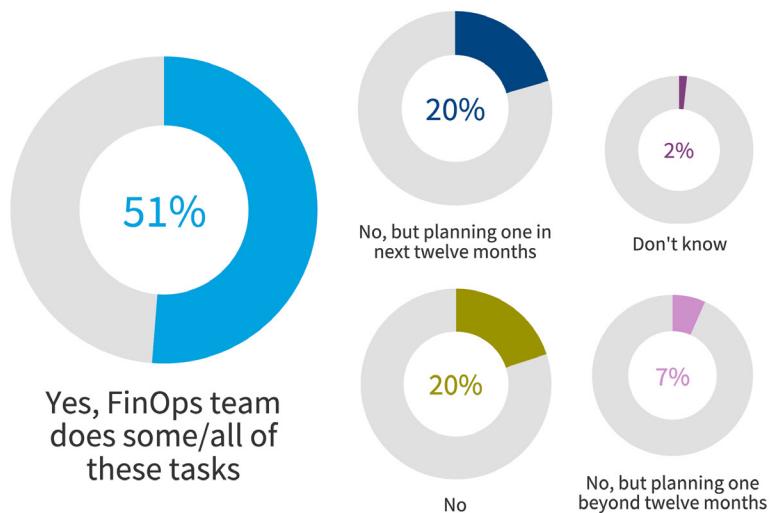
Source: Flexera 2024 State of the Cloud Report (Figure 25)

flexera

More than half of organizations already have CCOEs; this proportion could jump to more than 75% in years to come

Half of organizations (51%) have a FinOps team, and 20% are planning on creating one in the coming year.

Does your company have a FinOps team to advise, manage or execute cloud cost optimization strategies?



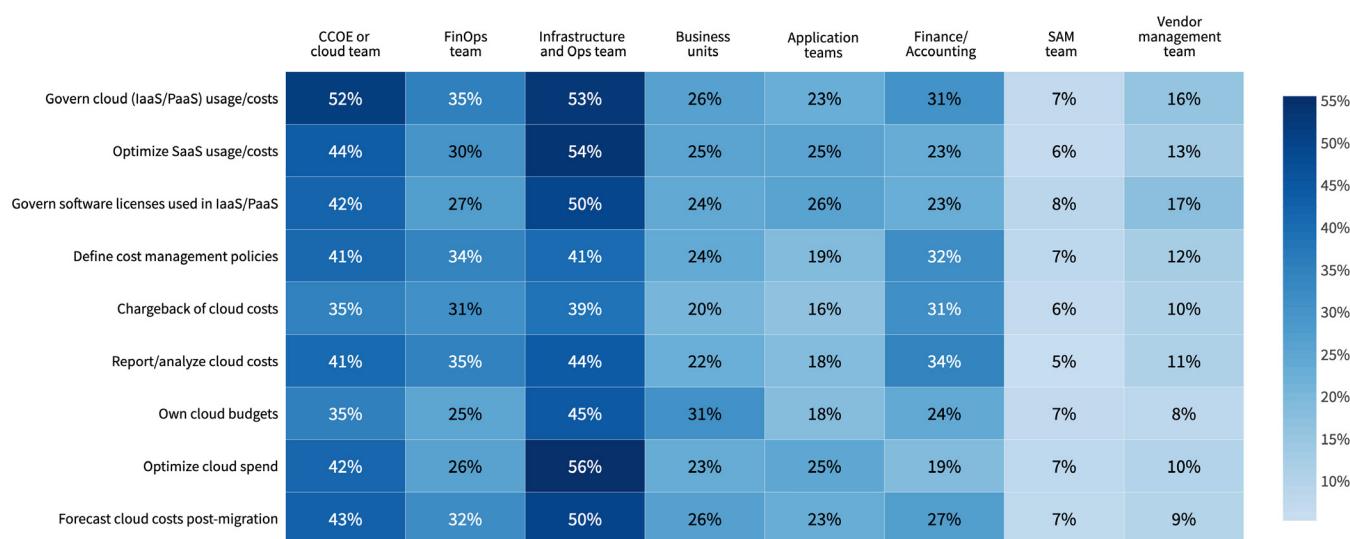
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 26)

flexera

As usual, *infrastructure and ops* as well as *CCOE or cloud* teams lead the charge for cloud cost management. Infrastructure and ops teams are most likely to *govern cloud (IaaS/PaaS) usage/costs* (53%), *optimize SaaS usage/costs* (54%) and *govern software licenses in IaaS/PaaS* (50%).

Who in your organization leads cloud cost management responsibilities?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 27)

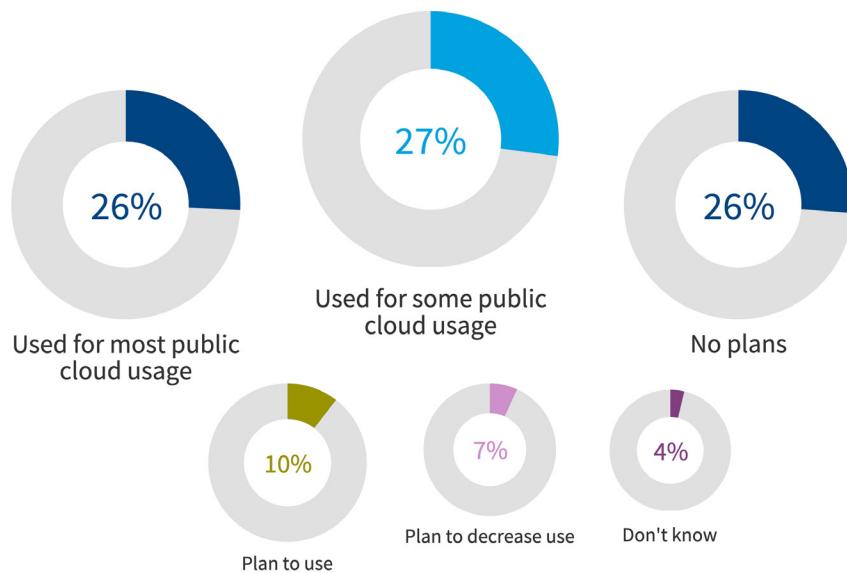
flexera

» FLEXERA POV

Even if software asset management (SAM) teams aren't responsible for cloud and SaaS costs, they need to ensure the responsible teams have the detailed licensing information required to use those licenses effectively, remain compliant, minimize risk and save the company money.

Fifty-three percent of all organizations are outsourcing at least some public cloud work, including 26% that use managed service providers (MSPs) for *most public cloud usage*.

Utilization of MSPs for managing public cloud for all organizations



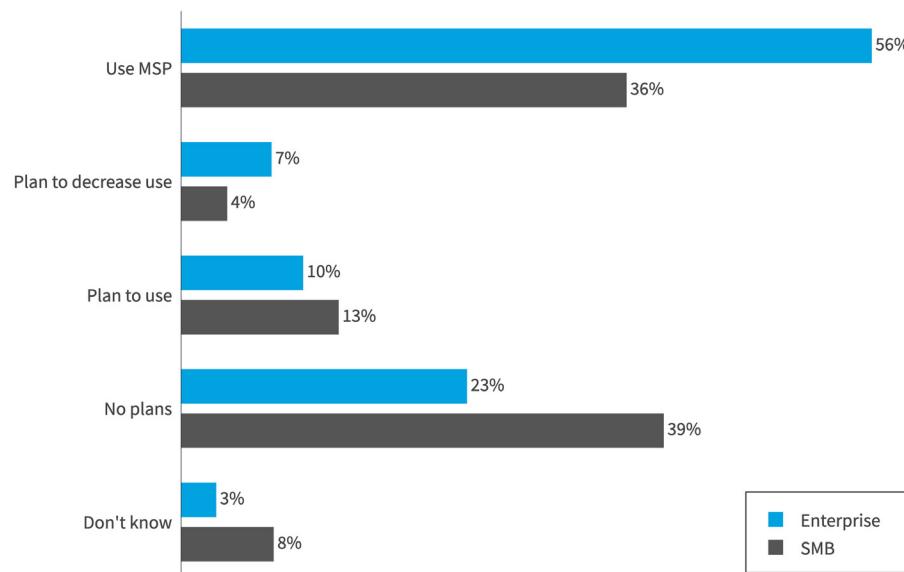
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 28)

flexera

Fifty-six percent of enterprises are outsourcing at least some public cloud work. SMB usage of MSPs has increased to 36% from 26% YoY.

Enterprise vs. SMB MSP utilization for managing public cloud



Enterprise: N=621, SMB: N=132

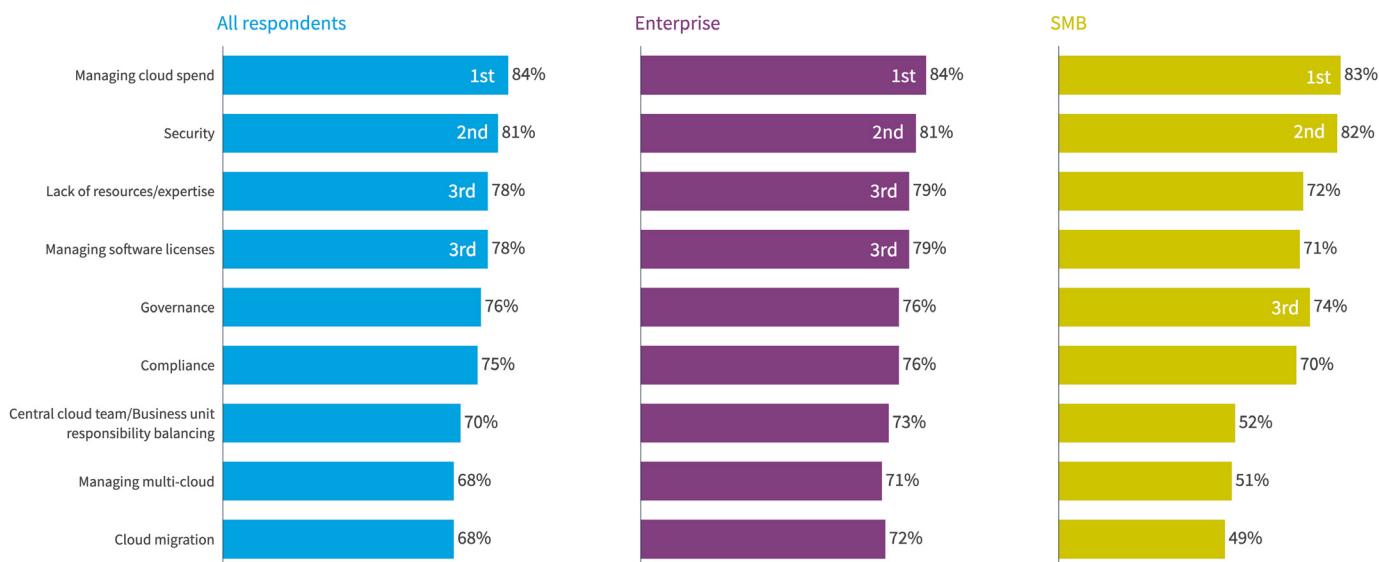
Source: Flexera 2024 State of the Cloud Report (Figure 29)

flexera

Top challenges are security, spend and expertise

For the second year in a row, *managing cloud spend* topped security as the top challenge facing all organizations. This shift is likely due to organizations becoming more comfortable with cloud security, while the increased use of cloud services leads to increased spend. Managing this spend has become a priority for organizations. As in previous State of the Cloud findings, a lack of resources and expertise continues to be a major challenge.

Top cloud challenges



All: N=753, Enterprise: N=621, SMB: N=132

Source: Flexera 2024 State of the Cloud Report (Figure 30)

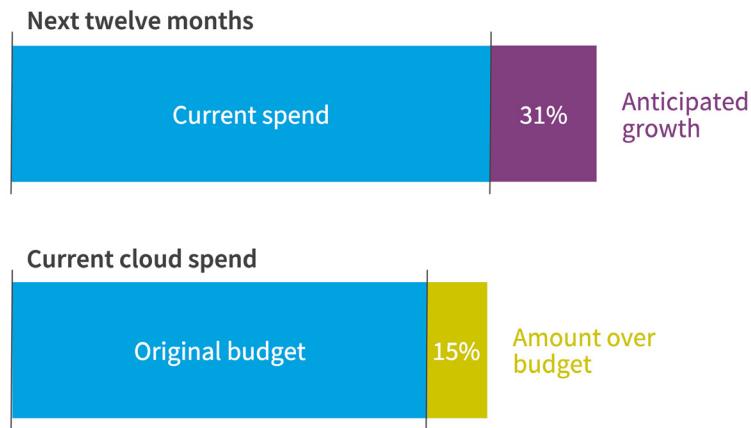
flexera

Managing cloud spend maintains its rank as the top cloud challenge; last year this initiative dethroned security, breaking an 11-year hold on the top spot

Organizations struggle to control growing cloud spend

It's easy to see why FinOps continues to evolve and grow as a cultural practice and financial management discipline. Public cloud spend was over budget by an average of 15%. Respondents remain bullish on cloud, as 31% expected their spend to increase in the next twelve months.

What's your organizational spend on public cloud?



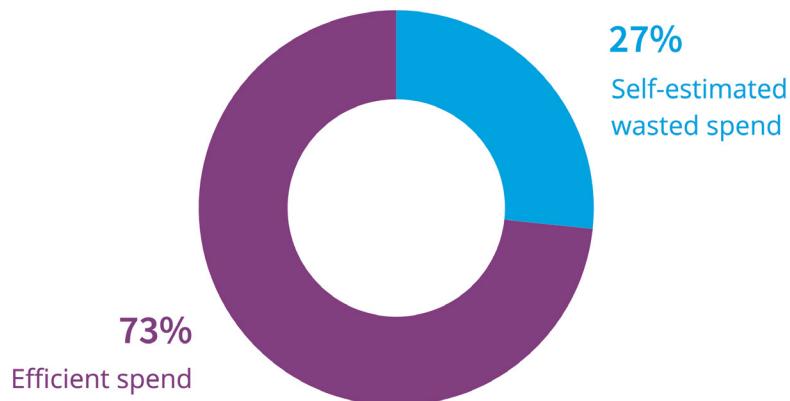
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 31)

flexera

Respondents reported their public cloud waste is 27%, similar to the 28% reported last year.

What's your estimated wasted cloud spend on IaaS and PaaS?



N=753

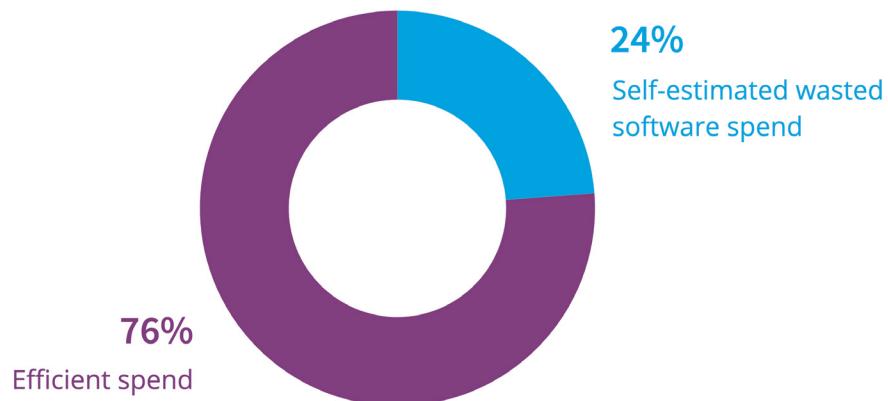
Source: Flexera 2024 State of the Cloud Report (Figure 32)

flexera

Estimated wasted cloud spend in IaaS and PaaS has been trending down after reaching a high of 32% in 2022. FinOps best practices are realizing financial benefits for many organizations

Software licenses can greatly impact the total cost of an application running in the cloud. Respondents reported that wasted software spend in the public cloud was 24%.

What's your estimated wasted software spend in the cloud?



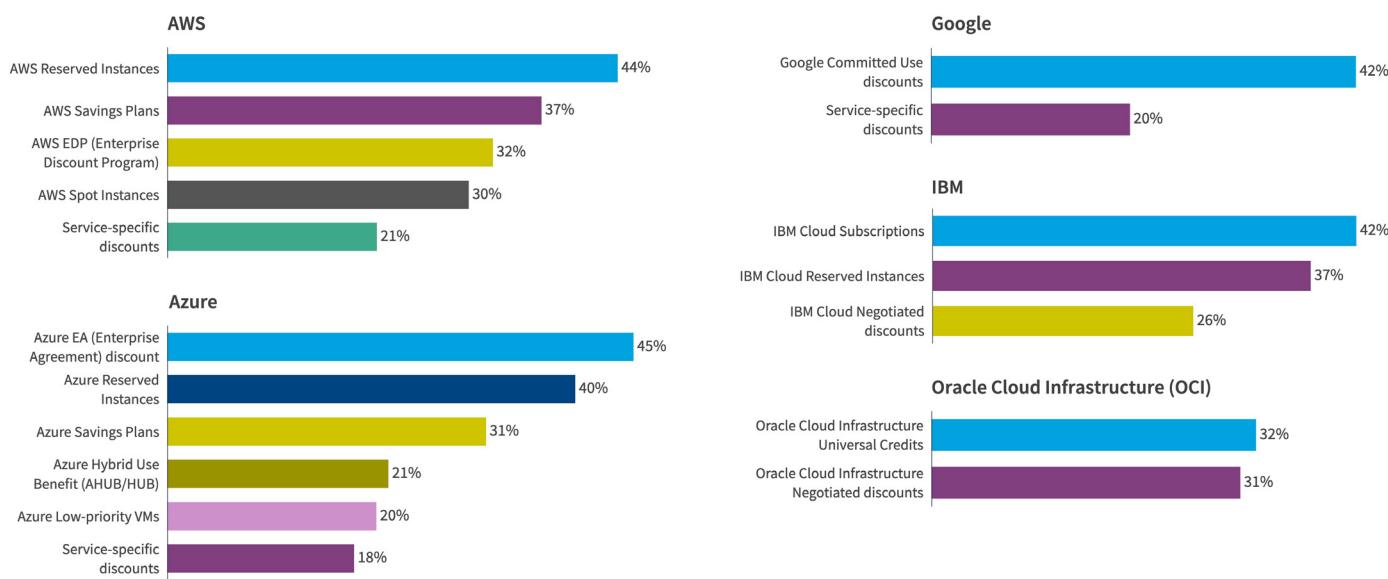
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 33)

flexera

Cloud provider pricing structures are complex and difficult to decipher, but provider discounts offer opportunities to reduce costs. The majority of respondents are using either *Azure EA (Enterprise Agreement) discount* (45%), *AWS Reserved Instances* (44%), *Azure Reserved Instances* (40%), *IBM Cloud Subscriptions* (42%), *Google Committed Use discount* (42%) or *Azure Reserved Instances* (40%).

Which provider discounts do you use?



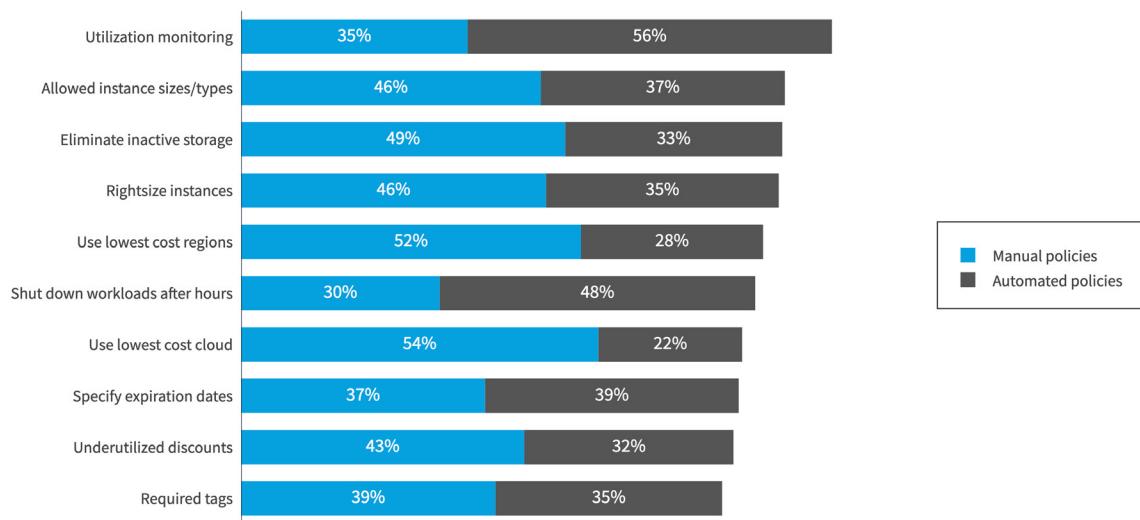
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 34)

flexera

Automated policies such as *utilization monitoring* (56%) and those that *shut down workloads after hours* (48%) are the most common ways to optimize cloud costs. Roughly a third of respondents (35%) have automated policies in place to tag cloud resources, which is a fundamental component of FinOps practices.

What types of policies do you use to optimize cloud costs?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 35)

flexera

» FLEXERA POV

Despite tags being critical to cost allocation and optimization, only 35% of organizations currently use automated policies that implement required tags.

This year we asked survey respondents to weigh in on how they managed SaaS and software costs. For the majority of organizations (57%), SaaS costs are tracked separately from IaaS and PaaS costs.

Management of SaaS and software costs compared to IaaS/PaaS costs



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 36)

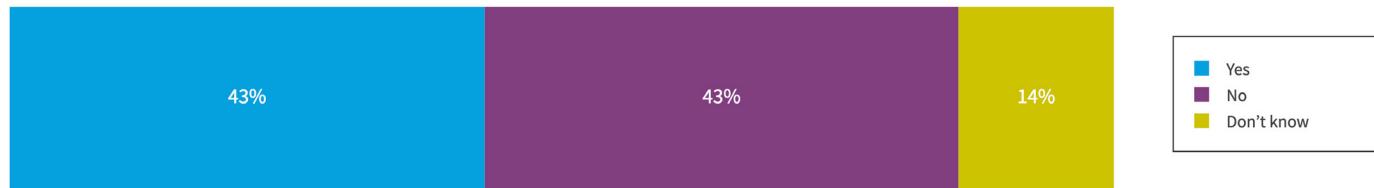
flexera

» FLEXERA POV

Many organizations struggle with finding the right bucket to put SaaS costs in, so these costs are often in a category by themselves. As organizations begin to adopt new cost management and optimization tools, these SaaS costs may be considered “cloud costs” as the definition of cloud begins to envelop additional non-on-premises costs.

FinOps professionals often use unit economics as a key metric to gauge the efficiency of cloud spend. Forty-three percent of respondents said they use unit economics as a key metric, up from 39% last year.

Does your organization use a unit economics model for cloud cost analysis?



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 37)

flexera

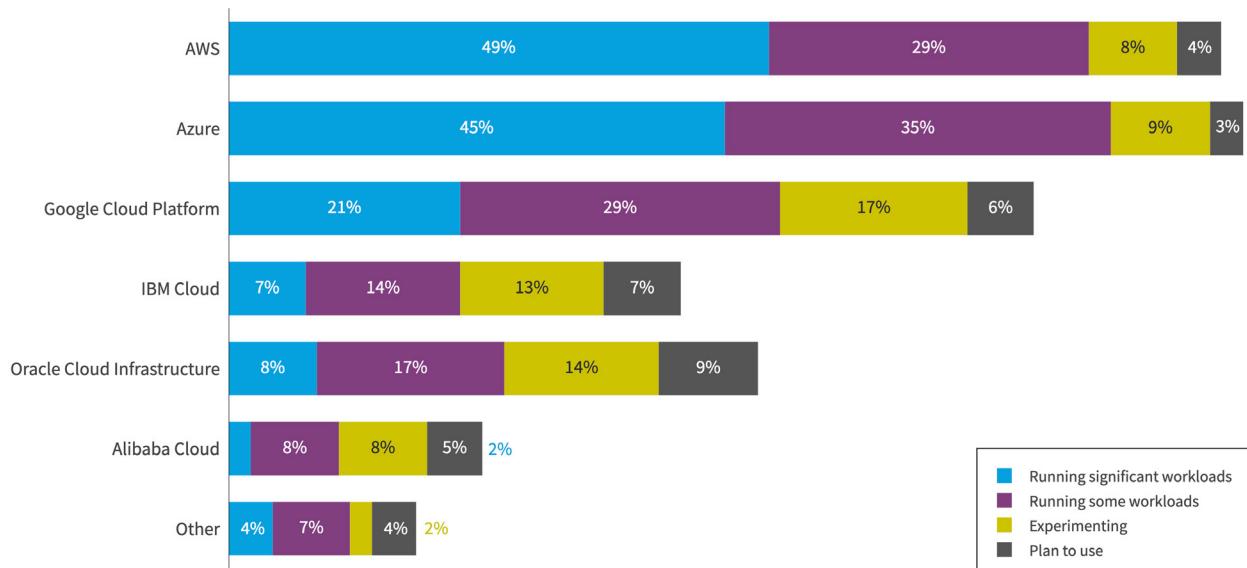
» FLEXERA POV

The 43% of respondents using unit economics as a key metric is good, but we expect this percentage to increase as FinOps practices become more mainstream.

Public cloud adoption is evolving

Amazon Web Services (AWS) and Microsoft Azure continue to be the most widely used cloud platforms. Specifically, 49% of respondents reported using AWS for *significant workloads*, while 45% reported using Azure and 21% reported using Google Cloud Platform. In contrast, usage of Oracle Cloud Infrastructure, IBM and Alibaba Cloud remained relatively unchanged compared to the previous year.

What public cloud providers does your organization use?



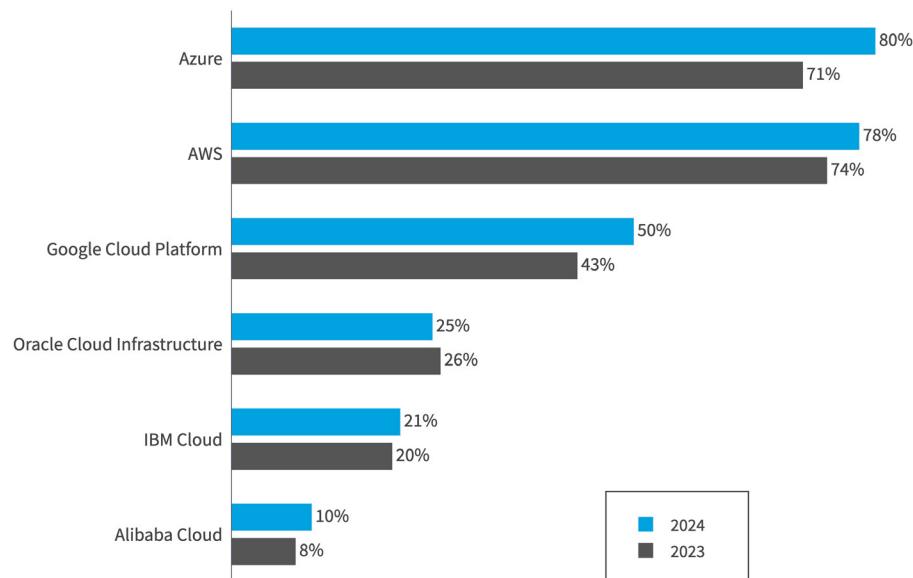
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 38)

flexera

The top three cloud providers—AWS, Azure and Google Cloud Platform—each gained adoption this year compared with last.

YoY public cloud provider adoption rates for all organizations



2024: N=753, 2023: N=750

Source: Flexera 2024 State of the Cloud Report (Figure 39)

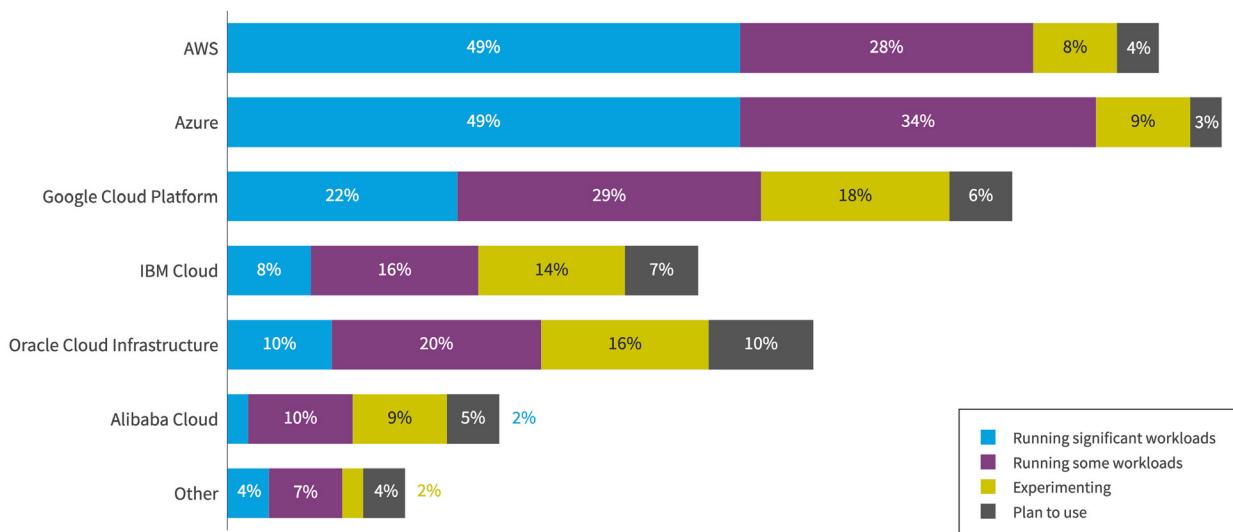
flexera

80% of all respondents now use Azure for at least some production workloads. This is the first time in the history of the State of the Cloud Report that a single cloud provider reached the 80% threshold

AWS and Azure are tied with 49% of enterprises *running significant workloads*. However, AWS has a significant lead over other providers with SMBs (50% for AWS, 29% for Azure and 18% for *Google Cloud Platform*).

The use of some public cloud providers increased YoY for SMBs. For example, 83% of respondents report using AWS, up from 71% YoY. Azure is up to 67% from 51% YoY, and *Google Cloud Platform* is up to 45% from 28% YoY. For the second year in a row, the highest percentage of SMBs experimenting with a cloud provider are using *Google Cloud Platform*.

Enterprise use of public cloud providers

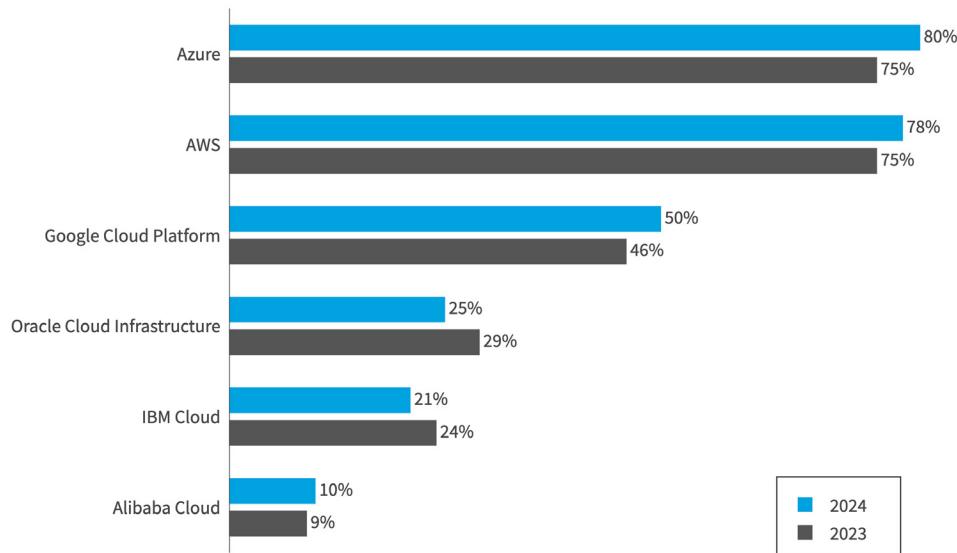


N=621

Source: Flexera 2024 State of the Cloud Report (Figure 40)

flexera

YoY enterprise public cloud adoption

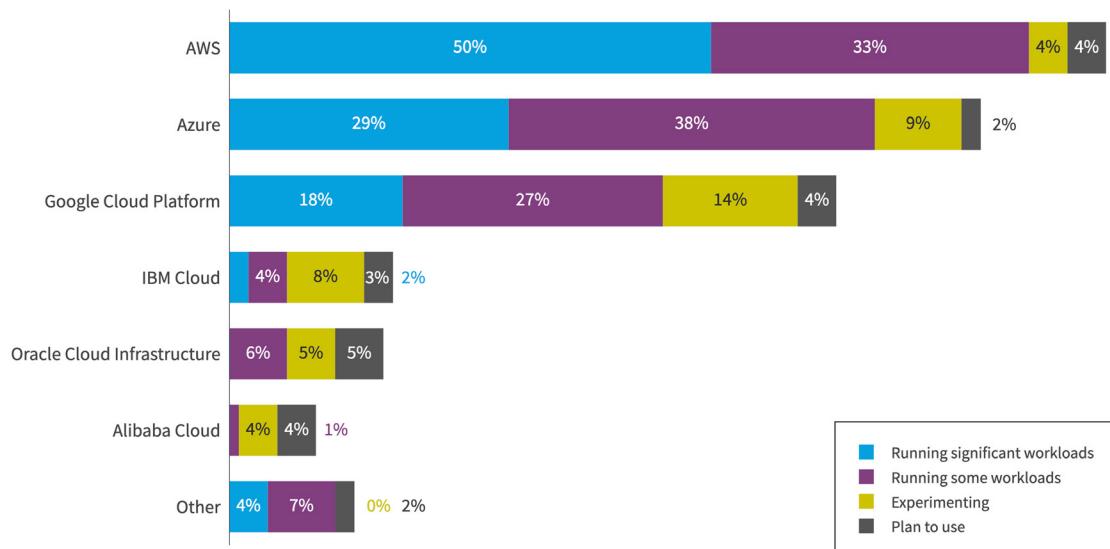


2024: N=621, 2023: N=627

Source: Flexera 2024 State of the Cloud Report (Figure 41)

flexera

SMB use of public cloud providers

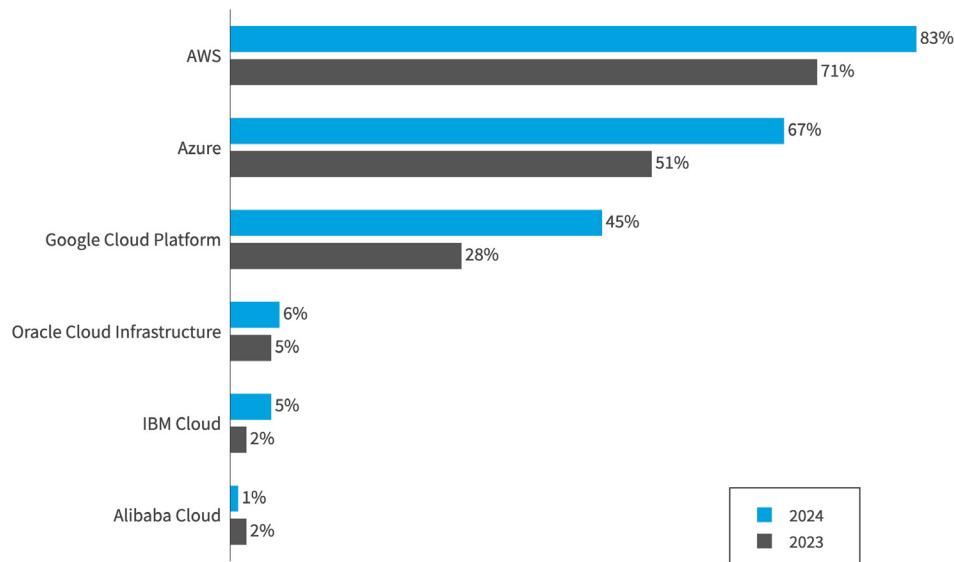


N=132

Source: Flexera 2024 State of the Cloud Report (Figure 42)

flexera

YoY SMB public cloud adoption



2024: N=132, 2023: N=123

Source: Flexera 2024 State of the Cloud Report (Figure 43)

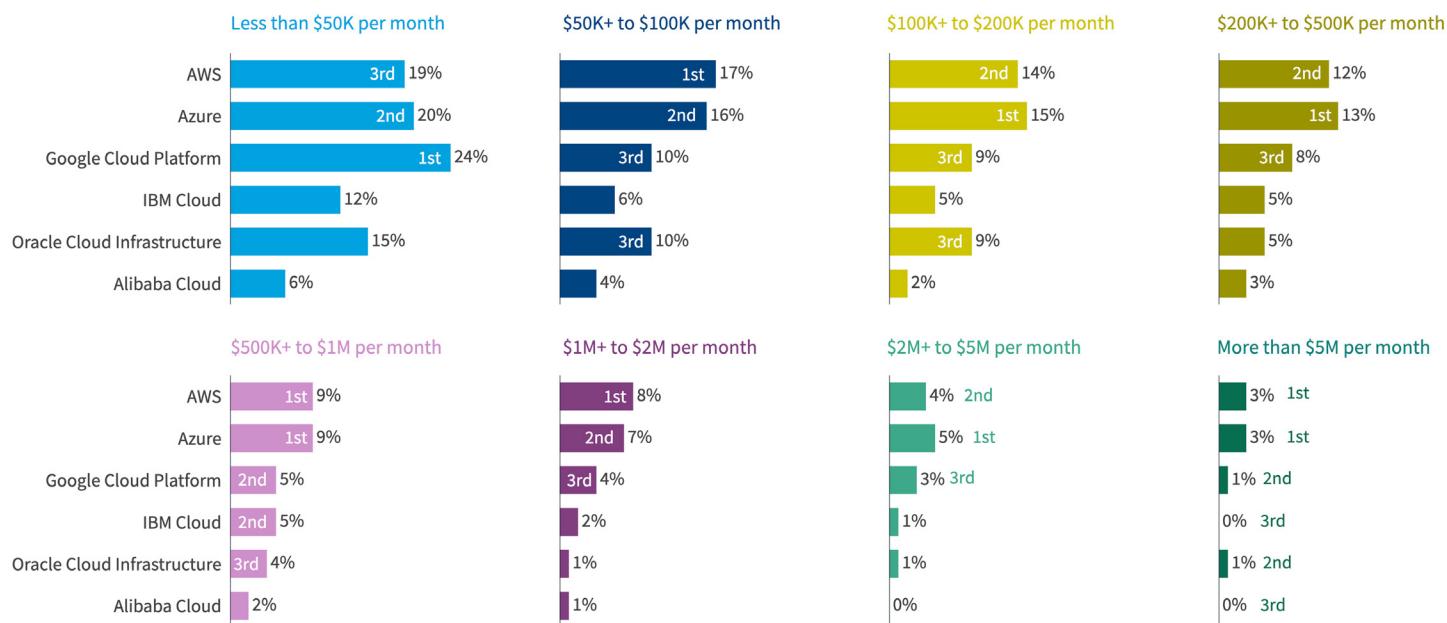
flexera

Azure's ongoing rollout of competitive features, especially in artificial intelligence (AI), could make it a more appealing choice for small organizations aiming to boost their business growth

With all respondents, AWS and Azure are nearly tied across all spending tiers.

Although *Google Cloud Platform* adoption remains well behind that of AWS and Azure, it leads with those spending less than \$50K per month (24% for *Google Cloud Platform*, 20% for Azure and 19% for AWS). This aligns with respondents experimenting with it (previously noted at 17% for *Google Cloud Platform*, 9% for Azure and 8% for AWS).

How much do you spend on each cloud provider?

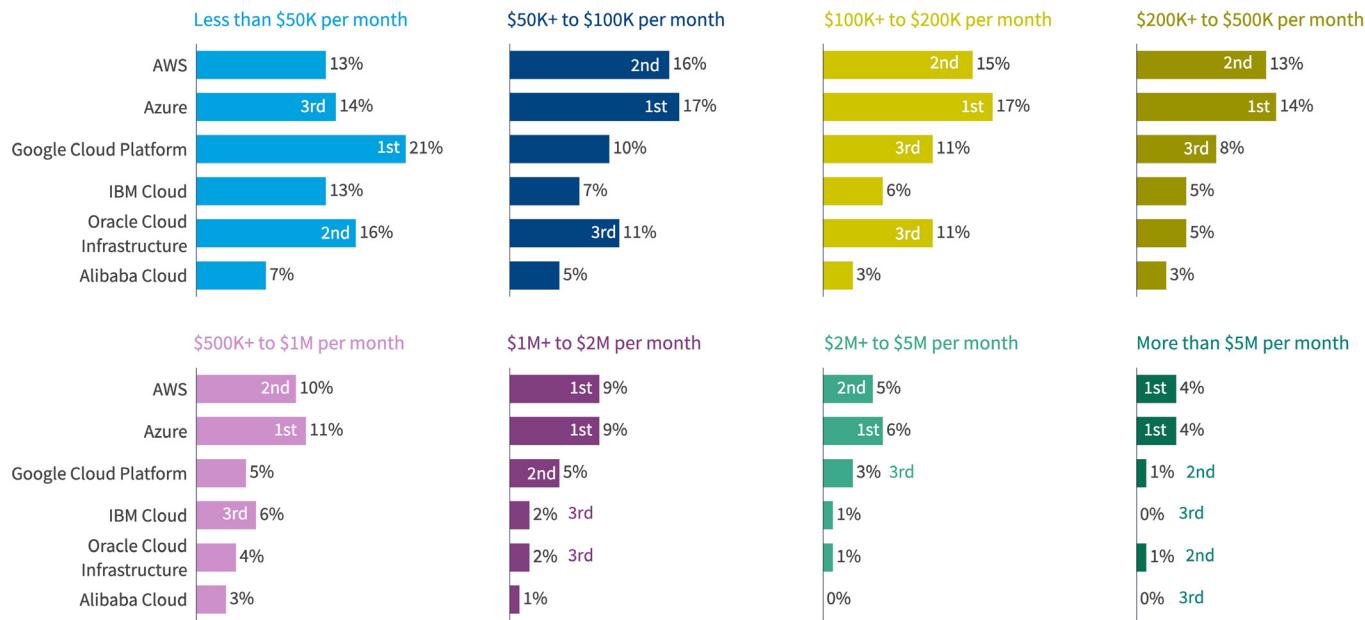


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 44)

flexera

Enterprise public cloud spend



N=621

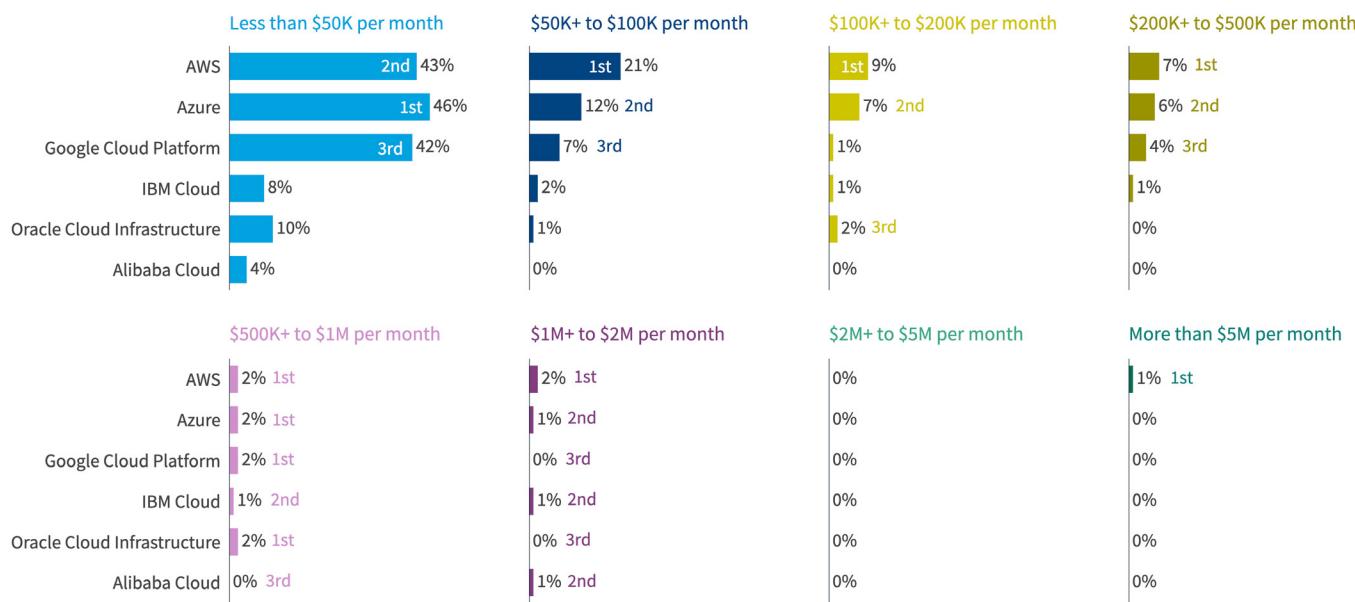
Source: Flexera 2024 State of the Cloud Report (Figure 45)

flexera

Enterprises spending more than \$1M a month continue to increase adoption of AWS (up to 18% from 15% YoY) and Azure (up to 19% from 15% YoY)

AWS (43%), Azure (46%) and *Google Cloud Platform* (42%) are near parity with SMBs that spend less than \$50,000 on public cloud. For SMBs that spend \$50,000 or more on public cloud, AWS holds the lead (42%) over Azure (28%).

SMB public cloud spend



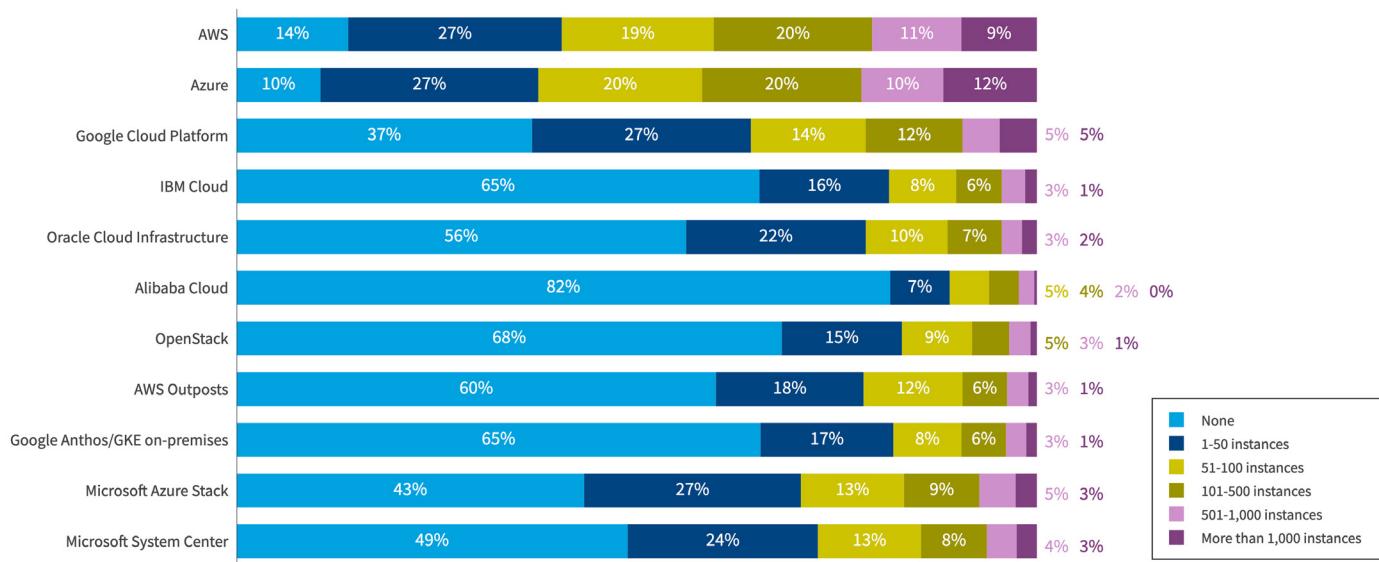
N=132

Source: Flexera 2024 State of the Cloud Report (Figure 46)

flexera

The number of virtual machines (VMs) or instances running in each cloud provides additional insight into the size of the organizational footprints within them. AWS and Azure lead among the larger-footprint sizes of more than 500 instances. In the private cloud/on-premises space, Microsoft offerings such as *Microsoft Azure Stack* and *Microsoft System Center* have more large-footprint deployments than either *AWS Outposts* or *Google Anthos*.

How many VMs do you have in each cloud provider?



N=753

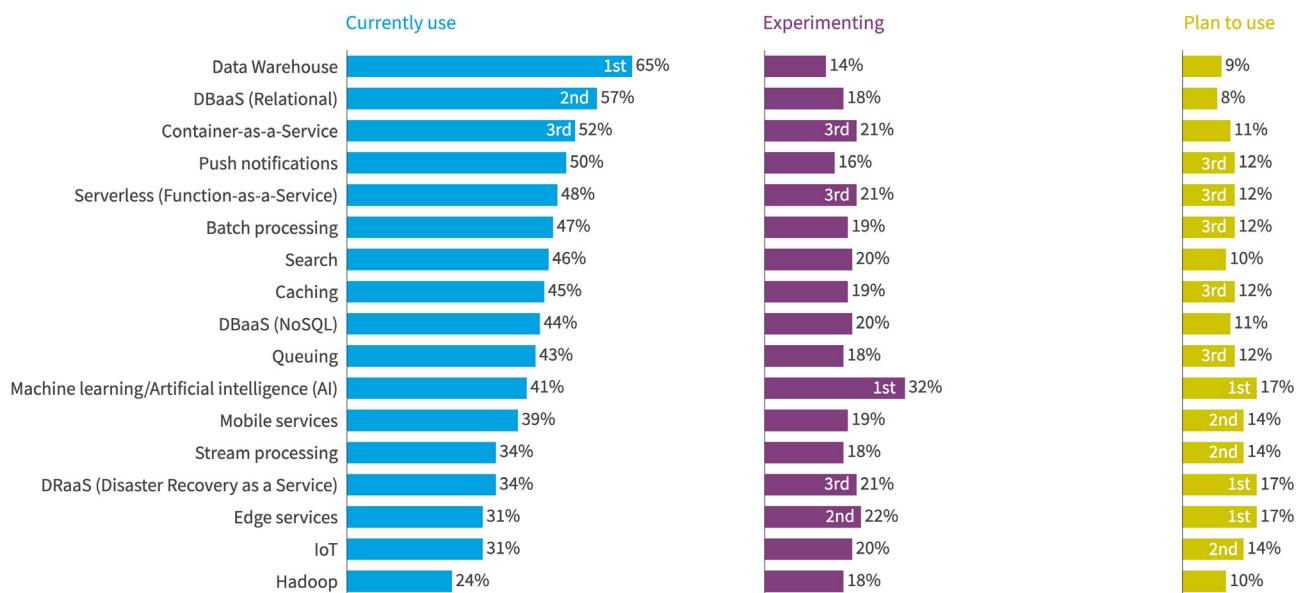
Source: Flexera 2024 State of the Cloud Report (Figure 47)

flexera

Use of public cloud PaaS offerings is increasing

In this year's survey, nearly all PaaS offerings saw a gain in usage, with the largest being in *data warehouse* (up to 65% from 56% YoY). *Container-as-a-service* (52%) and *serverless (function-as-a-service)* (48%) are both up 9 percentage points this year. *Machine learning/artificial intelligence (AI)* had a modest gain at 41%, up from 36% last year.

Public cloud services used by all organizations

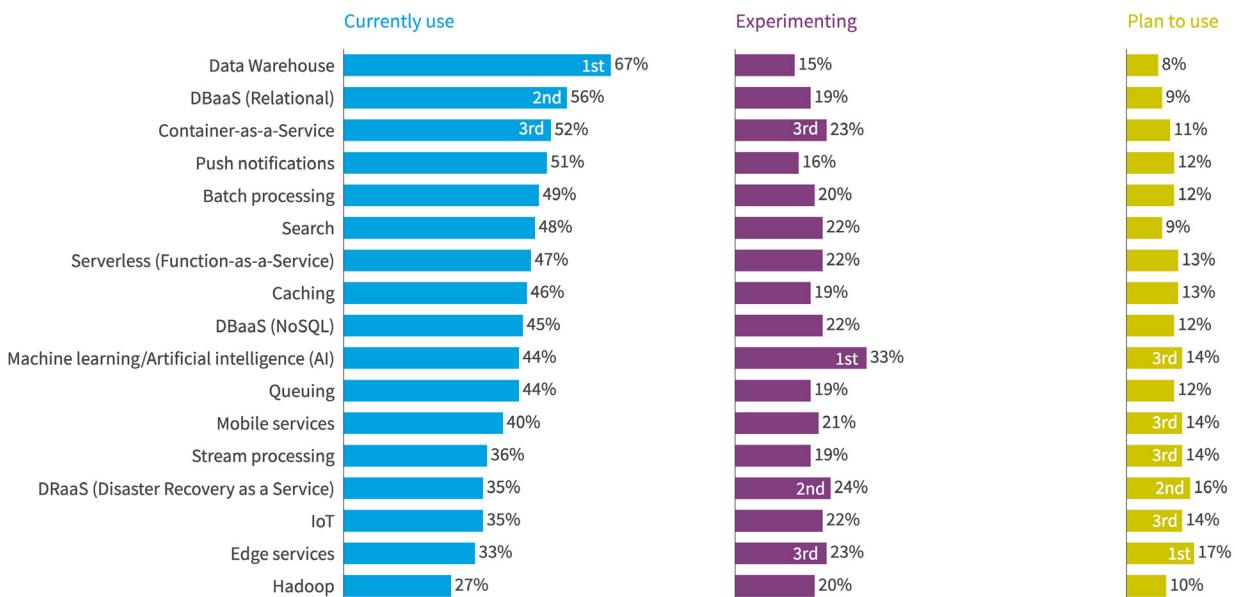


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 48)

flexera

Public cloud services used by enterprises



N=621

Source: Flexera 2024 State of the Cloud Report (Figure 49)

flexera

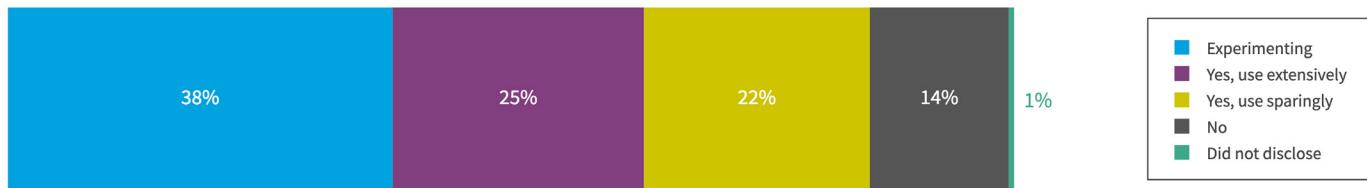
77% of enterprises are either currently using (44%) or experimenting with (33%) AI/ML. Organizations are experimenting more with AI/ML than with any other PaaS offering

» FLEXERA POV

Although current AI/ML usage is only at 41% with all respondents, Flexera expects this to increase significantly in the coming years as more and more organizations leverage the emerging GenAI services offered by public cloud providers.

This year, we asked if respondents are using any public cloud provider's GenAI services. A quarter of respondents say they already *use it extensively*, 38% are *experimenting* and 22% use it *sparingly*.

Use of generative AI (GenAI) public cloud services



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 50)

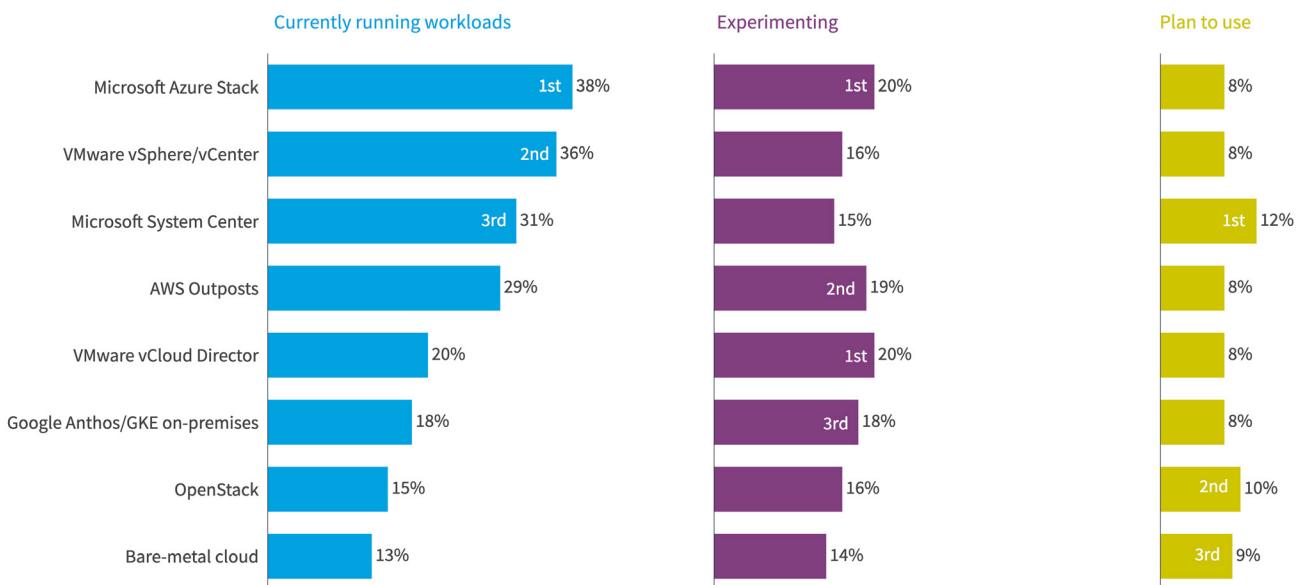
flexera

Nearly half (47%) of respondents are using GenAI cloud services in some form

Private cloud plays an important role

Most organizations are taking a multi-cloud, hybrid approach, in which private cloud plays an essential role. Similar to last year, *Microsoft Azure Stack* ranks first with 38%. *VMware vSphere/vCenter* climbed into the second spot with 36%, up from 28% YoY. Usage of all other private cloud technologies has remained relatively flat, with *OpenStack* and *bare-metal cloud* usage holding the final two spots as they have in prior years.

Private cloud technologies used by all organizations



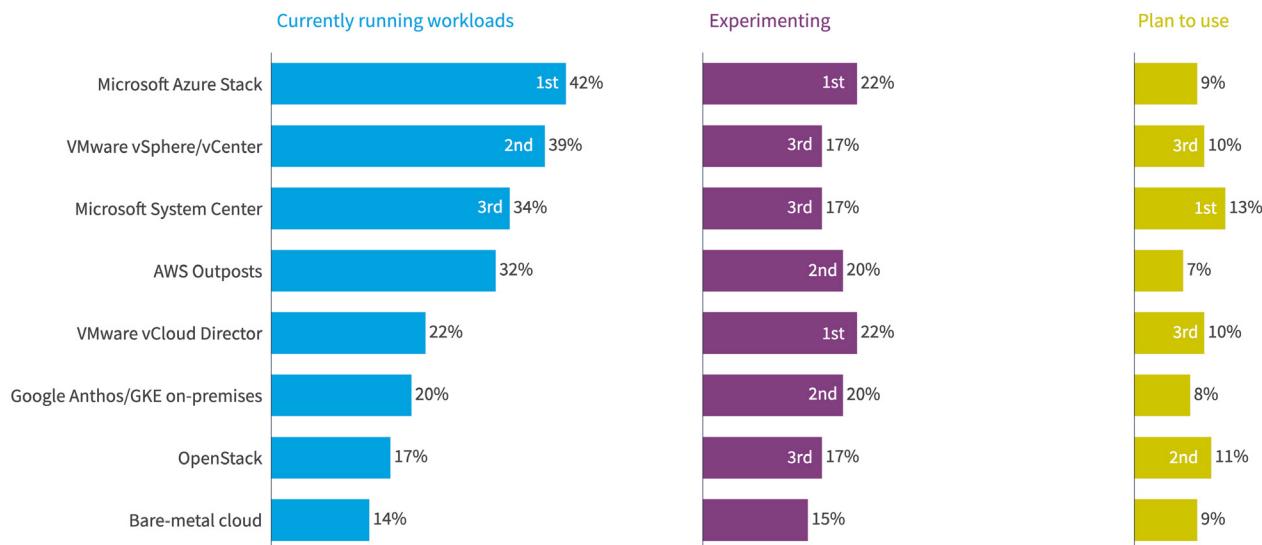
N=753

Source: Flexera 2024 State of the Cloud Report (Figure 51)

flexera

Azure Stack also continues to lead the way among enterprises (42% currently running workloads). VMware vSphere/vCenter is second at 39%.

Enterprise private cloud technologies



N=621

Source: Flexera 2024 State of the Cloud Report (Figure 52)

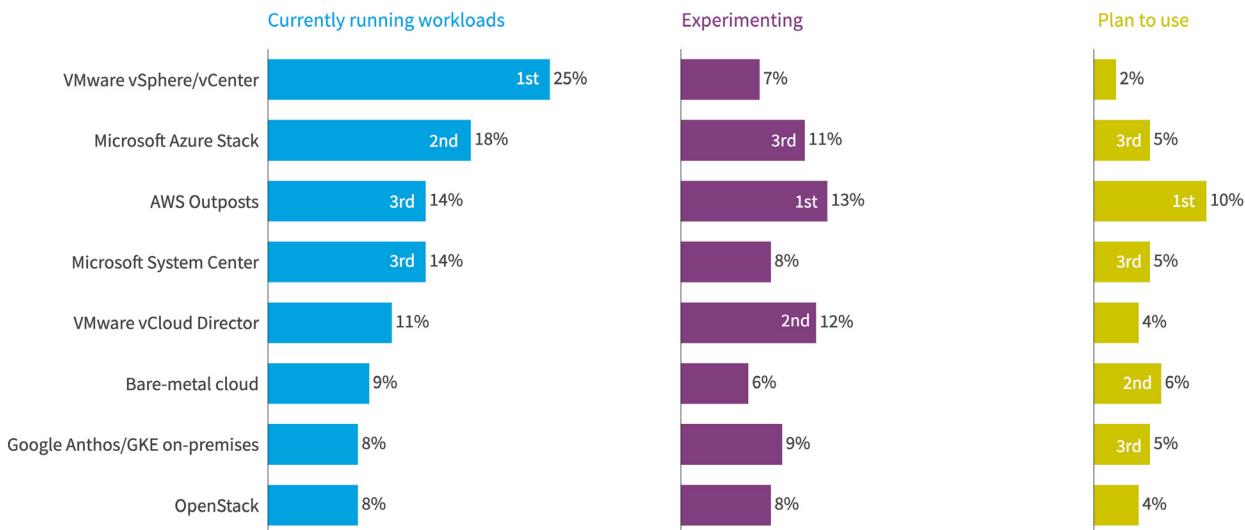
flexera

» FLEXERA POV

Enterprises experimenting with (17% this year, 20% last year) or planning to use (10% this year, 11% last year) vSphere/vCenter dropped. Despite some industry concerns about the Broadcom acquisition of VMware, vSphere/vCenter saw its current usage increase. These trends indicate there is still considerable momentum associated with VMware, and it will take time for enterprises to move away from these offerings.

A quarter of SMBs currently run workloads in VMware vSphere/vCenter.

SMB private cloud technologies



N=132

Source: Flexera 2024 State of the Cloud Report (Figure 53)

flexera

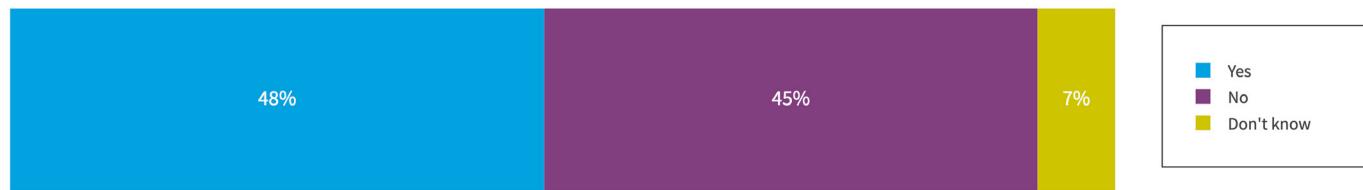
Among SMBs, vSphere/vCenter usage is higher than other private cloud technologies, but the combination of those experimenting with (7%) and planning to use it (2%) is the lowest

» FLEXERA POV

SMBs are less likely to use VMware technologies, possibly due to perceived changes to the channel after the Broadcom acquisition. As the State of the Cloud Report has demonstrated year over year, SMBs are more likely to put workloads in the public cloud—and they are less reliant on private cloud technologies.

Forty-eight percent of respondents say they already have defined sustainability initiatives, including tracking the carbon footprint of cloud usage. When asked how *sustainability* compares to *cost optimization*, 59% prioritized cost optimization.

Does your organization have a defined sustainability initiative
that includes carbon footprint tracking of cloud use?

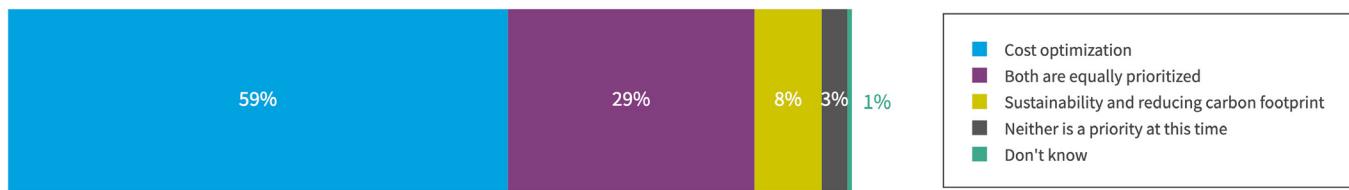


N=753

Source: Flexera 2024 State of the Cloud Report (Figure 54)

flexera

Cloud cost optimization and sustainability prioritization



N=753

Source: Flexera 2024 State of the Cloud Report (Figure 55)

flexera

59% prioritize cost optimization, while only 8% prioritize both sustainability and reducing carbon footprint

» FLEXERA POV

Although nearly half of all organizations have a defined sustainability initiative that includes carbon footprint tracking of cloud use, only 8% prioritize it in terms of cloud usage. On the other hand, 59% prioritize cost optimization, indicating that until legislation is in place that penalizes organizations for carbon footprints—such as what is currently being implemented in the European Union—prioritizing sustainability will continue to take a back seat to overall cost optimization.

State of the Cloud Report: European spotlight



The European distribution is very similar to that of the global respondent pool, with 33% coming from organizations of more than 10,000 employees and 46% from organizations with more than 5,000 employees.

European respondents by organization size



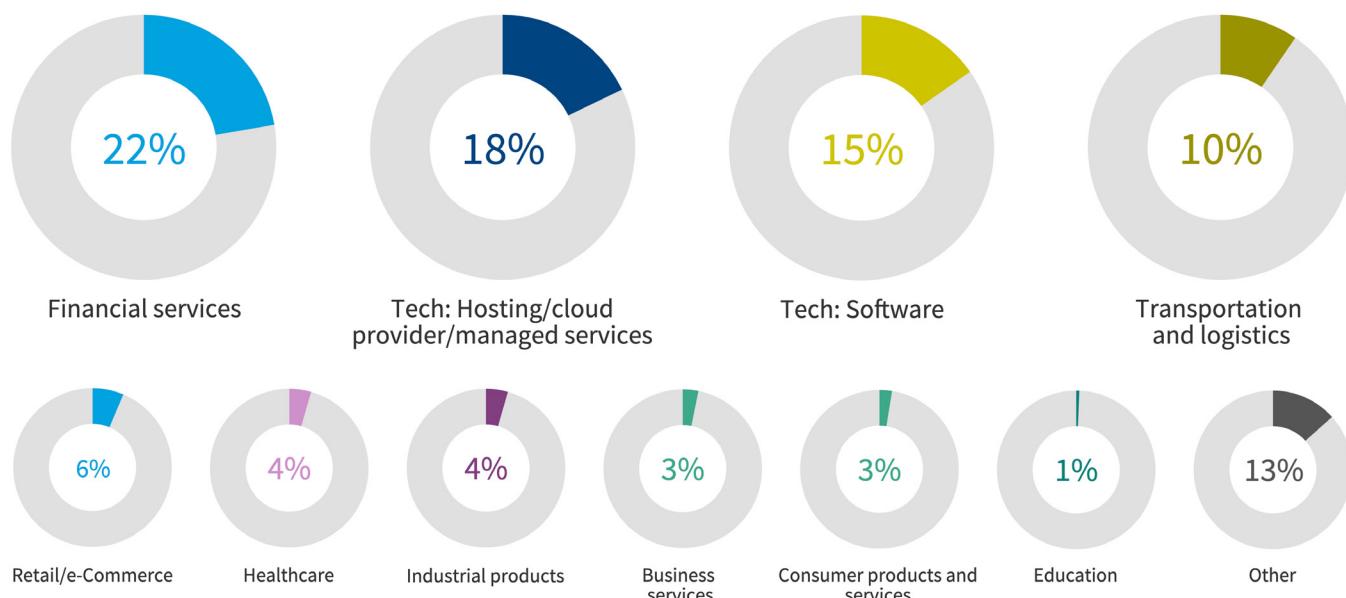
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 56)

flexera

The industries of European respondents also have a breakdown similar to that of the global survey, heavily weighted toward *financial services* and *technology*. European respondents worked at fewer *healthcare organizations* (4% compared to 12% globally).

European respondents by industry



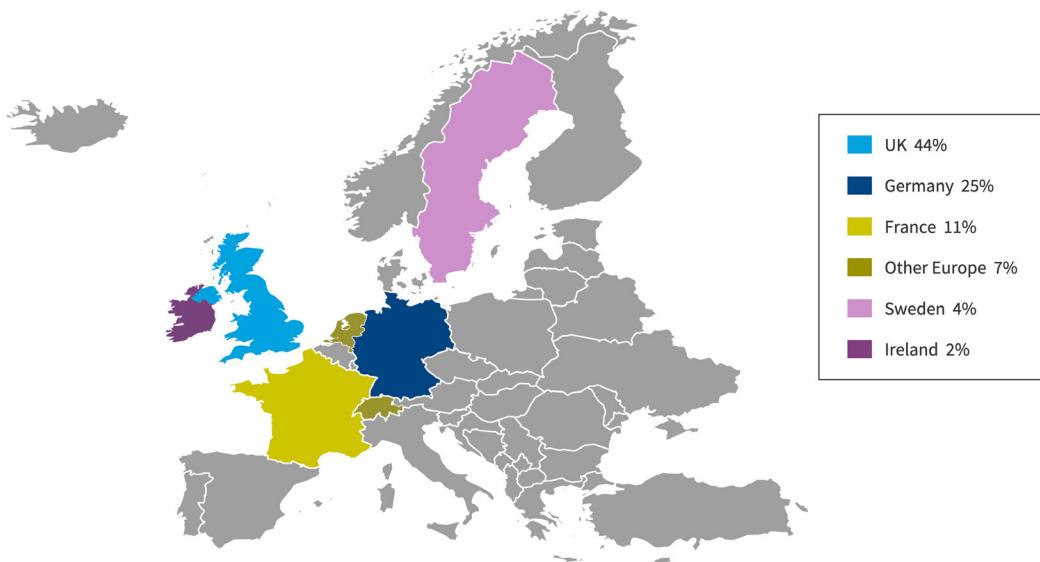
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 57)

flexera

As in years past, European respondents are mostly from the *UK* (44%), *Germany* (25%) and *France* (11%).

European respondents by country



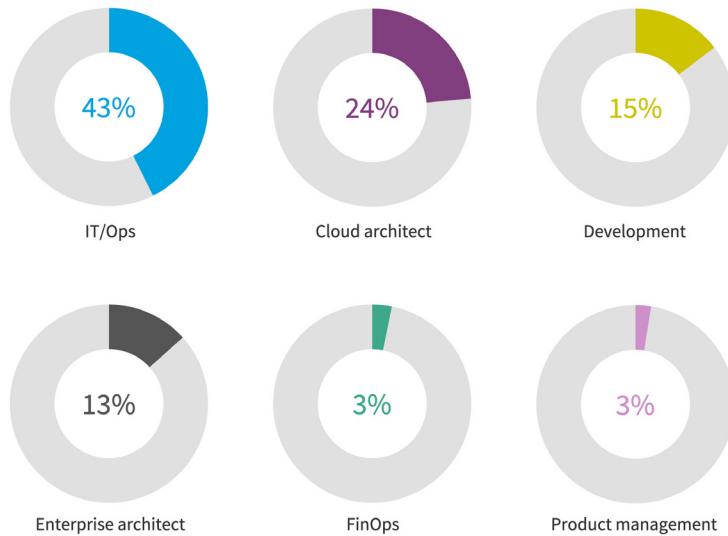
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 58)

flexera

The global and European data about roles is mostly consistent across respondent pools. One exception is *FinOps*, where European respondents were at 3%, compared to 8% globally.

European respondents by role



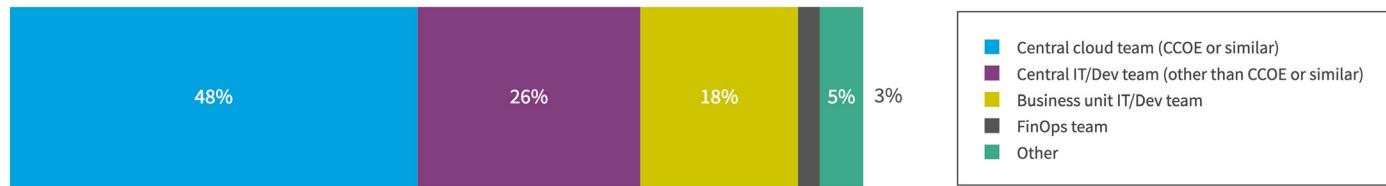
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 59)

flexera

European respondents have more respondents working in a *central IT/dev team* (26% European vs. 20% globally) but have very few working in *FinOps* teams (3% vs. 7% globally).

European respondents by where in the organization they work



N=157

Source: Flexera 2024 State of the Cloud Report (Figure 60)

flexera

European cloud usage continues to increase, with 73% reporting *heavy* usage this year, compared to 62% of European heavy users last year and 58% the year before that.

European respondents by cloud usage level



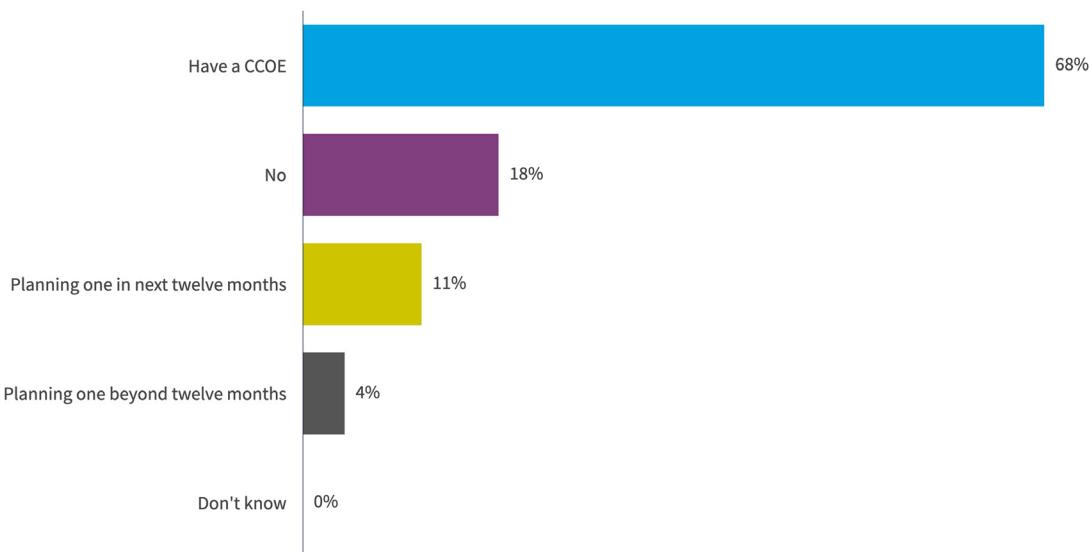
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 61)

flexera

European respondents have similar numbers working in a central cloud team or CCOE. Over two-thirds (68%) have a CCOE currently, and another 11% plan to have one in the next year.

European adoption of central cloud team or CCOE



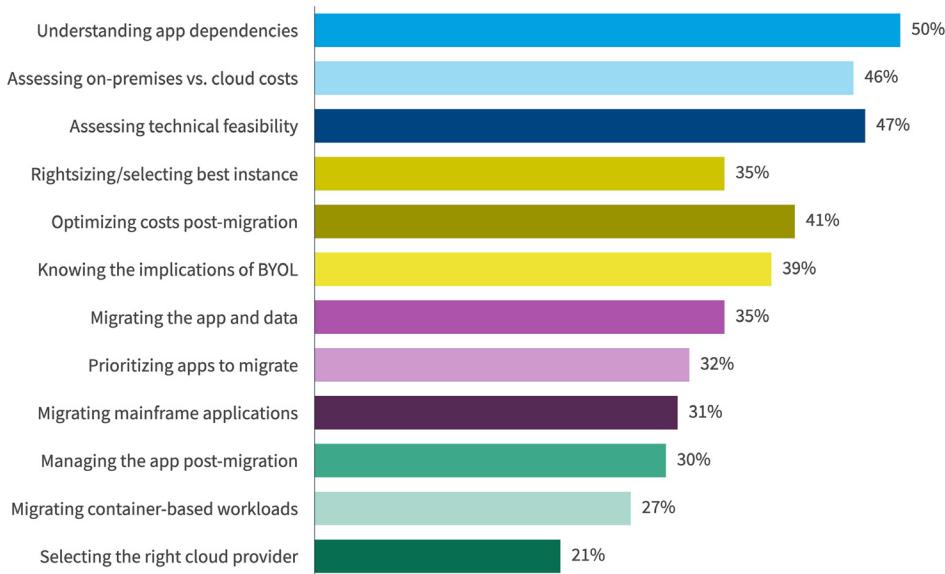
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 62)

flexera

Challenges in Europe are similar to those revealed in the global results. *Understanding app dependencies* (50%) is the top challenge in Europe, followed by *assessing technical feasibility* (47%) and *assessing on-premises vs. cloud costs* (46%).

Cloud migration challenges for European organizations



N=157

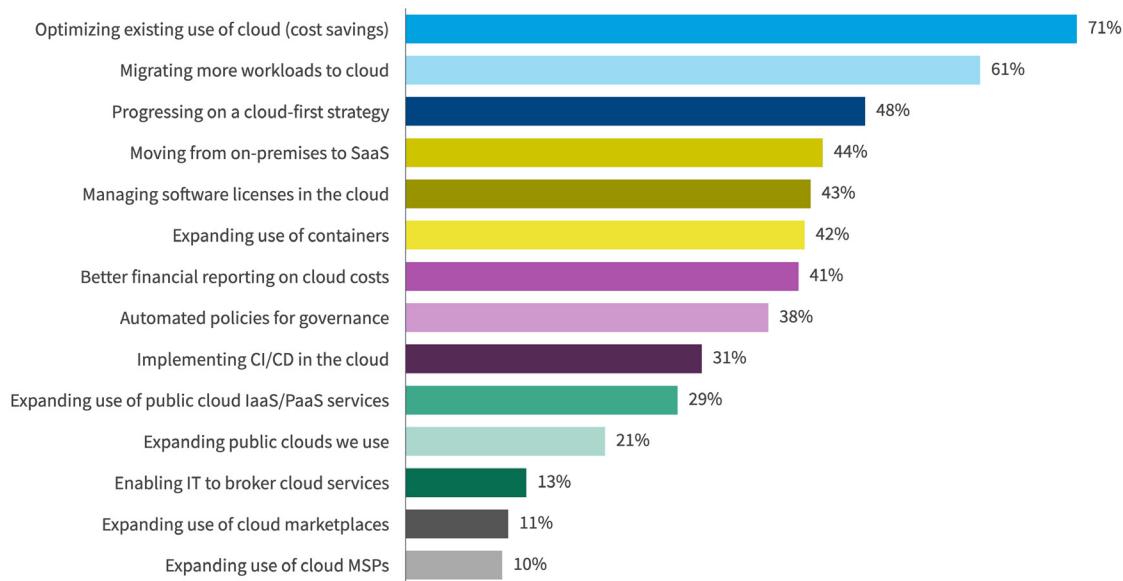
Source: Flexera 2024 State of the Cloud Report (Figure 63)

flexera

Each year, these same three challenges claim the top spots globally as well as for European respondents

European respondents are focused on cloud initiatives similar to those of their global counterparts. In Europe, as with all respondents, the top initiative is *optimizing existing use of cloud (cost savings)* (71%), followed by *migrating more workloads to the cloud* (61%) and *progressing on a cloud-first strategy* (48%). European respondents have a slightly heavier focus on *moving from on-premises to SaaS* offerings (44% compared to 39% globally).

Cloud initiatives for European organizations



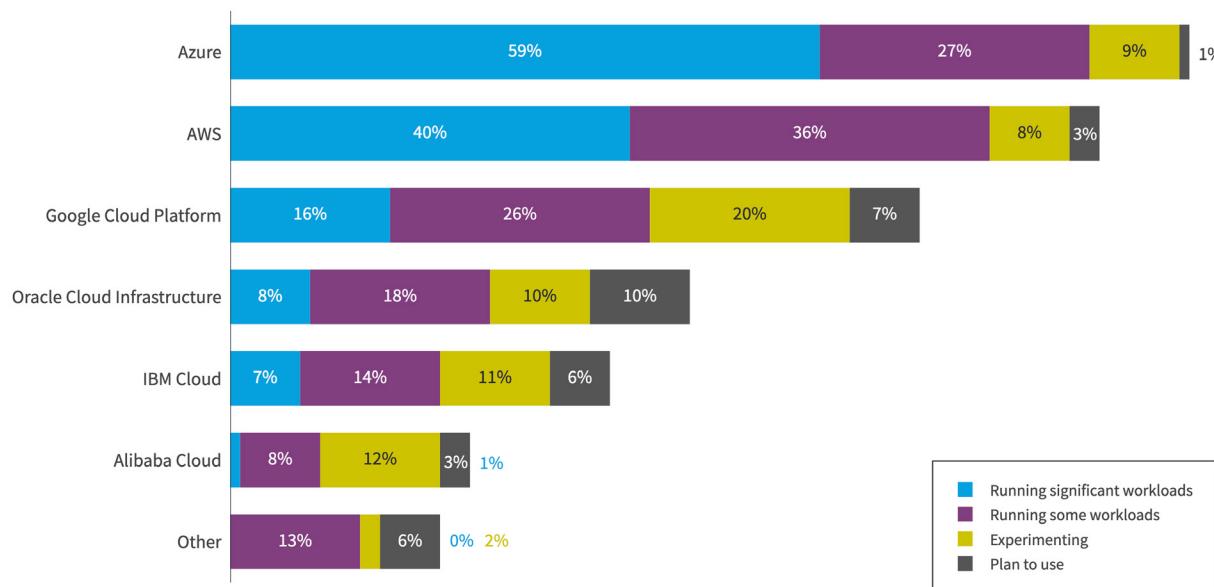
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 64)

flexera

European respondents show a distinct trend in cloud adoption compared to the global average, with a lower proportion using AWS and a higher inclination toward Azure. While 40% of European respondents have significant workloads in AWS, this is lower than the nearly half (49%) seen in the global respondent pool. On the other hand, Azure sees greater usage in Europe, with 59% of European respondents running significant workloads on Azure, a notable 14% increase over the global figure of 45%.

Public cloud provider adoption rates for European organizations



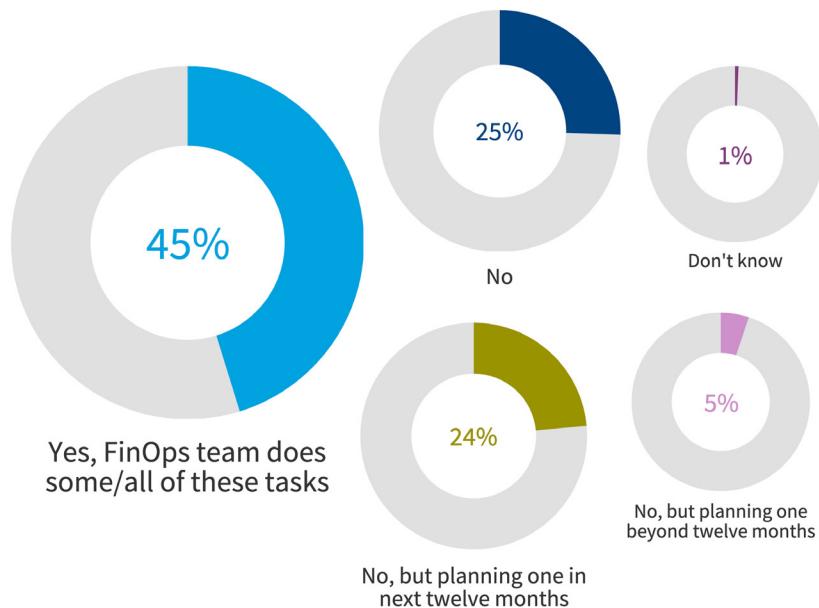
N=157

Source: Flexera 2024 State of the Cloud Report (Figure 65)

flexera

European organizations are less likely (45% compared to 51% globally) to have a FinOps team in place, but they are more likely (24% compared to 20% globally) to implement one in the next year.

Does your company have a FinOps team to advise, manage or execute cloud cost optimization strategies?



N=157

Source: Flexera 2024 State of the Cloud Report (Figure 66)

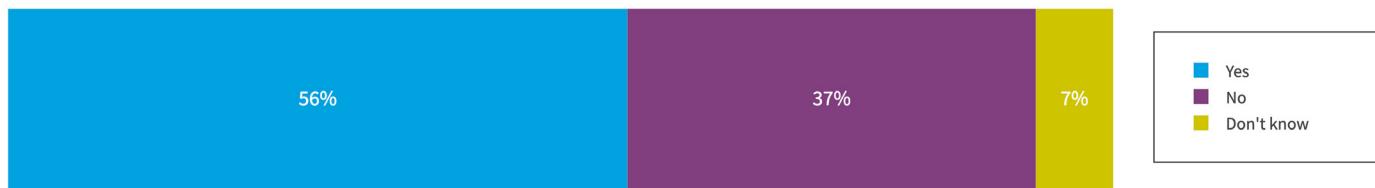
flexera

» FLEXERA POV

FinOps practices have seen more rapid implementation and maturation in the Americas than in Europe, but survey results indicate European FinOps teams are coming online rapidly.

European organizations are more likely than their global counterparts (56% vs. 48%) to have defined sustainability initiatives.

Does your organization have a defined sustainability initiative that includes carbon footprint tracking of cloud use?



N=157

Source: Flexera 2024 State of the Cloud Report (Figure 67)

flexera

» FLEXERA POV

As other parts of the world begin to adopt standards similar to the European Sustainability Reporting Standards (ESRS), the global numbers for this response will most likely increase.

European respondents are less likely (48% vs. 53% globally) to use an MSP for managing at least some of their cloud usage. They are also less likely (6% vs. 10% globally) to plan to use an MSP in the future.

Utilization of MSPs for managing public cloud for European organizations



N=157

Source: Flexera 2024 State of the Cloud Report (Figure 68)

flexera

Cloud initiatives move full speed ahead

Despite looming economic uncertainty in tech, the world continues to accelerate digital transformation. The *Flexera 2024 State of the Cloud Report* highlights key insights surrounding ways in which organizations are keeping costs down while tackling the complexities of hybrid cloud computing, sustainability and new technologies such as GenAI.

About Flexera

Flexera saves customers billions of dollars in wasted technology spend. A pioneer in Hybrid ITAM and FinOps, Flexera provides award-winning, data-oriented SaaS solutions for technology value optimization (TVO), enabling IT, finance, procurement and cloud teams to gain deep insights into cost optimization, compliance and risks for each business service. Flexera One solutions are built on a set of definitive customer, supplier and industry data, powered by Technopedia, that enables organizations to visualize their Enterprise Technology Blueprint™ in hybrid environments—from on-premises to SaaS to containers to cloud.

More than 50,000 customers subscribe to Flexera's technology value optimization solutions, delivered by 1,300+ team members worldwide. Learn more, visit flexera.com

» NEXT STEPS

Find out how Flexera can help you optimize your cloud

[CONTACT US](#)