

Magic Quadrant pour la surveillance et l'observabilité des performances des applications

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Les outils de gestion après-gestion et d'observabilité sont devenus de puissantes plateformes d'analyse qui ingèrent plusieurs flux de télémétrie, fournissant des informations critiques sur les performances des applications. Les différences significatives entre les fournisseurs signifient que les responsables de l'infrastructure et des opérations doivent prendre en compte les choix de surveillance stratégique.

Définition/description du marché

Le point de vue de Gartner est axé sur les technologies ou approches transformationnelles répondant aux besoins futurs des utilisateurs finaux. Il n'est pas axé sur le marché comme il l'est aujourd'hui.

Gartner définit le marché de la surveillance des performances des applications (APM) et de l'observabilité comme un logiciel permettant d'observer et d'analyser l'état, les performances et l'expérience utilisateur des applications. Les rôles ciblés sont les opérations informatiques, les ingénieurs en fiabilité de site, les opérations cloud et de plate-forme, les développeurs d'applications et les propriétaires de produits. Ces solutions peuvent être proposées pour des déploiements auto-hébergés ; en tant qu'environnements hébergés gérés par le fournisseur ; ou via un logiciel en tant que service (SaaS).

Les capacités de l'APM et des outils d'observabilité comprennent :

- L'observation du comportement transactionnel complet d'une application
- Découverte et cartographie automatisées d'une application et de ses composants d'infrastructure (y compris les services cloud)
- Surveillance des applications s'exécutant sur les navigateurs mobiles (natifs et navigateurs) et de bureau
- Identification et analyse des problèmes de performance des applications et de leur impact sur les résultats de l'entreprise

- Capacités d'intégration natives avec des outils d'automatisation et de gestion des services, ainsi qu'une intégration native avec des fournisseurs de cloud public, par exemple Amazon Web Services (AWS) Cloudwatch, Azure Monitoring et Google Cloud Operations
- Analyse des indicateurs clés de performance (KPI) de l'entreprise et des parcours des utilisateurs - par exemple, se connecter à la caisse
- La possibilité d'effectuer des interrogations interactives de plusieurs types de télémétrie (tels que des traces, des métriques et des journaux) pour détecter des « inconnues inconnues », c'est-à-dire la capacité d'identifier les problèmes sous-jacents aux événements inattendus et aux lacunes dans la couverture de la télémétrie
- Fonctionnalité de sécurité des applications fournie via un agent ou une infrastructure commune pour APM

Les fonctionnalités optionnelles peuvent inclure :

- Surveillance des terminaux pour comprendre l'expérience utilisateur et son impact sur les résultats de l'entreprise
- Prise en charge de la surveillance de l'infrastructure de bureau virtuel (VDI)
- Tests de performance et intégration avec des outils de test de charge

Quadrant magique

Figure 1 : Magic Quadrant pour la surveillance et l'observabilité des performances des applications





Source : Gartner (juin 2022)

Points forts et mises en garde des fournisseurs

Alibaba Cloud

Alibaba Cloud est un acteur de niche dans ce Magic Quadrant. Ses produits Arms (Application Real-Time Monitoring Service), Cloud Monitor et Log Service sont principalement conçus pour fonctionner sous forme d'abonnements SaaS sur la plate-forme Alibaba Cloud, bien que des options sur site soient disponibles pour les grands clients. Ses opérations sont principalement concentrées en Chine et dans la région Asie/Pacifique (APAC), avec un plus petit nombre de déploiements d'Alibaba Cloud en Europe et en Amérique du Nord. La société prévoit une intégration continue avec les outils DevOps; l'avancement d'Alibaba Cloud en Europe, au Moyen-Orient et en Afrique (EMEA) ; et l'amélioration de ses capacités d'intelligence artificielle (IA) pour la surveillance de l'expérience numérique (DEM). Ses clients sont principalement de grandes entreprises en Chine, avec un accent croissant sur les petites et moyennes entreprises (PME).

Forces

- **Exhaustivité de la solution** : Pour les clients déployant sur Alibaba Cloud, les outils natifs fournissent de nombreuses exigences de base d'une solution de surveillance, sans qu'il soit nécessaire d'implémenter une solution tierce.
- **Écosystème solide**: Comme beaucoup d'autres hyperscalers, Alibaba cloud dispose d'un solide portefeuille d'offres adjacentes, telles que l'analyse, ainsi que d'une intégration étroite avec des outils tels que DingTalk pour la collaboration.
- **Prix**: La mise en œuvre de la surveillance Alibaba APM est rentable, par rapport à la mise en œuvre d'un outil tiers sur Alibaba Cloud.

Précautions

- **Traction mondiale** : Les tensions politiques, les préoccupations perçues en matière de sécurité et d'autres problèmes non techniques continueront d'entraver l'adoption d'Alibaba Cloud, en particulier en Amérique du Nord et en Europe. Cela limitera la capacité des clients à accéder à la technologie à l'échelle mondiale.
- **Support**: Les options de support mondial pour Alibaba sont principalement centrées en Chine et sont limitées en dehors de la région APAC.
- **Plate-forme** : des déploiements sur site existent, mais ils reposent sur des efforts de mise en œuvre personnalisés. Les déploiements SaaS avec intégration native sont fournis à l'écosystème Alibaba Cloud, tandis que des installations manuelles sont nécessaires pour les applications d'autres fournisseurs de cloud.

Amazon Web Services

Amazon Web Services (AWS) est un Challenger dans ce Magic Quadrant. Sa solution APM et observabilité, qui comprend Amazon CloudWatch, AWS X-Ray, Amazon CodeGuru et Amazon DevOps Guru, permet des cas d'utilisation APM et observabilité. Cependant, il n'est pas empaqueté explicitement en tant qu'APM. Ses opérations sont géographiquement diversifiées et ses clients ont tendance à être de grandes entreprises. Bien que les informations de feuille de route pour Amazon Cloudwatch et le reste de ses services APM et d'observabilité ne soient pas disponibles, AWS publie régulièrement des mises à jour de produits. Les exemples d'avril 2022 incluent de nouvelles fonctionnalités, telles qu'Amazon CloudWatch Metrics Insights et Amazon CloudWatch Metric Streams.

Forces

- **Implémentation native AWS** : dans la plupart des cas, les ressources AWS stockent automatiquement les données de télémétrie dans Amazon CloudWatch. Il s'agit d'un point focal naturel pour analyser l'intégrité, les performances et l'efficacité des charges de travail déployées sur AWS. AWS met continuellement à jour ces services en fonction des commentaires des clients.

- **Empreinte géographique** : Amazon CloudWatch fait partie de chaque région AWS. AWS X-Ray, Amazon DevOps Guru et Amazon CodeGuru sont largement disponibles. Les organisations qui se préoccupent à la fois des capacités et de la souveraineté des données trouveront cela particulièrement bénéfique.
- **Intégration de la chaîne d'outils AWS** : ces services AWS fonctionnent non seulement bien ensemble, mais ils s'intègrent également bien aux autres services AWS. Par exemple, Amazon CloudWatch prend évidemment en charge la restauration automatisée des versions logicielles sous-performantes ou défectueuses via un pipeline de publication basé sur des déclencheurs de comportement.

Précautions

- **Complexité de la mise en œuvre et de l'utilisation** : compte tenu du nombre de services discrets impliqués, l'utilisation d'outils natifs AWS pour l'APM et l'observabilité nécessite un investissement dans la courbe d'apprentissage que toutes les organisations ne sont peut-être pas disposées à faire. Cependant, compte tenu de la gamme de solutions tierces qui prennent en charge les charges de travail hébergées par AWS, les équipes qui ont du mal avec CloudWatch ont des options.
- **Prise en charge multicloud variable** : les outils AWS APM et d'observabilité donnent la priorité à la prise en charge des charges de travail hébergées sur les plates-formes AWS, des charges de travail hybrides/sur site et en périphérie. La prise en charge d'autres écosystèmes de fournisseurs est comparable à celle des charges de travail hybrides/locales.
- **Complexité de la gestion des coûts** : il est difficile d'estimer les coûts réels associés à l'utilisation continue d'AWS APM et des outils d'observabilité, en particulier dans les situations d'analyse concurrentielle. Chaque service conserve ses propres leviers de tarification et les éléments de coût sous-jacents, tels que les coûts de transfert de données, qui doivent également être pris en compte.

Broadcom

Broadcom est un acteur de niche dans ce Magic Quadrant. L'offre DX APM de Broadcom fait partie de son portefeuille de logiciels, qui comprend des produits mainframe, d'automatisation et de sécurité. Son offre DX APM est principalement axée sur les cas d'utilisation des opérations informatiques dans sa base installée. Ses opérations sont géographiquement diversifiées et ses clients ont tendance à être de grandes entreprises. La feuille de route APM de Broadcom comprend l'expansion de l'adoption du libre-service pour APM et l'augmentation de ses capacités d'observabilité et d'analyse.

Forces

- **Prix avantageux pour les clients de Broadcom** : Broadcom propose de nombreuses solutions dans les domaines adjacents, en particulier dans les domaines de la sécurité, du mainframe et de l'automatisation. Les organisations qui investissent dans Broadcom peuvent tirer parti des

accords existants pour inclure la capacité APM, sans augmentation importante des coûts globaux.

- **AIOps intégré et automatisation** : la solution DX APM et intelligence artificielle pour les opérations informatiques (AIOps) de Broadcom offre des fonctionnalités couvrant l'expérience utilisateur, les applications, l'infrastructure, le réseau et la surveillance mainframe. Cela inclut la possibilité de tirer des enseignements de l'historique des modifications de code et de configuration, et d'estimer l'impact sur les performances des applications.
- **Forte présence mondiale** : Broadcom opère directement et par l'intermédiaire de partenaires dans plusieurs zones géographiques. Le logiciel DX APM est localisé dans plusieurs langues autres que l'anglais, y compris le japonais, l'espagnol et le Français.

Précautions

- **Complexité des prix pour les nouveaux clients** : Broadcom propose des contrats de licence de portefeuille (PLA), qui sont des contrats de grande entreprise pour sa suite complète de solutions AIOps, ainsi qu'une tarification autonome pour sa solution APM. Bien que les APL puissent simplifier la tarification pour les clients existants, certains nouveaux clients potentiels ont exprimé leur frustration à l'égard de ces accords et ils ont de la difficulté à faire des comparaisons avec d'autres fournisseurs.
- **Concentrez-vous sur les clients existants** : Les ventes directes stratégiques de Broadcom Software se concentrent principalement sur les grands clients existants. Broadcom a une stratégie de partenariat régional ciblée avec les revendeurs de canaux et les fournisseurs de services gérés (MSP), et consulte les partenaires nourris en fonction de la géographie, de l'expertise technique et des performances historiques en matière de prestation de services. Les solutions Broadcom figurent rarement sur la liste restreinte des solutions APM lorsque le client n'est pas un client Broadcom existant.
- **Pas de certification FedRAMP** : L'offre SaaS APM de Broadcom n'est pas conforme au Federal Risk and Authorization Management Program (FedRAMP) au moment de la publication.

Cisco (AppDynamics)

Cisco (AppDynamics) est un Challenger dans ce Magic Quadrant. Son offre apm et d'observabilité est principalement axée sur les organisations d'entreprise qui surveillent des environnements d'application et d'infrastructure volumineux, distribués et complexes; l'expérience de l'utilisateur final; et le contexte des affaires. La solution peut être hébergée sur site ou en SaaS. Ses opérations sont principalement concentrées dans les Amériques, la région EMEA et APAC, et ses clients ont tendance à être des moyennes et grandes entreprises dans un large éventail d'industries verticales. La feuille de route Cisco (AppDynamics) APM et observabilité est axée sur la simplification de la sécurité native du cloud en élargissant la prise en charge de la gestion des vulnérabilités et des politiques, et en améliorant sa capacité à surveiller les charges de travail publiques basées sur le cloud.

Forces

- **Large portefeuille de surveillance** : Cisco (AppDynamics) offre à ses clients un large portefeuille de produits logiciels d'infrastructure, y compris la surveillance des réseaux, de l'infrastructure et de la charge de travail, ainsi que la surveillance des applications mainframe et SAP.
- **Produit de sécurité** : Cisco (AppDynamics) a récemment introduit Cisco Secure Application, qui s'intègre aux données de l'agent AppDynamics pour prendre en charge l'identification rapide et la protection des vulnérabilités/menaces dans les applications surveillées.
- **Présence mondiale** : Cisco (AppDynamics) a une forte présence mondiale. La plate-forme est disponible pour les clients à auto-héberger, et ses centres de données SaaS sont largement distribués en Amérique du Nord, EMEA, Inde et Brésil. Elle poursuit son expansion dans la région EMEA.

Précautions

- **Intégration limitée actuelle** : la vision « Full Stack Observability » de Cisco promet une expérience unifiée pour la surveillance entre AppDynamics, ThousandEyes et Intersight. Cependant, les produits ne restent actuellement que faiblement intégrés, manquant d'une installation commune, d'une expérience utilisateur ou d'une plate-forme de données.
- **Retard dans la prise en charge de l'architecture moderne** : au cours de l'année écoulée, certains clients ont de plus en plus mentionné à Gartner qu'ils ne trouvaient pas que Cisco (AppDynamics) correspondait bien à leurs besoins d'observabilité pour les applications modernes et les charges de travail hébergées dans le cloud. Cisco (AppDynamics) prévoit de lancer un nouvel outil d'observabilité natif du cloud plus tard en 2022.
- **Tarification basée sur le cœur du processeur** : Cisco (AppDynamics) s'est éloigné de son modèle de tarification traditionnel basé sur les agents au profit d'une mesure basée sur le nombre de cœurs de processeur sous gestion. Le déploiement de cette tarification a été inégal, et les clients touchés ont exprimé leur frustration liée à leur compréhension de la façon dont les contrats existants seront mis à jour avec la nouvelle tarification et l'incertitude concernant les environnements de conteneurs de tarification.

Chien de données

Datadog est un leader dans ce Magic Quadrant. Sa plateforme SaaS offre des solutions d'observabilité et de sécurité. Ses opérations sont principalement concentrées aux États-Unis et dans la région EMEA, avec une présence croissante dans la région APAC et en Amérique latine. Ses clients vont des startups aux grandes entreprises. Au cours des dernières années, elle a considérablement élargi son portefeuille de solutions au-delà de l'infrastructure, de la gestion des journaux et de l'APM pour inclure la surveillance du réseau, la gestion des incidents, la DEM, la surveillance des bases de données et la sécurité. Datadog a réalisé un certain nombre d'acquisitions depuis le dernier Magic Quadrant, y compris des outils tels que Ozcode et CoScreen, qui ciblent les développeurs. Les futurs domaines d'investissement comprennent

l'amélioration de la visibilité de bout en bout, l'amélioration de l'expérience des développeurs, la gouvernance de la télémétrie, DevSecOps et la sécurité du cloud.

Forces

- **Solide portefeuille de plateformes** : Datadog continue d'élargir ses offres pour les opérations informatiques, la sécurité et les développeurs, tout en offrant une plate-forme et une expérience unifiées. Les contrats de retrait de Datadog permettent aux clients de mettre en œuvre à partir de l'ensemble du portefeuille sans avoir besoin d'un nouveau contrat.
- **Facilité d'utilisation de l'analyse** : Watchdog, le moteur d'IA de Datadog utilise l'apprentissage automatique (ML) intégré pour simplifier la complexité de la surveillance des architectures cloud natives. Watchdog fournit des alertes proactives, un dépannage accru et une analyse automatisée des causes premières (RCA).
- **Analyse de l'entonnoir** : l'analyse de l'entonnoir de Datadog dans la surveillance réelle des utilisateurs (RUM) peut comprendre le comportement complexe des utilisateurs tout au long des parcours des utilisateurs et identifier les taux de désabonnement et de baisse. Cela permet aux utilisateurs extérieurs à l'infrastructure et aux opérations traditionnelles (I&O) de mieux comprendre le comportement du client final.

Précautions

- **Flexibilité de la tarification d'entreprise** : Certains clients de Gartner dans le domaine de l'approvisionnement, en particulier ceux qui négocient des accords de grande entreprise avec Datadog, ont exprimé leur frustration lorsqu'ils traitent avec les équipes de compte Datadog. Ces défis comprennent l'offre de prix de liste, le manque de flexibilité autour des remises et des incitations limitées pour les offres de plus d'un an.
- **Points de présence limités** : les offres SaaS de Datadog sont disponibles aux États-Unis et en Europe (Allemagne). Certains clients en dehors de ces régions (en particulier l'APAC et l'Amérique latine) ont des préoccupations concernant la réglementation des données et la latence.
- **Déploiement SaaS uniquement** : Datadog ne propose qu'un produit SaaS et ne dispose d'aucune option de déploiement sur site. Cela signifie qu'il peut ne pas convenir aux clients ayant des réglementations en matière de souveraineté des données, en particulier sans expansion géographique supplémentaire.

Dynatrace

Dynatrace est un leader dans ce Magic Quadrant. Sa plate-forme complète offre une observabilité avec des capacités modulaires pour apm, surveillance de l'infrastructure informatique (ITIM), DEM, analyse commerciale, AIOps, automatisation du cloud et sécurité des applications. Ses opérations sont géographiquement diversifiées, avec un accent particulier sur la région EMEA, l'Amérique du Nord et la région APAC mature. Ses clients ont tendance à être des organisations d'entreprise. La feuille de route de Dynatrace comprend l'extension des capacités d'analyse de

son moteur d'IA Davis à de nouvelles sources de données, y compris l'analyse Étendue d'OpenTelemetry, et l'expansion de sa présence sur les marchés des fournisseurs de cloud, tels qu'AWS, Microsoft Azure et Google Cloud Platform (GCP).

Forces

- **Puissantes capacités d'analyse et d'IA au niveau du code** : le traçage distribué et l'analyse au niveau du code avec PurePath capturent et analysent les transactions à tous les niveaux de la pile d'applications, y compris les données OpenTelemetry, le maillage de services et les services informatiques sans serveur. Ceci, associé au moteur d'IA Davis de Dynatrace, permet l'analyse des causes profondes des problèmes de performance.
- **Convergence de l'APM et de la sécurité** : Dynatrace OneAgent et les capacités d'IA de Davis combinent le contexte d'application et de sécurité qui détermine si une vulnérabilité est exposée à Internet publique et/ou a accès à des données sensibles. Cela identifie également tous les autres services ou applications qui dépendent ou sont affectés.
- **Facilité de déploiement** : l'architecture OneAgent de Dynatrace permet aux clients de découvrir et de collecter en permanence des données d'observabilité de manière rapide et automatisée. Les commentaires du marché indiquent que cela conduit à un délai de rentabilisation plus rapide.

Précautions

- **Tarification basée sur la mémoire** : la tarification de l'unité hôte de Dynatrace est basée sur la taille de la mémoire de l'hôte, elle varie donc en fonction de l'environnement. Cela peut rendre le dimensionnement des transactions complexe pour les environnements plus grands, en particulier pour les déploiements hautement conteneurisés.
- **Davis Data Units usage**: Since last year, Dynatrace's contracts include a separate priced line item for its "Open Ingestion," which it terms "Davis Data Units." Unlike the other components (usually Host Units and DEM units), procurement teams frequently expressed questions as to the necessity of this component, as well as concerns about their ability to project consumption over time.
- **Geographic presence**: Dynatrace does not have a point of presence in the Middle East, which limits options for clients in the region who have restrictions on data sovereignty. Dynatrace recently opened its first office in the region in the United Arab Emirates (UAE).

Elastic

Elastic is a Visionary in this Magic Quadrant. Its APM product is available as a SaaS version (Elastic Observability) or a self-hosted version. The company is headquartered in North America, and its customers come from a broad range of industries, but they tend to be in the software and technology, financial services, public sector, and retail. The majority of Elastic's customers are split between the Americas and EMEA. Elastic's product roadmap includes improved support for OpenTelemetry, security use cases and AI.

Strengths

- **Unified agent:** In 2021, Elastic launched a new unified agent to simplify installation and configuration of large numbers of agents, with integrated security capabilities.
- **Open source:** Elastic has long been known as a strong proponent of open-source software (OSS) and contributes to many projects, including OpenTelemetry. This enables clients to start with their own small deployments, which may grow to take advantage of commercial offerings.
- **Deployment models:** Elastic offers on-premises and cloud-based versions of its APM and observability products, with broad feature parity between the two.

Cautions

- **Market awareness:** Elastic is best known for log analysis; many clients and existing customers of Elastic are unaware of the capabilities beyond its core area.
- **Pricing estimate:** In contrast with other vendors in this market, Elastic bases its pricing model on compute resources. Although Elastic offers a pricing calculator, comparison during procurement or review, and forecasting of costs and budgets, can be challenging.
- **Architecture complexity for on-premises deployment:** The deployment of Elastic Stack for on-premises environments can be complex, requiring high levels of skill to implement and operate at scale. It also requires significant manual tuning to support large volumes of data storage.

Honeycomb

Honeycomb is a Leader in this Magic Quadrant. Honeycomb's service comprises a data store and query engine optimized for exploratory identification and investigation of patterns and anomalies in application and infrastructure telemetry. Honeycomb is thus more observability-focused than APM and is delivered as a SaaS product. Its clients are global, but are concentrated in North America and EMEA. Recent updates have strengthened support for OpenTelemetry, added an API for data exchange and introduced metrics. Honeycomb's roadmap includes a service-mapping capability, service-level objective (SLO) enhancements and tailoring the product for enterprise use.

Strengths

- **Innovative analytics:** Honeycomb enables operators to quickly identify interesting anomalies in the collected telemetry. In particular, the "BubbleUp" tool is a novel innovation that visually represents data in a heat map in a way that clearly identifies correlated anomalies, enabling the operator to interactively explore the different dimensions of this data. This reduces the amount of time the operator needs to spend manually analyzing the data.
- **Integrated reliability workflows:** Honeycomb includes native support for defining service-level indicators (SLIs) and measuring service-level objectives (SLOs) and burn rate in a way that ties them directly to the telemetry that defines them and informs cause analysis.

- **Community engagement:** Honeycomb's commitment to community building and outreach efforts are noteworthy. Some of these efforts include a free tier of service, community events, open office hours and one book (so far). The modern use of observability outside of its control theory origins can largely be traced to Honeycomb's founders.

Cautions

- **Single location:** Honeycomb's service is delivered from the AWS us-east-1 (Northern Virginia) region. This may prove limiting in the future, not only from a latency perspective, but because there may be organizations for which secure tenancy is not sufficient or that want an observability platform closer to their applications.
- **Uniqueness of offering:** Honeycomb's product differs significantly from traditional APM solutions, making it difficult for end users to explain its purpose as part of the business case to obtain approval to procure it.
- **Pricing rigidity:** The tiered pricing plan is rigidly volume-based between tiers. Demands for flexibility are likely to increase as the customer base grows.

IBM (Instana)

IBM is a Leader in this Magic Quadrant. IBM acquired Instana in 2020, and its Instana APM product is offered as a SaaS product and as a self-hosted option, using a single-agent architecture. Its operations are mostly focused in North America and Western Europe, with a smaller number of clients in other regions. Its client base is midsize-to-large enterprises. IBM's position and capacity in monitoring has substantially improved with its recent acquisitions. IBM Instana's roadmap includes further integration for Turbonomic (another acquisition) and IBM Z Mainframe, as well as further support for OpenTelemetry and Kubernetes.

Strengths

- **Simple pricing model:** IBM Instana's pricing model, based on a per-host metric, is straightforward to understand and is competitively priced in the market. Pricing varies for the SaaS version, compared with the on-premises model, and list prices are available on the Instana website.
- **IBM client base:** The IBM acquisition gives Instana access to a wider audience and a larger sales team. It also enables Instana to target legacy IBM installations for modernization.
- **Designed for modern architectures:** Instana APM is focused on monitoring for containerized and hybrid environments and is suitable for clients looking for an APM solution, with an emphasis on monitoring modern infrastructure.

Cautions

- **No synthetics, no integrated security:** Instana APM has no integrated synthetic monitoring, relying instead on third-party tools, such as Apica, to provide this functionality. An integrated

synthetics tool is on the IBM Instana roadmap. Similarly, Instana lacks an integrated security tool, so it relies on other IBM tools, such as StackRox, to provide such functionality.

- **Unclear transition from legacy IBM:** There are still large deployments of legacy IBM monitoring tools, including those from the Tivoli portfolio. Clients are unsure of the upgrade paths available to them, and the value of upgrading remains unclear. IBM has initiated activities to help clients with the transition process.
- **Lack of ServiceNow integration:** Unlike most tools, Instana does not have an out-of-the-box offering to integrate with ServiceNow, the leading IT service management (ITSM) solution on the market. Instead, it relies on custom integration via webhooks.

Logz.io

Logz.io is a Visionary in this Magic Quadrant. Its APM and observability product set includes distributed tracing, infrastructure monitoring and log management. Logz.io leverages the Prometheus-compatible M3DB for metrics and OpenSearch for logs and traces. OpenTelemetry is used to collect trace data, which is visualized in Jaeger. A cloud security information and event management (SIEM) capability is available as well. All are delivered as SaaS-only solutions, hosted in multiple cloud providers. Its operations are geographically diversified, and its clients tend to be open-source-friendly enterprises of any size. Logz.io's roadmap includes a simplified agent architecture, service mapping and improved AI/ML. Digital experience monitoring is also planned.

Strengths

- **Open source:** Logz.io heavily leverages OSS throughout its product set. It demonstrates how organizations interested in following a similar path for their own use can better understand the capabilities of the components. Organizations that have found self-managing these tools to be onerous and costly may wish to migrate to Logz.io to reduce their overhead.
- **Geographic footprint:** With at least two points of presence in each of the North America, EMEA and the APAC regions distributed across two cloud providers, Logz.io offers wide geographic diversity and support for data sovereignty.
- **Cost-effective data management:** With Logz.io's Smart Tier, as log data is ingested or aged, it can be placed into one of three tiers that help balance availability, performance and cost.

Cautions

- **UI consistency:** Because Logz.io is literally a collection of OSS deployed together, variations in user interface (UI) as you switch between perspectives are apparent, and may be confusing to end users.
- **Forked open source:** To create the Logz.io products, many of the underlying open-source components have been forked, although to what degree is unclear. This has the potential to create latency in the incorporation of security remediations.

- **Agent sprawl:** As currently implemented, separate client-side agents may be required to transmit different types of telemetry to the Logz.io platform. For example, Prometheus or Telegraf for time series, Fluentd or Fluent Bit for log data, and an OpenTelemetry collector for traces. This increases complexity and adds to administrative burden.

ManageEngine

ManageEngine is a Niche Player in this Magic Quadrant. The company is the IT management division of privately held Zoho Corp., and its Applications Manager and Site24x7 products focus on on-premises and SaaS deployments, respectively. The company's operations are geographically diversified, and its clients tend to be small or midsize businesses (SMBs). ManageEngine's roadmap includes a focus on increasing its support for OpenTelemetry as a standard, improving log file analysis, expanding DEM capabilities, and integrating AIOps for analysis and noise reduction.

Strengths

- **Investment from parent company:** Zoho, the parent company of ManageEngine, is making a number of investments in AI solutions, from which ManageEngine should benefit.
- **SMB-optimized option:** ManageEngine's products are competitively priced and straightforward to implement for smaller enterprises with limited budgets and staff.
- **Ecosystem of tools:** ManageEngine's portfolio of products extends the company's capabilities beyond APM to include IT operations functions, such as network monitoring, infrastructure and ITSM help desk.

Cautions

- **Scalability:** ManageEngine solutions have a small market footprint and are rarely seen in large organizations. Gartner clients have mentioned issues with scaling the solution for complex and/or large environments.
- **Variable integration capability:** ManageEngine has a long list of integrations, but many are limited in scope, making integrations with other areas of IT, such as DevOps toolchains, lengthy and more complex.
- **Immature analytics:** The lack of integrated AI/ML capabilities in ManageEngine's offering was apparent during this research. This is an area in which it noticeably lags the competition.

Microsoft

Microsoft is a Challenger in this Magic Quadrant. Its Azure Monitor includes Application Insights for APM and Log Analytics for observability. Delivery is via SaaS. As the Microsoft Azure-native monitoring solution, there is substantial geographic diversity, and clients tend to be midsize-to-large enterprises. Microsoft's APM roadmap includes broader support for OpenTelemetry, managed Prometheus and Grafana, and advanced problem analysis based on AI. Microsoft's

roadmap also includes enhancing synthetic monitoring with screen capture and increasing support for on-premises and multicloud observability with Azure ARC.

Strengths

- **Service mapping:** Application Map automatically creates a topological representation of distributed applications and their dependencies. Nodes on the map provide health and status information, and support drill-down to additional levels of detail.
- **Data analytics:** Microsoft Azure Monitor Log Analytics enables the interactive exploration of ingested telemetry, using a language called KQL. Most APM use cases require only Application Insights, but more-complex problem identification and behavior analysis may require the use of KQL.
- **Consumption-based pricing:** Microsoft Azure Monitor pricing is based primarily on daily ingested data, which customers can manage, depending on the type and amount of data being ingested into the Azure Monitoring platform, especially for larger deployments.

Cautions

- **Limited adoption of monitoring outside of Azure:** Microsoft has positioned Azure Monitor as a solution for monitoring workloads hosted outside Azure and those hosted in other cloud providers. Adoption of Azure Monitor for use outside of Azure has been limited, and potential clients should carefully evaluate whether Azure Monitor can provide the same benefits as a dedicated solution.
- **Cost predictability:** Azure Monitor is priced based on consumption, as is common with public-cloud-based services. The number of consumable services and the complexity of the levers involved makes comparison with other vendors difficult.
- **UI complexity:** Microsoft Azure Monitor's UI has remained similar to previous years, and is falling behind competing products. Customer feedback states that the UI and the product lack intuitive workflows.

New Relic

New Relic is a Leader in this Magic Quadrant. Its New Relic One platform covers many areas of observability, including infrastructure, APM and DEM. Its operations are geographically diversified, and its customers tend to be midsize-to-large enterprise organizations. New Relic's roadmap focuses on improving integration with the application development life cycle and continuous integration/continuous delivery (CI/CD) tools, a new security offering, and enhanced integrations with hyperscalers and other partners.

Strengths

- **Business model and pricing:** New Relic offers a clearly differentiated and disruptive pricing model in the field that has contributed to its recent growth in the number of accounts. Pricing is based on the number of users and the volume of telemetry ingested, which overcomes many of

the challenges associated with element-based pricing. This model is increasingly resonating with clients looking to manage ever-increasing monitoring bills.

- **Developer tools:** Launched in early 2022, the core user license is targeted at developers and is based on its CodeStream acquisition. Developers can investigate problems in production from their usual integrated development environment (IDE), allowing tighter integration between the production and development worlds.
- **Support for open standards:** New Relic has added enhanced support for a number of open standards, including OpenTelemetry, eBPF and Grafana. This move away from proprietary standards provides clients with greater flexibility in their deployments.

Cautions

- **Security product:** At the time of research, New Relic did not have a security product as part of its portfolio. In May 2022, New Relic announced its new Vulnerability Management tool.
- **Licensing confusion:** Most enterprises will purchase either the Pro or Enterprise license type from New Relic. However, Gartner clients have indicated that they are unsure which of the two license types is correct for them, leading to clients either under- or overprovisioning. In addition, there is no way to mix the two license types, which some clients find frustrating.
- **Log management:** New Relic have recently changed its log tool to automatically collect log files where the APM agent is deployed. Although this will allow for greater insights by combining application logs with APM metrics, clients should ensure that New Relic's security controls are correctly enabled so that sensitive data (e.g., financial or health information) isn't inadvertently collected. They should also monitor telemetry consumption, because log files are significantly more verbose than metric data.

Oracle

Oracle is a Niche Player in this Magic Quadrant. Its Oracle Cloud Observability and Management (O&M) platform is a SaaS solution that supports database, infrastructure and APM generally within the Oracle Cloud Infrastructure (OCI) and enterprise applications customer base. Its operations are geographically diversified, and its clients tend to be midsize-to-large organizations, including government agencies. The roadmap for O&M APM, a relatively new product, includes augmented ML/AI-based anomaly detection and improved support for hybrid and multicloud workloads.

Strengths

- **Flexible ingestion:** In addition to its own agents, tracers and APIs, O&M supports ingesting telemetry in industry-standard formats, such as OpenMetrics (Prometheus), OpenTelemetry and OpenTracing.
- **Broad geographic coverage:** Because of Oracle's worldwide, direct presence, customers and prospects can access O&M services on a wide geographic basis.

- **Full-featured synthetic monitoring:** O&M includes extremely flexible synthetic monitoring that supports browser and API-based, multistep transactions.

Cautions

- **Limited APM-specific go-to-market:** OCI is the full suite of Oracle cloud infrastructure services, and O&M is the full OCI monitoring platform. Its APM product is a small part of this broader platform. Similar to other third-party APM providers, it does not have a specific go-to-market (GTM) strategy. This may limit the broader growth potential of O&M outside the OCI ecosystem.
- **Oracle-centric pricing model:** As with other portfolio vendors with vast product offerings, Oracle's pricing model of universal credits is optimized for its customer base, limiting the appeal for non-Oracle customers and prospects looking for stand-alone APM solutions.
- **Language support:** The set of languages for which a native agent is available comprises Java, JavaScript (Node), .NET (CLR) and Ruby.

Riverbed (Aternity)

Riverbed (Aternity) is a Niche Player in this Magic Quadrant. Aternity, launched as a separate entity in 2019, was recently reunified with Riverbed. Aternity's Digital Experience Management platform is focused on endpoint visibility, as well as back-end instrumentation. Its operations focus mainly on North America, with an additional market in Europe and Australia/New Zealand. Its clients tend to be midsize-to-large organizations. Aternity's roadmap for APM is focused heavily on unified observability, with a combined offering from Riverbed and Aternity. The company also plans to add continued enhancement support for open telemetry and serverless environments.

On 28 April, Riverbed announced a new product offering Alluvio, which will comprise elements of Aternity, combined with Riverbed NPM and ITIM. Alluvio was not evaluated for this research.

Strengths

- **Benchmarking of data:** Aternity provides benchmark data for various metrics that enable clients to easily see where and how they compare with their peers. These can be viewed by industry, geography and other categories.
- **DEM capability and focus:** Aternity has extensive DEM agent-based capabilities that, when integrated with the company's APM functionality, provide an end-to-end view of application traffic and detailed endpoint visibility.
- **Integration:** Bringing Aternity back into the Riverbed portfolio creates opportunities to grow through customer base expansion and greater access to additional development and operational resources.

Cautions

- **Aternity and Riverbed reintegration:** Aternity was spun off from its parent company Riverbed in 2019. It has recently been brought back into the organization. This reintegration and uncertainty have caused clients to be hesitant about adopting Aternity products.
- **No security capability or product:** Aternity lacks products that add security to the APM portfolio.
- **Low market awareness:** Aternity has a significant focus on the DEM aspect of APM, with less market awareness of its core APM capabilities.

SolarWinds

SolarWinds is a Niche Player in this Magic Quadrant. Its APM product set is focused on providing services via SaaS and on-premises monitoring. Its operations are geographically diverse, and its clients include small organizations, large global enterprises and governmental organizations. SolarWinds' roadmap includes plans for a new observability suite that combines all the functionality of the separate tools in a single SaaS package. Other enhancements include new AIOps capabilities.

Strengths

- **Breadth of coverage:** SolarWinds has a strong complementary suite of products, covering much of the typical IT operations workload. These include products for network, database, security and configuration management.
- **Pricing:** SolarWinds' new integrated bundle will mean that APM pricing is more attractive for clients looking for an integrated solution for monitoring. In particular, it is likely to be an attractive option for companies looking to implement APM with a limited budget.
- **Ease of use:** SolarWinds has designed many of its products to be self-service, with simple installation models for smaller deployments.

Cautions

- **Ongoing impact of supply chain attack:** SolarWinds continues to be affected by the SUNBURST hack of December 2020. Gartner notes that some clients, and especially government bodies, are not considering SolarWinds as a possible solution, due to its association with the attack.
- **Lack of integration:** SolarWinds' APM product suite suffers from a lack of integration among suite offerings, with a noticeable difference in user experience among suite products, as well as with other SolarWinds products, such as Orion. As noted, SolarWinds plans to launch a new, integrated observability suite later in 2022.
- **Portfolio overlap:** SolarWinds' portfolio contains a number of overlapping products with similar capabilities. It is not always clear which SolarWinds tool is the most suitable for a particular use case.

Splunk

Splunk is a Visionary in this Magic Quadrant. Its APM products combine metrics, traces and log analysis, end-user experience and incident response capabilities through various products aggregated in its Splunk Observability Cloud offering. Its operations are geographically diverse, and its clients tend to be enterprise organizations. The company continues to invest in its APM functionality by enhancing code-level visibility and acquisitions focused on enhancing its offerings in areas, such as real user monitoring, synthetic transaction monitoring (STM), cloud network monitoring and business workflows. A key aspect of the roadmap is gaining deeper monitoring and security insights with Splunk Cloud and Splunk Enterprise integration with Splunk Log Observer.

Strengths

- **Support for the large environments:** Splunk has a large presence in log monitoring and SIEM, which enables it to introduce and cross-sell APM solutions to existing customers.
- **Continuous visibility of code-level performance:** Splunk's APM Service Map clearly shows the topological relationships of the services affected during an error or outage. The code profiler visualizes bottlenecks in code and performs deeper examinations of spans to optimize the performance of applications.
- **OpenTelemetry support:** The Splunk APM is OpenTelemetry-native, making the product simple and intuitive. This makes the Splunk APM effective for cloud-native, service-based and mesh app and service architecture (MASA) applications.

Cautions

- **Complex licensing structure:** Splunk introduced simplified single SKU pricing for Observability Cloud. When purchased alongside Splunk Enterprise, however, pricing can be complex and relatively high, especially for low volumes of hosts.
- **Lacking full integration:** Splunk is still working to integrate its entire suite of APM and observability offerings with Splunk Synthetics (Rigor) and Cloud Network monitoring (Flowmill) not yet integrated. Some clients have expressed confusion on the need for two separate log solutions (Log Observer and Splunk Cloud).
- **Geographic presence:** Splunk Observability Cloud does not have a point of presence in the APAC region. Splunk Observability's regional availability is expected to expand in the coming year from the U.S./EMEA (via AWS/GCP) to APAC.

Sumo Logic

Sumo Logic is a Challenger in this Magic Quadrant. Its Observability platform is focused on providing availability, performance and security analysis via SaaS monitoring. Its operations are geographically diverse, and its clients include enterprise and midmarket segments. Sumo Logic's roadmap includes enhancing analytics coverage within alert response, enhancing tracing and RUM capabilities, and embracing open source with contributions to OpenTelemetry.

Strengths

- **Pricing model:** Sumo Logic's pricing model is based on capacity, credit and data tiering. This makes it easy for clients to analyze and manage costs as their data grows. Sumo Logic contracts are essentially drawdown contracts, in which clients purchase credits that may be used for any product in the portfolio.
- **Telemetry deployment flexibility:** Sumo Logic supports many different agents for collecting data, based on the telemetry type. Sumo Logic has full support for OpenTelemetry, which can collect telemetry from applications, OSs, databases and end users. It also has a proprietary agent that can collect telemetry from applications, OSs, databases and end users.
- **Cloud Integration:** Sumo Logic has strong native integrations with cloud service providers (CSPs). It can ingest and analyze data from multiple clouds, including AWS, Azure, GCP and private clouds.

Cautions

- **Lack of an STM capability:** Sumo Logic does not have STM. It integrates with Catchpoint's DEM solution to monitor the end user's digital experience.
- **Code-level analytics and dashboard coverage:** Sumo Logic's application tracing lacks the maturity of some competitors' offerings. Drill-down into business KPIs, session data and traces requires manual configuration. Analytics and dashboard features also require some manual efforts.
- **SaaS-only deployment:** Sumo Logic only offers a SaaS product, and no on-premises deployment option is available. This means it may not be suitable for clients that have regulations around data sovereignty, although customers may keep data in the AWS region of their choice.

VMware (TO)

VMware is a Visionary in this Magic Quadrant. Its APM and observability platform, Tanzu Observability (TO) by Wavefront, is more observability than APM. It has been used by enterprises, startups and service providers as a time-series-based monitoring platform, adding the capability to ingest and analyze OpenTelemetry-distributed traces into TO-enabled VMware. This addresses a broader set of customer APM needs. Its operations are geographically diverse, and its clients tend to be enterprises and service providers of all sizes. The product roadmap includes support for ingesting and analyzing logs; adding DEM through RUM and synthetics, which are being collected via integration with Catchpoint; and expanding use of AI/ML.

Strengths

- **Scalable ingestion:** Support for metrics-intensive workloads — into the millions of data points per second — has long been one of Tanzu Observability's differentiators. This model is being carried over to traces and logs. Organizations sensitive to node-based licensing may find such a capacity-based model appealing.

- **Agent independence:** Rather than create its own agent, VMware recommends the use of the open-source InfluxData Telegraf agent to collect telemetry that is passed to Tanzu Observability via its proxy, which also acts as an OpenTelemetry Receiver. Flexible ingestion via standard interfaces makes the product easier to deploy and reduces time to value.
- **Operational expansion:** VMware plans to double Tanzu Observability's geographic footprint in 2022, from four countries in the North America, EMEA and the APAC regions to eight.

Cautions

- **Lack of native DEM:** VMware relies on an external company (Catchpoint) for DEM, which limits its ability to control innovation in this area. Alternatively, customers may pass DEM data into VMware via the agent and proxy. Although OpenTelemetry-native applications can send DEM telemetry that way, the number of these applications is limited. VMware plans to release RUM and synthetic monitoring capability in 2023. However, requiring a subscription to an additional service provider may discourage prospective customers.
- **Platform bundling:** Although Tanzu Observability is available and is often purchased as a stand-alone product, as a business unit of VMware, the Tanzu Observability product roadmap and GTM strategy depends heavily on the priorities of its parent company. Despite substantial synergies with VMware's Kubernetes-based Tanzu product family, the product's capabilities go well beyond serving as a monitoring solution for Kubernetes-based infrastructure and applications.
- **Visibility:** Tanzu Observability comes up in a small percentage of Gartner client inquiries. The APM and observability market is quite competitive, especially lately. Given the size and scale of the VMware portfolio, it will be difficult for Tanzu Observability to achieve the visibility necessary to be successful in it.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

The following vendors met the inclusion criteria and have been added to the Magic Quadrant:

- Amazon Web Services
- Honeycomb
- Logz.io

- Sumo Logic
- VMware (TO)

Dropped

- Bonree did not meet the inclusion criteria.
- Tingyun did not meet the inclusion criteria.

Inclusion and Exclusion Criteria

For Gartner clients, Magic Quadrant and Critical Capabilities research identifies, then analyzes the most relevant providers and their products in a market. Gartner uses by default an upper limit of 20 providers to support the identification of the most relevant providers in a market. On some specific occasions, the upper limit may be extended by Methodologies, where the intended research value to our clients might otherwise be diminished. The inclusion criteria represent the specific attributes that analysts believe are necessary for inclusion in this research.

To qualify for inclusion, providers must demonstrate the capability to observe an application's complete transaction behavior, through proprietary agent technology and/or distributed tracing. The vendor must demonstrate the capability to automatically collect data from at least three modern application frameworks:

- Java Virtual Machines (JVMs)
- .NET CLRs
- PHP
- Ruby
- Node.js
- AngularJS
- Python
- Go

The vendor must show at least three of the following seven technical capabilities:

- Automated discovery and mapping of application and its infrastructure components (including cloud services)
- Monitoring of applications running on mobile (native and browser) and desktop browser

- Identification and analysis of application performance problems and their impact on business outcomes
- Native integration capabilities with automation and service management tools, as well as native integration with public cloud providers (e.g., AWS CloudWatch, Azure Monitoring, Google Cloud Operations)
- Analysis of business KPIs and user journeys (e.g., login to check-out)
- The ability to perform interactive interrogation of multiple telemetry types (i.e., traces, metrics, logs) to detect “unknown unknowns” – that is, the ability to identify underlying issues to unexpected events
- Application security functionality, delivered via a common agent or framework for APM.

Vendors must also satisfy the following business (nonfunctional) criteria:

- Rank among the top 20 organizations in the market momentum index defined by Gartner for this Magic Quadrant. Data inputs used to calculate APM Magic Quadrant platform market momentum include a balanced set of measures:
 - Gartner customer search and inquiry volume and trend data
 - Volume of job listings specifying the Magic Quadrant platform on TalentNeuron and on a range of employment websites
 - Frequency of mentions as a competitor to other APM platform vendors in reviews on Gartner’s Peer Insights forum during the year ending 22 January
- The APM offering must have generated at least \$75 million in annual generally accepted accounting principles (GAAP) revenue derived solely from its software-based APM products during the 12 calendar months prior to January 2022. Alternatively, the APM offering must have generated a minimum of \$10 million in annual revenue, combined with a growth rate of at least 25% during the 12 months prior to January 2022, compared with its previously completed 12 months.
- The APM offering must have at least 50 paying, production (non-beta-test) customers in each of two or more geographic regions (APAC, EMEA, Latin America or North America) for a minimum of 100 customers, excluding sales to MSPs.

Honorable Mention

Gartner is tracking more than 40 vendors in the APM and Observability market. This research focuses on 19 vendors that met our inclusion criteria. However, the exclusion of a particular vendor does not necessarily mean that it should not be considered, or that it does not have viability capabilities that may be a fit for a customer’s unique requirements.

LogicMonitor: More widely known as a provider of SaaS-based ITIM, LogicMonitor has expanded into observability through a combination of acquisition and engineering. It has recently introduced APM based on OpenTelemetry, as well as improved log analysis. LogicMonitor did not meet the inclusion criteria for this research.

Evaluation Criteria

Ability to Execute

Gartner analysts evaluate providers on the quality and efficacy of the processes, systems, methods or procedures that enable IT provider performance to be competitive, efficient and effective, and to positively affect revenue, retention and reputation in Gartner's market view. The criteria are:

- **Product or Service:** Core goods and services that compete in and/or serve the defined market. This includes current product and service capabilities, quality, feature sets and skills. This can be offered natively or through OEM agreements/partnerships, as defined in the market definition and detailed in the subcriteria.
- **Overall Viability:** Includes an assessment of the organization's overall financial health, as well as the financial and practical success of the business unit. It views the likelihood of the organization to continue to offer and invest in the product, as well as the product position in the current portfolio.
- **Sales Execution/Pricing:** The organization's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.
- **Market Responsiveness and Track Record:** Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the provider's history of responsiveness to changing market demands.
- **Marketing Execution:** The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand, increase awareness of products and establish a positive identification in the minds of customers. This "mind share" can be driven by a combination of publicity, promotional activity, thought leadership, social media, referrals and sales activities.
- **Customer Experience:** Products, services and/or programs that enable customers to achieve anticipated results with the products evaluated. Specifically, this includes supplier/buyer interactions, technical support or account support. This also may include ancillary tools, customer support programs, availability of user groups and service-level agreements (SLAs).

Table 1: Ability to Execute Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Product or Service	High
Overall Viability	Low
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	Medium
Customer Experience	High
Operations	NotRated

Source: Gartner (June 2022)

Completeness of Vision

Gartner analysts evaluate vendors on their ability to convincingly articulate logical statements about current and future market direction, innovation, customer needs and competitive forces, and how well they map to the Gartner position. Ultimately, vendors are rated on their understanding of how market forces can be exploited to create opportunity for themselves. The criteria are:

- **Market Understanding:** This refers to the vendor's ability to understand buyers' wants and needs, and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance them with their added vision.
- **Marketing Strategy:** This criterion refers to a clear, differentiated set of messages consistently communicated throughout the vendor's organization and externalized through its website, advertising, customer programs and positioning statements.

- **Sales Strategy:** This refers to the strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates. These extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.
- **Offering (Product) Strategy:** This includes the vendor’s approach to product development and delivery, emphasizing differentiation, functionality, methodology and feature sets as they map to current and future requirements.
- **Business Model:** This criterion includes the soundness and logic of the vendor’s underlying business proposition.
- **Vertical/Industry Strategy:** This involves the vendor’s strategy for directing resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets. This criterion is not evaluated in this Magic Quadrant, because APM and observability tools typically cover the multiple verticals in a similar manner.
- **Innovation:** This criterion refers to direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or preemptive purposes.
- **Geographic Strategy:** This includes the vendor’s strategy to direct resources, skills and offerings to meet specific geographic needs outside the “home” or native geography, directly or through partners, channels and subsidiaries, as appropriate for that geography/market.

Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Market Understanding	High
Marketing Strategy	Medium
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	High

Evaluation Criteria ↓	Weighting ↓
Vertical/Industry Strategy	NotRated
Innovation	High
Geographic Strategy	Medium

Source: Gartner (June 2022)

Quadrant Descriptions

Leaders

The APM and Observability Leaders quadrant comprises vendors that provide products that are a strong functional match to general market requirements and have been among the most successful in building and expanding their customer base. They have comprehensive portfolios that offer superior application visibility and have broad integration with other IT operations management (ITOM) technologies. Leaders demonstrate evidence of superior vision and execution for emerging and anticipated market requirements, as well as a consistent track record of innovation and customer experience.

Challengers

The APM and Observability Challengers quadrant comprises vendors with broad market reach and large deployments. Vendors in this quadrant typically have strong execution capabilities and a significant sales and brand presence garnered from the company as a whole, if not directly from its APM-related activities. Some vendors previously may have been among the top performers in the market and, thus, offer broad product portfolios. Vendors in this quadrant may be transforming their product offerings and market focus. In some cases, their APM offerings are often positioned as elements of a larger solution that may even extend beyond the boundaries of ITOM.

Visionaries

The APM and Observability Visionaries quadrant comprises vendors that provide products and have built a compelling plan to competitively address APM suite market requirements, but with a product portfolio that may still be a work in progress. They have a lower ability to execute than the Leaders. This is typically due to a lower ability to respond to market conditions, bring together the necessary product and platform requirements, and effectively gain and expand on market share.

Niche Players

The Niche Players quadrant comprises primarily, but not exclusively, vendors with solutions catering to specific audiences or with limited use-case support. Because they do not demonstrate equal depth across all core capabilities (see the Market Definition section), they typically do not meet the APM needs of the broader market. Or they may do so within specific verticals or market segments or geographic regions only. In addition, vendors in this quadrant may have a more-limited ability to invest in the necessary functional and sales and marketing capabilities to expand beyond their current focus. Inclusion in this quadrant does not reflect negatively on the vendors' value in the markets in which they choose to compete.

Context

An Expanded View of APM and Observability

The title of this research changed this year to reflect the growing interest and adoption of observability in the domain of APM. Observability is the characteristic of software and systems that allows them to be “seen,” and enables questions about their behavior to be answered (see [Innovation Insight for Observability](#)). Observability enables organizations to analyze software and systems. based on the signals they emit and to ask questions about their behavior and state.

The primary distinction between observability and traditional APM characterized in this research specifically is that observability-centric solutions support an exploratory, analytics-driven workflow that may bear more resemblance to business intelligence (BI) than IT operations. Many of the Leaders here provide powerful, AI-augmented APM that identifies and predicts pathologies quickly enough to resolve them with minimal user impact, alongside access to raw, high-cardinality telemetry and tools to explore and understand it. To be a Leader in this Magic Quadrant does not currently require both, although we have seen that the use of both dimensions together can create a virtuous cycle that may result in happier users.

Beyond these technical considerations, Gartner has observed that the term “observability” is resonating outside of IT operations, in particular with senior IT leaders and application owners. The term “monitoring” has been in use for several decades in various forms, and, in many organizations, it carries baggage from multiple legacy systems. These were seen as expensive, difficult and time-consuming to implement, and providing limited value to the business. One finance company executive told Gartner, “It feels like we monitor everything, but see nothing.” Using “observability” as a synonym for “modern monitoring” allows for discussion of these concepts beyond the IT operations team. This is particularly true when referring to cloud-native architectures, such as those comprising microservices, containers and container-orchestrators.

The Growing Integration of Security

This is the first year that security has been included as a component of the market. For decades, the domains of security and IT operations have worked in separate silos within most organizations. This has been the case even when the teams are using the same telemetry, most commonly seen with log files (e.g., SIEM).

Recent high-profile security incidents such as late 2021's Log4Shell (see [What to Do About Log4j?](#)) have highlighted the importance of understanding not only application performance, but

also the components and the vulnerabilities they contain.

APM tools and agents are already deployed across the most critical applications inside large enterprises. Expanding APM's capabilities to identify exploitable vulnerabilities in deployed applications and, ideally, block them, seems a promising additional set of capabilities. Some anecdotes from Gartner client inquiry during the height of Log4Shell indicated that customers of APM-based RASP found that these tools were identifying vulnerable applications more quickly than their vulnerability management solutions.

Although it is unlikely that we will see an application performance and security monitoring (APSM) market emerge, the growing overlap and similarity of the IT operations and security operations toolchains, cohorts and strategies suggest that more collaboration is inevitable.

Market Overview

The continued growth in mobile, cloud-native applications and workload migrations from traditional data center to cloud architectures continues to fuel the APM and observability market. In addition, growth in the adoption of APM tools has been witnessed in the following areas:

- Expansion within existing clients: In the past, only a small portion of applications, usually those that are client-facing or revenue-generating, were monitored via an APM solution. As APM products have evolved in capability, simplified deployment, accelerated time to value and decreased in price, we witnessed increased utilization of the tools in a larger percentage of applications. One client described an APM tool "spreading like wildfire" internally, as different teams saw a successful deployment and became aware of the insights gained.
- Expansion into previously untapped industries: APM and observability tools most often were found inside large enterprises in industries such as banking, finance and global retail. These industries had a high level of maturity in IT systems and could recognize the benefits of deploying monitoring tools. Recently, as many industries have undergone digital transformations, adoption of these tools has expanded into new areas. Examples include government departments (from national to local level), healthcare and manufacturing.

The consolidation of monitoring domains continues. It is further fueling market demand for APM products and adjacent segments, namely DEM and ITIM and, to a lesser extent, network performance monitoring (NPM). Given the above trends, Gartner expects the market for APM products to reach an estimated \$8.9 billion by 2026, with a 8.6% compound annual growth rate (CAGR) between 2020 and 2026 in constant currency (see [Forecast: Enterprise Infrastructure Software, Worldwide, 2020-2026, 1Q22 Update](#)).

The APM and observability market will continue to evolve during the next several years, driven by the following key trends:

- Customer demand for more holistic tools, where good-enough functionality (for example, in log management or infrastructure monitoring) becomes good enough as part of a broader monitoring platform.

- The need to view multiple data types in context, without having to switch context and tooling.
- With the above increase in the amount and types of data, APM tools will continue to become more aligned with analytics tools, rather than data collection technologies. This will continue to shift the value proposition away from purely proprietary agents for data collection and toward more open and flexible data-ingestion platforms.
- Use cases for APM will continue to expand beyond core IT operations, which continues to dominate demand. SRE/cloud operations and DevOps are becoming important use cases for customers looking to understand application performance across the entire stack and across multiple IT teams.
- SaaS products and other cloud services present particular challenges to I&O teams. These applications and workloads are often critical to businesses. However, they are difficult to monitor with traditional approaches. APM vendors are investing in capabilities to extend their monitoring to cover these environments.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive

technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

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