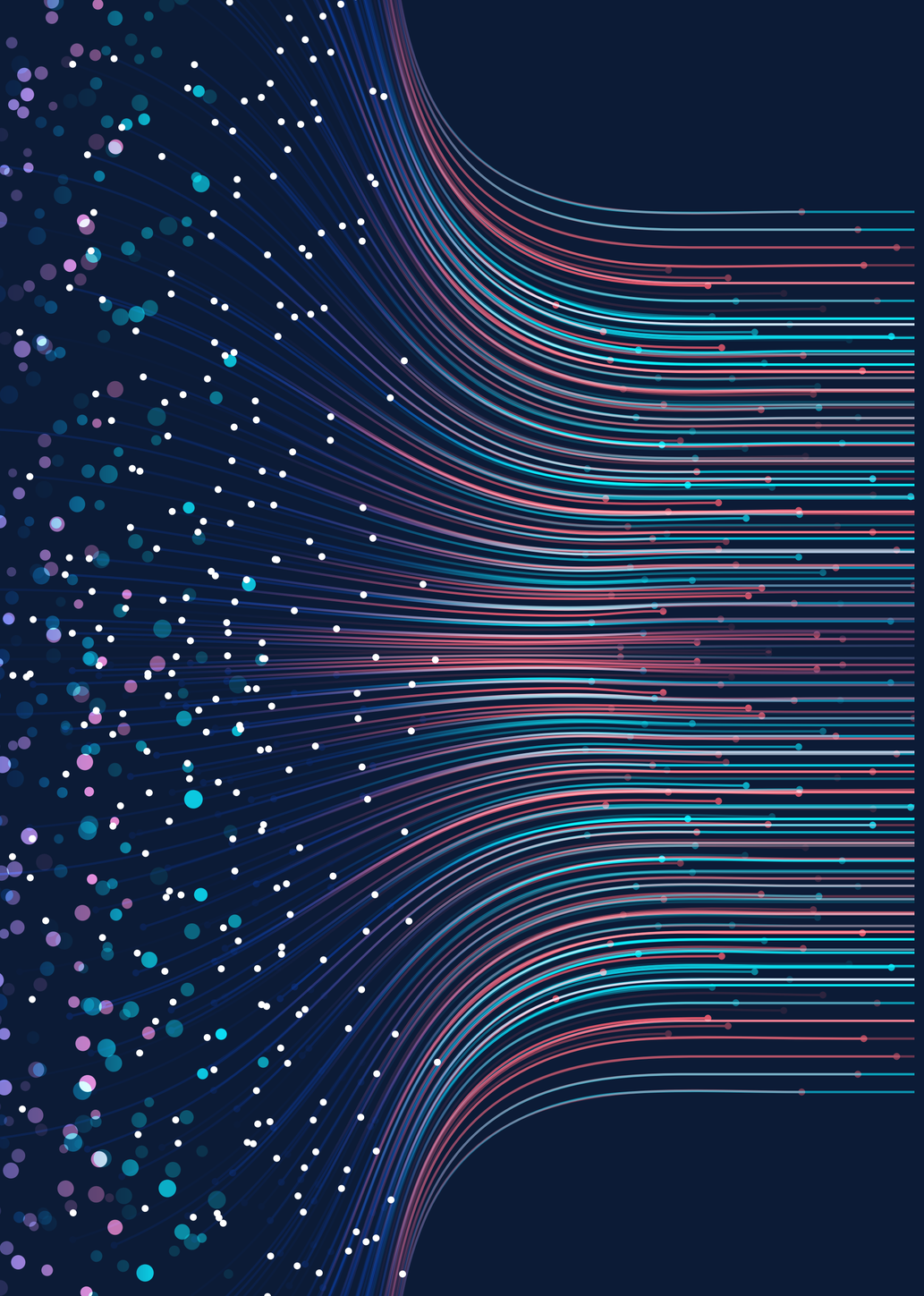

ManageEngine

State of Observability 2025

A report on adoption, challenges, and the path forward

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Introduction

Between December 2024 and January 2025, ManageEngine surveyed over 1,240 C-suite and IT professionals—including directors, managers, network/system administrators, developers, and architects.

They represent around a dozen industries and include organizations ranging in size from fewer than 50 to over 5,000 employees, operating across 75 countries worldwide.

This report is based on findings from the survey. We hope it offers you a data-driven perspective on the state of observability in 2025—including organizational maturity levels, adoption drivers, benefits and ROI, roadblocks, vendor concerns, and plans for the year ahead.

Report highlights

Maturity stage

Most organizations are in the early stages of observability (50.2%), with only 15.8% at a mature stage.

The former are focused on formulating an effective observability strategy, while the latter are integrating observability solutions with value-adding tools.

Adoption drivers

Visibility into distributed IT environments, a stronger security posture, and improved operational efficiency are the core drivers of observability adoption.

On the business front, ensuring continuity and fostering IT innovation take priority.

Metrics and ROI

Observability delivers better in terms of operational efficiency, service uptime, and IT security but falls short in providing visibility across the IT stack.

Yet, the ROI is undeniable—81% of respondents saw more than a 100% ROI.

Report highlights

Adoption barriers

Cost and skill gap are the major adoption barriers. Cost concerns mostly stem from three factors:

- Paying for unwanted bundles to get the modules needed
- Unpredictability of observability bills
- CapEx and OpEx of data management costs

AI gaps and needs

Over 40% of respondents say the AI/ML features in observability tools meet their operational needs, while an equal proportion find them unreliable.

Expected features include advanced root cause analysis and GenAI. Teams struggling with skill gaps particularly favor natural language querying.

Next-year priorities

Full-stack visibility and observability-security integration are top priorities.

Organizations in the monitoring stage focus more on security and telemetry data utilization, while mature ones prioritize leveraging AI/ML and integrating observability into the development lifecycle.

Observability adoption

Maturity

Objectives

Use cases

Number of tools used

MATURITY

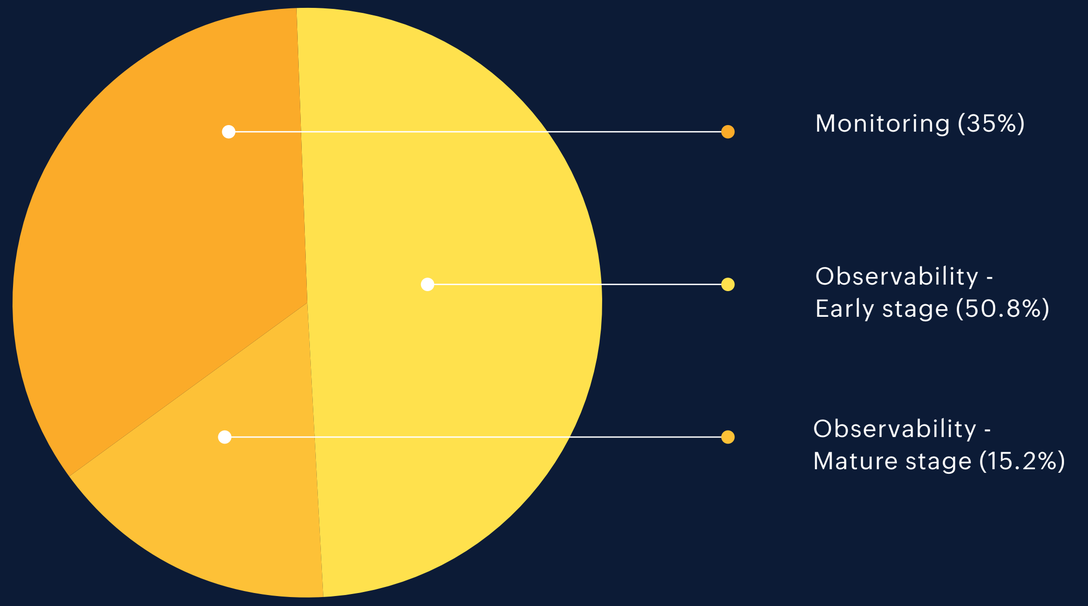
Most organizations are still in their early stages of observability.

We assessed organizations' observability maturity based on key outcomes, including improved metrics, productivity, and their ability to achieve goals after adopting observability.

Organizations still transitioning to observability prioritize building foundational visibility and integrating security. In contrast, those at the observability stage focus on leveraging AI/ML, enhancing digital experiences, and embedding observability into DevOps.

When it comes to barriers, early-stage organizations struggle with formulating an effective observability strategy, while mature ones face challenges in integrating observability with value-adding tools.

Where organizations stand in their observability adoption



OBJECTIVES

The aim is to build a more visible, secure, and resilient IT environment, efficiently.

The need for better visibility, higher efficiency, and stronger resilience characterizes today's observability aspirations, with resilience approached both from the system and security point of view.

Data suggests that organizations are increasingly leveraging observability to detect threats and strengthen business resilience. This highlights observability as a critical security asset and underscores the importance of security observability in modern IT strategy.

What drives your observability adoption?

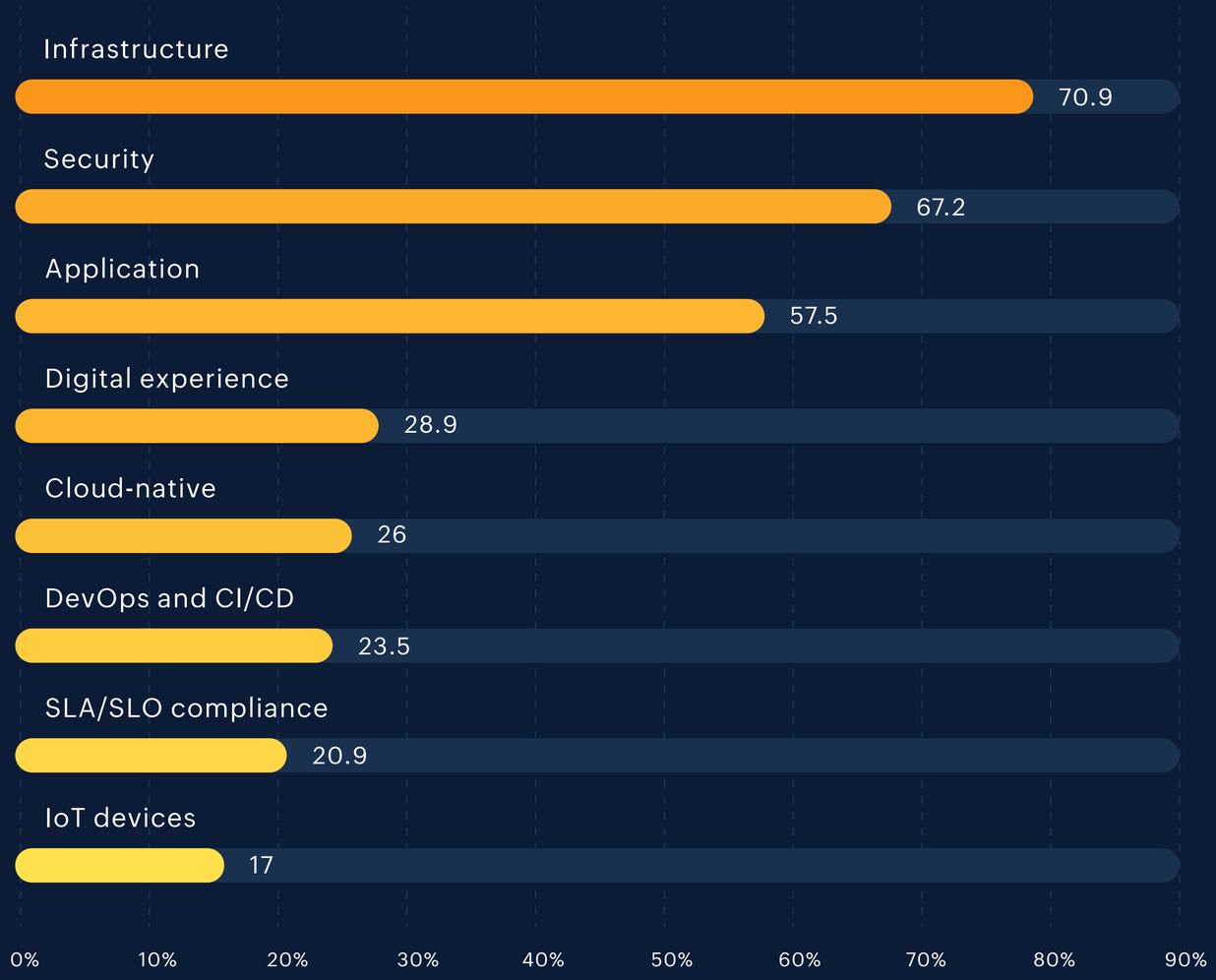
USE CASES

Infrastructure and security are the most observed aspects of IT environments, followed by applications.

While infrastructure observability monitors availability, health, and performance, security observability involves collecting and analyzing logs, traces, and metrics across attack surfaces to uncover hidden threats. Unlike traditional perimeter security, it provides deeper insights into suspicious patterns, detects lateral movement, and enables rapid threat detection and response.

For ITOM teams, this means merging performance monitoring with security intelligence, ensuring that both cyber threats and system degradations are addressed proactively.

Which areas of IT does your organization use observability tools for?



NUMBER OF TOOLS USED

Tool count increases with maturity but presents scaling challenges.

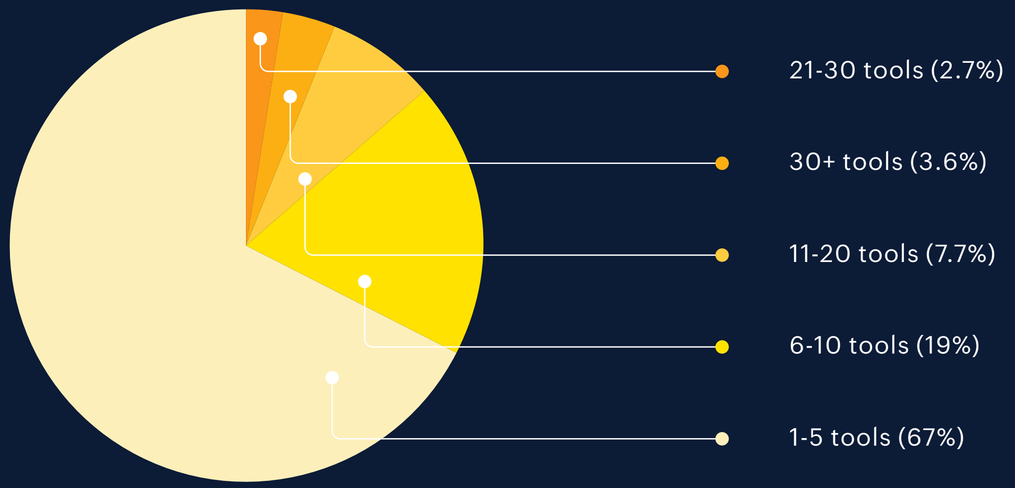
Common traits among organizations using more than 10 tools:

- Greater MTTR reduction
- Higher productivity gains
- Wider adoption (deployed for more use cases)
- Higher data management costs
- Difficulty in tool integration
- Difficulty in tool customization

Common traits among organizations using less than 10 tools:

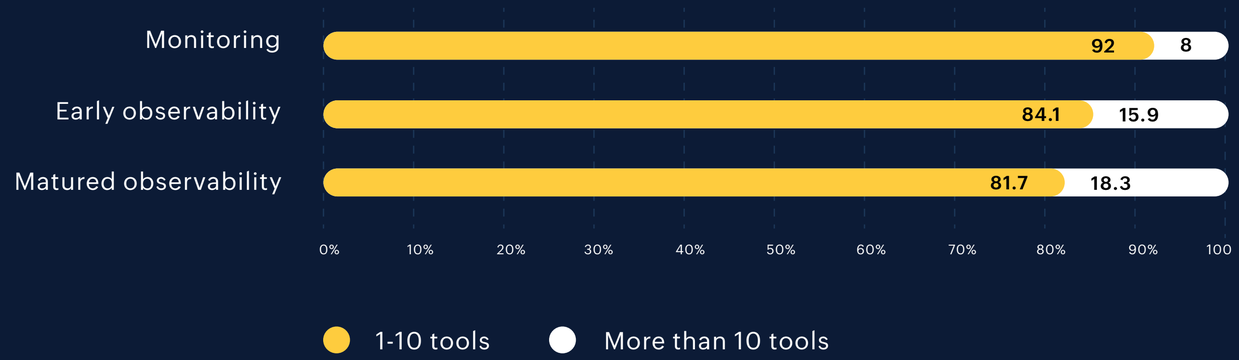
- Higher priority for tool consolidation
- Demand for reliable alerts
- Tool cost concerns

How many tools do you use for observability?



The number of tools used by organizations increases as they mature

Maturity stages:



Observability outcomes

Metrics that improved

MTTR reduction

Perceived impact on productivity

Perceived impact on goals

ROI

AI outcomes

METRICS THAT IMPROVED

Observability helps organizations achieve efficiency, uptime, and security goals, but still falls short in delivering complete visibility.

This suggests that while gains in efficiency and reduced outages are valuable, they don’t necessarily translate into end-to-end visibility or faster incident resolution.

Improvements in efficiency and service uptime may stem from better handling of routine operations such as resource allocation, capacity planning, and system maintenance. However, addressing complex incidents may require a more mature observability practice—one that eliminates fragmentation across tools, data, and processes—to ultimately reduce mean time to resolution (MTTR).

On a scale of 1 to 5, how do you rate the improvements observability helped you achieve?

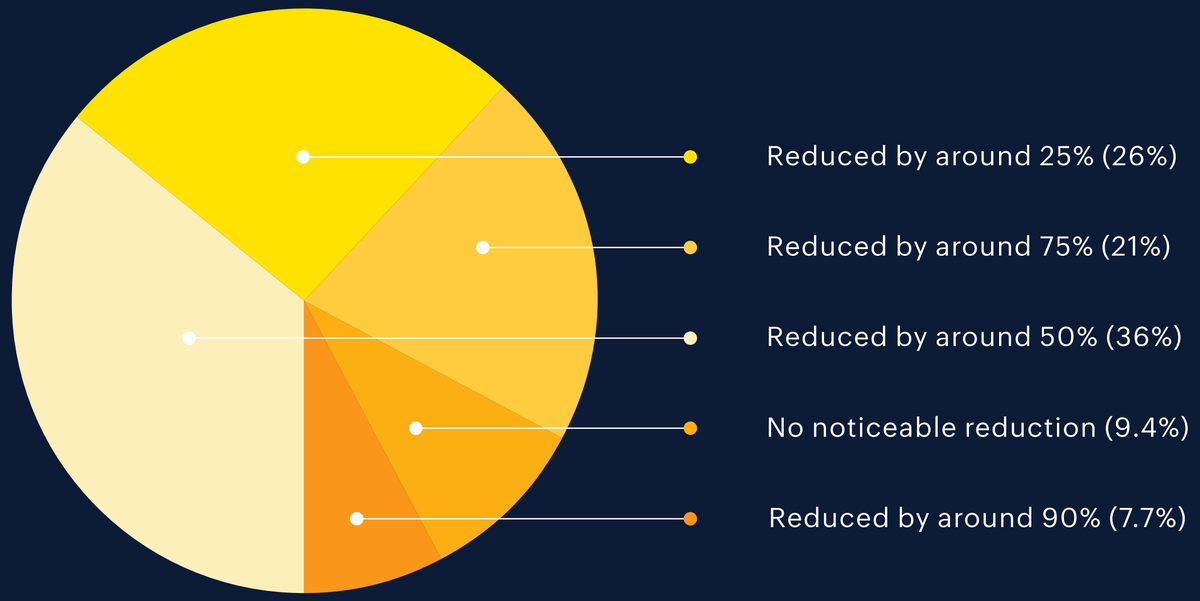
MTTR REDUCTION

Organizations see tangible reductions in troubleshooting time, but expectations are more.

While 64.7% of organizations have achieved a 50% or greater reduction in MTTR, many still find this insufficient to meet business needs. Observability has undeniably accelerated issue resolution, but it hasn’t reduced MTTR to levels that align with today’s operational demands.

As real-time reliability becomes the norm, downtime tolerances continue to shrink. Even significant reductions in MTTR may no longer be enough, as organizations strive to meet increasingly stringent service-level objectives and evolving user expectations.

By what percentage has the time spent on identifying and troubleshooting an issue been reduced?



PERCEIVED IMPACT ON PRODUCTIVITY

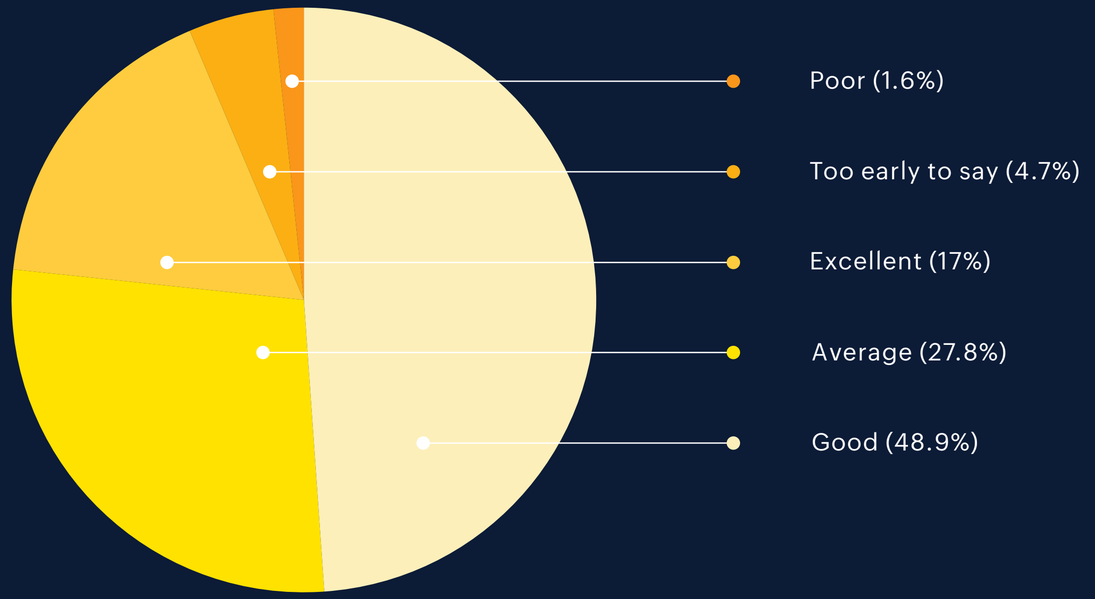
Observability has an above-average impact on boosting productivity, according to 66% of respondents.

We found that respondents who reported higher productivity gains differ from those who reported lower gains in two key ways: tool-related and organizational factors.

On the tool side, those using observability solutions with unified dashboards and reliable alerts saw greater improvements in productivity.

On the organizational side, those reporting lower productivity impact often lacked both a clear observability strategy and the necessary team skills to use the tools effectively.

How well does your observability tool(s) support your day-to-day work?



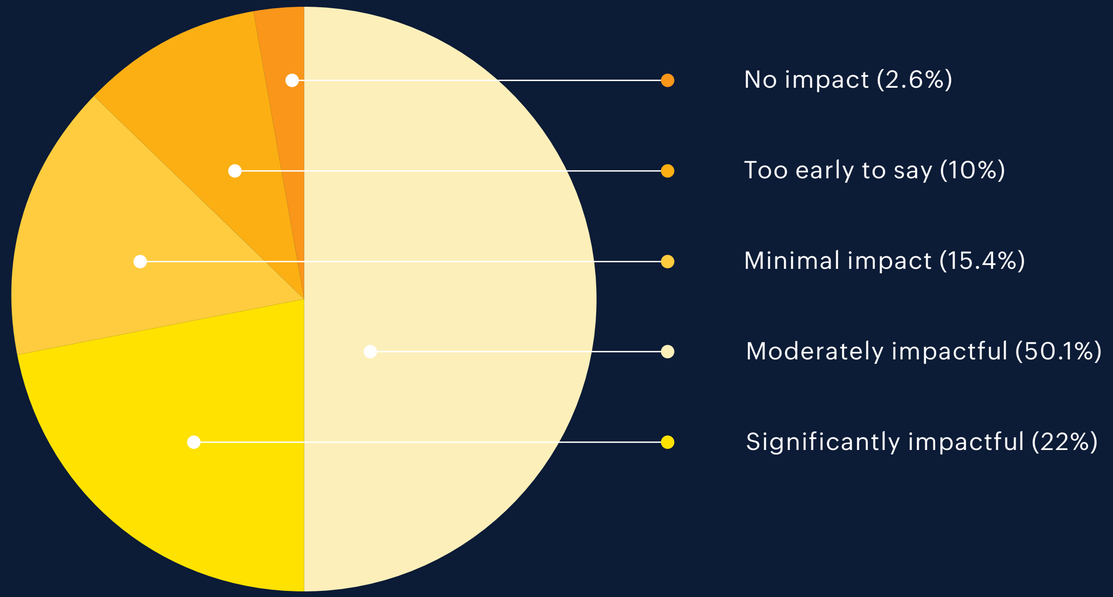
PERCEIVED IMPACT ON GOALS

Observability tools are helpful in realizing strategic IT goals, according to 72% of IT leaders.

When we analyzed the observability deployment of organizations that see a higher impact in achieving their IT goals, their use cases often expand beyond infrastructure and security. These organizations consistently leveraged observability for application monitoring, CI/CD pipelines, and maintaining SLA/SLO compliance.

This suggests that the broader and more integrated the observability deployment, the greater its strategic value. Organizations that embed observability tools across various aspects of IT, rather than using them merely for troubleshooting, tend to see more tangible benefits.

To what extent has your observability tool improved your organization's effectiveness in managing ITOps and realizing strategic IT goals?



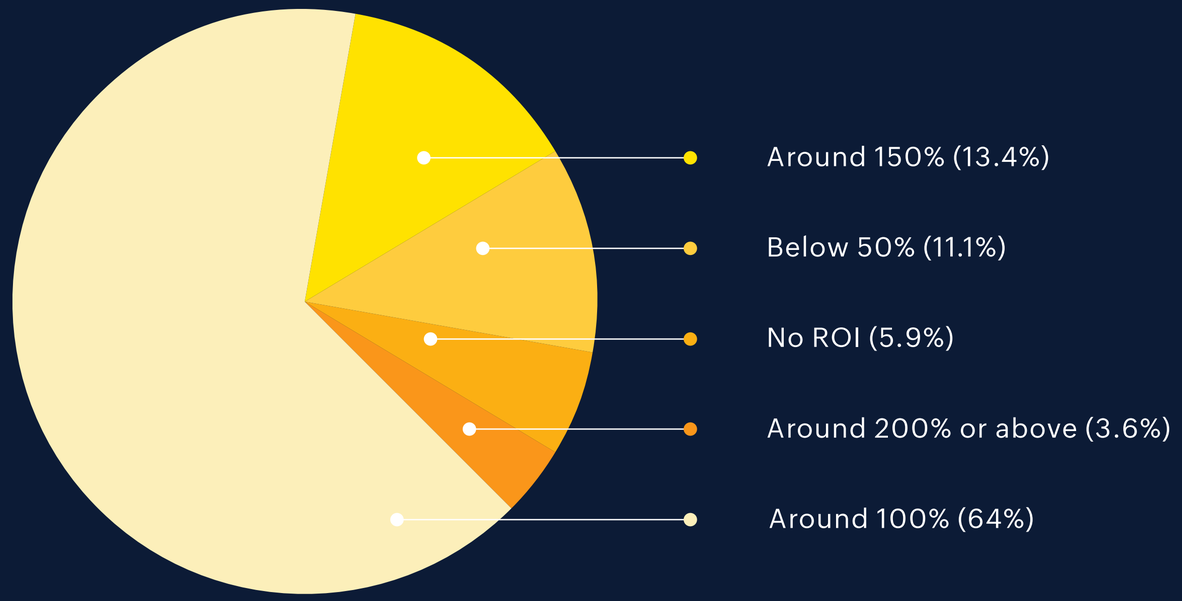
ROI

The ROI from observability tools is 100% or higher, for 81% of respondents.

Common traits of organizations achieving more than 100% ROI in observability:

- 6.5 times more likely to prioritize observability in their IT strategy
- Allocate 2.24 times more budget toward observability initiatives
- Actively drive digital transformation using observability
- Deploy observability holistically, spanning end-user experience, DevOps pipelines, and IoT devices
- Use tools that generate reliable, low-noise alerts for faster and clearer incident response
- 3.3 times more likely to pursue initiatives aimed at maximizing observability's value

What is your annual ROI from observability tools?



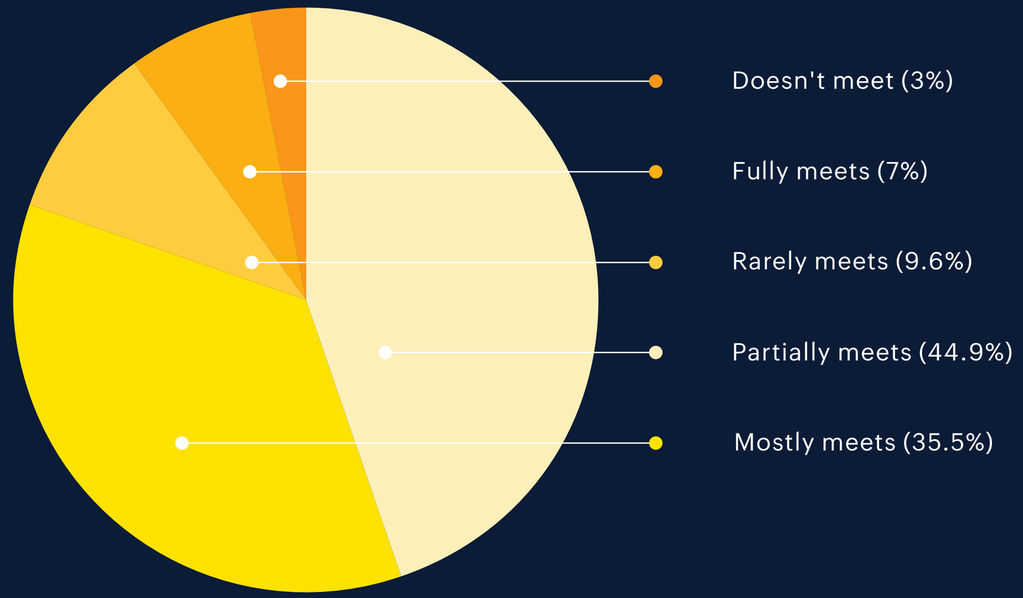
AI OUTCOMES

AI/ML features in observability tools add value but often fall short of fully meeting IT teams' needs.

Organizations that report more reliable AI/ML capabilities reap significantly higher benefits, based on observed correlations:

- 4.9 times more likely to achieve a 90% reduction in MTTR
- 3.7 times higher productivity gains
- 2.9 times greater strategic impact
- 2.8 times more likely to exceed 150% ROI

To what extent do the AI/ML capabilities in your observability tools meet your operational needs and expectations?



- Fully meet needs: Works well with little to no manual intervention
- Mostly meet needs: Occasionally require manual intervention
- Partially meet needs: Addresses some use cases but leaves critical gaps
- Rarely meet needs: Requires significant manual effort to make it work
- Do not meet needs

Observability challenges

Adoption barriers

Tool gaps

Vendor concerns

ADOPTION BARRIERS

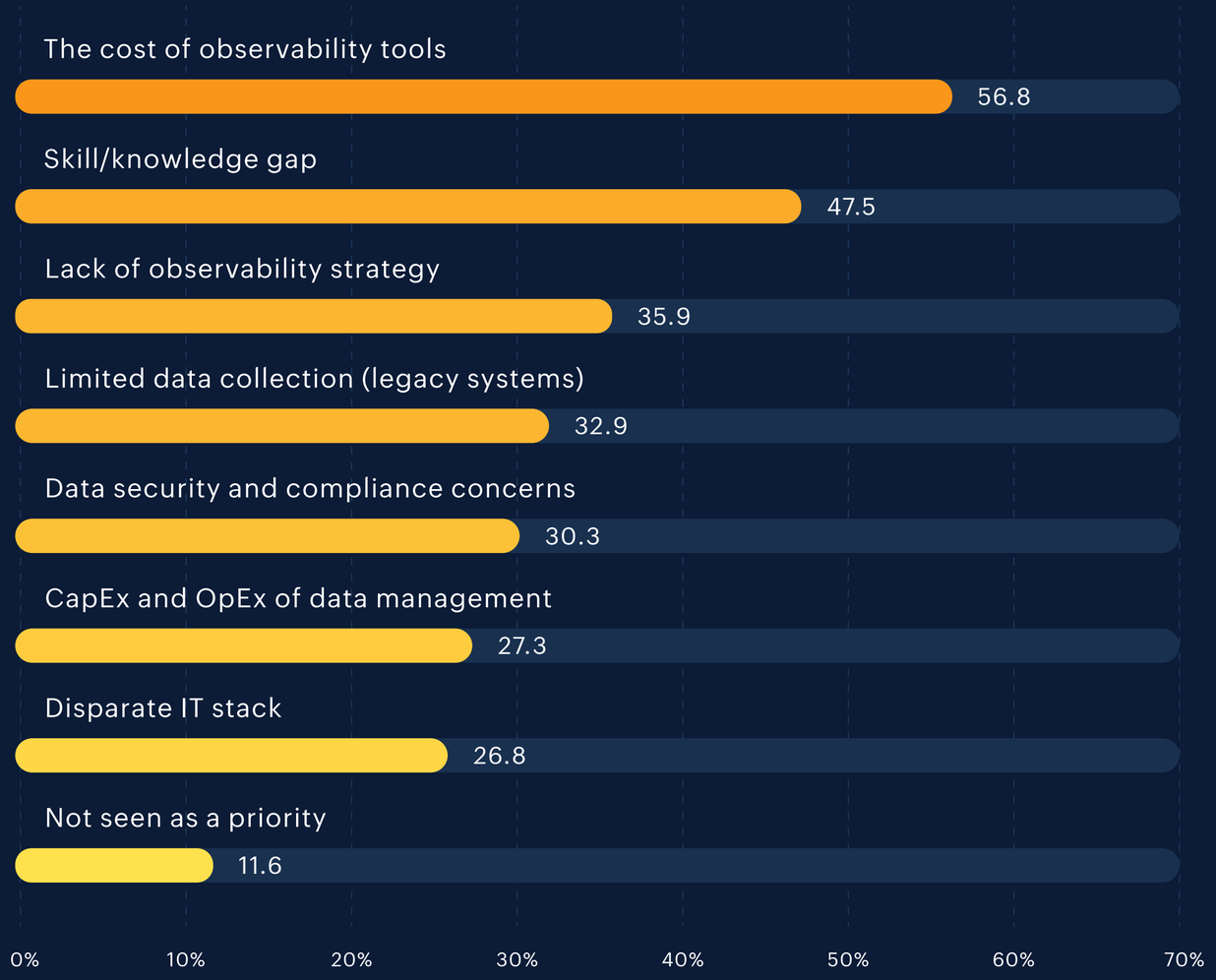
Tool cost and skill gap are the major roadblocks to observability adoption.

Correlations between organizations with and without observability tool cost concerns reveal key differences:

Organizations with cost concerns experience more issues with their observability tools—such as noisy alerts, weak root cause analysis, scalability limitations, and integration challenges. This highlights their frustration with encountering daily operational issues despite making significant investments.

Organizations without cost concerns are often found prioritizing operational and resource efficiency in their observability goals and tool evaluation. They also allocate larger budgets for observability and report higher ROI.

What are the factors that hinder you from achieving observability?



TOOL GAPS

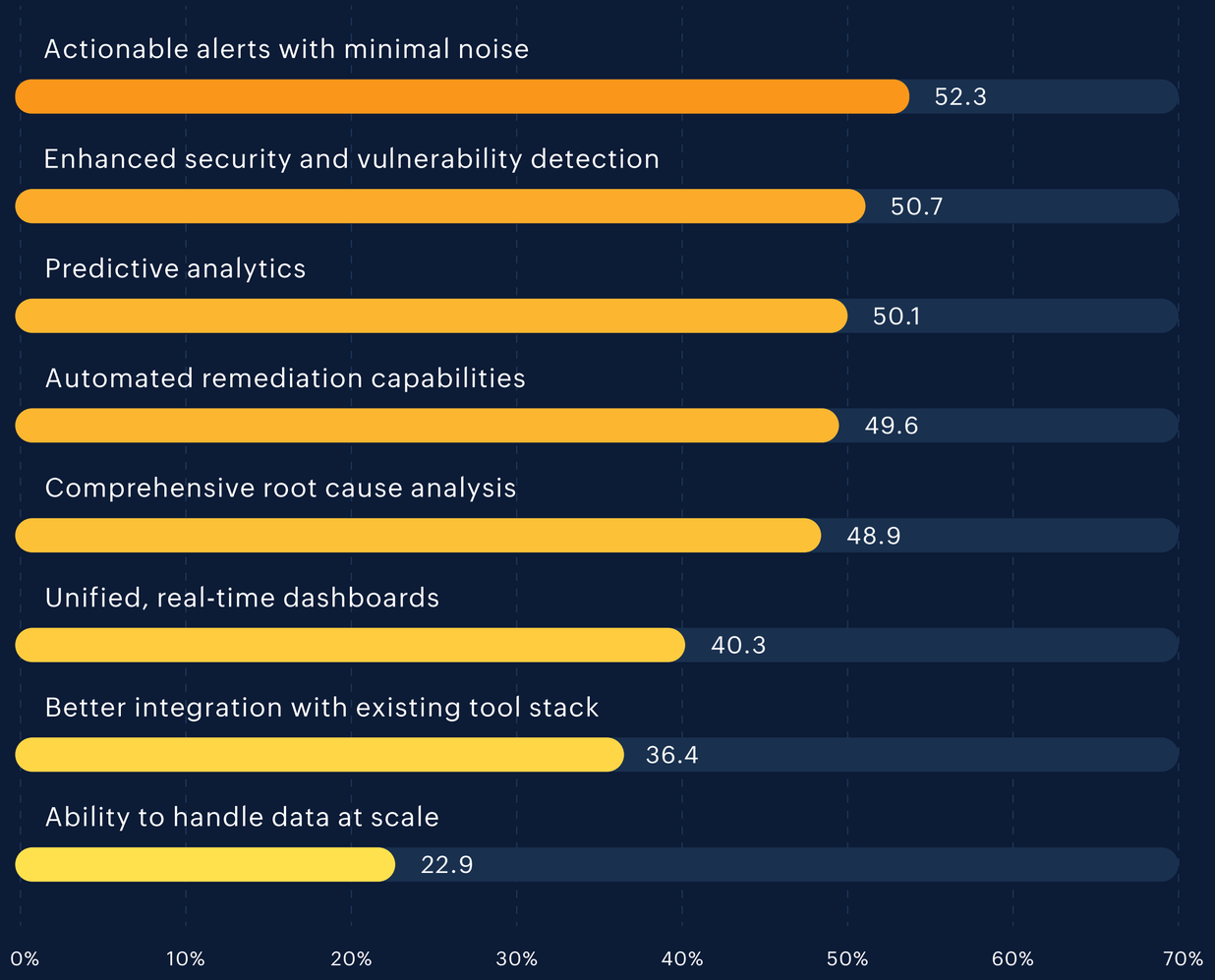
Quality alerts, security features, and AI-driven automation are the most sought-after tool capabilities.

The most common question teams ask when choosing observability tools is: “Will it help reduce alert noise?” Organizations that successfully keep alert noise low consistently report higher ROI—and they rarely face other major roadblocks.

We also observed that early-stage observability adopters place high expectations on security features, likely because their priority is to establish a strong security foundation.

As organizations mature, their expectations shift toward AI-driven capabilities to support faster troubleshooting and scalable operations.

What do you wish to see improved in your observability tools?



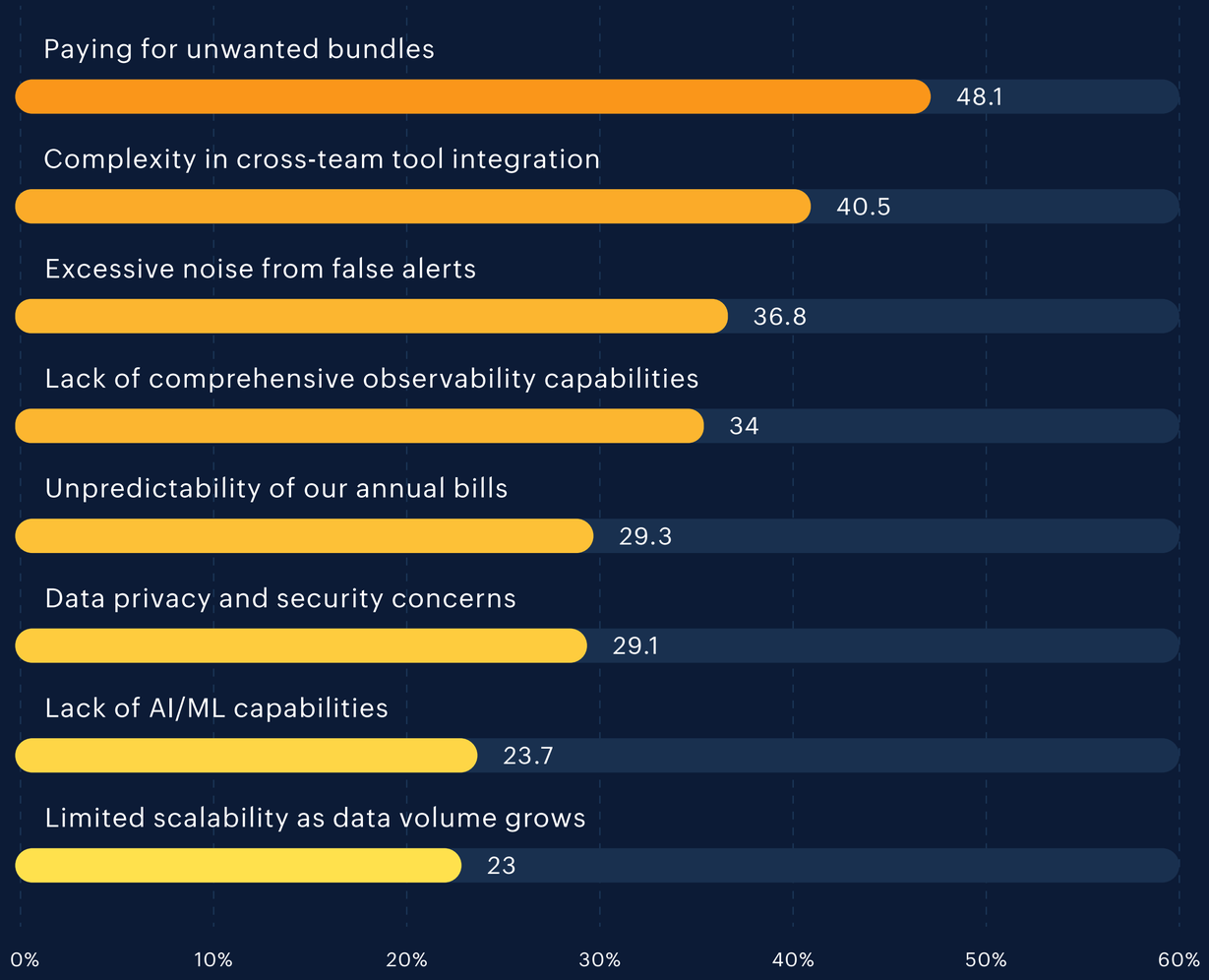
VENDOR CONCERNS

Paying for unwanted bundles is the most-pressing vendor concern.

Those frustrated with unwanted bundles also pointed to the unpredictability of annual bills—suggesting that their cost concerns stem less from pricing itself and more from a lack of pricing transparency and modular flexibility.

To address this and maximize value, many plan to consolidate tools, adopt open-source alternatives, or switch to more affordable vendors.

What are your primary concerns with observability vendors?



Observability plans

Value-boosting plans

Data management plans

AI expectations

Priorities for the year ahead

VALUE-BOOSTING PLANS

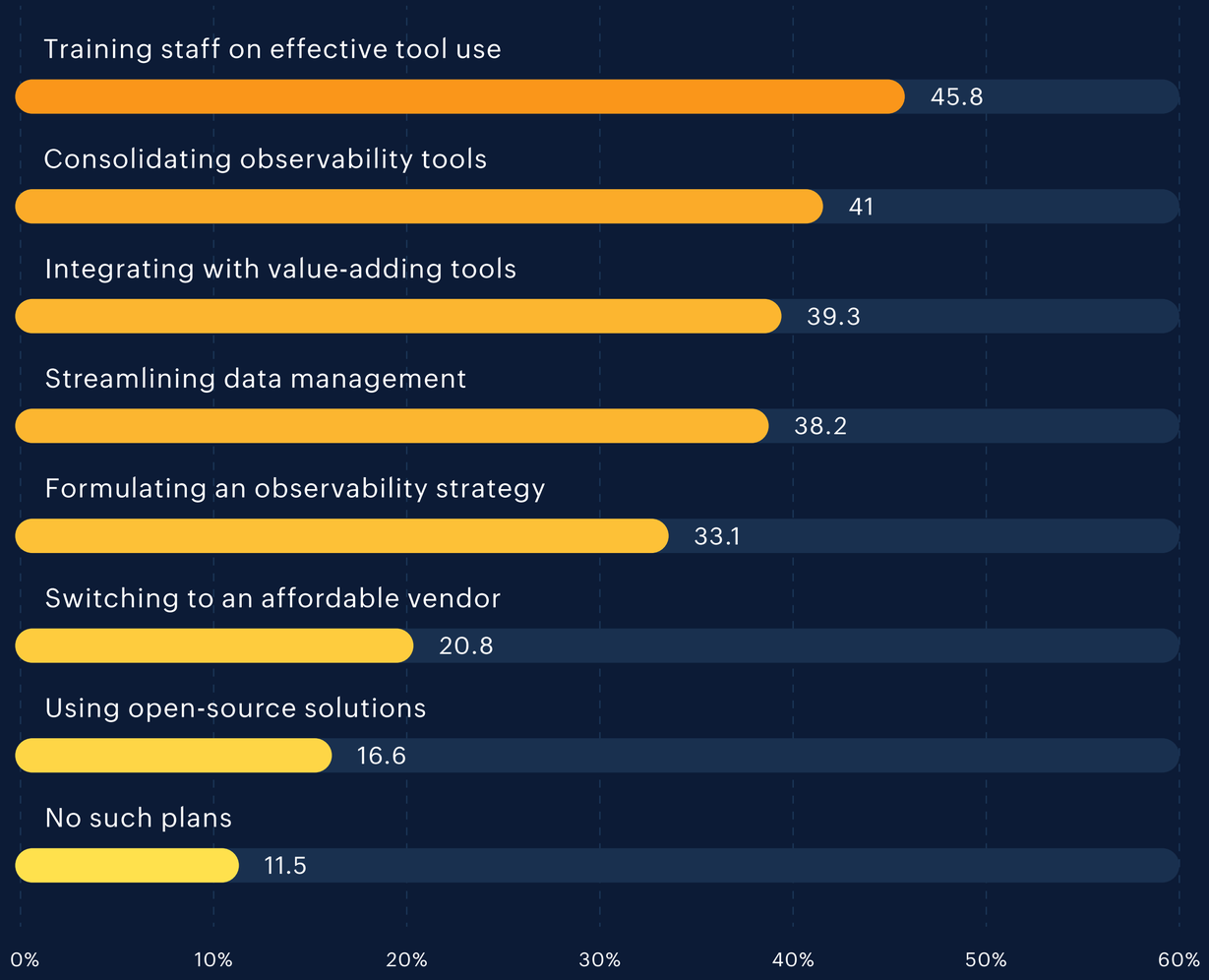
Training staff on effective use of observability tools is the top value-boosting plan.

Upskilling staff to effectively use observability tools remains a priority across all maturity stages, indicating that skill gaps persist even at advanced stages of observability.

Organizations in the monitoring stage focus on establishing their observability foundation and are more likely to explore cost-effective options, such as switching to affordable vendors and adopting open-source solutions.

In contrast, those who have already adopted observability prioritize integrating their solutions with value-adding tools, implementing structured data management, and consolidating their toolsets.

How are you planning to boost the value of observability in the future?



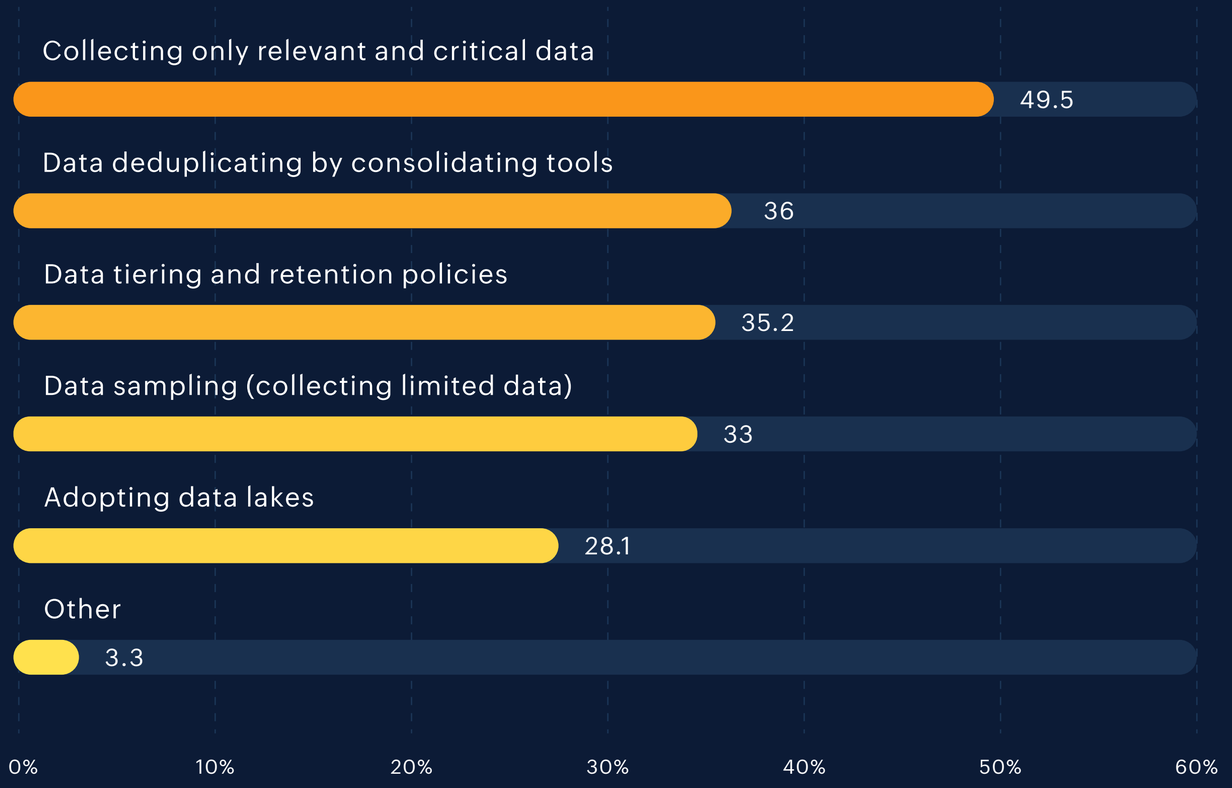
DATA MANAGEMENT PLANS

Data efficiency in observability, for most organizations, starts with a strategic approach to data collection.

While collecting relevant and critical data is a key priority overall, how organizations approach it depends on their maturity. Those in the early stages of observability tend to focus more on filtering and de-duplicating data.

In contrast, those further along in their observability journey show sustained interest in a broader set of data best practices—most notably, data sampling. This is likely because mature organizations handle high volumes of telemetry data and, to avoid budget overruns, rely on sampling techniques that capture statistically representative subsets of system behavior.

What data-focused initiatives do you consider adopting one year from now?



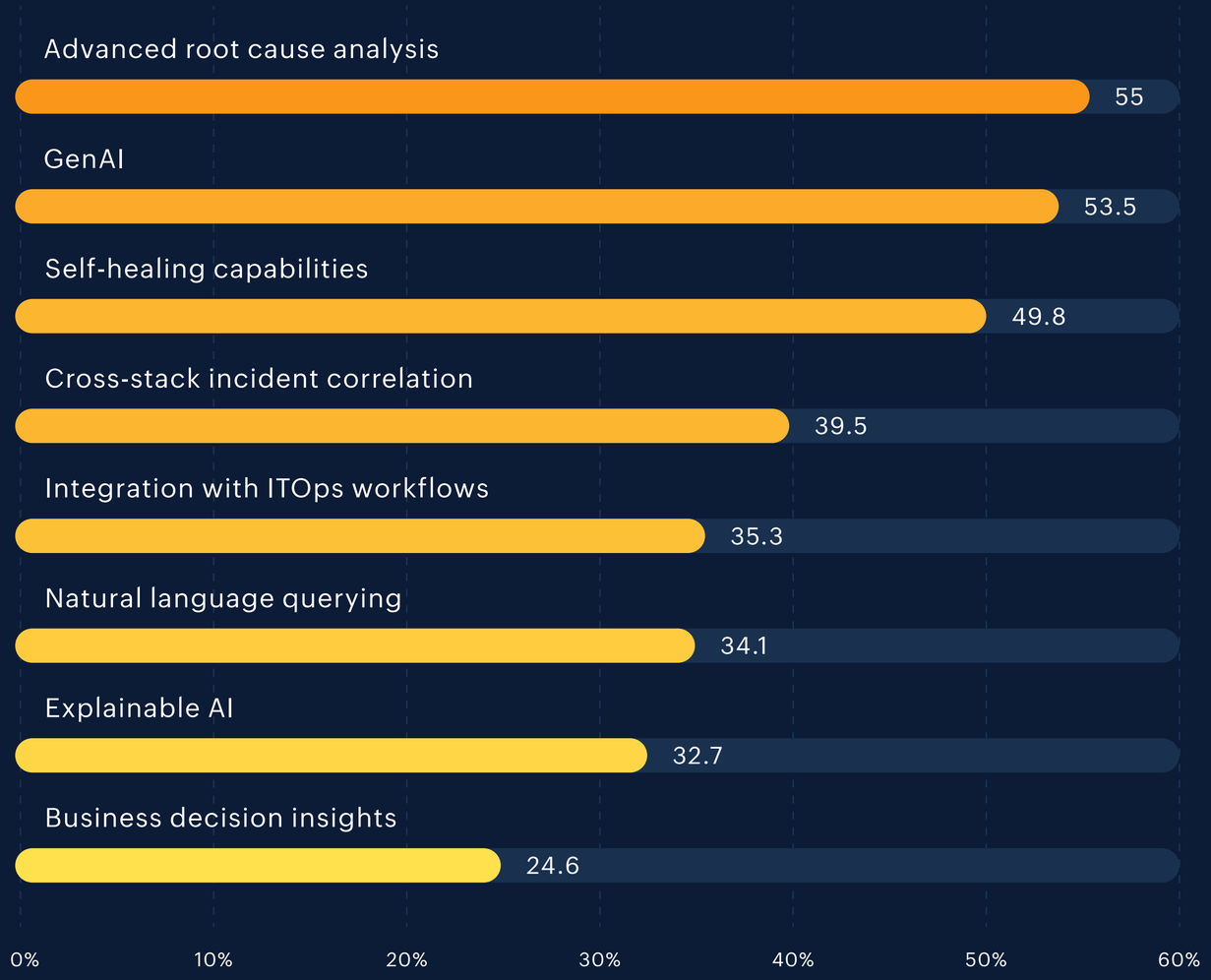
AI EXPECTATIONS

Advanced RCA and GenAI are the most sought-after AI capabilities.

Respondents facing skill gaps in using observability tools show 1.5 times higher demand for AI/ML features. Notably, they favor natural language querying (46% vs. 27%) as a more accessible alternative to complex query languages.

This pattern suggests that while AI is broadly valued in observability, teams with limited expertise rely on it more heavily to bridge skill gaps. Natural language processing, in particular, emerges as a critical need—helping lower the technical barrier to effective tool usage.

What AI/ML capabilities would you like observability vendors to improve or add in the future?



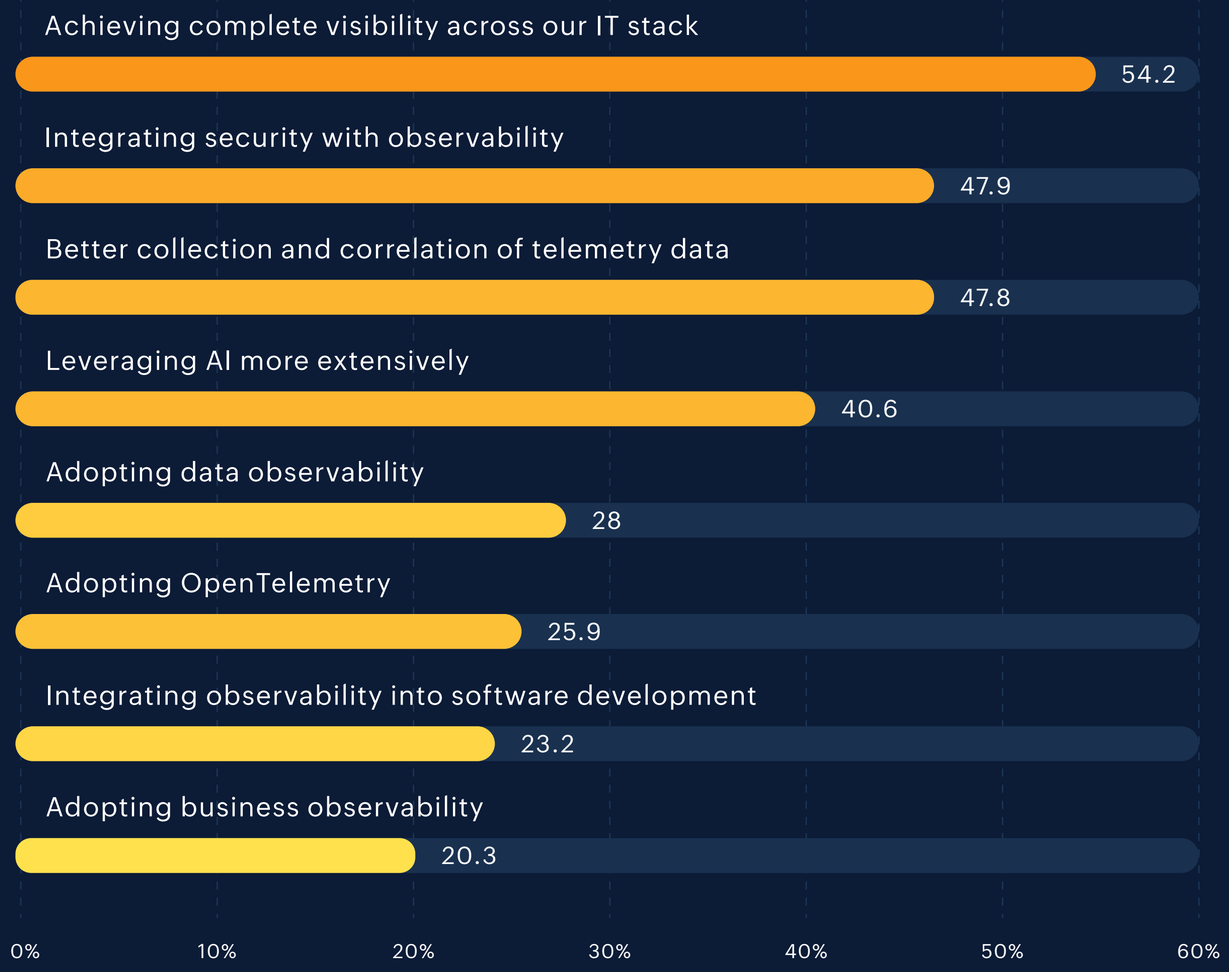
PRIORITIES FOR THE YEAR AHEAD

Achieving full-stack visibility, security integration, and effective telemetry usage are top observability priorities

The ambition to achieve end-to-end visibility across the IT stack remains consistent across all maturity stages, with more mature organizations placing even greater emphasis on it.

While organizations in the early stage prioritize security integration and efficient telemetry usage, mature organizations focus on adopting OpenTelemetry, leveraging AI, and embedding observability into the software development lifecycle.

What are your organization's key observability priorities for the next 12 months?



SMBs vs. ENTERPRISES

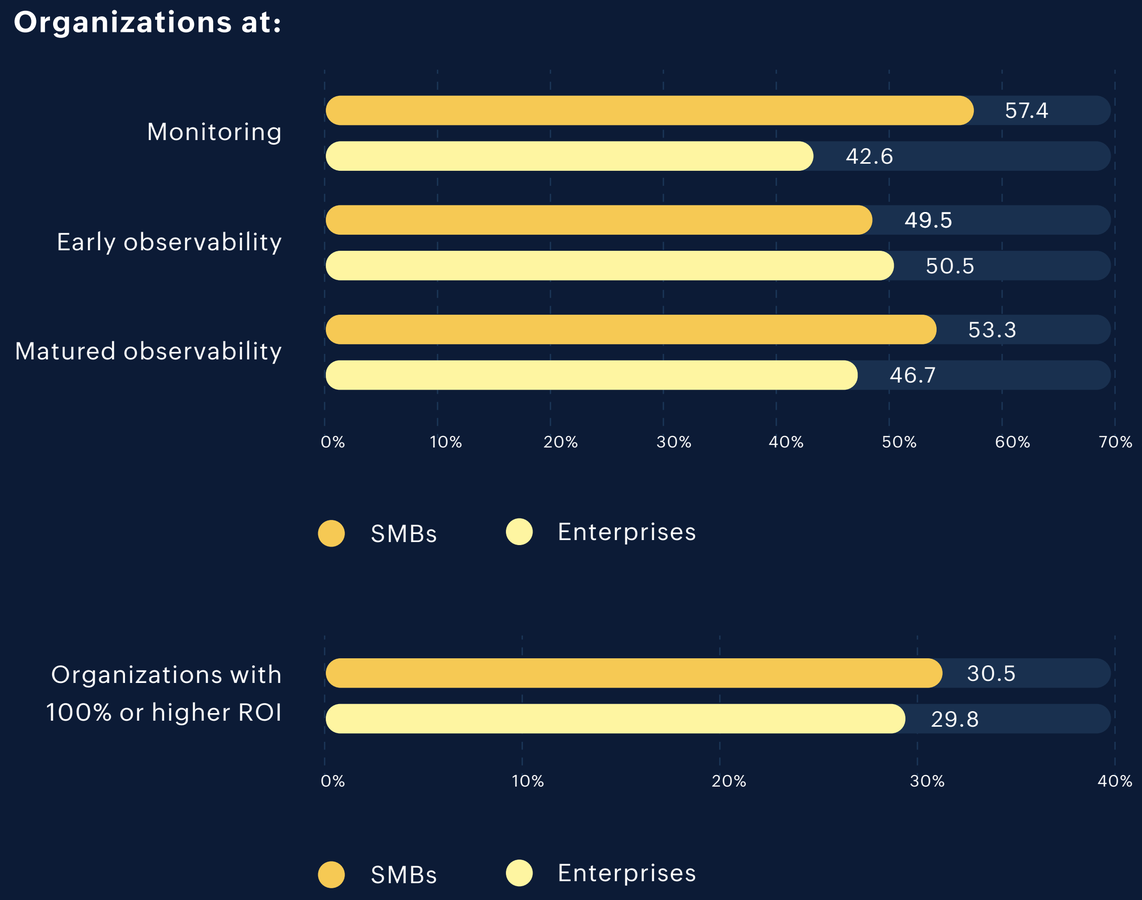
Adoption and benefits

SMBs adopt observability to improve operational efficiency and security posture, while enterprises aim for visibility across hybrid IT environments and accelerating RCA. Both report gains in operational efficiency, uptime, and security. Enterprises see better hybrid-cloud visibility and developer productivity, enabled by broader use cases like DevOps and cloud-native monitoring.

Challenges and plans

SMBs face cost and skill shortages, whereas enterprises struggle with legacy systems and tool integration. Full visibility and security integration are the goals common to both. SMBs prioritize business observability more, while enterprises focus more on AI adoption and embedding observability into software development.

How SMBs and enterprises differ in their observability maturity status and ROI



INDUSTRY HIGHLIGHTS

IT solutions and services

Pushing for innovation and insight while advancing observability maturity

The IT sector leads in observability maturity, with nearly a quarter of them reaching advanced stages. They prioritize innovation and digital experience over pure operational metrics.

Goals and priorities:

- Accelerate troubleshooting with advanced RCA capabilities
- Focus more on application and cloud-native monitoring
- Leverage AI, particularly GenAI features
- Adopt OpenTelemetry as part of a broader data initiative

Key gaps:

- Data management costs are a growing concern
- Multi-cloud complexity is creating integration challenges
- AI features are still underdelivering on promises

Moving forward, the industry is doubling down on aggressive tool consolidation, upskilling teams on effective tool use, and deeper DevOps integration. IT services firms view observability as both an operational necessity and competitive differentiator.

Banking and financial services

Aiming for better visibility, prioritizing security, and solving technical debt

The BFSI sector has high observability adoption but remains mostly at early maturity stages, with fewer than 10% reaching full-stack observability.

Goals and priorities:

- Achieve comprehensive visibility across complex environments
- Maintain robust security postures
- Adopt OpenTelemetry for efficient data management
- Seek natural language querying and advanced RCA

Key gaps:

- Legacy systems are limiting telemetry data collection
- The lack of an observability strategy is stalling progress
- ROI is mixed

Moving forward, BFSI organizations are focusing on strategic tool consolidation, enhanced data governance, and selective AI adoption (favoring transparency in AI decision-making). To them, observability is both a security measure and an operational necessity.

INDUSTRY HIGHLIGHTS

Manufacturing/Automotive

Focusing on efficiency and resilience while maintaining a pragmatic AI stance

Manufacturers approach observability with a focus on operational efficiency and cost control. Optimizing IT performance is their top priority.

Goals and priorities:

- Drive efficiency in IT resource usage and operations
- Seek predictive analytics and self-healing observability workflows
- Integrate observability with value-adding tools
- Adopt data best practices

Key gaps:

- Legacy systems create visibility blind spots
- AI features often disappoint despite operational needs
- Turning observability insights into business decisions is a struggle

Manufacturers plan to focus on workforce training and targeted system integrations. They prefer reliable, explainable AI over experimental capabilities, maintaining a practical approach to addressing current production challenges over pursuing innovation.

Healthcare

Prioritizing security without compromising tool and data efficiency

Healthcare organizations approach observability with a strong focus on improving security posture and ensuring compliance. Their tooling is lean, with most using fewer tools than average.

Goals and priorities:

- Security is both an operational and strategic priority
- Seek self-remediating IT workflows
- Prioritize integrations with tools that add value to observability
- Consolidate tools to minimize data duplication

Key gaps:

- Visibility across the distributed IT estate remains limited
- Observability has shown minimal impact on productivity and broader IT goals
- AI features continue to under-deliver

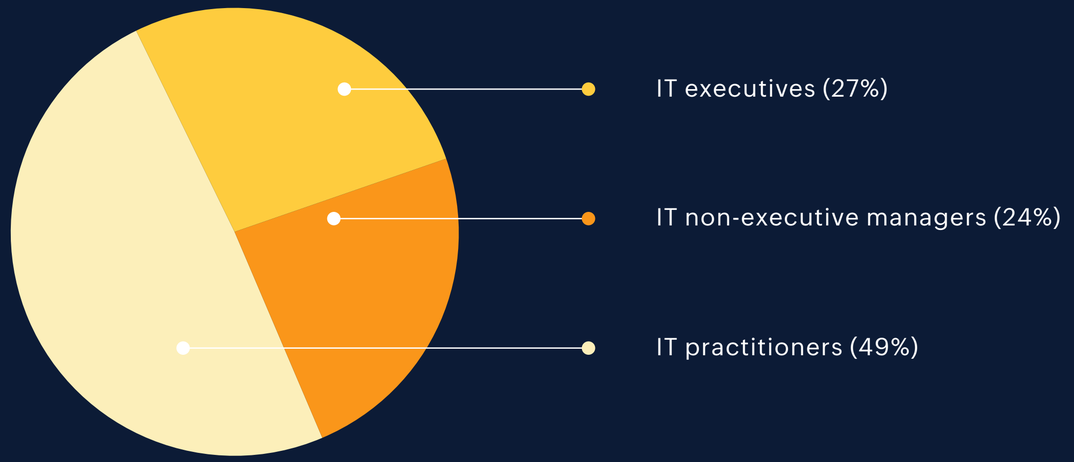
Healthcare organizations plan to improve data management and consolidate tools. They prefer AI/ML that delivers actionable insights for business decisions. Their focus remains on security-observability integration over broader observability expansion.

RESPONDENT DEMOGRAPHICS

Regions

Role	Percentage
North America	32%
India	27%
APAC	24%
Middle East and Africa	8%
Europe	5%
LATAM	2%
Australia	2%

Roles



IT Executives: Chief Information Officer (CIO), Chief Technology Officer (CTO), Chief Information Security Officer (CISO), Chief Data Officer (CDO), etc.

IT Practitioners: IT Administrator, Network Administrator, System Administrator, IT Architect, Solutions Architect, Software Engineer, DevOps Engineer, SecOps Engineer, etc.

RESPONDENT DEMOGRAPHICS

Industry

Industry	Percentage
IT solutions/services	43%
Banking/Finance/Insurance	12%
Manufacturing/Automotive	10%
Healthcare/Pharmaceutical	7%
Government/NGO	5%
Educational services	4%
Logistics/Transportation	3%
Others	16%

Organization size

Size	Percentage
Fewer than 50 employees	12%
50-249 employees	20%
250-999 employees	20%
1,000-4,999 employees	23%
5,000 or more employees	24%

Survey details

Total no. of respondents = 1240

Survey period: December 2024 to January 2025

About ManageEngine FSO

ManageEngine's FSO suite delivers full-stack observability across modern, hybrid IT environments.

From infrastructure and networks to applications, security, and digital experiences, our solutions provide real-time visibility, faster troubleshooting, and actionable insights across the entire IT stack.

Powered by AI, our FSO suite uses intelligent analytics to predict potential issues, automate responses, and deliver proactive recommendations, ensuring teams can resolve problems before they impact operations. This comprehensive approach helps improve service reliability, optimize resource usage, and align IT performance with business goals.

Our solutions are available both on-premises and in the cloud.

Visit www.manageengine.com/fso