



2020

Flexera™

DIGITAL TRANSFORMATION PLANNING REPORT

An in-depth look at how IT leaders are
approaching digital transformation

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Table of Contents

Executive summary	1
Digital transformation	3
Cloud is a foundation for digital transformation	6
Governance	10
Cybersecurity	15
Customer experience	20
Funding for digital transformation	24
Summary	29
Methodology	29

Table of Figures

Figure 1. Top 3 priorities for technology initiatives	3	Figure 15. IT spend controlled by business units by region	17
Figure 2. First, second and third priorities	4	Figure 16. Security best practices	19
Figure 3. Adoption rates for leading public cloud providers	5	Figure 17. CoE prevalence—digital transformers versus all respondents	21
Figure 4. On-premises software use is declining	6	Figure 18. Reduction in data center use leads to investment shift	22
Figure 5. Cloud strategies adopted by organizations	7	Figure 19. Types of software used from vendors	23
Figure 6. Enterprise cloud strategy is predominantly multi-cloud	8	Figure 20. Where IT spend is going today	24
Figure 7. Adoption of technologies from newer vendors at the expense of legacy providers	9	Figure 21. IT spend management challenges	25
Figure 8. IT spend is distributed across central IT and the business units	10	Figure 22. Identifying who manages enterprise cloud spend	26
Figure 9. Stages of cloud maturity	11	Figure 23. Software challenges in the cloud	27
Figure 10. Governance is the top cloud challenge	12	Figure 24. A significant portion of total cloud spend is wasted	28
Figure 11. Governance is the top challenge regardless of maturity level	13		
Figure 12. Differing views of central IT role in cloud	14		
Figure 13. Governance, security and compliance among top cloud challenges	15		
Figure 14. Security is a significant challenge at all levels of cloud maturity	16		

FLEXERA™ 2020 DIGITAL TRANSFORMATION PLANNING REPORT

An in-depth look at how IT leaders are approaching digital transformation

Executive summary

When asked about their top technology priorities for 2020, chief information officers (CIOs) and other senior IT leaders ranked digital transformation as their top focus. These leaders are reinventing their organizations with the goals of creating an exceptional customer experience and staying ahead of the competition.

Using technology to achieve a competitive advantage is the essence of digital business, but there's much confusion around what this transformation entails. Successful digital transformation requires investments in technologies, people and processes that drive business value. These investments include funding for critical initiatives that support the digital enterprise, such as cloud, cybersecurity and customer experience. Success also requires effective governance of cloud-based assets and clear visibility into the cost of cloud resources.

This inaugural Flexera 2020 Digital Transformation Planning Report examines how organizations are approaching digital transformation, including priorities, challenges and strategies. For this report, Flexera has synthesized data from its industry-leading [RightScale® 2019 State of the Cloud from Flexera](#) and [Flexera 2020 State of Tech Spend](#) reports and [Flexera 2018 SaaS Survey](#) to provide visibility into the initiatives that support digital transformation.

This report offers insights into the factors driving digital transformation, how IT leaders are approaching the digital transformation journey and the challenges they face along the way.

The highlights

Digital transformation and cloud

- 54% of organizations indicate that digital transformation is a top priority
- Other priorities include cybersecurity, cloud-first/cloud migration and improving the customer experience
- AWS and Azure have the largest number of companies using their public cloud environments
- 84% of organizations surveyed have a multi-cloud strategy

Governance and cybersecurity

- 68% of organizations are intermediate or advanced for cloud maturity
- 84% of organizations report cloud governance is a top cloud challenge, and security (81%) is close behind as a major challenge
- Effective governance is a challenge for all respondents regardless of cloud maturity level
- 26% of IT spend is controlled by business units

Customer experience and funding for digital transformation

- While centers of excellence (CoEs) often focus on such initiatives as cloud adoption, analytics/big data and artificial intelligence, those initiatives are all essential to improving the customer experience
- 65% of companies plan to reduce the number of data centers, which will enable organizations to reallocate resources to initiatives that drive innovation and improve the customer experience
- Half of the organizations surveyed spend more than \$1 million per year on public cloud

Digital transformation

Participants in the Flexera 2020 State of Tech Spend Report survey report digital transformation, cybersecurity and cloud-first/cloud migration are the top three priorities for technology initiatives for the next year. Improving customer experience follows close behind in fourth place. As **Figure 1** shows, more than half of the respondents named digital transformation as the most important priority.

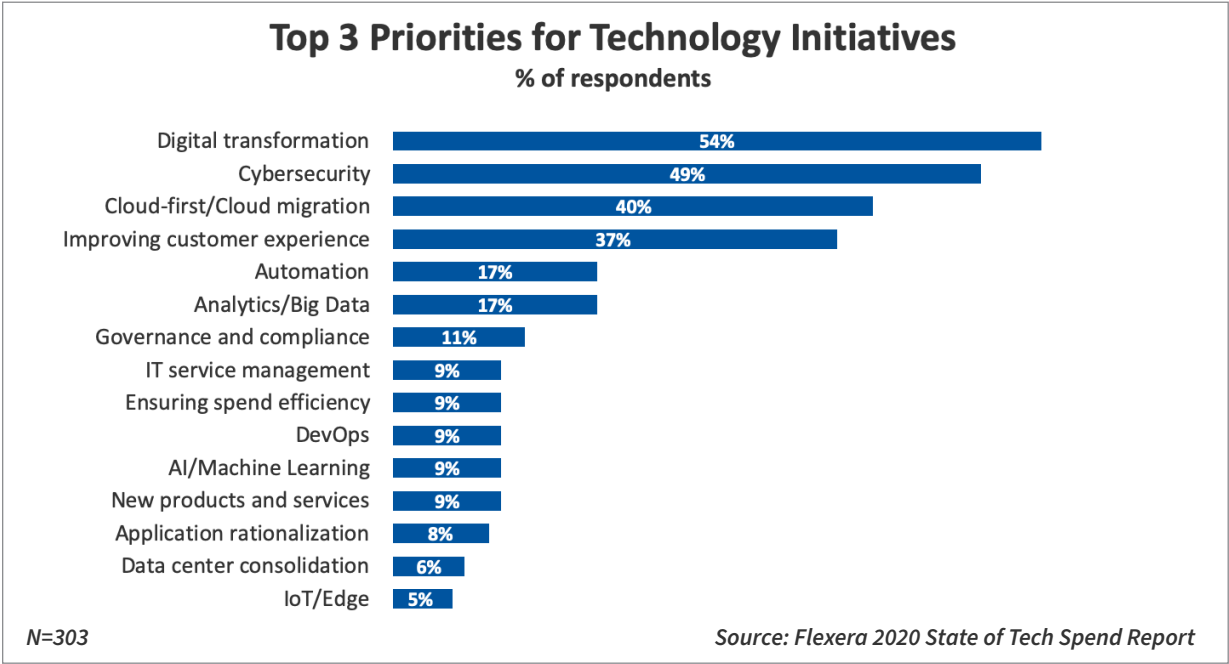


Figure 1. Top priorities for technology initiatives

The choice of the top three initiatives underscores the importance senior leaders place on replacing the traditional business model with a new, faster, more innovative approach to deliver on what customers want and need from a vendor. In other words, organizations are embracing digital transformation because it’s essential to creating a compelling customer experience that enables future business success.

Digital transformation isn’t possible without an investment in the cloud, because it’s an enabler for the digital journey. As organizations transform, they must realize securing applications, business data and customer information in the cloud is more than just good business practice. It’s also a regulatory requirement in the European Union and soon will be in California, USA, as well as potentially other states. Additionally, the cloud introduces new and more complex issues around protecting data, applications and intellectual property. Clearly, the top four technology priorities are tightly linked.

Analytics/big data, governance and automation are lower on the list of priorities but are nonetheless vital to successful digitalization. Analytics and big data projects are crucial to understanding customer preferences and expectations, enabling the organization to fine-tune the customer experience and build stronger digital relationships constantly. Governance is equally important to any IT project, but more so when the cloud strategy spans central IT and departmental or business unit IT teams. Proper governance ensures migrations to cloud happen without introducing security and noncompliance risks. For its part, automation delivers operational efficiencies that speed processes and keep costs in check. Automation is essential when the labor market is tight and unemployment is low.

To successfully navigate the journey to digital, organizations must intertwine cloud, cybersecurity and customer experience with their transformation efforts and layer in robust governance and cost visibility. Unless they harmonize all these areas, they risk having to reboot part, or multiple parts, of their digital strategies.

Deeper insight into technology priorities

Respondents were asked to rank technology initiatives according to their first, second and third priorities, which provided a deeper understanding of the prominence of the top initiatives. As **Figure 2** indicates, digital transformation, cybersecurity and cloud appear in the top four for each priority level. Yet while respondents ranked customer experience fourth as their top priority, they listed it in the top spot for their second priority.

This placement indicates respondents are aware of the significant role customer experience plays in business success. To create and maintain an exceptional customer experience, organizations need to pursue digital transformation.

Priority of Initiatives % of respondents		
TOP PRIORITY	SECOND PRIORITY	THIRD PRIORITY
1. Digital transformation (26%)	1. Customer experience (16%)	1. Digital transformation (14%)
2. Cybersecurity (22%)	2. Cybersecurity (16%)	2. Cybersecurity (12%)
3. Cloud (17%)	3. Digital transformation (14%)	3. Cloud (10%)
4. Customer experience (14%)	4. Cloud (14%)	4. Analytics/Big Data (9%)
5. Spend efficiency (3%)	5. Automation (8%)	5. Automation (8%)

N=303

Source: Flexera 2020 State of Tech Spend Report

Figure 2. First, second and third priorities

A look at the cloud vendors

With cloud so closely aligned with digital transformation, it's enlightening to look at the primary cloud vendors to see how they compare with respect to adoption. The RightScale 2019 State of the Cloud Report from Flexera focuses on public cloud vendors because, as organizations progress in cloud maturity, they increasingly move workloads to the public cloud while maintaining a private cloud footprint in their data centers. (The maturity model presented in the RightScale 2019 State of the Cloud Report from Flexera divides maturity into four levels based on the number of workloads the organization has moved to public cloud: watcher, beginner, intermediate and advanced.)

As **Figure 3** shows, AWS, Microsoft and Google are the top three public cloud providers. Sixty-seven percent of companies are running workloads in AWS, while another 15 percent are experimenting with it. Microsoft Azure is a close second, with 60 percent of survey respondents currently using Azure and 14 percent experimenting with it. Azure is experiencing rapid growth because of its focus on enterprise workloads, extending its ecosystems and the cost advantage of running Microsoft licenses on Azure. In specific industries, companies prefer to use Azure because it's not a competitive threat, the way AWS and Amazon are to their core business.

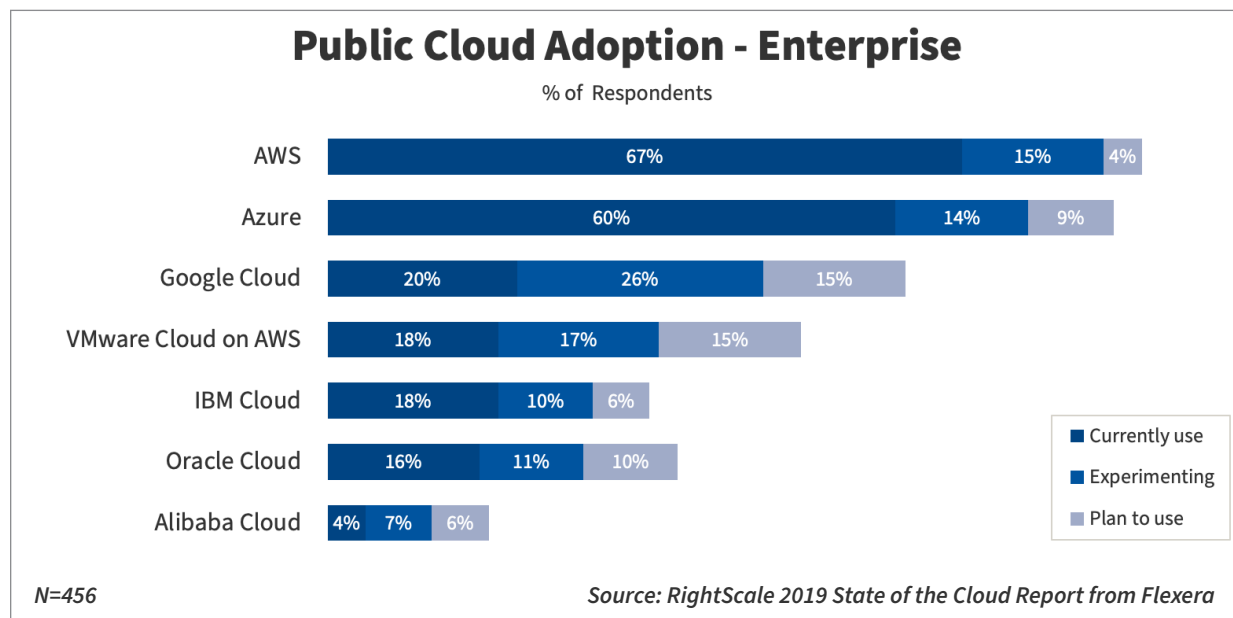


Figure 3. Adoption rates for leading public cloud providers

Cloud is a foundation for digital transformation

Because digital transformation is highly dependent on cloud, organizations are redirecting software investments from on-premises to cloud-based applications. **Figure 4** validates this trend, showing that survey respondents expect spending on infrastructure as a service (IaaS), platform as a service (PaaS) and software as a service (SaaS) to rise over the next 12 months, while 55 percent expect their on-premises software spend to decline.

Over the past decade, on-premises software vendors have scrambled to migrate their products to the public cloud. Some legacy software vendors—for example, Microsoft, Oracle and IBM—have built their own cloud offerings. To encourage customers to run applications in the vendor's cloud platform, vendors will charge an additional fee for customers to run their apps in a cloud environment other than that of the application vendor. The extra charge is a continuation of the age-old strategy of vendors attempting to lock customers into their platforms.

But organizations are resisting vendor lock-in and evaluating or using containers to make workloads portable. That's because maintaining agility is an important driver of digital transformation. IT organizations recall all too well how legacy on-premises solutions lacked flexibility and limited their agility.

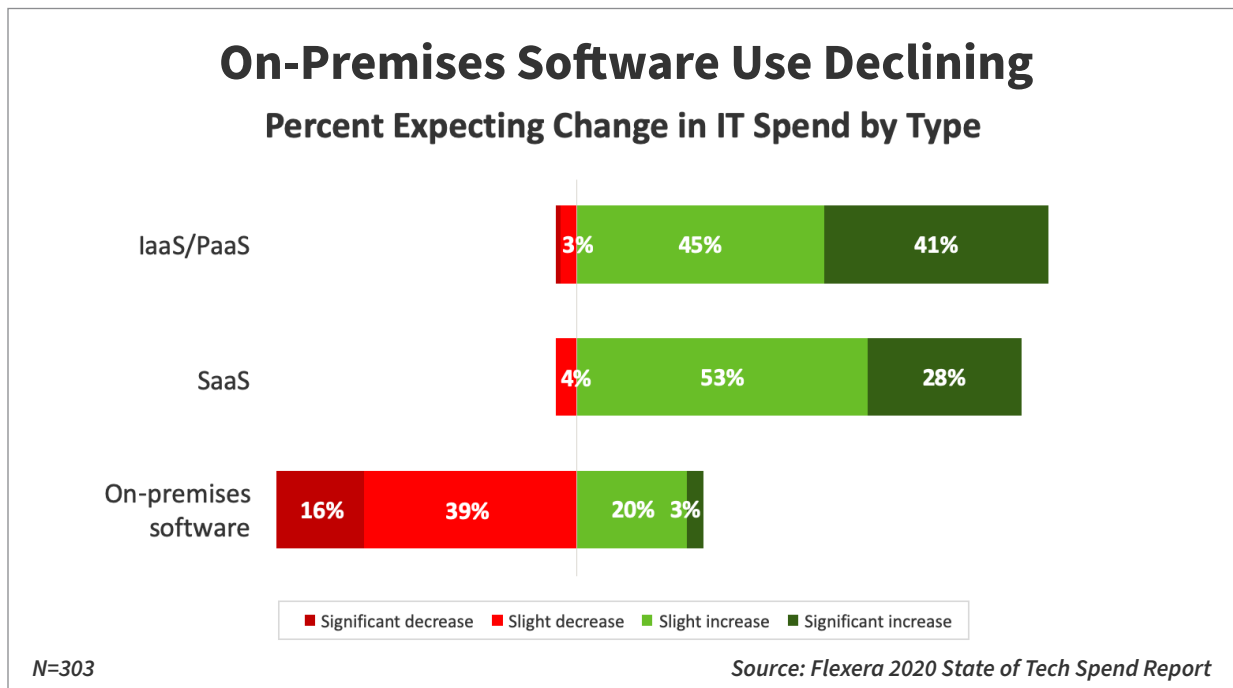


Figure 4. On-premises software use is declining

Retiring technical debt frees funding for cloud

As cloud maturity advances, organizations find themselves running more and more highly distributed workloads across multiple cloud vendors. The corresponding increase in complexity makes ensuring governance, security and cost control quite tricky.

Figure 5 paints a picture of the direction organizations are going with their cloud strategies. It indicates the complexity isn't going away. Maintaining a hybrid cloud strategy requires keeping the data center for the foreseeable future to support those workloads still on-premises. Hybrid cloud allows the organization to pull public workloads back on-premises and scale up, if the need arises, enabling them to build flexibility and agility into their infrastructure strategy.

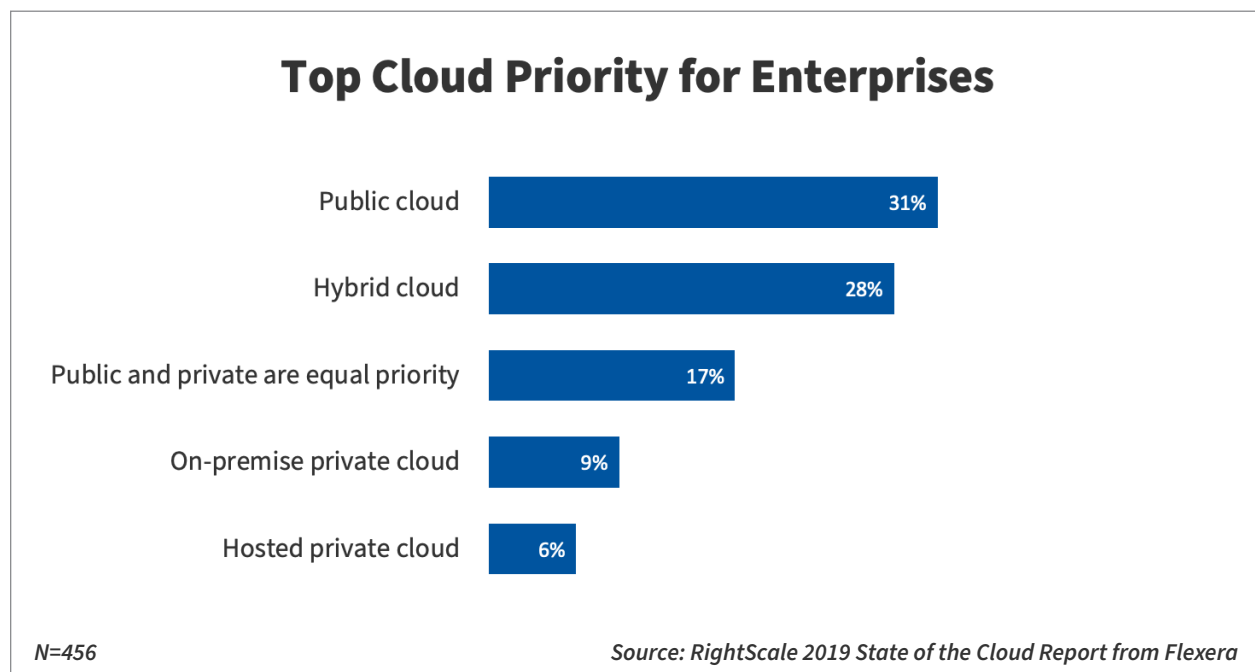


Figure 5. Top cloud priority for enterprises

Strategic direction is multi-cloud

Figure 6 shows that a multi-cloud enterprise cloud strategy has become pervasive in the marketplace. Eighty-four percent of companies are taking a multi-cloud approach.

An effective digital transformation strategy is about pushing boundaries and minimizing constraints—that is, avoiding the limitations of on-premises legacy technologies that held companies back for so many years. With a multi-cloud approach, organizations are building flexibility into their cloud strategy to foster innovation and competitive pricing.

Meanwhile, vendors are attempting to lock customers in with certain actions, such as modifying pricing and licensing models in ways that try to create single-vendor scenarios. For example, a vendor offering a database solution might charge extra if the organization chooses to run the application in another vendor’s cloud. But many organizations are quite willing to pay a premium to keep their options open.

Organizations are also moving to diversify their workforces in terms of cloud expertise. They want to ensure they recruit people with a mix of skills—some with AWS expertise, others with Azure, and so forth—to support an environment encompassing multiple cloud providers.

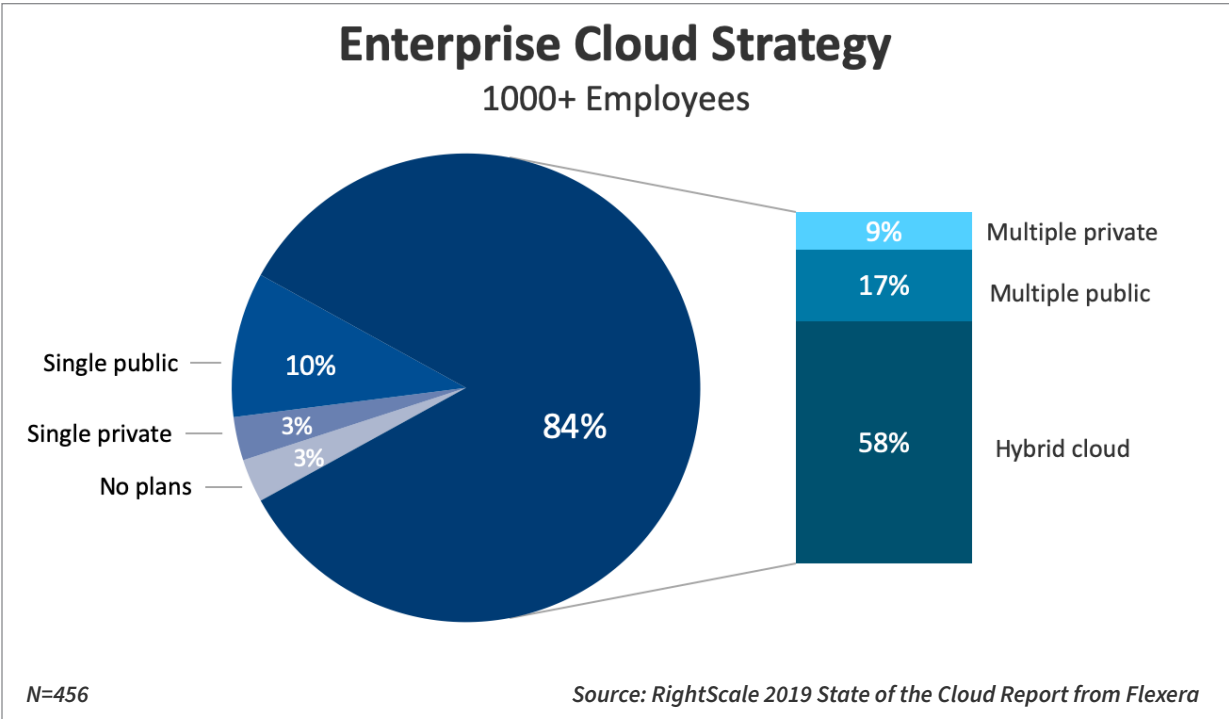


Figure 6. Enterprise cloud strategy is predominantly multi-cloud

Mega-vendors usage shifts

As organizations go digital, respondents report a change in vendor presence. Many organizations are switching from high-profile, old-guard vendors to newer cloud and SaaS technology providers. As the technology market continues to consolidate, emerging vendors will likely move into the upper echelon.

Survey participants were asked how they plan to allocate spend among vendors. **Figure 7** shows that five of the top six vendors for which vendor usage is expected to increase have a cloud-only or SaaS-only delivery model. Microsoft is the only exception, maintaining a significant product portfolio of on-premises solutions.

All the vendors listed in the figure are actively pursuing a cloud strategy through partnering or acquisition to bring new technologies into their portfolios. This trend is evidenced by IBM's recent acquisition of RedHat. For the most part, vendors have rearchitected their on-premises software to run on cloud platforms, while still supporting customers who have yet to make the shift. There may always be several applications organizations don't migrate due to the criticality of data.

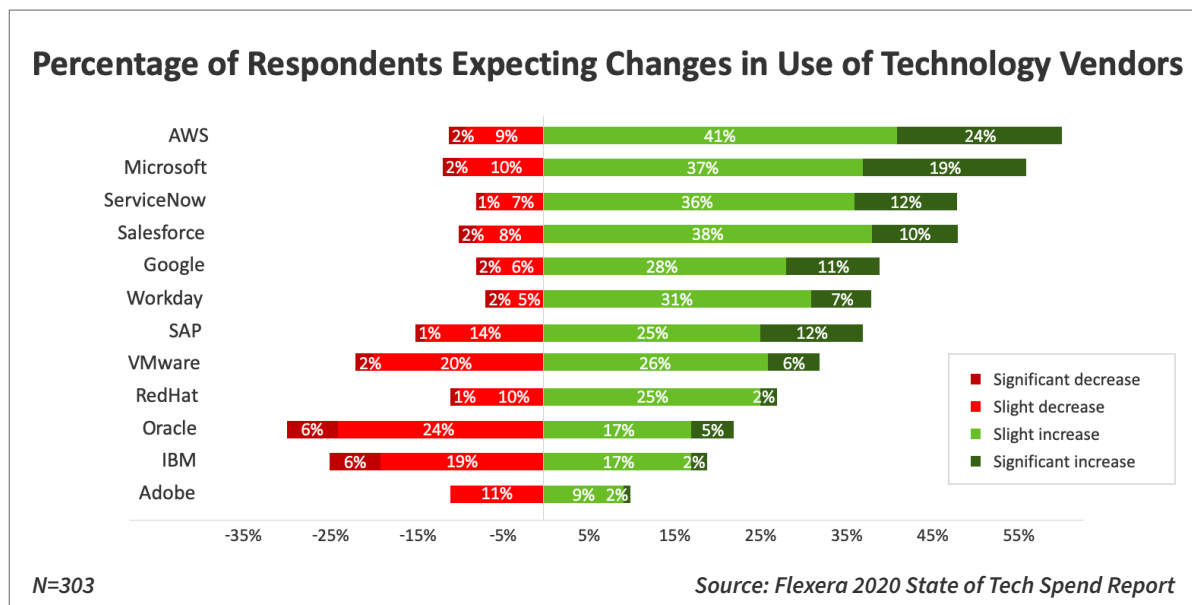


Figure 7. Adoption of technologies from newer vendors at the expense of legacy providers

Governance

A clearly articulated governance structure is crucial to success with any IT project. Without a solid structure, there's confusion about accountability. Cloud governance is a framework that controls and administers the policies and standards associated with a cloud implementation. As **Figure 8** shows, 26 percent of business units have control of their IT budgets and can purchase cloud resources on their own. Typically, a business unit will buy an asset and not rely on central IT's input in the decision process. The potential is great for issues to arise in this more decentralized environment, unless strong governance is in place.

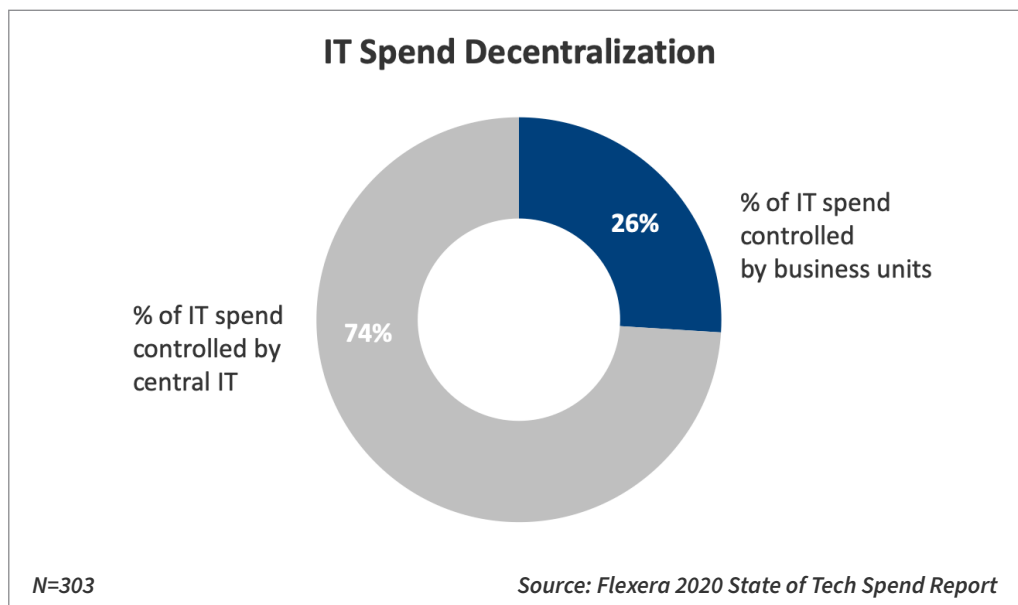


Figure 8. IT spend is distributed across central IT and the business units

When a business unit makes a purchase and doesn't inform central IT, it's known as shadow IT. Industry analyst firms estimate that shadow technology purchases could represent up to 40 percent of the IT budget. Complete visibility into the asset base can be lost, leading to potential security and cost issues when shadow assets aren't centrally managed.

A common governance framework across the enterprise is essential when technology budgets are distributed among central IT and business units. That framework defines standards and policies, assigns responsibilities and ensures compliance. When done correctly, the governance framework enables organizations to:

- Secure their apps and data
- Minimize risk associated with noncompliance
- Identify inefficiencies and waste
- Optimize technology spend
- Automate processes to deliver operational efficiencies

There's an assumption that governance issues will be solved as maturity increases. In this assumption, once an organization has had to deal with cloud-related problems, it'll have established processes to prevent those problems from reoccurring. Infrastructure and operations teams don't like fixing the same issue multiple times. To fully achieve the benefits of digital business without too many missteps and restarts on the digital journey, organizations must build cloud experience and expertise. As they do, they continuously move along the cloud maturity continuum, from watcher to beginner through intermediate and advanced.

Figure 9 shows 68 percent of organizations have reached the intermediate or advanced level of cloud maturity, as defined by the volume of workloads they have running in the public cloud. When there are many cloud workloads, the problems presented in the early stages should have been resolved to enable the organization to continue its transformation seamlessly.

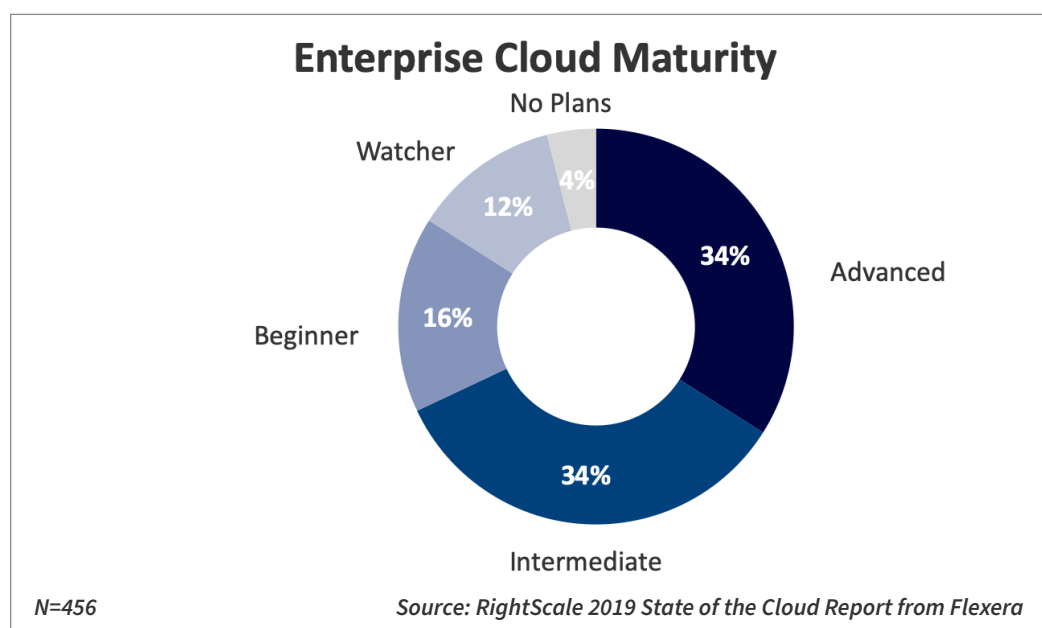


Figure 9. Stages of cloud maturity

Governance challenges

Developing and establishing a governance framework and getting buy-in across the enterprise can be difficult. As **Figure 10** shows, 84 percent of survey respondents report governance is one of the top challenges they face, tied with managing cloud spend. The next three challenges follow very close behind, with security at 81 percent, and compliance and lack of resources/expertise both at 79 percent.

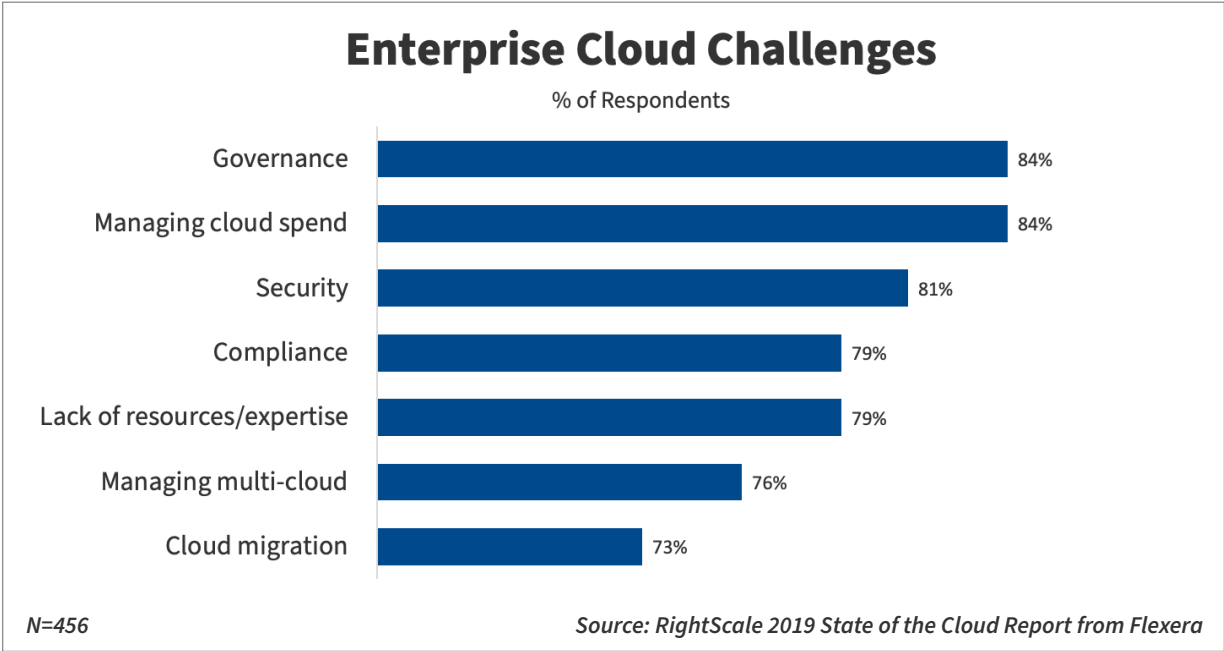


Figure 10. Governance is one of the top cloud challenges

The top five challenges are interconnected. Lack of resources and expertise likely makes it more difficult to tackle the other four top challenges. Security and compliance, which involve the most risk, are easier to ensure if the organization has a sound governance framework. Where governance is strong, all groups—central IT and business units—are working on the same page, minimizing potential security and compliance risks while also reducing cost overruns.

Maturity level has limited impact on the top challenges

While it's expected that governance is the top challenge given the complexity and dynamic nature of the cloud environment, it's surprising to find it continues to be a challenge regardless of cloud maturity level, as **Figure 11** shows. Lack of resources, managing cloud spend, security and compliance also remain challenges, even for organizations at the highest level of maturity.

As organizations mature with respect to cloud, one would expect they would find ways to address the major challenges faced when they were new to the cloud. That's the case with cloud migration, which has declined with maturity. At the beginner stage, cloud migration represents a significant challenge. As organizations progress through intermediate to advanced maturity—where most workloads are in the cloud—the experience they've gained reduces migration challenges. Governance remains a top challenge, even as companies mature.

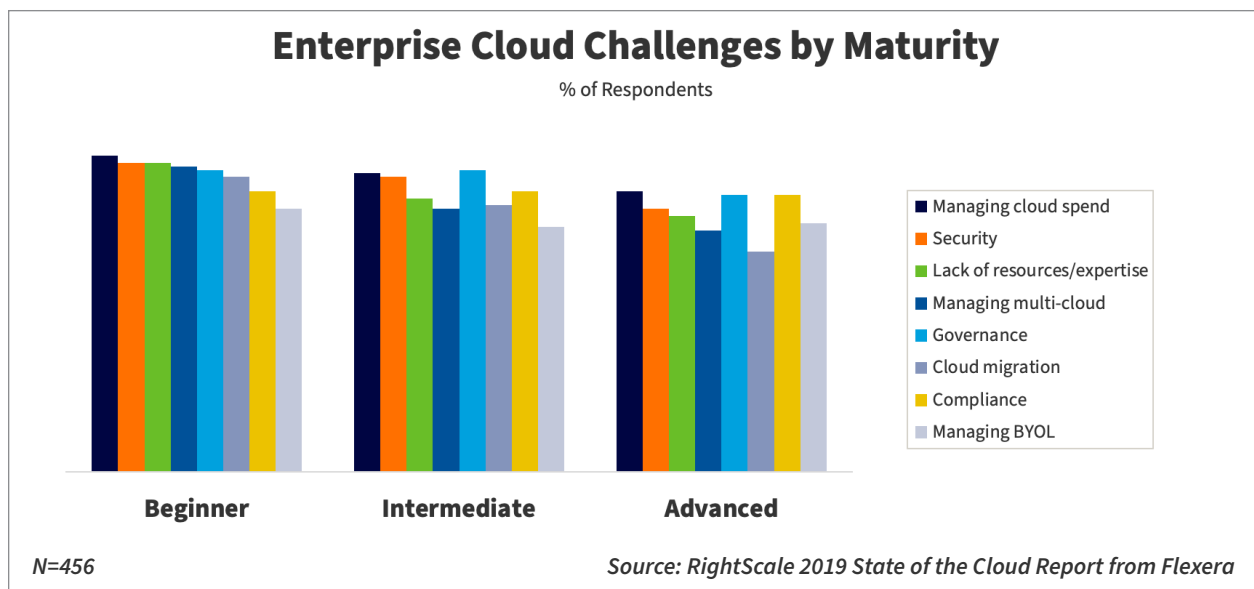


Figure 11. Governance is a challenge regardless of maturity level

The impact of decentralized spend control on governance

When IT spend control is decentralized, central IT and business units have differing ideas of how responsibilities are divided.

Figure 12 illustrates the differing perceptions of the two groups. The starkest example of the difference is the responsibility of managing and optimizing the costs of cloud services. Here, 68 percent of central IT staff members believe that central IT is responsible, whereas only 47 percent of the business unit respondents believe that's the case. These disparate perspectives can introduce confusion that wreaks havoc with governance while impacting costs, security, compliance and other factors.

The solution is to foster cooperation and collaboration between central IT and the business units. Allow business units to retain control of IT spend while tasking central IT with ensuring business unit IT assets align with and adhere to the enterprise governance framework. A robust governance framework brings a common understanding that eliminates confusion and keeps everyone focused on their responsibilities. When central IT teams support business-led IT decisions, they're often brought into the decision process at earlier stages and are viewed as a partner, rather than an implementer. A collaborative relationship can help encourage robust governance objectives.

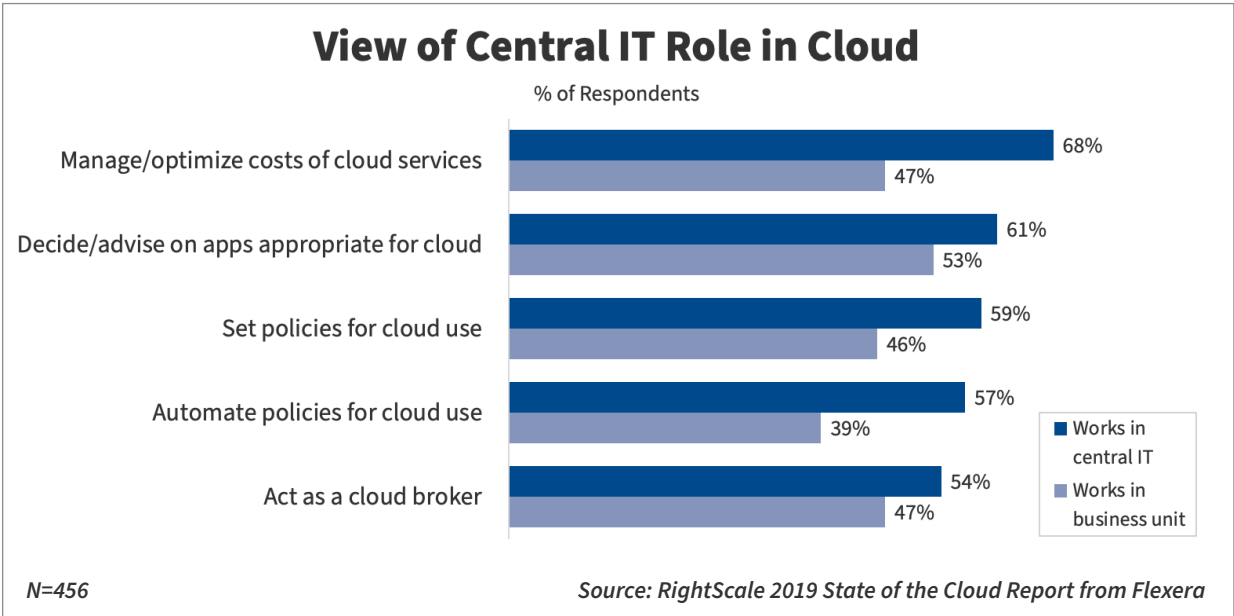


Figure 12. Differing views of central IT role in cloud

Cybersecurity

In addition to weak governance, cybersecurity is an area that poses a significant risk to successful digital transformation. When survey respondents were asked about their top cloud challenges, they ranked security and compliance very close to their rankings for governance.

When security responsibility and controls aren't centralized and people operate in an ad hoc manner, the risk of a security incident rises dramatically. Not a day goes by without a news report about a misconfigured application firewall or a SaaS application that wasn't correctly vetted by the internal security operations team. Security controls must be properly implemented in a hybrid IT world, where systems are integrated across a wide swath of applications. Using a set of standard templates or policies, security teams put in place controls to prevent a configuration oversight.

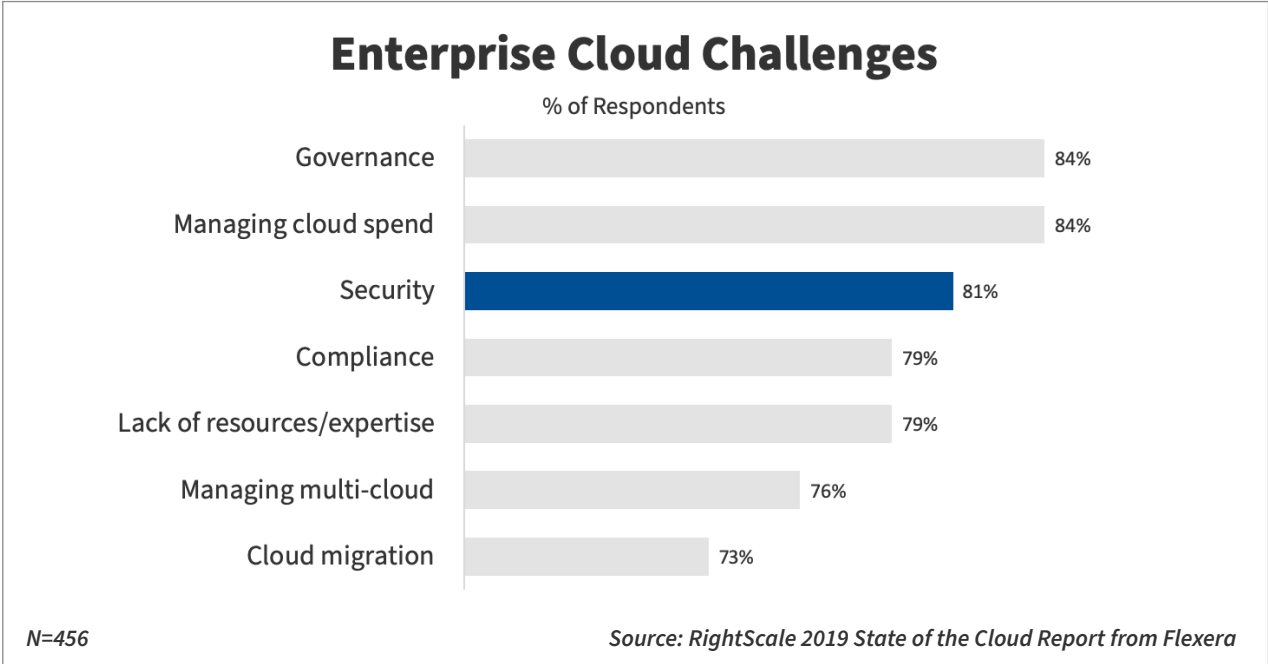


Figure 13. Governance, security and compliance among top cloud challenges

Cloud security remains a top challenge

Like governance, security remains a top challenge regardless of cloud maturity. However, it does become slightly less of an issue as organizations advance in cloud maturity. As **Figure 14** shows, the percent of respondents citing it as a major challenge declines from 87 percent at the beginner level to 74 percent at the advanced level.

To reduce security risks, organizations need to persuade business units to follow standards and policies. Additionally, they need to replace manual security efforts with automated, end-to-end processes that eliminate the risk of human error and enforce security policies consistently across the enterprise. Reducing security incidents will always be a challenge as hackers attempt more sophisticated breaches, but cloud security controls should be well understood across all the teams.

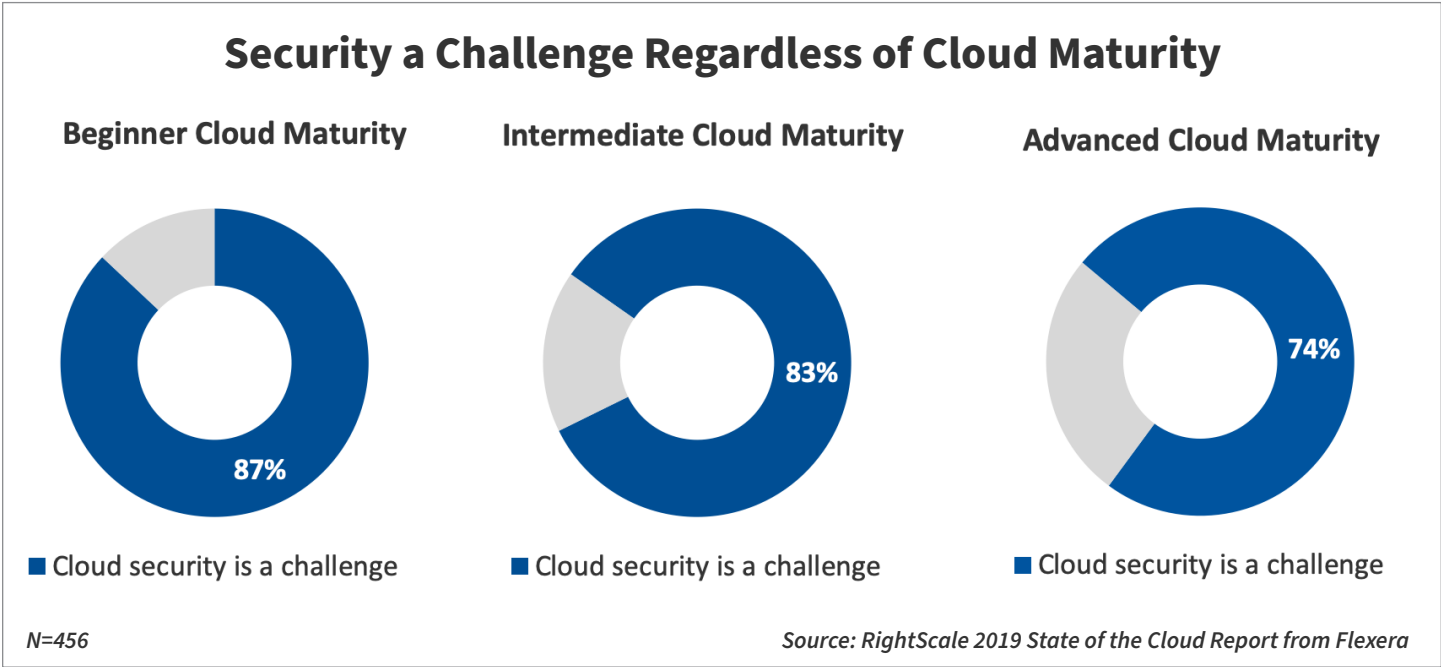


Figure 14. Security is a significant challenge at all levels of cloud maturity

Impact of decentralized spend control on security

As **Figure 15** shows, 26 percent of IT spend is controlled by business units. Among European businesses, it’s even higher at 32 percent. Decentralized spend control raises security issues. Decentralized buying without the participation of central IT limits IT’s visibility into the acquired resources. Central IT cannot provide security for resources it doesn’t know about because business units purchased them.

Security may remain an issue, even if the business units make central IT aware of their acquisitions. For example, if half a dozen business units are buying different marketing or sales automation systems, central IT may not have the resources to test, validate and secure them all properly.

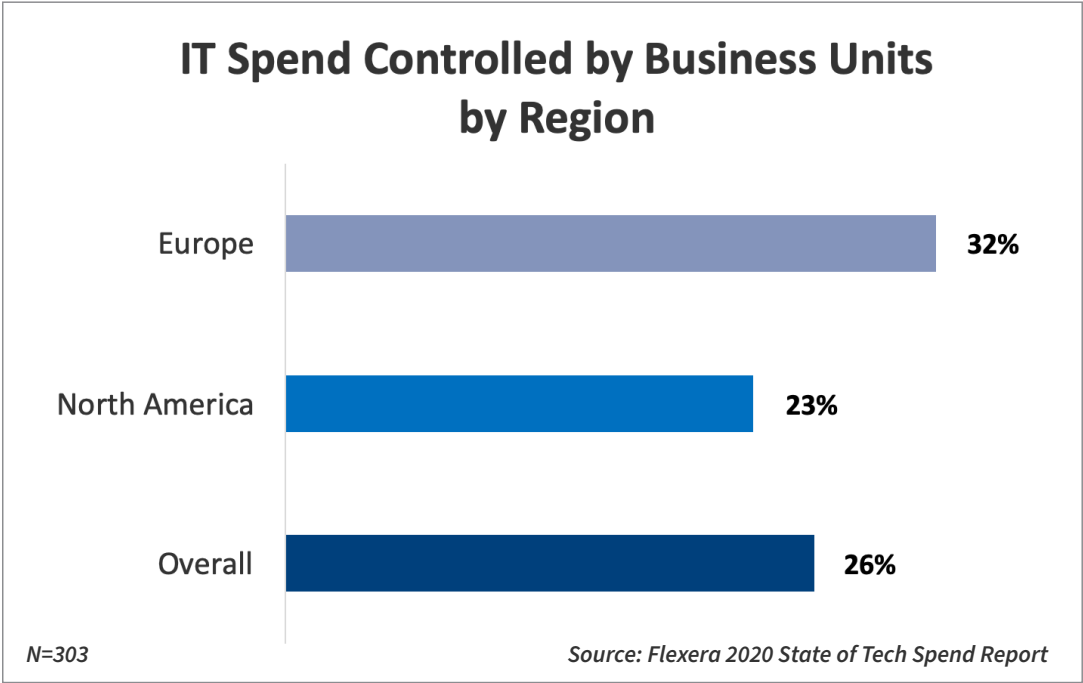


Figure 15. IT spend controlled by business units by region

SaaS security risks

The proliferation of SaaS introduces another opportunity for security risks. There is often a standard set of SaaS applications used throughout an enterprise—for example, Office 365, Salesforce and Box—that are controlled and managed effectively due to their widespread use within the organization. However, organizations often have hundreds of SaaS apps security teams simply don't know about or lack the resources to validate and test to ensure compliance with security policies. Moreover, individuals and departments can acquire SaaS apps without informing central IT. Consequently, IT security teams don't inspect and validate them.

An additional concern is the integration of these apps with major systems of record the business relies on for day-to-day operations. For example, Salesforce often integrates with customer and inventory databases. These integrations can expose sensitive data to unauthorized access. The entire business, and not just the data residing in the SaaS app, could be at risk without proper security validation. Customers who have integrated with their partners' IT systems to share and collect data could be creating risks for their IT systems, too.

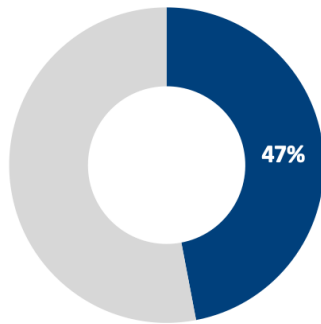
Central IT needs to ensure SaaS apps, like other apps used throughout the organization, comply with security best practices. **Figure 16** shows vital security practices that may be lacking when it comes to SaaS:

- Single sign-on provides a minimum level of access control, requiring the user to enter an ID and password to use the app
- Multi-factor security increases protection with a second layer of access control; for example, sending an email or text containing a security code the user must enter to complete the login
- Prompt offboarding ensures access to relevant SaaS apps is quickly terminated, preferably automatically, when an employee changes positions or leaves the company

As organizations advance in cloud maturity, they need to ensure proper access controls and processes are in place for SaaS applications that might be influenced by cost, security, data protection and privacy guidelines. Employee offboarding from SaaS apps is one of the easiest controls to put in place, but only 33 percent of organizations have implemented these processes. Organizations are now experiencing heavy SaaS usage but haven't updated their processes to reflect this increase in use.

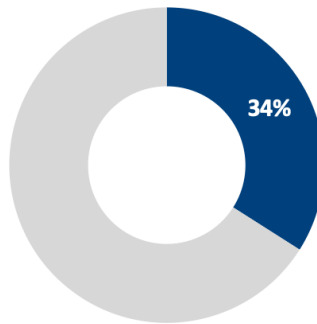
Lack of SaaS Security Practices Increases Risk

Single Sign-on
Implemented



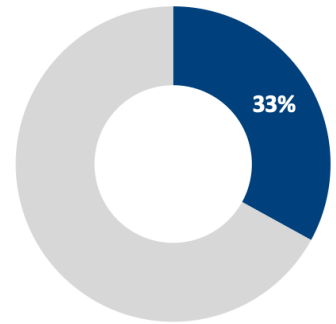
■ Yes ■ No

Multi-Factor
Authentication



■ Yes ■ No

Prompt Offboarding
of Departing Employees



■ Yes ■ No

N=728

Source: Flexera 2018 SaaS Survey

Figure 16. SaaS security best practices

Customer experience

Digital transformation is not an end, but a journey that will likely evolve into a continuous delivery process over time. The motivating factor is the expectation that digital technologies will empower the organization to interact with customers in more engaging and effective ways, such as leveraging augmented reality. The goal is to create an unmatched experience that makes business interactions seamless and effortless. In doing so, the organization builds strong, long-term customer relationships that drive growth, revenue and profitability.

Establishing CoEs is one of the ways organizations are working to succeed in critical areas that support enhancing the customer experience. As **Figure 17** shows, the prevalence of CoEs tends to be higher in organizations considered digital transformers that leverage CoEs to improve customer experience. A digital transformer is a company that has indicated digital transformation is among its top three priorities.

Of course, many digital transformers have a CoE, but they may have other CoEs for the technologies that support digital transformation. Fifty-three percent of digital transformers have adopted CoE for analytics/big data projects, which are focused on collecting detailed information about customers to create a comprehensive view of the customer. This view reveals customer preference and expectation insights that the organization can leverage to:

- Achieve more personalized interactions
- Make doing business with the organization easier
- Enhance current products and design new ones based on the wants and needs of customers
- Minimize costs to help keep pricing competitive while maintaining profitability

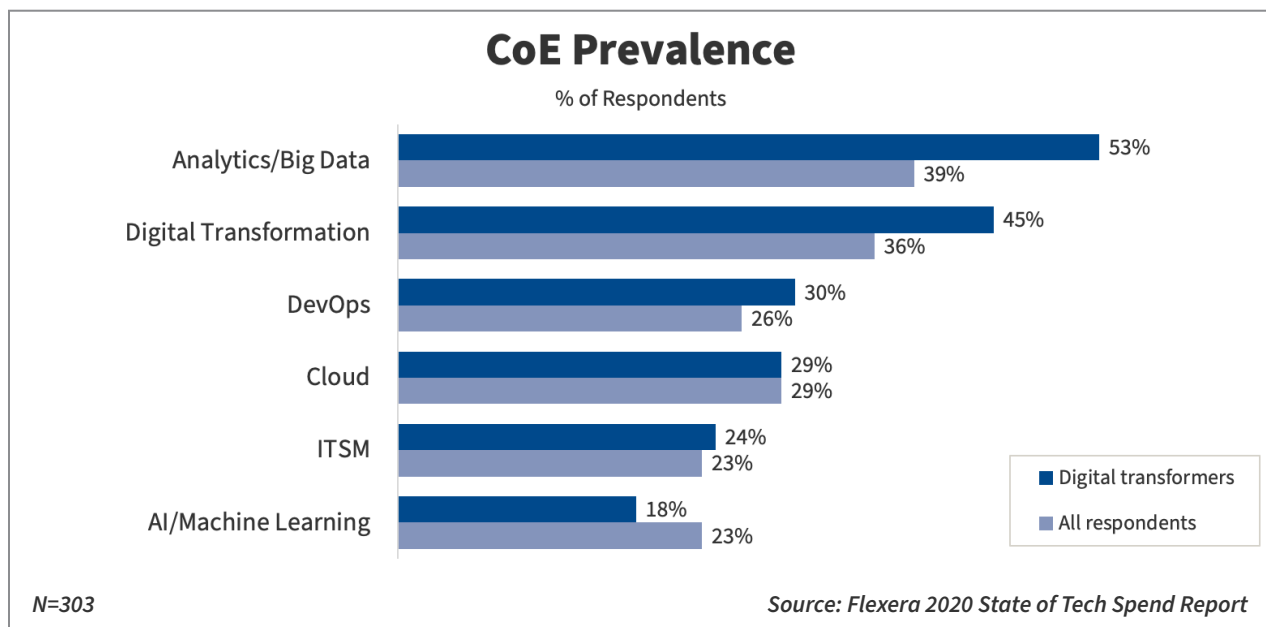


Figure 17. CoE prevalence—digital transformers versus all respondents

Shift to the cloud

As organizations move to the cloud, which is an essential element to improving the customer experience, the majority are reducing the number of data centers they operate. **Figure 18** reflects this, showing that 65 percent of Flexera 2020 State of Tech Spend Report survey respondents plan to decrease the number of data centers. It also indicates organizations are trying to eliminate their technical debt by moving away from the traditional data center architecture.

Reducing the number of data centers cuts costs in many areas, including hardware, software, heating and cooling, facilities and networking. As organizations shift investments from the data center to the cloud, they reduce legacy technical debt while freeing up money and human resources that can be repurposed. Often, legacy software doesn't innovate and add features as quickly as cloud-based applications, releasing only one new version or upgrade every year or longer. With cloud apps, the latest features are released faster, and updates are done unobtrusively, so there's no downtime or impact. These organizations are retiring hardware and legacy software and using the money they recoup to fund investment in cloud technologies. IT teams can leverage these features and design products at a significantly faster pace.

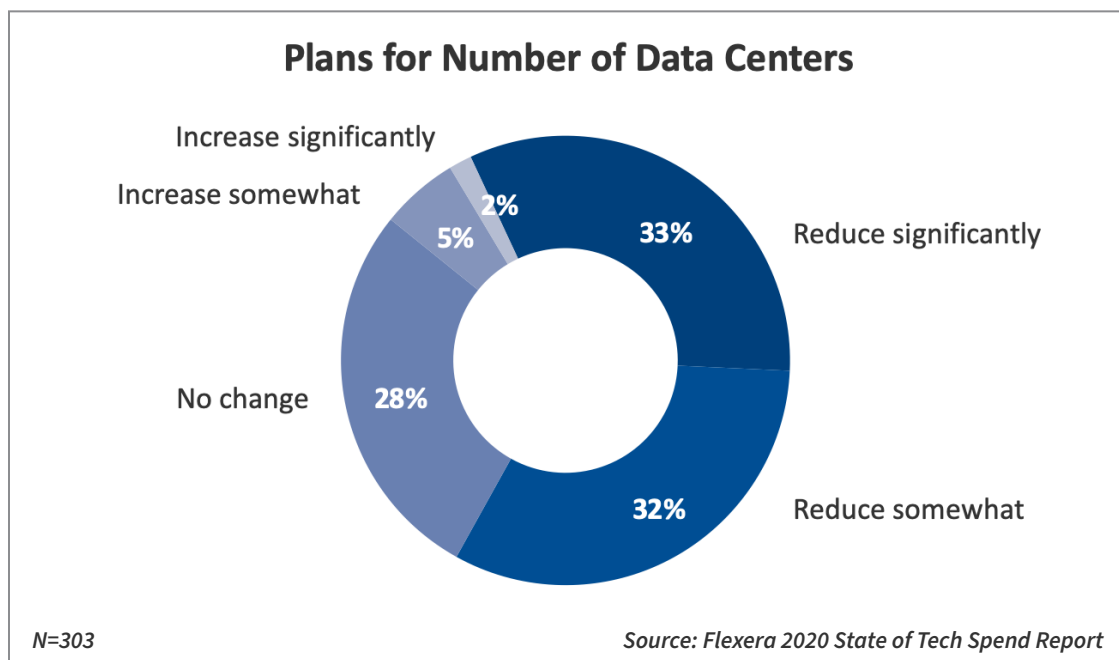


Figure 18. Reduction in data center use leads to investment shift

Companies shifting more workloads to the cloud

The efforts by organizations to retire technical debt and free up funding for digital transformation and customer experience initiatives could have an impact on the marketplace. Reflecting the evolution in software delivery, vendors of business-critical legacy systems are making changes to stay in the game by revamping their apps for cloud and launching their own public cloud offerings.

As **Figure 19** shows, some are having more success in this area than others. Microsoft, Oracle and IBM have been major software vendors for decades. Microsoft has a significantly larger presence in the cloud, with 62 percent of survey respondents reporting heavy use of its licensed software. Microsoft has excelled at moving customers to its cloud and SaaS offerings.

It appears that Oracle and IBM have work to do to ensure they aren't overtaken by newer vendors, especially those that were born in the cloud. But it's too early to count them out. Technology giants like IBM and Oracle have made acquisitions that helped them expand their market reach.

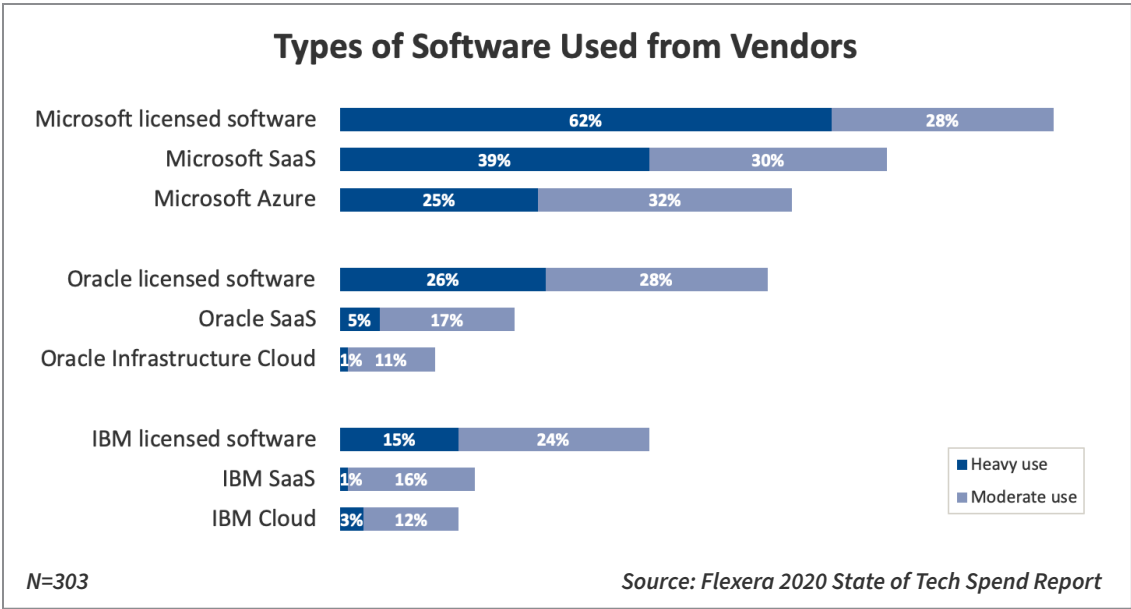


Figure 19. Types of software used from vendors

Funding for digital transformation

Making the shift to digital business is a costly endeavor with the potential for a huge payback. It involves purchasing new applications and ensuring the correct skill sets are in place to leverage the technology. But no organization has an unlimited technology budget. As organizations make the shift from traditional to digital, they must pay close attention to costs—eliminating waste, optimizing spend and maximizing return on investment. Every technology implemented must be evaluated in terms of its business value and impact on digital transformation. Digital transformation is driving increased spend on SaaS, IaaS and PaaS.

Figure 20 shows where IT spend is going today. Cloud services—SaaS, IaaS and PaaS—account for 25 percent of IT spend, exceeding the 22 percent allocated to on-premises software. The Flexera 2020 State of Tech Spend Report indicates organizations expect an additional 11 percent of spend will reside in the cloud within the next year, meaning nearly half of all workloads will run in the cloud within 12 months.

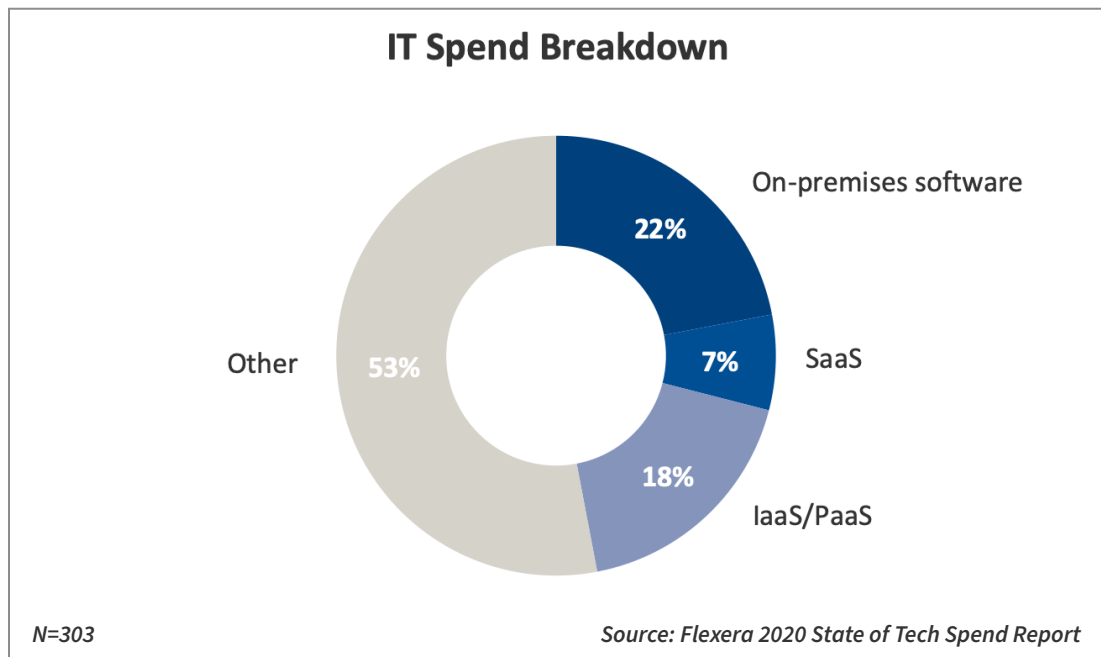


Figure 20. Where IT spend is going today

Spend management challenges become more complex

As digital transformation drives IT change, the processes for assessing spend need to be reconsidered. IT faces significant challenges in optimizing technology spend. **Figure 21** shows that having too many manual responses is the primary challenge, with 43 percent of survey respondents indicating it’s “very much of a challenge.” To keep up in the rapidly changing cloud environment, organizations must replace manual processes for tracking licenses and costs with automated ones.

The figure also shows 38 percent of respondents report ensuring spend efficiency/avoiding waste is “very much of a challenge.” Factors such as decentralization of IT spend control, the dynamic nature of IT assets residing in the cloud, and the growing emphasis on multi-cloud all obscure visibility and hamper efforts to identify and eliminate waste. In this environment, costs can spiral out of control if they’re not tightly monitored.

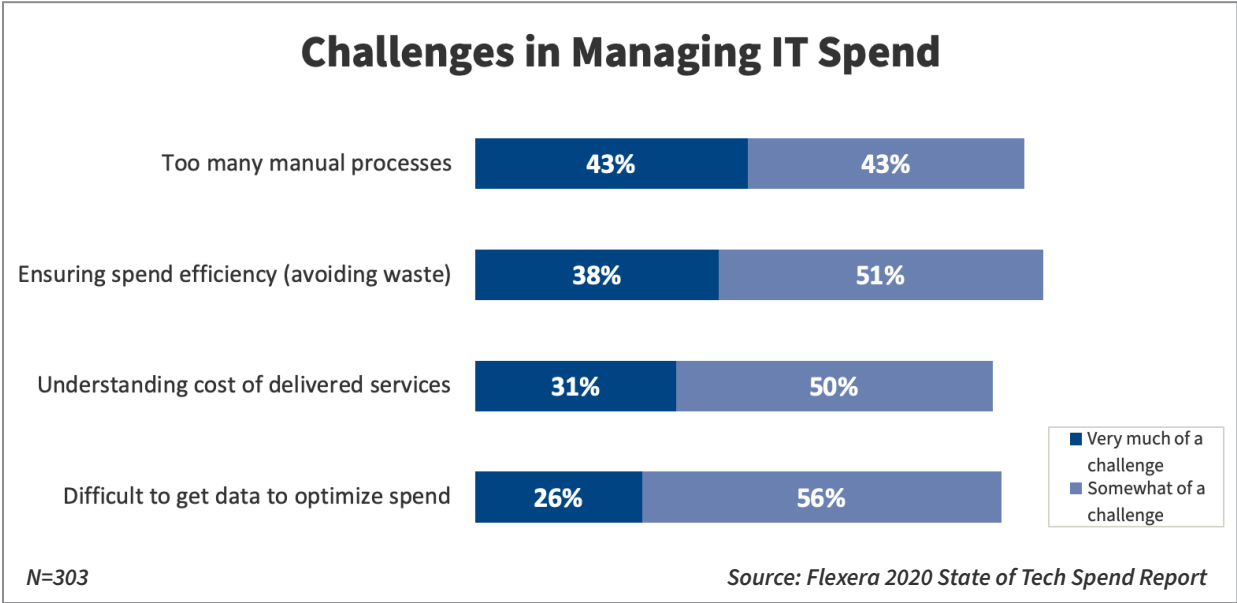


Figure 21. IT spend management challenges

SAM and vendor management can lend expertise

Traditionally, software asset management (SAM) and vendor management teams have been tasked with managing technology spend. Over the years, they’ve developed considerable expertise in optimizing license consumption, ensuring compliance with contract terms, negotiating and managing favorable contracts, reclaiming unused licenses, optimizing renewals and automating license management for on-premises and enterprise SaaS agreements. Consequently, they’ve achieved substantial cost and audit savings and reduced the amount of overbuying that seeks to eliminate audit risk.

But as **Figure 22** shows, these teams have only minimal involvement in activities related to cloud cost management. Instead, the cloud team and infrastructure and operations team are more actively involved in enterprise cloud cost management, such as governing IaaS and PaaS usage costs, optimizing spend, reporting and analyzing cloud costs, and governing SaaS usage and costs.

As organizations struggle to contain cloud costs, they'd be well advised to tap the knowledge and skill sets of the SAM and vendor management teams and ratchet up their involvement in cloud cost management. These teams can play a valuable role in interpreting usage data, negotiating favorable vendor contracts and optimizing tech spend.

One of the challenges here is that SAM and vendor management teams may lack the confidence that their skills apply to the cloud because they consider cloud technologies different and more complex than traditional ones. But in many organizations, these teams are already responsible for SaaS solutions, such as Salesforce and Workday, and can handle cloud cost management. The skills they bring—understanding contract terms and complex licensing arrangements and developing policies for storage and compute—make their participation in managing cloud spend highly advantageous.

Organizations Struggle to Optimize Cloud Spend Cloud + I&O Teams Manage Enterprise Cloud Spend

ENTERPRISE CLOUD COST MANAGEMENT RESPONSIBILITIES	CLOUD TEAM	INFRASTRUCTURE & OPS	BUSINESS UNITS	FINANCE	SAM & VENDOR MGMT
Govern IaaS/PaaS usage/costs	47%	47%	28%	21%	8%
Optimize cloud spend	41%	46%	21%	15%	5%
Chargeback cloud costs	30%	30%	21%	30%	5%
Govern software licenses in IaaS/PaaS	30%	43%	20%	16%	12%
Govern SaaS usage/costs	31%	36%	32%	17%	6%
Own cloud budgets	28%	34%	38%	17%	2%

N=456

Source: RightScale 2019 State of the Cloud Report from Flexera

Figure 22. Identifying who manages enterprise cloud spend

Cost-related challenges in the cloud

A focus on cost is needed in a dynamic environment to ensure spend is being optimized. **Figure 23** highlights the top challenges organizations face in managing software in the cloud. RightScale 2019 State of the Cloud Report from Flexera respondents cite understanding cost implications of software licenses, ensuring license rules are followed and complexity of license rules in public cloud as the top three challenges. Licensing terms are complex and vary considerably from one software vendor to another. The complexity of licensing and pricing structures often translates into overbuying—just as they have with on-premises software.

Costs can rise dramatically when cloud teams lack skills around licensing, contract terms, cost implications and effective contract negotiation. Again, SAM and vendor management teams have vital skills that can help the organization address these challenges.

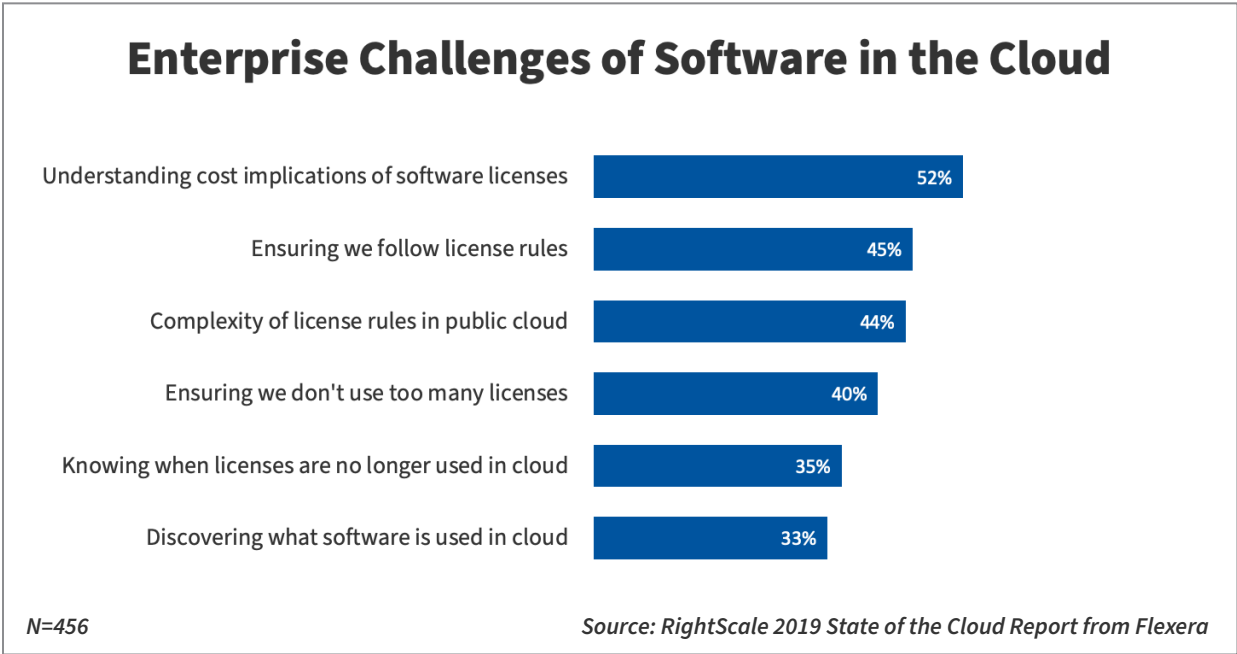


Figure 23. Software challenges in the cloud

Spend versus waste

Enterprise cloud spend is already substantial, and it's only going to grow. **Figure 24** shows that slightly more than half of the survey respondents report their cloud spend exceeds \$1.2 million a year. C-level executives and IT leaders need full visibility into the costs of running IT to bring cloud costs under control and make informed business decisions that align with budget allocations.

As senior leaders work to replace legacy environments with cloud, they expect to retire much of the technical debt associated with legacy environments and apply the savings to improve the customer experience. This change will allow them to drive revenue and create opportunities for new lines of business.

But what should be foremost in the minds of these leaders is the amount of wasted spend. As **Figure 24** shows, survey participants self-reported that 30 percent of cloud spend is wasted. Flexera research puts the amount of total wasted cloud spend at 35 percent. Assuming an annual budget of \$1.2 million, that adds up to \$324,000 wasted annually on the low end and \$420,000 on the high end.

Wasted spend siphons off money that could be used for innovative projects that drive value creation and spur growth. Senior leaders must put strategies and solutions in place that identify and eliminate wasted cloud spend.

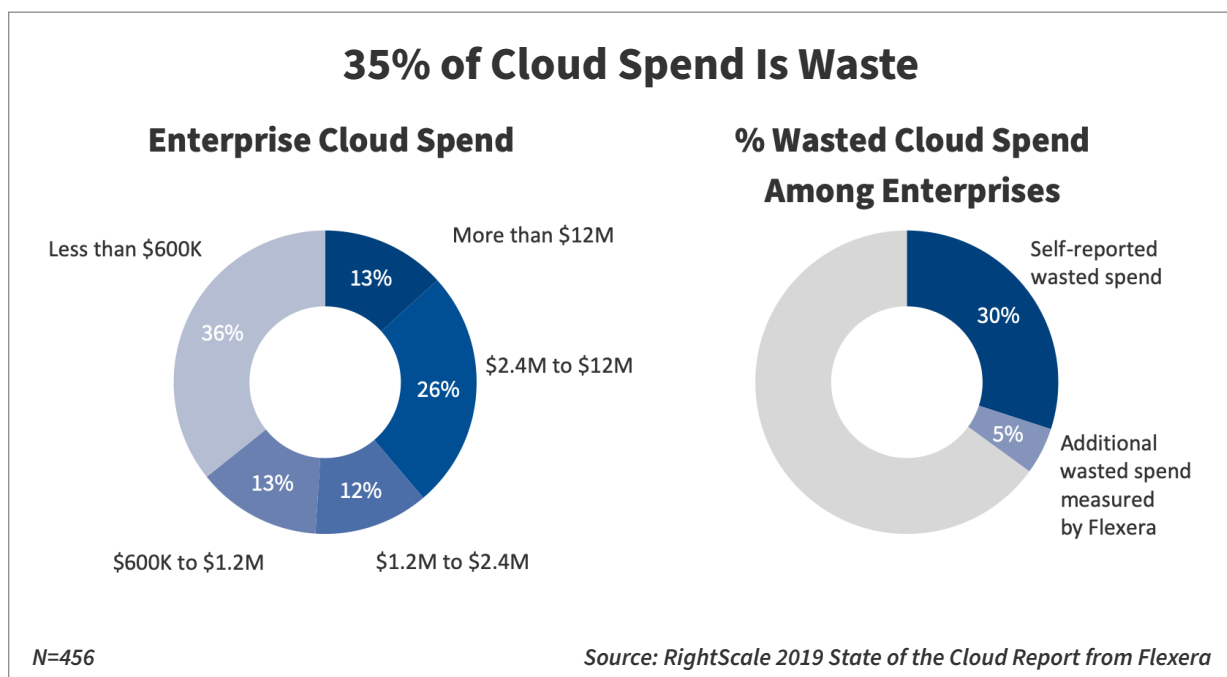


Figure 24. A significant portion of total cloud spend is wasted

Summary

Organizations appear to be transitioning from legacy software vendors to newer technologies, reducing the use of data centers and leaving behind on-premises solutions as part of their efforts to foster innovation and drive business value.

A successful digital transformation journey working toward improving customer experience relies on the cloud as the delivery model, ensures good governance to prevent or reduce cybersecurity incidents and works within a defined IT budget.

Methodology

The Flexera 2020 State of Tech Spend Survey leveraged a large panel network that included 303 global professionals across industries. The panel was composed of vetted respondents with detailed profiles. Respondents selected for the survey were executives and high-level managers in IT with visibility into their organizations' overall IT budgets. The survey included only organizations with at least 2,000 employees.

[Get details on demographics for this survey](#)

The RightScale 2019 State of the Cloud Survey from Flexera questioned technical professionals across a broad cross-section of organizations about their adoption of cloud infrastructure. For this report, we only used data from 456 enterprises with more than 1,000 employees, out of a total of 786 organizations that responded. The 786 respondents range from technical executives to managers and practitioners and represent organizations of varying sizes across many industries. Respondents represent companies across the cloud spectrum, including both users (21 percent) and non-users (79 percent) of RightScale Cloud Management Platform from Flexera. Their answers provide a comprehensive perspective on the state of the cloud today.

[Get details on demographics for this survey](#)

The Flexera 2018 SaaS Survey questioned finance, procurement and IT professionals within a network of organizations with 5,000 to 250,000 employees. The 728 respondents shared insight into their use of SaaS applications and the challenges they face with shadow IT.

About Flexera

Flexera helps executives succeed at what once seemed impossible: getting clarity into, and full control of, their company's technology "black hole." From on-premises to the cloud, Flexera helps business leaders turn IT insight into action. With a portfolio of integrated solutions, Flexera helps enterprises optimize their technology footprint and realize IT's full potential to accelerate their business. For over 30 years, our 1300+ team members worldwide have been passionate about helping our more than 50,000 customers fuel business success. To learn more, visit flexera.com.

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