



CompTIA®

# IT Industry Outlook 2026

Research Report

January 2026 release



## Summary

Over the past twelve months, economic uncertainty has combined with a more measured approach to digital transformation, forcing companies to consider the future of their technology architecture. Artificial intelligence appears to be a significant part of the solution, but it is unlikely to reach its full potential without comparable investments in cybersecurity, data, and infrastructure. These investments, of course, are not limited to specific tools but also include the skills required to integrate those tools effectively.

CompTIA's IT Industry Outlook 2026 report examines the major trends that will drive technology and business strategy over the next twelve months. Education and evolution around tech components, along with deeper maturity in skills-based workforce approaches, will lead organizations toward their ultimate goals or automation and enhanced productivity.

- 77%** Percent reporting (net) feeling good about their organization's prospects in the coming year
- 94%** Percent reporting (net) at least somewhat likely to invest in AI-specific training in 2026
- #1** Rank of privacy concerns as a driver for 2026 cybersecurity strategy, indicating a need for stronger governance
- 52%** Highest rating of data domain with strong organizational capability (data security)
- 54%** Percent reporting partial digitization of workflow with automation efforts happening in parallel
- 83%** Percent reporting expectations for the technical support function to further grow skills to support a digitally capable workforce

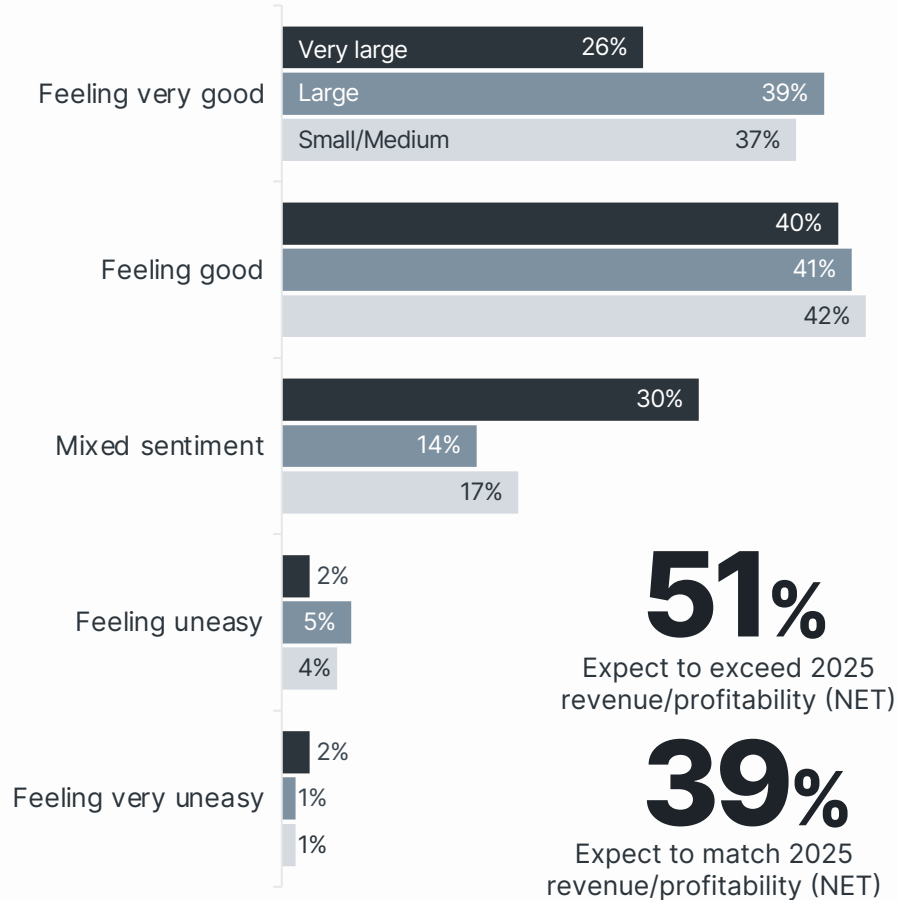
See Methodology page for survey administration and sample details

## 2026 Trends

- 1** | The AI push continues...along with the push for organizational value
- 2** | Cybersecurity expands its reach...and training evolves to keep up
- 3** | Businesses double down on data practices...building toward strategic objectives
- 4** | Automation drives workflow renovation...with strong technical teams behind the effort
- 5** | Workforce pipelines become a focal point...as companies translate skills to tasks

## Business sentiment still cautious for the coming year

Following a year of economic turmoil that put many purchases on hold, businesses remain somewhat cautious about the coming year. While CompTIA's sentiment forecast last year was gathered specifically among IT industry firms, this year's data across a broader range of industry verticals is in line with previous viewpoints, indicating a desire to search for efficiencies and be selective with investments.



## Optimism driven by plans for internal improvement

Three of the top five drivers for optimism in 2026 projections are related to operational improvement. AI adoption may become a top factor in these improvements, but workflow transformation and skill building will also be necessary ingredients.

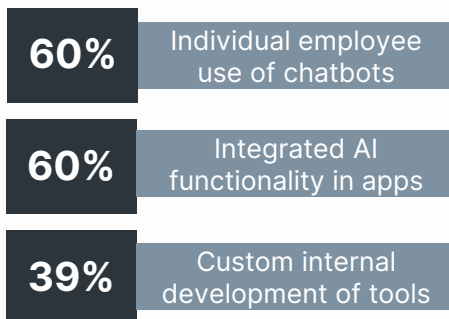
- 1 Improved operational efficiency [51%]
- 2 Using AI for productivity [45%]
- 3 Reaching new customer segments [45%]
- 4 Improvement in sales/marketing [42%]
- 5 New lines of business or new products [37%]

## Economic factors weigh on corporate forecasts

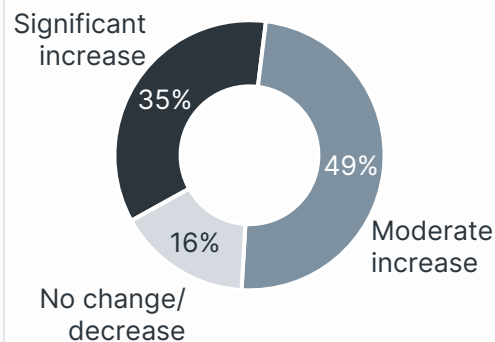
Economic uncertainty, including tariffs or some other unexpected events, continue to place downward pressure on purchase decisions. Although global politics remains out of the control of most businesses, developing strong plans for a skilled workforce is a key tactic in weathering the unknown.

- 1 Broad economic uncertainty [49%]
- 2 Trade turmoil/tariffs [45%]
- 3 Customers spending less [37%]
- 4 Availability of skilled workers [30%]
- 5 Unexpected shock [30%]

## Custom development not a focus of AI adoption



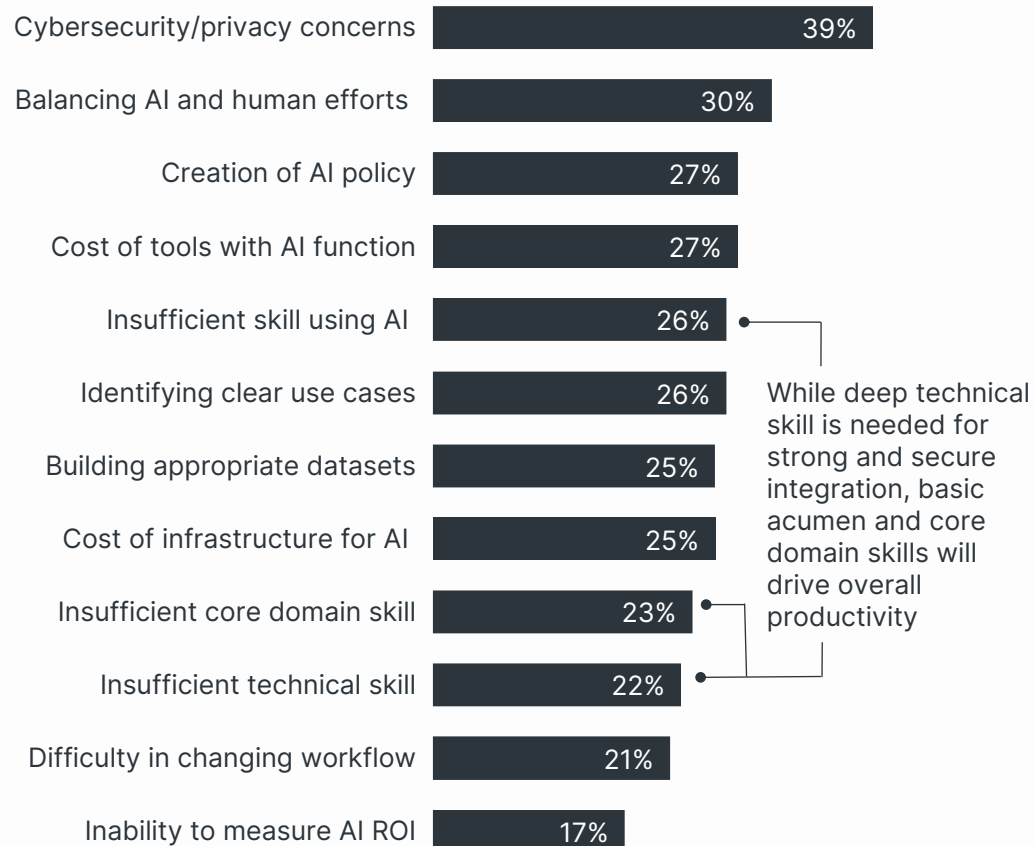
## AI investments set to increase in 2026



As companies pursue greater adoption, AI fluency and AI extensions of existing skills will be critical to maximizing potential.

## Challenges in AI adoption reflect a wide range of issues to resolve for full implementation

The list of AI-related challenges runs the gamut from technical issues like cybersecurity to operational issues like policy and workflow. As investments increase, it will be critical to understand the total cost of AI implementation and to ensure a workforce capable of deriving business value.





## Companies are focused on addressing AI skills across the entire workforce

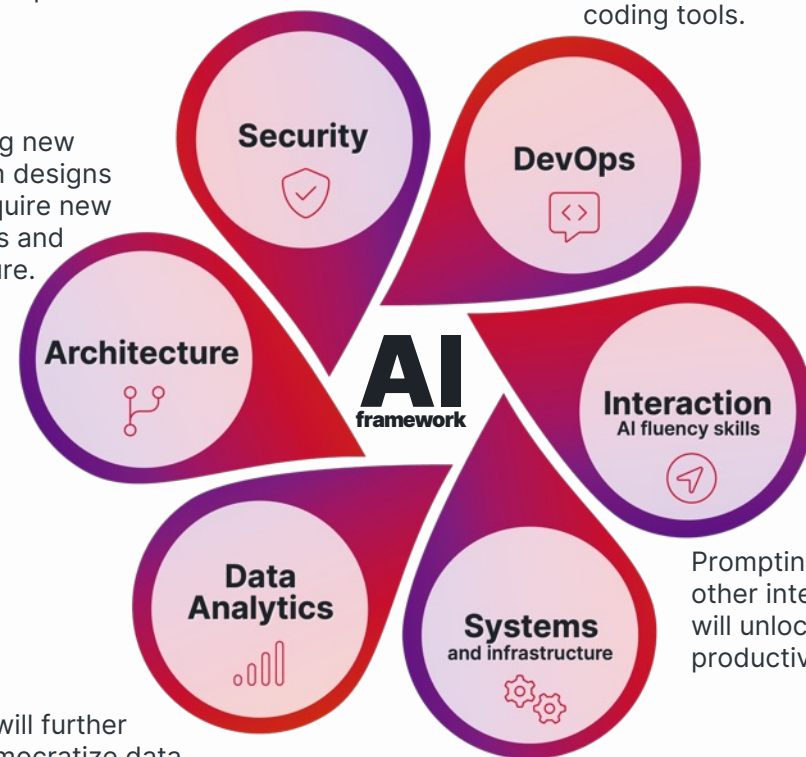
Basic understanding of AI functionality	46%	With AI behaving differently than traditional software, AI fluency is needed for proper operation.
Use of AI to extend core job functions	43%	Most adoption of AI extends skills and knowledge that already exists.
Awareness of AI-driven security threats	40%	Just as AI improves internal efficiency, it can improve the efficacy and reach of threats.
Techniques in using AI for automation	40%	Automation is an end goal for many firms, but it requires strong knowledge of workflow.
Using AI to extend data analysis	39%	AI can accelerate and augment data analytics provided the data is managed properly.
Best practices for securing AI systems	38%	In addition to securing data and systems, there must be strong governance around AI usage.
Preparing data for AI input/training	37%	AI output depends on input, and building appropriate data sets is part of data management.
Building input/prompts for AI	35%	Efficient prompting will boost productivity as employees build AI into daily routines.
Creating AI agents	31%	Agents can handle complex processes but also require supervision and adjustment.

## AI framework domains impact variety of job roles

Security professionals must know how to utilize AI and defend against new threats, and AI security basics are part of workforce awareness.

All parts of the software development lifecycle (SDLC) will evolve with the emergence of AI coding tools.

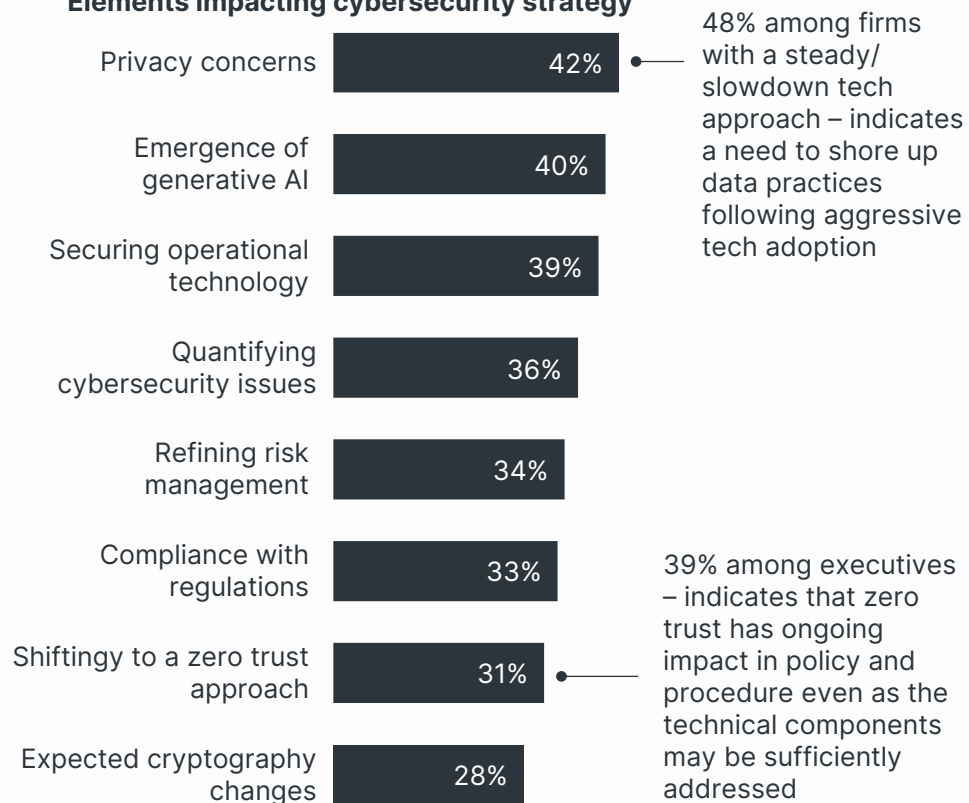
Building new system designs will require new policies and structure.



## Cybersecurity Strategies Must Respond to a Rapidly Changing Digital Business Environment

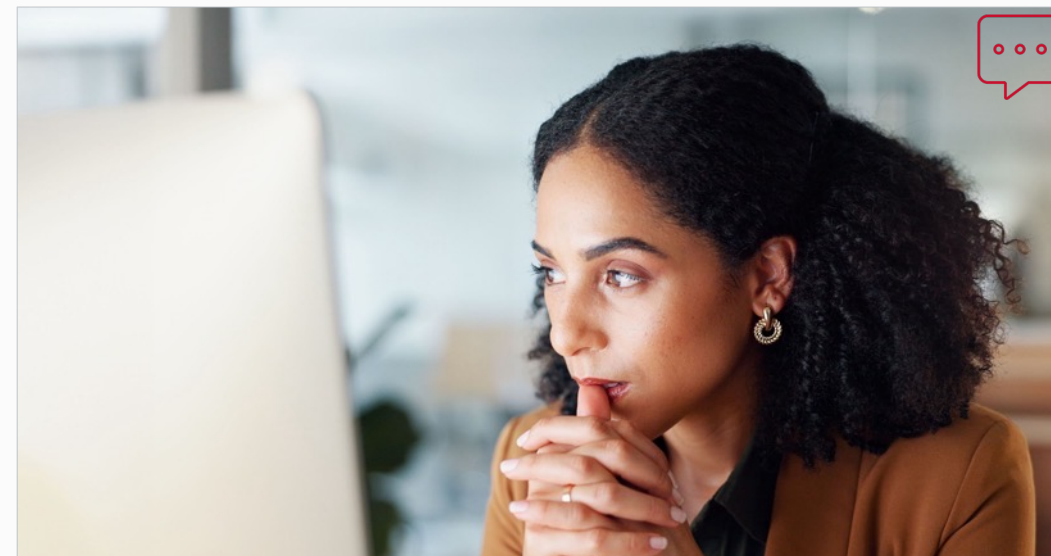
The discipline of cybersecurity was born out of the complexity and critical nature of digital workflow. That complexity and criticality continue to drive strategy, as organizations contend with the ramifications of emerging technology and the requirements for successful operations.

### Elements impacting cybersecurity strategy

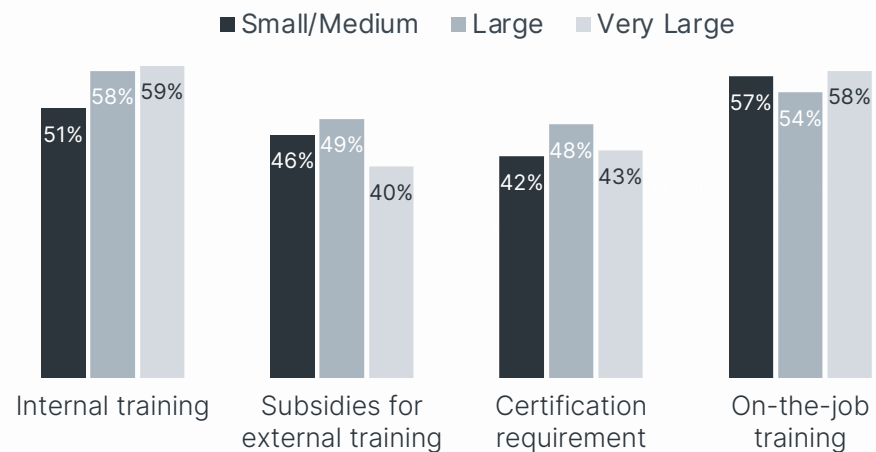


## Making Cybersecurity Plans for a Post-Quantum World

Cryptography has never featured as a top priority in CompTIA's research. In previous versions of CompTIA's State of Cybersecurity reports, cryptography ranked low as a skill to be improved, and this study finds expected cryptography changes are not a major part of future cybersecurity planning. In a similar vein, quantum computing has been on the horizon for years now, making it difficult for executives to fully appreciate the potential impact. However, the threat of quantum computing to existing cryptographic practices is too large to ignore. If quantum systems become able to crack today's algorithms, entire architectures will instantly become vulnerable. While businesses may not need individuals who understand every detail of post-quantum cryptography (PQC) algorithms, they need individuals who can describe the risks and plan the transition. This includes several areas of expertise: building systems with crypto agility that can evolve as standards change, ensuring compliance with government regulations and vendor implementations, and constructing networks that can handle the potentially larger load of PQC keys and signatures. This work cannot wait until quantum systems are widely available, especially as malicious actors may harvest data now to be encrypted later and operational technology components have significant upgrade challenges.



## Multiple options expected to build cyber skills



## Skills in demand reflect a need for robust cybersecurity workforce and pipeline

Cybersecurity professionals have traditionally been a branch of the broader infrastructure team. This view, signaling the more advanced nature of cybersecurity, typically drives a demand for experienced candidates to fill cybersecurity needs. However, the complex nature of modern cybersecurity is forcing companies to consider how they build depth from early career roles to expert-level architects.

**54%** Data security

**29%** OT security

Securing components of digital architecture is the foundational piece of a cybersecurity strategy.

**42%** Risk management

**34%** Threat intelligence

**30%** Incident response

**22%** Penetration testing

The knowledge base and processes followed by the security team tie cybersecurity health to organizational success and drive proactive behavior rather than waiting to react to a security incident.

**43%** Security data analysis

**42%** AI-enabled operations

**31%** Process automation

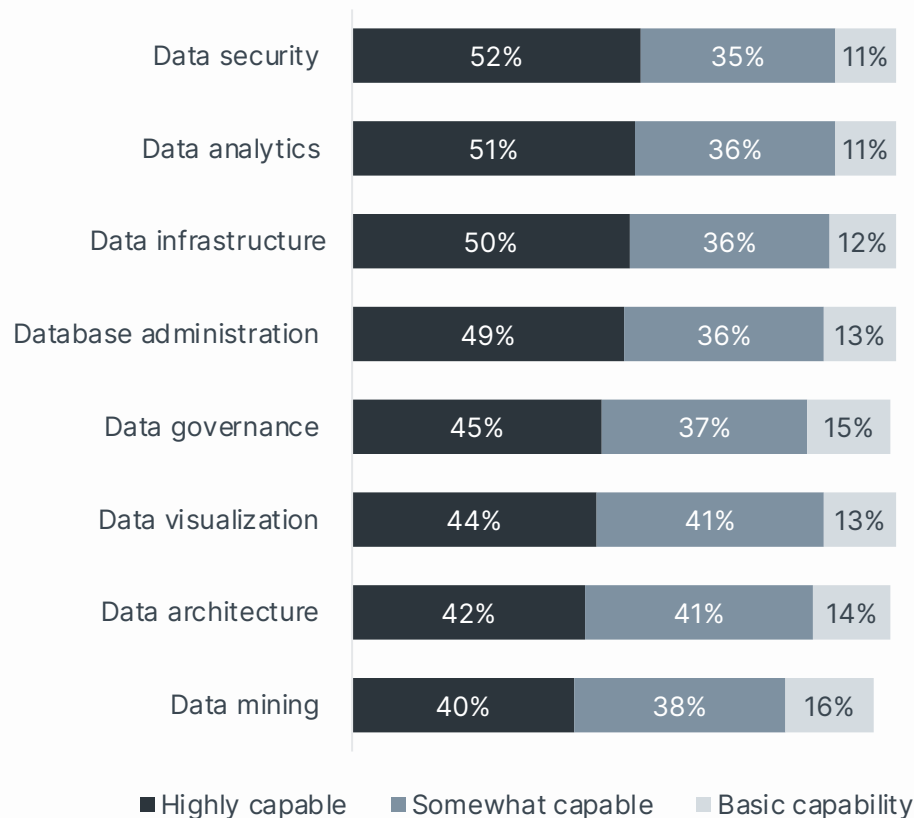
Streamlining operations is critical for security teams that are increasingly spread across many organizational imperatives.

**34%** Workforce education

Workforce enablement is critical in modern digital environments

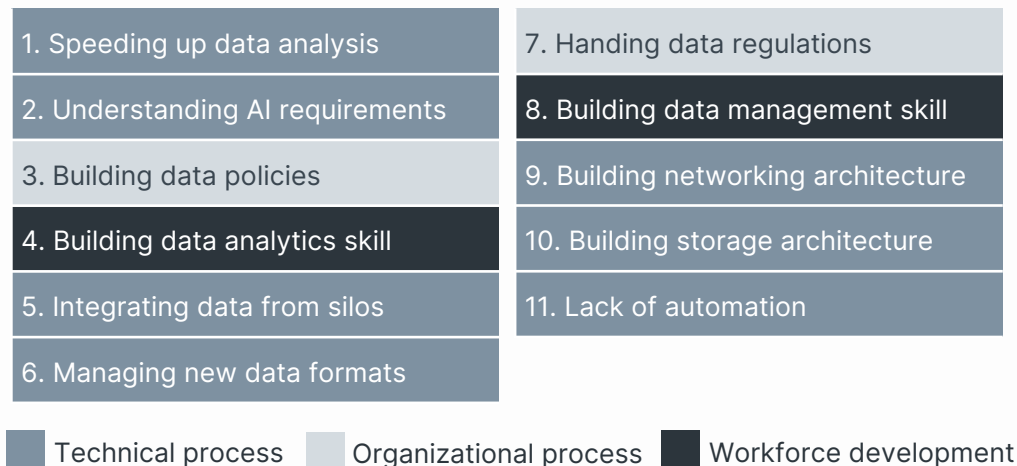
## Most firms are not highly capable in data practices

The field of data is the most recent standalone discipline within technology, so it makes sense that many organizations are still coming up the learning curve with their data practices. As with cybersecurity, the importance of data to overall operations dictates not only technical prowess but also organizational planning and policy. Data security has gotten serious focus in a cloud-first technology landscape, and improved data analytics has been a top goal for several years. However, the more foundational components of data management—database administration, data governance, and data mining—must be addressed before advanced tactics can succeed.

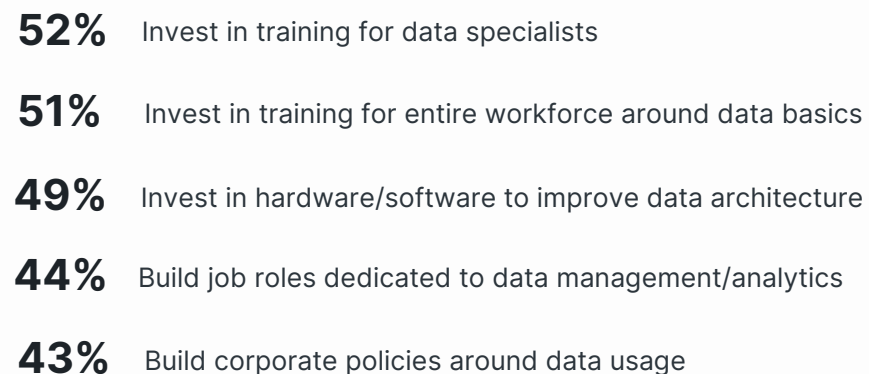


## Data challenges require comprehensive strategy

The dual skillsets of data management and data analytics will help drive the technical processes that dominate the list of data challenges, but companies must also consider the ripple effects of infrastructure buildouts and cross-departmental coordination.



## Planned steps to improve data practices





## Workflow evolution and automation are advanced stages of digital transformation

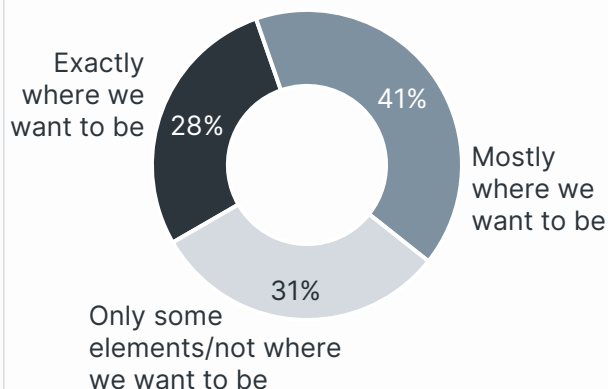
Digital transformation has been a long process because of the way it changes workflow. Few companies have an in-depth understanding of every workflow component, so digital enhancement often drives undocumented changes.

54%

Partially digitized workflow and working in parallel on further digitization and automation

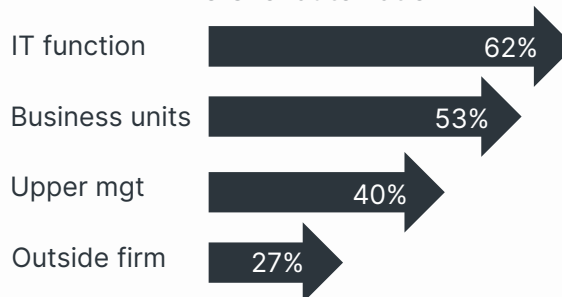


### State of automation

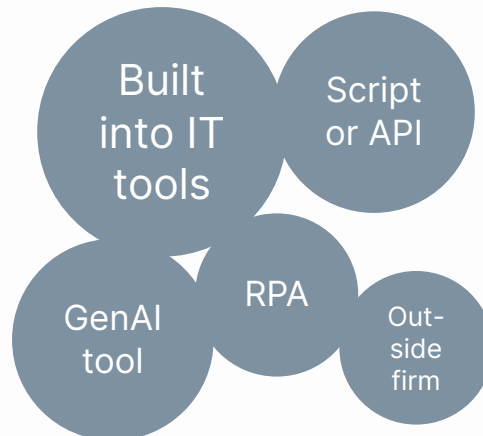


## Automation approaches may vary based on motivation and objective

### Drivers for automation

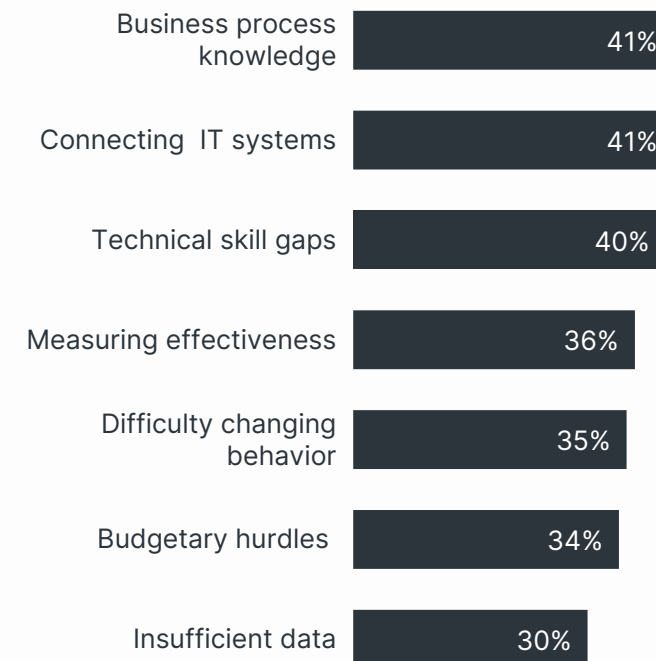


### Methods of automation



## Challenges of automation highlight issues beyond technology

Ubiquitous computing power and highly digitized environments have allowed for extremely complex processes to be automated, possibly leading to a belief that nearly any process can be automated. The reality is that many business processes still hold tremendous complexity, with little data to document how problems are solved or decisions are made. There are certainly challenges in having the appropriate technology systems or skills, but many automation efforts will likely struggle to be fully contextual, even before taking into account the new employee behaviors that truly leverage automation.





## Technical support remains a critical part of digital operations

**83%**

Companies planning to build technical support skills to handle the demands of a workforce that is more digitally capable.

**92%** Among firms with an aggressive approach to technology

**90%** Among executives

### Top focus activities in technical support

- #1** Educating end users on proper use of technology and security
- #2** Using AI to find solutions or discover patterns in user requests
- #3** Understanding patterns in end user requests to identify problem areas
- #4** Improving ticketing system and process (ease of use, response time, etc.)
- #5** Providing support for specific high-profile applications



## Companies claim relative strength in building career paths across technical domains

On a scale from 1 to 10, a healthy number of companies rate themselves at 8 or better in terms of creating pathways from technical support into other areas of technology.

### Infrastructure

59%

The most traditional pathway from tech support, this area may be getting less focus as other areas are prioritized.

### Software Development

58%

Firms continue to build out and evolve internal development efforts for AI implementation and customization of applications.

### Data

65%

Both the management and analysis of data can be specializations built from a tech support foundation.

### Cybersecurity

65%

Some firms may be exploring specific early career cybersecurity roles, while others use tech support as a pipeline.

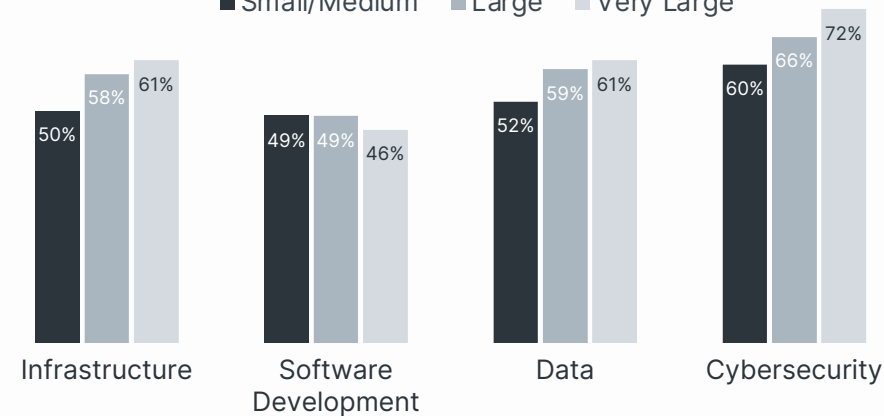
### Technical Project Management

57%

Project management requires a wide range of technical and organizational knowledge, making it a natural step from tech support.

## All tech domains seen as critical for creating and supporting digital workflow

■ Small/Medium ■ Large ■ Very Large





## Expected actions to address skill concerns

Training for existing employees remains the most common plan for addressing skill gaps in the coming year. Especially when combined with industry-recognized certifications, this allows companies to capitalize on the institutional knowledge they already possess while expanding expertise and best practices to tackle new tasks in AI environments.

**64%** Training within current skill set

**47%** Pursuing industry-recognized certs

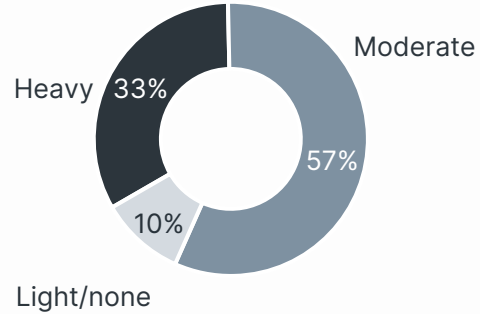
**45%** New hiring

**42%** Transfer into new roles

**35%** Partner with outside firms

## Skills-based approaches are a priority but still require further definition

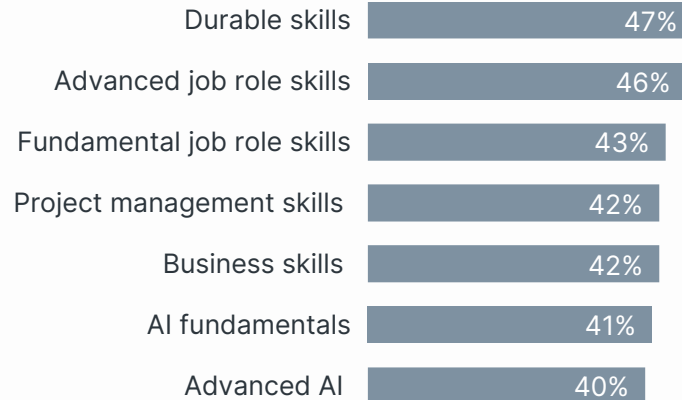
### Current skills-based investment



Nine out of ten companies have made heavy or moderate investments in a skills-based workforce approach, but it may be difficult to determine if these investments are producing the desired results.



### Critical skill domains

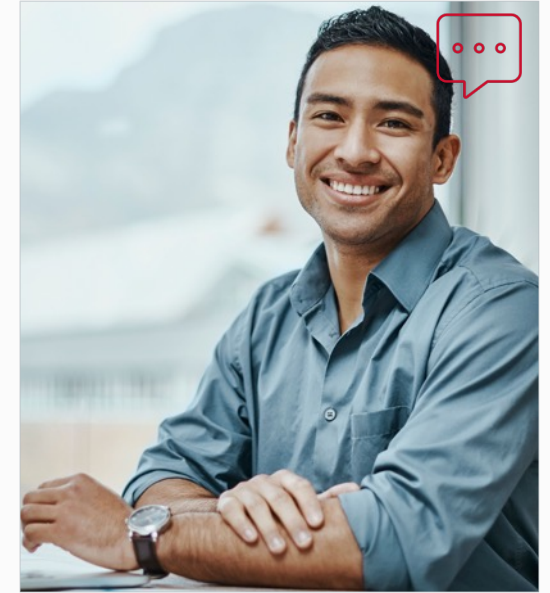


To fully pursue a skills-based approach, companies need to improve understanding of the skills needed, which are still dominated by durable skills and skills connected to specific job roles.

## All options being explored as companies transform their workforce

Workforce development must be highly flexible in today's rapidly changing environment.

- 1 Upskilling existing technical staff
- 2 Cross-skilling existing technical staff
- 3 Reskilling technical or business staff





## Methodology

CompTIA's IT Industry Outlook study was conducted via a quantitative survey fielded online during October/November 2025. A total of 1,012 business and technology professionals completed the survey, yielding an overall margin of sampling error proxy at 95% confidence of +/- 3.1 percentage points. Subsets of the data and segmentations will have higher estimated sampling error rates.

As with any survey, sampling error is present and will be higher for subsegments of the dataset. While non-sampling error cannot be accurately calculated, precautionary steps were taken in all phases of the survey design, collection and processing of the data to minimize its influence.

For additional trending information, please see the prior year releases of CompTIA's IT Industry Outlook research.

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