2021

Flexera™

STATE OF TECH SPEND REPORT

Organizations are accelerating digital transformation and cloud migration to better respond to COVID-19 and other external factors.

Flexera

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Contents

Executive summary **1**

The highlights **2**

Methodology **4**

Respondent demographics **5**

Key IT initiatives **9**

Accelerating pace of digital transformation 12

Impact of the pandemic **14**

IT spend benchmarks **16**

Anticipated IT spend changes by region 19

The Americas are less optimistic for 2021 20

About one-third of IT budget allocated to growth 21

Tech spend not entirely controlled by IT 22

The shift to cloud **24**

Number of data centers is decreasing 25

2021 spend for automation, cloud and AI to increase 27

IT transformation challenges **28**

Eliminating wasted spend 30

Spend visibility is a challenge 31

Data quality affects IT decisions 32

Spend optimization 33

Varying degrees of maturity 34

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IT spend by vendor 35

Expected change by vendor 37

IT workforce shifts to remote 38

Significant investment planned for remote workers.....40

CIOs fill gaps with external partner resources 41

Summary 42

Europe spotlight: introduction..... 43

Europe spotlight: highlights..... 43

European respondent demographics 44

Key IT initiatives in Europe..... 46

IT spend in Europe 47

European organizations shifting to cloud at a slightly slower pace 49

Impact of COVID-19 on European IT spend.....50

European organizations face challenges with spend visibility 52

European IT spend by vendor 53

IT staffing in Europe..... 54

About Flexera 56

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Table of Figures

Figure 1. Respondents by organization size 5

Figure 2. Respondents by region..... 6

Figure 3. Respondents by industry 7

Figure 4. Respondents by department and by level..... 8

Figure 5. Top priorities for technology initiatives 9

Figure 6. Top initiatives year over year 10

Figure 7. Priority of initiatives 11

Figure 8. Expected change in digital transformation pace in 2021 12

Figure 9. Expected change in pace of digital transformation, by region 13

Figure 10. Factors impacting organizations due to the pandemic 14

Figure 11. Impact of pandemic on digital transformation pace..... 15

Figure 12. IT spend of respondents..... 16

Figure 13. IT spend as a percent of revenue by region and by organization size 17

Figure 14. IT spend as a percent of revenue by industry..... 18

Figure 15. Percent of respondents expecting change in IT spend 19

Figure 16. Americas expected changes in IT spend year over year 20

Figure 17. IT investments in growth vs. running the business..... 21

Figure 18. IT spend decentralization..... 22

Figure 19. IT spend controlled by business units, by region and organization size..... 23

Figure 20. IT spend breakdown..... 24

Figure 21. Plans for the number of data centers in the next 24 months..... 25

Figure 22. Percent experiencing change in IT spend to date due to COVID-19..... 26

Figure 23. Percent expecting change in IT spend in 2021..... 27

Figure 24. Four levels of strategic involvement..... 28

Figure 25. IT involvement with business strategy 29

Figure 26. Wasted technology spend is 30 percent of total IT spend..... 30

Figure 27. Challenges in IT spend visibility..... 31

Figure 28. Challenges in IT decision making 32

Figure 29. Spend optimization challenges 33

Figure 30. Maturity of spend optimization..... 34

Figure 31. Top three vendors of respondents..... 35

Figure 32. Respondents' largest vendors by spend 36

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Figure 33. Percent expecting change in vendor spend in 2021 37

Figure 34. Breakdown of enterprise IT staff..... 38

Figure 35. When remote IT staff expect to return to the office..... 39

Figure 36. Planned changes to investments in IT staffing in 2021 40

Figure 37. Planned changes to use of external IT resources in 2021 41

Figure 38. European respondents by organization size..... 44

Figure 39. European respondents by industry..... 45

Figure 40. European ranking of key IT initiatives 46

Figure 41. How European IT spend as a percent of revenue compares with spend in the Americas 47

Figure 42. Percent expecting change in IT spend, by region 48

Figure 43. European organizations' IT spend breakdown by type..... 49

Figure 44. IT spend changes in Europe due to COVID-19..... 50

Figure 45. Factors impacting organizations due to COVID-19..... 51

Figure 46. IT spend visibility challenges in Europe..... 52

Figure 47. Top vendors in Europe in terms of spend 53

Figure 48. Breakdown of European IT staff..... 54

Figure 49. When remote IT workers will return to the office..... 55

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FLEXERA™ 2021 STATE OF TECH SPEND REPORT

Organizations are accelerating digital transformation and cloud migration to better respond to COVID-19 and other external factors.

Executive summary

Organizations are continuing to pursue their digital transformation goals. Participants in the *Flexera 2021 State of Tech Spend* survey once again ranked digital transformation as their number one technology initiative. Cybersecurity and cloud follow closely behind as the second and third most important initiatives.

The *Flexera 2021 State of Tech Spend Report* offers a high-level perspective on the technology and spend issues that concern senior IT leaders as they develop tech strategies and make technology choices. Additionally, the report examines shifts in enterprise IT spend on technologies that enable business transformation. The report's granular data and insights deliver a substantive view into changes around such topics as software vendor spend, the ways organizations are trying to optimize their spend and the relevance of data centers. The report documents these trends, providing benchmarks and insights that help IT professionals make better decisions.

The report highlights the noteworthy and sometimes dramatic shifts since last year's report was published. The COVID-19 pandemic has proven to be a game changer. It's forced organizations to accelerate digital transformation efforts to support major changes in how and where people work and to mitigate negative impacts of the economic downturn. Nearly half of IT staff members now work from home. Time frames for returning to the office are uncertain. And 20 percent of people who are now working at home will do so permanently after the pandemic ends.

The pandemic has made for a challenging and interesting year. As difficult as the year's been, however, the rapid progress toward becoming a digital enterprise will likely pay off substantially in 2021 and beyond.

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The highlights

The *Flexera 2021 State of Tech Spend Report* survey was designed to gain insight into spending on technology, including the major initiatives in which organizations are investing, how they're tracking and managing IT spend, and the challenges they face in optimizing spend. This year's survey also delved into the impact of the COVID-19 pandemic on cloud and digital transformation strategies.

The most interesting findings this year include:

Key initiatives

- The top initiatives for 2021 are the same as in 2020: digital transformation, cybersecurity and cloud
- Cost savings was the initiative showing the largest increase year over year, tripling from nine percent in 2020 to 27 percent in 2021
- 86 percent of all respondents expect the pace of digital transformation to continue accelerating, with more than half of European respondents expecting the pace to increase significantly
- Pandemic impacts on IT include work from home (74 percent) and lower revenue/profits for half of respondents
- For about half of organizations, the pandemic is increasing the pace of digital transformation due to work-from-home policies and an increased willingness to move to cloud

IT spend benchmarks

- Respondents report their average IT spend is at 7.5 percent of revenue
- 49 percent expect an increase in IT spend during the next year, while 32 percent expect a decrease
- The Americas region has become less optimistic on IT spend, with 49 percent expecting an increase this year compared with 57 percent in 2020
- Organizations are allocating 64 percent of IT spend to running the business and 36 percent to growth and innovation
- 26 percent of IT spend is controlled by business units, the same as in 2020

The shift to cloud

- At 30 percent of total IT spend, cloud spend has surpassed on-premises software spend (24 percent), with 20 percent allocated to IaaS/PaaS and ten percent to SaaS
- 62 percent of respondents will reduce their use of data centers in the next 24 months, with 27 percent planning significant reductions in data center use and seven percent planning to eliminate them completely
- The pandemic has increased public cloud and SaaS spend for half of organizations
- The shift of spend to cloud will continue in 2021 along with increased investments in automation and artificial intelligence (AI)

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Spend optimization challenges

- Despite the drive toward digital business, IT operates strategically (as an equal partner or stakeholder) less than half of the time
- Respondents continue to underestimate wasted IT spend at twelve percent; analysts and industry experts estimate wasted spend to be 30 percent or more
- With organizations struggling to access enough quality data, the top challenges to spend visibility and optimization are understanding the costs of IT-delivered business services and visibility of technology and spend across on-premises, SaaS and cloud
- Manual processes also hamper efforts to optimize spend

Use of IT vendors

- Microsoft continues to dominate, with 84 percent of respondents ranking it as a top three vendor by spend
- AWS has moved into the number two position, ahead of traditional vendors such as Oracle, SAP and IBM
- More than half of respondents expect to increase investments next year in Microsoft SaaS and Azure solutions, and almost half expect to increase investments in Microsoft's traditional licensed software
- Respondents also expect to increase spend on AWS, Salesforce, Google and other cloud solutions
- 25 percent of respondents expect to decrease their spend on Oracle's licensed software next year, and 23 percent plan to decrease their spend on IBM licensed software

IT organizations shift to remote

- As a result of COVID-19, almost half of IT staff members now work from home
- 21 percent of IT resources are now working as full-time employees in the office
- The return to the office will be slow, with 61 percent of the IT staff currently working from home expected to return to the office by mid-2021
- One-fifth of IT staffers who shifted to work from home will remain remote workers permanently instead of returning to the office
- 79 percent of organizations expect to increase investments in remote workers in 2021
- More than half of organizations will increase investments in diversity
- IT will continue to leverage outside expertise in critical technologies, with cybersecurity, big data/analytics and automation topping the list

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Methodology

The *Flexera 2021 State of Tech Spend Report* survey leveraged a large panel network comprised of vetted respondents whose detailed profiles are rigorously maintained. The network includes professional across industries and context areas, including C-suite executives, academics, scientists, former public sector leaders and policy specialists.

The 474 respondents from the network who participated in the report's survey are executives and high-level managers in IT with significant knowledge of their organizations' overall IT budgets.

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Respondent demographics

The survey included organizations with at least 2,000 employees. As **Figure 1** shows, most respondents work in large organizations, with 52 percent employed at organizations with 10,000 or more employees. This heavier weighting toward large companies is reflected in responses to budget, spend and employee headcount questions.

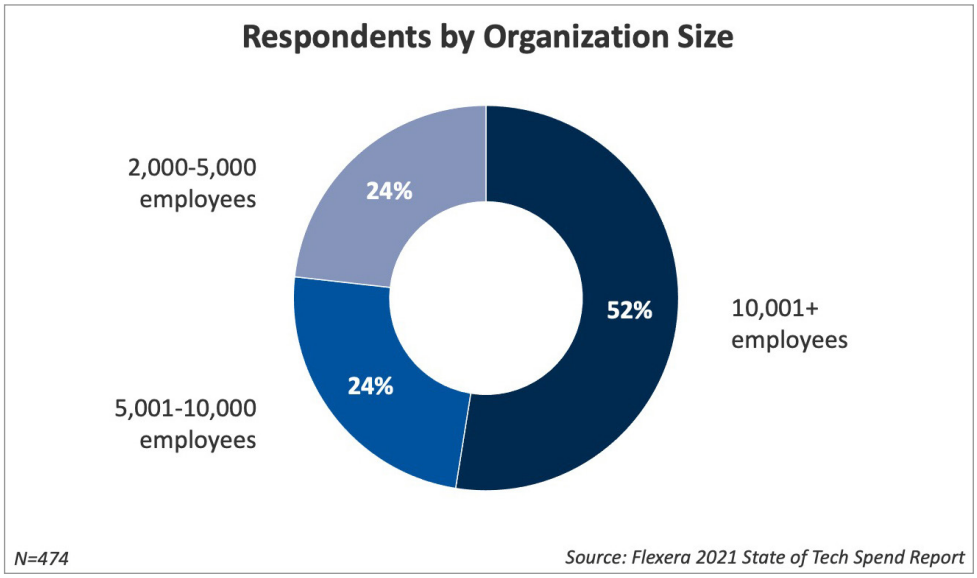

Figure 1. Respondents by organization size

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The survey targeted organizations in North America and Europe. As **Figure 2** shows, 68 percent are based in the Americas and 32 percent are spread across Europe. The larger organizations often have offices in multiple geographies. However, the locations cited in the survey are where organizations' headquarters are located.

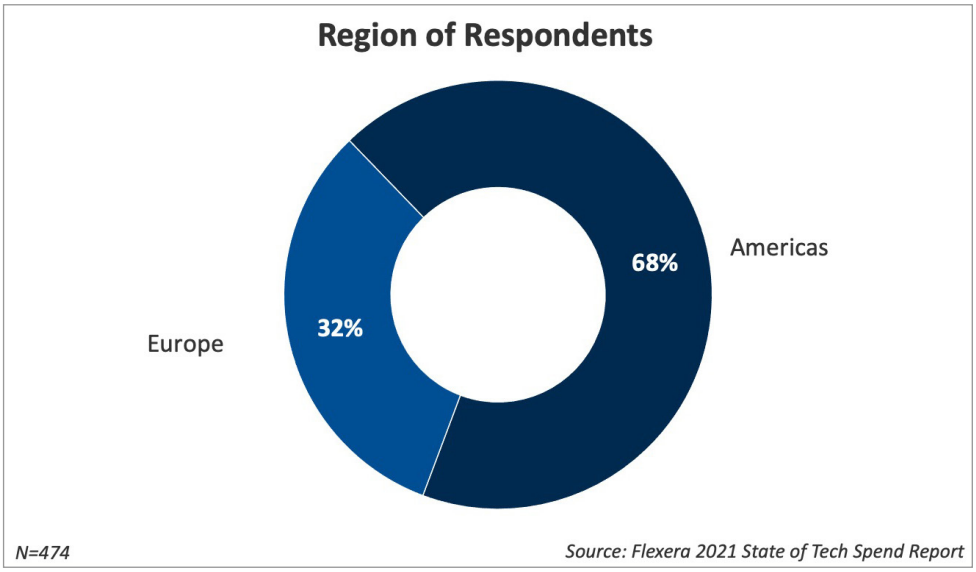

Figure 2. Respondents by region

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The survey encompasses a diverse mix of industries. **Figure 3** summarizes industry representation. Only *financial services* and *retail and eCommerce* have double-digit representation. The Other category includes a variety of industries, with each representing less than five percent of respondents.

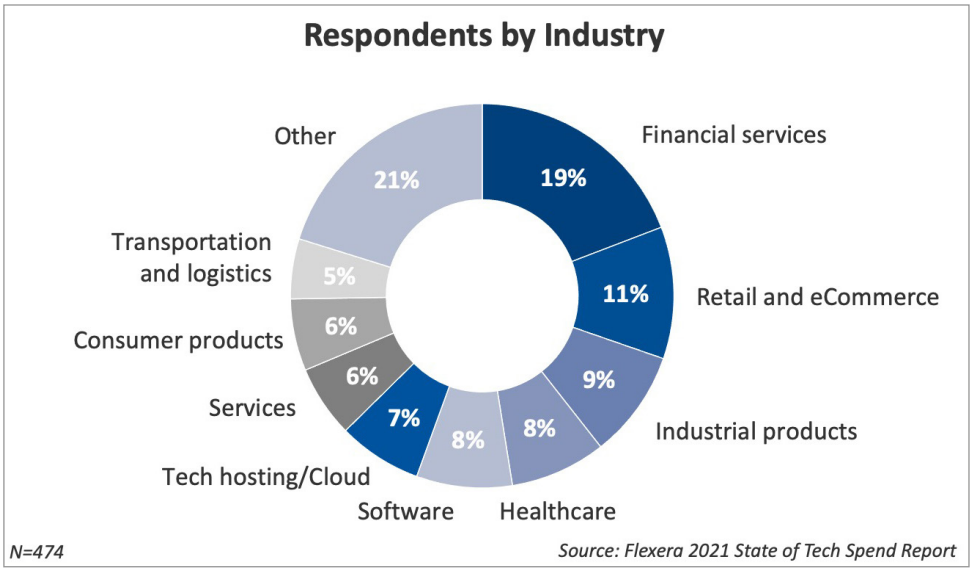

Figure 3. Respondents by industry

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As **Figure 4** indicates, the vast majority of respondents (82 percent) work in the IT organization. An additional six percent identify as infrastructure and operations, which is not represented in the IT segment, and three percent identify as finance. In some cases, IT finance could be based in IT but with dotted-line reporting to the chief financial officer.

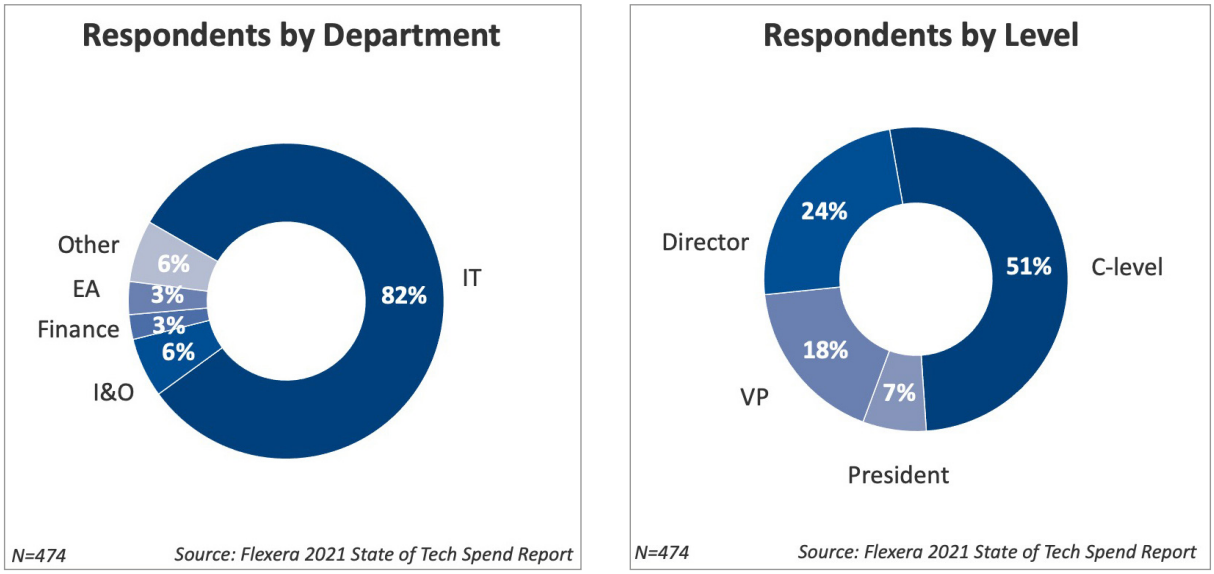

Figure 4. Respondents by department and by level

Figure 4 also shows the breakdown of respondents by management level within the organization. Almost one-quarter (24 percent) are directors and 76 percent are C-level executives, presidents and vice presidents. These senior executives have broad visibility into the cost of running IT and leverage that insight to guide business decisions aligned with budget allocations.

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Key IT initiatives

This *Flexera 2021 State of Tech Spend Report* examines how much enterprises are spending and the technology initiatives in which they're investing. These initiatives focus on the challenges central IT is uniquely positioned to address. These usually are enterprise-wide initiatives. But departmental IT groups address problems specific to their respective business units.

Respondents were asked for their top three priorities for technology initiatives. As **Figure 5** shows, the initiatives that are top of mind in 2021 are *digital transformation*, *cybersecurity* and *cloud/cloud migration*. These are the same initiatives cited as the top three in 2020. *Customer experience* once again captured the number four spot, indicating the continued importance of a customer-centric attitude aimed at increasing customer retention, encouraging repeat business and driving revenue.

Business value/growth and *cost savings* displaced *agility/automation* and *analytics* for fifth and sixth place, respectively. The pandemic may be behind the increased interest in value and cost savings.

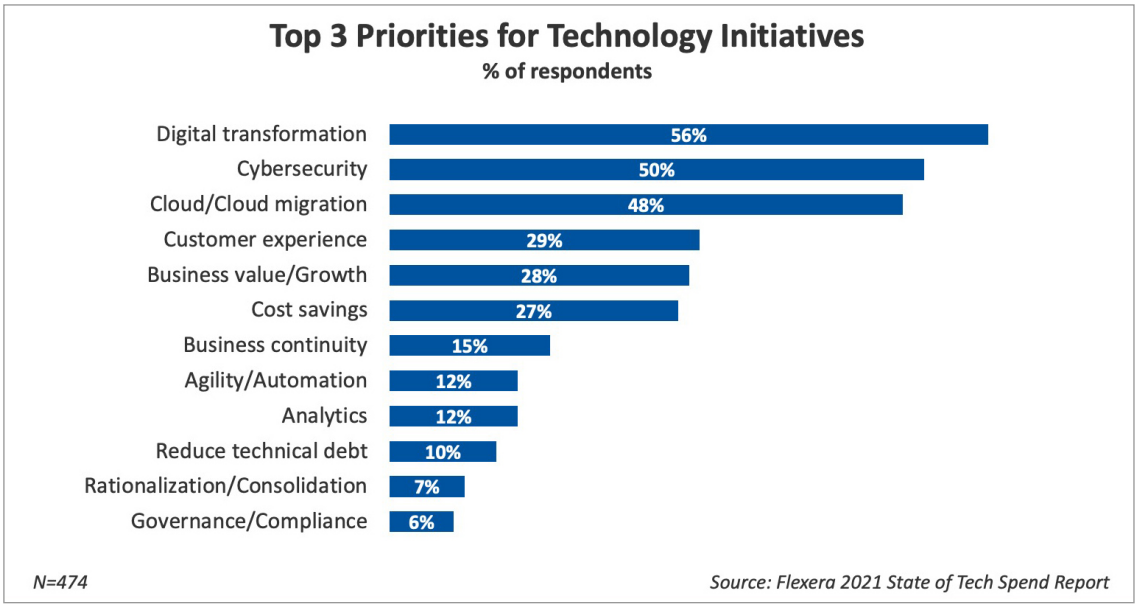

Figure 5. Top priorities for technology initiatives

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Figure 6 compares the year-over-year percentage changes for organizations' priorities. *Digital transformation* and *cybersecurity* remain at the top of their lists. And the importance of *cloud/cloud migration* has risen somewhat. But the most notable jump is in *cost savings*, which tripled over 2020, with 27 percent of this year's respondents citing it as a top initiative compared with nine percent last year.

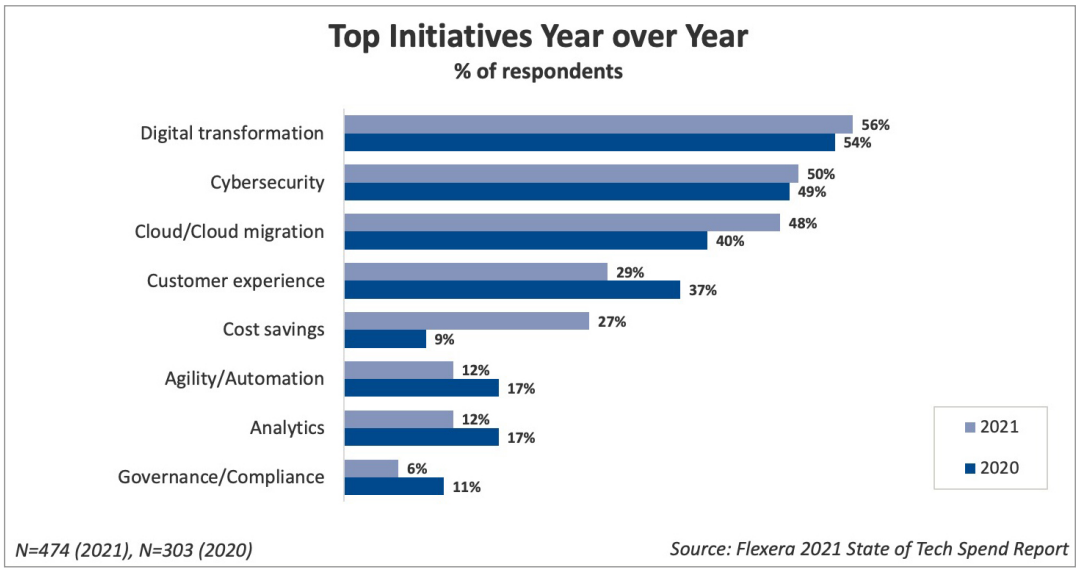

Figure 6. Top initiatives year over year

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Figure 7 shows the breakdown of the initiatives most frequently ranked as the top three priorities. This chart includes only the first six slots for each. *Digital transformation*, *cybersecurity* and *cloud/cloud migration* are most frequently cited as the top priorities in 2021, as they were in 2020. They're also among the most named as a second or third priority.

Digital transformation and *cybersecurity* tied as the top priority initiative, with 24 percent of respondents placing each of them in the top spot. *Cloud/cloud migration* follows closely behind at 20 percent.

For the second priority, *cloud/cloud migration*, *digital transformation* and *cybersecurity* tied at 16 percent each. New to the list of priorities this year is *business value/growth,* which ranked fourth as a top priority, fifth as a second priority and sixth as a third priority. Organizations are emphasizing expanding the customer base as well as expanding into new markets. Progress with cloud and digital transformation initiatives is positioning them to do that.

Priority of Initiatives
% of respondents

	TOP PRIORITY	SECOND PRIORITY	THIRD PRIORITY
1	Digital transformation (24%)	Cloud/Cloud migration (16%)	Digital transformation (15%)
2	Cybersecurity (24%)	Digital transformation (16%)	Cost savings (12%)
3	Cloud/Cloud migration (20%)	Cybersecurity (16%)	Cloud/Cloud migration (11%)
4	Business value/Growth (10%)	Customer experience (14%)	Cybersecurity (10%)
5	Cost savings (7%)	Business value/Growth (9%)	Customer experience (9%)
6	Customer experience (6%)	Cost savings (8%)	Business value/Growth (9%)

N=474

Source: Flexera 2021 State of Tech Spend Report

Figure 7. Priority of initiatives

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Accelerating pace of digital transformation

Most respondents expect the pace of digital transformation to continue accelerating in the year ahead. As **Figure 8** indicates, 86 percent expect the pace to increase somewhat or significantly.

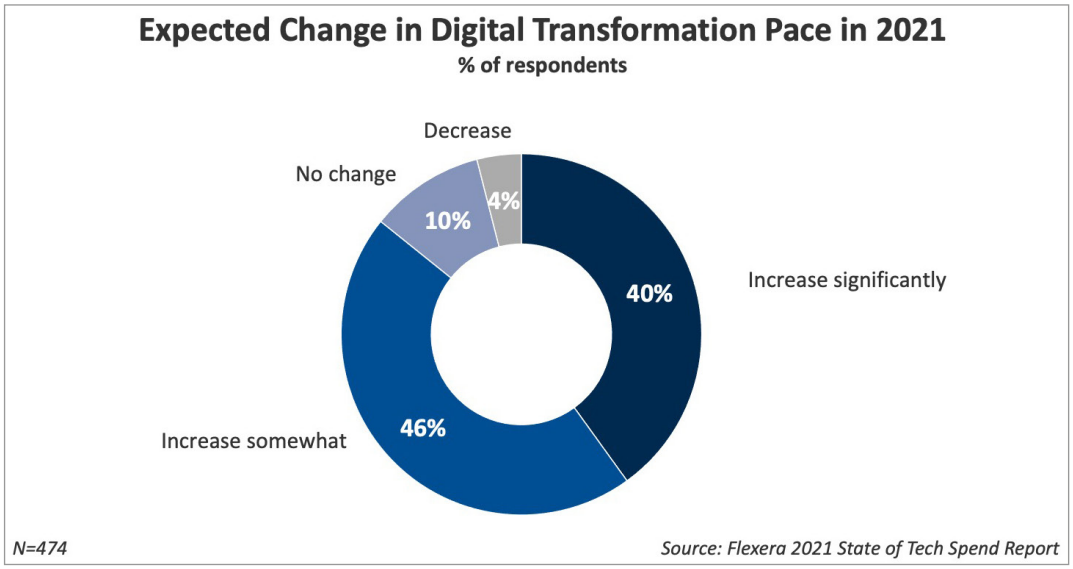

Figure 8. Expected change in digital transformation pace in 2021

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European respondents expect digital transformation to occur at a significantly faster pace than do those in the Americas. As **Figure 9** indicates, 51 percent of Europeans say the pace will increase significantly compared with 35 percent of respondents in the Americas.

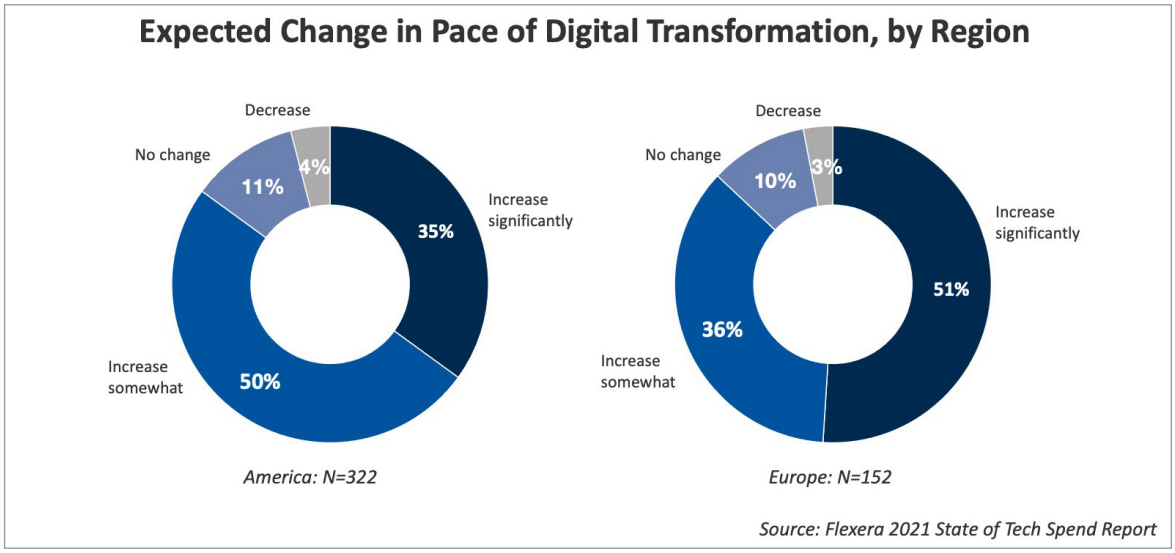

Figure 9. Expected change in pace of digital transformation, by region

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Impact of the pandemic

The *Flexera 2020 State of the Cloud Report,* published in May 2020, offered insights into how IT executives expected the COVID-19 pandemic to affect key initiatives, such as digital transformation and cloud migration. The survey underlying the report was conducted relatively early in the pandemic cycle. More than half of people responding to the COVID-19 questions expected cloud usage would be higher than they had planned for prior to the pandemic.

The *Flexera 2021 State of Tech Spend* survey included questions that delved into known impacts of COVID-19 and how it'll affect the pace of digital transformation. As **Figure 10** indicates, respondents named *work from home*, *lower revenue/profits at organization* and *general economic downturn* as the top three pandemic-related factors affecting their organizations.

Interestingly, *increased willingness to move to cloud* and *lower budgets at organization* followed closely behind *general economic downturn*. Cloud promises to help businesses reduce costs, so it isn't surprising to see an increased interest in cloud technologies. Accelerating the move to cloud makes it easier for people to work from home. And it helps offset the negative impacts of revenue declines and budget cuts due to the cost reductions cloud can deliver.

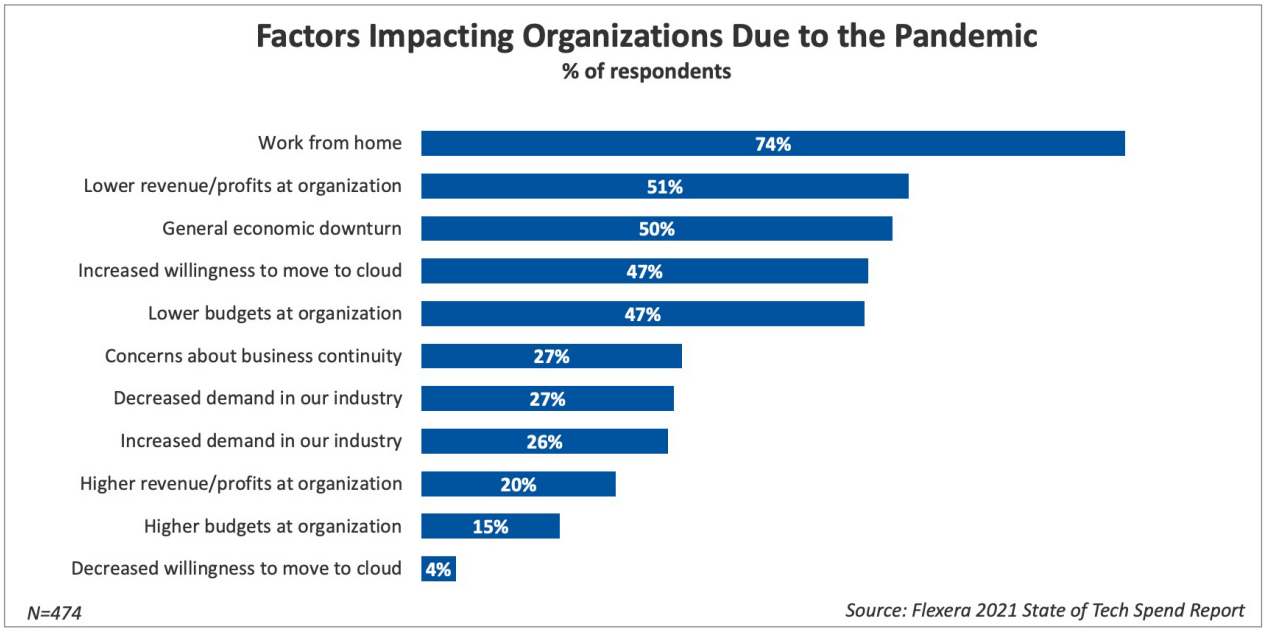

Figure 10. Factors impacting organizations due to the pandemic

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The survey asked about changes organizations plan to make in investments for their IT workforces. Their responses indicate that the pandemic is quickening the pace of digital transformation. Some went as far as to say that what they expected to accomplish over 24 months had to be done within just a few weeks to accommodate work from home. Organizations scrambled to get laptops, SaaS apps, remote connections and cloud resources in place to support the significant increases in remote workers.

Figure 11 shows that 54 percent of organizations plan to increase investments in work-from-home technologies. The figure also shows that 42 percent of respondents are more willing to move to cloud.

Technology spend in some industries may be dropping due to the pandemic. Others—retail, for example—are investing more in technology as they deemphasize brick-and-mortar stores and switch the major portion of their business online.

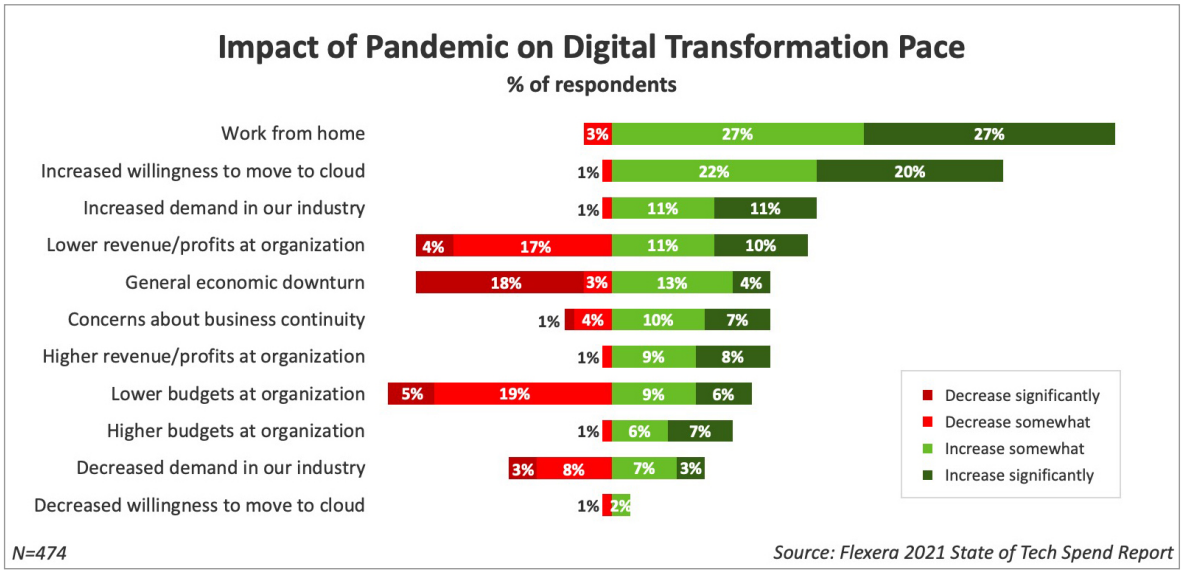

Figure 11. Impact of pandemic on digital transformation pace

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IT spend benchmarks

Many organizations are beginning to experience positive results from their investments in digital transformation, cybersecurity, cloud computing and numerous other technology initiatives. This is especially the case in healthcare, financial services, consumer and industrial products, and the high-tech sector. Respondents were asked about their organizations' level of IT spend. As **Figure 12** indicates, about one-third spend more than $250 million USD. It's likely these are the larger organizations. However, in some industries, even midsize and smaller organizations must invest significantly in technology due to the nature of their businesses.

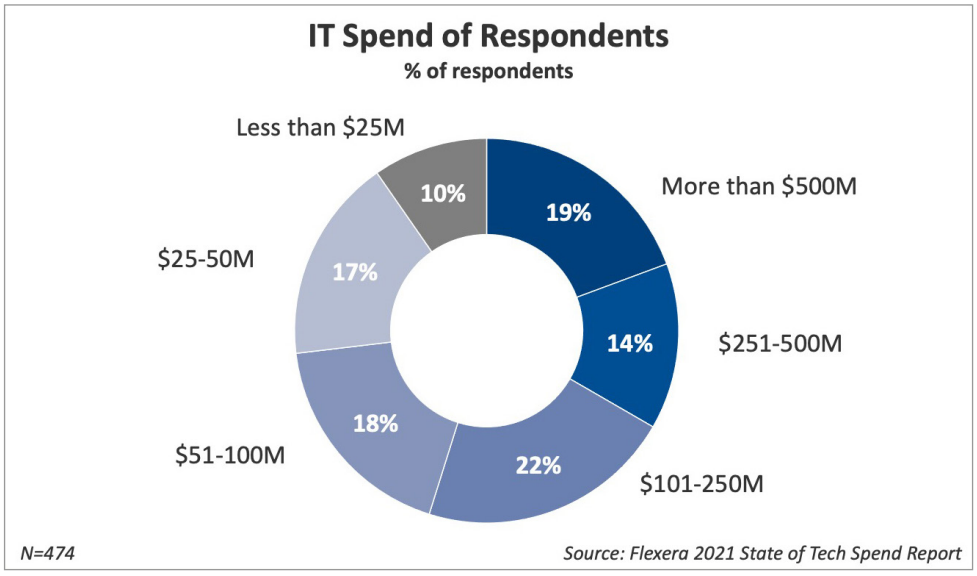

Figure 12. IT spend of respondents

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As **Figure 13** shows, survey respondents estimate overall IT spend at 7.5 percent of revenue, a number considerably higher than the four percent often reported by industry analysts. The disparity may be driven by the mix of large and small organizations and industry sectors included in this survey population.

Organizations in the Americas are allocating a higher percentage of revenue than are those in Europe. This difference may be the result of macroeconomic conditions as well as the impact of COVID-19 in various parts of the world.

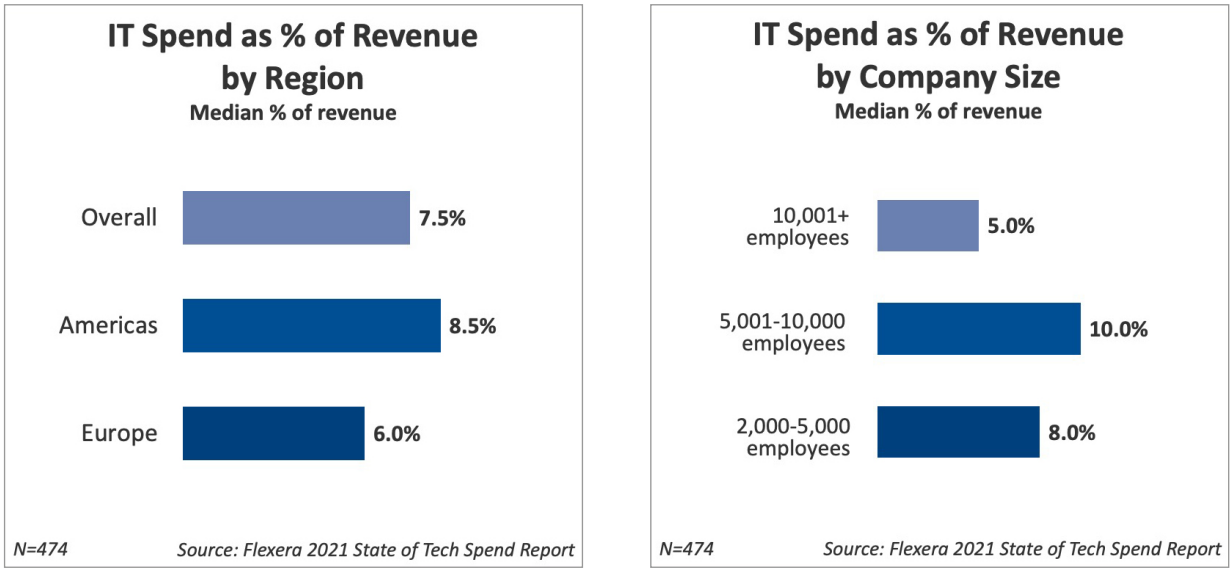

Figure 13. IT spend as a percent of revenue by region and by organization size

IT spend as a percent of revenue varies based on organization size, although industry also plays a role in technology spend. **Figure 13** shows that smaller organizations estimate spending eight percent of revenue on technology, midsize organizations report ten percent and large organizations say five percent. Small and midsize companies may face headcount constraints that drive their technology spend up in relation to total revenue.

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Figure 14 shows the breakdown of IT spend as a percent of revenue by industry. Technology companies such as software and tech hosting/cloud, along with financial services firms, spend a significant percent of revenue on technology. In other industries, organizations spend half as much or less.

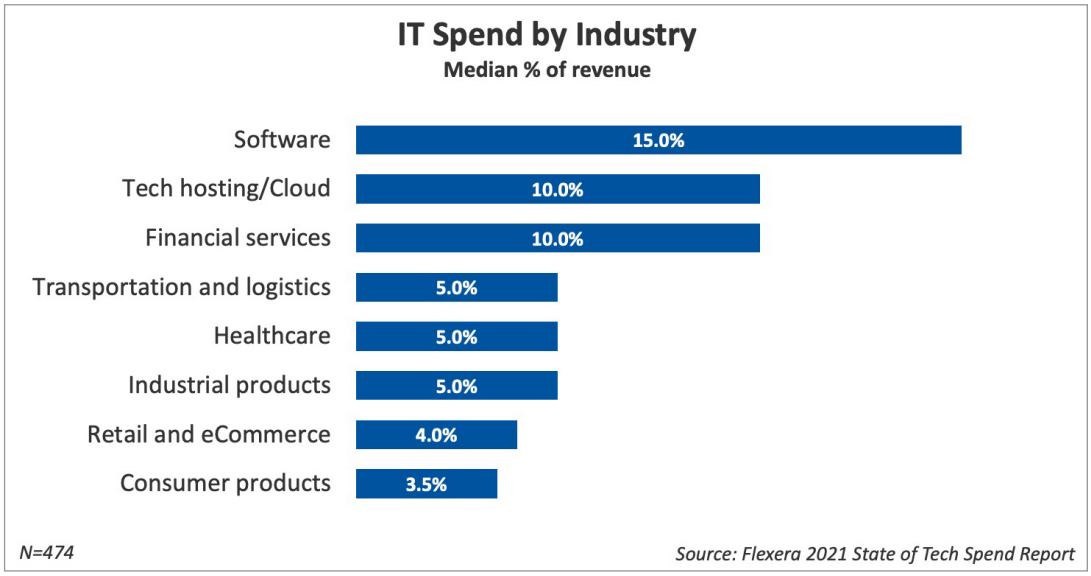

Figure 14. IT spend as a percent of revenue by industry

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Anticipated IT spend changes by region

Figure 15 summarizes respondents' expectations for how IT spend will change over the next year. Overall, approximately half expect an increase in spend. The responses are almost identical across regions.

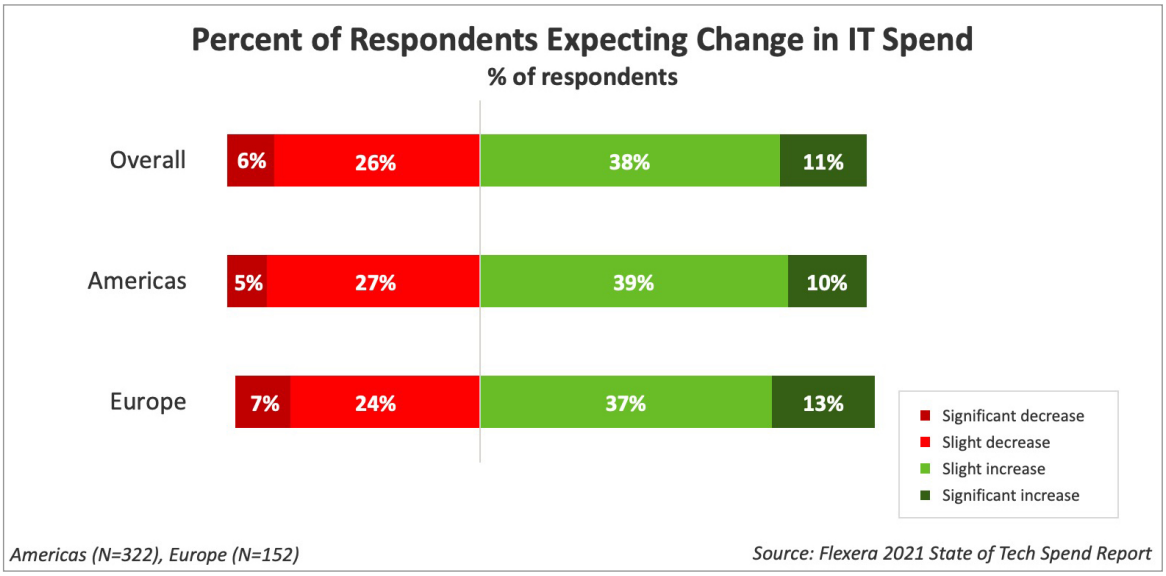

Figure 15. Percent of respondents expecting change in IT spend

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The Americas are less optimistic for 2021

Figure 16 shows organizations in the Americas are less optimistic about IT spending year over year. Only 49 percent of respondents expect an increase in 2021 compared with 57 percent in 2020.

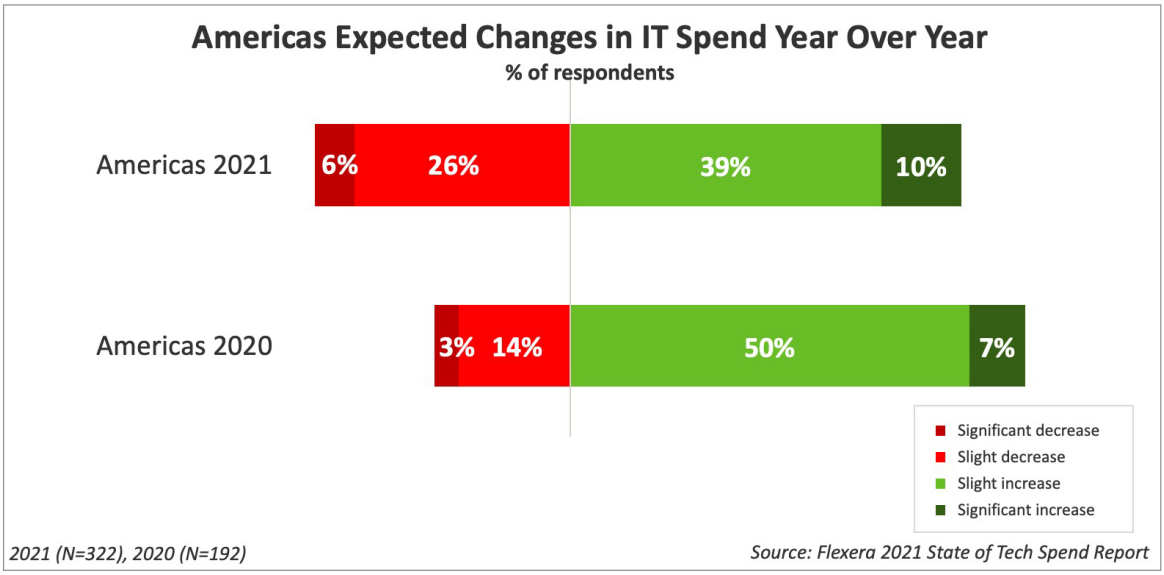

Figure 16. Americas expected changes in IT spend year over year

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About one-third of IT budget allocated to growth

IT leaders continue to balance the demands of running day-to-day business operations reliably with providing support for growth and innovation. Without sufficient focus on the latter, IT can quickly lose relevance. To mitigate the impacts of this challenge, IT needs to align itself as closely as possible with business needs.

IT leaders can compare their own spend allocations with the benchmarks in **Figure 17** to determine how they stack up against other organizations. As the figure shows, central IT departments allocate 64 percent of their budgets to running the current environment and 36 percent to growth and innovation.

Industry analysts often estimate the costs of running the business can be as high as 70 percent, with only a 30 percent investment in growth. However, this ratio can vary based on market dynamics and economic conditions. Projects also typically go through a life cycle, starting in the innovation category and then moving into the running-the-business category when they mature.

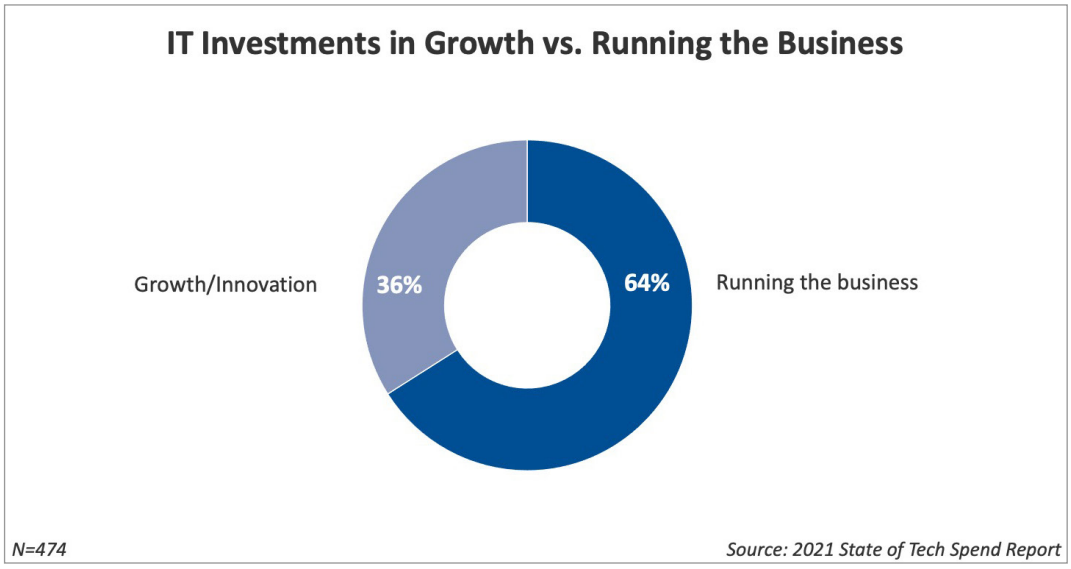

Figure 17. IT investments in growth vs. running the business

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Tech spend not entirely controlled by IT

The decentralization of IT spend will continue as business units in large organizations increasingly leverage technology to deliver business value. **Figure 18** shows that business units now control slightly more than one-quarter of IT spend. While central IT can often influence this spending, the central IT team doesn't directly control it.

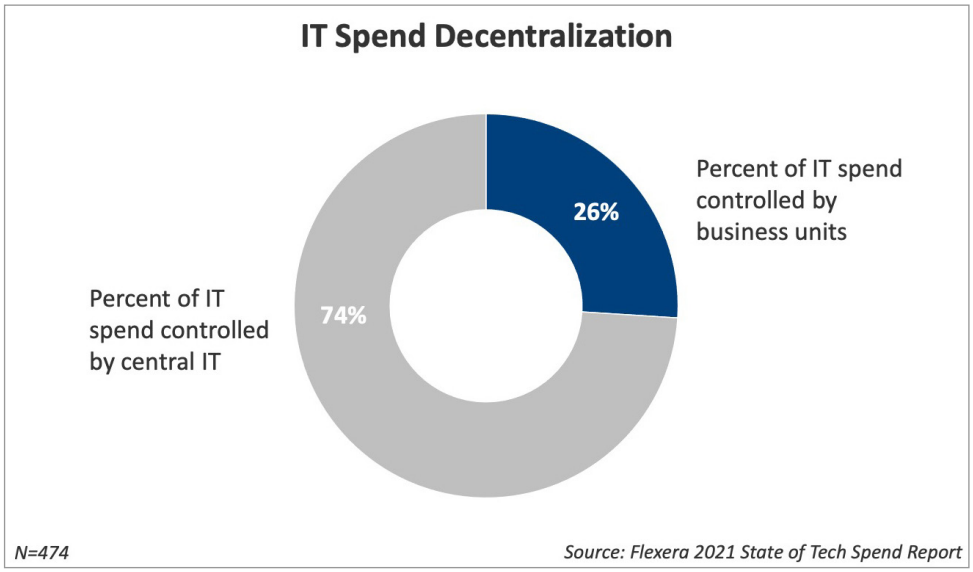

Figure 18. IT spend decentralization

Decentralized spend may also include true shadow IT—purchases of IT services without the knowledge of IT procurement. Research conducted by industry analysts indicates shadow IT spend could be as much as an extra 40 percent on top of known IT spend.

As enterprises grow, business units often will retain control over their IT—particularly if growth occurs through mergers and acquisitions. Large enterprises often struggle with this approach. Business unit control allows line-of-business managers to make decisions faster, ensuring agility as they respond to the demands of their markets. But decentralization can also lead to redundancies, inadequate security controls and support inefficiencies.

It's imperative that business units collaborate with central IT to ensure that ITAM and SAM teams account for the technology assets owned by the business units. This visibility is essential to properly managing, tracking and securing all technology assets.

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There are strong incentives for business units to cooperate. For example, IT sourcing teams may be able to include business unit purchases in corporate software and hardware vendor contracts, resulting in greater discounts that translate into lower costs.

As **Figure 19** shows, IT spend control is similar across regions and across organization size, with smaller organizations being slightly less decentralized.

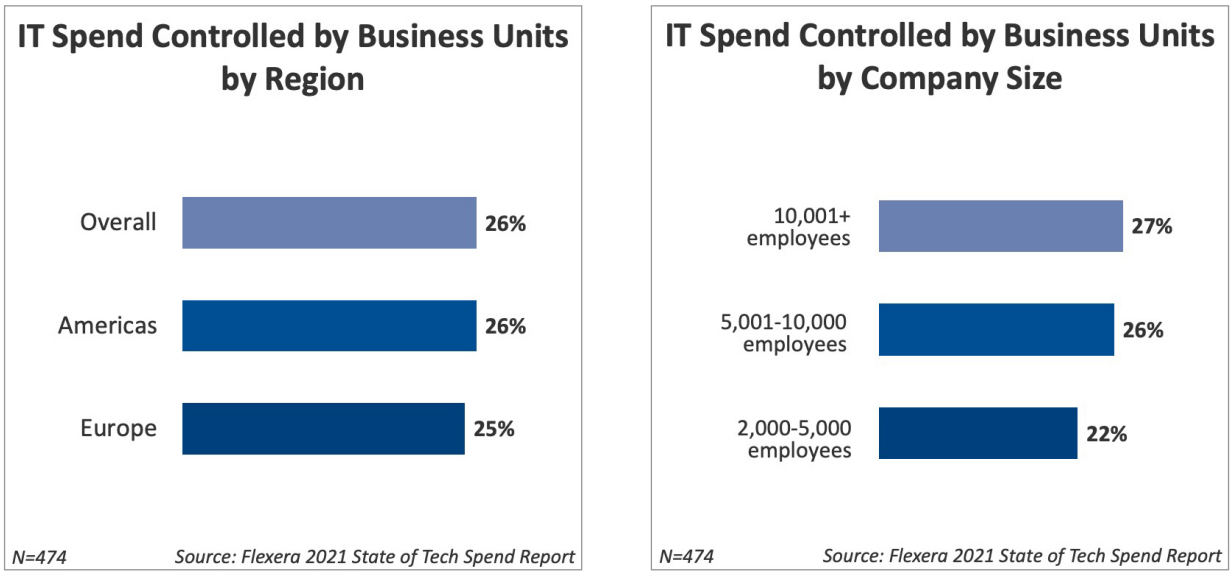

Figure 19. IT spend controlled by business units, by region and organization size

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The shift to cloud

As **Figure 20** shows, more than half of IT spend is allocated to software. On-premises software represents 24 percent. The combination of SaaS, IaaS and PaaS represents 30 percent. These results indicate a significant shift to cloud solutions.

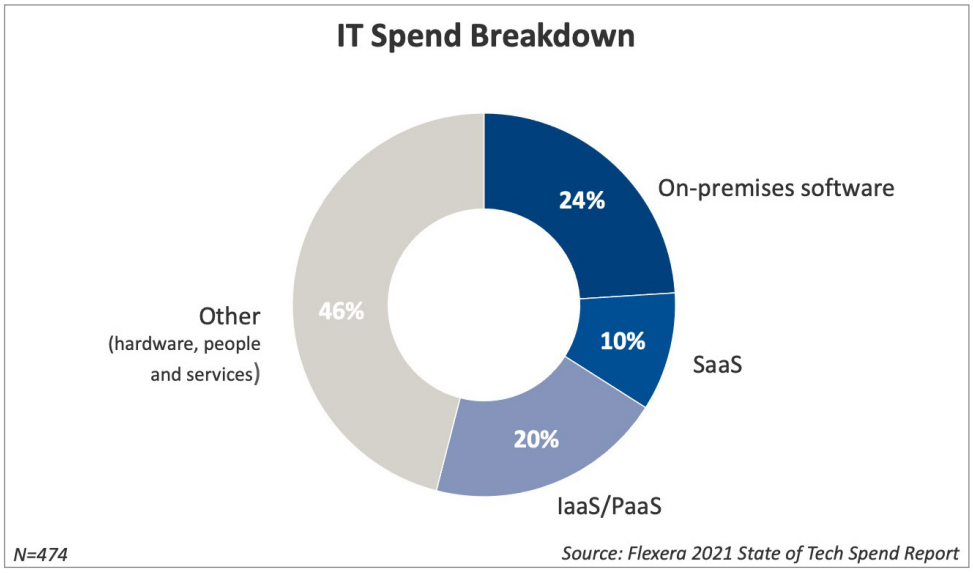

Figure 20. IT spend breakdown

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Number of data centers is decreasing

As organizations shift to cloud, they're reducing the number of data centers they operate. **Figure 21** shows seven percent plan to eliminate data centers and 27 percent plan significant reductions. Only 14 percent of respondents plan to increase the number of data centers significantly or somewhat.

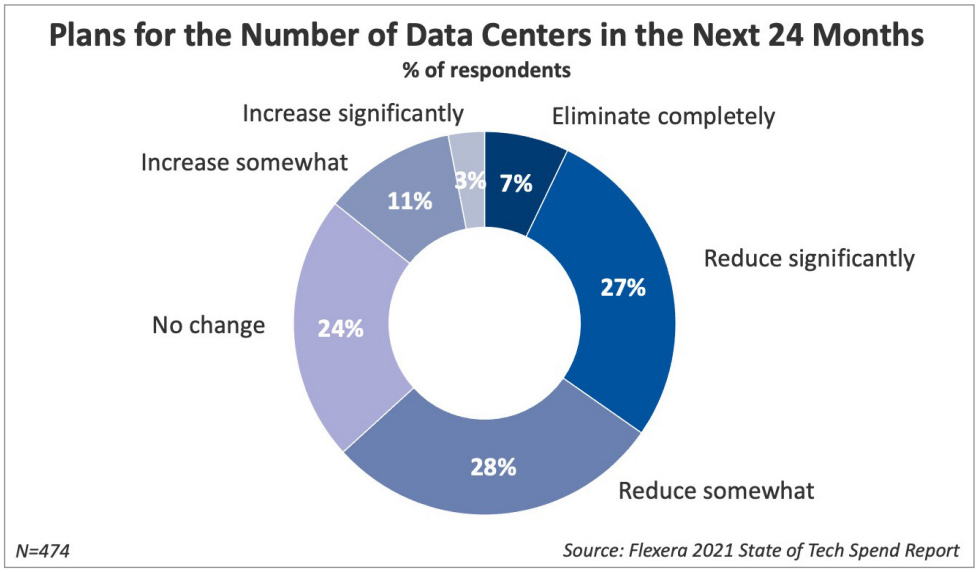

Figure 21. Plans for the number of data centers in the next 24 months

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COVID-19 has driven cloud spend up and on-premises software spend down. This isn't surprising as organizations turn to SaaS and move more apps and data to the cloud to support employees working from home. Organizations are also transitioning more activities to the cloud as business shifts online. This is especially true in the retail sector. **Figure 22** shows these trends. It also shows spending on personal computers, networks and other devices rising to support at-home workforces.

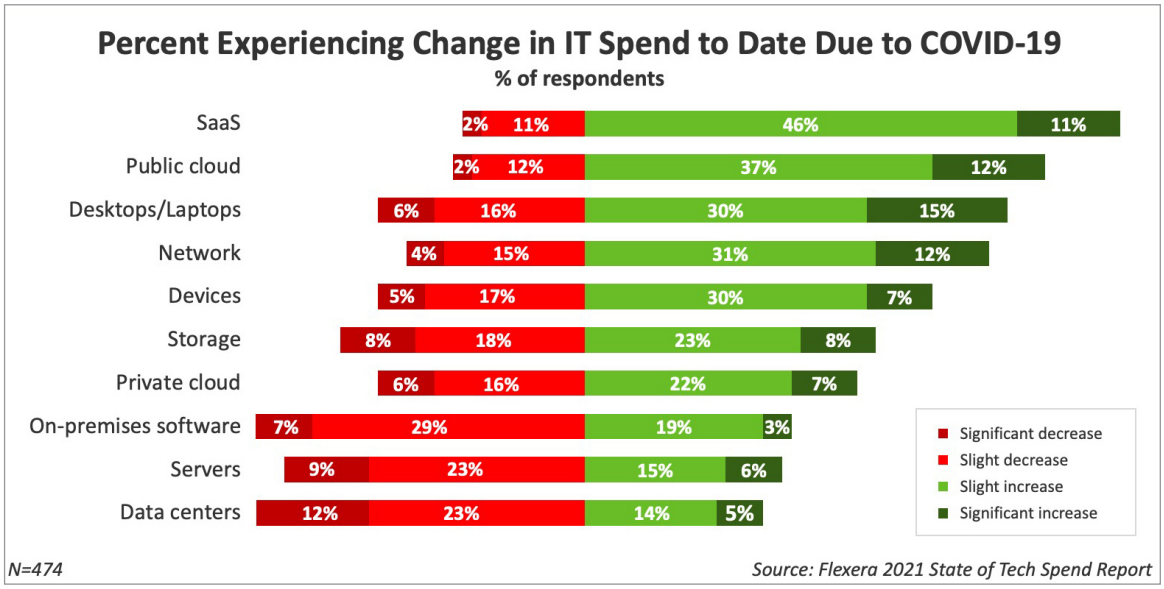

Figure 22. Percent experiencing change in IT spend to date due to COVID-19

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2021 spend for automation, cloud and AI to increase

Figure 23 shows survey respondents expect significant changes in IT spend across several technologies. Not surprisingly, spend for *on-premises software*, *servers* and *data centers* is dropping substantially while spend for *SaaS* and *public cloud* is increasing.

Organizations also expect to spend more for *automation*, *AI/machine learning* and *containers*. Automation can eliminate manual tasks, increasing productivity and speeding up the completion of processes—both of which improve customer experience.

AI and machine learning can help with making recommendations to customers, which also improves the customer experience. Combined with automation, AI and machine learning play a big role in monitoring complex IT infrastructures. They bring the ability to spot impending issues, correlate alerts to uncover the root cause of issues, and take corrective action far faster than humans can. These technologies are essential for big data projects that are critical for gaining full visibility into customer behavior, as well as collecting and analyzing information for data-driven decision making.

Interest in container technologies is also rising. Containers help control costs because they allow more efficient use of infrastructure. They also offer a more productive way to deploy workloads in the cloud as they speed development and deployment of new services.

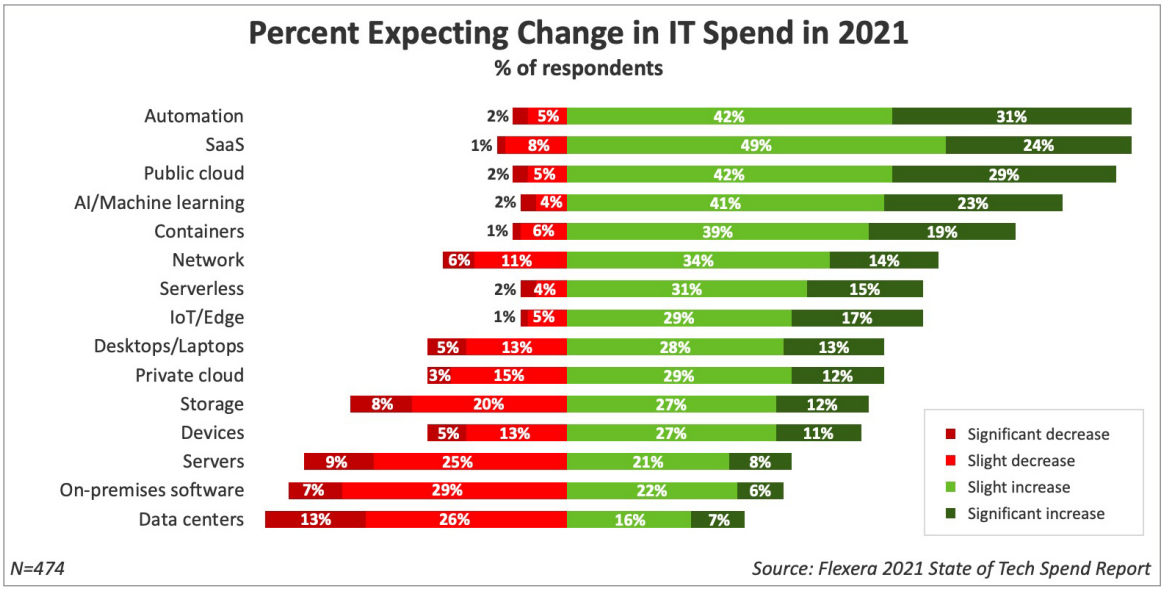

Figure 23. Percent expecting change in IT spend in 2021

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IT transformation challenges

Digital transformation requires a shift to faster and continuous delivery of enhancements to an organization's products and services. To make this happen, IT must align itself closely with the business, participating in strategic technology decisions and activities early in the planning process.

One measure of IT alignment is its involvement in the strategic activities of the business. **Figure 24** defines the four levels of involvement based on the point at which IT is brought into the decision-making process.

Four Levels of Strategic Involvement

Level	Description
Equal partner	Actively involved in strategic planning and engaging with the business in the early stages of strategic planning
Stakeholder	Brought in later than an equal partner would be but consulted regularly and provides input that influences technology decisions
Validator	Acts as a sounding board to determine whether the technology decisions the business has made are workable in the current environment; also provides business unit colleagues with information on cost implications
Implementer	Installs and maintains technologies or applications selected by the business; an important role but not a strategic one; no input into decision making, and in many ways, operates similar to an outsourcer

Figure 24. Four levels of strategic involvement

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As **Figure 25** shows, only 20 percent of respondents consider themselves equal partners, while more than half report that they're *implementers* or *validators*.

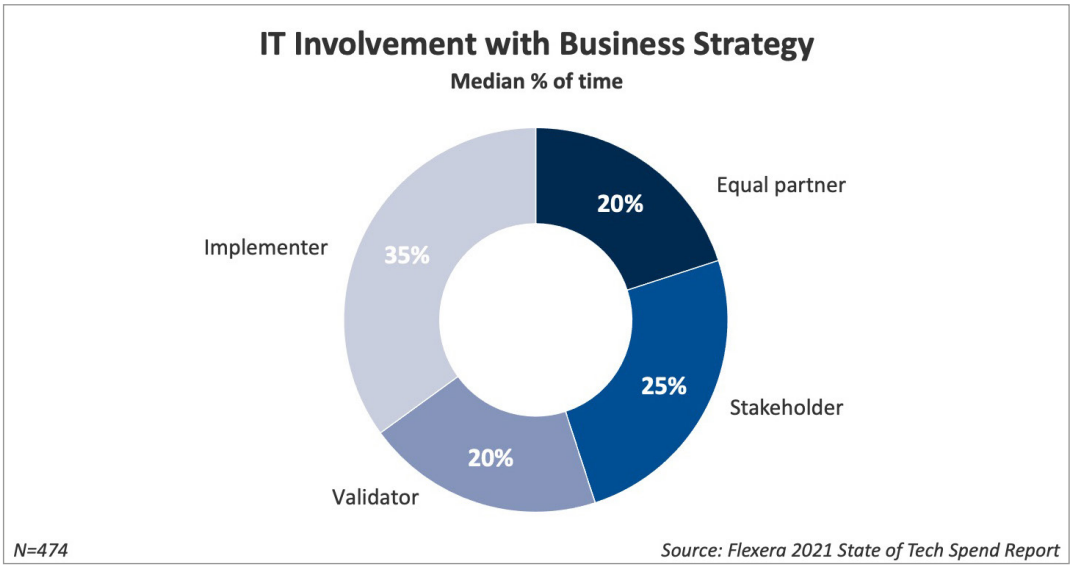

Figure 25. IT involvement with business strategy

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Eliminating wasted spend

The survey results also point to a disconnect between organizations' estimates of wasted IT spend compared with actual waste. **Figure 26** shows that, on average, survey respondents estimate twelve percent of total IT spend is wasted. Research by Flexera and other industry experts, however, puts the amount of wasted technology spend at 30 percent or more.

The disconnect could be due to the fact that organizations and people tend to be overly optimistic when they assess their ability to control waste. Independent or tool-based measurements of wasted IT spend typically uncover larger amounts of hidden waste than what's perceived.

Improving spend efficiency offers the opportunity to reallocate investments to initiatives that enable business value creation. Of course, it isn't possible to eliminate waste completely. But a decrease of just five or ten percent can have a major impact on what IT can accomplish. For IT organizations facing flat or decreasing budgets, improving spend efficiency can make a huge difference in their ability to meet business demands for delivering new services at a faster pace.

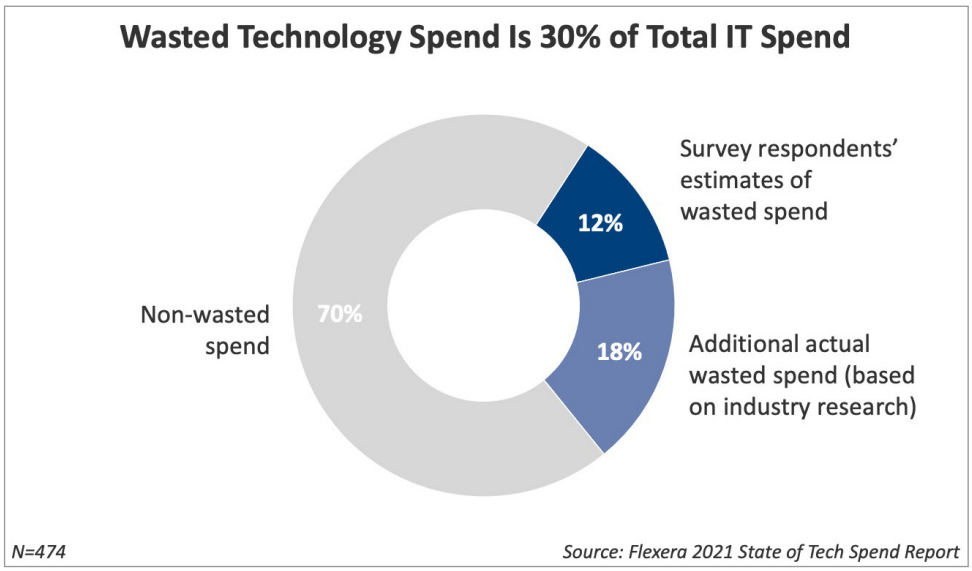

Figure 26. Wasted technology spend is 30 percent of total IT spend

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Spend visibility is a challenge

Senior leaders are encountering significant challenges as they strive to gain better visibility into spend. **Figure 27** shows that *reporting on IT spend by business service* is the top challenge. It also was the top challenge for organizations last year. *Visibility of technology for on-premises, SaaS, cloud* and *visibility of spend data for on-premises, SaaS, cloud* are ranked second and third, respectively.

Business services comprise multiple components and applications with many moving parts that span multiple technologies. They also often share hosts, storage, processors, cloud resources or databases with other services. It can be a daunting task to understand how everything maps together and aggregate spend across all the assets and resources as demand and usage fluctuate.

To get the full picture of where IT spend is going, organizations need timely and accurate data about the IT assets they have, along with cost data associated with them.

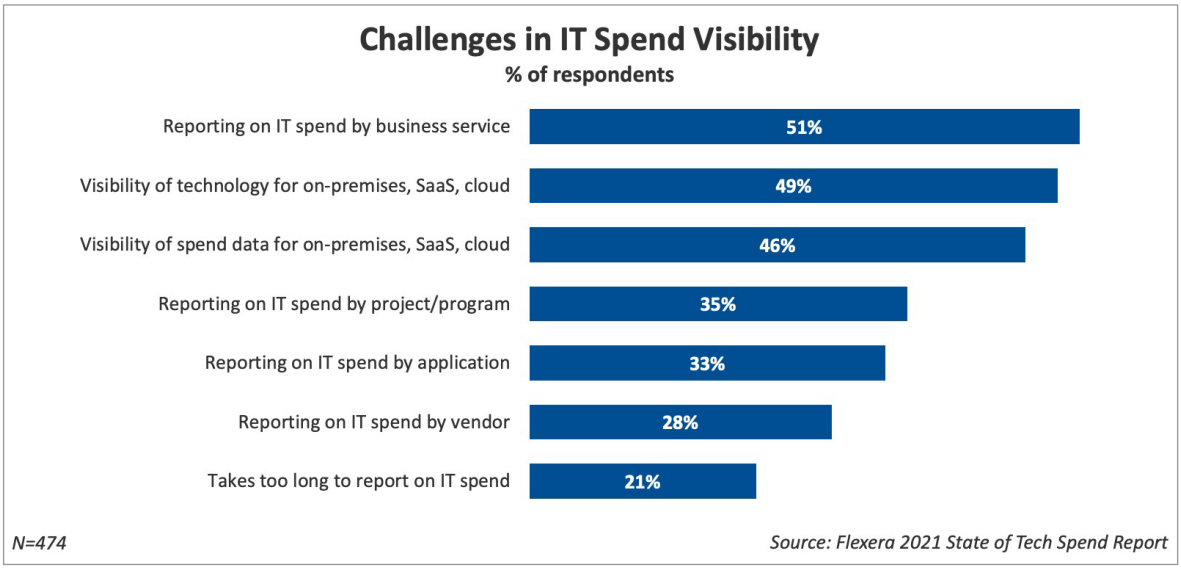

Figure 27. Challenges in IT spend visibility

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Data quality affects IT decisions

The pressure to make decisions, act and swiftly deliver results continues to intensify as organizations undergo digital transformation and move to the cloud. Respondents cite *not enough good-quality data* as the biggest challenge when asked what most hampers their ability to make technology decisions, as **Figure 28** shows.

The data senior leaders need comes from disparate sources. Inconsistencies, inaccuracies and missing data points interfere with rapid interpretation. Much of the collection and consolidation of data is manual, which means data is probably outdated by the time managers receive it.

Close behind the data quality challenge are *implementing decisions is slow* and *decisions take too long to make*. Organizations need to take advantage of automated tools that capture the data from many sources—both internal and external—and normalize, rationalize and present it in actionable form in near-real time.

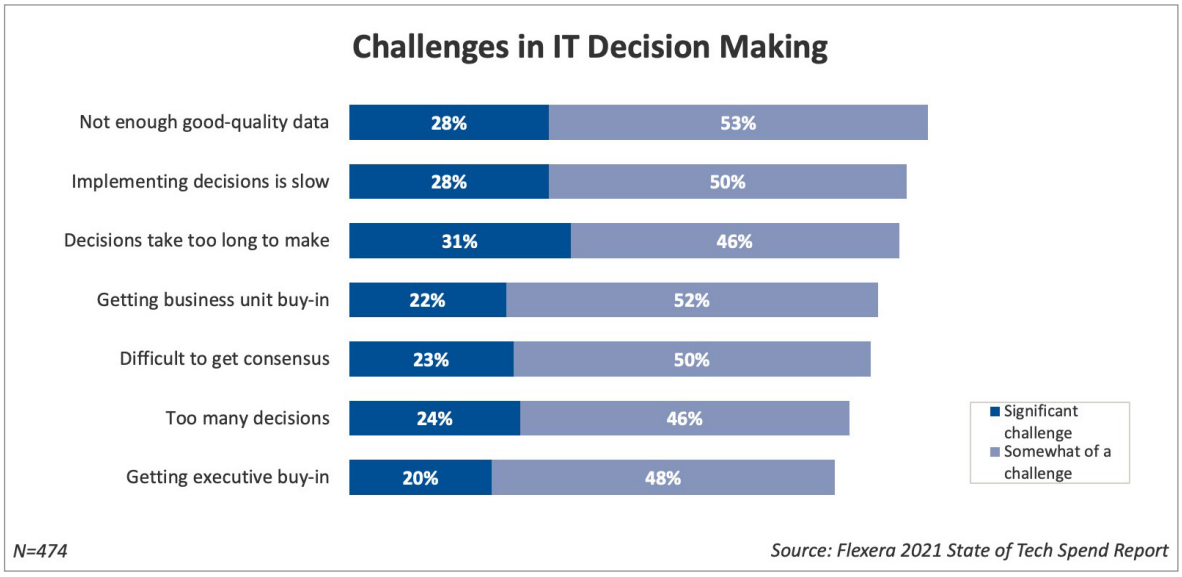

Figure 28. Challenges in IT decision making

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Spend optimization

IT organizations are also struggling to manage and optimize the cost of services they deliver to the business. **Figure 29** shows the key challenges they face in achieving that objective. Eighty-three percent of respondents cite *too many manual processes* as very much or somewhat of a challenge. Manual processes slow down operations, create bottlenecks and are difficult to track.

Almost four in five (79 percent) say *understanding the cost of delivered IT services* is very much a challenge. Identifying all the components that comprise a service is especially difficult in today's dynamic IT landscape.

Likewise, 79 percent say it is very much or somewhat of a challenge to get data required to optimize spend. And 79 percent say the same about ensuring spend efficiency (that is, avoiding waste). Executives are looking for confirmation that their investments are paying off and that every dollar spent delivers on enterprise strategic goals.

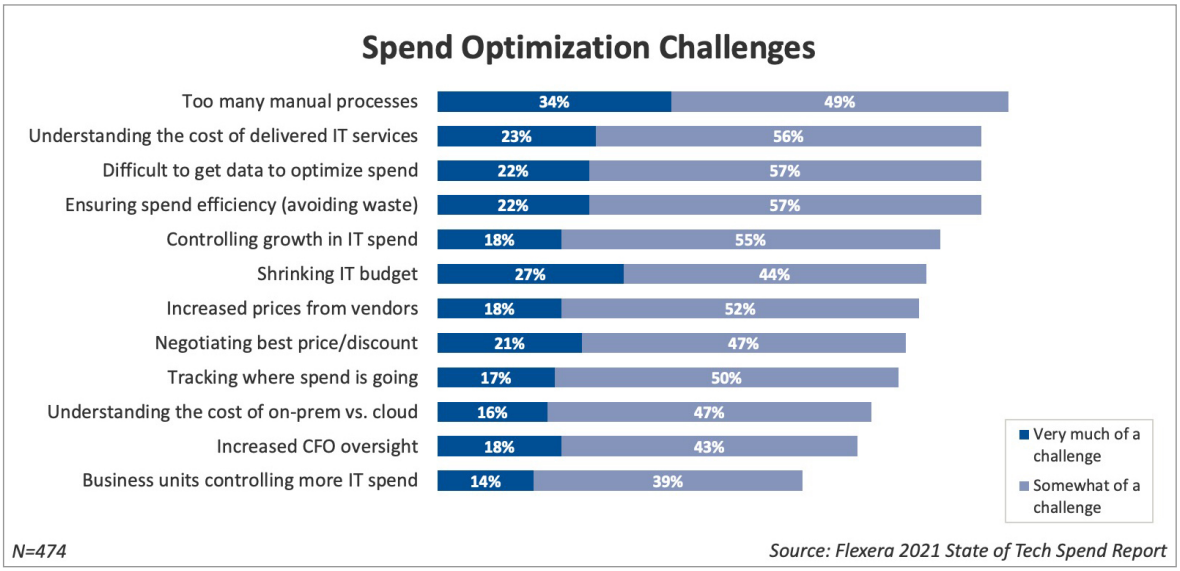

Figure 29. Spend optimization challenges

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Varying degrees of maturity

Spend management challenges often arise due to a lack of maturity in the organization's spend-optimization processes. **Figure 30** shows that 36 percent of respondents claim to have a very mature *software license compliance* process. Organizations have been implementing policies and processes for license compliance for years, so the percentage is lower than one might expect. Only 27 percent say they are very mature when it comes to *optimizing software license spend*.

Organizations need to take steps to mature these processes, starting with beefing up license compliance processes and expanding them to cover on-premises and cloud-based software. And they need to incorporate strategies for optimizing software license spend. By maturing these processes, organizations position themselves to control and contain costs as they move to cloud.

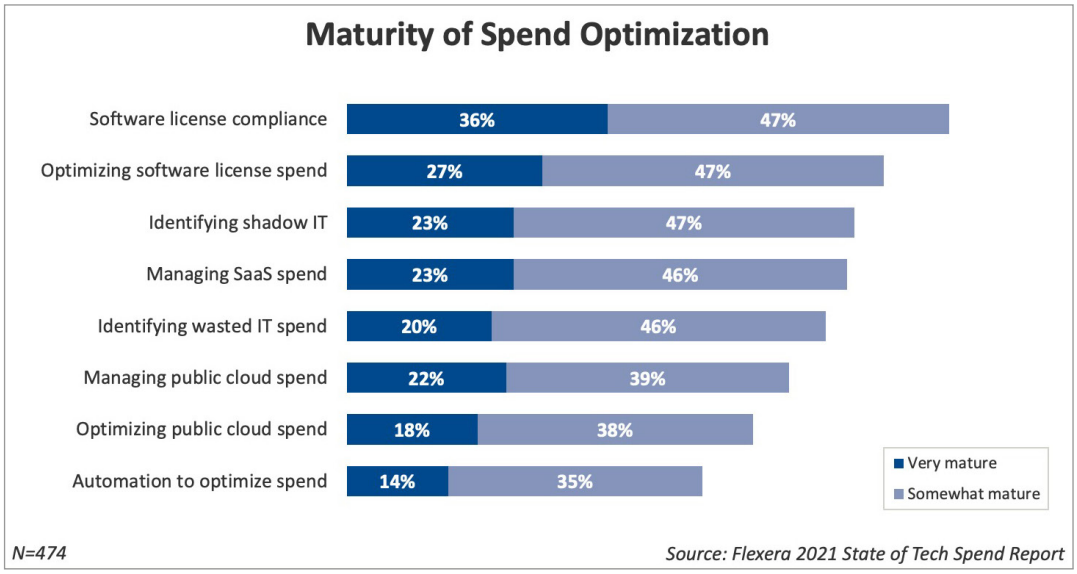

Figure 30. Maturity of spend optimization

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IT spend by vendor

The survey asked respondents about their current and future use of leading technology vendors across traditional on-premises software, SaaS and public cloud. Microsoft, with products that touch virtually every part of the IT stack, continues to make gains and hold the largest share of any of the vendors. Almost half (47 percent) of respondents report Microsoft is their top vendor by spend, as **Figure 31** shows. And another 23 percent say it's their second largest. The organization has managed to maintain a successful on-premises business while also excelling in the cloud space.

Twenty-two percent of respondents place AWS in the number one spot in terms of spend; twelve percent rank it in the number two spot. AWS now holds the second largest share of the top vendors. This bears out what respondents indicated in last year's survey—that Microsoft and AWS were expected to be the top two vendors in terms of IT spend.

Notably, AWS has enjoyed significant gains since 2020, when 19 percent of respondents named it as the first or second largest vendor. This year, at 34 percent, AWS pulled ahead of SAP and holds a clear lead over Oracle and Salesforce.

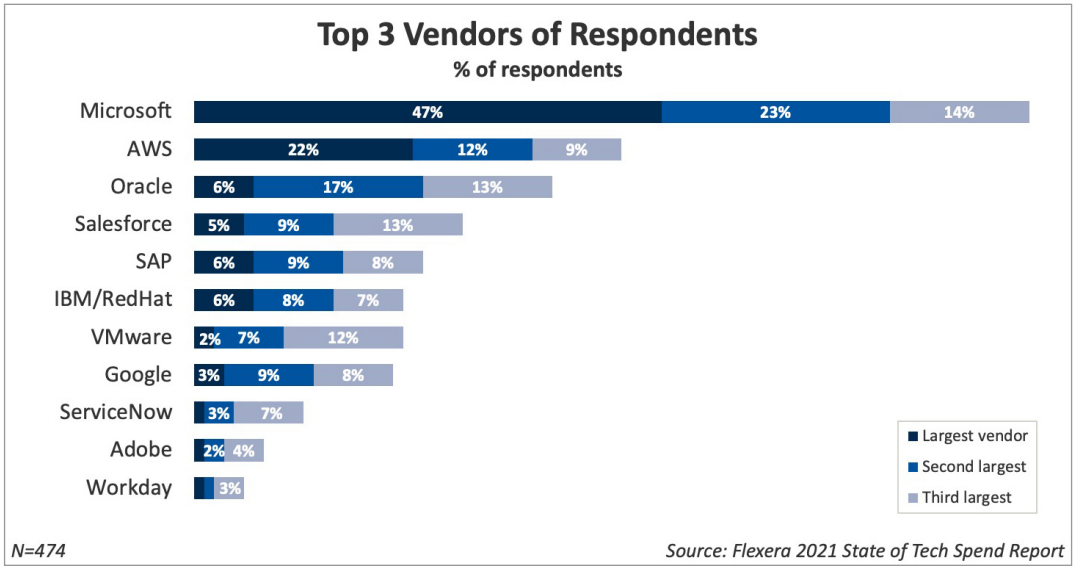

Figure 31. Top three vendors of respondents

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Figure 32 provides another view of the largest vendors by spend. The results aren't surprising. Microsoft is in the number one spot for largest, second largest and third largest vendor. AWS also shows up in the top five for all three levels.

It's notable that Google made the top five for the second largest vendor. Google hasn't been a player in the enterprise market in the past. As organizations move increasingly to cloud and SaaS, they're showing more interest in Google Cloud and the Google Workspace collaboration and productivity apps.

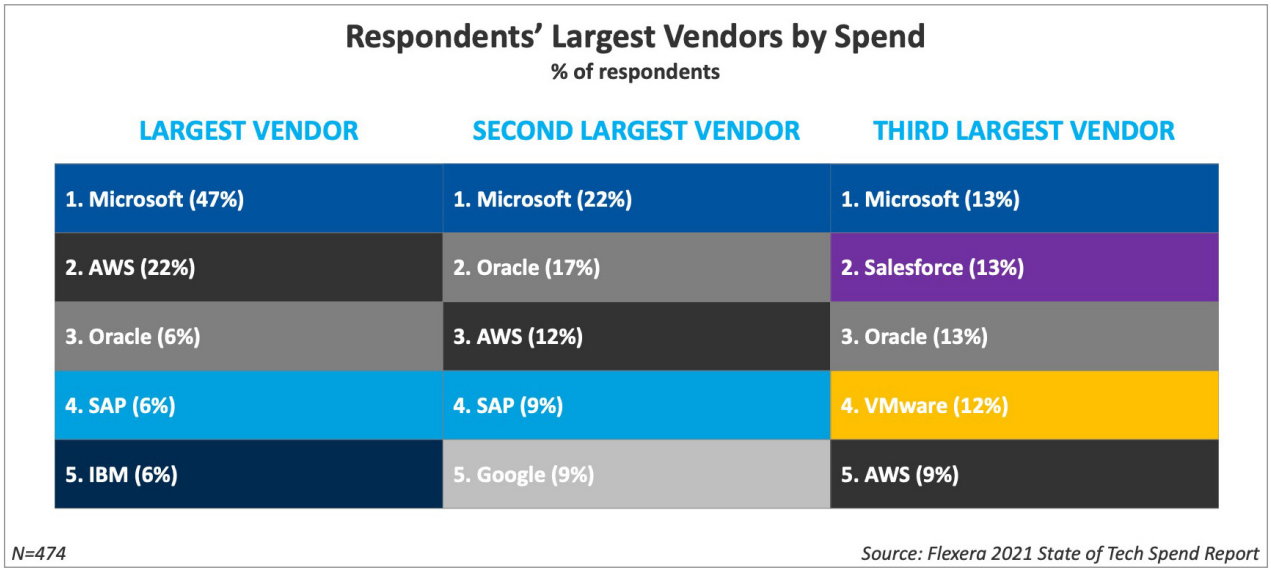

Figure 32. Respondents' largest vendors by spend

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Expected change by vendor

Growth in cloud spend will continue to alter the landscape. As Figure 33 shows, respondents expect significant increases in spend for Microsoft, which includes Microsoft Azure, Microsoft SaaS software and Microsoft licensed software. Microsoft's licensed software is starting to show some weaknesses; respondents' expected spending increases for Microsoft licensed software are lower than what they anticipate for Azure and SaaS software. Expected decreases are higher in this area of Microsoft's business.

Organizations using vendors whose offerings span on-premises and cloud, including Microsoft, SAP, VMware, Oracle and IBM, will need a blended approach to managing vendors and solutions. They may have solid ITAM processes in place but need to build SaaS and cloud management into their strategies to ensure cohesiveness.

Significant increases in spend are also expected in cloud- and SaaS-only vendors such as AWS, Salesforce and Google. Traditional vendors Oracle and IBM show higher numbers of respondents planning to decrease spend.

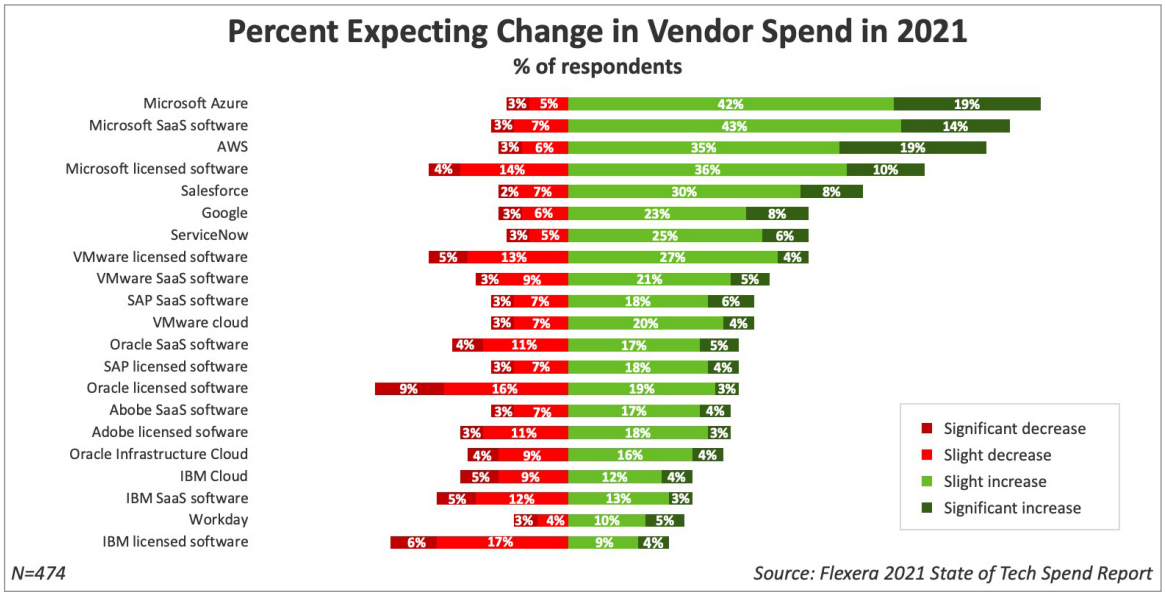

Figure 33. Percent expecting change in vendor spend in 2021

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IT workforce shifts to remote

Central IT organizations are pulling in talent and needed skills from a variety of sources. However, there's been a significant shift to remote work since the beginning of the pandemic. **Figure 34** shows that 57 percent of IT staff are full-time remote workers, with 45 percent having that status due to COVID-19 and twelve percent not due to COVID-19. Nine percent are full time with partial remote activity. Full-time, in-office workers represent only 21 percent of the IT staff. In 2020, 54 percent of the staff worked full time in the office. Considerably more than half of the staff is now remote at least part of the time.

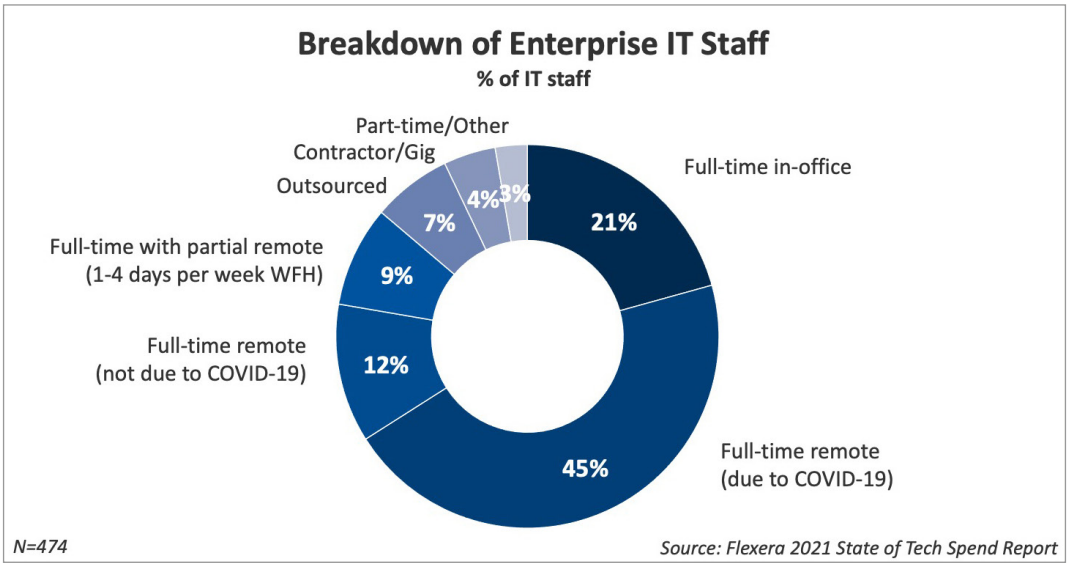

Figure 34. Breakdown of enterprise IT staff

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Survey respondents also answered questions about the time frame for returning to the office. **Figure 35** shows nearly one-fifth of staff currently working from home due to COVID-19 will continue to do so after the pandemic ends. More than one-third (36 percent) aren't expected to return to the office until mid-2021, and 20 percent won't return until after mid-2021.

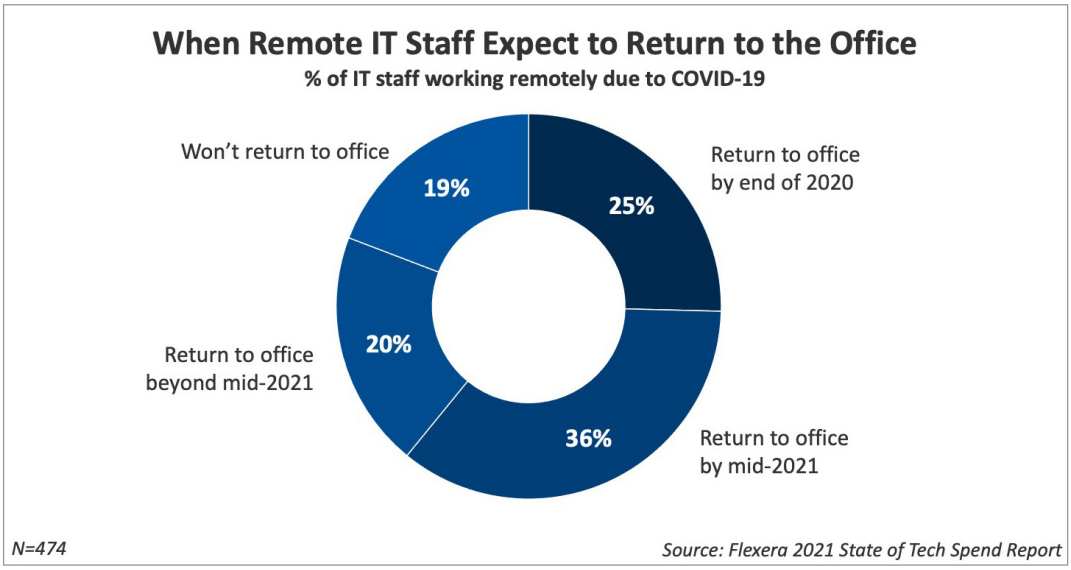

Figure 35. When remote IT staff expect to return to the office

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Significant investment planned for remote workers

Digital transformation is changing the mix of skill sets organizations need. Organizations have been assessing the IT workforce and identifying where investment is needed. Last year, senior IT executives expected the top investment focus to be related to skilling, upskilling and re-skilling to ensure their people have the right knowledge and expertise.

Organizations are rethinking their staffing investments for 2021 because of the pandemic and the expectation that employees will continue to work from home. As **Figure 36** shows, investing in *remote workers* has moved to the top of the list of planned changes to IT staffing investments. It was in sixth place last year. *Investing in upskilling* and *re-skilling of existing employees* moved down slightly to the number two and three priorities, respectively.

Outsourcing is still in sixth place. However, more organizations are now planning to reduce investments in outsourcing and fewer are planning to increase investments. Some of this shift may be a result of the reduction in the number of data centers.

Increasing diversity continues to be an important focus. Organizations are attempting to promote more women and minorities into higher management levels to diversify the workforce.

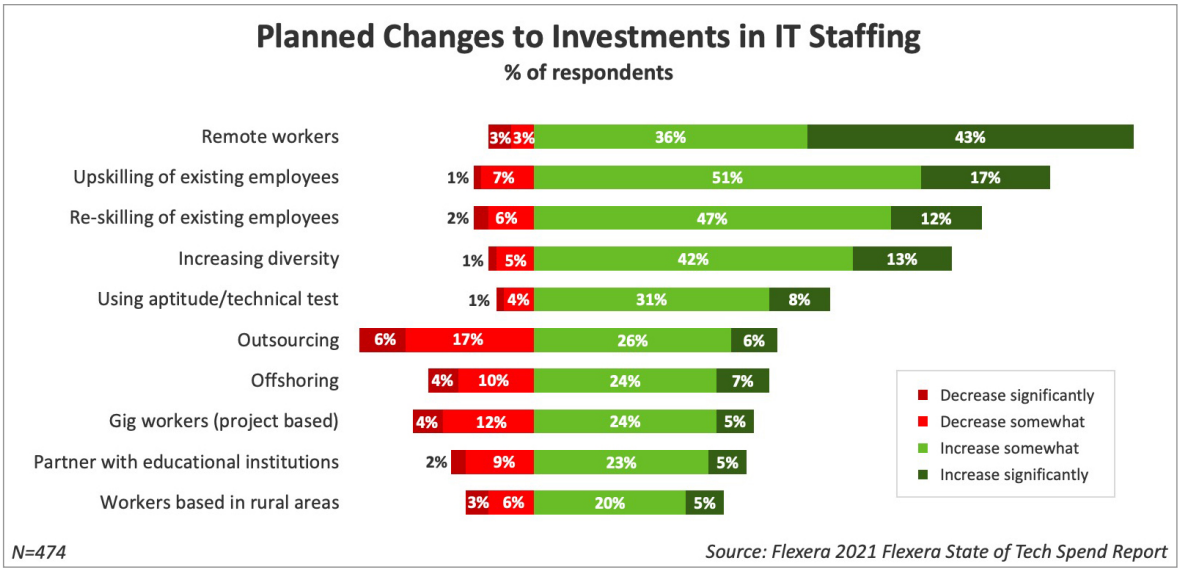

Figure 36. Planned changes to investments in IT staffing in 2021

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CIOs fill gaps with external partner resources

The survey queried participants on how they plan to use external resources to supplement internal resources in the key technology areas they need to address. As **Figure 37** shows, the top five in which external partners will play a role are *cybersecurity*, *analytics/big data*, *automation*, *AI/machine learning* and *cloud operations*. All five are rapidly growing specialization areas that require specialized skill sets.

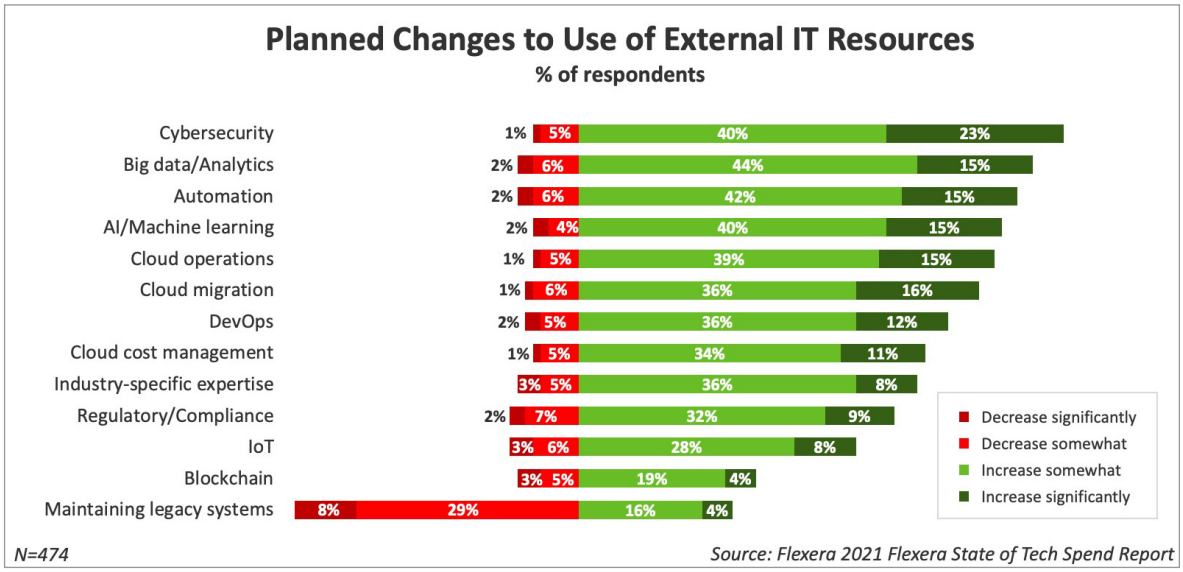

Figure 37. Planned changes to use of external IT resources in 2021

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Summary

Organizations continue to drive transformation by investing in cloud and other AI technologies. Containing costs as they adopt the digital business model will be essential to achieving digitization and maintaining relevance long term. As a result, organizations need to focus on gaining visibility into IT spend, including allocating costs to business applications and services in today's complex IT architectures, aggregating costs across multiple organizational entities and ferreting out waste.

While the drivers behind going digital haven't changed, the pressure to fast-track digitization increased dramatically with the emergence of COVID-19. The pandemic has accelerated the pace of transformation, causing organizations to shift gears with respect to timelines and IT spend allocations.

As disruptive as 2020 was, the long-term advantages of earlier digital transformation are likely to lead to enhanced business success over the next few years.

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FLEXERA™ 2021 STATE OF TECH SPEND REPORT: Europe Spotlight

Despite a few differences, European organizations face similar challenges and cite the same tech initiative priorities as their global counterparts.

Europe spotlight: introduction

The 152 European participants in the *Flexera 2021 State of Tech Spend* survey represent about one-third of the total survey audience. They're executives and high-level managers in IT with significant knowledge of their organizations' overall IT budgets. This Europe spotlight provides insight into their perspectives on the technology and spend issues they face as they develop tech strategies and make technology choices. It includes comparisons between European organizations and their counterparts in other parts of the world.

Europe spotlight: highlights

- The top three IT initiatives in Europe are digital transformation, cybersecurity and cloud/cloud migration—the same initiatives cited as the top three in 2020
- European organizations spend less on IT as a percent of revenue, allocating six percent of revenue compared with 8.5 percent in the Americas
- In response to COVID-19, European organizations are increasing their spending on SaaS, public cloud, desktop and laptop computers, and networking to better support their at-home workforce
- Top pandemic-related factors affecting Europe include work from home, lower revenues/profits, general economic downturn, increased willingness to move to cloud and lower budgets
- European organizations report that their top five spend visibility challenges are visibility of technology for on-premises, SaaS, cloud; reporting on IT spend by business service; visibility of spend data for on-premises, SaaS, cloud; reporting on IT spend by project/program; and reporting on IT spend by business service
- Microsoft is strongly entrenched as the largest vendor in terms of spend among European organizations; Oracle and SAP are the second and third largest, respectively
- The post-pandemic return to the office is predicted to be faster in Europe, with 65 percent of the workforce expected to return to the office by mid-2021 compared with 60 percent in the Americas

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European respondent demographics

The survey included organizations with at least 2,000 employees. As **Figure 38** shows, 61 percent of European participants work in organizations with 10,001 or more employees compared with 52 percent in the Americas. Representation by European organizations with 5,001 to 10,000 employees is about the same globally, while representation by organizations with 2,000 to 5,000 employees is higher in the Americas.

The heavier weighting toward large companies, both in Europe and the Americas, is reflected in responses to budget, spend and employee headcount questions.

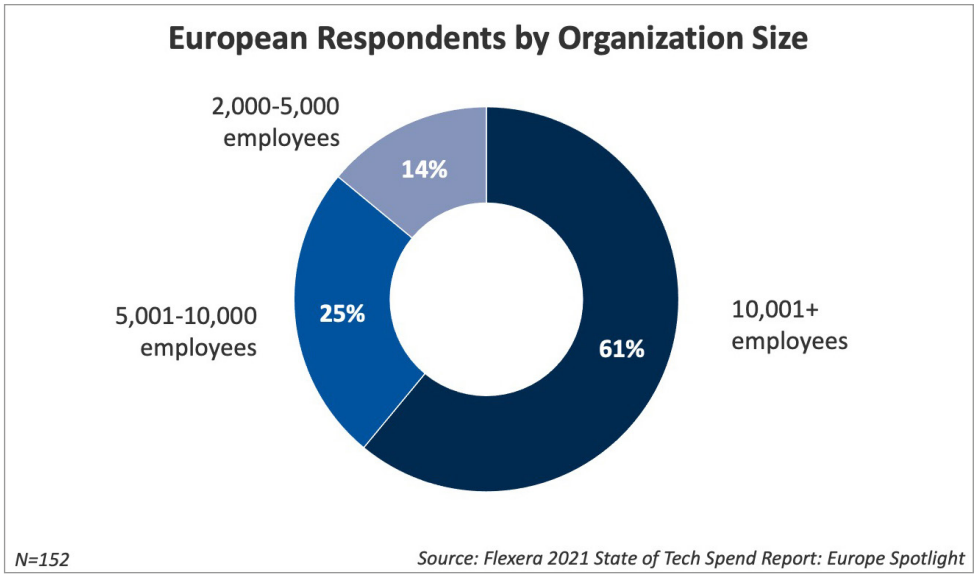

Figure 38. European respondents by organization size

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Figure 39 summarizes participation by industry. While the survey encompasses a cross section of industries, three have double-digit representation: *financial services*, *retail and eCommerce*, and *transportation and logistics*. The Other category represents a variety of industries, with each representing less than five percent of respondents.

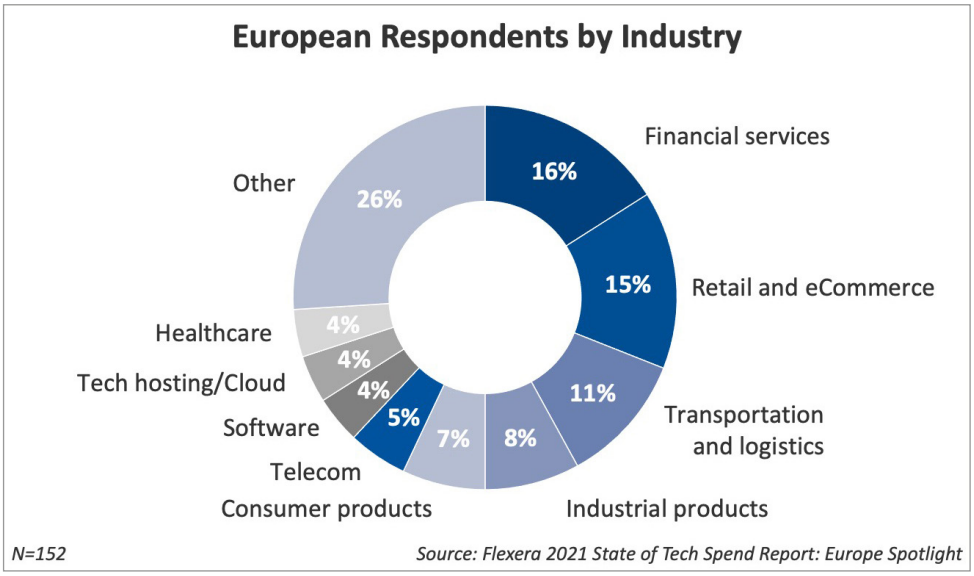

Figure 39. European respondents by industry

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Key IT initiatives in Europe

As **Figure 40** shows, the IT initiative priorities in Europe closely mirror the top priorities in the Americas. *Digital transformation*, *cybersecurity* and *cloud/cloud migration* top the list worldwide. These same initiatives were cited as the top three in 2020.

In Europe, *business value/growth* came in at number four and *customer experience* captured the number five spot.

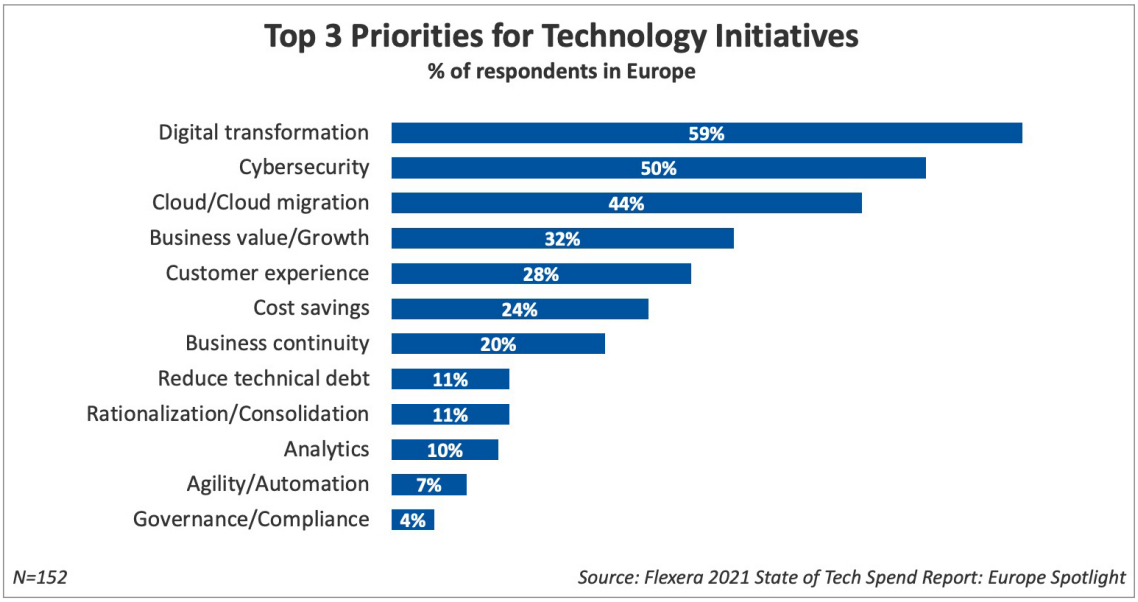

Figure 40. European ranking of key IT initiatives

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IT spend in Europe

European organizations allocate a lower percentage of revenue to IT spend than do their counterparts worldwide. As **Figure 41** indicates, European organizations spend less as a percent of revenue than do organizations in the Americas.

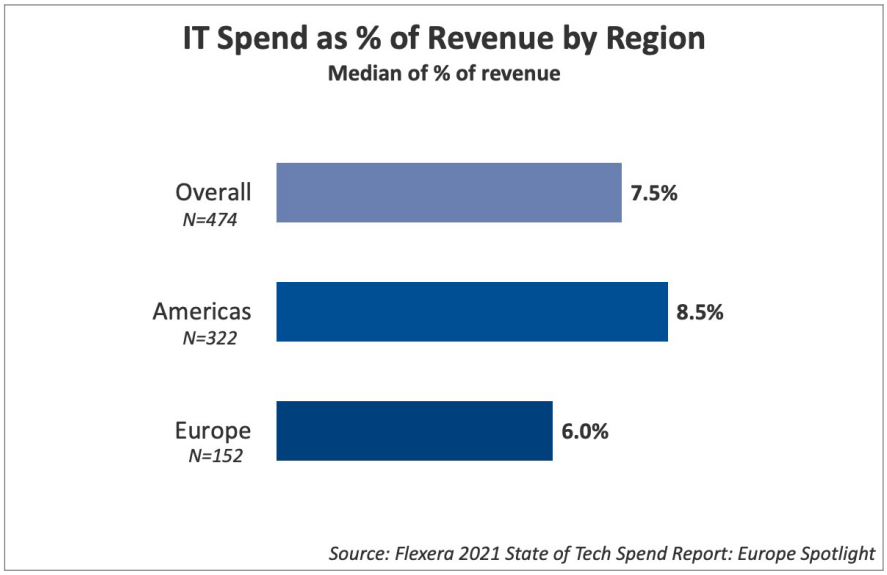

Figure 41. How European IT spend as a percent of revenue compares with spend in the Americas

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Organizations worldwide expect changes in IT spend levels over the next year. As **Figure 42** shows, responses are similar across regions. Almost half of global respondents expect an increase in IT spend, while 32 percent expect a decrease. In Europe, 31 percent of respondents expect IT spend to decrease, while half expect it to increase.

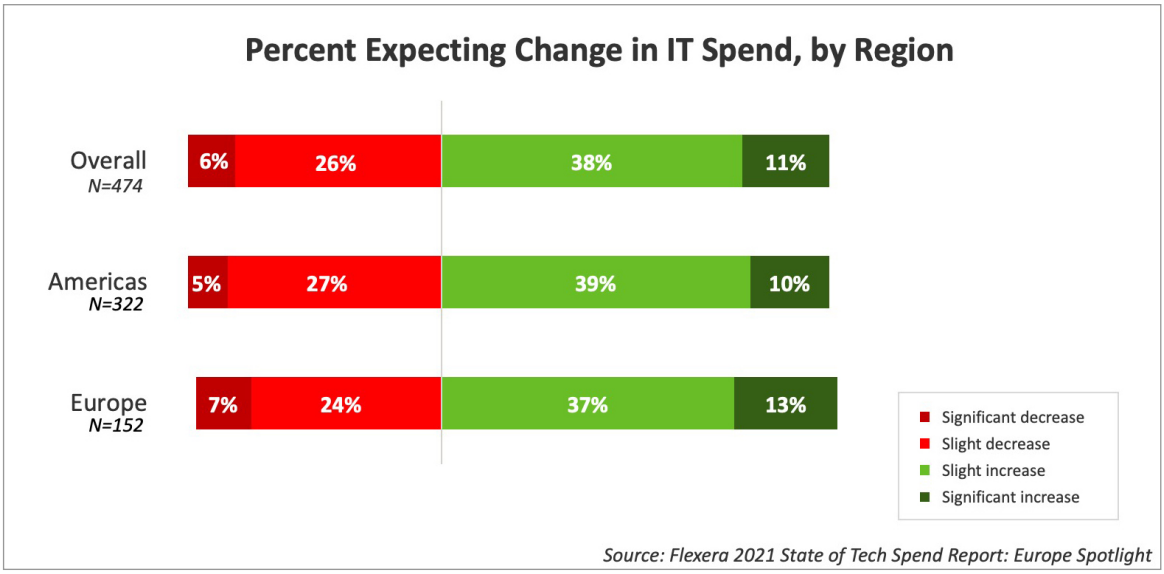

Figure 42. Percent expecting change in IT spend, by region

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European organizations shifting to cloud at a slightly slower pace

In Europe, as in the Americas, organizations are allocating slightly more than half of IT spend to software. **Figure 43** shows the spend breakdown in Europe for *on-premises software* versus cloud, which includes *SaaS* and *IaaS/PaaS*. At 27 percent, European spending on the cloud is less than the worldwide spending (which is 30 percent).

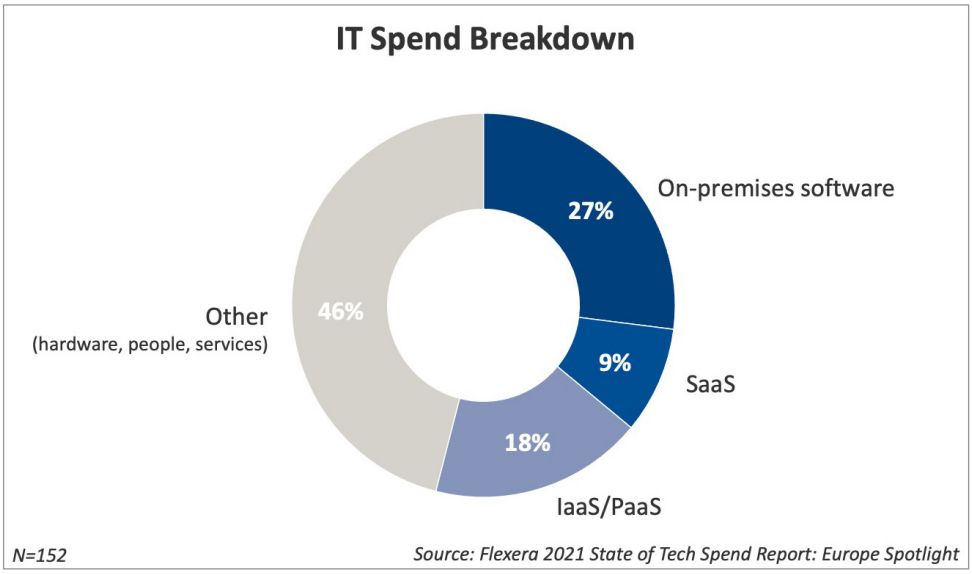

Figure 43. European organizations' IT spend breakdown by type

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Impact of COVID-19 on European IT spend

In Europe and the Americas, COVID-19 is driving cloud spend up and on-premises software spend down. **Figure 44** shows the changes European organizations are experiencing.

The European numbers align closely with those reported worldwide. However, European organizations are more likely to increase spending for *desktops/laptops* and *network*, while a larger portion of respondents in the Americas are increasing spend on *public cloud*. Spending on personal computers, networks and other devices is likely geared toward supporting the expanded at-home workforce.

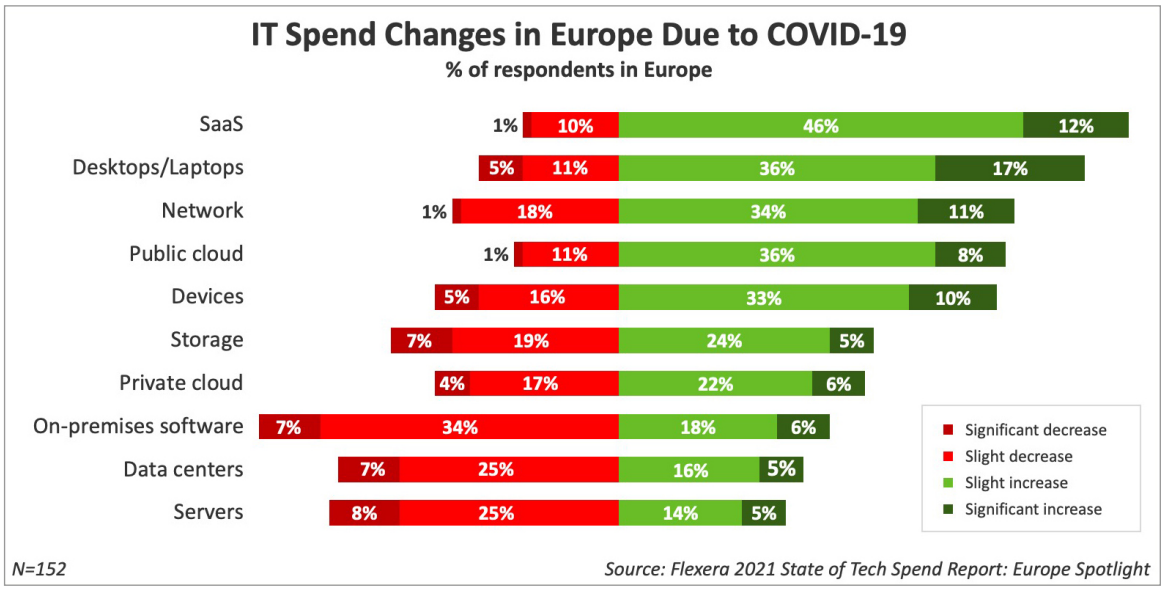

Figure 44. IT spend changes in Europe due to COVID-19

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The ranking of pandemic-related factors affecting European organizations aligns with worldwide rankings. As **Figure 45** indicates, European respondents named *work from home*, *lower revenue/profits at organization*, *general economic downturn*, *increased willingness to move to cloud* and *lower budgets at organization* as the five pandemic-related factors that affect their organizations the most. The percentages for the same five factors differ only slightly from those of global respondents.

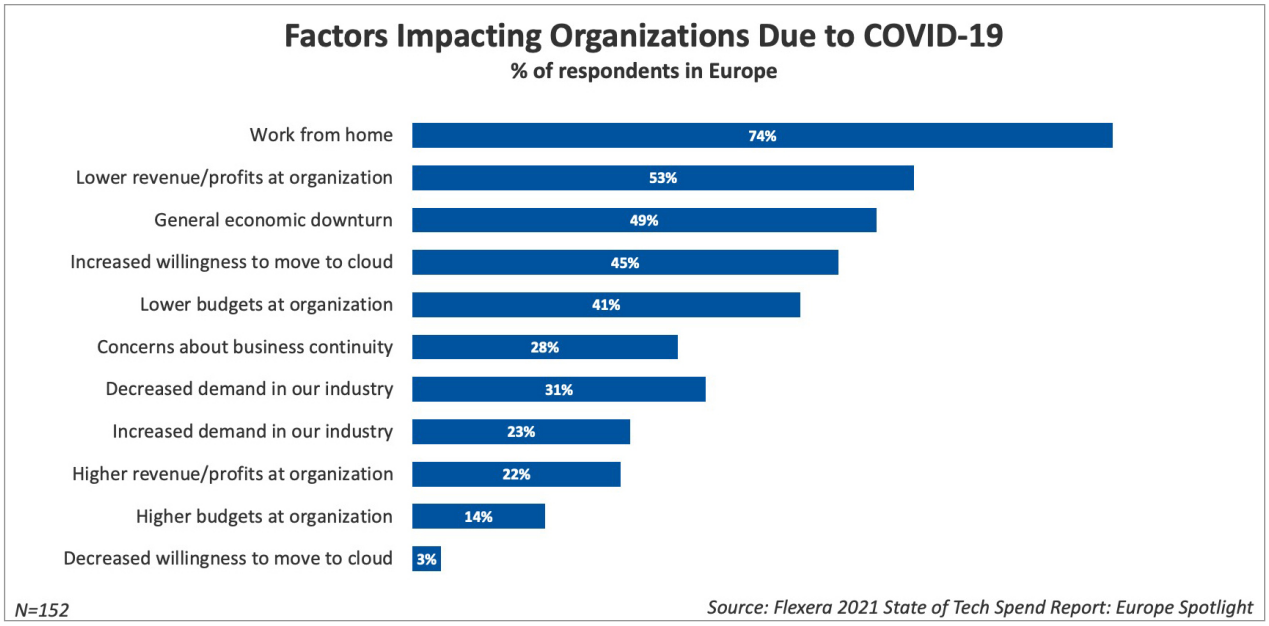

Figure 45. Factors impacting organizations due to COVID-19

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European organizations face challenges with spend visibility

Like their counterparts in the Americas, senior IT leaders in Europe face obstacles in gaining visibility into spend. **Figure 46** shows how European respondents ranked the challenges they face. The same challenges made the top five worldwide for both those parts of the globe. However, European organizations rank *visibility of technology for on-premises, SaaS, cloud* and *reporting on IT spend by business service* as the top two challenges. Worldwide rankings have these two challenges reversed in position.

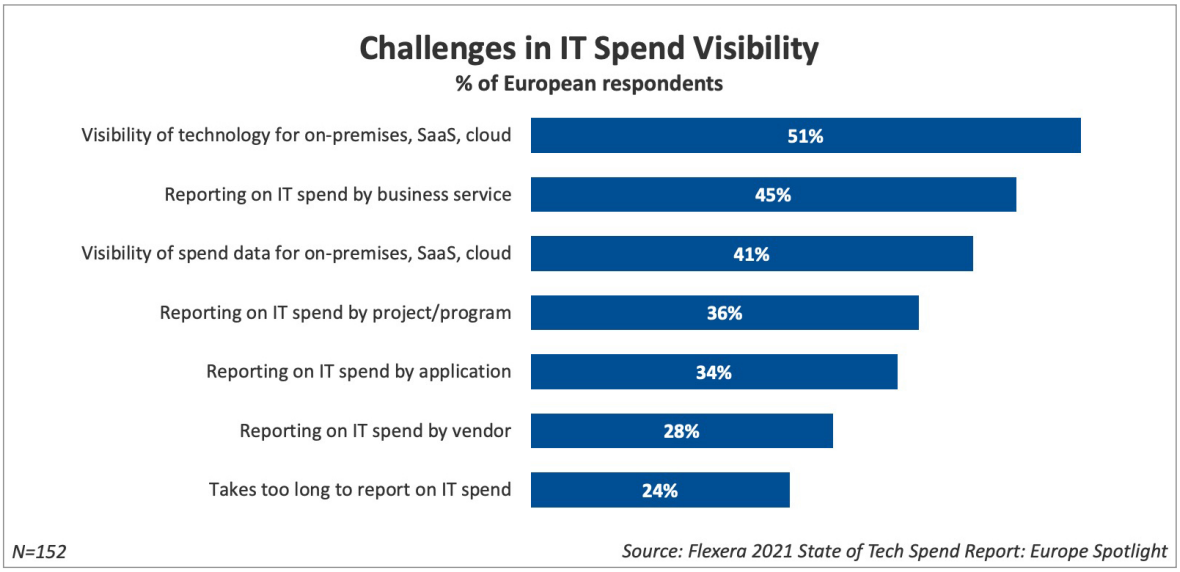

Figure 46. IT spend visibility challenges in Europe

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European IT spend by vendor

With respect to respondents' ranking of vendors by spend, Microsoft holds a significant lead worldwide. Almost half (47 percent) of respondents name Microsoft as the largest vendor, 23 percent name it as the second largest and 14 percent report it as the third largest. **Figure 47** shows that Microsoft's lead in Europe is even higher. More than half (53 percent) rank it as the largest vendor by spend, 22 percent as the second largest and eleven percent as the third largest.

AWS was named the largest vendor by 14 percent of respondents compared with 22 percent globally. Both Oracle and SAP were more likely than AWS to be ranked among the top three vendors of European respondents. AWS was ranked in the top three by 33 percent of the respondents, while Oracle was cited by 37 percent and SAP by 34 percent.

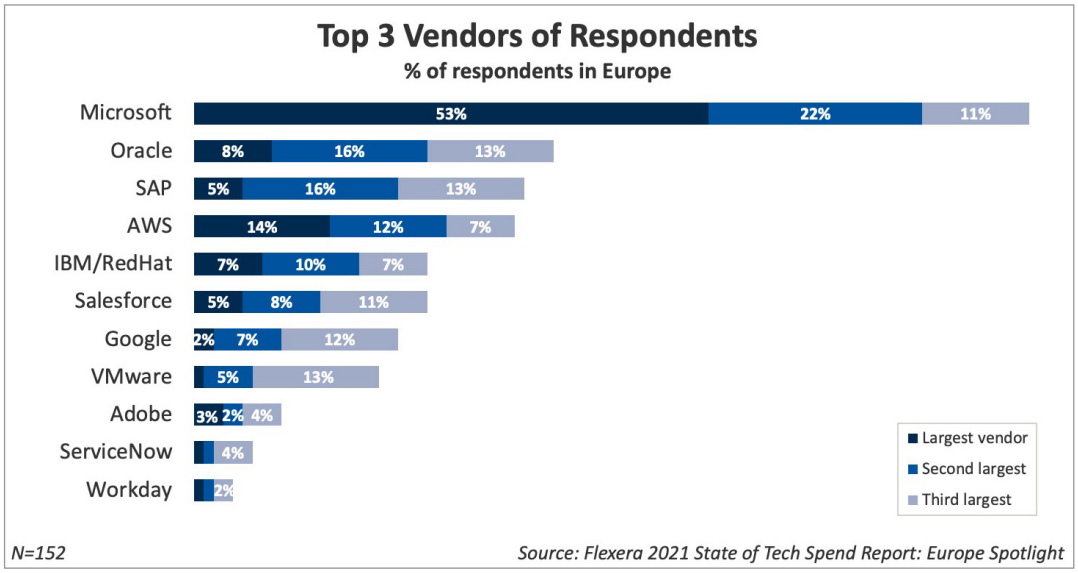

Figure 47. Top vendors in Europe in terms of spend

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IT staffing in Europe

Since the pandemic began, there has been a shift to remote work in the Americas and in Europe. In the *Flexera 2021 State of Tech Spend* survey, respondents worldwide reported that the proportion of full-time remote workers rose to 57 percent, with 45 percent working remotely because of COVID-19 and twelve percent for non-COVID-19 reasons.

Figure 48 shows that the number of full-time remote IT staff workers in Europe is 46 percent—less than the worldwide total, with 37 percent working remotely due to COVID-19. Even so, more than half of IT staff members in Europe are now remote at least part of the time.

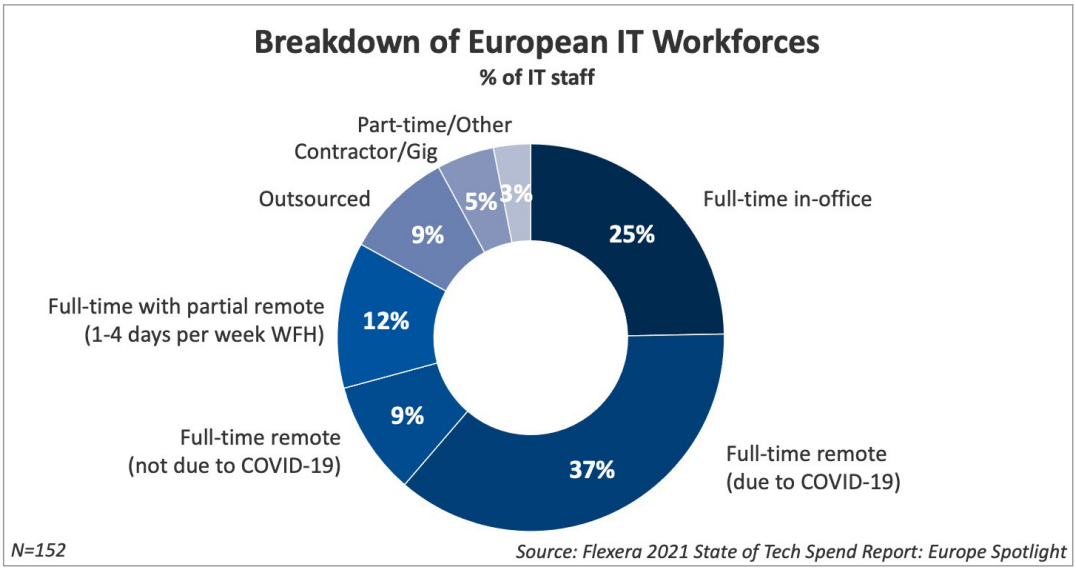

Figure 48. Breakdown of European IT staff

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European respondents expect that IT staff members working from home will return to the office sooner than their counterparts in the Americas. **Figure 49** shows survey results from Europe and the Americas. In Europe, 65 percent will return to the office by mid-2021 compared with 60 percent in the Americas. Of the staff currently working from home due to COVID-19, 17 percent are expected to work from home permanently once the pandemic ends compared with 20 percent in the Americas.

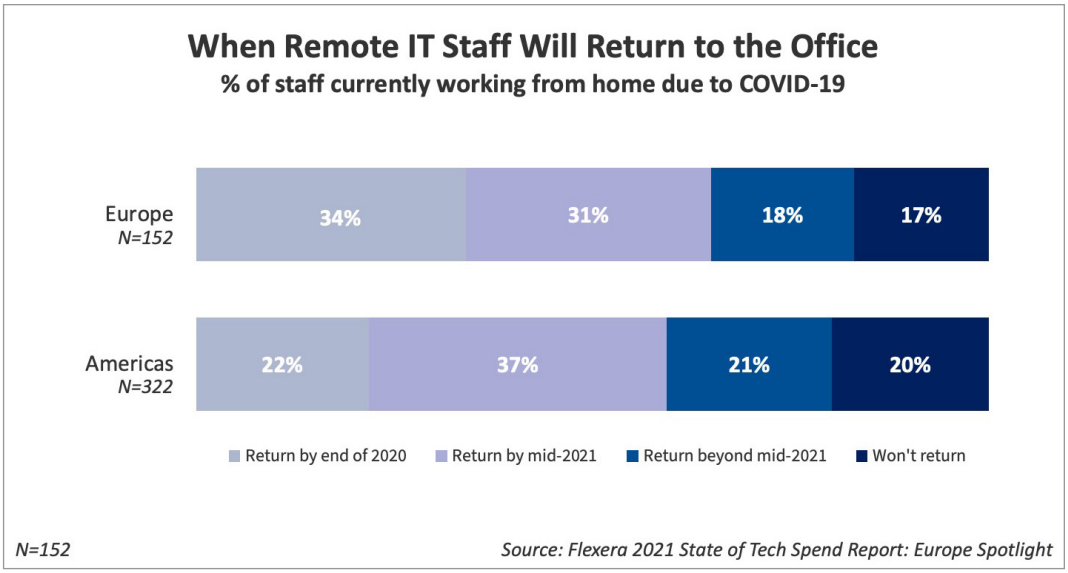

Figure 49. When remote IT workers will return to the office

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Flexera delivers IT management solutions that enable enterprises to accelerate and multiply the return on their technology investments. We help organizations *inform their IT* with total visibility into their complex hybrid ecosystems, providing the IT insights that fuel better-informed decisions. And we help them *transform their IT* with tools that allow IT leaders to rightsize across all platforms, reallocate spend, reduce risk and chart the most effective path to the cloud.

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