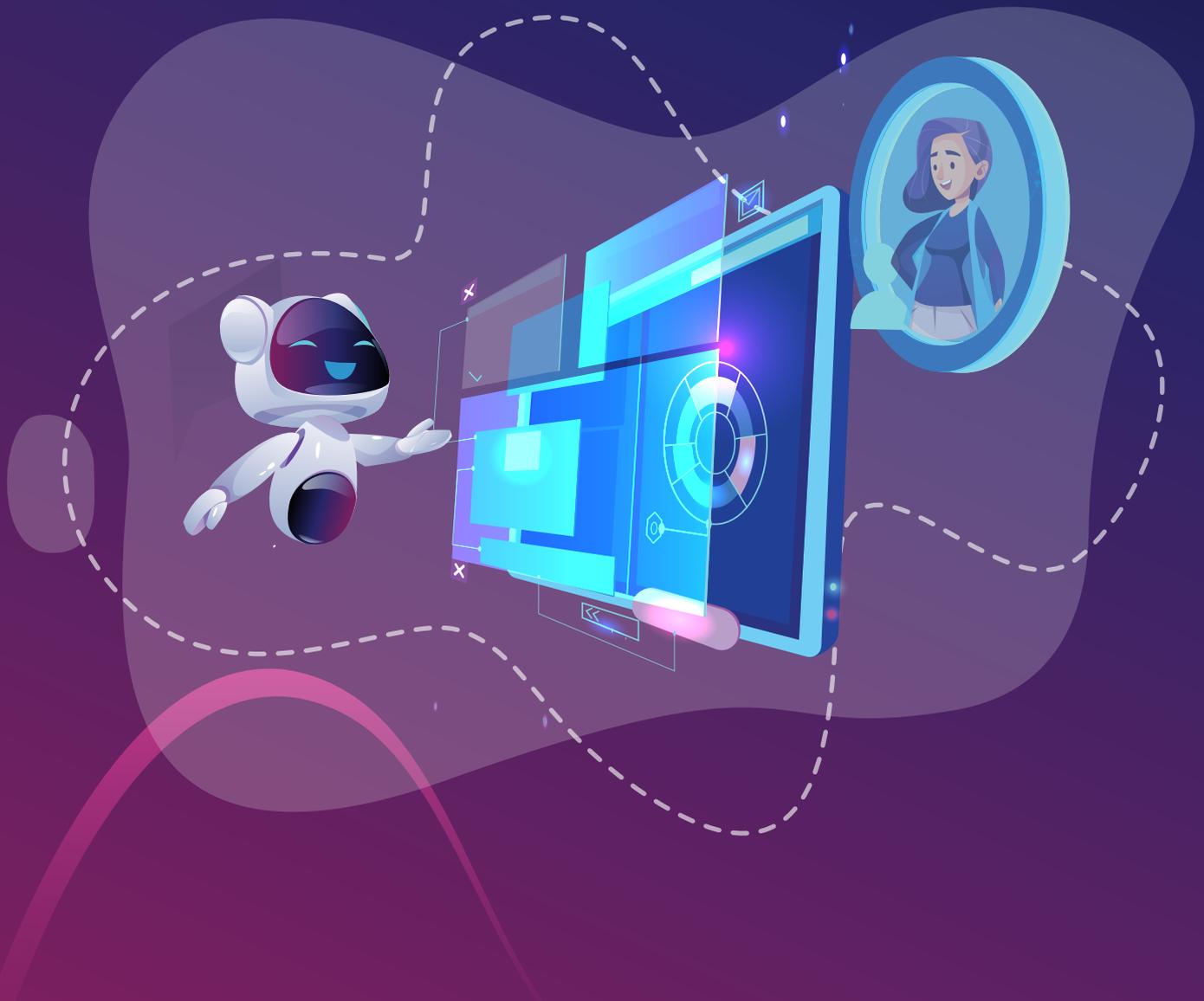


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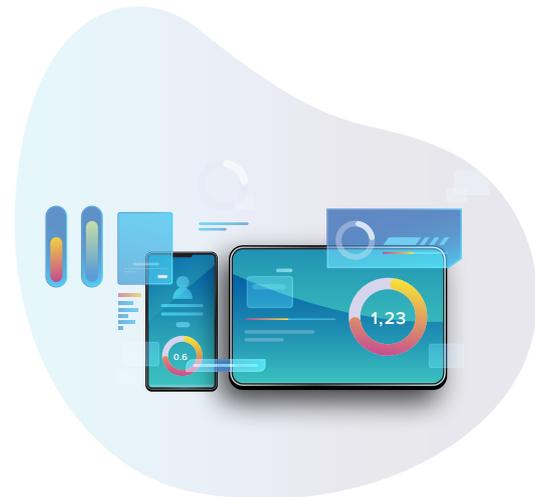
Redefining Application Performance Monitoring Trends to Watch Out in 2020



Introduction

From monolithic architecture to distributed systems and microservices, the art of application development has changed over the years, and the needs for monitoring those applications have evolved with it.

[Application performance monitoring \(APM\)](#) solutions now meet the monitoring needs of all applications deployed across various platforms, be it on-premise, cloud, or even hybrid models.



Organizations are embracing APM solutions and the APM industry is realizing significant growth as a result. According to a report by Mordor Intelligence, the APM market was valued at \$5.8 billion in 2019 and is expected to grow to \$11.43 billion by 2025 at a CAGR of 12 percent.

Visualization, customization, and artificial intelligence (AI) shape the current APM market, but what can we expect to see in the future? What are the evolving trends in automation and monitoring tools that DevOps teams look out for? How can DevOps teams utilize APM solutions and get the most out of them? Read on to learn more.

1. Application Monitoring to Digital Experience Monitoring

APM used to mean monitoring standard application performance metrics and errors. But in recent years, this definition has evolved. The latest one, according to Gartner, is: "APM is a suite of monitoring software comprising digital experience monitoring, application discovery, tracing and diagnostics, and purpose-built AI for IT operations. "



The emphasis on digital experience plus AI is one of the most easily observable industry trends. The de facto standard for DevOps extends beyond ensuring uptime and availability, and now includes actively understanding user experience and proactively enhancing performance.

To thrive in a diverse user market, developers need to create apps that deliver a uniform user experience across different environments. This requires gathering details about how external factors like user geography, device, OS, browsers, and network impact the performance of the application, in addition to the traditional performance monitoring factors behind app servers.

Integrating APM with tools like synthetic monitoring and real user monitoring, which provide insight on user experience, helps developers build global and scalable applications.

2. Value from AIOps

DevOps plus AI = AIOps

AI is no longer a fancy word for superhuman intelligence, but a staple in the tech world. AI can no longer be ignored by DevOps. In the current state, monitoring tools use AI to identify and alert IT admins about anomalies, letting DevOps take over from there. However, as AI grows more pervasive, valuable insights into app behavior allow for deep data mining into business trends that are otherwise hard to identify in a complex architecture.

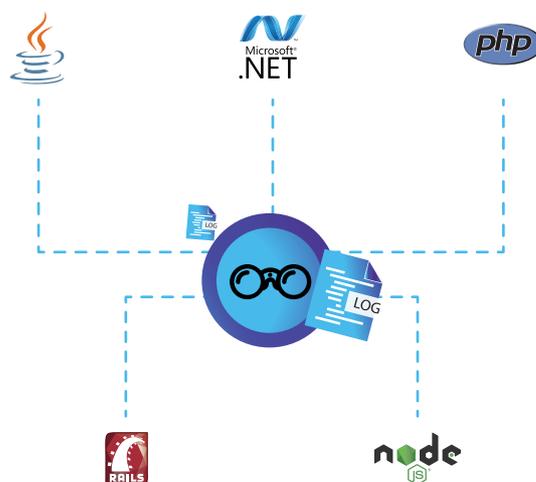


AI-based alerting systems save valuable time by preventing false and unnecessary alerts that can arise during an update. Having AI integrated with an APM tool helps businesses take proactive rather than reactive actions. For instance, letting AI autoscale its instances depending on the load, frees admins from constantly monitoring the load. Plus, AI is great at detecting anomalous or suspicious behaviors, understanding and reporting performance bottlenecks over time, and detecting when it's ideal to reboot servers.

3. Logs and APM

The industry has accepted that metrics, traces, and logs form the three pillars of observability. APM tools cover standardized metrics like Apdex, stacktrace, errors, and exceptions that aid DevOps teams to figure out where something went wrong. But for application developers, who need to resolve performance issues without compromising functionality, logs are required to provide crucial and context-sensitive information in their own language.

Currently, APM tools provide integrations that associate logs with stacktrace to provide contextual information on logged exceptions. But the future demands APM tools that can integrate their own and third-party log monitoring solutions to give complete observability into the application behavior.



4. One Agent to Rule Them All

Earlier we discussed that digital experience monitoring is no longer about one tool or a simple set of metrics. It requires coordinating and collaborating results from a varied set of tools that monitor numerous aspects of your application performance. This, in turn, requires a single agent from APM vendors to monitor various technical and functional aspects of your application built upon various platforms and to provide a unified view of your services. Automatic detection and instrumentation is an added bonus.

5. From Solution to Skill Set

DevOps has evolved from a set of practices to organizational culture, and what is culture without shared beliefs and practices? We at Site24x7 believe that APM is already an intrinsic part of the DevOps culture. Continuous integration and continuous delivery is made possible only with [continuous monitoring](#).

Like DevOps, in the future an APM specialist will be required to identify the pain points in application performance, benchmark the performance KPIs, and tailor the monitoring needs according to the demands of the application. Performance is not an afterthought, and to implement shift-left in the DevOps cycle, an APM specialist will play a crucial role.

We at Site24x7 believe the APM market will continue to evolve, take on a greater role in IT, and provide more solutions for organizations.