# 2023 Global Tech Outlook

**A Red Hat report**

Red Hat surveyed 1,703 information technology (IT) leaders to better understand where they are on their digital transformation journeys, their IT and non-IT funding priorities, and the challenges they are facing. The survey was conducted worldwide across a wide range of industries. Respondents comprised a subset of Red Hat customers together with others drawn from a broad industry panel. More than half of the respondents work at companies with more than US$100 million in revenue.

This is the ninth year we've conducted this research. While we're always probing new aspects of technology usage, many of our questions are consistent from year to year, allowing us to explore trends over time.

**Read this 2023 report to see what we gleaned from a survey conducted from May through June 2022, in six key areas.**

Red Hat

# 01

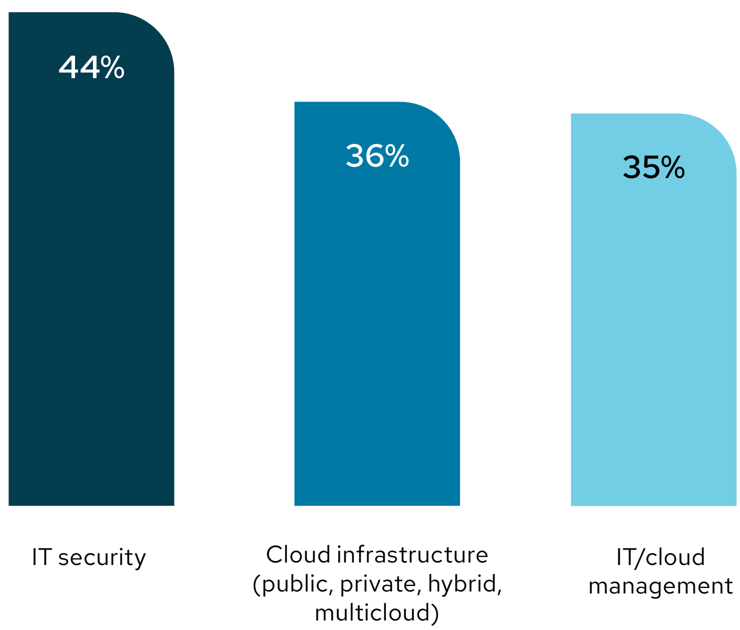
## Security a pervasive theme

Security is consistently top of mind across funding areas. Selected by 44% of respondents, IT security is by far the most common overall funding priority moving into 2023. This increased focus is also visible across other funding areas.

Security was the top IT funding priority this year, as it was the previous year, with 44% saying that it was a top three funding priority—a full eight points higher than the number two cloud infrastructure option. This was true across all regions and almost all industries. (Only transportation and logistics ranked security a little lower compared to cloud-related priorities.)

**Chart 1**

*Over the next 12 months, what are your company's top IT technology funding priorities? (Select up to three)*




As was the case in the previous year, network security (40%) and cloud security (38%) were the clear leaders within security when respondents chose their top three priorities. As was also the case in the previous year, third-party or supply chain risk management was the laggard, with only 12% of respondents saying that it was a top funding priority. Hiring security and compliance staff and upgrades/patch management were likewise laggards. One possible explanation is that the funding priorities tend to reflect the cost of often-pricey products rather than internal investments in people and process.

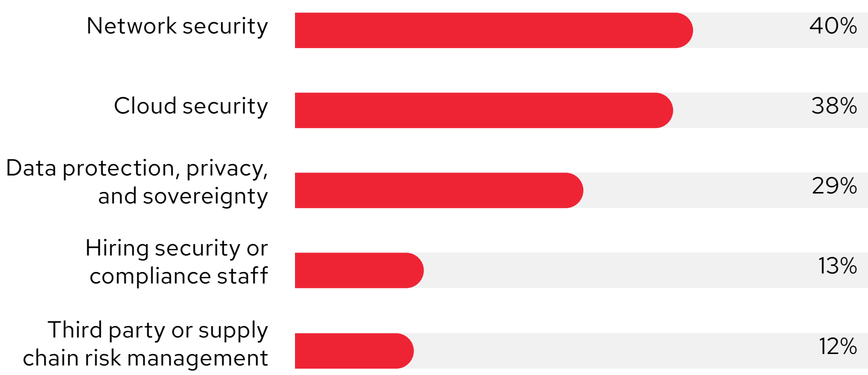



**Chart 2**

*Over the next 12 months, what are your company's top funding priorities for security?*

In general, security was a top funding priority within many categories. Cloud security was the top cloud infrastructure priority (42%). Data security and integrity, the top analytics funding priority this year (45%), edging out artificial intelligence and machine learning (AI/ML). And security automation was the top automation priority.


**Chart 3**

*Over the next 12 months, what are your company's top funding priorities for **cloud infrastructure** (public, private, hybrid, multicloud)?*


**Chart 4**

*Over the next 12 months, what are your company's top funding priorities for big data and **analytics**?*


**Chart 5**

*Over the next 12 months, what are your company's top funding priorities for **IT operations automation** (e.g., Ansible, Puppet)?*

In addition, over three out of four respondents "somewhat increased" or "significantly increased" their investments in securing access by applications to other applications or data sources, or both, this year. Nearly as many increased their investments in securing access by people.

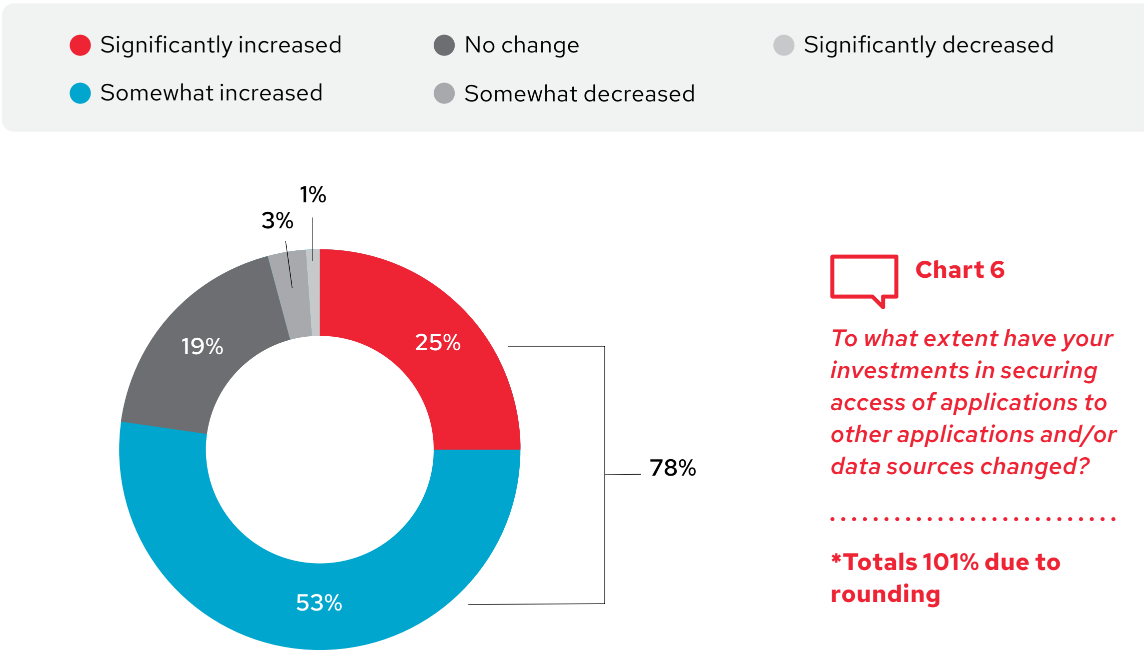



**Chart 6**

*To what extent have your investments in securing access of applications to other applications and/or data sources changed?*

***Totals 101% due to rounding**

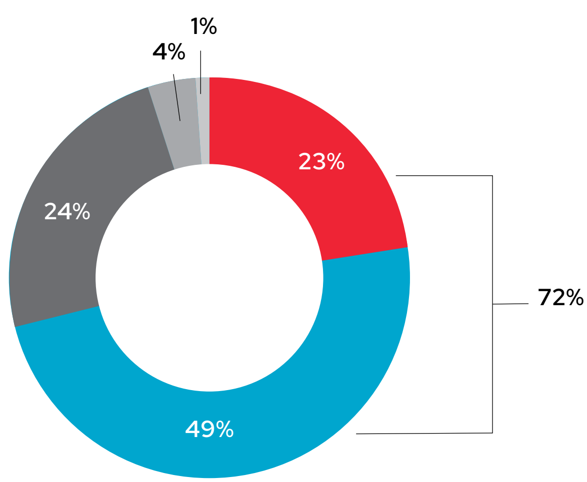



**Chart 7**

*To what extent have your investments in securing access of people to applications and/or data sources changed?*

***Totals 101% due to rounding**

# 02

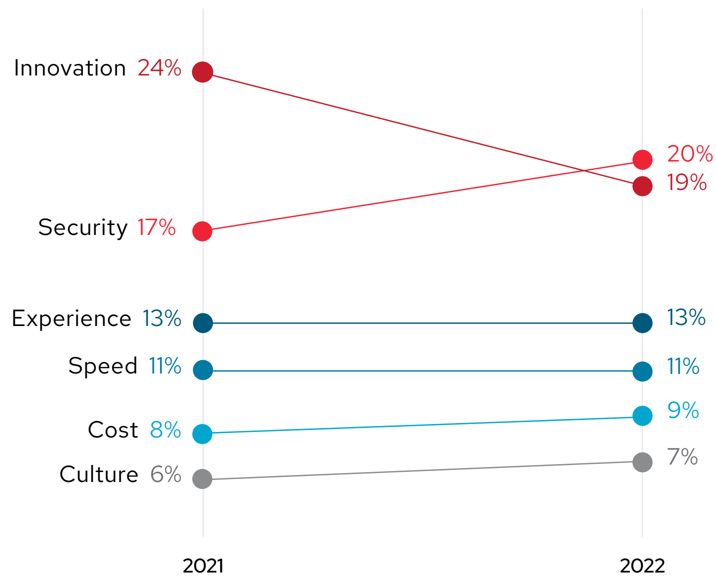
## Immediate concerns prioritized for digital transformation

Security takes precedence over innovation in an unpredictable global environment (but innovation remains important as you transform).

We also saw an uptick in security's overall prioritization as part of digital transformation initiatives.

**Chart 8**

***If you were to characterize your absolute top priority for your company's digital transformation in a single term, which of the following would best fit?***




Most of the priorities for digital transformation didn't move much relative to the prior year. Somewhat disappointingly given its overall importance, culture remains in last place at 7%, albeit up one point compared to the previous year. Priorities such as speed and experience remain unchanged at 11% and 13%, respectively.

However, the top two priorities shifted significantly relative to each other. Security took the new top position with a three-point increase from the previous year to 20%. Innovation dropped a full five points to second place, with 19% now identifying it as their absolute top priority for digital transformation.

**What's going on?** Is the emphasis on innovation that we've seen in so many surveys waning?

We don't think so. First of all, security barely edged out innovation (by one point) this year. Given that this survey question forced respondents to choose just one priority, it's not surprising that more of them chose security this year given all the well-publicized threats and data breaches. Indeed, the survey data showing that those accelerating their digital transformation ticked up to 23% of the total this year would be hard to square with a declining appetite for innovation.

That said, it's an unpredictable global environment. It therefore shouldn't be surprising that more immediate, concrete concerns are a bit more top of mind. Cost as an absolute top priority also crept up a little this year, albeit to only 9%—near the bottom of the list.

# 03

## Talent and skills gaps also widespread

Skillset or talent gaps remains the top digital transformation barrier. Hiring or reskilling talent gaps becomes more critical to transformation success.

This survey wasn't the first to identify talent and skills gaps, and it won't be the last. Have a conversation with decision makers in organizations, IT and otherwise. If they don't mention skill gaps as a challenge, it's probably because that reality is so obvious it doesn't bear mentioning.

When asked about their top funding priorities outside of IT, 37% of this year's respondents chose digital transformation strategy, barely edging out technical/ technology skills training for the top slot.

However, all the top non-IT funding priorities involve upskilling and people to a significant degree. After all, digital transformation isn't just, or even mostly, about technology; it's about people and culture, as well as process. Indeed, technology is a relatively small part of the mix. Furthermore, just down in the third spot is people/ process skills training (30%). The category, IT or developer hiring and retention isn't far behind (28%), as is compliance of which training is a component. Overall, it's fair to say that people dominate non-IT funding priorities.

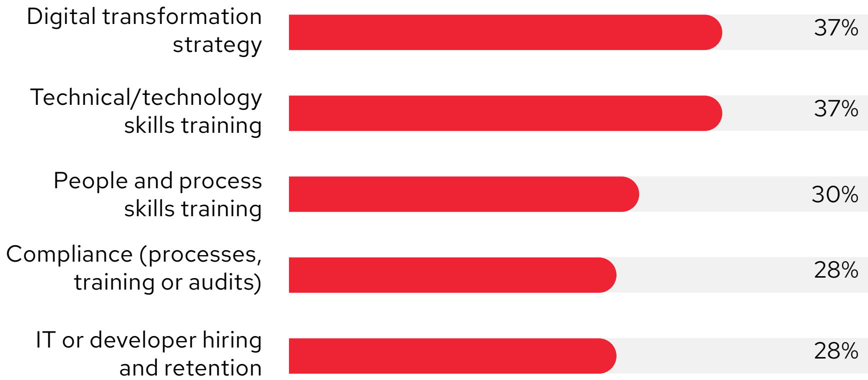



**Chart 9**

*Over the next 12 months, what are your company's top funding priorities outside of IT technology products or solutions?*

In other words, the top five non-IT funding priorities are all about people to at least some degree. Only hiring security and compliance staff among security funding priorities is a somewhat puzzling low-priority outlier as we've seen.

# 04

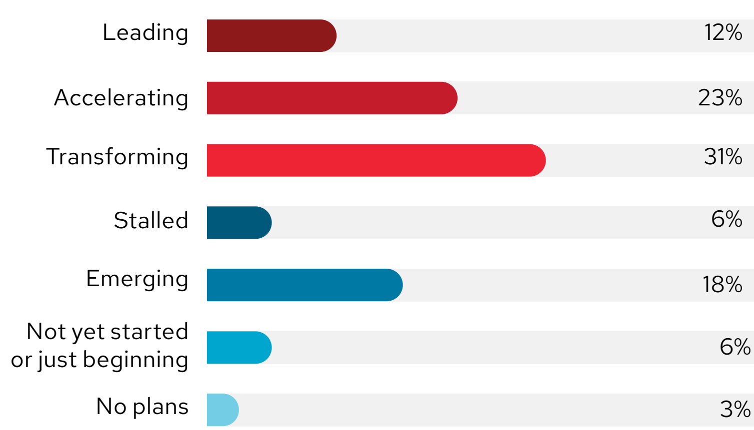
## A deeper look at digital transformation

Hybrid cloud strategies continue to dominate. Among industries, Education is looking to both catch up and accelerate.

The numbers for the organizations who have started on their digital transformation journeys, for the most part, don't look much different from the previous year's results. 12% said they were leading, 23% said they were accelerating, 31% said they were transforming, and 18% said they were emerging.

**Chart 10**

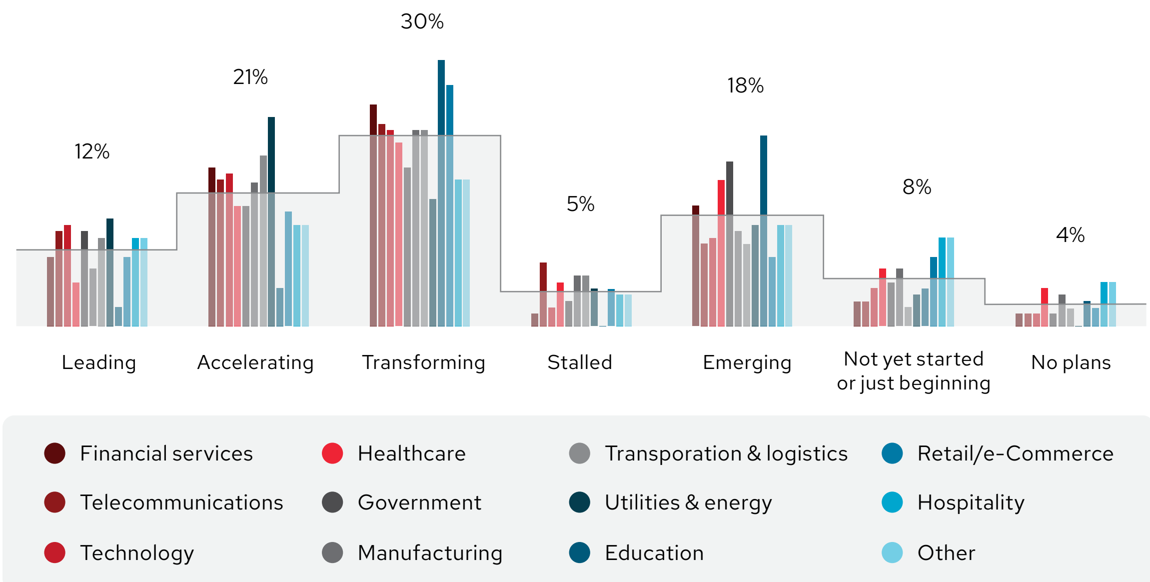
*Currently, where is your company in its journey to digital transformation?*



The biggest change was with those who said they were stalled. That category doubled in size, albeit to a still fairly low 6% in a category that saw a commensurate decrease the prior year. (So the number is back to where it was in our 2021 report.)

**Chart 11**

*Currently, where is your company in its journey to digital transformation?*




### Why the stalling?

In the previous year, it was unambiguous that the global pandemic was the main reason. This year the pandemic remained the most frequently chosen answer, but a variety of other factors—including financial and talent concerns—were chosen almost as frequently.

Let's now look at some of the interesting breakdowns by industry within this year's overall digital transformation data, which generally had more pronounced differences than the previous year's results.

One clear outlier was education, in which respondents were nine points less likely to say they were leading in digital transformation and 16 points less likely to be accelerating than the industry average. Education identified skill set and talent gaps, along with technical debt, as particular barriers relative to other industries. Healthcare was also well below average, in general, with leading, accelerating, and transforming categories all trailing the industry average.

By contrast, most of those above the average were just a few points ahead. However, utilities & energy was five points above in leading, and 11 above in accelerating. Telecommunications was also above the mean in the leading, accelerating, and transforming categories—although it was also significantly more likely to have its digital transformation stalled. Technical debt was the greatest barrier in telecommunications relative to the overall average.

# 05

## Who makes the call

Technologists can influence but aren't necessarily the final decision makers.

There's a fairly widespread belief in at least some tech circles that the technologists within organizations, even at the grassroots level, are making more of a company's technical decisions than ever before. This is in sharp contrast to the historical stereotype of technology staff being told to use whatever product some vendor had sold to their boss.

**Does the data support this belief or not?** Only in part.

We asked those in a variety of management and technologist roles whether they were the decision maker or a decision influencer for software, hardware, or cloud purchases. Although the question asked who was the decision maker, the responses should probably be taken in the vein of whether they have a significant direct say in the final outcome, given that the percentages total up to well over 100%.

Among this group of either decision makers or influencers, a significant majority of president/C-level (92%), vice president (78%), and director (74%) roles said they were the decision maker—along with just over half of managers.

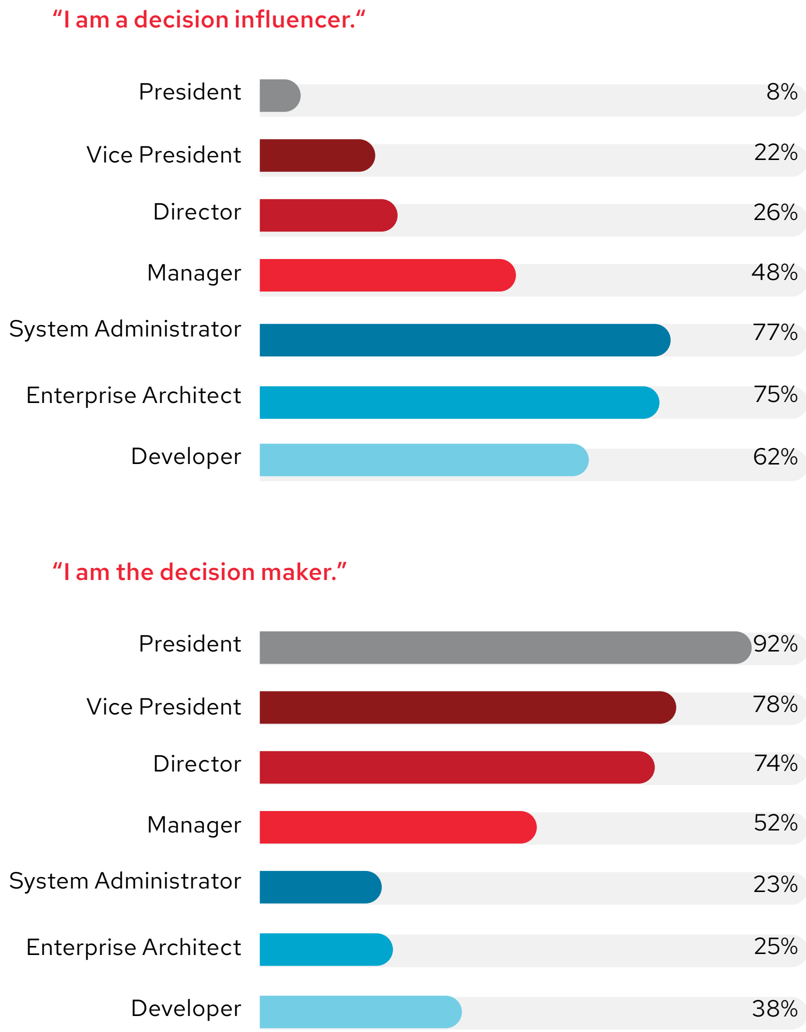



**Chart 12**

*When it comes to making decisions about hardware, software, or cloud purchases, which best describes your role?*

System administrators (23%) and enterprise architects (25%) were far less likely to say they made the decision rather than just influencing it. How about developers? Here it gets interesting. 38% said they made decisions. While lower than the management roles, this is still a large minority.

While the data does not support a thesis that IT decision-making authority in organizations has mostly devolved to developers, it does support the idea that developers at least see themselves as having increased authority. This is the case compared both to other technical roles today and to the historical stereotype of management making all the decisions. In addition, even when developers don't have the final say, they often influence technology choices at least to some degree.

# 06

## Data storytelling used to gain executive buy-in

Executives look to data to guide digital transformation strategy. Turn data into insights to elevate your points.

We also looked at how responses to our questions differed by role and level in the organization. One particular result, with clear implications, stood out.

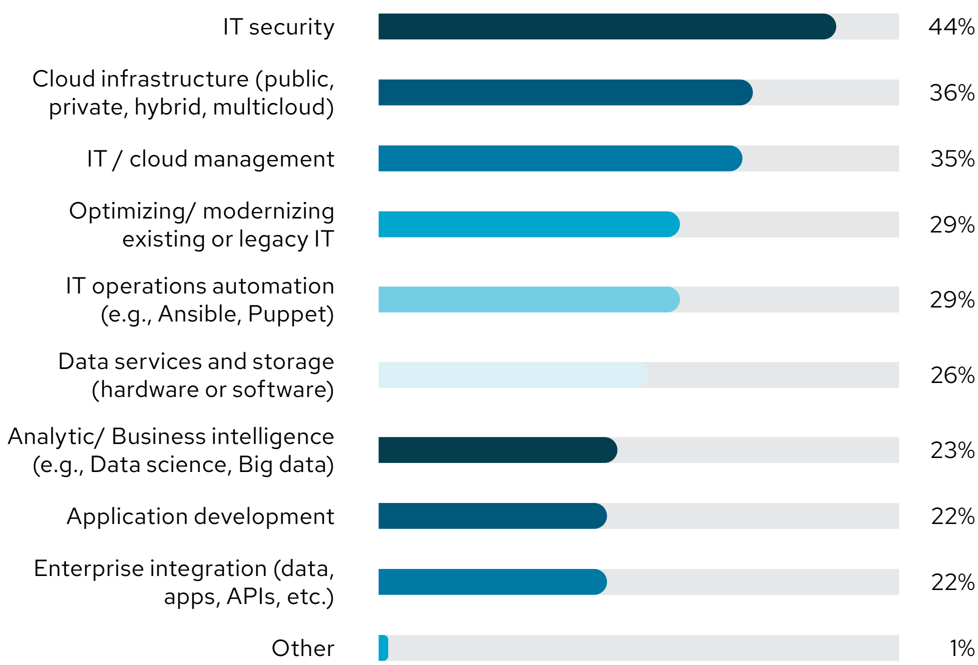
When we asked, "What do you think is most important for your company to be successful in its digital transformation?" the higher up the management chain they were, the more likely our respondents were to choose "gaining data insights/business intelligence" as a top priority. A similar pattern played out when we asked about top barriers. In this case, management roles were mostly significantly more likely to choose "minimal data analytics or insights."

The implication is clear. If you want to influence decisions, those who overwhelmingly say that they are the decision makers want to see data. If you can provide that data—and, just as importantly, insights associated with that data—you'll be in a much better position to influence outcomes.

## Appendix

Original survey questions and answers have been condensed in the main text for readability. Please note that some charts highlight specific selections rather than all response options. This appendix includes the charts with the full questions and answers as they were posed in the survey.

### Chart 1 | Over the next 12 months, what are your company's top IT technology funding priorities? (Select up to 3)

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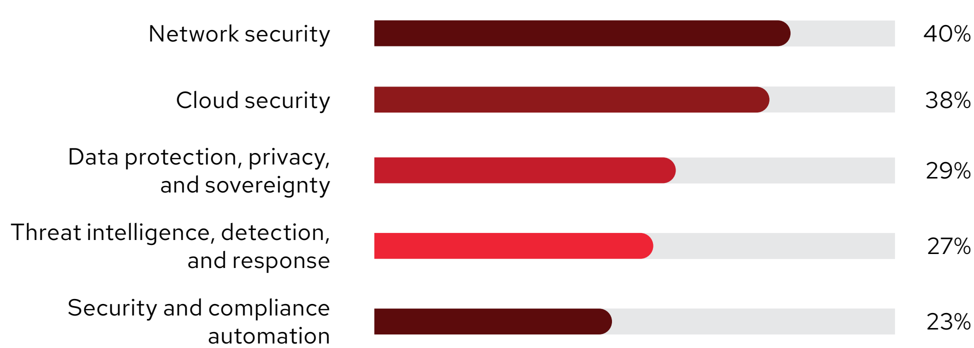

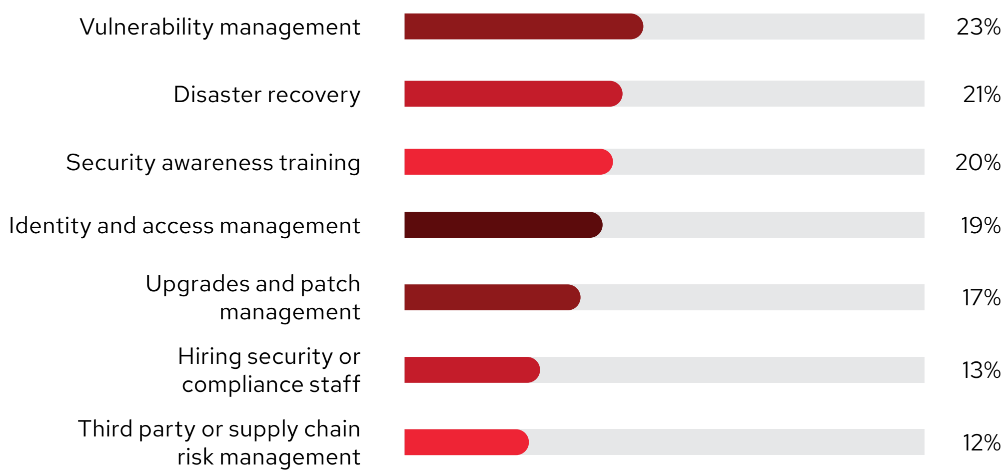


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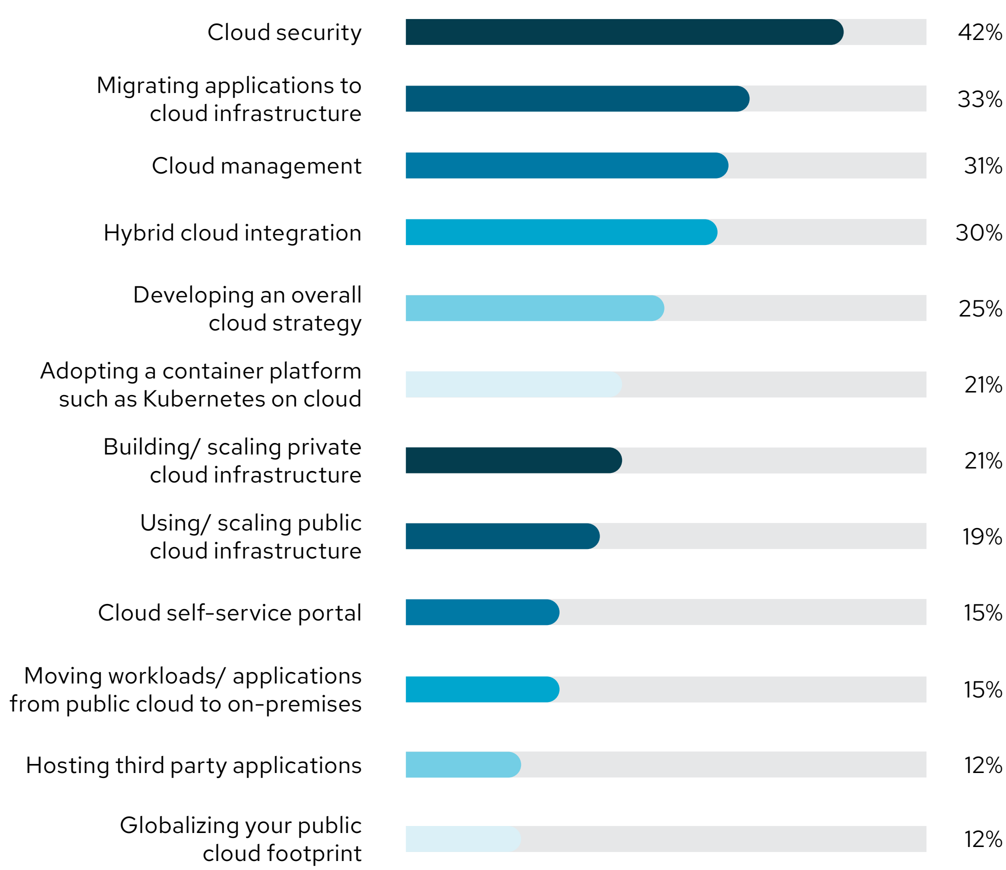

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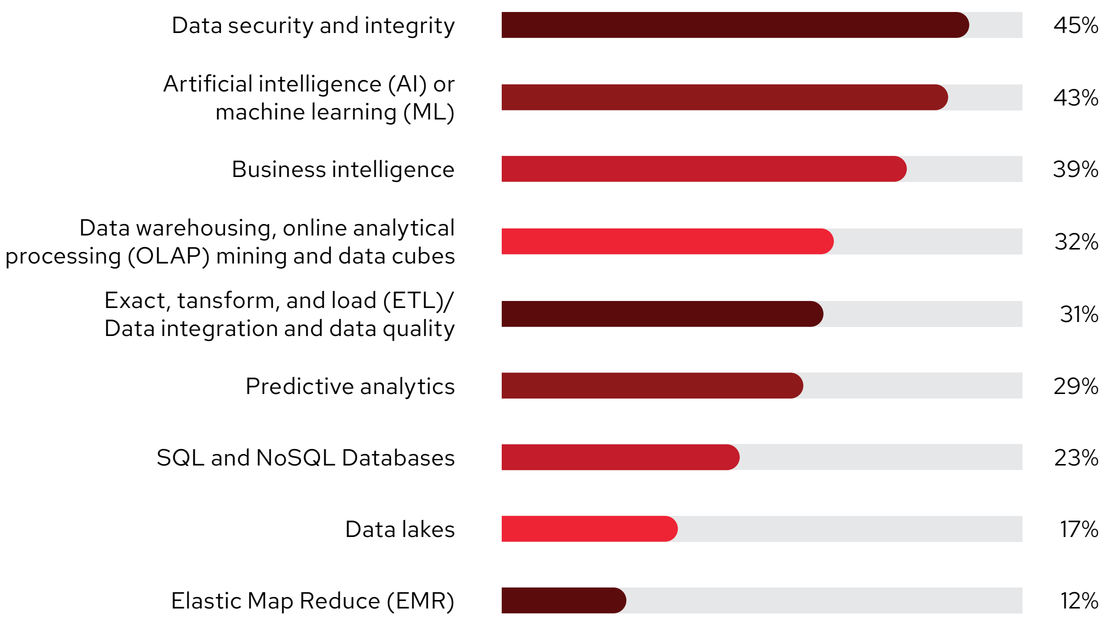


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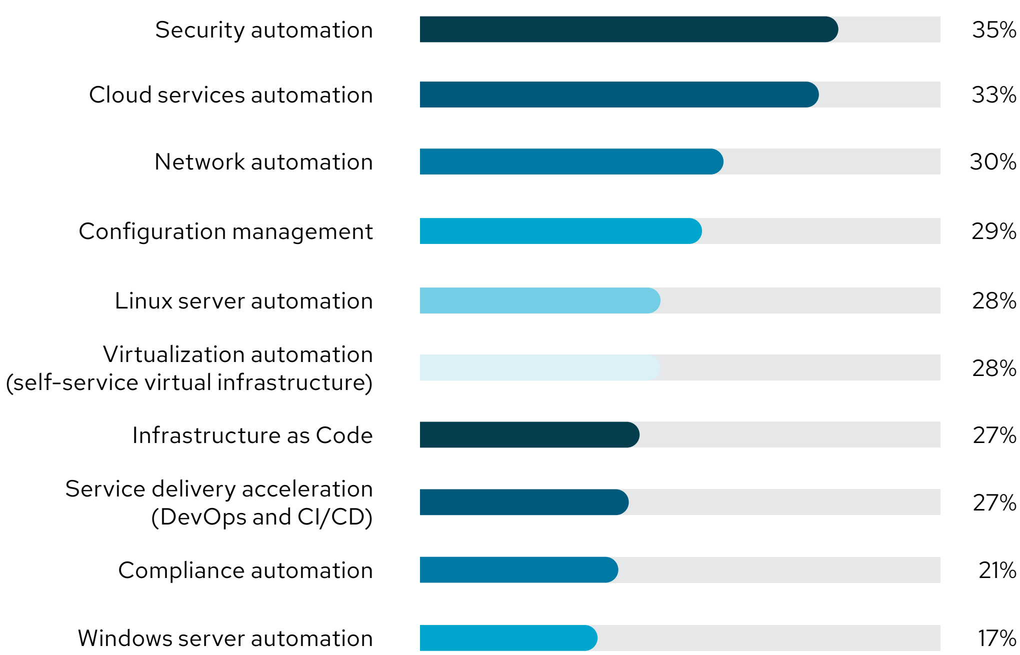

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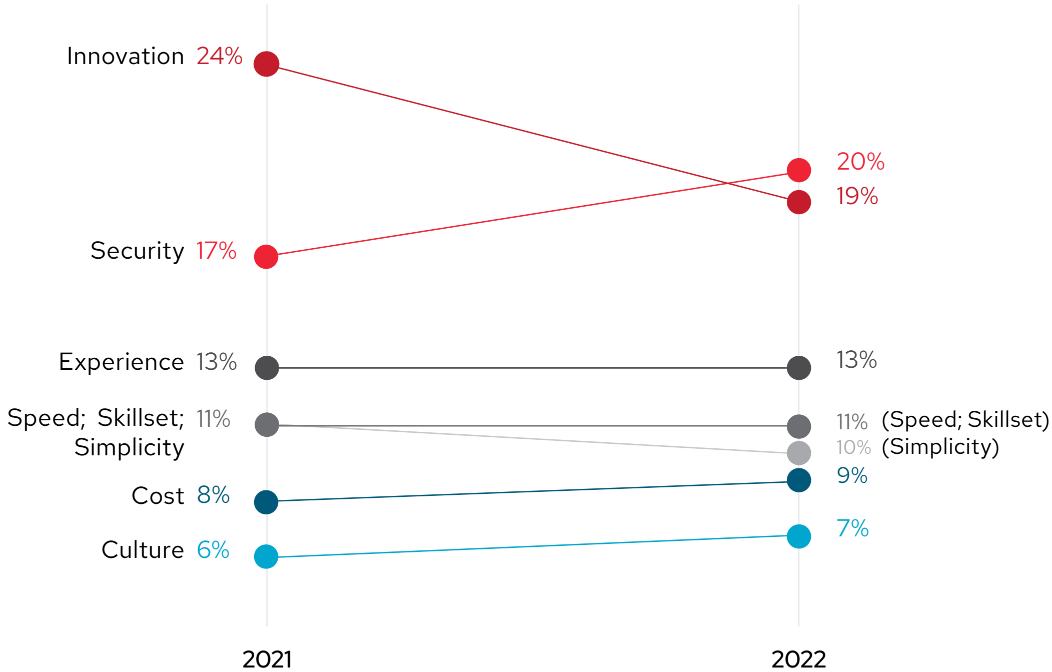


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