

AI Ops Gets Real

5 Proven Business Cases for Success

EBOOK

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Introduction

Chances are, if you work in enterprise IT, you've heard about AIOps.

Since Gartner coined the term back in 2016, the market for artificial intelligence, machine learning and related technologies that help IT Operations has been growing. The growth of AIOps has been in direct response to the growth in scale and complexity of the modern enterprise IT environment.

AIOps has also been the subject of much hype by analysts, vendors, and the media. These days it seems like every IT solution provider from APM to ITSM now claims to have an AIOps solution. With all the marketing noise around AIOps, it's time to separate the truth from fiction.

It's time for AIOps to get real.

Truth is, AIOps is indeed seeing adoption by enterprises, especially those investing in digital transformation initiatives. Gartner estimates that, by the end of 2019, 25% of global enterprises will have strategically implemented an AIOps platform supporting two or more major IT Operations functions (Source: [DZone](#)).

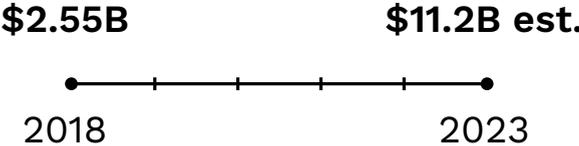
So if your organization has yet to move on AIOps, you're not alone. This ebook shares five stories of enterprises well along on their AIOps journey, and the results returned. These companies have already realized concrete, measurable results with their AIOps projects.

It's time to discover WHY and HOW they did it.

AIOps Market Growing

Forecast, 2018-2023

34% CAGR



Source: [Markets and Markets](#)



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The increasing complexity of an organization’s IT platform, combined with the dependency of the business upon it, means that standard approaches to operational management are no longer fit for purpose. In essence, we need the equivalent of a human, albeit one that does not make mistakes and can deal with the masses of data that a modern platform produces in real time. We need artificial intelligence. Welcome to the age of AIOps.”

– **Clive Longbottom, Co-Founder & Service Director, Quocirca**



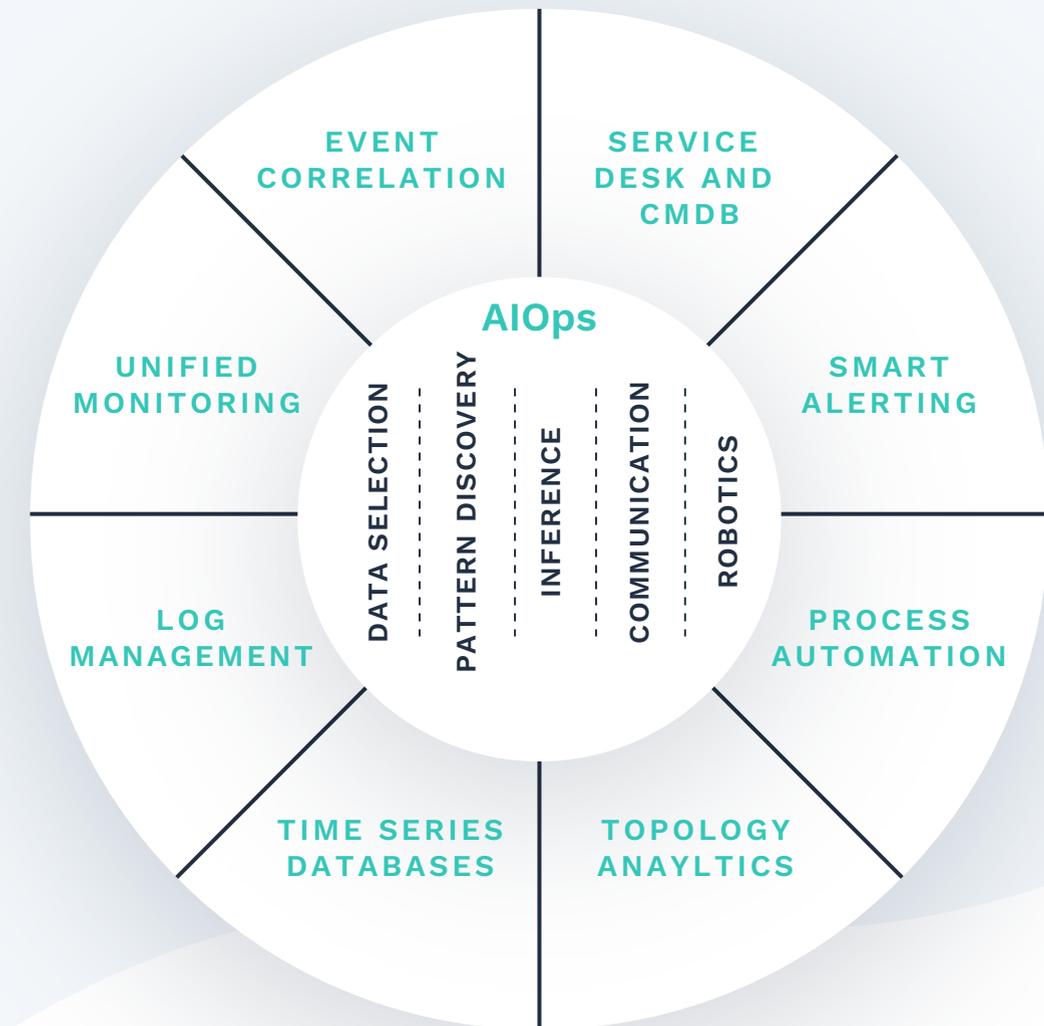
The Case for AIOps

All the possible use cases for AIOps solutions pivot on one common objective: to turn the big data generated by IT systems into meaningful insights. AIOps combines human intelligence with the massive processing power of AI algorithms for faster, more informed decision-making. It delivers full visibility into the health and behavior of systems across all domains: application, cloud, datacenter, and more.

Early adoption of AIOps focused on automating routine or menial tasks — such as sifting through the flood of alerts generated by infrastructure monitoring tools.

Today, AIOps is moving beyond alert correlation. [A recent survey of IT executives by AIOps Exchange](#) revealed that 45 percent of enterprises are using AIOps for better root cause analysis as well as to help predict future problems.

The “holy grail” of AIOps, ultimately, is the ability to detect and respond to IT incidents faster, before users or customers are even aware there is a problem. Everyone wants to make the incident war room — and its costly reactive firefighting — a thing of the past.



Common AIOps Use Cases

Business Case	Business Objectives
Digital Transformation	<ul style="list-style-type: none">• Support business modernization efforts• Improve customer experience• Consolidate IT infrastructure• Support cloud migration
Ops Team Productivity	<ul style="list-style-type: none">• Stop alert fatigue• Increase system visibility, end data silos• Automate routine tasks• Speed decision-making• Improve team collaboration• Support DevOps & CI/CD
IT Incident Management	<ul style="list-style-type: none">• Detect issues faster• Determine probable root cause• Speed mean-time-to-resolution• Reduce escalations• Improve incident workflows
IT Service Assurance	<ul style="list-style-type: none">• Mitigate the impacts of system outages & downtime• Meet customer SLAs• Reduce ticket & notification volume• Fix poor reliability/availability of critical apps & services
Cost Reduction	<ul style="list-style-type: none">• Reduce staff overhead• Stem losses from outages & downtime• Control cost of incident, problem & change management



Replacing Legacy Solutions

Many enterprises struggle to maintain their legacy event management system in the face of increasing data volume, variety, and velocity. These rigid, rules-based solutions are not able to support the scale, complexity, and agility of today's IT infrastructure.

The 1990's generation of IT Ops solutions includes IBM Netcool, HP Evanos, CA Spectrum, and BMC TrueSight, among others.

Today's IT infrastructure monitoring architectures generate Big Data volumes so volatile and chaotic that the last generation of event correlation and analysis tools simply can't keep up. These solutions demand a set of prewritten rules to drive decision-making, making them rigid. They assume that the environment being observed will change little, making them static.

In the AIOps Exchange survey, 40% of respondents say AIOps is a viable replacement for these legacy IT event management systems. However, it is possible to run AIOps in parallel or even against the data generated by these older systems. The new AIOps solution then assumes responsibility for correlation and causality, delivering more efficient AI-driven workflows.



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AIOps is coming into its own, both as a potentially transformative investment for IT Operations as well as for IT as a whole. Our research has shown how AIOps can help to unify IT in real time through more consistent, proactive, and actionable data. This includes bringing security, development, and IT service management teams closer together with core operations stakeholders.”

– **Dennis Nils Drogseth, Vice President, Enterprise Management Associates**

 **TWEET**

Real Success Stories

Here are 5 unique stories of **success** with AIOps.

Each company had a different **business case** justifying its AIOps investment.

Each selected the same AIOps platform as its chosen solution: **Moogsoft**.

What's **more** important is WHY & HOW they did it...

Verizon Media



Profile

Verizon Media is a \$2B division established with Verizon's acquisitions of AOL and Yahoo, for \$4.4B and \$4.5B respectively. With popular media and online brands like TechCrunch and HuffPost, Verizon keeps audiences entertained and informed.

Legacy System

IBM Netcool

What was the objective?

After these acquisitions, Verizon's delivery of hundreds of services was dependent on a very complex, heterogeneous IT infrastructure. They sought ways to streamline and orchestrate legacy tools with cloud environments, while adopting DevOps for agile delivery.

What was the problem?

A breakdown anywhere in the application service delivery chain that powers 424 media services would cause multiple failures. Legacy tools like IBM Netcool were unable to consume the roughly 2 million alerts generated every day. Verizon was unable to identify the root cause of system issues and service interruptions.

What were the requirements?

AIOps had to find the signal in all that noise. Identify incidents that have real service impact on application availability and performance. See the entire scope of impact with contextual data. Finally, AIOps had to suggest root cause to help teams collaborate and remediate problems rapidly and effectively.

How did they do it?

AIOps reduces alert noise, correlates similar alerts, and clusters them into incidents. IT Operations teams can focus on the most serious issues. They can determine the root cause, collaborate easily, and take action to rapidly remediate incidents effectively.

What were the results?

99% reduction in alert noise. Reduced cost and impact of system outages. Improved automation via integration with Verizon's ticketing system. To date, Verizon has avoided several costly outages.

Any lessons learned?

Verizon's test environment helps fine-tune correlation / clustering logic before on-boarding it to production.

Qualcomm



Profile

Qualcomm is a Fortune 500 wireless telecommunications company with \$24B in revenue. It powered the smartphone revolution by pioneering 3G and 4G, connecting billions of people. Qualcomm's innovative chipsets have lead the way to a new era of intelligent, connected devices.

Legacy Systems

CA Spectrum, CA eHealth, HP Sitescope, Microsoft SCOM

What was the objective?

Qualcomm's new CIO launched the "One IT" mandate to break down silos, increase transparency, and foster better collaboration across the organization.

What was the problem?

A failed ITSM implementation had left the NOC consuming only 3% of total alert volumes. Qualcomm was actively limiting telemetry data volume in an effort to combat team fatigue.

What were the requirements?

AIOps had to allow Qualcomm to increase alert loads, but target team efforts more effectively. Data enrichment from CMDB and other sources to add more intelligent context to events. Root cause analysis to identify which team could best resolve a given issue.

How did they do it?

AIOps has improved Qualcomm's visibility into their environment by ingesting a ton of data, reducing alert volumes by 95%. MTTR has been reduced, with some issues resolved automatically, and all situational knowledge captured and recycled.

What were the results?

Quality of service is now managed with more effective, efficient team collaboration. Full data visibility helped break down silos. Top problems and trends are tracked to target future automation efforts.

Any lessons learned?

Digital transformation initiatives should follow an agile, iterative approach. Buy-in is required from business application owners as well as technical stakeholders. Adjust as needed along the way.

Fannie Mae



Profile

The Federal National Mortgage Association, commonly known as Fannie Mae, is a publicly traded \$12B U.S. government enterprise. Fannie Mae expands the secondary mortgage market by securitizing mortgage loans in the form of mortgage-backed securities. Founded during the Great Depression, Fannie Mae is a Fortune 500 company today.

Legacy System

IBM Netcool

What was the objective?

Fannie Mae called its vision “SMART IT”, where AIOps would help enable state-of-the-art monitoring and centralized incident management to assure better customer experiences.

What was the problem?

Silo based incident management and alert processing challenges had resulted in operational inefficiencies. Fannie Mae was struggling with 5M alerts per month across its complex environment. Longer times to detect and resolve IT issues delivered a poor customer experience.

What were the requirements?

Fannie Mae wanted a unified AI/ML solution to give it complete monitoring visibility across its tech stack. AIOps had to fully Integrate with all current tools, which included xMatters and ServiceNow. Finally, AIOps needed to be agile and scalable to support Fannie’s digital transformation.

How did they do it?

AIOps was chosen to drive complete incident management across Fannie Mae’s IT Operations. IT health and performance is monitored in real time. Insights are shared to help teams collaborate, determine root cause, and resolve situations faster.

What were the results?

Fast adoption of the AIOps-powered IT incident management system spread across multiple teams. Collaboration in addressing incidents has resulted in improved MTTR. Improved operational efficiency has allowed IT resources to be freed from fire-fighting. Some recurring issues can now be resolved automatically.

Any lessons learned?

Knowledge capture and recycling is key, both to power predictive insights about what might happen, and to automate the resolution of routine issues when they do.

GoDaddy



Profile

GoDaddy is the world's largest web domain name registrar and web hosting company. It serves 18.5M customers and 62M registered domains, with revenues of \$2.2B.

Legacy System

CA Spectrum

What was the objective?

To improve IT service quality and availability, while reducing Service Assurance costs. GoDaddy also wanted to mitigate the impact of service disruptions with faster incident detection and resolution.

What was the problem?

GoDaddy's NOC team suffered both information overload and ticket overload. Alert correlation was manual and lacked situational awareness. Every alert generated a ticket, most of which were inactive or irrelevant, flooding the IT service desk. Service disruptions were estimated to cost \$10,000 per minute.

What were the requirements?

AIOps would be employed to automate manual monitoring efforts and reduce the volume of IT service tickets. All service tickets had to be based on actual incidents, not just alerts.

What were the results?

GoDaddy has reduced its event noise by 99.9%, correlating 98M events every month. 94% of alarms are now auto-resolved. Service level agreements have been hit each year, three years running. Outage time in 2018 was limited to just 53 minutes, total.

Any lessons learned?

One unanticipated efficiency of AIOps is that it has allowed GoDaddy to invest in its team, uplevel their skills, and free them for higher value work.

KeyBank



Profile

KeyBank is the primary subsidiary of KeyCorp, a regional bank headquartered in Cleveland, Ohio. With 1200 branches and 1100 ATMs across 15 states, KeyBank serves customers spanning retail, small business, corporate, and investment. KeyBank manages assets totaling \$137B.

Legacy System

IBM Netcool

What was the objective?

IT needed to run IT more efficiently in the face of the bank's massive digital transformation effort. Its rules-based legacy event management system was simply not scalable or cost effective anymore.

What was the problem?

KeyBank processes 15 terabytes of data every day. Human operators could no longer keep up. IBM Netcool buckled under 10,000 rules, which had become impossible to maintain. As data volumes increased, 22 different monitoring tools were being used across its environment.

What were the requirements?

Adopt AIOps to control costs, avoid additional headcount. Keep up with the velocity of change, including external factors like evolving customer expectations and an internal drive to migrate many services to the cloud.

What were the results?

IT at KeyBank now supports a better digital experience for customers. Restoration of services is now measured in seconds not hours. AIOps has replaced an outdated legacy ITOM solution.

Any lessons learned?

Change is hard. As you implement AIOps, continually socialize everything you are changing for ongoing feedback from stakeholders.

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With IT operational data volumes at an all-time high and showing no signs of slowing in scope and complexity, IT executive leaders must embrace technologies like AIOps. It can help solve immediate pain associated with IT Operations data overload, such as alert fatigue and slow mean time to repair, and enable business critical projects like digital transformation.”

– Nancy Gohring, Senior Analyst, 451 Research Associates

 TWEET

How to Launch Your AIOps Initiative

It's surprisingly easy to start exploring whether AIOps is right for your organization.

Here are some first steps:

1

Don't wait. Picking up this ebook was a good start! Continue researching AIOps capabilities, even if a greenlit project isn't imminent. You may need AIOps sooner than expected.

2

Start small. It's possible to aim AIOps at a single application stack or line of business. Test and iterate as you go, expanding its footprint as additional teams are onboarded.

3

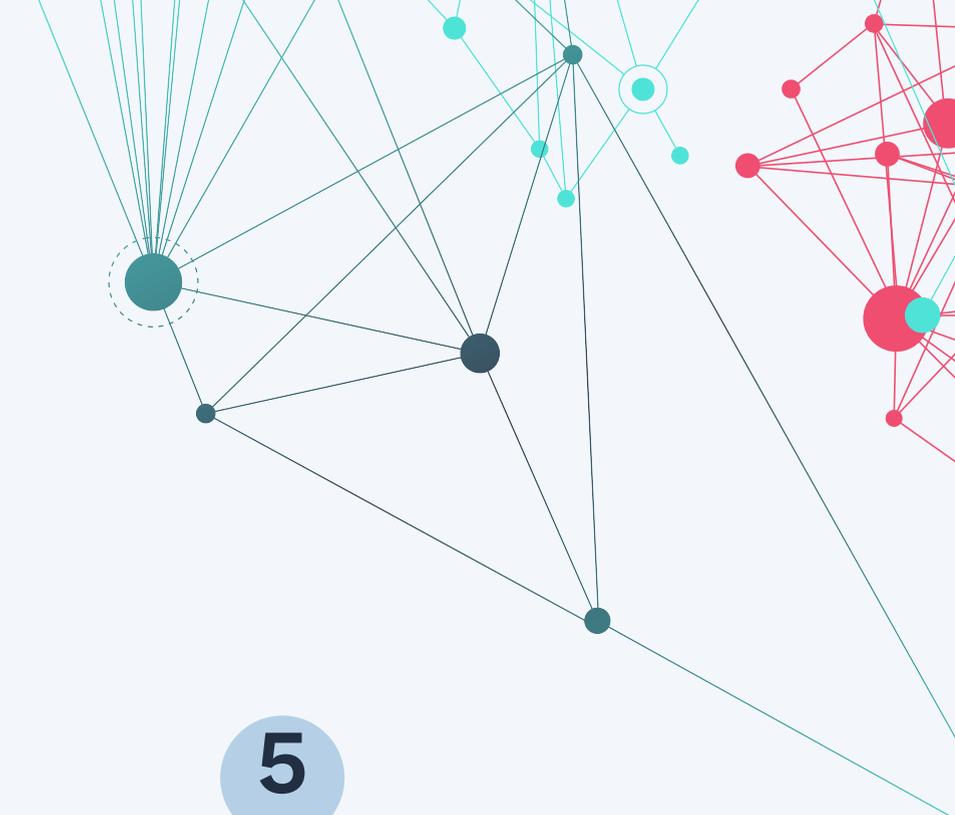
Quick wins. Aim AIOps at attainable goals to start, such as noise reduction and alert correlation. As your adoption expands and matures, add capabilities like root cause analysis and knowledge sharing.

4

Identify pain. Determine the most time-consuming or costly tasks to automate. Focus on 1-3 key metrics to measure. Adjust any existing processes as necessary to meet these objectives.

5

Visualize success. Focus on a few key goals. Pick a vendor with deep AIOps expertise and a detailed product roadmap. Along the way, celebrate successful adoption & solution maturation.



Resource Links

Moogsoft AIOps-specific

[Blog on the legacy of IBM Netcool](#)

[Case Studies for full stories of AIOps success](#)

[Take a test drive of Moogsoft Enterprise](#)

Other resources on AIOps

[The AIOps Manifesto from AIOpsExchange.org](#)

[Webinar: EMA Research on AIOps in the real world](#)

[Webinar: KeyBank on limitation of rules-based ITOM](#)

About Moogsoft

Moogsoft is a pioneer and leading provider of **AIOps solutions** that help IT teams work faster and smarter. With patented AI analyzing billions of events daily across the world's most complex IT environments, the Moogsoft AIOps platform helps the world's top enterprises avoid outages, automate service assurance, and accelerate digital transformation initiatives. Founded in 2011, Moogsoft has more than 120 customers worldwide including SAP SuccessFactors, American Airlines, Fannie Mae, Yahoo!, and HCL Technologies. It has established strategic partnerships with leading managed service providers and outsourcing organizations including AWS, Cisco, HCL Technologies, TCS and Wipro. Moogsoft® and the Moogsoft logo are proprietary trademarks of Moogsoft Inc. All other products or names may be trademarks of their respective companies.

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