

Whitepaper: Maximize Efficiency with AIOps

How Managed Service Providers Can Reduce
Total Cost of Ownership



Introduction

In today's rapidly evolving IT landscape, Managed Service Providers (MSPs) play a crucial role in ensuring businesses operate efficiently and securely. As MSPs strive to deliver superior service and remain competitive, maintaining strong margins poses a significant challenge. Reducing the Total Cost of Ownership (TCO) requires an innovative solution. This white paper explores how a new approach to Artificial Intelligence for IT Operations (AIOps) can reduce TCO and features examples from Grok AIOps.



Challenges Facing MSPs

Today's modern environments are complex with diverse technologies, platforms, and vendors creating intricate, dynamic landscapes. Manual intervention for incident response, troubleshooting, and escalations not only slows operations but heightens the risk of errors and service disruptions. Internally and externally, higher user expectations pressure MSPs to deliver superior experiences, demanding high service availability, performance, and responsiveness. As MSPs expand their clientele and service offerings, scalability emerges as a critical concern, with traditional scaling approaches often proving inefficient and costly.

Many MSPs are turning to AIOps solutions because they recognize that effectively managing resources across unique customer ecosystems requires a sophisticated approach. Despite an abundance of observability and AIOps platforms available, reactive IT operations persist, exacerbated by a shortage of skilled personnel.

However, deploying most AIOps or Observability solutions requires a significant amount of upfront investment for integration, data preparation and rules development, often delaying the realization of value between one to two years. Amidst these challenges, minimal AI utilization and the "black box" nature of AIOps solutions decreases transparency and undermines trust in most AIOps solutions today.

Breaking Down Total Cost of Ownership (TCO)



TCO encompasses all direct and indirect costs associated with the acquisition, deployment, operation, and maintenance of IT systems and services over their entire lifecycle. For MSPs, TCO includes:

- **Tooling Costs:** Licensing, Maintenance and Support Costs
- **Operational Costs:** Reduced productivity due to inefficient incident response and resolution, often stemming from siloed operations and tools
- **Time to Value Costs:** Up-front investment for deployment, integrations and customer onboarding
- **Incident Costs:** Loss of opportunities and revenue due to system downtime or inefficiencies with automation

Reduce TCO with Pure Machine Learning – Driven AIOps

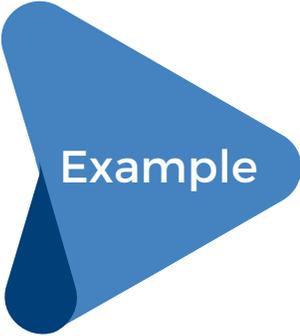
AIOps platforms that integrate advanced machine learning and data analytics will not only reduce costs that makes a meaningful impact to the bottom line but also enables MSPs to drive towards a self-healing environment.



Reduce Tooling Costs

Conventional topology-based AIOps solutions require continuous updates, maintenance and manual effort to adapt to changing IT environments and new use cases.

However, An AIOps solution based entirely on machine learning significantly reduces costs by bypassing the need for traditional Configuration Management Databases (CMDB) and rules development. This is because it can autonomously learn and adapt in real-time, eliminating the need for predefined rules or manual adjustments. This streamlined approach not only has the potential to replace expensive AIOps (and in some cases, Observability tools) but also consolidates the functionalities of monitoring tools into a single, intelligent platform. Consequently, organizations can reduce the number of specialized tools they rely on, simplifying IT management and significantly cutting operational costs.



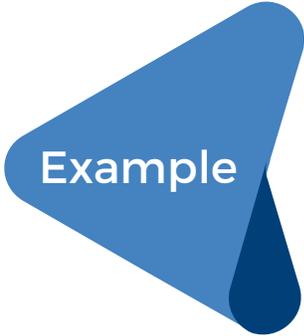
Example

Grok AIOps does not require any rules development or dependency on topology. While it can integrate with CMDB's, it doesn't rely on a CMDB to learn about its new IT environment. Instead, it employs a sequence of machine learning models to adapt and observe diverse forms of telemetry to understand the relative importance of emerging issues, new incident use cases and the diagnostic or remediation steps for incident response.

Customers who use Grok often choose to replace their costly AIOps tools and integrate it with their existing ticketing and monitoring tools, whether they are home grown or commercial.

AIOps that employ 100% machine learning can continuously analyze and optimize resource usage across IT environments, ensuring that resources are allocated efficiently and cost-effectively. This helps MSPs scale their services dynamically without unnecessary overhead.

Grok excels in autonomously learning and analyzing infrastructure data, revealing underutilized or bottlenecked resources for each specific customer environment. By leveraging Grok's deep and real-time analytics, Grok facilitates intelligent workload migration to cost-effective environments and optimizes workload distribution for performance and cost efficiency. Additionally, Grok transforms capacity planning into a predictive, data-driven strategy, allowing MSPs to anticipate future demand, scale resources accordingly, and avoid unnecessary costs associated with over-provisioning.



Example

Increase Operational Productivity

An AIOps tool with self-learning capabilities not only minimizes the administrative overhead but also simplifies operations, leading to lower operational costs and more efficient resource utilization. One of the key value propositions for AIOps tools is accelerated root cause analysis, which enables IT Ops teams to quickly identify the root causes of incidents and performance issues, reducing the time and resources needed for troubleshooting and resolution.

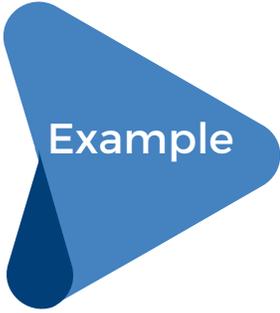


Example

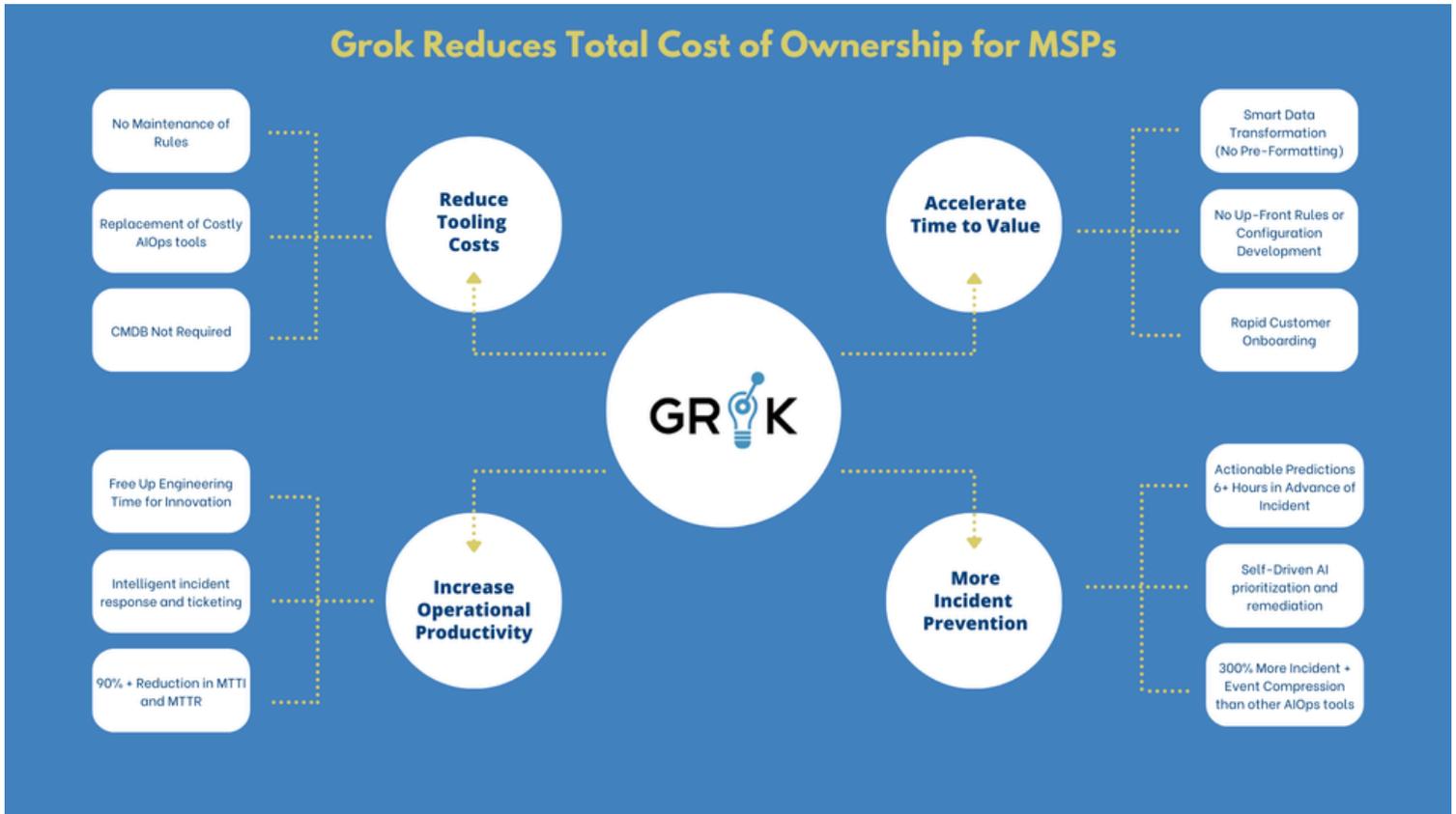
Through observation and its representational memory, Grok AIOps uses cognitive AI learning to autonomously detect and group related incidents (into Detections) that share common underlying symptoms.

This reduces the need for manual investigation and intervention while compressing the number of incidents and events 300% more than topology based AIOps tools.

With self-driven AI automation, AIOps platforms can also model expert decision making, self-prioritize and automate tasks and processes, such as system updates and patches, freeing up valuable human resources for higher-value activities. This leads to significant operational efficiencies by empowering L1-L2 IT Ops staff, freeing up more time for innovation among engineers and faster recovery times, leading to lower operational costs.



Grok's AI-driven automation can self-prioritize remediations, recommend the required remediation steps to automate, design low-code automation and suppress unnecessary ticket creation. This enables IT Ops teams can focus on a set of narrowed down and/or critical issues, significantly reducing noise and operational overhead.



Prevent More Incidents

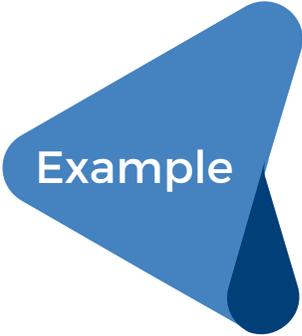
With AIOps, MSPs can intelligently automate incident response processes, from detecting anomalies to diagnostics to automated remediation. This not only reduces the workload on IT Operations staff but also ensures timely and efficient resolution of issues.

For remediations that are more nuanced and can't be resolved without human intervention, AIOps tools offer intelligent ticketing. AI-driven automation can model expert decision to making to determine when to create tickets with the relevant context, route them to the right team with the appropriate priority. Within each ticket, AIOps tools can recommend fixes and real-time diagnostic results, reducing manual effort for Level 1 agents.

AIOps tools that process anomalies as early warning signals (e.g. not as incidents) - and that employ a series of machine learning algorithms can provide actionable predictions into potential issues and system performance, allowing MSPs to take proactive measures to prevent incidents and optimize resource usage. This predictive capability significantly reduces downtime, bring focus on resolving the right issues and improves service reliability.

Through observation of human actions and enrichment (e.g. from ITSM systems), Grok automatically creates and updates an automation pipeline, recommending and prioritizing remediation steps based on impact and frequency of occurrences. It integrates with any ITSM tool for intelligent ticketing. Within Grok (or an MSP's preferred ticketing system), operators can also view relevant insights with the right context to expediently resolve the issue. As a result, Grok's MSP customers have enjoyed 90% reduction in MTTI and MTTR.

Additionally, Grok's predictive analytics offer early warnings and actionable insights, helping MSPs anticipate and mitigate potential problems before they affect operations.



Accelerate Time to Value

Beyond the cost of ongoing maintenance, MSPs can deliver robust, scalable IT operations while reducing the complexity and up-front cost associated with traditional AIOps tools:

- **Smart Data Transformation** - MSPs deal with hundreds of unique customer IT ecosystems, each with unique tools, integrations and requirements. AIOps solutions must support the latest modern cloud-based technology stacks as well as custom legacy tooling. Many environments already utilize mainstream, off-the-shelf and open-source tools for monitoring, event management, ITSM and change management systems. Some may also have implemented “home-grown” solutions or customized legacy systems that contain valuable business data. To achieve its true potential, AIOps platforms must be capable of rapidly ingesting diverse types of data, such as logs, metrics, and events across operational silos - and then transforming the data for optimal use across a sequence of self-updating, self-learning ML.
- **No upfront rules development or configuration** - Before an AIOps platform can be deployed, it typically requires ML definition and/or conditional logic for specific use cases. This typically requires offline analysis of which use cases to prioritize and/or months of rules development for the AIOps solution to work for any environment.
- **Customer Onboarding** - The most innovative MSPs are always adding more customers and delivering more services. Unfortunately, in most cases, companies are not given the option to add more personnel or resources to support the growth.

Examples:

- Grok is designed to easily integrate and layer into your existing infrastructure. Grok leverages investments already made with existing tools and combines them with the insight and intelligence of AI and machine learning. Subsequently, no data manipulation or pre-formatting is required before Grok is deployed, reducing deployment time from 12-24 months.
- Grok eliminates the need to manually create or maintain elaborate rules or bespoke algorithms, further reducing the upfront administrative costs and resources up front. Its plug-and-play machine learning model dynamically learns from complex customer environments, adapting to specific needs or scaling across multiple customers.
- Grok also provides MSPs the flexibility to manage customers independently or centrally. Grok handles the cumbersome, manual tasks that the team needs to spin up bespoke services for any customer environment, delivering AI outcomes such as predictions, incident classifications and recommended automations within days of signing a new customer agreement.

About Grok AIOps

As the only Autonomous AIOps Platform, Grok seamlessly integrate neuroscience principles with advanced machine learning techniques. Our solution ensures continuous self-learning, operating on a plug-and-play model. Currently deployed in over 1,000 customer environments, our platform stands as a testament to its reliability and effectiveness.

Learn More at: www.grokstream.com

The Only Open, Autonomous AI Platform

Elastic Scalability for Any IT Environment

