OpsRamp

🗒 Report

Top Trends In AIOps Adoption:

The Future of Digital Operations Management?

Executive Summary

Artificial Intelligence for IT operations (AIOps) is going from idea to reality in the enterprise, but there are challenges. This report presents the primary AIOps use cases and benefits, and highlights the requirements to drive broader enterprise adoption.

Why Do You Need AIOps Platforms?

- With greater digital infrastructure delivery in the modern enterprise, it's only natural that IT operations teams are experiencing exponential data growth.

- This rise in IT operational data volume, velocity, and variety have contributed to an increase in event noise. Modern IT environments are constantly generating alerts for incorrect configurations, events, and more.

- IT professionals are now drowning in 'alert storms' that negatively impact service availability and increase resolution time for IT outages.

How Do AIOps Tools Help?

- While traditional IT monitoring tools can handle routine infrastructure operations, modern digital operations management requires tools built on a solid foundation of artificial intelligence and machine learning.

- Gartner labels these emerging set of event correlation and analysis tools as AIOps platforms, and interest in these capabilities is growing like wildfire.

- A recent report from Markets and Markets shows that "the AIOps platform market size is expected to grow from USD 1.73 billion in 2017 to USD 11.02 billion by 2023, at a CAGR of 34.0% during the forecast period."

OpsRamp recently conducted a survey on enterprise adoption of AIOps tools to learn how machine learning can address the challenges of root cause analysis, anomaly detection and alert correlation. We asked IT decision-makers at organizations larger than 500 employees on current benefits and challenges and what the future holds for AIOps platforms.

INSIGHTS

Where Are We On The AIOps Adoption Curve

AIOps adoption is gaining momentum, with IT teams either experimenting or actively using machine learning for hybrid infrastructure management.

What's Driving AIOps Adoption Today

Modern digital and traditional IT operations teams are looking for any assistance they can get for ensuring better customer experiences and more accurate decision making.

How AIOps Improves IT Operational Efficiency

AIOps tools can deliver a competitive advantage with accurate predictions for a range of incidents across legacy and modern infrastructure, IT management tools (log analytics, monitoring, and ITSM) and enterprise processes.
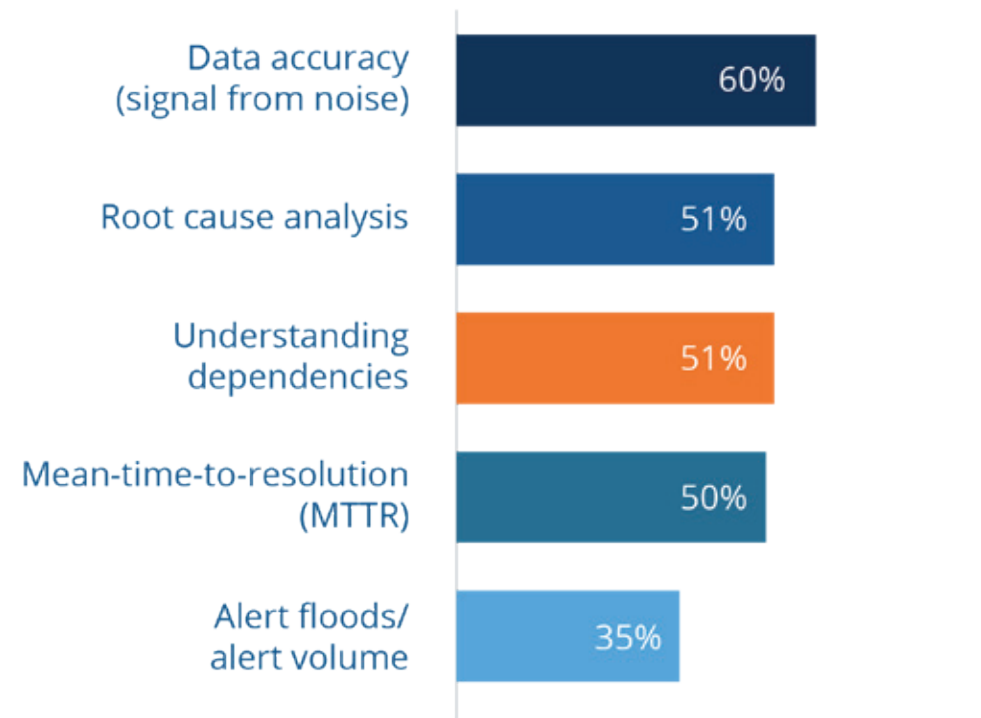
TREND #1: EVERYONE'S DROWNING IN DATA

#1 EVERYONE'S DROWNING IN DATA

Modern enterprises need actionable and predictive insights to better manage vast IT operational datasets. Here are two key findings from the survey:

- 60% of respondents believe that data accuracy ('extracting signal from noise') was their biggest challenge followed by incident root cause analysis (51%).

- IT service dependency context (51%) and reducing mean time to resolution (50%) were the other event management challenges.

WHAT ARE YOUR TOP EVENT MANAGEMENT CHALLENGES?

Challenge	Percentage
Data accuracy (signal from noise)	60%
Root cause analysis	51%
Understanding dependencies	51%
Mean-time-to-resolution (MTTR)	50%
Alert floods/ alert volume	35%

AIOps to the rescue: Advanced analytics can make sense of vast sets of event data and drive faster IT incident response. Deliver richer business context, proactive detection and lower downtime with AIOps.

#1 EVERYONE'S DROWNING IN DATA

Enterprise IT teams are experiencing a significant amount of repeat IT incidents. More than a quarter of incidents had occurred earlier for 50% of respondents while more than a half of incidents were reruns for 15% of respondents.

What does this mean for IT incident management?

- Repeat failures are leading indicators that enterprises have not addressed the larger issue of technical debt that can result in constant rework.

- IT operations teams need to stop fixing symptoms and start taking corrective actions to resolve these recurring incidents.

WHAT PERCENTAGE OF YOUR INCIDENTS ARE REPEAT INCIDENTS?

Category	Percentage
0-25%	29%
25-50%	51%
50-75% or greater	15%
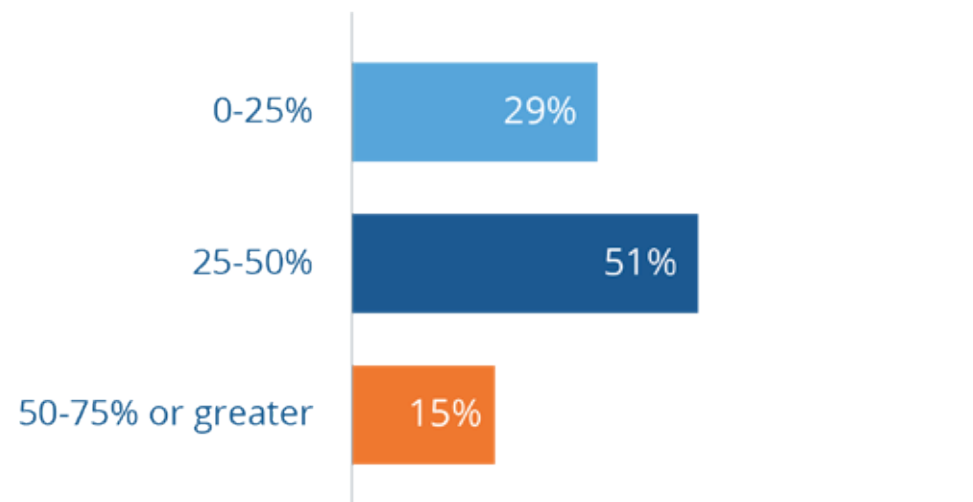
No silver bullet: While AIOps tools can reduce alert volume and speed incident diagnosis, underlying technical debt can derail enterprise productivity and impact digital service performance.

TREND #2: THE MACHINES ARE RISING, INDEED

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With AIOps experiencing an innovation trigger on the Gartner Hype Cycle, most enterprises are familiar with machine learning-based event management.

Here are some trends driving AIOps adoption in the enterprise:

- More than two-thirds of IT decision-makers have already experimented with the use of AIOps tools.

- IT teams report AIOps adoption around extracting relevant data insights (73%), root cause analysis (68%), alert correlation (49%) and noise reduction (28%).

HOW HAS YOUR TEAM USED AIOPS?

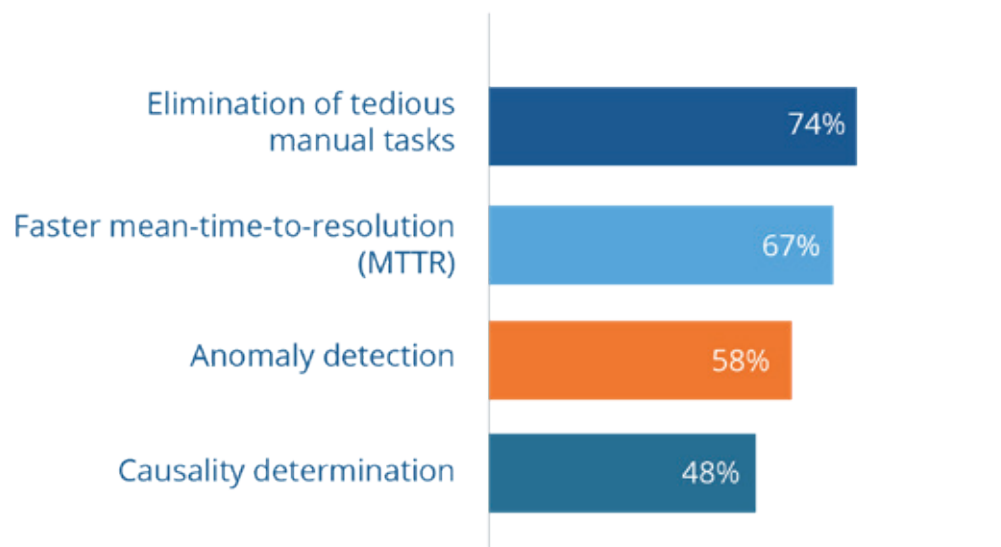|	
Data Insights	73%
Root cause analysis	68%
Alert correlation and inferencing	49%
Noise reduction	28%
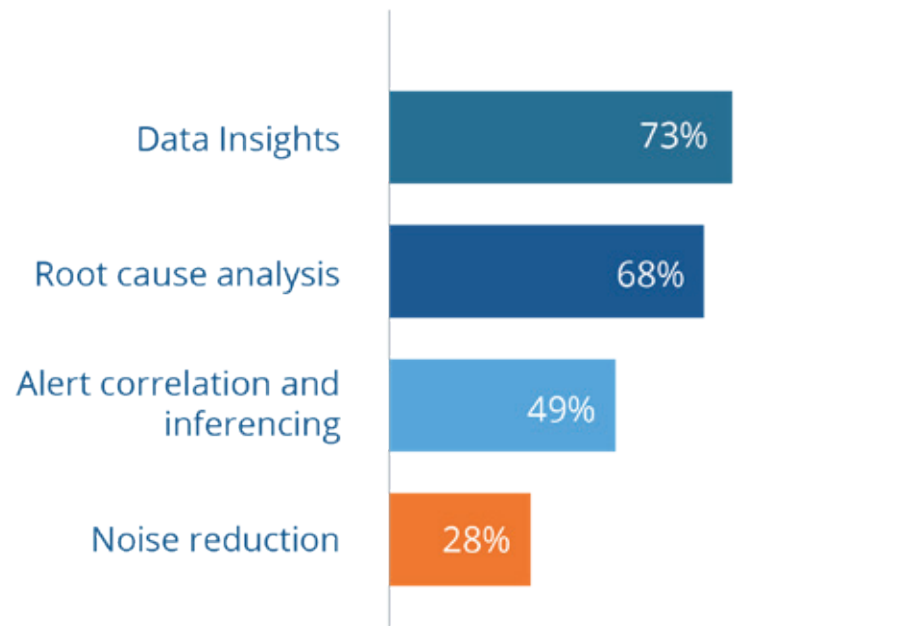
Alerts and more: AIOps is changing the way enterprises organize their IT operations. Real-time analytics can extract meaningful insights from metrics, events and logs for continuous improvement, faster deployments and better collaboration.

#2 THE MACHINES ARE RISING, INDEED

There is a tremendous appetite for the promise and potential of AIOps. Adaptive insights can accelerate digital performance by breaking down operational silos, eliminating firefighting and increasing IT efficiency:

- The two biggest benefits of AIOps are the ability to automate routine functions (74%) and avoid costly service disruptions with faster MTTR (67%).

- 58% of IT practitioners believe that AIOps can help in anomaly detection, by predicting shifts in normal system behavior in dynamic production environments.

WHAT DO YOU THINK ARE THE PRIMARY OPERATIONAL BENEFITS OF USING AIOPS TOOLS?

Benefit	Percentage
Elimination of tedious manual tasks	74%
Faster mean-time-to-resolution (MTTR)	67%
Anomaly detection	58%
Causality determination	48%

No limits on machine learning: The potential of AIOps is still in flux. As AIOps tools grow in sophistication, enterprises expect to save time and money with actionable event context and data-driven recommendations.

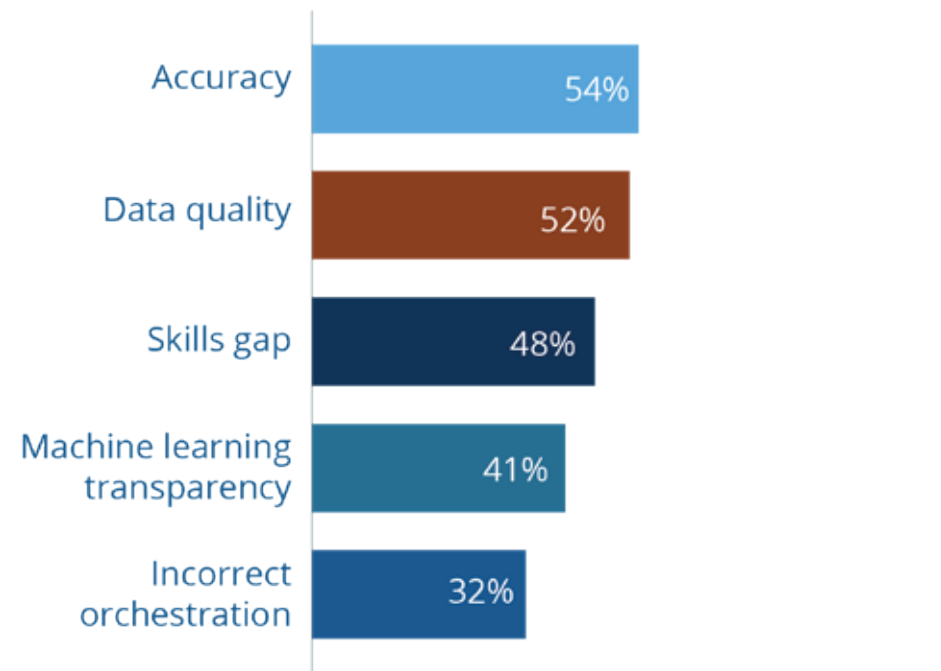# TREND #3: AIOPS LOOKS COMPLEX AND COSTLY

#3 AIOPS LOOKS COMPLEX AND COSTLY

While AIOps adoption is picking up at a fast pace, IT teams have a growing set of apprehensions. 54% of respondents worry about the accuracy of AIOps prediction models, 52% about the quality of large datasets for building machine learning models while 48% fret about the IT talent required for supervising machine learning algorithms.

Here's how IT practitioners and vendors can work together to address these concerns:

- AIOps vendors will need to provide more transparency on how to interpret and understand the accuracy and performance of AIOps forecasting models.

- IT teams will need to hire qualified data scientists to implement AIOps tools. Also, don't forget to train existing staff so that you can finally close the skills gap.

WHAT CONCERNS DO YOU HAVE ABOUT THE USE OF AIOPS TOOLS?

Concern	Percentage
Accuracy	54%
Data quality	52%
Skills gap	48%
Machine learning transparency	41%
Incorrect orchestration	32%

Solving AIOps problems: Accuracy, data quality and transparency are the biggest implementation issues. Identify emerging AIOps challenges and partner with your tool vendor to prioritize solutions.

#3 AIOPS LOOKS COMPLEX AND COSTLY

So if the operational need is compelling and there's a market for dynamic and personalized event insights, what are the barriers to jumping onto the AIOps bandwagon?

Our survey explains why enterprises are a bit wary about broader AIOps adoption:

- There's a perception that AIOps tools are costly to implement, with more than 50% indicating that price is a key concern.

- Time-to-value (deployment complexity) and current technological limitations of the AIOps tools stack pose ideological challenges for risk-averse organizations.

WHAT'S HOLDING YOU BACK FROM USING AIOPS TOOLS IN YOUR IT OPERATIONS?

Cost	52%
Complexity	29%
Technological Limitations	29%
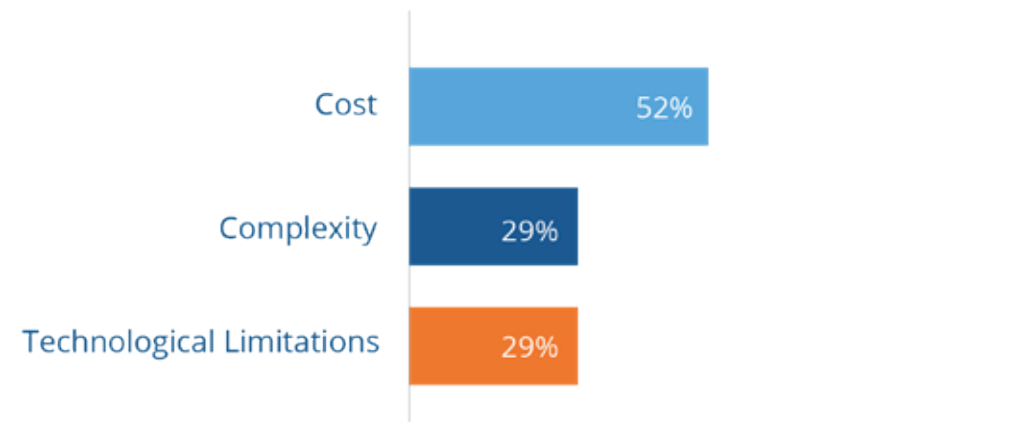
Assumed sticker shock? IT teams will need to upgrade their skills and need large amounts of training data for successful AIOps deployment. Invest in digital operations platforms built for modern event management for easy access to data and rapid time to value.

TREND #4: IT'S TIME TO DEMOCRATIZE ACCESS TO AIOPS

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While AIOps tools will automate a broad range of IT operations functions over time, expect immediate gains on the incident management front. Nearly 90% of respondents see at least a 10% reduction in alert volume by using AIOps platforms:

- 45% believe AIOps will reduce alert noise by 25%, leading to greater productivity, better coordination and faster resolution.

- 25% define success as the ability to reduce incoming alert volume by 50%, for superior event storm correlation and data-driven incident predictions.

WHAT PERCENTAGE DECREASE IN ALERTS WOULD INDICATE SUCCESS IN AN AIOPS STRATEGY?

Category	Percentage
10% fewer alerts	18%
25% fewer alerts	45%
50% fewer alerts	25%
75% fewer alerts	12%

Smarter incident management: The hype surrounding AIOps technologies has reached fever pitch levels. Fixing the problems of notification overload and chaotic incident response are immediate needs.
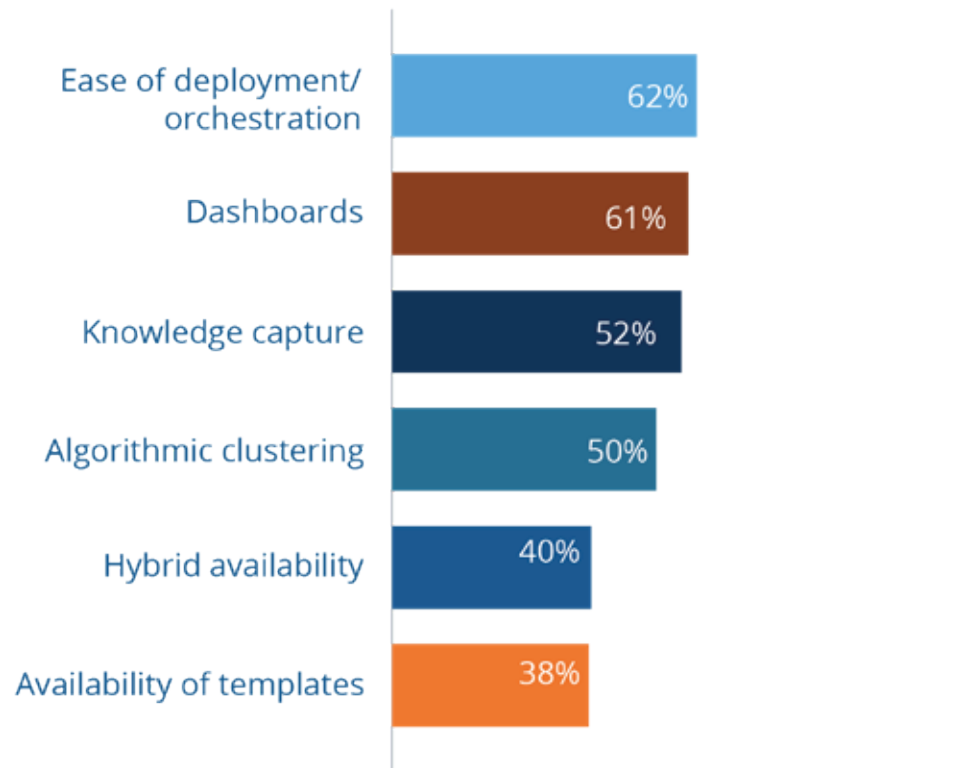
#4 IT'S TIME TO DEMOCRATIZE ACCESS TO AIOPS

Whether it's due to perceived complexity or a lack of skills, IT teams want AIOps solutions that are easy to deploy and offer relevant insights for hybrid, multi-cloud management.

Here's a quick peek into the AIOps wishlist:

- 63% of IT practitioners want an AIOps platform that's easy to deploy, configure, and maintain across their modern IT infrastructure landscape.

- Data ingestion and enrichment (62%), dynamic clustering algorithms (53%) and proactive dashboards with real-time event context (53%) are the other must-have AIOps features.

WHICH FEATURES DO YOU THINK ARE PARTICULARLY IMPORTANT IN AIOPS TOOL OFFERINGS?

Feature	Percentage
Ease of deployment/orchestration	62%
Dashboards	61%
Knowledge capture	52%
Algorithmic clustering	50%
Hybrid availability	40%
Availability of templates	38%

See what's coming: Enterprises expect that AIOps solutions can help them better manage infrastructure complexity, predict performance issues and take self-correcting actions.

THE TAKEAWAY

To keep up with the demands of digital business, you need a new way of managing incidents and maintaining system health. The promise of AIOps is the ability to sift through reams of IT infrastructure data and help digital operations teams control the chaos of multiple alert streams.

Given the pressing need for modern incident management techniques, AIOps is clearly more than a passing trend. It's an inflection point in the future of the agile, digital enterprise.

Are you ready to adopt AIOps as you modernize your incident management and digital operations strategy? Learn about OpsRamp and our Alert Inference Engine, and then schedule your own custom demo today.

METHODOLOGY

- **Sample Size.** We surveyed 120 IT executives to assess the state of AIOps adoption.
- **Responsibility.** Respondents are either individually or jointly responsible for AIOps investment decisions.
- **Geography.** Survey respondents are all based in the United States.
- **Firmographics.** 29% worked at companies with more than 10,000+ employees, 18% worked at companies with 5,001 to 10,000 employees, 34% worked at companies with 1,001 to 5,000 employees, and 18% at companies with 501 to 1,000 employees.

About OpsRamp

OpsRamp enables IT to manage more workloads with less work.

The OpsRamp IT operations management platform drives total visibility across hybrid infrastructures with complete monitoring and management of business-critical services and optimization through automation, artificial intelligence, and machine learning.