

The State of AIOps 2023

*Delivering Value but Falling
Short of Expectations*



OpsRamp

a Hewlett Packard Enterprise company

Key Takeaways

Enterprises and MSPs want to increase efficiency through automation. AIOps can help them get there.

Reducing tool sprawl can and should be a key part of your AIOps strategy.

Improved alerting and reduced helpdesk tickets are early wins that can be achieved through AIOps.

Most organizations see benefits from AIOps within six months.

AIOps is creating jobs, but good help is hard to find.

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Introduction

The rise of the ChatGPT chatbot and other generative AI models has made AI hot and trendy again. Meanwhile, AI has been making IT operations work better for at least seven years now, when [Gartner](#) first defined the concept of AIOps as using big data and machine learning to automate IT operations processes, such as event correlation, anomaly detection and causality determination. Gartner now pegs AIOps as a \$2.1bn market by 2025. AIOps accounts for about 40% of all ITOps inquiry calls Gartner gets from clients.

As we emerge from a three-year pandemic but face stubborn inflation, global instability and a possible recession we decided to take a look at just what is the state of AIOps going into 2023.

We had little trouble finding enterprises and managed service providers (MSPs) that said they had deployed AIOps and nearly all claimed to have realized at least some benefit from it. This survey tries to understand what the reality of AIOps is for organizations today, how are they using it, what benefits they are seeing and what challenges, opportunities and concerns remain. We look at the similarities and differences in AIOps deployment among both enterprises and MSPs.

We also look more broadly at the state of ITOps today and how continued development and adoption of AIOps could change it for the better.

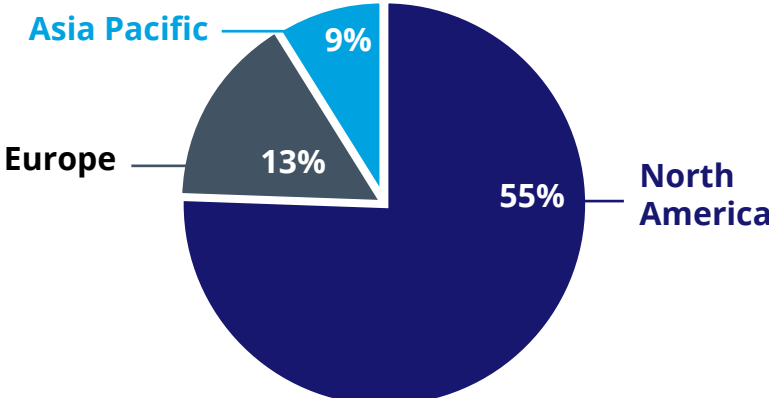
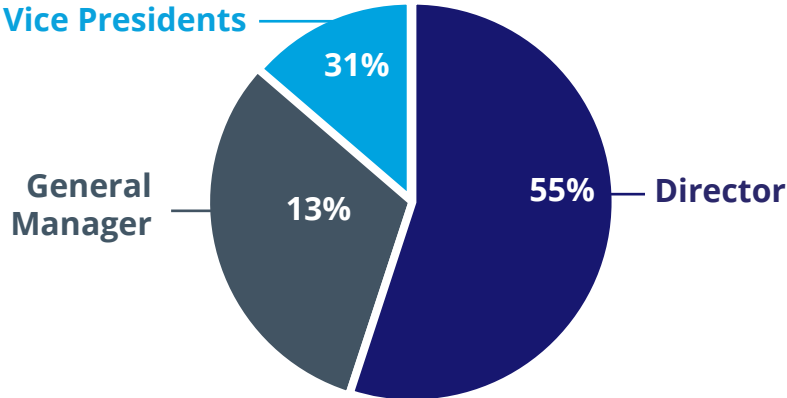
Methodology

A third party surveyed a total of 265 respondents in December 2022. All respondents work at the general manager, director or vice president level in North America, Europe or Asia Pacific. All respondents are managers with budget-decision-making responsibilities for IT monitoring tools and work at firms with at least \$25 million in annual revenue and more than 500 employees. All said they had deployed AIOps. Of the 265 respondents, 138 (52.1%) work at enterprise organizations and 127 (47.9%) work at managed service providers.

Here is a quick snapshot of our survey respondents:

» Most respondents hold the role of either director (55.1%) or general manager (31.5%). The remainder are vice presidents (13.4%).

» 75.6% of respondents are based in North America, 15.6% in Europe and 8.7% in Asia Pacific.



The Economic Outlook for IT Operations

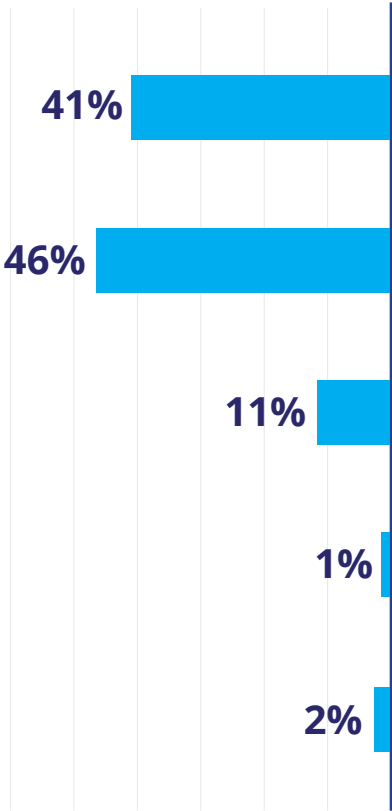
The International Monetary Fund (IMF) forecasts that global economic growth will drop from [3.2% in 2022 to just 2.7% in 2023](#), with growth in advanced economies such as North America, Europe and Japan even lower than that. High inflation, the cost-of-living crisis, tightening financial conditions, Russia's invasion of Ukraine and the lingering Covid-19 pandemic are all economic headwinds weighing on economic growth.

However, technology executives from enterprises and MSPs are more bullish on the economy with 86% of enterprises and 83.5% of MSPs either extremely positive or somewhat positive about economic growth this year. Just 13.4% of MSPs and 11.6% of enterprises expressed negative expectations for economic growth in 2023. One reason for this optimism could be that businesses will keep investing in technology to gain new efficiencies from digital transformation. Many of these organizations will need outside help (from service providers) to keep their IT infrastructure humming smoothly, especially if tight budgets require them to hold down internal staffing levels.

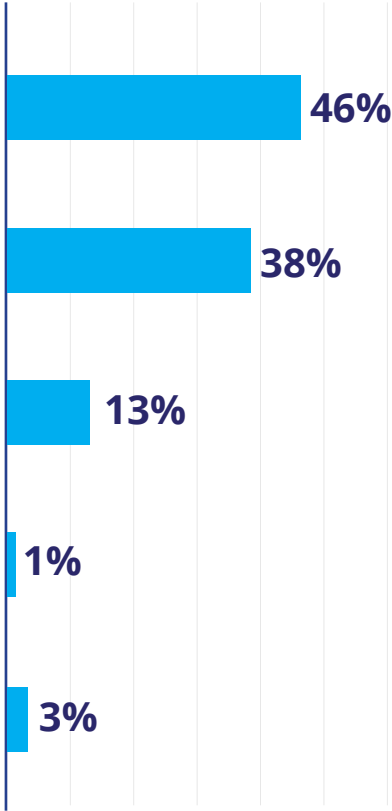


Q: What are your expectations for economic growth in 2023?

Enterprises



MSPs



Enterprises and MSPs Seek to Boost Efficiency

Optimism about economic growth notwithstanding, enterprises and MSPs are both looking to become more efficient in 2023. We asked MSPs what their primary obstacles to achieving steady growth and profitability were. More than two-thirds (68.5%) of respondents cited the need to improve operational efficiencies. Almost as many (64.6% needed to increase customer satisfaction and reduce churn, perhaps signaling headwinds on winning new customers. Hiring and retaining talented employees remains a challenge, cited by 61.4% of respondents.

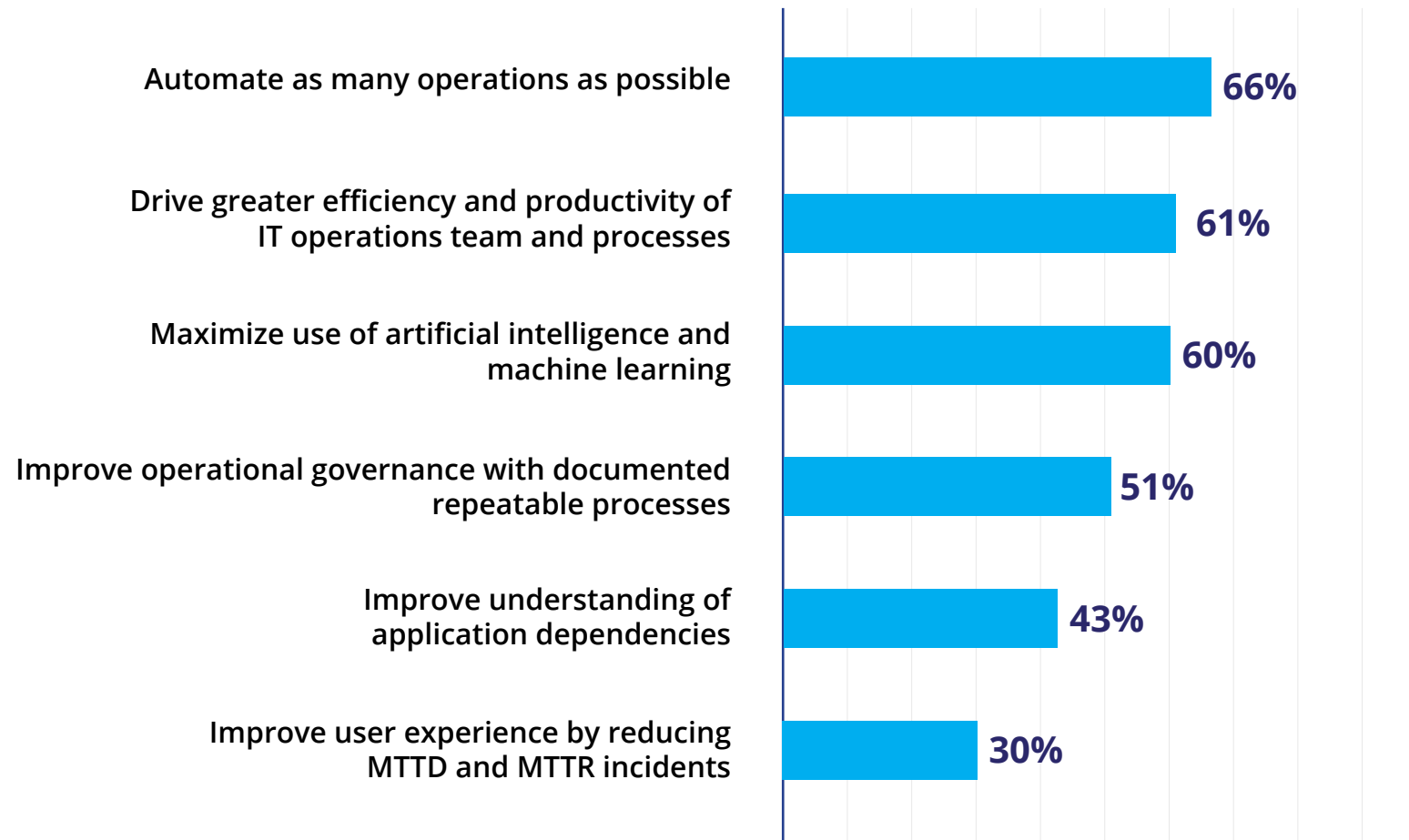


Q: What are your primary obstacles to achieving steady growth and profitability? (MSPs)

We asked our enterprise respondents a somewhat different question: “What are the primary needs/challenges for your IT operations team to overcome in 2023?” We saw a similar theme emerge as with our MSP respondents. 65.9% of enterprises wish to automate as many operations as possible and another 60.9% want to drive greater efficiency and productivity of IT operations teams and processes. Both answers point to a similar goal of making IT teams more efficient and productive by automating more operations and processes. The third-highest response—maximize use of artificial intelligence and machine learning at 60.1%--gives us some indication of how IT plans to get to this more automated, efficient state.



Q: What are the primary needs/challenges for your IT operations team to overcome in 2023? (Enterprises)



Cloud, Security and Network Services to Drive Growth for MSPs

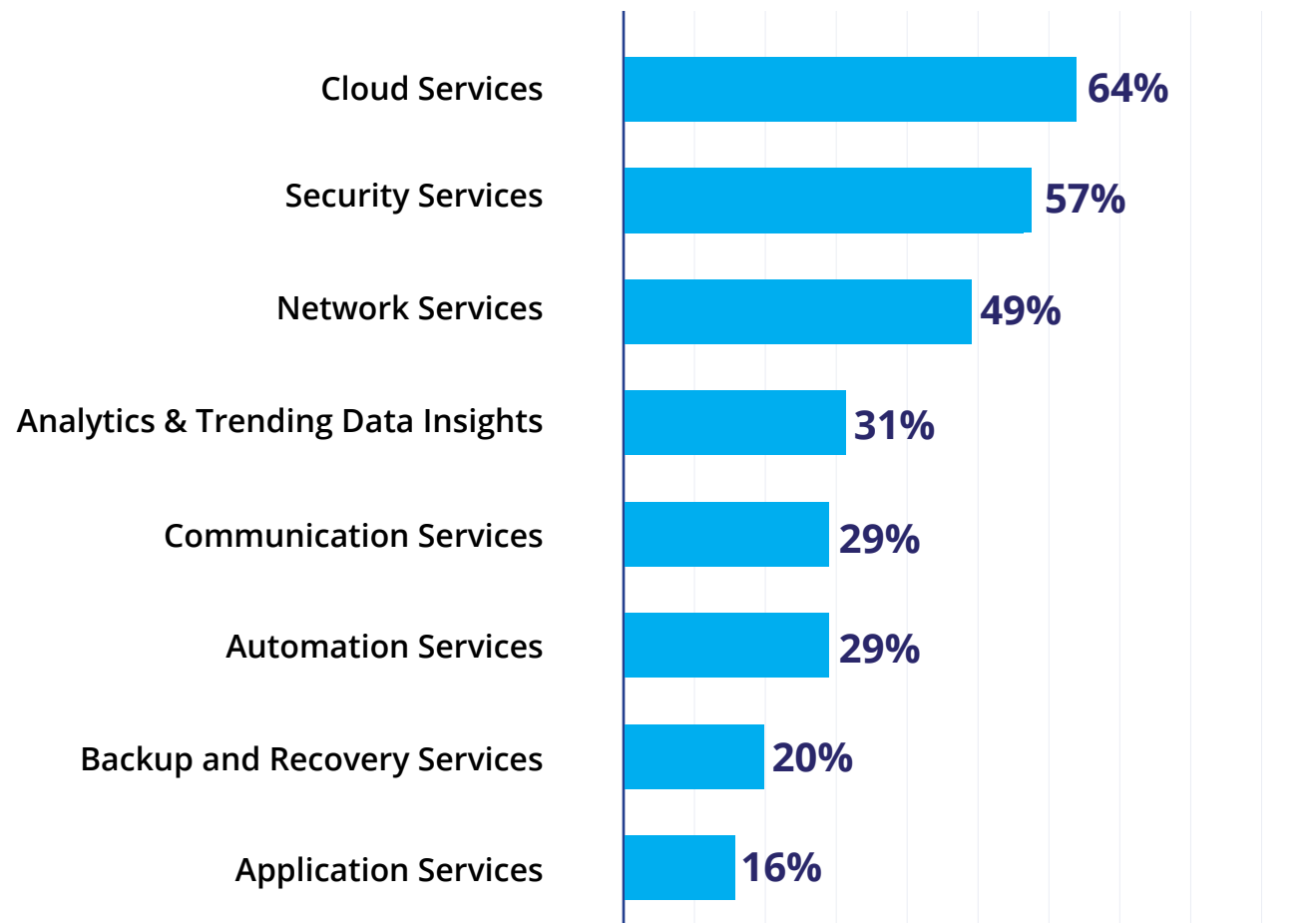
We asked our MSP respondents to select their top three managed service offerings that would have the most traction with customers in 2023. A clear top three emerged, as nearly 65% selected cloud services, another 57.5% chose security services and nearly half of respondents picked network services. These were also the top three choices in our [MSP Survey Report in 2022](#) as well, though cloud and network services tied for the top spot in that survey with security a close third.

Cloud in the top spot is certainly no surprise. It represents the largest chunk of IT spending, according to [Gartner](#), which forecasts public cloud services to be a \$591.8bn market in 2023, a 20.7% increase over 2022.

Security remains an imperative for organizations managing increasingly distributed cloud environments that their own networks have to interact with. As for those networks, not everything moves to the cloud. Enterprises will continue to invest in the hardware, routers, switches and networking software that runs their internal networks and connects them to the public cloud and will need MSPs' help to manage those environments. Bottom line: Hybrid cloud is here to stay.



Q: Which managed service offerings do you foresee having the most traction with customers in 2023? (MSPs)

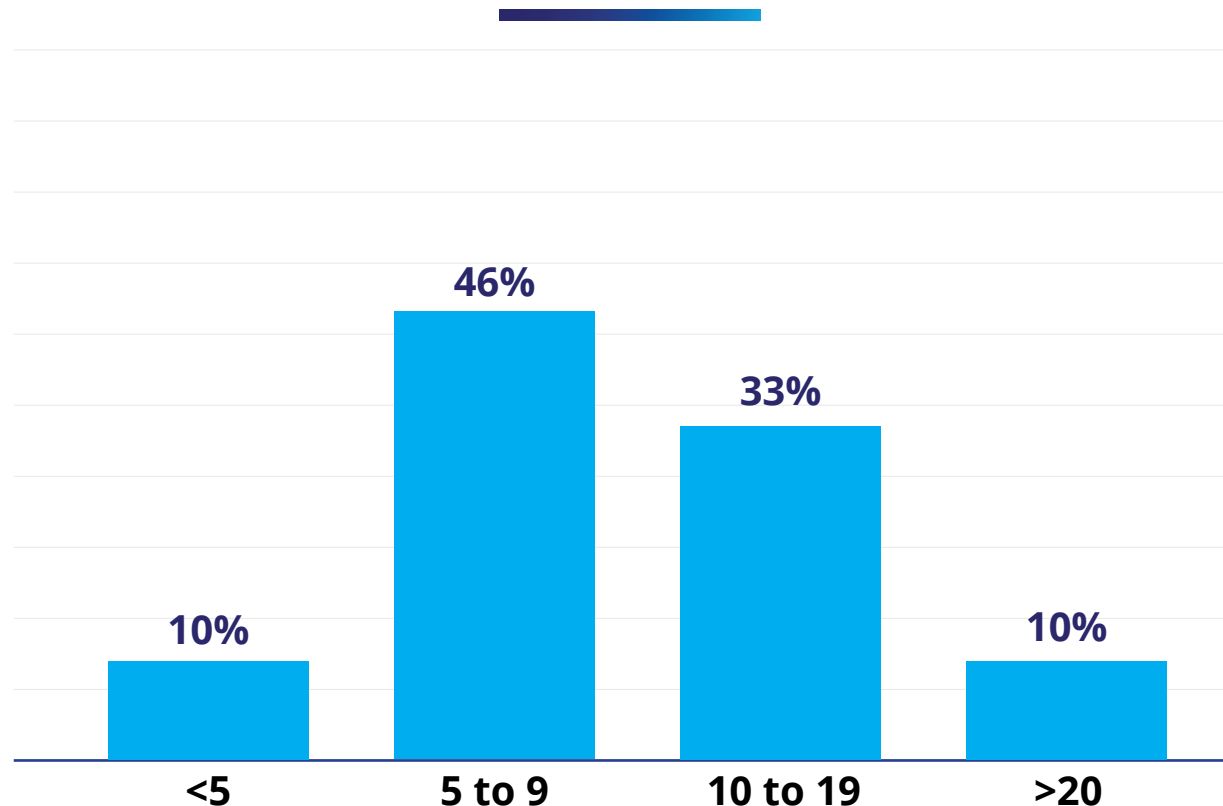


The Current ITOps Landscape

Before we delve into how enterprises and MSPs are using AIOps, let's step back to see how they're dealing with more foundational ITOps challenges, like monitoring and incident management. The first question we asked was about monitoring tool sprawl. Enterprises are doing a better job of keeping tool sprawl in check, with more than half of respondents (56.5%) having less than 10 monitoring tools. Still a third of enterprises are using 10-19 tools and another 10% have more than 20!

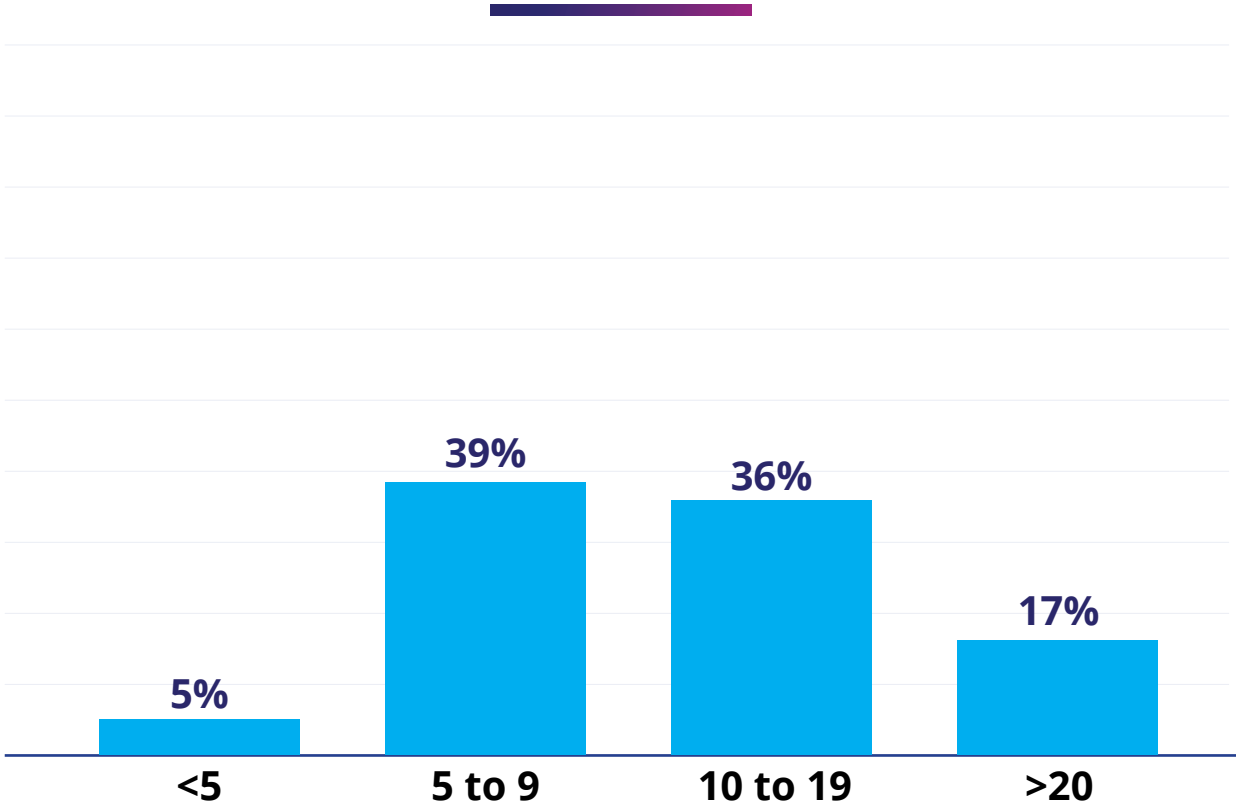


Q: How many monitoring tools do you currently have to monitor and manage your entire IT environment? (Enterprises)



Monitoring tool sprawl is even more of an issue for MSPs, not surprising since MSPs have to support different customer environments and often inherit the tools that come with those environments. More than half of MSPs (55.1%) are managing 10 or more tools. Just 5.5% have less than 5.

Q: How many monitoring tools do you currently have to monitor and manage your entire IT environment? (MSPs)



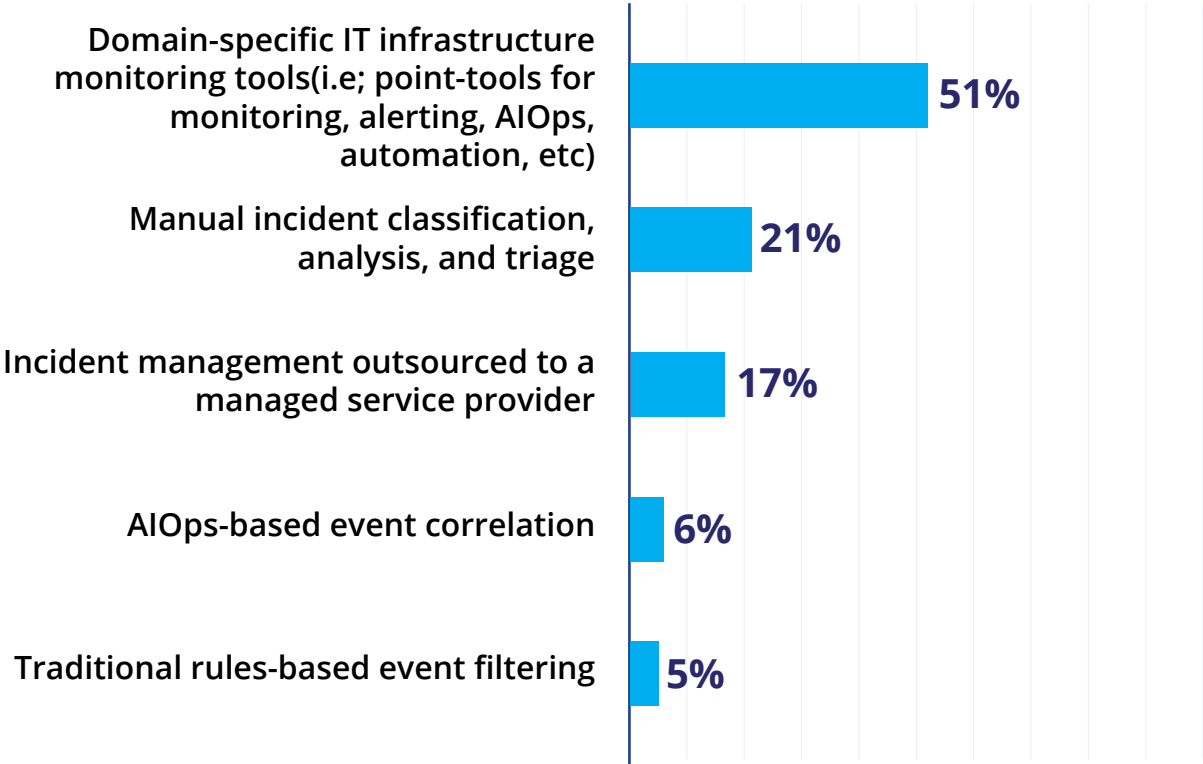
Domain-centric Monitoring is Still King

Our next question sheds some light on why monitoring tool sprawl remains: Domain-centric IT infrastructure monitoring tools is still the go-to approach for detecting performance issues or IT outages for both enterprises and MSPs, even though we asked this question two different ways for both respondents. Enterprises and MSPs both tend to use separate tools for whatever part of the IT estate they're monitoring. We allowed enterprises just a single response to this question with more than half picking domain-specific IT infrastructure monitoring tools, nearly 30 percentage points more than the next most popular choice.

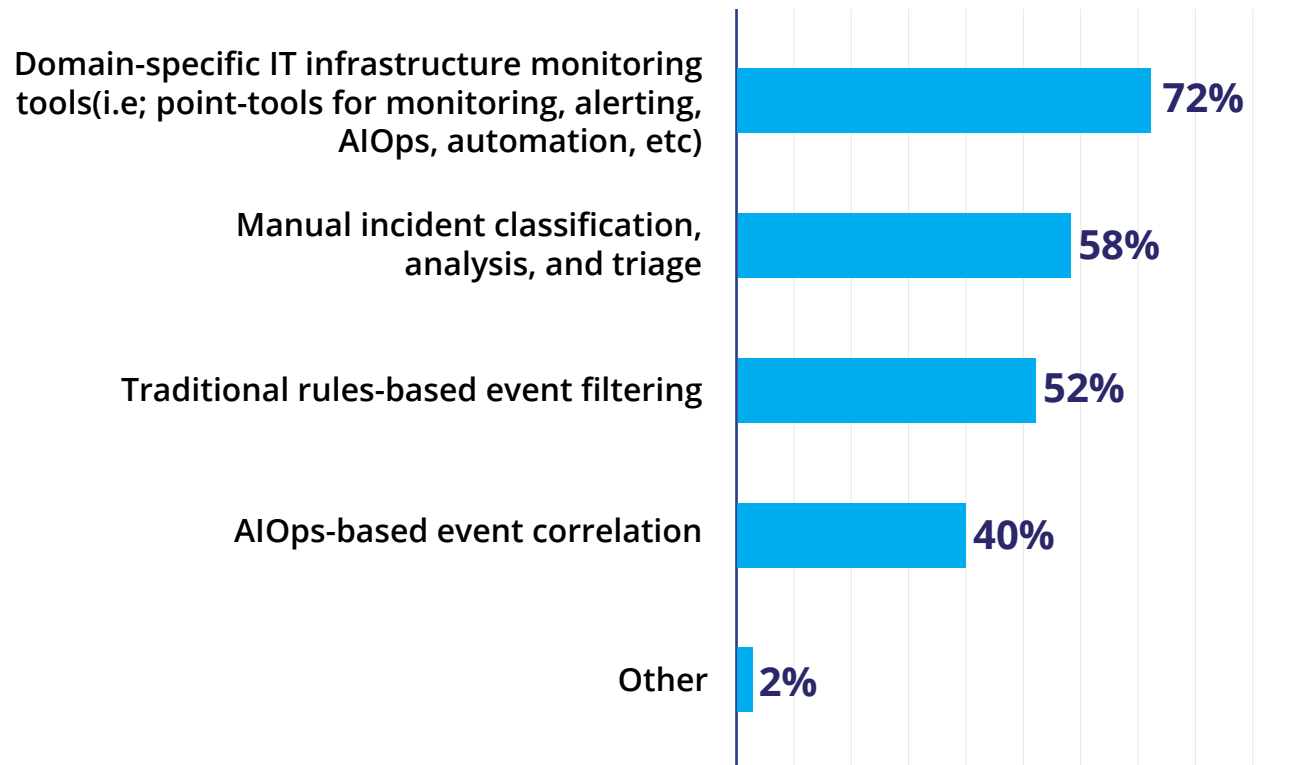


Q: How do you currently detect production issues or IT outages that impact user experience and business-service performance? (Enterprises)

As MSPs typically use more tools, we allowed them to check off multiple answers to this question. Domain-specific IT infrastructure monitoring tools was still the top answer, selected by 72.4% of respondents. Though more than 40% of MSPs selected AIOps-based event correlation, it was the least popular answer for MSPs and was cited by just 6% of enterprises. While nearly all of our respondents claim to be having some success with AIOps, the answers to this question tell us that both enterprises and MSPs have a lot of room to grow in their AIOps deployments.



Q: How do you currently detect production issues or IT outages that impact user experience and business-service performance? (MSPs)



Dependency Mapping Holds Back Incident Management

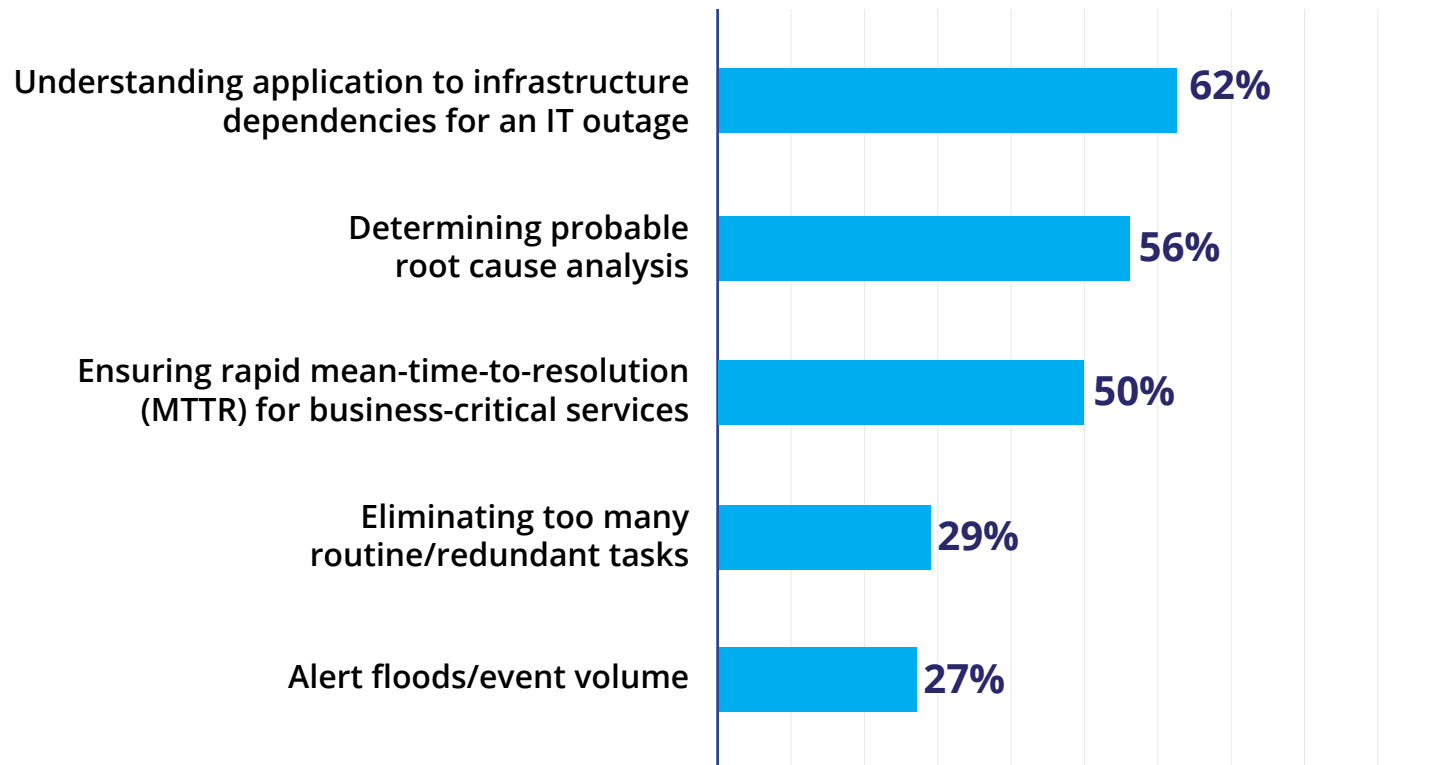
Next, we asked both enterprises and MSPs about their top incident management challenges. Both sets of respondents cited “understanding application to infrastructure dependencies for an IT outage” as their top challenge with enterprises at 62.3% and MSPs at 66.1%. Mapping applications to their underlying infrastructure remains a challenge for both enterprises and MSPs, especially as more workloads move to the cloud and applications can draw on hybrid resources.

The two sets of respondents diverged on their second-biggest incident management challenge. For MSPs, “ensuring rapid mean-time-to-resolution (MTTR) for business-critical services” was right behind application to infrastructure dependencies, at 65.4%. Enterprises’ second-biggest incident management challenge was “determining probable root cause analysis” at 56.5%. The three top answers are interrelated.

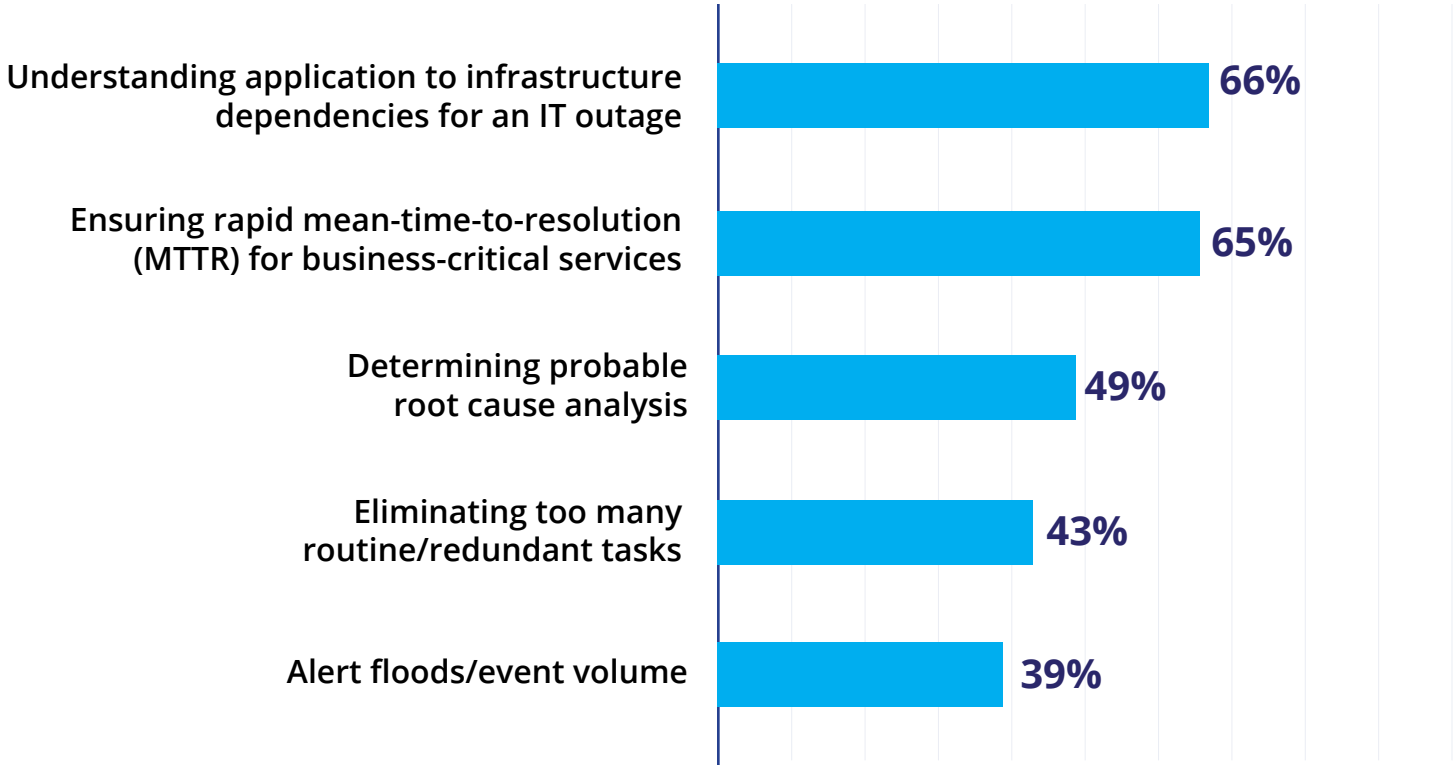
Finding out the root cause of an issue and speeding up resolution of that issue can both be improved by better application and business service mapping that keeps up with the complex dependencies in modern hybrid environments.




Q: What are your top incident management challenges? (Enterprises)



Q: What are your top incident management challenges? (MSPs)



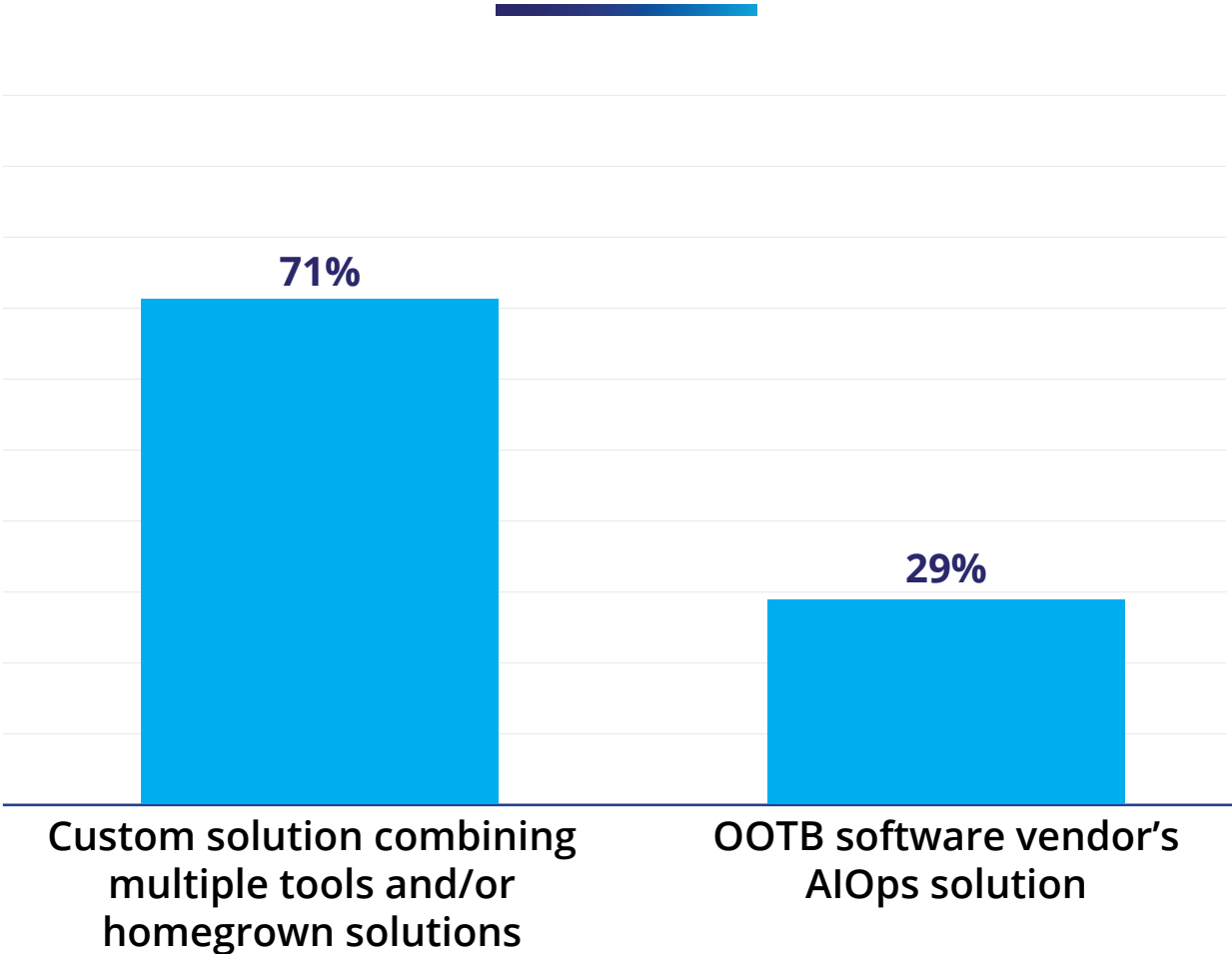
AIOps Vendor Selection and Adoption



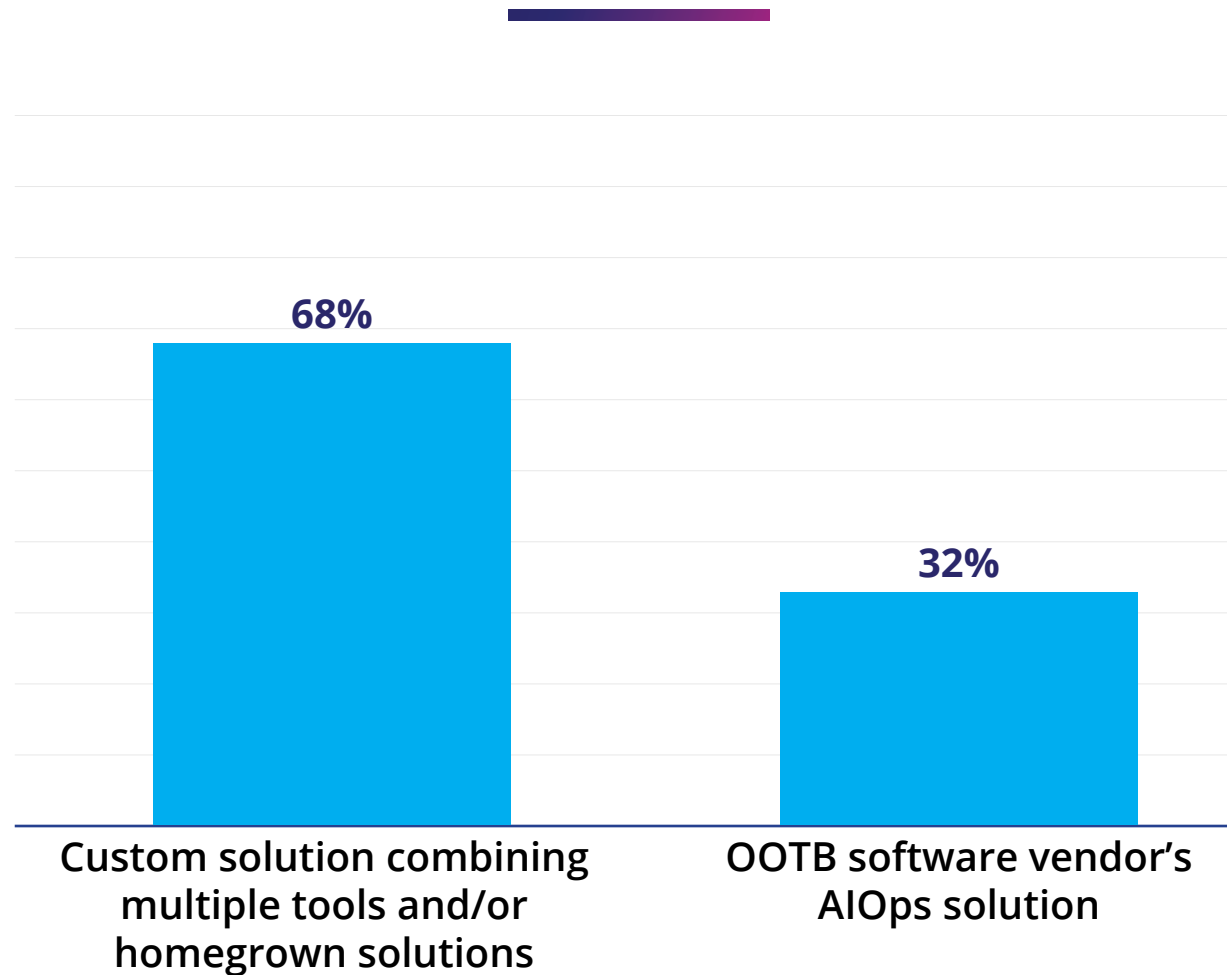
So our current ITOps landscape remains dominated by domain-specific monitoring tools and lots of them as both enterprises and MSPs struggle to map dependencies between applications, business services and IT infrastructure and need faster root cause analysis and MTTR. There's clearly a need for AIOps, yet all of our survey respondents claim to have implemented AIOps solutions already. So what does AIOps actually look like at enterprises and MSPs? We first focused on vendor selection.

AIOps is an approach more than a free-standing technology so it's not surprising then that most organizations have implemented custom AIOps solutions consisting of multiple tools and/or homegrown solutions rather than out-of-the-box AIOps solutions from one particular vendor. This trend is even more pronounced on the enterprise side vs. MSPs.

Q: Did you implement a custom AIOps solution or an off-the-shelf software vendor's solution? (Enterprises)



Q: Did you implement a custom AIOps solution or an off-the-shelf software vendor's solution (MSPs)

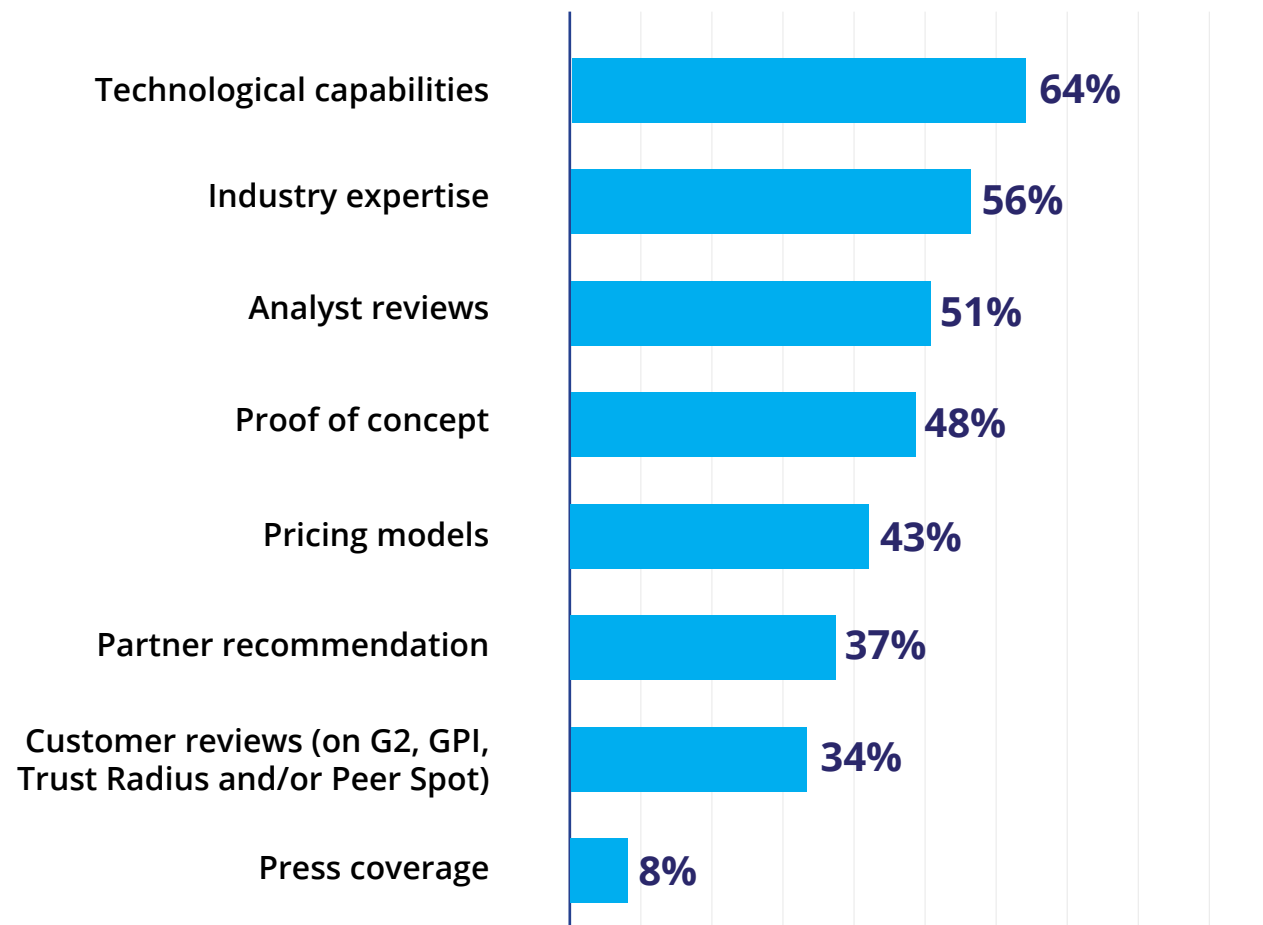


How to Choose an AIOps Vendor

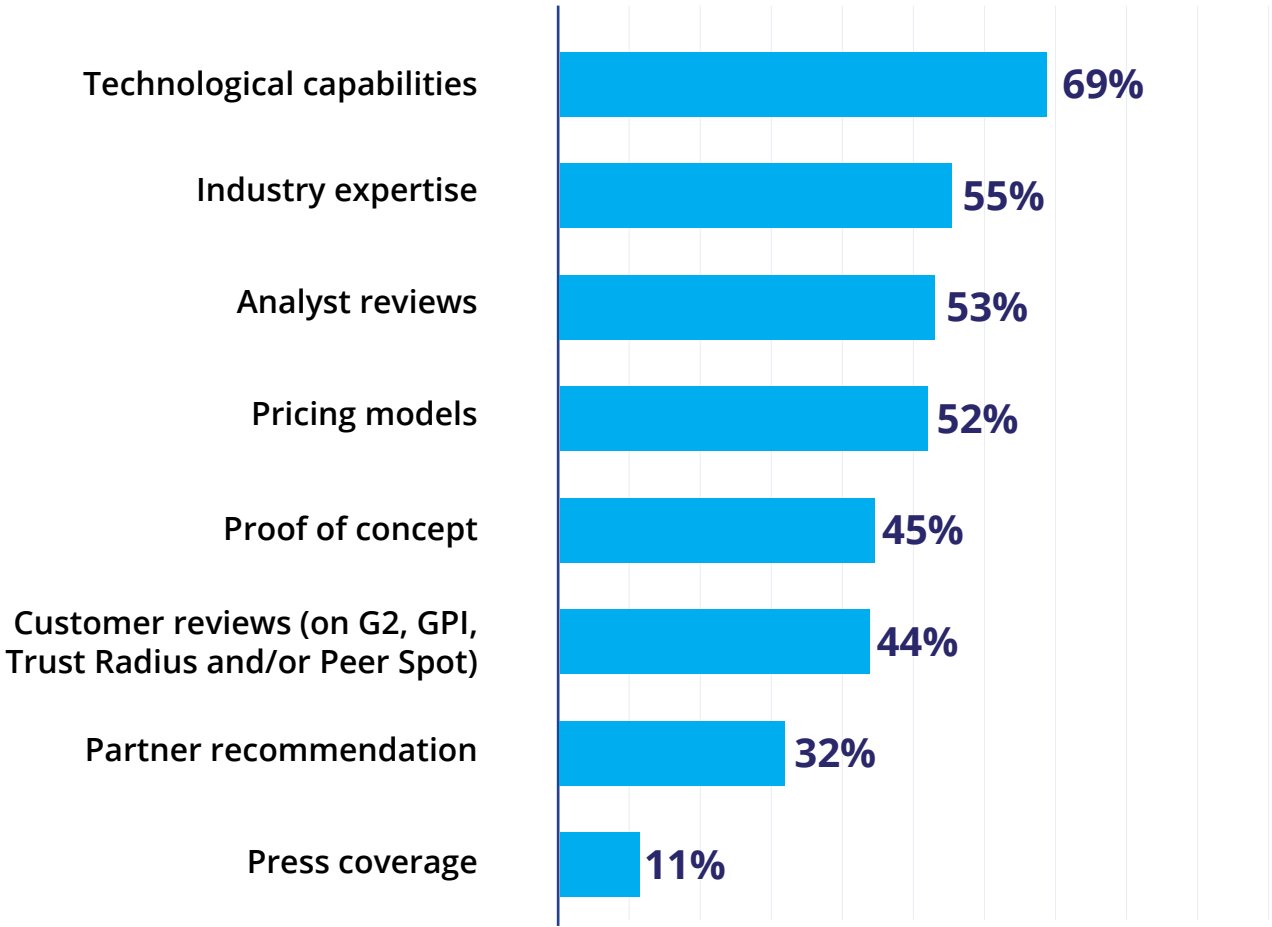
We asked what criteria respondents used to choose an AIOps vendor. Again, the responses were fairly consistent across both enterprises and MSPs, with technological capabilities and industry expertise the most important factors for both, more so than pricing or even proof of concepts. Analyst reviews of vendor offerings are valued more by both enterprises and MSPs than customer reviews, partner recommendations and press coverage.



Q: What criteria did you use to choose an AIOps vendor? (Enterprises)



Q: What criteria did you use to choose an AIOps vendor? (MSPs)



So if technological capabilities and industry expertise drive AIOps vendor selection, what technological capabilities are organizations looking for those vendors to provide?

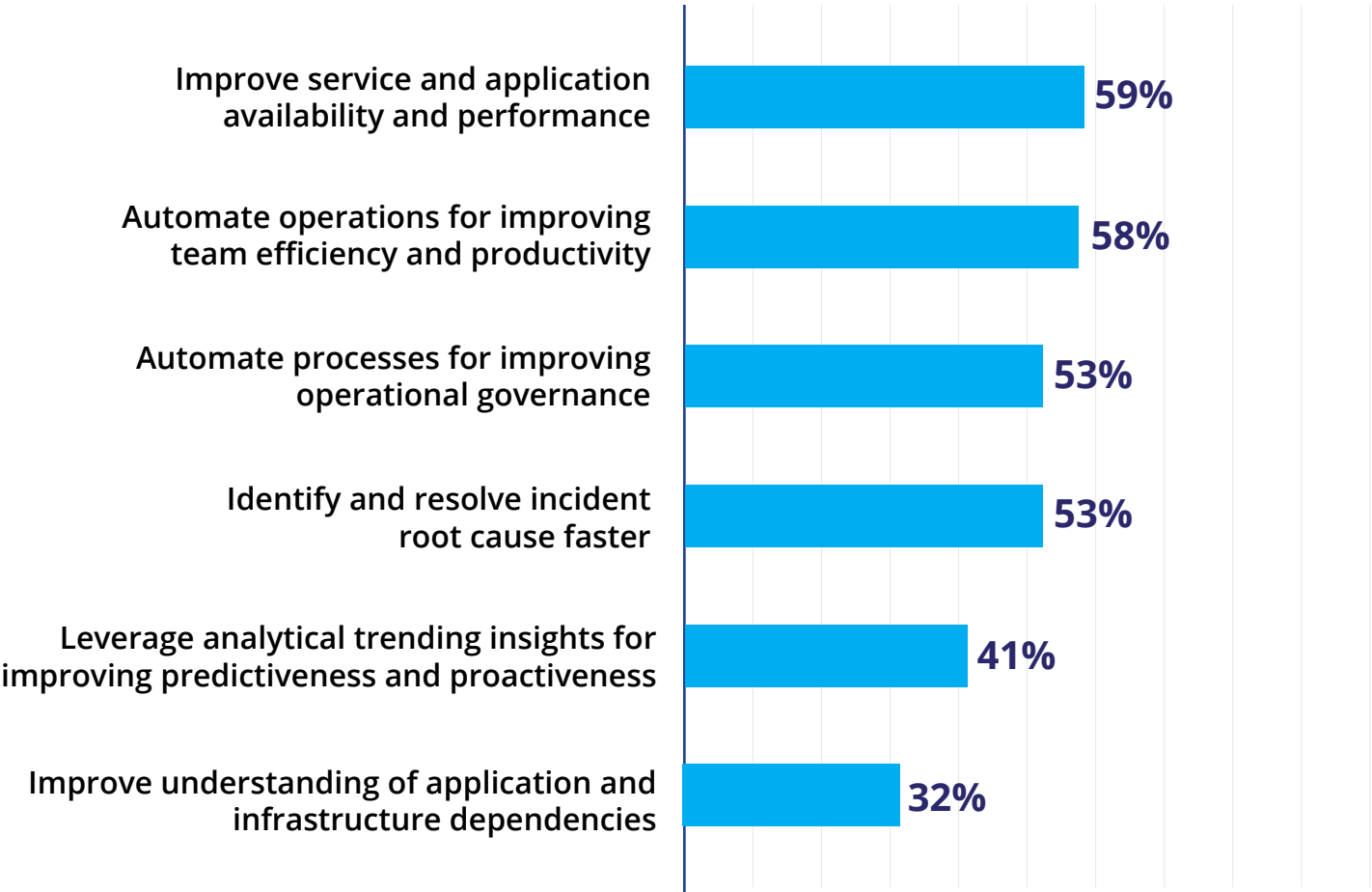
Enterprises and MSPs had the same top three choices:

- Improve service and application availability and performance
- Automate operations for improving team efficiency and productivity
- Automate processes for improving operational governance.

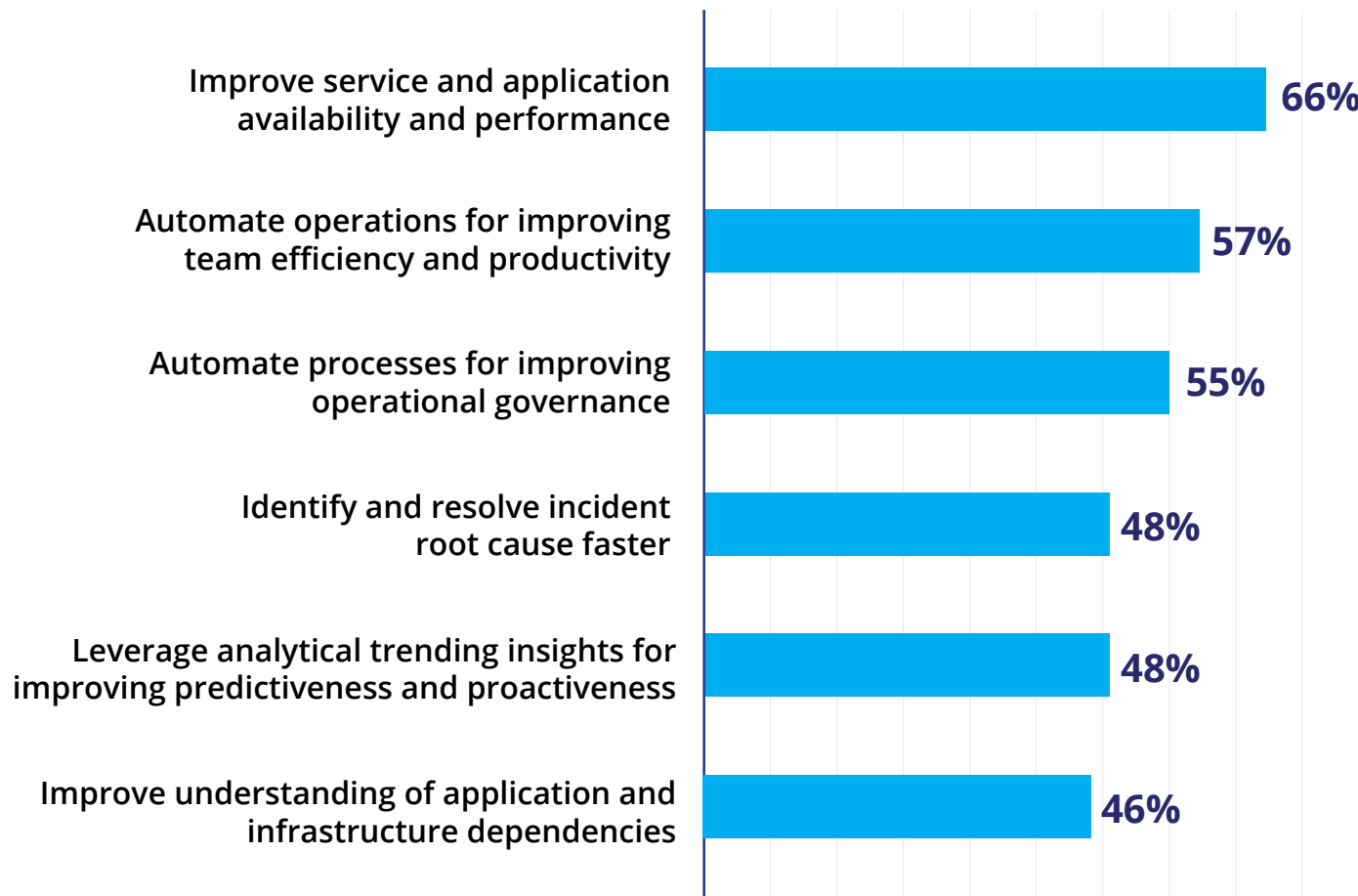
The first one is an overarching goal of any AIOps deployment. At the end of the day, AIOps adopters want better availability and performance of applications and other IT services. But the next two highest responses are more telling. Clearly, both enterprises and MSPs see automation—of operations and processes—as one of the chief benefits of AIOps. AIOps, if done right, can give users the confidence to automate menial IT tasks or kick off automated processes to resolve detected issues.

Though respondents told us that mapping application and infrastructure dependencies is an ongoing challenge, they aren't looking to AIOps to resolve that challenge. Improve understanding of application and infrastructure dependencies was rated last among the factors driving AIOps adoption by both enterprises and MSPs. Dependency mapping needs to be handled at the monitoring stage before you can adopt AIOps.

Q: What are the driving factors for your adoption of AIOps? (Enterprises)



Q: What are the driving factors for your adoption of AIOps? (MSPs)



The Most Important AIOps Features

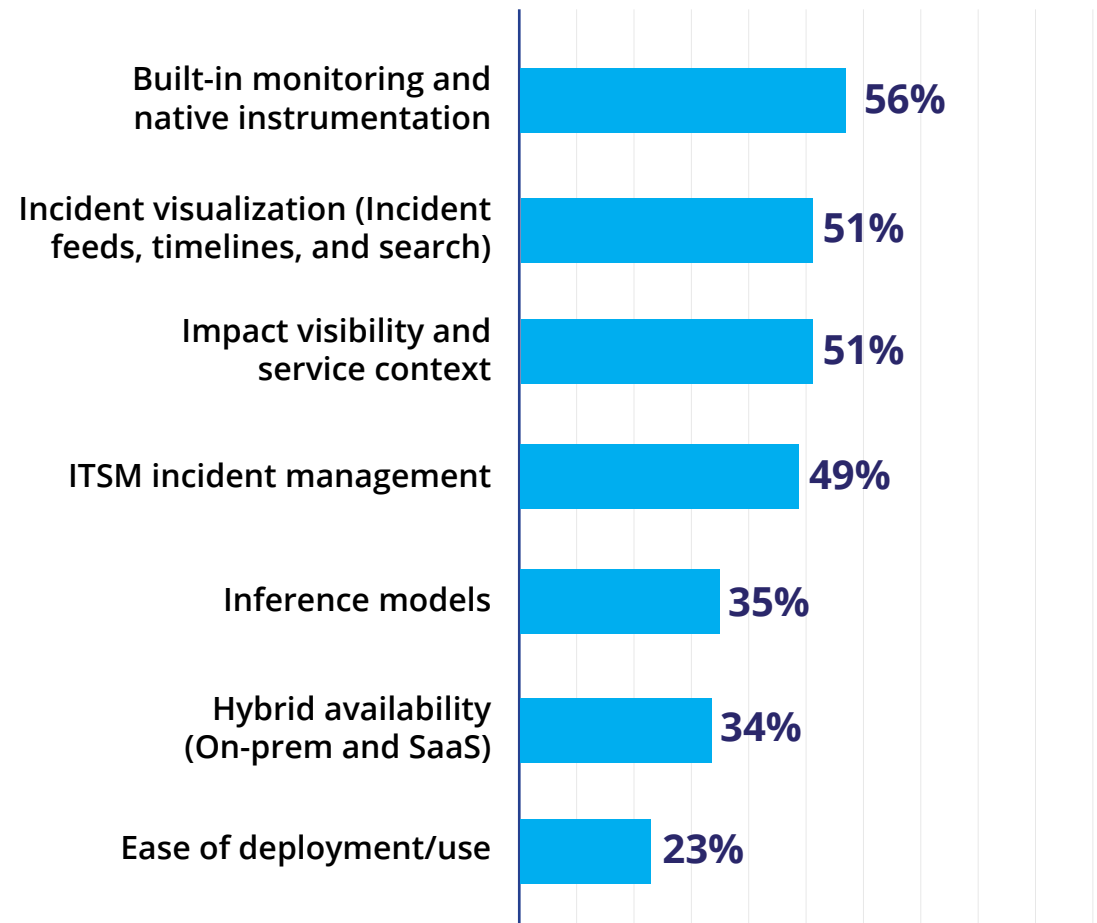
While the previous question asked what drove our respondents' adoption of AIOps, the next question asked them what features and capabilities they were looking for in an AIOps solution. Enterprises picked built-in monitoring and native instrumentation as their top choice, with more than 55.8% of respondents selecting this answer. In a world where many AIOps solutions are simply event correlation engines that require other tools to collect the monitoring data they analyze, this answer indicates that a majority of enterprises prefer that their AIOps solution have monitoring built-in rather than have an event correlation engine that sits above their monitoring stack.

A majority of enterprises prefer that their AIOps solution have monitoring built-in rather than have an event correlation engine that sits above their monitoring stack.

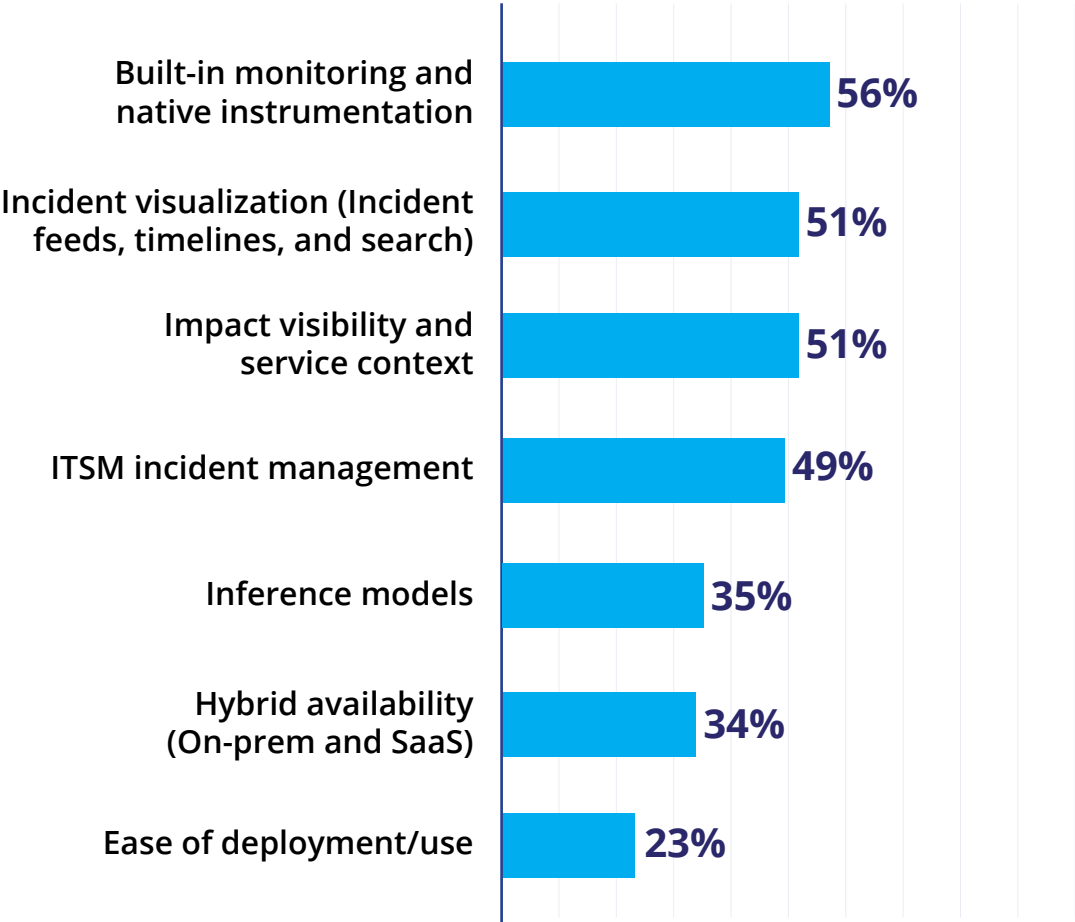
Incident visualization (51.4%) and impact visibility and service context (50.7%) also were selected by more than half of respondents. Interestingly, ease of deployment/use scored lowest on this question, selected by just 23.2% of respondents, perhaps an indication that respondents are willing to tolerate some complexity and deployment challenges in exchange for powerful capabilities that get the job done.

Q: Which features and capabilities do you feel are particularly important in an AIOps solution? (Enterprises)

MSPs reported the same top three, though Incident visualization was the top response at 54.3%, followed by built-in monitoring/native instrumentation (53.5%) and Impact visibility/service context (50.4%). Ease of deployment/use scored even lower among MSPs. MSPs are used to having to hide complexity from their end users.



Q: Which features and capabilities do you feel are particularly important in an AIOps solution? (MSP)



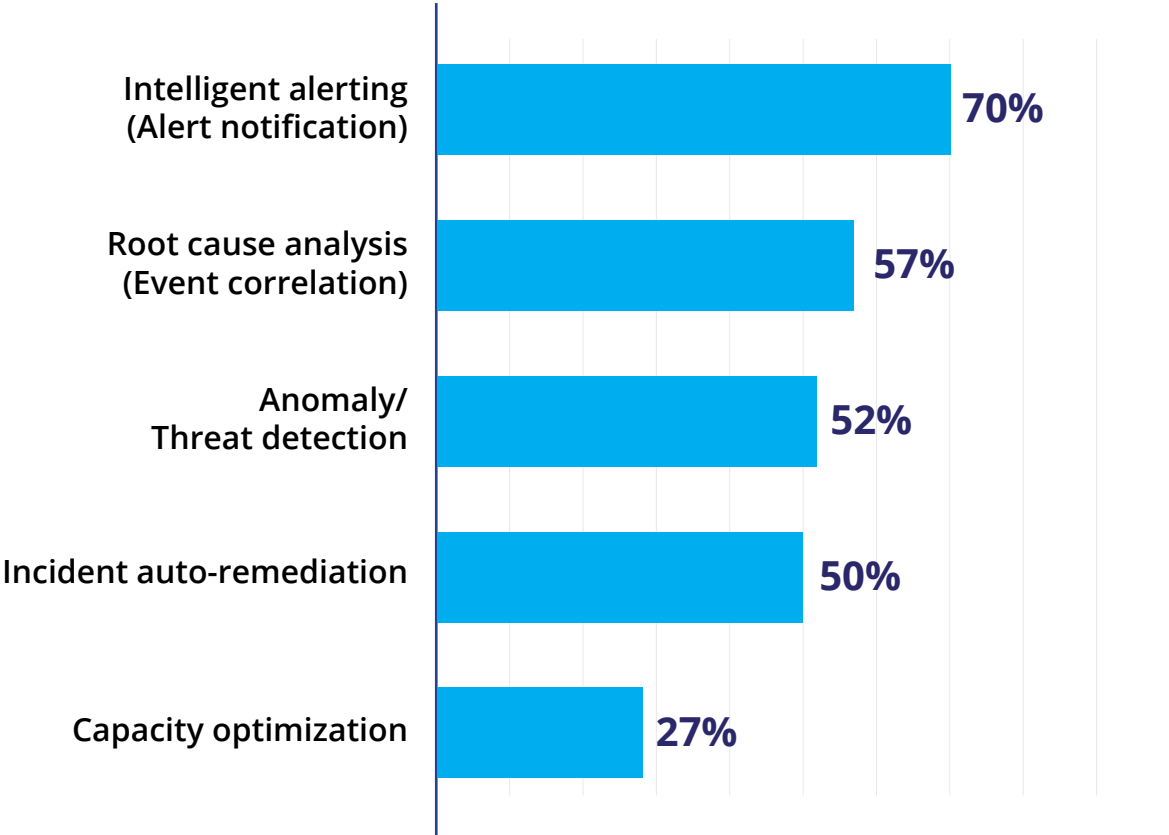
AIOps in Practice

All of our respondents claim to be using AIOps solutions and nearly all say that AIOps is delivering the value they expected, 98% of enterprises and 96% of MSPs, which really surprised us. So we dug a bit deeper into how our respondents were using AIOps, the benefits they were seeing and how much faster they were resolving incidents with AIOps.

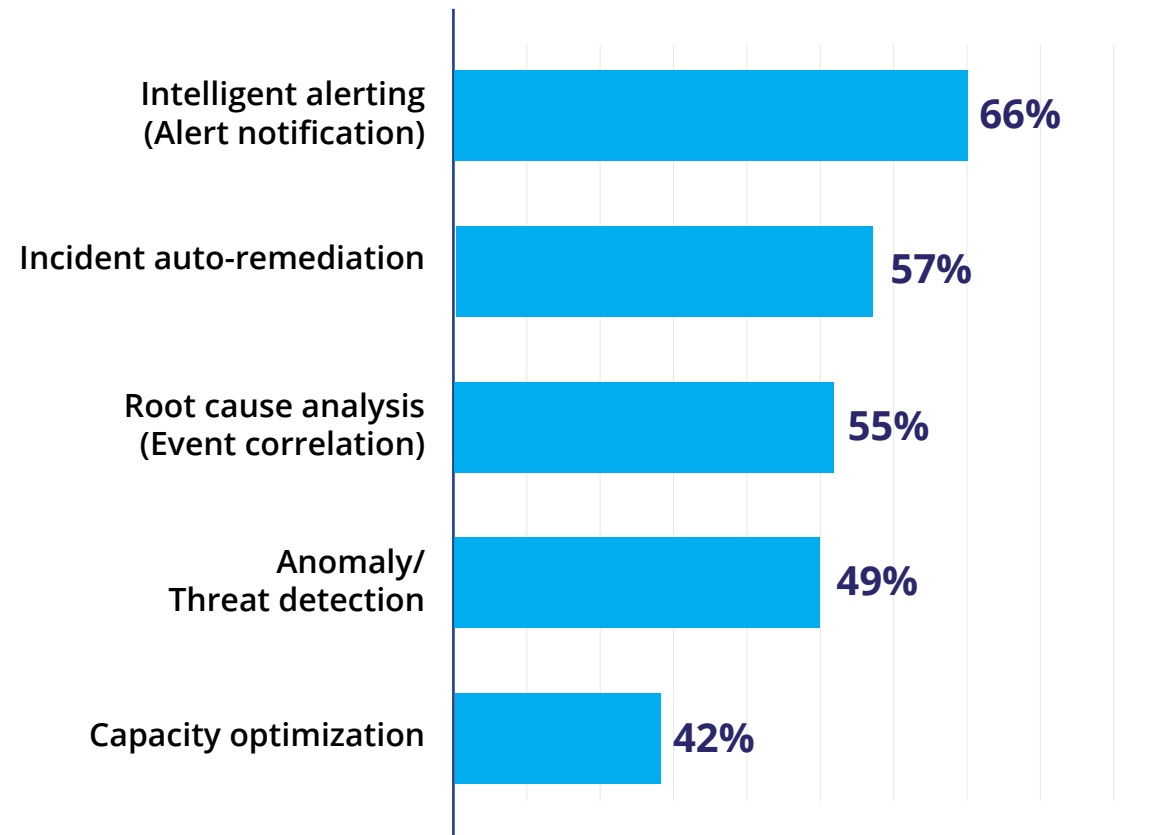


First, we asked our respondents how their teams were currently using AIOps tools. The big winner across both sets of respondents was intelligent alerting, used by 69.6% of enterprises and 66.1% of MSPs. From there, the answers diverged a bit. Incident auto-remediation, perhaps the most advanced AIOps use case, was the second-highest choice of MSPs at 56.7% but only registered with 50% of enterprises, where it trailed root cause analysis (57.2%) and anomaly/threat detection (52.2%). MSPs, not surprisingly, are a bit more advanced in AIOps use cases, but both constituencies have room to grow.

Q: How is your team currently using AIOps tools? (Enterprises)



Q: How is your team currently using AIOps tools? (MSPs)

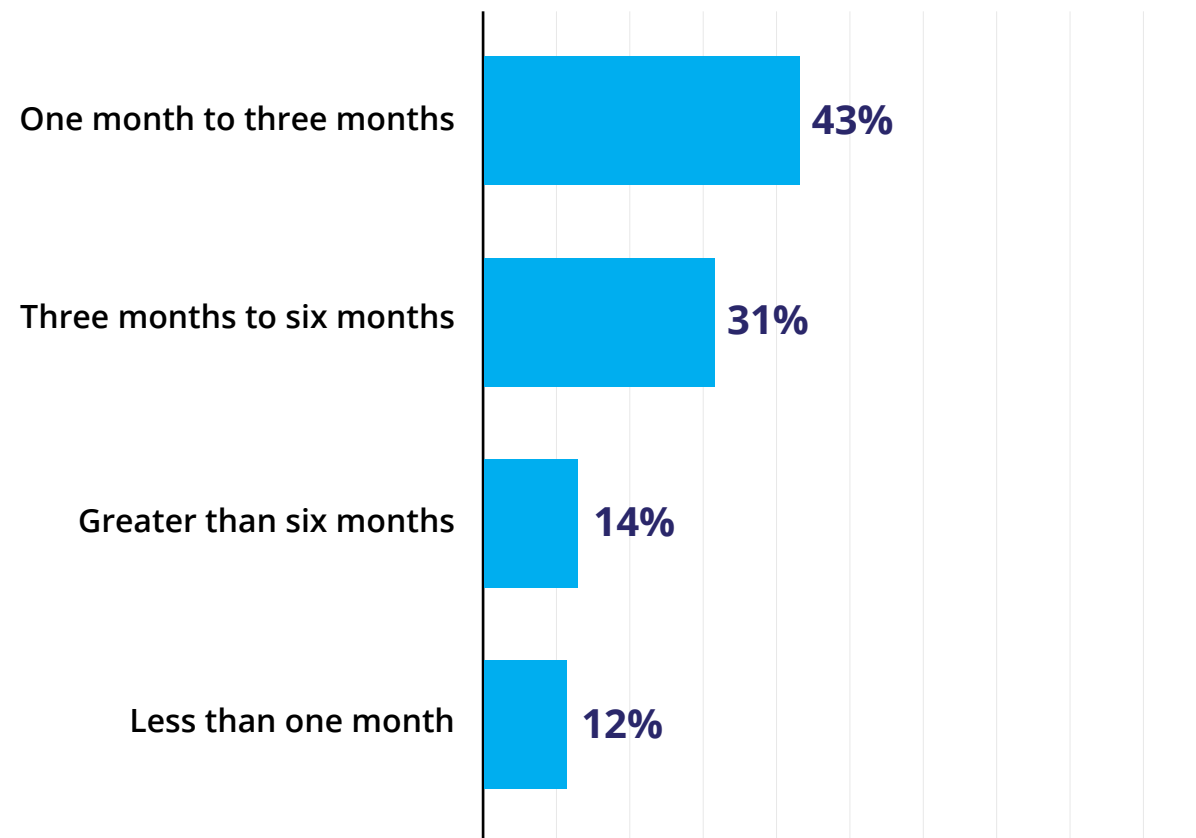


AIOps in Three to Six Months a Reality for Most

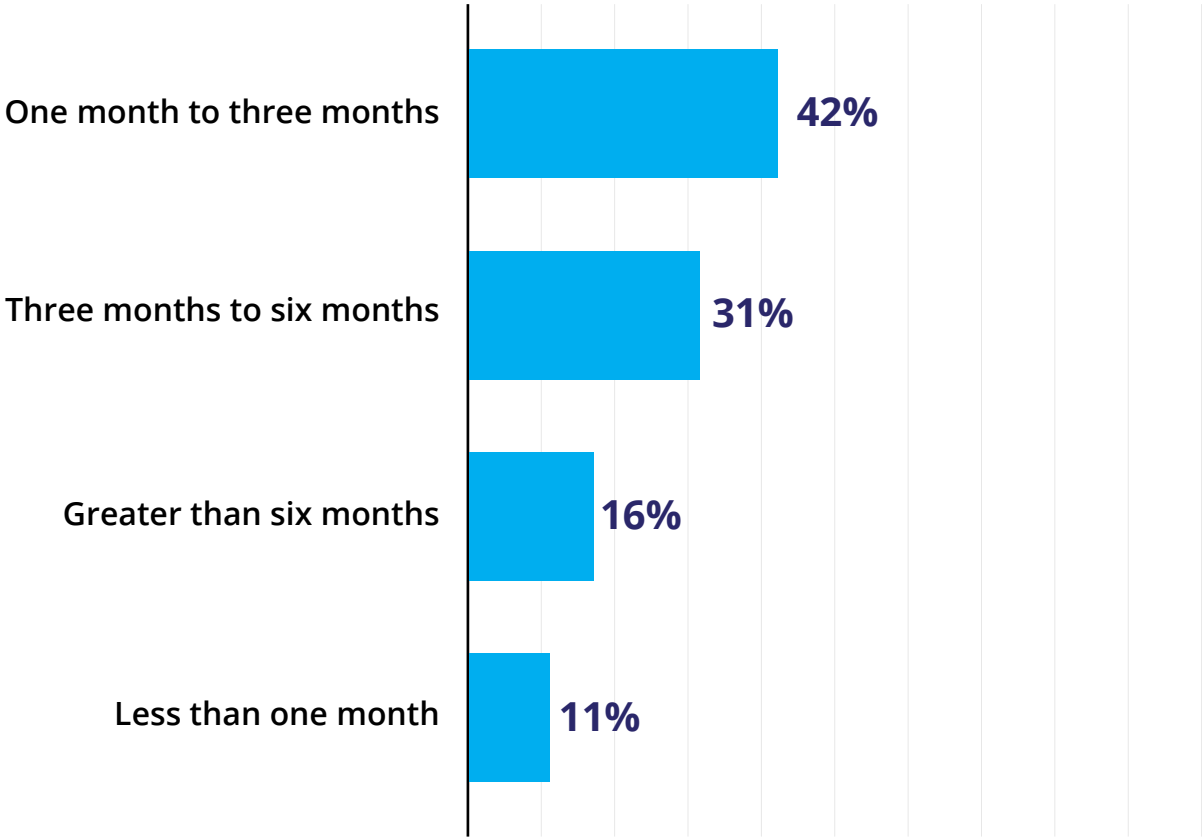
AIOps is powerful, but also complex. AIOps implementations are not prohibitively long, however, according to most of our survey respondents. A majority of respondents said they implemented AIOps within three months, with more than 80% completing their AIOps implementations within 6 months.



Q: How long did it take to implement your current AIOps solution? (Enterprises)



Q: How long did it take to implement your current AIOps solution? (MSPs)



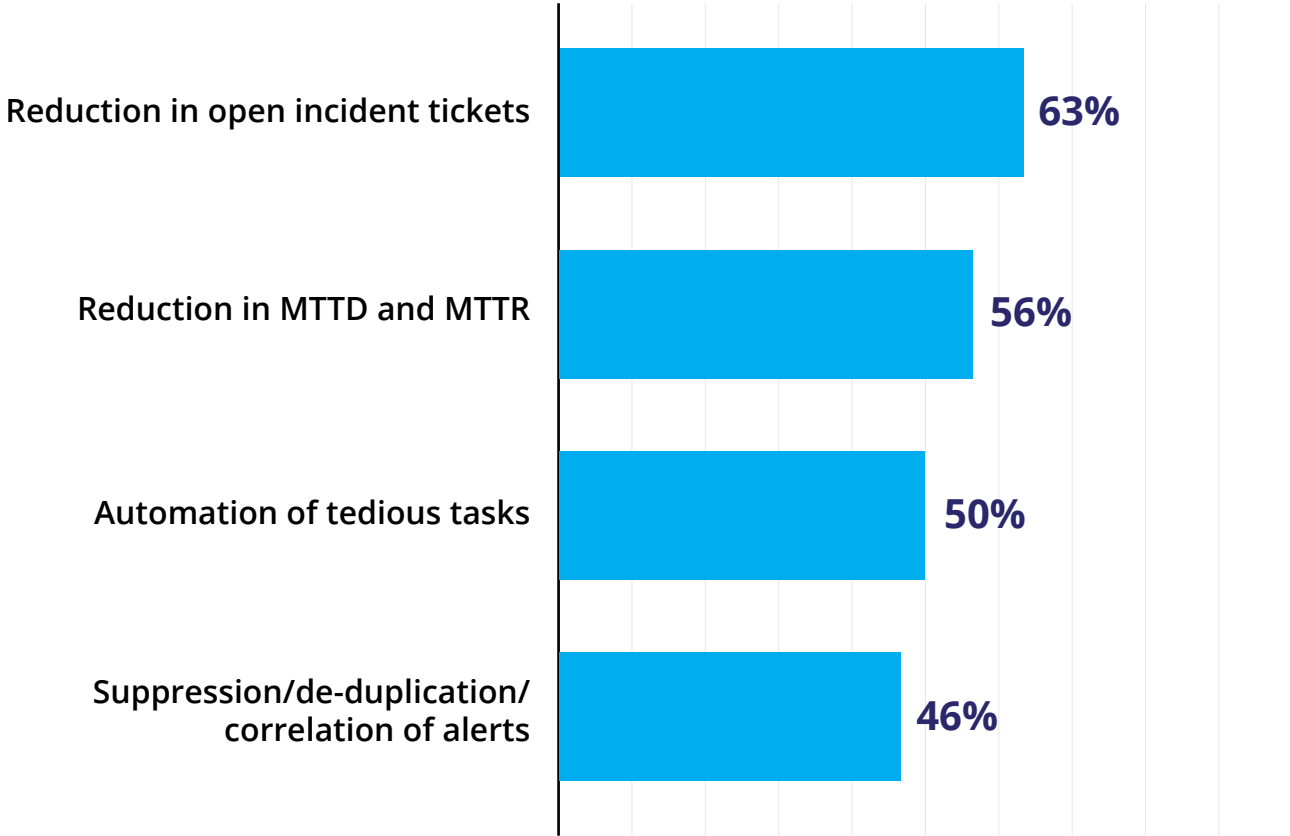
The Benefits of AIOps

Once implementation is complete, what benefits do organizations reap from their new AIOps solutions? For our respondents, primarily it's reduction in open incident tickets, cited by 63% of enterprises and 66.9% of MSPs. This isn't surprising since the primary AIOps use case for both was intelligent alerting. AIOps is clearly helping IT operations to take the strain off the help desk, by consolidating alerts through intelligent alerting and reducing the number of tickets filed, many of which would be from the same incident.

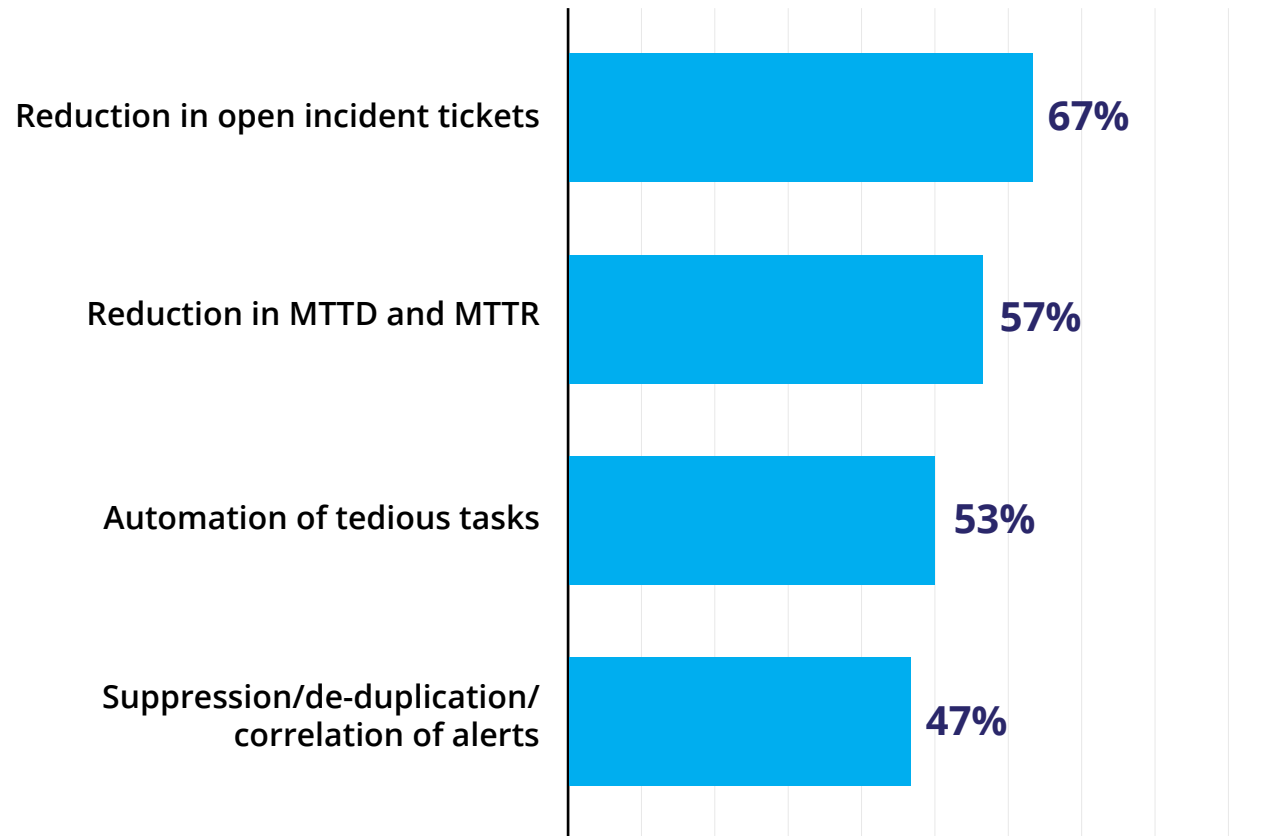
A secondary benefit from reducing those trouble tickets is reducing mean time to detect and mean time to resolve, cited by 55.8% of enterprises and 56.7% of MSPs. Cut down on the trouble tickets filed and IT operations is freed up to focus on the real problems end users are experiencing and resolve them. Automation helps too. More than half of our respondents cited automation of tedious tasks as a primary operational benefit of their AIOps implementation.



Q: What are the primary operational benefits of using AIOps tools? (Enterprises)



Q: What are the primary operational benefits of using AIOps tools? (MSPs)

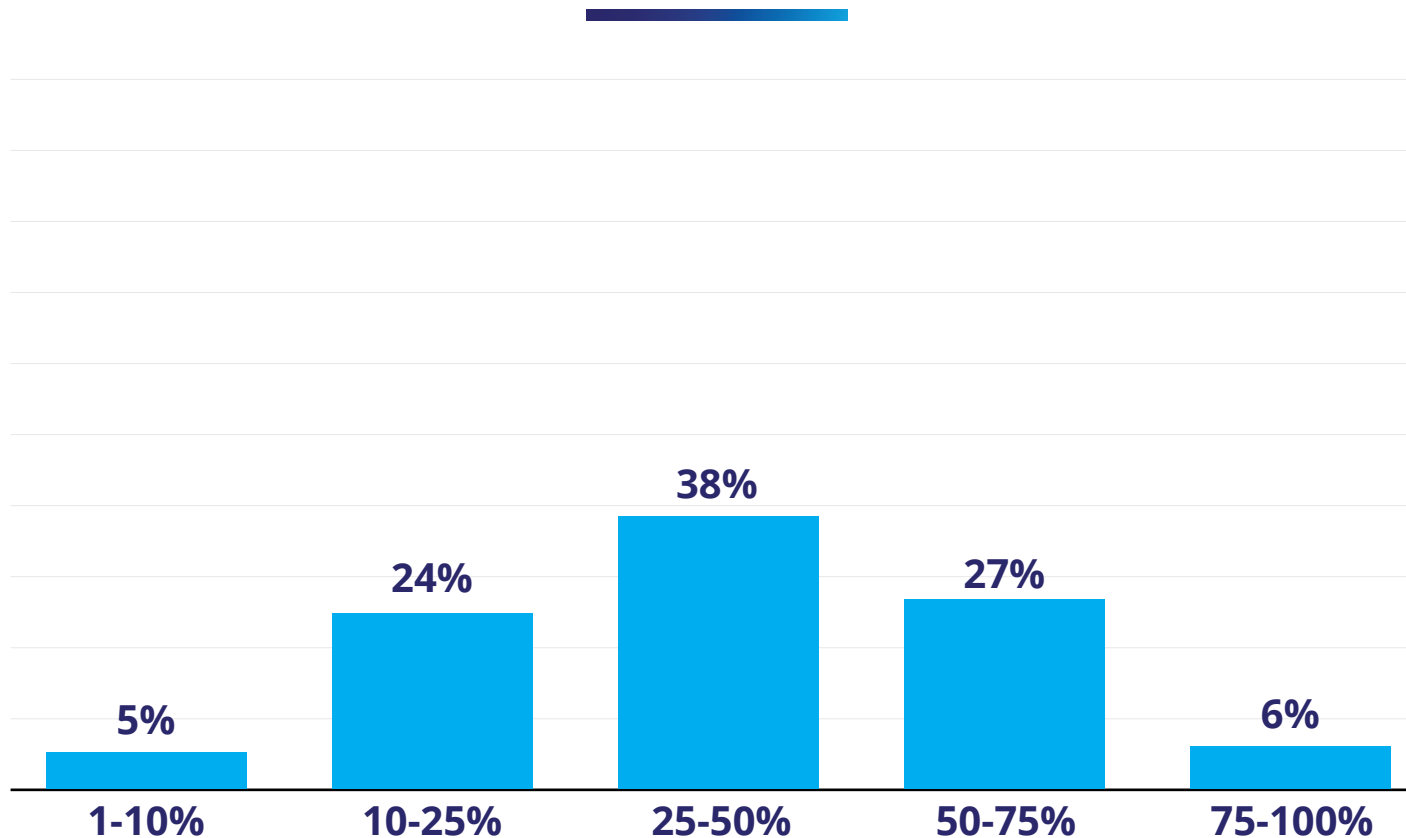


The Speed of AIOps

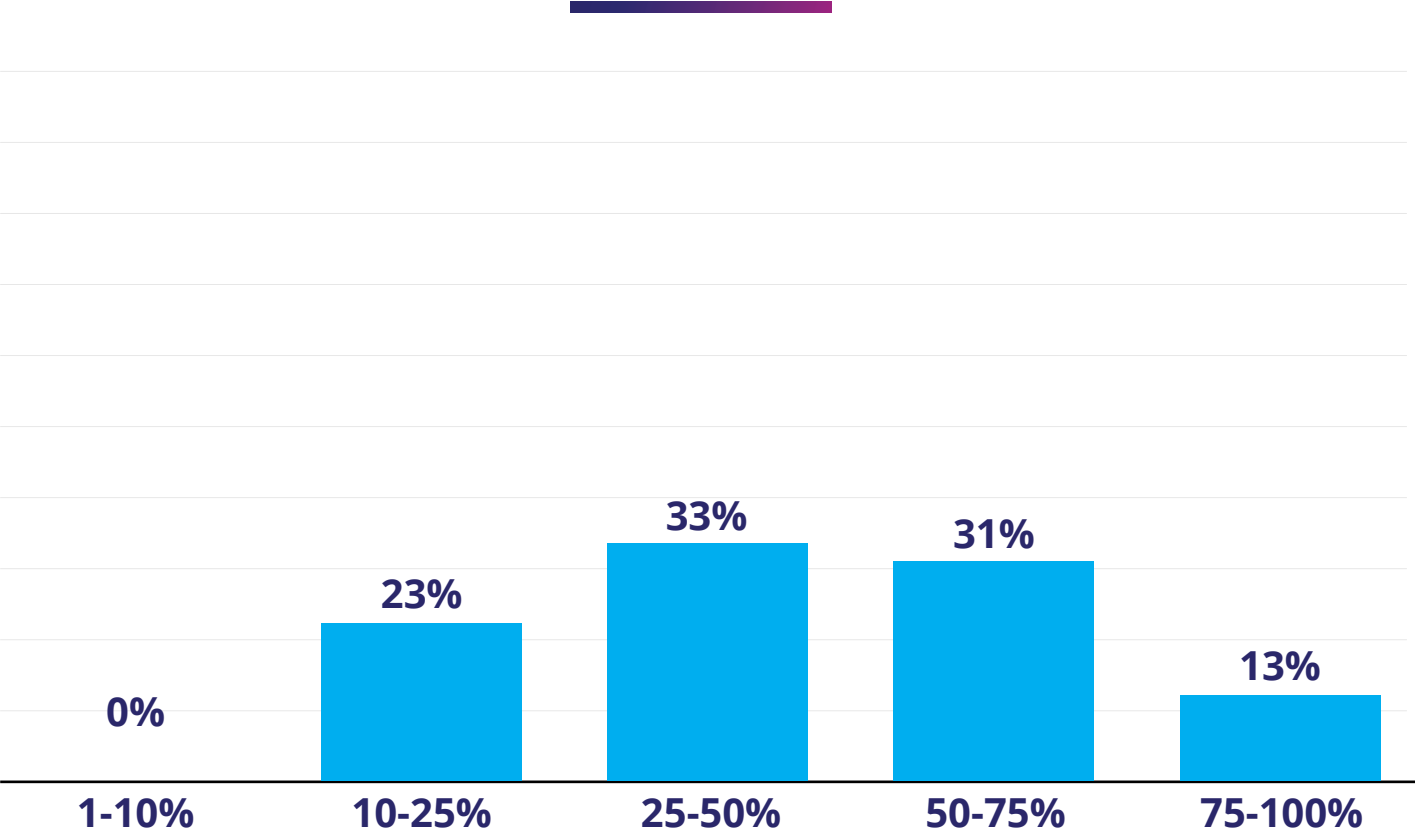
Next we asked our respondents to quantify just how fast they were able to resolve IT incidents using AIOps capabilities. A plurality of respondents put their IT organizations in the 25-50% reduction range. MSPs seemed a bit more advanced in this area with more than 44% cutting incident resolution time by more than 50% vs just over 33% of enterprises speeding up incident resolution by that much.



Q: How much faster are you able to resolve incidents using AIOps capabilities?
(Enterprises)



Q: How much faster are you able to resolve incidents using AIOps capabilities? (MSPs)



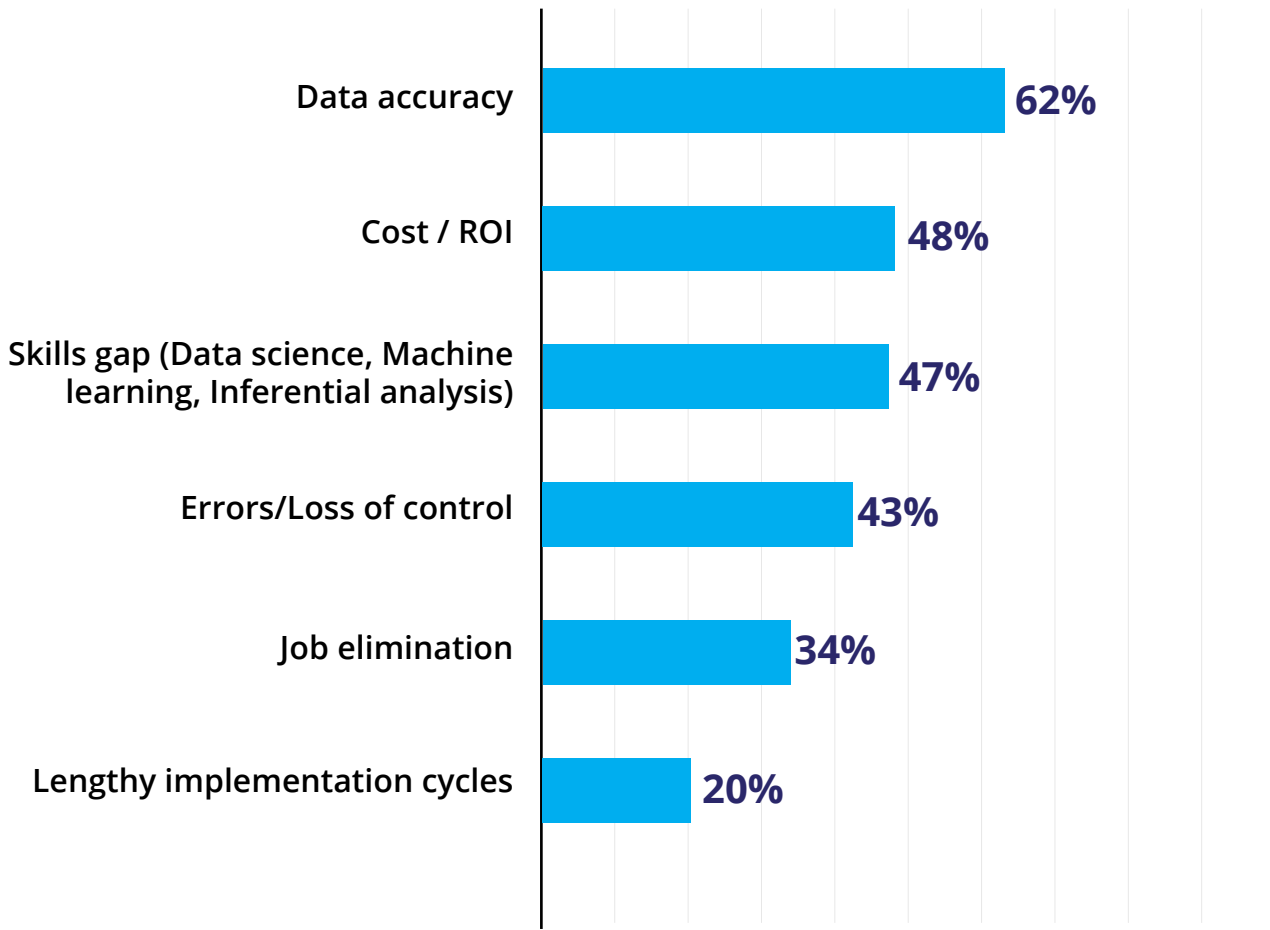
AIOps Concerns and Challenges

Clearly, our survey shows that AIOps is delivering significant quantifiable benefits for those organizations that have deployed the technology. But AIOps has also brought a new set of concerns and challenges as any new technology would as it makes inroads to an organization.

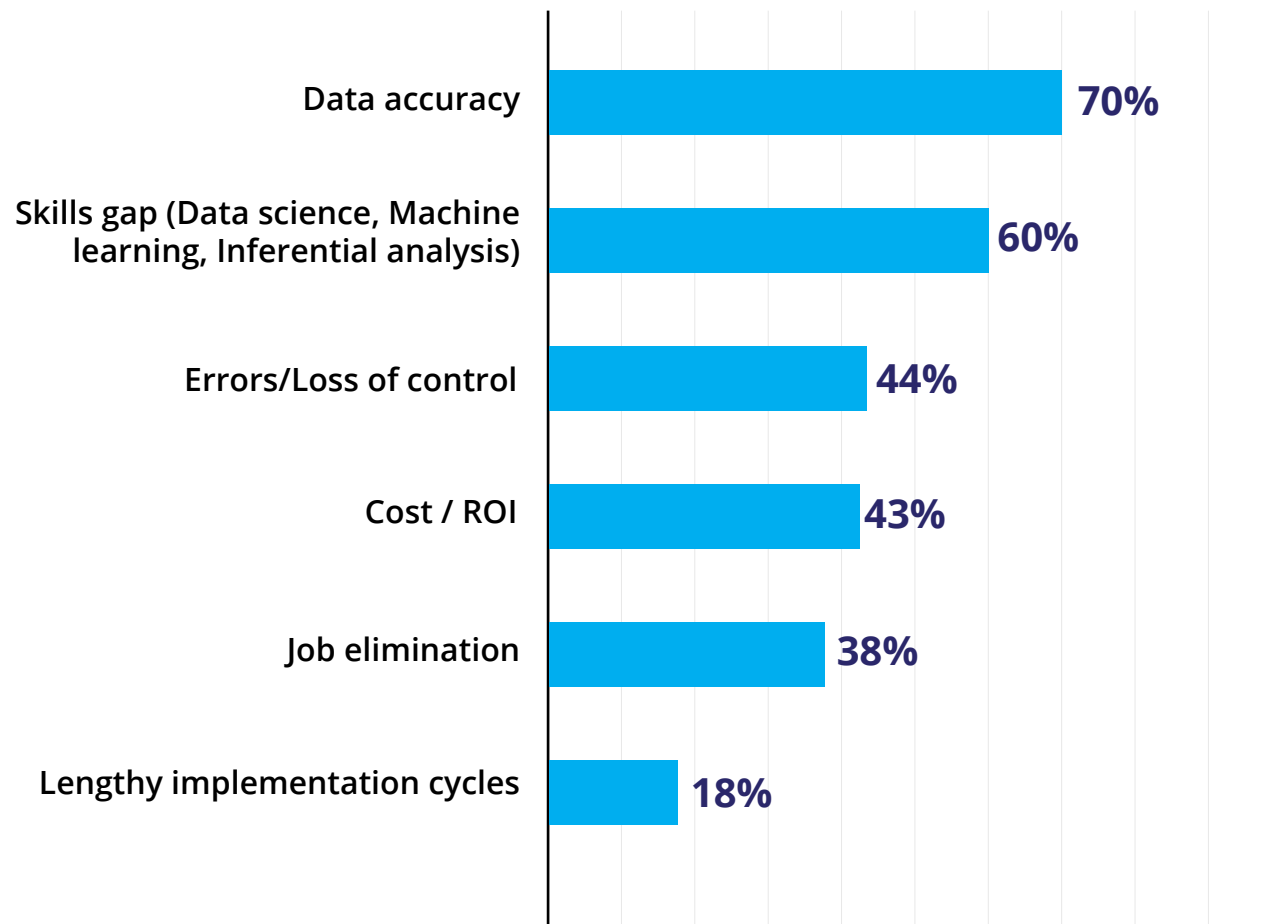
Foremost among the concerns both enterprises and MSPs have about AIOps is data accuracy. AIOps systems are only as good as the data that goes into them and our survey indicates that organizations are struggling to get the right data into their systems. As we learned earlier in the survey, most organizations still have a lot of tools collecting data and feeding it to their AIOps systems as domain-specific monitoring tools prevail. Data from so many disparate sources makes it harder for AIOps systems to integrate and analyze that data.

Skills gaps were also a concern, especially for MSPs, though cost/ROI scored slightly higher on enterprises' list of concerns. Jobs elimination and lengthy implementation cycles ended up near the bottom of the list of AIOps concerns for both enterprises and MSPs.

Q: What concerns do you have about the use of AIOps tools? (Enterprises)



Q: What concerns do you have about the use of AIOps tools? (MSPs)

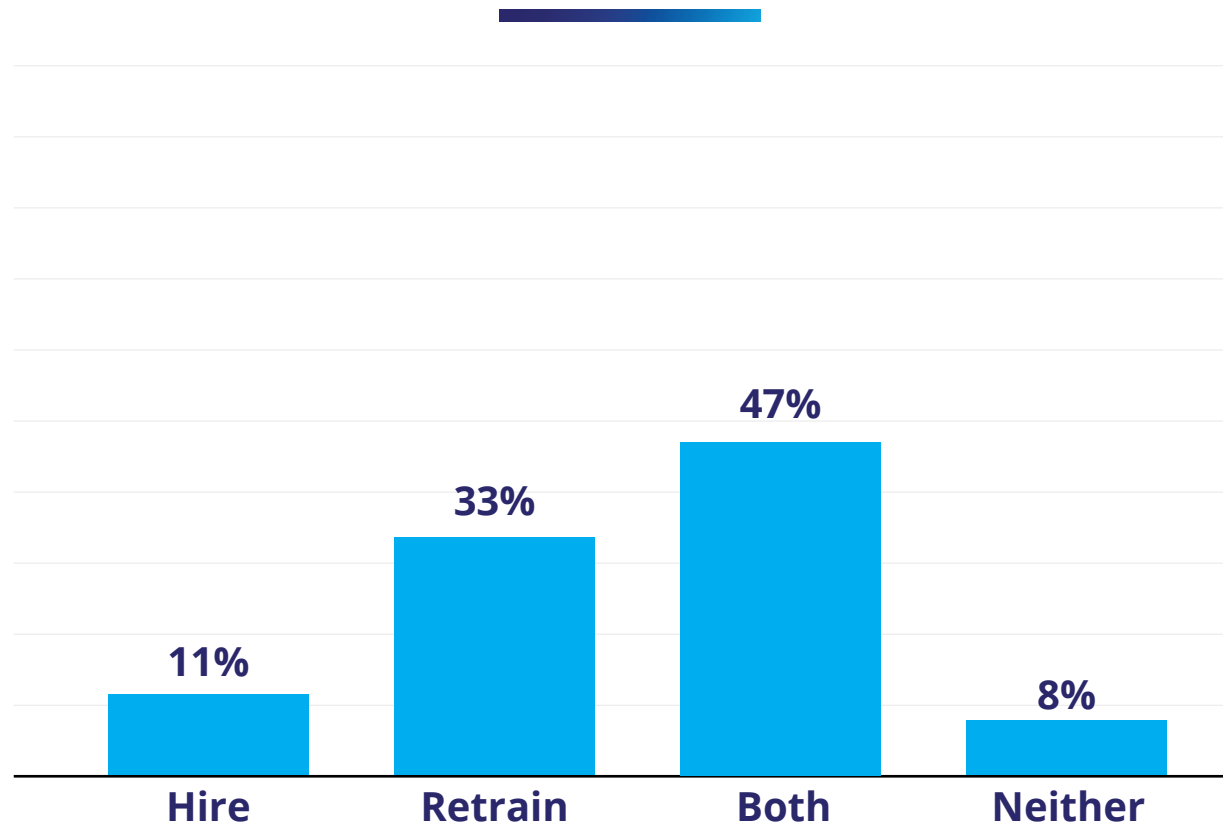


AIOps is Not a Job Killer!

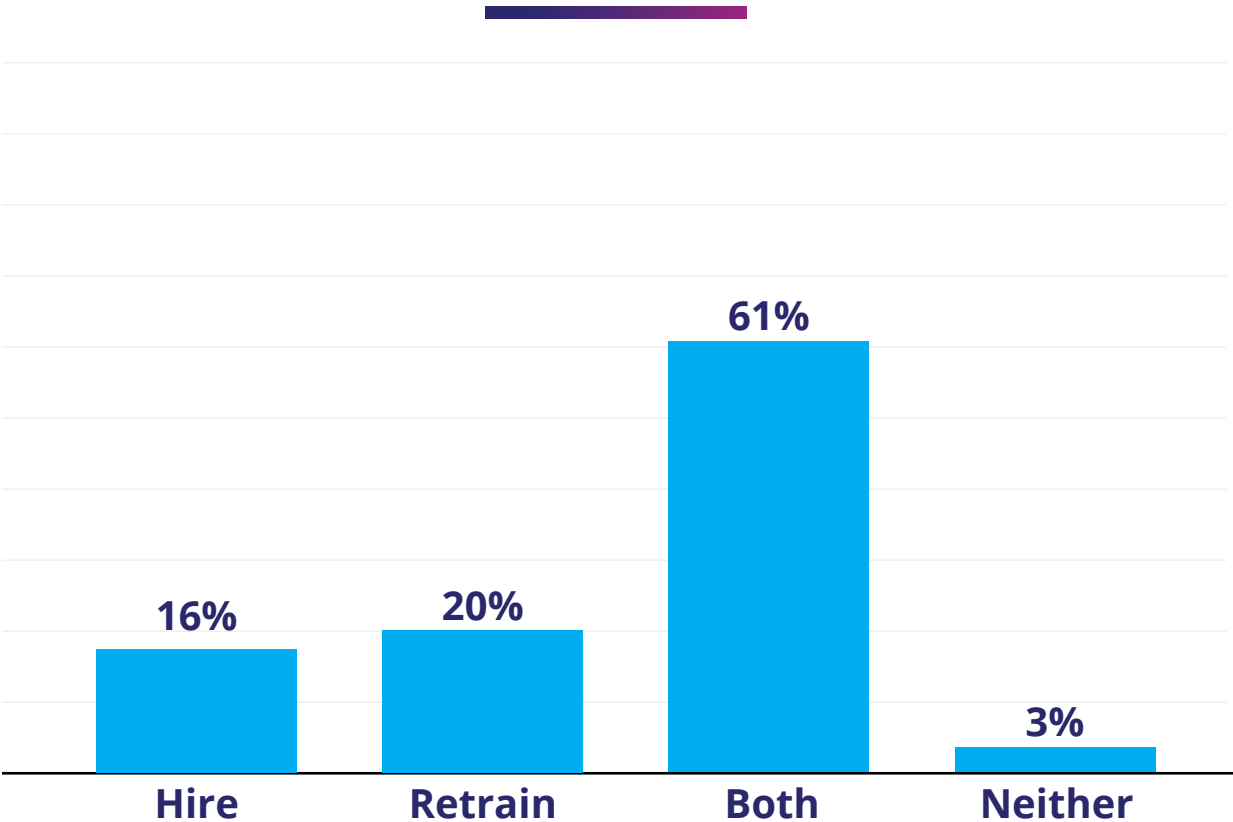
As skills gaps scored high on the list of concerns, we asked our respondents how they were coping with implementing a new technology that requires new skills. Retraining existing employees trumped hiring new ones for our respondents, but at the end of the day, both enterprises and MSPs have to do both: hire new employees and retrain existing ones. ITOps employees need to learn new skills, but AIOps appears to be offering more opportunities for career growth rather than making their jobs irrelevant.



Q: Did you have to hire or retrain your employees specifically for AIOps? (Enterprises)



Q: Did you have to hire or retrain your employees specifically for AIOps? (MSPs)

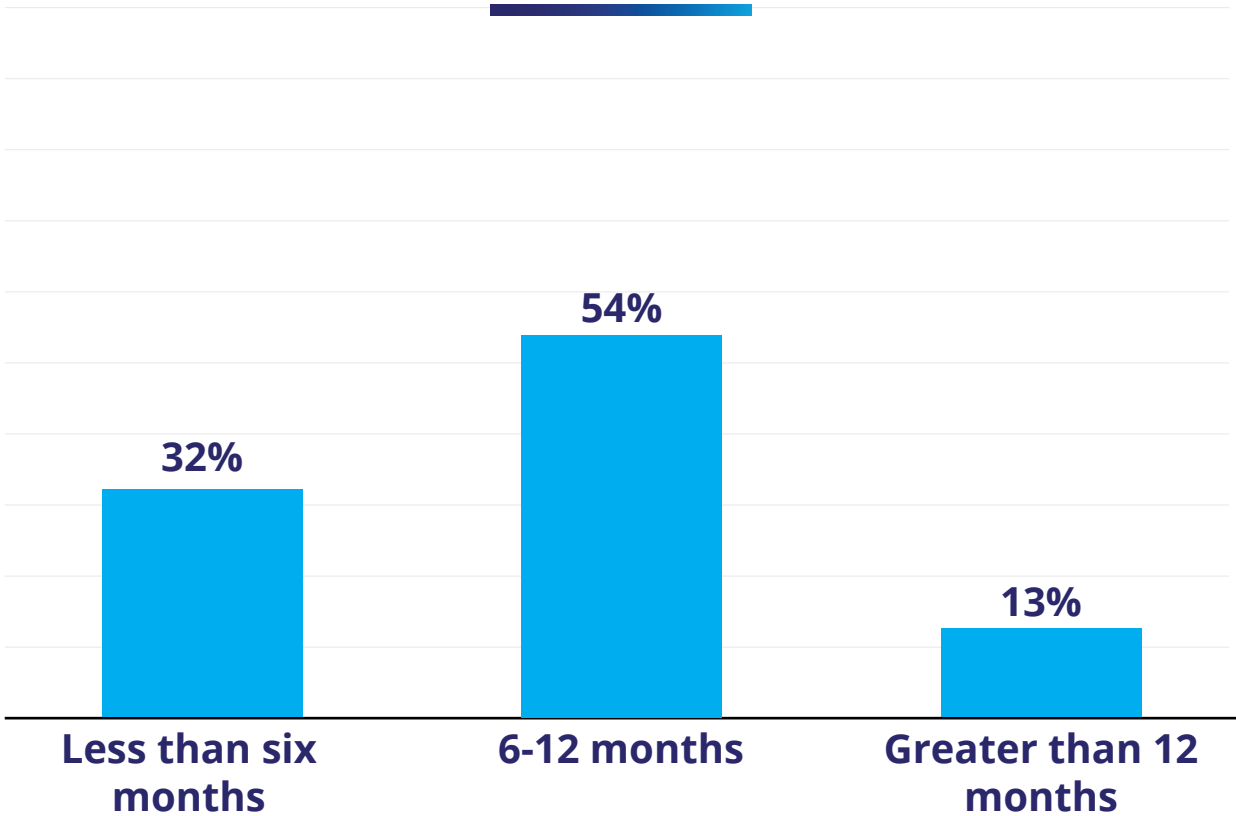


A Steep Hiring Curve

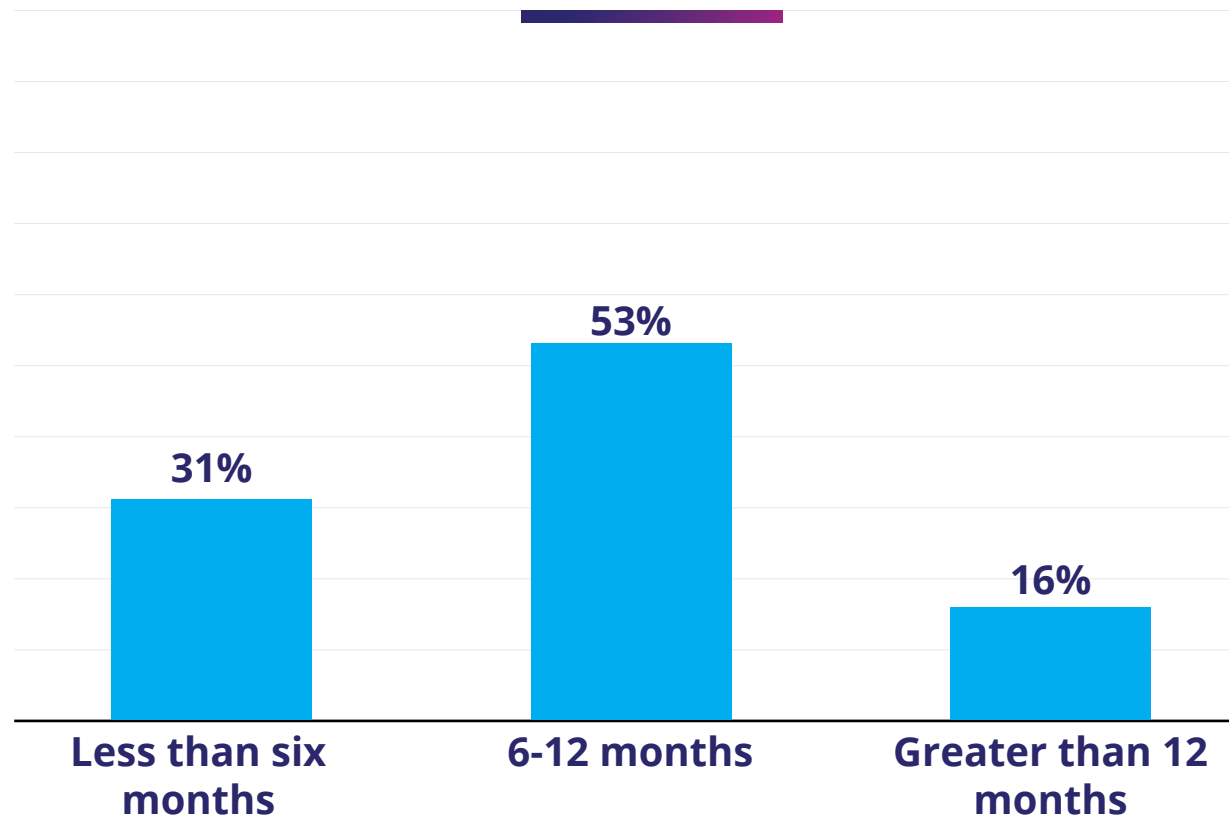
Machine learning or AI engineers are in-demand and hard to find. These are relatively new skills in short supply on the job market. Our survey bears this out as more than two-thirds of respondents said that it takes six months or more to hire for these roles. Yes, hiring for AIOps takes longer than implementing AIOps. Organizations should invest in re-training existing ITOps employees for AIOps wherever possible.



Q: How long does it take for you to hire machine learning/artificial intelligence engineers? (Enterprises)



Q: How long does it take for you to hire machine learning/artificial intelligence engineers? (MSPs)



Conclusion

Here are five key takeaways from this report for both enterprises and MSPs to consider as they assess their AIOps strategies:

- **Embrace efficiency and automation.**
Though our survey respondents largely remain bullish on growth, they are also preparing for uncertain times by boosting operational efficiencies. One way they'll do this is by automating as many processes as possible. Effective AIOps can make your IT operations more efficient—by reducing alert noise and consolidating help desk ticketing—and lay the groundwork for automating more IT processes and operations.
- **Automation is the goal; improved incident management is the reality.** Organizations want to automate more IT operations and processes and see AIOps as the way to get there. But you probably won't get to automation overnight. Incremental improvements in incident management such as intelligent alerting and reduced help desk tickets are benefits AIOps adopters usually realize first.
- **Tool sprawl remains but can be reduced as part of your AIOps strategy.**
Tool sprawl remains a reality as domain-specific IT monitoring tools are still the go-to method for detecting IT issues at both enterprises and MSPs. But survey respondents also recognized the need to have integrated monitoring as part of their AIOps strategy. A tool that can monitor multiple application and infrastructure domains—cloud and on-premises—as part of an AIOps platform can help organizations consolidate monitoring tools and reduce their data management and integration burdens.
- **AIOps works, ROI within 6 months.** AIOps isn't hype. It's generating real benefits for the vast majority of users within 6 months of implementation and is helping them to resolve IT incidents faster.
- **AIOps is creating jobs, not killing them.** Concerns that AIOps will make ITOps jobs redundant appear largely unfounded. Instead, AIOps is creating retraining and upskilling opportunities for existing employees and creating jobs for machine learning and AI engineers, who are in short supply.



Fortunately, Enterprises and MSPs don't have to go it alone in capitalizing on the AIOps opportunity. The OpsRamp SaaS-based [digital operations management platform](#) is the first service-centric AIOps platform. Bringing together hybrid discovery and monitoring with proactive event management and intelligent automation on a single platform, OpsRamp can monitor and manage all of your customers' infrastructure and hybrid IT environments—in the cloud or on-premises—in one place and apply machine learning to that data to reduce alert noise, pinpoint the root cause of incidents, and automate incident response.

The OpsRamp platform cuts mean time to discovery and remediation of issues in half for MSPs and enterprises alike. The multi-tier, multi-tenant design of the OpsRamp platform is ideally suited for MSPs who have to manage multiple customer instances and enterprise IT teams that act as a service provider to their internal constituents.

To learn more about OpsRamp's
service-centric approach to AIOps,
visit our [AIOps solutions page](#)

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