

Magic Quadrant for Application Performance Monitoring

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APM vendors are expanding their support for hybrid and multicloud infrastructure, business processes, machine learning and automated root cause analysis. I&O leaders must balance their desire for these needed capabilities with ease of use and automation support when selecting an APM suite.

Strategic Planning Assumption

Enterprises will quadruple their application performance monitoring (APM) due to increasingly digitalized business processes from 2018 through 2021 to reach 20% of all business applications.

Market Definition/Description

With a few changes in description from the 2018 Magic Quadrant, Gartner defines APM suites as one or more software components that facilitate application monitoring to meet three main functional dimensions:

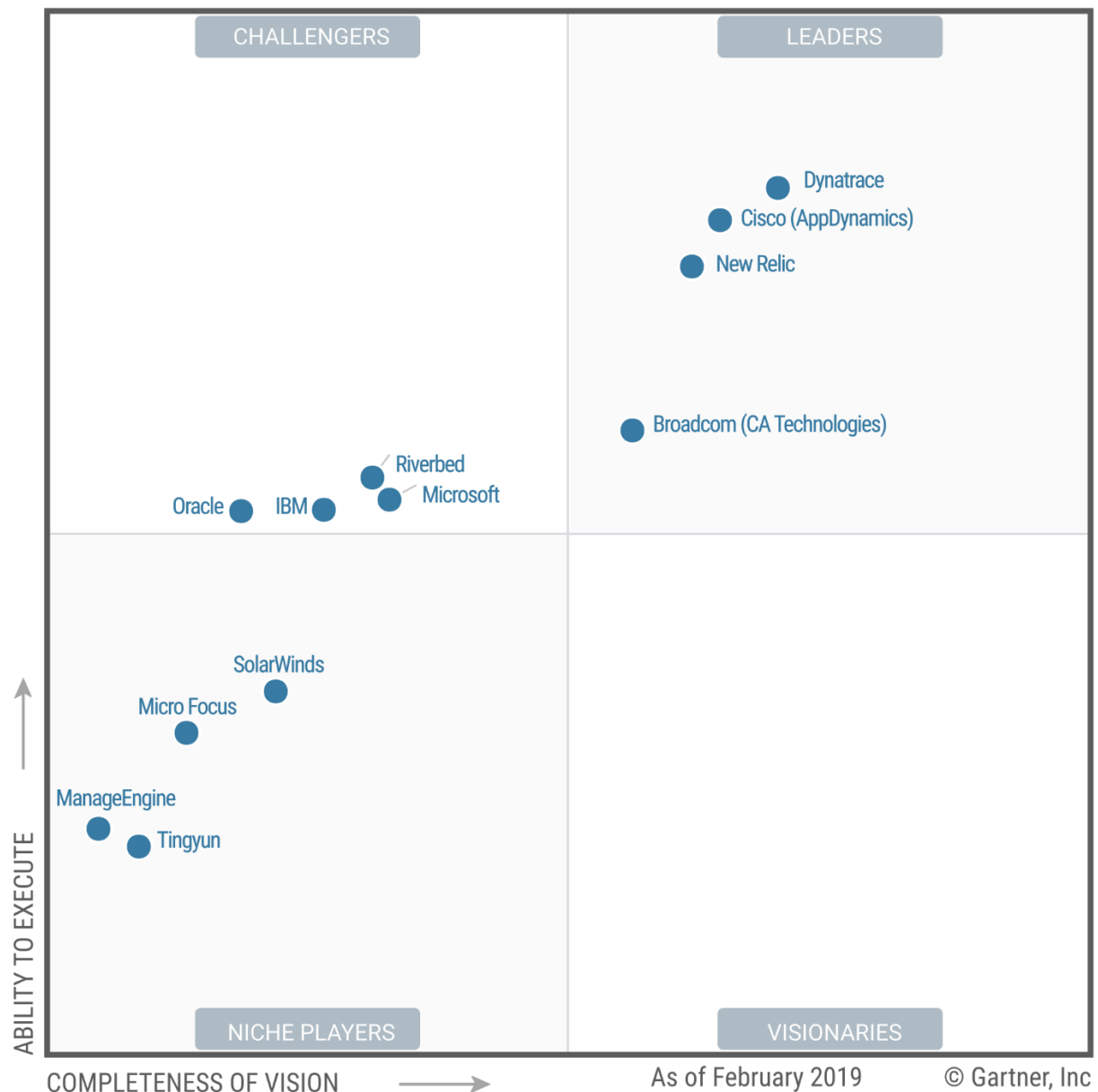
- Digital experience monitoring (DEM): DEM is an availability and performance monitoring discipline that supports the optimization of the operational experience and behavior of a digital agent, human or machine, as it interacts with enterprise applications and services. For the purposes of this research, it will include real-user monitoring (RUM) and synthetic transaction monitoring for both web- and mobile-based end users.
- Application discovery, tracing and diagnostics (ADTD): Application discovery, tracing and diagnosis is a set of processes designed to understand the relationships between application servers, map transactions across these nodes, and enable the deep inspection of methods using bytecode instrumentation (BCI) and/or distributed tracing.
- Artificial intelligence for IT operations (AIOps): AIOps platforms combine big data and machine learning functionality to support IT operations. AIOps for applications enables the automated detection of performance and event patterns or clusters, the detection of anomalies in time-series event data, and the determination of the root cause of application performance problems. AIOps accomplishes this through machine learning, statistical inference or other methods.

Gartner continues to include DEM and AIOps for applications as components of our APM suite evaluations, while also evaluating them as separate subsegments of the performance analysis market.

Magic Quadrant

Figure 1. Magic Quadrant for Application Performance Monitoring

Source: Gartner (March 2019)



Dynatrace

Headquartered in Waltham, Massachusetts, Dynatrace is a privately held company owned by private equity firm Thoma Bravo. Dynatrace's APM offering is available as on-premises, managed service and SaaS, all under the same common architecture.

The Dynatrace solution includes APM, DEM, infrastructure, network monitoring and AIOps capabilities that are embedded across the platform. Unlike some competitors' offerings, Dynatrace's analytics are not sold as a separate module. Dynatrace's analytics leverage real-time topology and AI algorithms to automatically detect anomalies, business impact and root cause across users, applications, and infrastructure. The analytics are built into the platform regardless of the feature being used and can ingest external data sources via APIs. The vendor offers a comprehensive monitoring suite, covering on-premises and cloud infrastructure, as well as hosted, packaged and mainframe applications and SaaS applications. Qumram, a company acquired in November 2017, adds session replay to its DEM capabilities. Dynatrace continues to expand its support for cloud infrastructure and applications. Additionally, it offers its products in a variety of deployment options and provides support and managed services through the Dynatrace ONE program.

Dynatrace continues to integrate research, product development and service delivery through the colocation of such activities across three key locations around the world. The vendor's roadmap includes expanded support for multicloud and hybrid architectures, further use of purpose-built AI to enable faster root cause analysis and the move toward automation and remediation, and the use of session replay as part of customer and business journey analysis.

Dynatrace has a global footprint with a primary go-to-market consisting of direct sales to midsize and large organizations, and uses channel and strategic technology partners to deliver products and services. Dynatrace's revenue derived from sales of APM suites (excluding professional services) in 2018 is estimated at between \$250 million and \$550 million.

Strengths

- Dynatrace offers a comprehensive and integrated monitoring platform covering infrastructure, network, application and end-user experience, underpinned by its OneAgent architecture.
- The vendor offers strong support for a wide set of environments, from mainframe to COTS, as well as SaaS, serving customers with a mix of modern and legacy technologies.
- Dynatrace ONE provides customers with premium managed services with a variety of options, from in-product chat and remote coaching with product specialists to on-site professional services.

Cautions

- Dynatrace tends to be a premium solution in the market, often on the top end of the price range among the competitors analyzed in this research.
- The vendor continues its journey to convert existing customers to the new Dynatrace platform, but some customers report inconsistencies in licensing options that complicate purchasing.
- Although Dynatrace continues to strengthen its customer journey analytics, its business analysis capabilities have fewer features and automation than some of its competitors.

[Read the full Gartner report](#)