



Embracing The Future: How Observability And AIOps Are Revolutionizing IT Operations

By Eveline Oehrlich, Research Director Research In Action.

The landscape of IT operations is undergoing a radical shift, fuelled by the increasing complexity of modern systems and the need for faster, more efficient responses to incidents. Two key drivers of this change are Observability and Artificial Intelligence for IT Operations (AIOps). These concepts, though distinct, are intrinsically linked and together are revolutionizing the way we understand and manage IT systems. But before I get going with some actionable suggestions and pointers to the top vendors in this space (or spaces), we must look at the definitions of both Observability and AIOps:

- **Observability is for Seeing the Unseen:** Observability, derived from control theory, is a measure of how well we can understand the state of a system from its outputs. In the context of IT, observability involves gathering, visualizing, and analysing metrics, logs, and traces to comprehend the system's internal state. But do not confuse observability with monitoring as it's more than just monitoring. Observability provides a deeper, more nuanced view of system behaviour, enabling teams to understand not just when and where failures occur, but why.
- **AIOps is Where Machine Learning Meets IT Operations:** AIOps represents the modern IT operations analytics, where artificial intelligence and machine learning are leveraged to automate and improve IT operations. AIOps platforms ingest and analyse vast amounts of data, learning from it to predict potential issues, detect anomalies, and even automate responses. The goal is to reduce the manual toil of IT operations, enable faster resolution of issues, and ultimately, improve system reliability and end-user satisfaction.

There are Significant Synergies Across Observability and AIOps

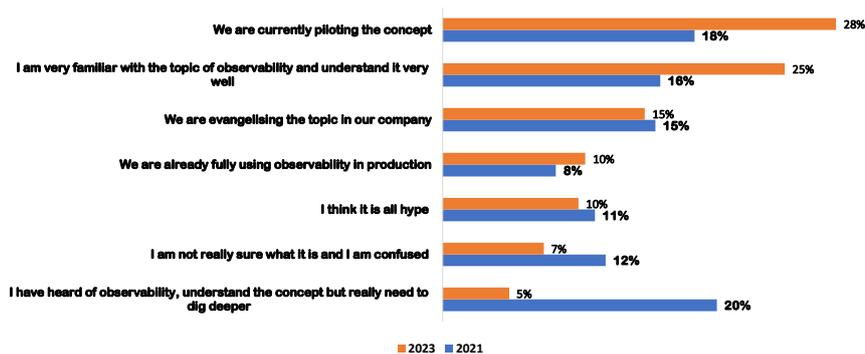
Observability provides the data and insights, while AIOps provides the means to act on them. Together, they offer a powerful combination for IT operations. With observability, we gain a thorough understanding of system states, allowing us to feed high-quality, relevant data into AIOps platforms. These platforms, in turn, use this data to make accurate predictions and automate tasks, thus reducing the mean time to resolution (MTTR) of incidents. Again, in 2023 we discussed and evaluated if we should combine these two topics into one market research topic for comparing the vendors. However, there are two reasons why we kept them still apart this year:

- **The Observability Topic Is Gaining Momentum:** Since our first VSM in 2021, the understanding and actual usage has shifted towards understanding it and piloting since 2021 (see Figure 1). When we asked the question of “What would you say about the current state of the observability software market?” we found that twenty eight percent (28%) are currently piloting observability within their organization, 25% are familiar with the topic and understand it well, 13% are evangelizing the



usage of observability, and 10% of survey respondents are fully using observability in production. Because of these percentages we felt that it is best to research the vendors in the observability space separately, taking into consideration that almost all the vendors are leveraging AI and ML within their solutions.

FIGURE 1: OBSERVABILITY IN 2023 SHIFTS FROM CONCEPTUAL UNDERSTANDING TO EVANGELIZING AND PILOTS



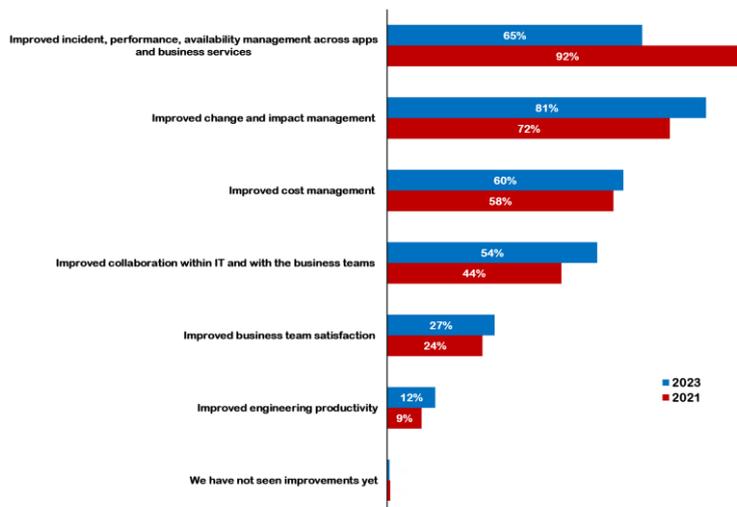
N = 1,500 Enterprise IT and Business Managers with budget responsibilities.

Question: What would you say about the current state of the observability software market?

Source: AIOps Vendor Selection Matrix™ Survey, 2023

- **AIOps supports a multitude of use cases.** When we asked our survey takers, which includes 1,500 different job titles across IT, we found that AIOps supports many different roles with key use cases (see Figure 2). This is where some AIOps vendors are honing in as for example Avantra is the top vendor to provide AIOps capabilities for SAP.

FIGURE 2: TOP FIVE CRITICAL AIOps SOLUTIONS USE CASES



N = 1,500 Enterprise IT and Business Managers with budget responsibilities.

Question: Which three use cases do you see important while leveraging AIOps within your IT organization?

Source: AIOps Vendor Selection Matrix™ Survey, 2023



What to Know: Don't Start Your Observability and AIOps Journey Without Knowing Your Goals

Adopting Observability and AIOps solutions can bring many benefits, but it's essential to consider several factors to ensure a successful implementation. The most important one is to understand your current state and define your goals. Conduct an audit of your current IT infrastructure and operations. Knowing where you stand will help you identify gaps and determine the level of transformation required. Once you have determined where you have the biggest gaps in analysing, visualizing, monitoring, and observing across your technology stack you should identify what you hope to achieve by implementing Observability and AIOps. Examples of such goals are faster incident resolution, improved system reliability, or reduced manual toil.

Give Your Vendor Selection a Head Start

There are many vendors offering Observability and AIOps solutions. Thoroughly evaluate their offerings, considering factors like capabilities, ease of use, customization, scalability, and cost. We have done the work for you already so see this in our Vendor Selection Matrix™ reports ([#one](#) and [#two](#)) for your evaluation. To further differentiate the broad list of vendors you must consider a variety of topics which depend on your organizations current state and goals. Here are a few things to consider.

- **Data quality and possible integration needs:** Both Observability and AIOps rely heavily on data and without high-quality data, it will be difficult to achieve any goals at all. One critical first step is to ensure that your systems can produce high-quality, relevant data, as this will directly impact the effectiveness of your AIOps solution. A key topic related to this is how well does the solution integrate with your existing tools and workflows? A solution that cannot easily integrate might lead to more complexities.
- **Security and Compliance:** Ensure that the solutions you adopt comply with your organization's security standards and regulations. This is particularly important in industries with stringent regulatory requirements.
- **Automation Scope:** Decide what processes you want to automate. While AIOps can automate many IT operations, it's important to strike a balance. Over-reliance on automation may result in overlooking subtle nuances that human operators can identify.
- **Plan for Evolution:** Your IT environment will continue to evolve, so your Observability and AIOps solutions should be flexible and adaptable. Regularly reassess and adjust your strategies as needed.
- **Professional Guidance:** If you are unsure where to start or how to proceed, consider seeking professional guidance. A consultant or specialist in IT operations transformation can help guide you through the process.



Bottom line: Moving towards Observability and AIOps does require a cultural shift within the organization, its team members, and individuals. To avoid failures, you should ensure that you understand the benefits and challenges and continuously manage the expectations. Second, provide necessary training and certifications. Remember that Observability and AIOps are not "one-size-fits-all" solutions. Every organization will have unique requirements and challenges, so take the time to understand your needs and choose the approach that best suits your situation.

Some Free Advice for your Observability and AIOps Journey:

1. **Do not just focus on technology centric questions.** Technology-centric questions revolve around the technical aspects of a application or service and focus only on the technical implementation and management of the technology related. Business-centric questions center on the impact and outcomes of technology on the business. Examples are how can technology drive business objectives, improve processes, and deliver customer value. AIOps must, besides taking a technology-centric approach, also be extended into answering questions which address business value and outcomes.
2. **Bring in your domain experts.** IT domain expertise remains important for triaging and problem resolution because it helps organizations to effectively manage complex, rapidly changing technologies, applications, and systems. The different experts also can ensure that seamless integration is possible, and customization and optimization efforts ensure security and compliance. Additionally, IT domain experts can effectively communicate with both technical and non-technical stakeholders, helping to bridge the gap between these groups. Also, domain experts play an essential role in training and developing other IT professionals, helping to build a strong, knowledgeable team that can effectively manage the organization's IT systems and infrastructure.
3. **The network is essential now and in the future.** The network and its components are a crucial aspect within IT architectures of today and in the future. It functions as the connecting fabric between devices and systems, it supports cloud computing, facilitates remote work. Additionally, network connections enable big data and analytics, ensure security and boundaries embracing new networking technologies. As the digital transformation continue to grow, the importance of a strong, secure, flexible, scalable network infrastructure will only increase.
4. **The Manager of Managers (MoM) is crucial and here to stay.** The MOM has always been a trend in the monitoring and management space but has gained new fans (and old fans like me) and followers. As Observability and AIOps have gained traction managing the complex, distributed systems and data volumes continue to grow, MoM plays a crucial role in consolidating and managing multiple monitoring and management tools to provide a holistic view of the IT and business environment. Simply the MoM is enabling the improvement of operational efficiency.



As the complexity of IT systems continues to grow, traditional approaches to monitoring and management are no longer sufficient. The future of IT operations lies in the integration of observability and AIOps, allowing for proactive incident management, automated resolutions, and ultimately, more resilient systems. By embracing these technologies, IT teams can stay ahead of issues rather than merely reacting to them, ensuring seamless experiences for end-users and continuity for businesses in an increasingly digital world. I am excited to be part of this research and look forward to the future. As always, reach out if you have questions.

Sincerely,

Eveline Oehrlich

Vendor Selection Matrix™ Disclaimer:

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