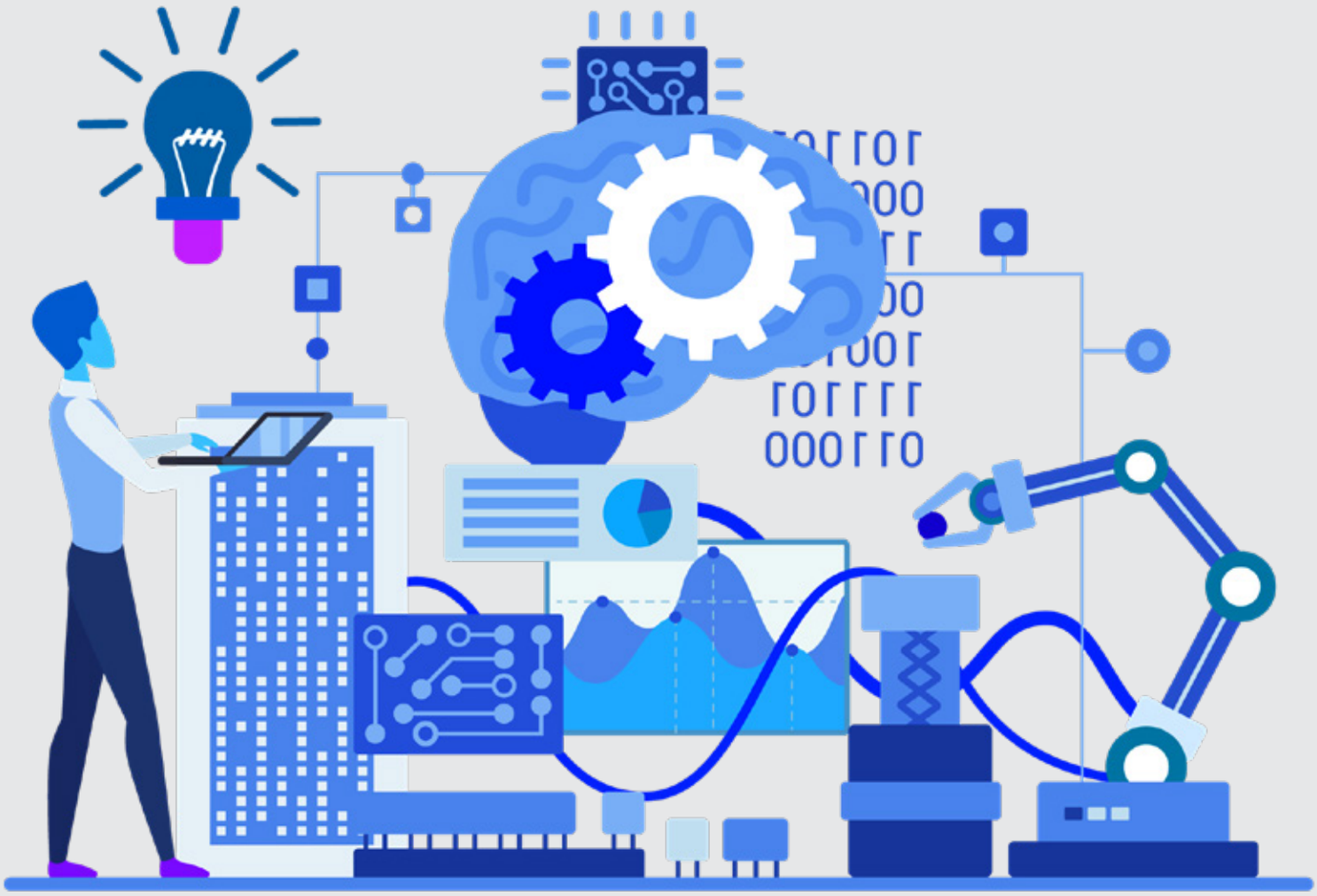
LTIMindtree



POV

Bringing Artificial Intelligence and Automation to IT Operations

Every IT department within an organization works toward providing a stable environment to the business. IT landscapes are designed to fulfil business requirements with the help of tools, applications, and systems aided by the underlying infrastructure.

However, the one thing that keeps CIOs awake at night are unplanned outages. In 2019, as per a Forrester Consulting survey commissioned by IBM of 100 IT directors to understand the real impact of downtime in their organization, It was found that on an average, unplanned downtime costs 35% more per minute than planned downtime and the reaction time causes loss of productivity and money[1].

One way to minimize unplanned outages is to have strong monitoring tools provided by either the OEMs like SolMan for SAP or other third-party tools such as SolarWinds or DynaTrace. Over the years, monitoring tools have brought down number of downtime hours due to unplanned outages. Monitoring tools are invaluable in reducing production downtime by raising alerts on pre-configured events, including details of the breach and other information that can potentially guide support resources on quick resolution of the issue.

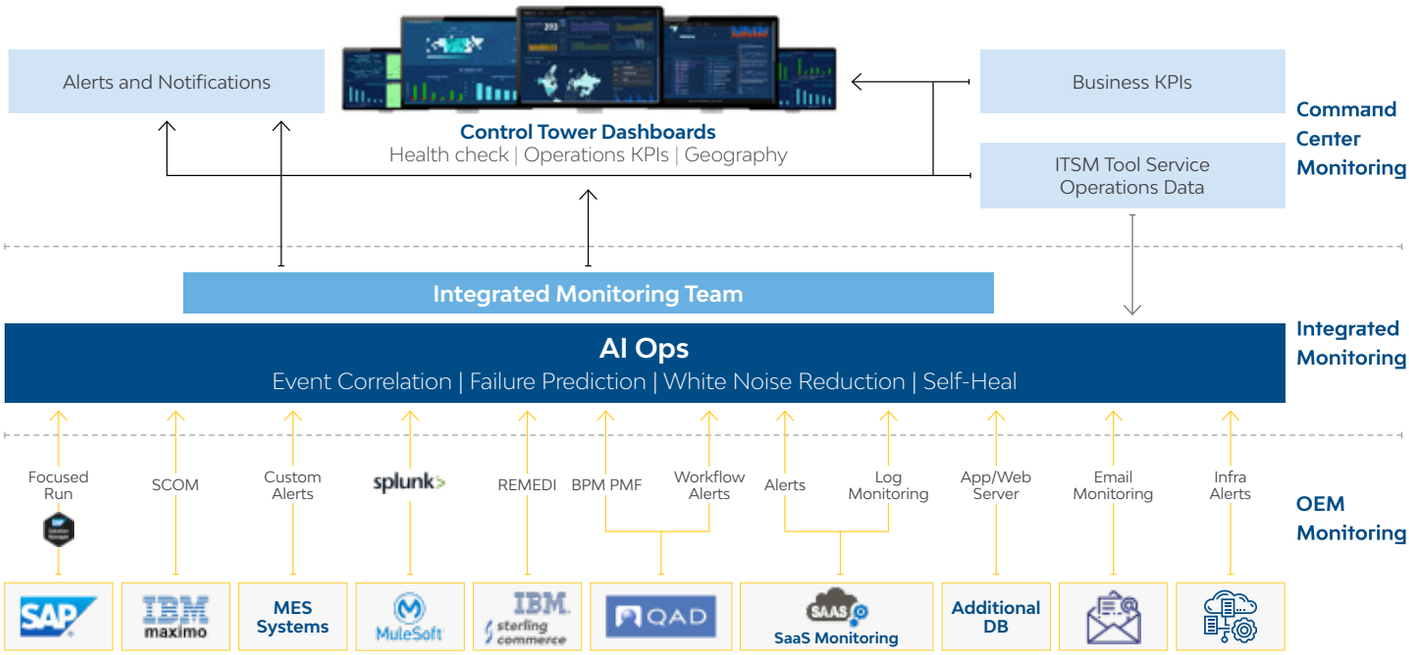
While traditional monitoring tools bring in value, they have many limitations:

- **Reactive:** Monitors send alerts only after the event has occurred.
- **Need oversight:** Monitors need human oversight; all alerts are continuously reviewed by the operations team and standard operating procedures (SOPs) determine the next course of action.
- **Lack of correlation:** Due to the disparity between multiple tools spread across the landscape and lack of connectivity between them, traditional monitoring tools are incapable of generating any correlation between events. For example, a tool that is monitoring a server may not correlate events that are generated by the applications being hosted on that server.
- **Lack of historical insights:** Monitoring tools work in the present; they do not have the capability to provide historical connections between events.
- **False positives:** Monitoring tools may generate a high number of alerts which may not need any attention. However, these events could be false positives which can be determined only after reviewing the alert and based on the experience of the support team. This leads to waste of time and effort and is subjective to the assessment of the person reviewing the alert.

In order to overcome such limitations of traditional monitoring tools, we need to make monitoring tools smarter and ready for challenges of the modern enterprise.

Enter AIOps. AIOps is a smart tool that applies artificial intelligence to IT operations and monitoring. It brings together varied monitoring tools under a single platform and provides intelligent oversight. The effort and skills required to monitor multiple tools are consolidated into a single window.

Simply put, AIOps is the monitor of monitors—it sits on top of other monitoring tools and continuously logs all the events it receives. Where it shines in comparison to the traditional monitors is that instead of having an army of people watching the different monitoring tools, all that work is now automated and handled effectively by the tool itself.



*Sample representation

You may be wondering—is AIOps a monitoring tool? It is not. AIOps is a multi-technology platform which provides valuable insights into IT operations through the data collected from various IT operations events, monitoring tools and devices using analytics and machine learning.

Here are some of the primary features of AIOPs:

- **Event collection:** Collecting data from multiple monitoring tools (application and infrastructure) makes it the single platform to monitor right across the IT landscape.
- **Noise reduction:** Monitoring tools generate a high volume of alerts. AIOps helps by eliminating alerts which may turn out to be false positives. This allows the monitoring team to focus on critical alerts that may lead to a production-down situation.
- **Event correlation:** AIOps creates a correlation between events captured across monitoring tools. It has the ability to correlate infra events. For e.g., if a server goes down, the applications hosted on the server will also go down, especially if they do not have any built-in redundancy. AIOps' ability to correlate these events will allow the support team to stay on top of things and proactively tackle them, even before the users realize the issue and report the incident.
- **Intelligent insights:** AIOps provides insights on issues by generating patterns relating to historical issues and provides cause and effect details. It provides intelligent insights to enable the production support team to determine the root cause, leading to permanent corrective actions.
- **Automation:** AIOps has the ability to trigger automation scripts to resolve a problem based on pre-defined rules or provide guided resolution to the support person based on historical data.

AIOps is the future of IT operations. In other words, *there is no future of IT operations which does not involve AIOps*. The primary reason for this lies in the way the operations/events data has evolved over time. Data has increased not only in length and breadth, but also in depth. The amount of data dimension available for review, prediction, and ultimately decision-making is immense and we can no longer wait for human efforts to mine insights from this data.

With the ever-growing scale of data and IT operations, traditional monitoring tools will soon become obsolete, if not untenable. AIOps platforms will provide a competitive edge by improving operational efficiency and dependency on human interventions to increase production uptime and prevent revenue loss.

References:

1. Forrester Opportunity Snapshot: A Custom Study Commissioned by IBM August 2019

About the Author

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Ali Asgar Parekh is the delivery partner for industrial manufacturing customers as part of LTIMindtree's manufacturing business unit. He brings with him more than 21 years of experience in application transition, transformation, and setting up next-gen IT operations. Parekh is a transformation leader who has expertise in ensuring customers operate their application landscape in an efficient and optimized way by adopting key transformation levers such as digitization, extreme automation, and converged ops, bringing customer delight. He comes from a commerce and finance background and holds certifications in System Management, Project Management (PMP), Scaled Agile, and ISO Audit.

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LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by 81,000+ talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit https://www.ltimindtree.com/.