BUYER'S GUIDE

for

AIOps Applications

This Buyer's Guide for AIOps Applications is developed specifically for large companies providing digitized services direct to their customers and who are looking to "up their game" by providing consistent service to customers without the typical drag on profitability.

For our purposes we define *digitized services* to include on demand services to millions of subscribers by businesses like cable operators, video conferencing/meeting platforms and communication service providers. On a smaller scale, we include businesses touching customers with applications for telehealth, banking, investment services and insurance claims processing. These types of businesses require a solution provided by a new breed of AIOps application. These types of businesses have one thing in common - the customers pay for and expect consistently excellent service without interruption.

In this Guide, we define the scope of an AIOps application aiming to improve and sustain the customer experience.

By using the Guide, we believe you will be able to

- ✔ Document the needs of your business,
- ✔ Select the product capabilities that will meet your needs,
- ✔ Use the checklist, included, to narrow your search for vendors that will enable you to reach your goals and realize value from your AIOps investment.

LET'S GET STARTED

AIOps - A working definition

AIOps is a relatively new product category and is a term used to describe a lot of different capabilities. In the broadest sense, some functions of AIOps have been added to legacy solutions to enhance performance and outcomes. Automated operations platforms, network management platforms, application performance management and service desk have been improved with the addition of some algorithms and machine learning. These AIOps enhancements have been able to increase staff productivity by providing some automation and have also reduced mean time to repair (MTTR).

What do AIOps applications have in common?

AIOps uses a conglomeration of various AI strategies, including aggregation, analytics, algorithms, automation and orchestration, machine learning and visualization. Depending on the use case, the data comes from log files, monitoring tools, helpdesk ticketing systems and other sources - even some that may be sitting outside the enterprise. With all this data, AIOps requires big data technologies which aggregate and organize the output from all systems into a useful form. Analytics techniques can interpret the raw information to create new data and metadata. Analytics reduce noise and spot trends and patterns which enables the AIOps application to identify and isolate problems.

Analytics requires algorithms to codify organizational expertise, business policies and processes. Capable AIOps applications come with algorithms and models that are configurable and extensible to solve for a variety of use cases. The algorithms and models provide the foundation for capturing behaviors and activities. An extensible AIOps application evolves over time, as the data and the environment changes.

Automation is a desirable outcome from implementing an AIOps application. Automated functions are triggered by the results of analytics and the ability to implement machine learning.

Finally, an AIOps application should provide a **variety of visualization techniques** like human-readable dashboards, reports, graphics and other output. Humans rely on visualizations to formulate insights beyond the scope of the AIOps application.

IN THIS GUIDE, WE ARE FOCUSING ON **THE NEW GENERATION OF AIOps APPLICATIONS** - THOSE APPLICATIONS BUILT FOR PURPOSE TO IMPROVE EFFECTIVENESS AND EFFICIENCY OF SERVICE DELIVERY TO LARGE NUMBERS OF EXTERNAL CUSTOMERS.

Not all AIOps applications are created equal

Businesses generating revenue by acquiring new customers and achieving profitability by retaining these customers demand speed and automation made possible by an AIOps application. Day by day, hour by hour at breakneck speed, the operations organization in these businesses have one goal: ***know about a problem, fix the problem before the customer realizes there is a problem***. Generating revenue is top of mind but not without an eye on the cost of operations. These businesses should be considering ***the new generation of AIOps applications designed to change the way operations works to find, fix and prevent problems***.

The systems and applications in a large enterprise produce increasingly greater volumes of data – streaming and batch – from inside and outside the enterprise. By providing operations with greater insights from the data and enabling isolated functions to share the data, organizations expect to reduce the time staff members spend responding to mundane, routine, and everyday alerts. The best outcome is improved availability and performance of all assets impacting the business.

OPERATIONS HAS ONE GOAL:
KNOW ABOUT A PROBLEM, FIX A PROBLEM, BEFORE THE CUSTOMER REALIZES THERE IS A PROBLEM.

In this Guide we are focusing on applying AIOps to monitor and manage across all the operational functions to ***improve the customer's service experience***. In these types of businesses, operations' key performance indicators (KPIs) and metrics are heavily influenced by the external customers' experience. A positive customer experience requires functional silos to work seamlessly to detect and respond to service impacting issues. The new generation AIOps application must be able to correlate critical data coming from isolated organizational functions. In these businesses the scope of the AIOps application is broader and the cross-silo analysis is core to its value.

What are your business needs?

There are as many use cases for AIOps as there are vendors. The market is crowded with claims:

- Reduce the noise
- Manage the managers from one pane of glass
- Expand beyond IT infrastructure - more data improves visibility
- Use analytics to correlate signals within silos to automate response and reduce the need to increase staff

WHAT ARE YOUR BUSINESS NEEDS?

Tune out the claims and focus on your business needs.

What some businesses are saying.

- We are spending millions and want to measure the impact of spend on the customer's service experience. Is there a better way to spend the dollars?
- Despite staffing changes, service impacting issues are increasing. Our industry relies on our ability to acquire new customers, get them engaged as quickly as possible. We want an AIOps solution that improves time to new service.
- Competition for customers is fierce. We want to avoid high churn rates. Competitors offer short term attractive pricing and if the offer comes when the customer is having a service problem or waiting a long time for repairs - well, timing is everything.
- We need more collaboration across functional domains; finger pointing is not productive especially while the customer is waiting for a fix.
- We have a high change environment and changes cause unintentional breakage. Problems occurring during change are having an impact on our numbers and our customers.
- We want to accelerate remediation - but where we see the real payoff is preventing issues from occurring in the first place.

DISCUSS YOUR BUSINESS NEEDS WITH VENDORS TO CLARIFY YOUR EXPECTATIONS AND UNDERSTAND THE IMPLICATIONS OF ADOPTING AIOPS TO FULFILL YOUR NEEDS

AIOps can transform how you manage, collaborate and measure success - but it's not a cure all for every problem. Take the time to discuss your business needs with vendors to clarify your expectations and understand the implications of adopting AIOps to fulfill your needs.

HOW WILL YOU USE AIOPS?

Assess your business needs

Like many other organizations you may have invested in several, point products. Unfortunately, too many monitors generating too much data can mask the root cause. With limited visibility, isolated functional teams are flying blind and fighting fires. There's never enough time for proactive root cause analysis. The future for AIOps is more strategic - new generation AIOps applications cross correlate signals from multiple functions to determine root cause. Correlation improves organizational collaboration which has a positive impact on the customer's service experience.

How would you describe the state of operations in your organization?

- Operations is often decentralized and within teams may lack specialization or domain expertise.
- Reactive workflow - meaning the customer opens a trouble ticket that kicks off a workflow to correct the problem without operations digging deep to understand the root cause.
- Teams are siloed with limited collaboration during incident response.
- The business is agile, continuously innovating and releasing updates but operations is unable to keep pace with change.

Now consider what would you like to be able to do with an AIOps application?

- Detect failures early - *BEFORE the customer experiences a service outage* or complains about service degradation.
- Triangulate multiple alerts from the network, an application and the infrastructure indicating the *same root cause problem.*
- Identify root cause, key symptoms and affected population of a service-impacting issues.
- Detect, triage, and mitigate negative customer impact caused by *change management*.
- Automate *remedial actions* of an identified customer- affecting service issues.
- Introduce new applications, hardware, or software upgrades without risk.
- Enable continuous innovation and deployment while limiting unintended and unexpected problems.

HOW WILL YOU INTEGRATE NEXT GEN AIOPS?

Product evaluation

Use this checklist to compare and contrast the capabilities of AIOps applications

CORE PRODUCT CAPABILITIES

Noise reduction:

- ☐ Automates signal detection
- ☐ Assigns severity
- ☐ Correlates to customer experience markers
- ☐ Correlates to 3rd party events / alarms

Fix Automation:

- ☐ Automates ticketing, notification and escalation
- ☐ Automates scripts to remediate issue
- ☐ Prescribes actions to orchestrators
- ☐ Automates decision support / next-best-action

Collaboration and Ease of use:

- ☐ Works with existing investments in monitoring tools
- ☐ Integrates with existing workflows and collaboration tools
- ☐ Deploys on premises or in any major cloud

Event Correlation:

- ☐ Visibility across entire ecosystem including APM, NPMD, IPM, change management
- ☐ Ontology mapping
- ☐ Correlates anomalous behavior across the ecosystem
- ☐ Correlates incidents to change management events
- ☐ Detects exact matches, previously learned and previously unknown behaviors, and related behaviors/fuzzy matching
- ☐ Autonomous root cause and impact analysis

Analytics:

- ☐ Automatically selects baseline and anomaly detection models
- ☐ Automatically discovers infrastructure dependency
- ☐ Provides predictive analytics

Questions to ask about deployment

?

What is the level of effort for the deployment?

What was time to value for existing customers?

Total cost of ownership - how many dedicated resources does the application require in production?

How flexible is the application - what is the cost of change?

PRODUCT EVALUATION

Once you have a good understanding of what the product can do, the questions on this page will help you clarify how you will use the AIOps application and determine if it will integrate with your current topology of monitoring tools.

Two questions you want to answer during vendor and product evaluation is:

?

How do we work - what are the work processes and flows? Which AIOps application will have a positive impact on workflows and processes?

Which AIOps application is built to integrate with the tools we already own and use?

How we work – facts to consider:

Number of operations staff _____

How many external customers are you supporting/time zones? _____

How many teams do you have in each of the silos? _____

How are they organized now - how would you like to see them collaborating? _____

How many events/ alerts you are generating today, _____

Frequency of change (e.g., CI/CD, code changes, sw updates) (minutes, hours, days/weeks) _____

What tools do we rely on?

An effective AIOps application will integrate with core technology in your business. Some will be data sources and others will be systems for action. Take an inventory of what you have today. An effective AIOps solution will add value to your investments.

Are there any tools you use today that can be removed after implementing AIOps?

- ☐ TOOLS FOR DEPLOYMENT: Chef, Puppet other
- ☐ APPLICATION SERVICES: AppDynamic, New Relic, Dynatrace
- ☐ NETWORK: Solarwinds, Riverbed, Netscout
- ☐ ON PREMISE INFRASTRUCTURE: Science Logic, Zenoss
- ☐ CLOUD INFRASTRUCTURE: Datadog, Azure X, AWS CloudWatch, Wavefront
- ☐ LOG FILES: Splunk, AppDynamics, Sumlogic

How will you know its working?

The following improvements are quantifiable as return on investment. Evaluate the AIOps application on its ability to:

- Reduce the number of customer support contacts; avoid adding headcount
- Reduce the number of "no-fault-found" trouble tickets
- Reduce the number of on-site technical visits to business and home service customers
- Avoid the cost of adding to the operations staff
- Increase Net Promoter scores
- Increase customer retention - reduce churn rate
- Support and encourage increased service usage
- Decrease in training costs - reduced number of problems marked as "operator error"
- Decrease licensing fees by eliminating redundant tools

Key Performance Indicators (KPIs): Determine if the products you are evaluating will have an impact on your KPIs

- Ticket volumes, number of incidents by severity levels , number of people involved in resolving incidents
- Number of identified customers impacted by identified incidents for one day
- Number of repeated incidents during a month
- Improvement in mean time to detect (MTTD), mean time to acknowledge (MTTA) and mean time to resolve (MTTR)

FINAL STEP – PLAN A HANDS-ON EXPERIENCE

Orchestrate the evaluation

Talk to the vendor and review:

- Core functional areas you want to improve.
- Product capabilities you need.
- How you are going to review the AIOps application? How long will it take? Do you need specialized training to evaluate the product?

Final: Evaluation checklist

- ☐ **Where** will eval take place?
- ☐ **Which** data sources will be tested?
- ☐ **What** outputs will be available?
- ☐ **Who** will participate in evaluation?
- ☐ **Timeframe** for evaluation

READY TO TAKE THE NEXT STEP?

Share your product evaluation checklist and assessment of your business needs with a VIA AIOps expert by downloading you completed form and sending to marketingcommunications@vitria.com.

Or click here to schedule a demo.

About VIA AIOps

VIA AIOps is the next generation AIOps application. We understand the operational requirements of large businesses where digital services to external customers are core to revenue and profitability. VIA AIOps is ideal for these businesses and differs from first generation AIOps platforms in three ways:

1

First, we provide expansive **total ecosystem observability**. VIA ingests high volumes of data, coming at high speeds, from any source, batch or streaming. Instead of looking at each component of the infrastructure in silos - we look across the silos at the ***whole service supply chain***. *We provide visibility to what is causal, symptomatic, and impactful.* We do this across silos so we can automate response. We monitor all signals across all layers.

2

Second, we change outcomes with **explanatory AI.** VIA provides augmented intelligence - the combination of human and machine analytics. VIA's ***analytics as a service*** architecture enables what-if analyses and generates visual explanations of all analyses and actions. VIA automates signal detection, ontology mapping and cross correlation.

3

Third, VIA AIOps provides **experience assurance** through identification and prioritization of true business and customer impacting incidents, which improves the customer experience:

- Automates root cause and impact analysis
- Cross correlates signals to reduce noise and prioritize actions
- Correlates change management events with customer reported trouble tickets
- Prescribes remedial action
- Prevents the same events from impacting service in the future

Unlike first generation AIOps applications which remain largely siloed, VIA operates and correlates across silos, improving automation and operational collaboration. Monitors gather the data, but VIA transforms data into actionable intelligence to isolate the root cause of service impacting issues. VIA AIOps deploys in minutes, leverages the whole of your operational data, proving value in as little as a day. We know that every ecosystem is unique and our flexible system model adapts with it at the speed of change. VIA deploys on-prem or in any major cloud environment.

Experience VIA AIOps to understand how customers have quantified millions of dollars in value.

ABOUT US

Move from Analyzing Data to Automating Actions. VIA AIOps enables reliable automation by correlating data and events across all layers of service delivery to improve the customer experience and optimize operations. Automation minimizes the incident-to-response lifecycle and overall service and customer impact. VIA AIOps provides total ecosystem observability, and explanatory AI to increase confidence in automation and speed up operationalization. Using VIA AIOps provides experience assurance to your customers know and act on problems before your customers do.

Discover more at http://www.vitria.com

VITRIA®

V80620