



ENABLING AIOPS WITH SERVICENOW

COULD AIOPS BE THE ANSWER TO ACHIEVING DIGITAL TRANSFORMATION AT BREAKNECK SPEED?

Although each business is unique, we are all moving towards the same goal of integrating technology into every area of the business. The only difference is some will get there quickly, some will get sidetracked only to eventually stagger across the finish line, and others, despite how hard they try, won't make it there at all. Why is that?

The state of their ITOM (IT operations management) is slowing down the business and veering it off course. In almost every case, it means there is little to no visibility of IT assets, workflow processes aren't streamlined, data isn't shared and centralized, and, most importantly, AI/ML (artificial intelligence/machine learning) capabilities are not being utilized to enhance IT operational functions.



GRAPPLING WITH INADEQUATE ITOM

With all the growth and transformation happening these days in multiple industries, companies are seeing a rapid increase of data flowing in and being available for analysis from various on-premises and cloud infrastructure components, which is inundating their IT teams. This has led to a heavy investment in both home-grown and third-party monitoring tools, creating a significant challenge: how do you manage the sprawl of tools and keep monitoring your applications, servers, routers, and other IT assets in an effective yet economical way? The solution: make the digital business highly observable with IT monitoring that's unified, holistic, and intelligent.

Organizations are eager to automate repetitive and recurring IT tasks, as well as find out how AI/ML can possibly help predict when serious problems are about to occur, but they are unsure where to start. We have discovered that the major problem they face when it comes to IT monitoring is the lack of a data strategy or an operating model to drive analytics, automation, and remediation. Additionally, unnecessary pressure is being put on the budget to constantly bring in more tools to keep up with the inflow of data mainly because no end-to-end tools exist within the organization. For example, the engineering team may have created several tools that accomplish specific tasks, which is great, but they're not integrated with each other, just siloed entities that fail to come into a centralized place for IT to be able to offer coordinated support. Also, as IT teams work tickets and monitor assets, they don't work together, especially in large environments. They could be leveraging AI/ML to make operational management easier and reducing or eliminating manual, redundant activities while saving time and money.

EVOLUTION OF BIG DATA AND THE FUTURE STATE OF IT MONITORING

Gartner was the first to coin the term IT operations analytics, which later became AIOps (artificial intelligence for operations). While some of the underlying technologies have been around for years, it's a relatively new principle that essentially covers how you manage IT, how DevOps is done, and how algorithms are applied to detect, remediate, and potentially prevent system failures that could have major impacts on services. Although Gartner reports that it may take 5–10 years before companies fully adopt this technology, companies like ServiceNow already have an AIOps platform that can serve as both a foundation and springboard to better IT asset management.

As an evolution from ML complementing visual analytics and log management, we believe adopting ServiceNow's AIOps platform is the first step to improving IT operations. The platform is capable of combining big data, AI, and ML to refine how IT operational functions are executed by putting tools and knowledge in the hands of system engineers and operational experts providing support. It can also scale effortlessly, ingest numerous data sources from a myriad of monitoring tools, e.g., Splunk, Dynatrace, or AppDynamics, and provide data analysis that helps identify historical patterns to automate the detection and resolution of common IT issues.

Continued momentum for digital transformation is a key driver for this technology. But simply adopting an AIOps platform is not the silver bullet to solving all of an organization's IT troubles. Having the platform in place is one thing, knowing how to use it effectively and tapping into all its potential is something that requires a constructive approach from a knowledgeable, dependable partner.



WITHOUT THESE 3 STEPS, AIOps WILL BE A FAILED PROJECT

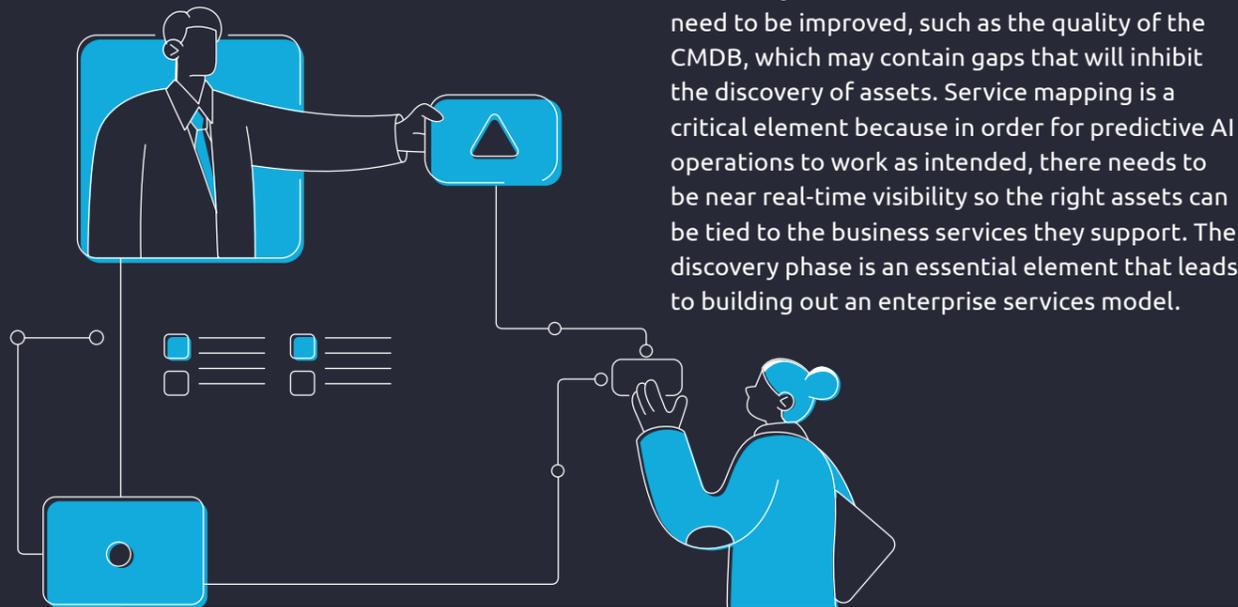
With ServiceNow AIOps platform as the enterprise foundation, an end-to-end solution can be built to deliver value, transparency, and continual service improvement for any IT ecosystem. But organizations will need a partner to help bring their existing tools into one standardized environment, to connect them all, and also to decide which ones can be discontinued to streamline and reduce costs. Effective reporting, KPIs, and governance also play a key role in order to start visualizing and reporting on what's happening as well as managing what has been deployed in ITOM.

1. Before defining AIOps objectives, a detailed assessment needs to be done. It will uncover an organization's current data sources, tools, and operational capabilities. An in-depth look at the CMDB (configuration management database) will reveal all the IT assets (apps, infra, network) in use, services, and their relationships.

2. Many companies that have made initial investments in a platform like ServiceNow have difficulty following through with their defined approach because it's often unguided, which creates uncertainty. This is where CoE (center of excellence) advisory services can be of particular importance. It's essential for a team of cross-discipline AIOps experts to create a strategy, roadmap, and provide next-best-action recommendations based on where the organization is in their journey. This will ensure AIOps objectives can be reached within a reasonable timeline.

3. Questions will undoubtedly arise: How do I implement and sustain this operating model? How do I manage all the tools? How do I bring disparate teams together so they don't work in silos? How can I use all the different components of the platform to deliver increasingly better service? The answer is, with an IT monitoring model blueprint and governance. With recommendations on the most effective tools, integration approach, methodology for transformation, interactions between IT operations, the business and other IT teams, the right SLAs (service level agreement) and SRE (site reliability engineering) KPIs (key performance indicators) can be defined. It will result in a top-performing organization with AIOps at the helm.

Most likely other foundational IT services will need to be improved, such as the quality of the CMDB, which may contain gaps that will inhibit the discovery of assets. Service mapping is a critical element because in order for predictive AI operations to work as intended, there needs to be near real-time visibility so the right assets can be tied to the business services they support. The discovery phase is an essential element that leads to building out an enterprise services model.



OUTCOMES TO EXPECT

The typical reactionary scenario for most organizations that monitor events is to raise a red flag only after a failure is detected, and preliminary damage has occurred. This is in stark contrast to how ServiceNow uses Predictive AIOps. When tools are integrated with the ServiceNow platform, they can monitor all the CIs (configuration items), capture events, and generate logs. ServiceNow's Health Log Analytics pushes them onto the Predictive AIOps engine, where patterns and historical data are scrupulously analyzed to make future predictions on if and when a problem might occur, depending on ML-driven thresholds. This will enable operations teams to predict and prevent a failure before users are impacted through automation.

Integrating multiple monitoring tools with ServiceNow and centralizing all events, alerts, and logs simply results in noise reduction and enables IT operators to have full visibility across the entire IT estate to resolve incidents faster, which reduces downtime and increases the availability of IT services.

A new or improved operating model will provide operational efficiencies through automated and streamlined processes. For example, if multiple teams are unknowingly working on the same issue, their analysis and resolution tasks can be coordinated through automation and AIOps so information is shared via Operator Workspace. It will result in less effort to identify root cause and faster remediation of issues.

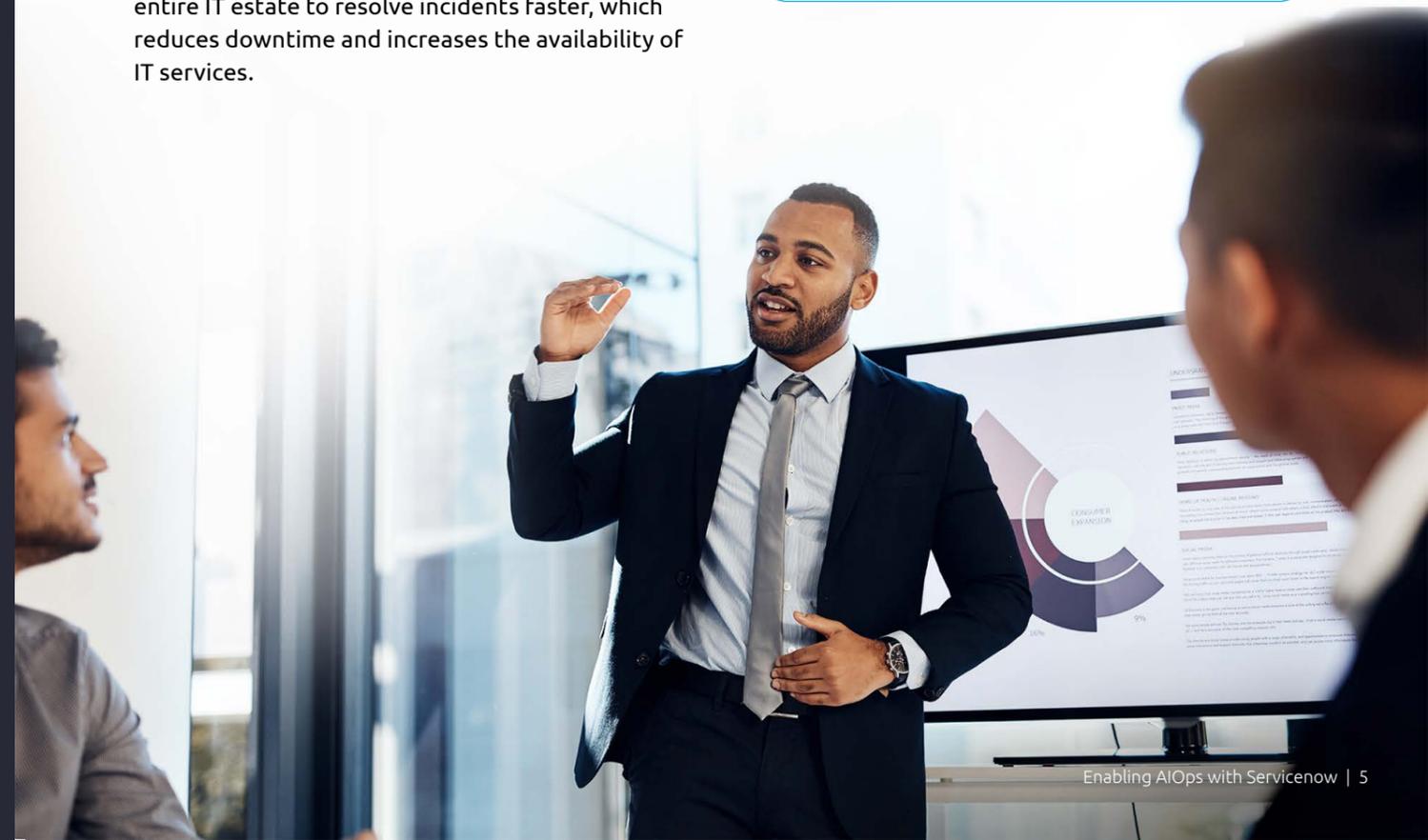
AUTHOR



Hugo Gordillo

**Delivery Architect Director,
ServiceNow & SIAM Capability Leader**

hugo.gordillo@capgemini.com





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For further information please contact:

infra.global@capgemini.com