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INDUSTRY ANALYSIS & CONSULTING

EMA Radar™
AIOps: A Guide to Investing in Innovation

Summary Report Spotlighting CloudFabrix

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Executive Introduction

Core Criteria

The AIOps marketplace is both dynamic and transformative. As exhibited within this report by 13 of the industry's leading innovators, AIOps is a landscape with creative solutions that vary in breadth and focus. For this Radar, EMA posed a series of questions to produce a charted use case summary of where each vendor is positioned. The questions also delivered a fresh look at how the industry has evolved, with detailed insights into design, deployment, cost, and overall effectiveness.

Our key criteria for each solution included:

- Capabilities for self-learning to deliver predictive, prescriptive, preventative, and if/then actionable insights
- Support for a wide range of advanced heuristics, such as multivariate analysis, machine learning, streaming data, tiered analytics, cognitive analytics, and generative AI
- Potential use as a strategic overlay to assimilate or consolidate multiple monitoring and other toolset investments
- Advanced levels of integrated automation to facilitate communication and action
- Discovery and dependency mapping for enhanced analytic context
- Support for private and public cloud, as well as hybrid and legacy environments
- Assimilation of data from cross-domain sources in high data volumes for real-time and historical cross-domain awareness

With an eye on observability, we also examined a breadth of data types (e.g., events, metrics, logs, flow, traces, configurations, etc.) with a growing move toward open source data and OpenTelemetry.

A Market in an Accelerated (Explosive?) State of Evolution

EMA's 2020 AIOps Radar introduced AIOps' significant market changes spanning eight years. "When EMA first examined this arena in 2012…the term 'overlay' seemed to be the single most relevant descriptor. However, the diversity of approaches and design have ramped up significantly, along with ongoing advances in AI/ML, integrated automation, and unique approaches to discovery and dependency mapping."[1]

Since 2020, the diversity of approach has become more significant and so have the innovations. Time to value is shortened dramatically in many cases, despite the outreach to OpenTelemetry and higher volumes of data collection for enhanced observability. 2023 was an "explosive" year for generative AI, with new initiatives from most of the vendors included in this report—something we will explore in depth in "Generative AI for AIOps." Perhaps most significantly, all the vendors featured grew in revenue over the last three years with a surprising average of 100% revenue growth (ranging from less than 10% to more than 400%). Similarly, the AIOps customer base also spread substantially since 2020, in multiple cases doubling, tripling, or more.

Diversity is still key. These innovations, even when shared in type, are achieved in often unique ways. Attention to deployment requirements has been hugely creative, but each vendor in this Radar has its own story to tell. Although the "overlay" approach remains largely descriptive of most, just how this is achieved is once again very much a vendor-specific story. Analytic priorities vary. Role-based support varies. Approaches to automation also vary in substantial and creative ways. Data collection has a distinctive narrative among all the vendors here. Not every vendor seeks the same breadth of data in the same way. For instance, two event-centric vendors are present in the mix because of their cost and deployment efficiencies, along with their overall effectiveness.

[1] "EMA Radar Report: AIOps – A Guide for Investing in Innovation," Q3 2020, Enterprise Management Associates.

That's partly why the goal of this Radar is not to pick a single winner. Instead, it's to provide IT organizations with use case perspectives relevant to purchase. The truth is that any of the 13 vendors represented might be the best choice for you depending on what you currently have, your level of process and organizational maturity, your goals, and what technologies you already have deployed. To honor this, each of the vendor profiles provides a distinctive look at design, value, and limitations, with excerpts from customer interviews for added insight.

Methodology

EMA first reached out to vendors qualified for this Radar in late July 2023. The process required that EMA complete the following steps with each of the 13 vendors in this report:

- Finalizing a 31-page questionnaire and sharing it with vendors
- Providing weighting to different questions and answers to support the generation of KPIs, pentagons, and Radar Chart positioning
- Reviewing vendor inputs in a series of digital and conversational interactions
- Entering the data from the questionnaires into Excel to generate KPIs and Radar Charts
- Interviewing customers to validate vendor claims—with 21 interviews in total
- Analyzing the results in December 2023 and developing the profiles in January 2024
- Final reviews and report generation in February 2024

Use Cases Associated

The three use cases evaluated are:

1. **Incident, performance, and availability management.** This focused on optimizing the resiliency of critical application and business services—in cloud (public/private), microservices, and containers, as well as non-cloud environments with a strong focus on triage, diagnostics, roles supported, benefits, self-learning capabilities, and associated automations.
2. **Change impact and capacity optimization.** These are admittedly two use cases combined into one, but share requirements in terms of understanding interdependencies across the application/service infrastructure as volumes increase, changes are made, configuration issues arise, and automated actions are required.
3. **Business impact and IT-to-business alignment.** This includes user and customer experience, business process impacts, and optimizing IT performance in support of business outcomes, such as revenue, supply chain interdependencies, and marketing, with an eye to promoting overarching IT-to-business initiatives, such as digital transformation.

Vendors were given the option of choosing the use cases in which they wished to be evaluated, with the vast majority choosing all three.

The Radar also looked at DevOps support, integrated SecOps capabilities, and IoT awareness, which could variously play to each, or all, of the use cases listed depending on the platform's design and the vendor's focus.

Appendix A looks at KPIs in detail, but the core criteria for evaluation are as follows:

Deployment and Administration – This area targets a number of factors, such as FTEs for ongoing administration, time to value, automation, administrative advantages in deployment and adaptability to changing conditions, and customer support. It also looks at the range of services available to address core requirements, as well as strategic priorities associated with the use cases. Customer deployment interviews were especially critical in validating vendor perspectives for these evaluations.

Cost Advantage – Costs include core software for on-premises or SaaS investments, service costs associated with deployment and basic administration, and maintenance costs. We also looked at pricing models and adaptability to evolving adoption requirements, so costs and value could become more closely interlinked.

Architecture – This area assesses the richness of AI/ML heuristics, scalability in terms of data volumes, time granularity in sequencing KPIs, breadth of data sources (such as events and time series data), support for cloud, big data capabilities, discovery, and dependency mapping. This section also evaluates the range of third-party integrations for monitoring, configuration, and ITSM-support, open source integrations with a growing focus on OpenTelemetry, and breadth of business integrations, such as business process impacts and financial planning systems.

Functionality – Functionality looks at native reporting and visualization capabilities, breadth of application support across on-premises and cloud environments, DevOps benefits, and the range and strengths of automations supported natively or through out-of-the-box third-party integrations. The list of 26 options includes workflows, alert-driven notifications, automated event remediation, and automations in support of data collection, inventory, and discovery, as just a few examples.

Vendor Strength – This area addresses vendor market presence and growth relevant to AIOps, geographical coverage, and the percentage invested in research and development.

Highlights on What the Data Shows

Deployment and Administration

Overall, EMA witnessed deployment times accelerate from 2020, with some vendors seeing ROI in as little as less than one week for a documented deployment. More specifically, the data shows the following for the fastest recorded ROI (please note that these are not averages, but the fastest vendor-documented ROI):

- Less than 1 week – 15%
- Two weeks to one month – 15%
- Less than 3 months – 54%
- Less than 6 months – 8%
- Less than 9 months – 15%

Although the estimates were provided by the vendors themselves, customer interviews helped to substantiate these findings.

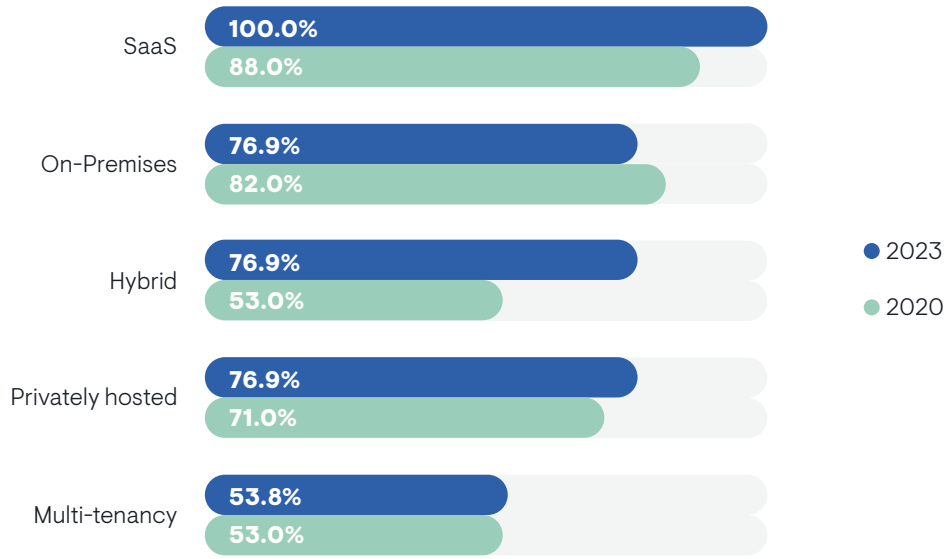
EMA also looked at administrative overhead for large enterprise deployments with more than 10,000 people. These remained largely centered in the 1-1.5 full-time employee (FTE) estimate from 2020, and if anything moved upward in number, it was partly because deployments are evolving to become richer and more dimensional with a growing number of innovations. More specifically, the averages for full-time administrative support in large enterprises are:

- 0.25-0.5 FTEs – 8%
- 0.5-1 FTEs – 15%
- 1-1.5 FTEs – 23%
- 1.5-2 FTEs – 38%
- 2-2.5 FTEs – 15%

Differences such as SaaS versus on-premises requirements and the degree to which the solution was primarily offered as a managed service, which cut down considerably on administrative overhead, affected the range between the low end and the high end. Minimal administrative overhead was also more prevalent in singular, well-focused platforms versus the added complexity of often more functionally-rich suites.

The growth of SaaS at 100% is highlighted in Figure 1. On-premises and hybrid followed closely, both at 76.9%. It's interesting to note that across this range, the average AIOps vendor offered more than three (3.25) deployment options for its customers, a close parallel to 2020, with an average of 3.47 options per vendor. In both cases, it was a dramatic change from 2012, when almost all AIOps deployments were on-premises.

Figure 1: 2023 shows rich diversity of AIOps deployment options, with a clear move toward SaaS and hybrid and less strictly on-premises compared with 2020.



Heuristics, Data Assimilation, Cloud Support, Dependency Mapping, and Automation

All the AIOps platforms evaluated have heuristics that can "learn" their environments dynamically, with limited to minimal administrative intervention. EMA asked vendors to weight their AI/ ML heuristics on a scale from 0-2, with 2 being a featured heuristic value, 1 being present, and 0 being absent. The top 10 heuristics with a 2 weighting were:

1. Machine learning and baselining for event pattern recognition – 100%
2. Correlators – 100%
3. Topology-based analytics – 92.3%
4. Anomaly detection – 92.3%
5. Unsupervised (out-of-the-box) models – 84.6%
6. Predictive analytics – 84.6%
7. Rule-based analytics – 84.6%
8. Comparators – 84.6%
9. Object-based modeling – 76.3%
10. Prescriptive analytics – 69.2%

Overall, the results indicated a richer set of analytics options than from 2020, with a list expanded to include generative AI.

EMA assessed each vendor's scalability in part by asking about data volume assimilation within five minutes. The results showed substantial increases since 2020, with most vendors moving into a new category. The two lowest volumes reflected event-centric AIOps solutions that didn't require metrics, traces, and other data, but which drew on events that intermediate sources and tools generated. The highest category of more than 100 million wasn't even an option in 2020.

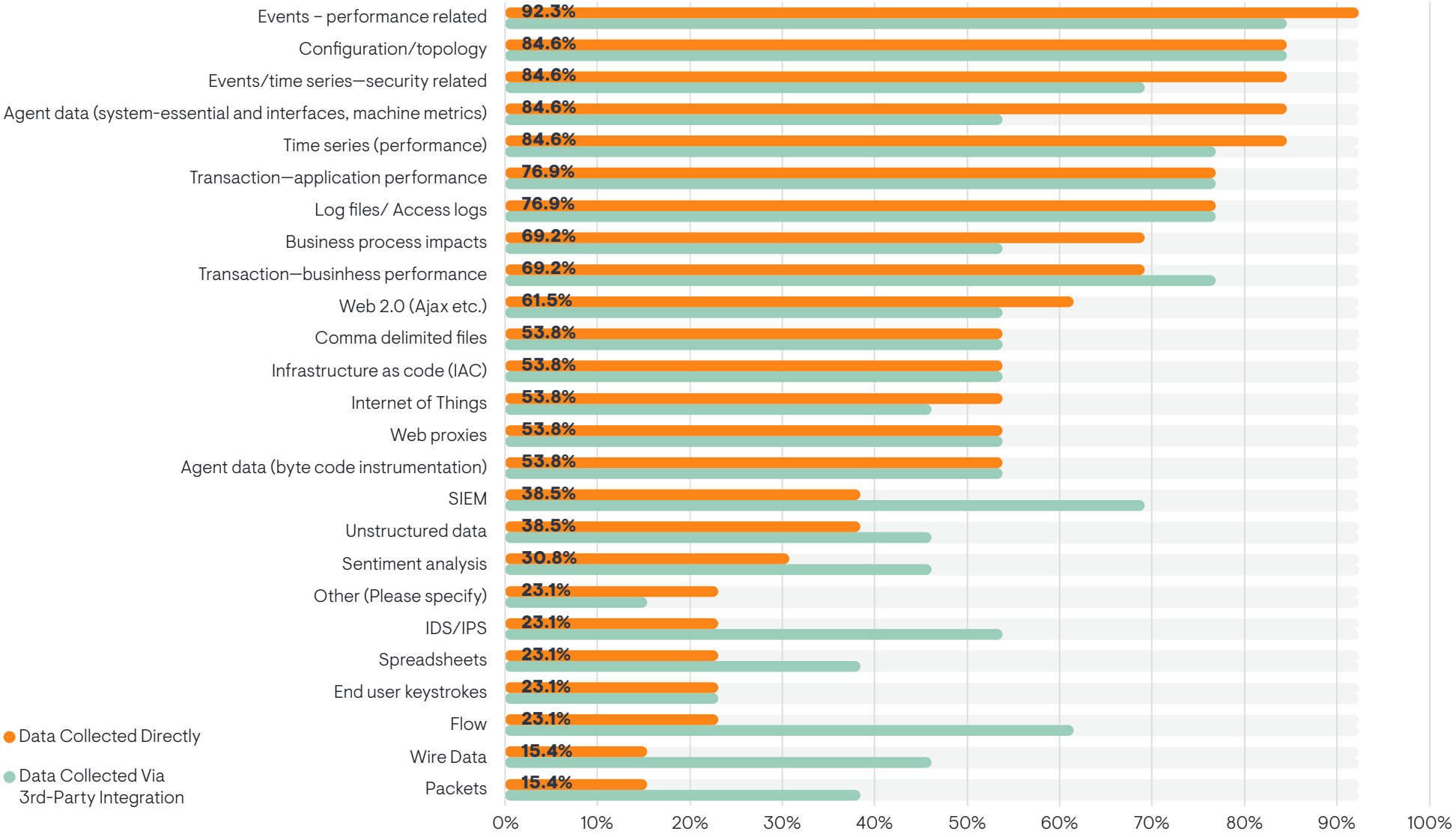
- 50-100K – 15%
- 1-10 million – 40%
- 10-50 million – 30%
- 50-100 million – 8%
- More than 100 million – 8%

OpenTelemetry became all but standard in 2023 after emerging as a factor late in 2020. Most of the vendors supported it without requirements for professional services. Associated with the rise in OpenTelemetry was significant native support for open source integrations, which ranged from fewer than 10 to more than 50, with nearly half between 11 and 30. EMA also asked about granularity in sequencing KPIs and 77% could provide real-time or subsecond sequencing, up from 41% in 2020.

Figure 2 highlights the types and breadth of data collected among the vendors featured. We asked about both native data assimilation and data through third-party integrations. Given the "overlay" nature of AIOps in its evolution, both sets are featured. Several things stand out from the comparisons:

- No single source gets 100% from native or third party, emphasizing the interdependencies of both.
- Critical data sources, such as events and time series data, favor native assimilation.
- Third-party integrations significantly expand other options, such as security information and event management, intrusion detection system and intrusion prevention systems, flow data, wire data, packets, and sentiment analysis.

Figure 2: For data assimilation, which types of data/alerts can your advanced analytics solution collect natively and with integrations?



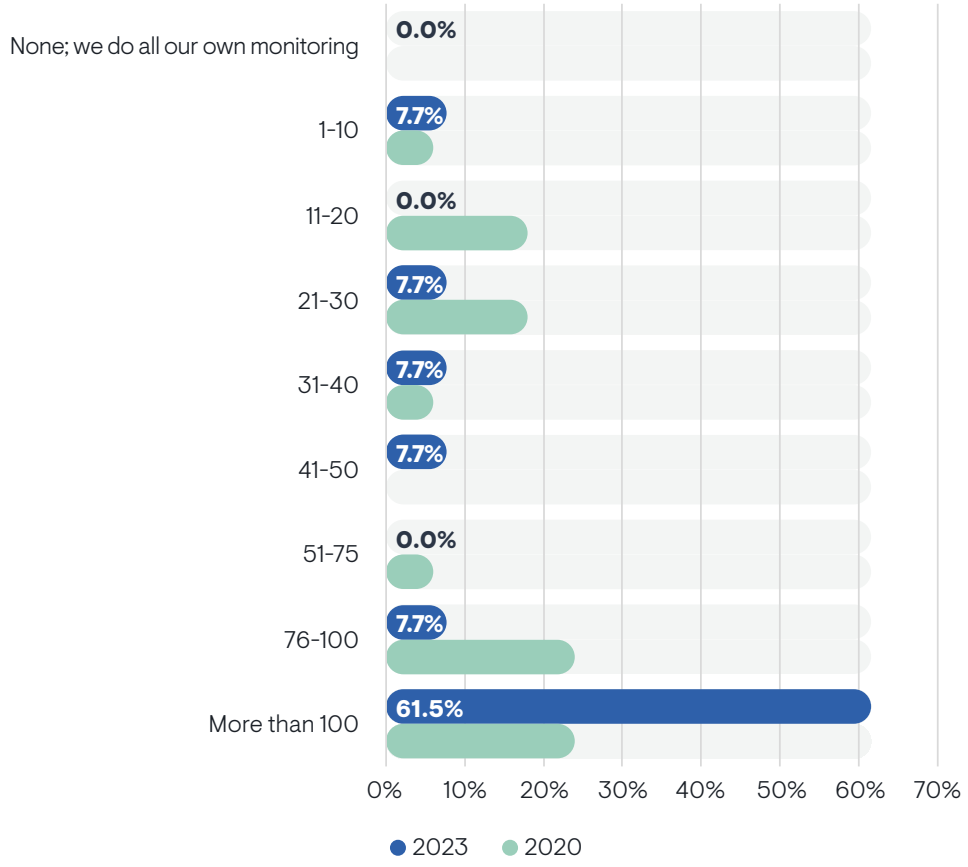
When asked about technical sources for integration, the AIOps vendors in this report indicated the following for their top-tier priorities:

- Application dependency mapping for change impact analysis – 100%
- CMDB or extended configuration management system – 100%
- An event management system – 100%
- Network performance management – 100%
- Service desks for trouble ticketing – 92.3%
- Public cloud-related resources for performance – 92.3%
- Application development/DevOps tools/processes – 92.3%
- Security/compliance-specific tools – 92.3%
- ITSM service catalogs – 84.6%
- Public cloud-related resources for capacity planning and cost – 84.6%

Once again, the percentages are higher than they were in 2020, where no items scored 100%, and the lowest of the top 10 was 59%, not 84.6%.

As shown in Figure 3, toolset integrations also soared in volume over the last three years, more than doubling those with fully supported integrations for third-party tools.

Figure 3: How many different monitoring or other tools (your own and/or third-party) are fully supported today as (additional) fully integrated sources for your advanced analytics solution? In other words, how many tools can you integrate out of the box?

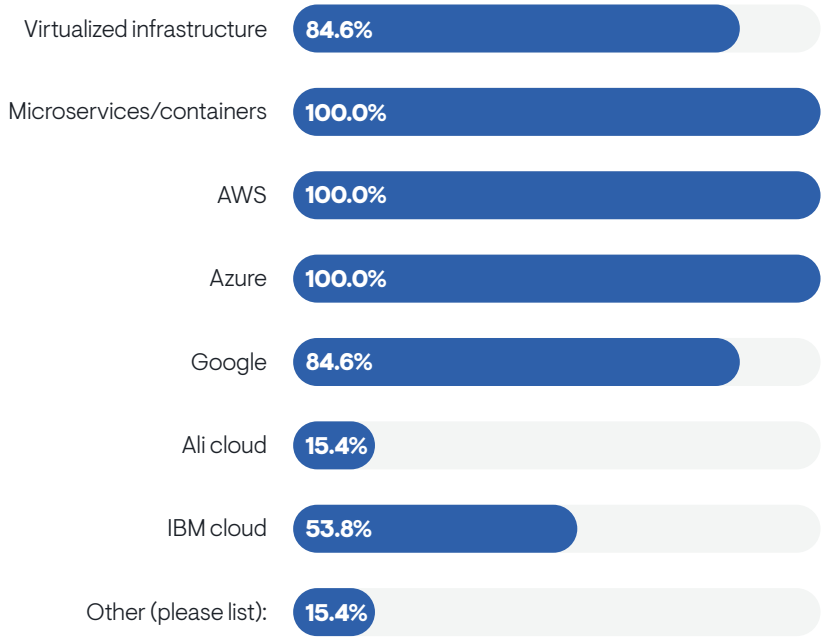


Chosen technical integrations show once again a breadth and diversity reflecting AIOps growing in levels of innovation and relevance. The top ten were as follows:

1. Application dependency mapping for change impact – 100%
2. CMDB or extended configuration management system – 100%
3. An event management system – 100%
4. Network performance management – 100%
5. Application performance management – 100%
6. Service desks for trouble ticketing – 92.3%
7. Public cloud-related resources for performance – 92.3%
8. Application development/DevOps tools/processes – 92.3%
9. Application or operational dashboard – 92.3%
10. Security/compliance-specific tools – 84.6%

Cloud was also a critical area for growing attention, as shown in Figure 4. Significantly, all 13 vendors supported microservices/containers, AWS, and Azure through a mix of technology-specific and toolset integrations; however, support for virtualized infrastructure declined by 16.4%.

Figure 4: Here we look at public cloud, virtualized infrastructure, and microservices/container environments.

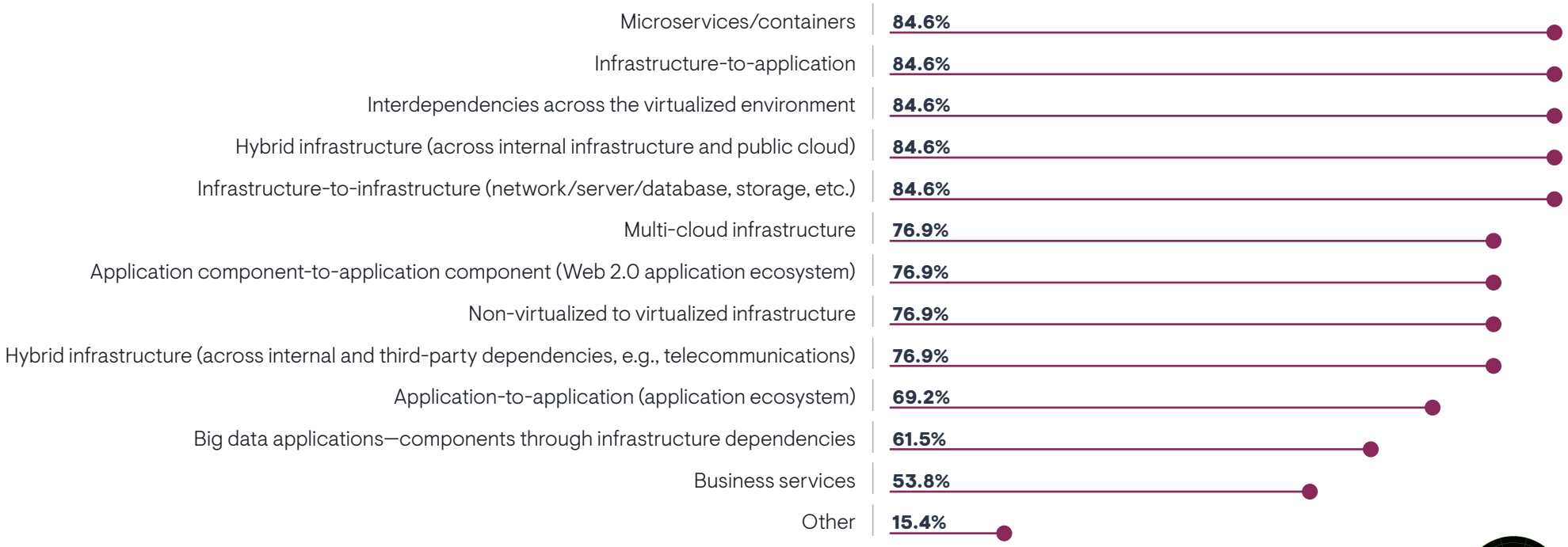


Dependency mapping can also be key to both AIOps and more dimensional observability. In Figure 5, we see how top priorities are emerging in 2024. Microservices and containers are tied with more traditional dependency priorities, such as application-to-infrastructure or infrastructure-to-infrastructure dependencies. Eleven of the thirteen vendors evaluated offered some form of application dependency mapping, both directly and through third-party integrations.

Another critical area for product functionality was automation. As provided in the following list, the top ten options were as follows:

1. Workflow within and across IT – 100%
2. Runbook or IT process automation – 100%
3. Automated trouble ticketing – 100%
4. Automation in support of incident team communication – 100%
5. Automated event remediation – 100%
6. Automated remediation and proactive service resolution – 92.3%
7. Automation in support of diagnostics collection – 84.6%
8. Automation in support of data assimilation and reconciliation – 84.6%
9. Automation in support of endpoint inventory/discovery – 84.6%
10. Automation in support of application discovery and dependency mapping – 84.6%

Figure 5: How would you characterize your support for capturing and analyzing applications or other service interdependencies directly through your own platform?



We also examined the average number of automations selected out of what were 26 options and the average per vendor was 18, with a low of 6 and a high of all 26. Once again, this reinforces the criticality of automation in AIOps initiatives, both in facilitating better data collection and analysis and enabling critical actions for remediation, prevention, and communication.

Generative AI for AIOps

2023 was an important year for AIOps-driven generative AI adoption, with some use cases also feeding observability. Eleven out of the thirteen vendors presented in this Radar made generative AI available to their constituencies, either in 2023 or in January of 2024. Another vendor has generative AI in development and another is evaluating it for future commitment. The list highlights the leading areas of attention by overall priorities. The range here is varied, highlighting the diversity of the AIOps/observability vendors evaluated.

How are you using generative AI?

- Troubleshooting and/or analytics summarization – 46%
- Recommendations for taking action – 30%
- Action/automation (e.g., configuration automation, patch management, or accelerating workflow development) – 23%
- Generating trouble ticket summaries, or more broadly improving ITSM efficiencies – 23%
- Post-mortem analysis and recommendations for improvement – 15%
- Report or dashboard creation – 15%
- Chatbots – 15%
- Log summarization or analysis – 15%
- Data collection for localized LLMs – 8%
- IT asset management – 8%
- Updates for more cohesive team communication – 8%

Some of the conversations with vendors indicated a focus on making their LLMs more native to their customer environments, and in several instances, a reluctance to move to ChatGPT. In general, though, the trend was more all-embracing. Dialogues with deployments also showed ongoing interest, with a few vendors in active planning. However, none of the customer interviews were currently using generative AI—something that should change substantially as 2024 goes forward.

Seven of the more telling vendor descriptions are shared here anonymously. They are all taken from vendor-specific profiles with richer context and specificity:

- "We combine chat bots with action bots to facilitate human-like interactions."
- "We generate incident summaries to help improve IT efficiencies and effectiveness."
- "Our generative AI accelerates pipeline productivity, dashboard creation, and improved IT efficiencies, with conversational queries and LLMs focused on localized environments."
- "We offer a conversation engine with plain language explanations of diagnoses and resolutions, as well as for insights on continuous improvements."
- "Our generative AI delivers more effective data assessments and explorations of what/if scenarios in what we call 'hypermodal AI' – combining causal, predictive, and generative AI."
- "Our generative AI accelerates workflow development by creating workflow blueprints."
- "Last year, we introduced an AI chatbot to write or explain queries."

Observability: A Closer Look

The AIOps view on observability is, as already noted, a varied story. Observability is becoming more foundational to AIOps. In contrast, AIOps' roots go back to event-specific data, which still applies today, and is central to two of the vendors: BigPanda and PagerDuty. These solutions address observability primarily through third-party integrations that produce ongoing insights for analysis.

The broader AIOps market, as reflected in the eleven other vendors in this Radar, explores observability directly, albeit in various ways. Some vendors, like Dynatrace and Splunk, are leading innovators in observability primarily through their own native capabilities, and in some instances may serve as sources for other AIOps solutions. The other nine vendors preside both as native sources of observability and as overlays to existing toolsets and other sources across most of the data types described in Figure 2. Their observability efficiencies are also significant, innovative, and evolving, with surprising levels of value and efficacy.

Reading the Radar Charts

The three use cases are intentionally parallel to those in the "EMA Radar for Advanced Performance Analytics (APA) Use Cases" from December 2012. This parallelism makes meaningful comparisons possible, enabling tracking of trends, progress, and areas of stasis. While it's clear that the AIOps landscape represents serious forward progress in twelve years, many of the challenges and tradeoffs remain similar.

The Radar is intended to provide a useful set of insights into the design points and unique strengths of each of the thirteen AIOps/observability solutions. Only proven offerings showing innovation with growing AIOps adoptions were invited to participate.

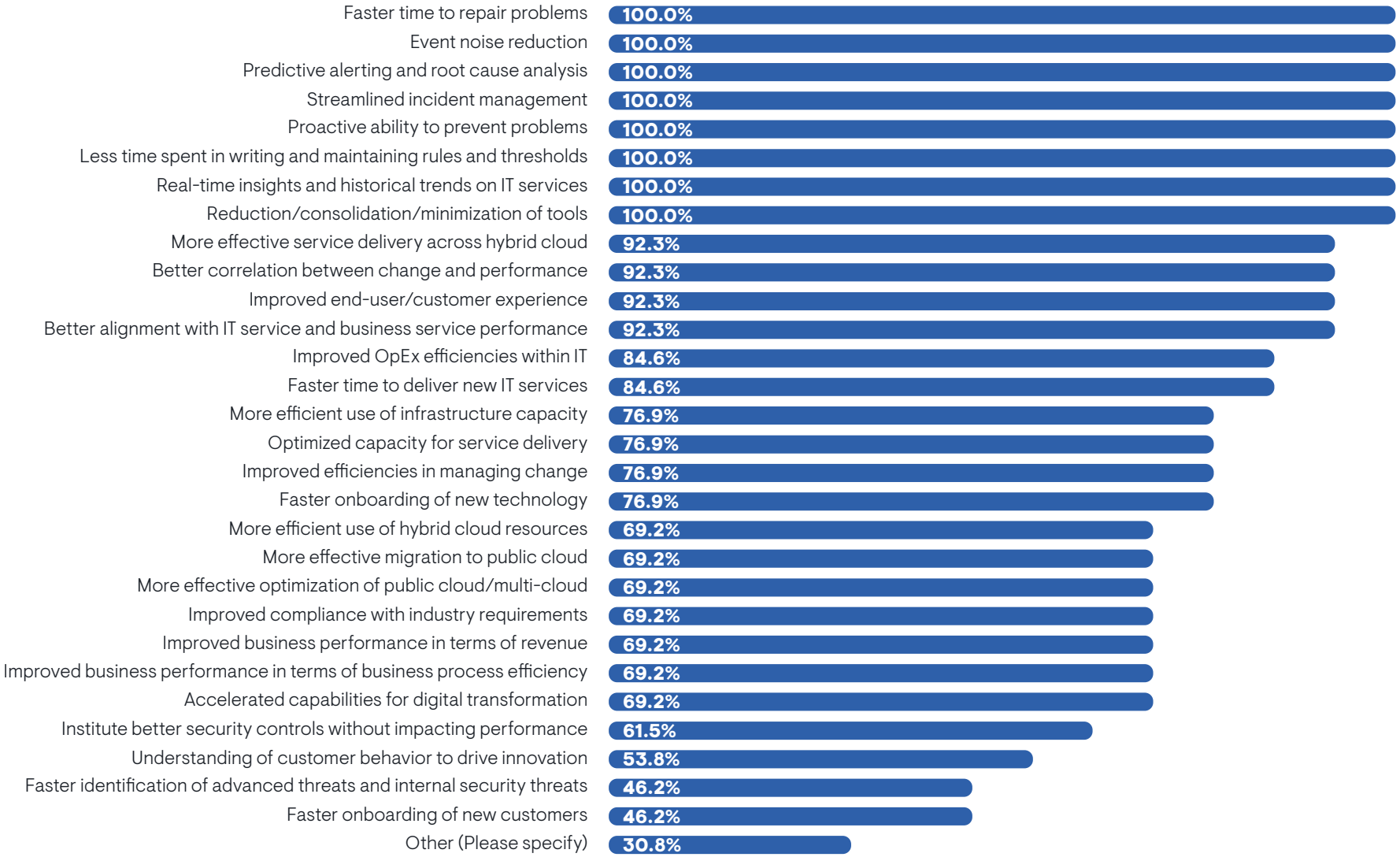
While the charts provide positioning with ranks such as Value Leader and Strong Value for each use case, IT and service provider buyers are well advised to first define their objectives, then seek out the solution that fits them best based on the more in-depth profile evaluations. However, the Radar Charts are designed to be helpful departure points for planning adoptions in terms of use case diversity and high-level insights on where each vendor's strengths lie.

- The vertical axis (Product Strength) will be primary for seeking strengths in functionality and overall architectural breadth and power.
- The horizontal axis (Cost-Efficiency) favors cost advantages, as well as advantages in administrative overhead and overall administrative efficiency.
- The size of the bubble is reflective of Vendor Strength and represents overall market strength as relevant to the Radar.

Because of the nature of AIOps solutions, proximate vendor positions may still reflect radically different advantages. For instance, one vendor's core analytic power may place it next to a vendor at a similar cost/administrative advantage, but with weaker core analytics and broader assimilative/observability and modeling strengths. They may, in fact, represent significantly different types of investment choices. Therefore, no investment decisions should be made without considering each vendor's profile.

Figure 6 shows overall benefits from AIOps across the thirteen vendors with a longer, richer list than in 2020. As you look down, you'll see value to all three use cases, with those in performance and availability leading at the top. The vendor inputs were also largely corroborated in customer interviews and earlier EMA research.

Figure 6: What benefits have you seen achieved in actual deployments?



Incident, Performance, and Availability Management

Keeping IT services at appropriate levels of performance remains central to all AIOps/observability platforms. In this Radar, EMA examined a number of factors ranging from domain reach, stakeholders supported, real-time data currency for observability, and heuristics to enable not only awareness of anomalies, but predictive and prescriptive recommendations. When asked specifically about triage capabilities, the top ten reported by the 13 vendors represented were as follows:

1. Isolate whether the problem is within the application, server, network, or database – 100%
2. Triage across application tiers – 100%
3. Isolate infrastructure issues internal to systems – 100%
4. Isolate infrastructure issues in the network – 100%
5. Triage across virtualized systems – 100%
6. Isolate container-specific issues in your own environment – 100%
7. Isolate microservices-specific issues within your own environment – 100%
8. Isolate microservices/container issues within the public cloud – 100%
9. Isolate infrastructure issues in storage – 92.3%
10. Isolate infrastructure issues within the database – 92.3%

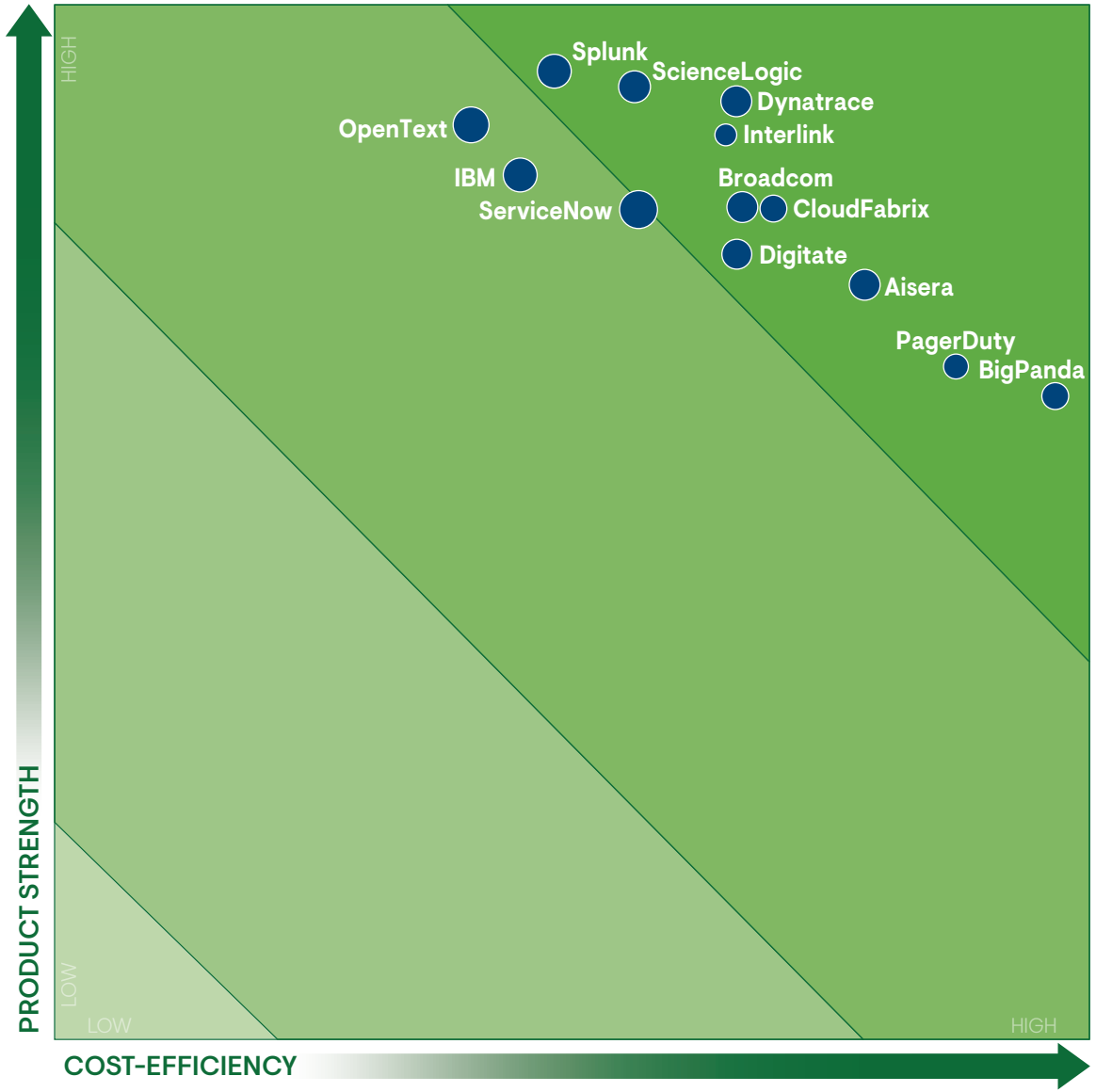
These percentages are in dramatic contrast to 2020, when no triage response got more than 94% and the lowest of the top ten was at 82%. Moreover, containers, microservices, and cloud figure far more prominently in 2024 than they did in 2020.

Incident, Performance, and Availability Management

VALUE RATING

- VALUE LEADER
- STRONG VALUE
- SELECTIVE VALUE
- LIMITED VALUE

VENDOR STRENGTH



Change Impact and Capacity Optimization

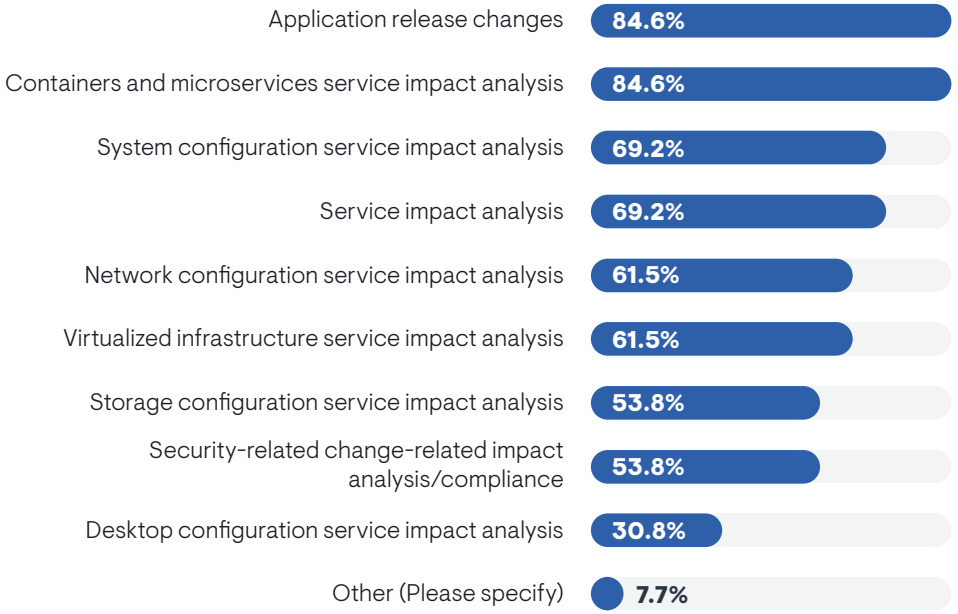
Among the benefits shown in Figure 6, the following specifically addressed change impact and capacity optimization:

- Better correlation between change and performance – 92.3%
- More efficient use of infrastructure capacity – 76.9%
- Optimized capacity for service delivery – 76.9%
- Improved efficiencies in managing change – 76.9%
- More efficient use of hybrid cloud resources – 69.2%
- More effective migration to public cloud – 69.2%
- More effective optimization of public cloud/multi-cloud – 62.9%

Clearly incident, performance, and availability management have led in AIOps priorities, but this list shows a significant investment in change impact and capacity, which in the end also affect performance and cost. Understanding the capacity issues proactively can be a big plus for optimizing service performance, as well as planning ahead for cloud and other migrations.

Figure 7 shows more specific capabilities for tracing infrastructure and application changes, not surprisingly focused first on application release changes and changes in containers and microservices, which are increasingly becoming critical to application deployments. System configuration changes and service impact analysis follow next. A trend surfacing in our analysis was that change impact and capacity optimization is the one slightly shrinking use case for AIOps in 2024. The percentages were higher by an average of about 12% in 2020. One can attribute this in part to the escalating need for innovation in the other two areas and pressures to adapt to, ironically enough, more dynamically changing environments.

Figure 7: Please indicate the capabilities you have for tracing infrastructure, application, and/or business performance to changes made to infrastructures and applications.



Change Impact and Capacity Optimization

VALUE RATING

- VALUE LEADER
- STRONG VALUE
- SELECTIVE VALUE
- LIMITED VALUE

VENDOR STRENGTH

Business Impact and IT-to-Business Alignment

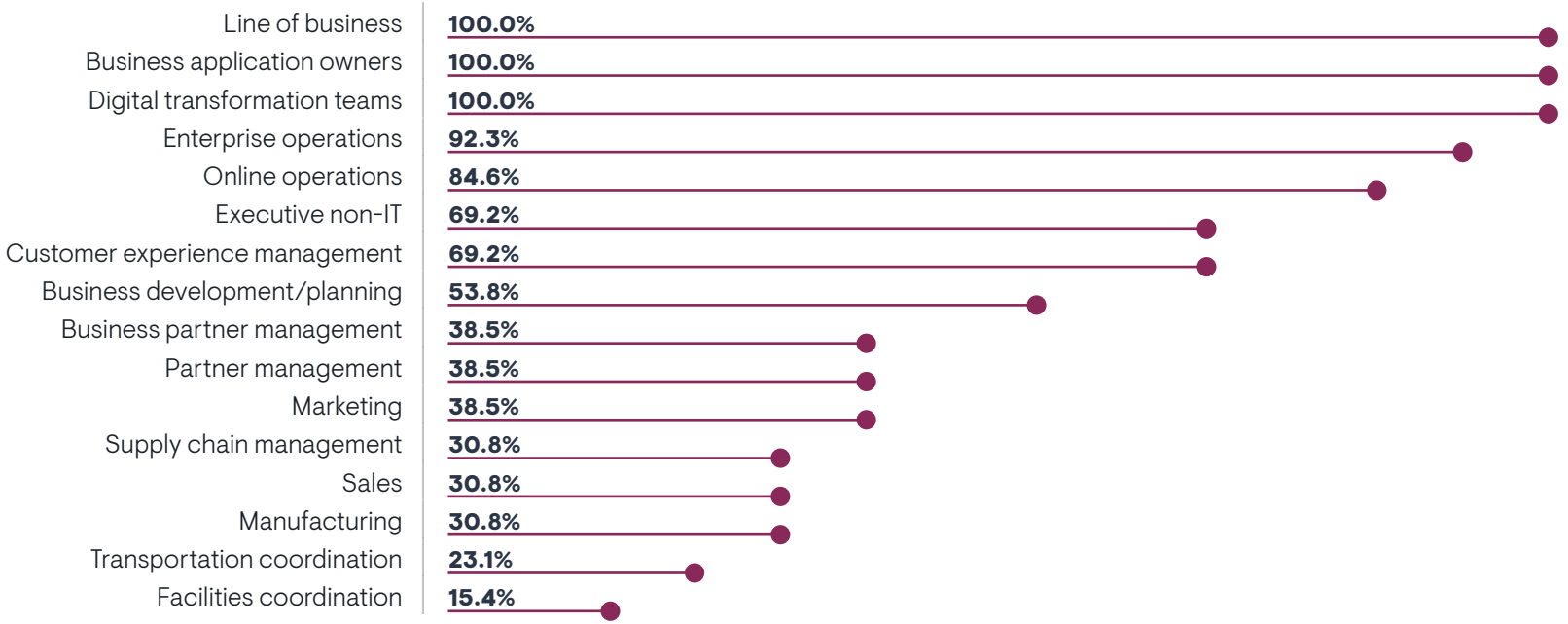
Business impact and IT-to-business alignment have been, by contrast, significant areas of growth for AIOps solutions overall since the need to promote strategic initiatives, such as digital transformation, has risen consistently in importance.

Support for business outcomes and better alignment between IT and business stakeholders is achieved in various ways through AIOps platforms. To evaluate vendors in this area, EMA looked factors such as:

- Business sources for importing and exporting data—e.g., business process management systems, social media for business interaction, customer experience management, and marketing-related data.
- Logical associations for unifying performance and change insights with business outcomes—e.g., cost of service delivery, customer behavior metrics, business activity metrics, revenue, conversion from competitive websites, and business process impact metrics.

Figure 8 looks at critical business roles supported. Line of business owners, business application owners, and digital transformation teams were at the top, supported by all thirteen vendors. Growth of support for business roles shows a significant 10% delta upward from 2020 overall.

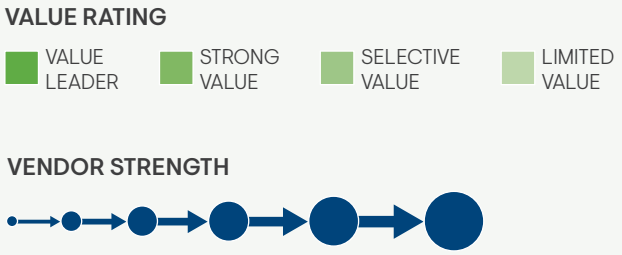
Figure 8: Which of the following non-IT-related roles do you support natively or as fully integrated extensions to your advanced analytics solution?



Business Impact and IT-to-Business Alignment

In terms of benefits, as shown in Figure 6, those directly related to business impact and business-to-IT-alignment are:

- Better alignment with IT and business performance – 92.3%
- Improved business performance in terms of revenue – 69.2%
- Improved business performance in terms of business process efficiency – 69.2%
- Accelerated capabilities for digital transformation – 69.2%
- Understanding customer behavior to drive innovation – 53.8%
- Faster onboarding of new customers – 46.2%



What the Deployments Say

In reviewing the 21 customer interviews for this Radar report, certain characteristics stood out in terms of vendor selection, deployment, and benefits achieved. The following quotes are grouped into each of these three categories and kept anonymous as to vendor and source. They represent a mix of large enterprises: entertainment, genetics, financial services/banking, manufacturing, real estate, energy, travel, telecommunications, and MSPs. The quotes were selected for being emblematic while illustrating the diversity inherent in both IT environments and values achieved.

Vendor Selection

"We had monitoring systems all over the place, but nothing to bring them together. Our AIOps platform took all the puzzle pieces for root causes and alerts and delivered a common analysis across the broader spectrum."

"Initially, we selected our AIOps platform due to cost and meeting our good-enough requirements. It allowed us to start small and grow big as our needs expanded."

"Several years ago, we engaged the analyst community and evaluated a number of different options before settling on our AIOps platform. It turned out to be a very good fit. Easy to deploy. I haven't seen a downside with them yet."

"One of the reasons we selected our AIOps platform is because of all the data collectors that can address application and infrastructure health to get the observability we needed. Data collection coming in from any tool is very elastic, with easily added integrations."

Deployment and Administration

"Our deployment was fairly straightforward. Our AIOps vendor was pretty amazing to work with—very hands-on, while making sure the deliverables were met in a timely fashion and the solution was doing what it was supposed to do."

"So far, administration has required only one full-time employee, although we are now expanding usage and looking for a second administrator."

"Both we and our customer base seek to get the alignments across different roles, such as executives, business stakeholders, IT operations, ITSM, and engineering teams. In this respect, we've found our AIOps vendor's strategic workshop to be of real value. The workshop identifies who is looking for what information and aligns deployments based on role and persona-based needs."

Benefits

"It's our one source of truth—we can all look at one commonly shared dashboard."

"Our AIOps platform lets our IT team service thousands of global users with little direct involvement. This level of automation and ease of use has been hugely beneficial for scaling our operations."

"Another process our AIOps platform has accelerated is pre- and post-checking for patching. That used to require human oversight, but our platform does it automatically."

"The framework has delivered a 60% reduction in trouble tickets, with rich seasonality insights to enhance our broader planning and decision-making."

"Our AIOps platform significantly improved application performance. We now have five-nines availability. So far, this is our best year yet, with zero downtime."

"They've helped us build a bridge between the business and operations, providing tailored dashboard views driven from the same event and enrichment data, avoiding conflicts between the varied support and business areas."

"The platform engages with hundreds of management tools and as many as 65,000 different technology sets, turning observability into a single thread—its correlation is massively powerful."

"Our AIOps platform can align IT performance with business service performance, and with ITSM integrations the platform can enrich device information—who owns it, who supports it, who's using it."

Thirteen AIOps Vendors in Summary

Aisera: Aisera is a highly adaptive AIOps vendor with a creative approach to advanced analytics, along with low cost, minimal administrative overhead, and fast time to value. Aisera has a strong presence in mid-tier enterprises, as well as in larger enterprises where most of today's AIOps solutions reside. Aisera features AI observability across data center and cloud environments for issue detection, automated impact, and root cause analysis. Its AI Discovery leverages Aisera's Dynamic CMDB and Probabilistic Service Maps, and the platform offers thousands of prebuilt and AI-generated workflows. In a recent addition, Aisera AIOps Copilot leverages generative AI with both chat bots (AiseraGPT) and action bots that can receive notifications about health status and produce contextual responses in real time.

BigPanda: The BigPanda Operational Intelligence and Automation Platform is designed to improve incident management and customer experience by organizing and mobilizing exponentially growing ITOps, DevOps, and business-related data. BigPanda's vision, present and future, is to drive IT operational efficiency and service reliability by integrating automation with advanced analytics to accelerate IT effectiveness. Among BigPanda's core features are Open Integration Hub to ingest, normalize, filter, and dedupe all monitoring data; the Event Enrichment Engine for full-context alerts and incidents; Root Cause Changes to identify changes that may have contributed to an incident or outage; Unified Analytics for out-of-the-box reports, and Generative AI for automated incident analysis. BigPanda is a leader in cost-effectiveness, partly because its event-focused architecture streamlines deployment and administration.

Broadcom: Broadcom's AIOps and Observability suite is designed for enterprise-size deployments seeking to bring IT and business performance together in new and creative ways. Broadcom offers significant levels of support for IT and business roles, leveraging a breadth of data sources across data center, cloud native, and hybrid environments, with observability from the mainframe to emerging technology platforms. Broadcom's platform facilitates staged deployments where customers can move forward step by step while maximizing benefits. Broadcom's suite includes DX Operational Intelligence, DX Application Performance Management, and DX Unified Infrastructure Management. These are complemented by a single pane of glass for correlated, contextual insights, a wide range of automations (including Broadcom's Automic Automation workflows based on heuristic analysis), and an ongoing awareness of topology-driven service degradation.

CloudFabrix: CloudFabrix's Robotic Data Automation Fabric is a data-centric AIOps platform with unique asset intelligence and broad AI capabilities that can support a wide range of stakeholders, from ITOps, to DevOps, to BizOps, to ITSM, to infrastructure planning. Its scalable microservices- and containers-based architecture assimilates data from cross-domain sources via its unique Observability Pipelines with ongoing, real-time awareness, as well as in-depth insights into historical trends as changes are made and assets age, impacting capacity and performance. CloudFabrix is an industry leader in change impact and capacity optimization with its balance of product strength and cost-efficiency. Some of the overriding benefits include alert noise reduction, predictive insights, accelerated incident response, automated problem resolution, and 360-degree asset visibility across the application infrastructure to minimize risks and support compliance and cost optimization.

Digitate: Digitate's ignio AIOps is a SaaS-based, domain-agnostic platform, leveraging a wide range of AI and in-depth capabilities for automation to support IT operations, ITSM, DevOps, and business stakeholders across on-premises, multi-cloud, and hybrid environments. As such, ignio covers the AIOps lifecycle across observability, blueprinting, behavior profiling, alert/event management, automated triage, and self-healing. Digitate's ignio AIOps suite includes ignio AI.Workload Management, ignio AI.EROps, ignio AI.Digital, ignio AI.Assurance, and ignio Cognitive Procurement. The platform's focus on observability has two dimensions: vertical, which targets the application infrastructure across the full stack, including storage, hosting, networking, and end-user interdependencies, and horizontal, covering the flow between and across applications and how that impacts performance and business outcomes. Digitate leverages advanced levels of automation to unify the two, extract insights, and promote action.

Dynatrace: Dynatrace is a fast-growing AIOps innovator with an all-in-one analytics and automation platform to support what it describes as "answer-driven AIOps." Dynatrace's AIOps capabilities offer dynamic and highly scalable insights across the entire application infrastructure, and the vendor stands out for delivering fast time to value for incident, performance, and availability management, with nearly instantaneous benefits. Some of the core differentiators include: the Grail data lakehouse with rich support for observability and data ingestion across the application infrastructure, including cloud, as well as security and business-related sources; the Smartscape topology model for multi-dimensional context on where and what is going on; Davis AI's support for causal, predictive, and generative AI, with integrated automation for root cause, problem prevention, and remediations; and proactive capabilities for enterprise-wide collaboration.

IBM: IBM's AIOps and observability suite delivers intelligent AI-powered correlation and automation by leveraging big data and machine learning. As such, it can enhance and unify the broader IT and business environment with more proactive problem resolution, capacity optimization, and improved business outcomes. IBM plays well to all three use cases evaluated with substantial industry leadership in value and functionality. IBM's breadth of options also stands out in giving its customers both choice and versatility in how they prioritize and deploy their AIOps and observability capabilities. These include IBM Cloud Pak for AIOps and Instana Observability for capturing traces and metrics across the application infrastructure, SevOne for automated network observability, Turbonomic for performance and infrastructure optimization, and Apptio for financial and operational insights across the entire IT portfolio.

Interlink: Interlink's AIOps & Observability Platform is an integrated solution that offers its customers a "Single System of Engagement." It provides ITOps, DevOps, SREs, and business stakeholders with observability across the full IT stack, automated remediation processes, and advanced proactive insights into service and business health. Automated Service Intelligence analyzes data from many different sources in real time or near-real time. Business Enterprise Server delivers historical trending and reporting. Service Configuration Manager enables versatile options for dependency mapping across the full application infrastructure. Data Hub facilitates ongoing data access for AI. Interlink is an industry leader for managing IT application/infrastructures and business services in a unified, dynamic, and cohesive manner. The vendor is especially successful in industries in which IT services most critically impact business outcomes.

OpenText: Operations Bridge (OpsBridge) Ultimate delivers a breadth of role-aware capabilities that make it an effective unifier across IT while also aligning IT with the business. Operations Bridge automatically discovers and monitors hybrid IT infrastructure and applications, detects anomalies, and automates problem remediation. It provides consolidated performance and event management, optimization, customizable dashboards, and versatile team communication. The platform includes business process monitoring for synthetic transaction analysis, real-user monitoring for observed transaction analysis, SiteScope for agentless infrastructure monitoring, a breadth of advanced AI and analytics, a well-supported list of more than 8,000 prebuilt workflows, and the OPTIC Data Lake with powerful ingestion capabilities to facilitate observability and AI requirements. These capabilities are enhanced by OpenText's industry-leading out-of-the-box integrations with more than 200 third-party monitoring, configuration, automation, and other tools.

PagerDuty: PagerDuty rightly presents itself as a "system of action" rather than a "system of record," with a clear focus on events generated by multiple toolsets across the entire application infrastructure. Some of its key features are Auto-Pause Incident Notifications to dynamically predict transient alerts; Global Alert Grouping to accelerate resolution; Global Event Orchestration to enrich events and trigger self-healing actions; Past Incidents to identify whether an incident's been seen before and how it's been resolved in the past; Self-Service via Terraform for defining all orchestrations, escalations, and automations to promote persona-based actions and full-service ownership for subject matter experts. PagerDuty is an industry leader in its 750 fully supported third-party integrations designed for ease of deployment and adaptability.

ScienceLogic: ScienceLogic SL1 is a richly assimilative AIOps platform covering the full application/infrastructure as aligned with business service performance. The platform has shown industry-leading value in optimizing business service health, hybrid and multi-cloud visibility, and toolset modernization and consolidation. ScienceLogic does this in part through a real-time data lake specifically designed to address AIOps requirements. SL1's capabilities also include discovery, holistic business services awareness, mapping, monitoring, event management, automation, and AI/ML heuristics. Some of SL1's distinctive values include day-to-day situational awareness, self-organizing and enriched data for improved visibility and action, and preemptive self-healing automation. SL1 is actively evolving with generative AI to help transform IT operations, ITSM, DevOps, and business performance through its Autonomic IT vision. ScienceLogic's SL1 platform is targeted at large, complex enterprise and global service provider environments.

ServiceNow: ServiceNow IT Operations Management (ITOM) and ServiceNow Cloud Observability fully complement the vendor's revolutionized IT service management capabilities through a wide range of innovations and growing functionality. Users can predict issues, reduce user impact, and automate resolutions with cross-team automation workflows. ServiceNow's key features include ITOM Visibility, ITOM Predictive AIOps, native CMDB support, Cloud Observability, unified and persona-aware views and dashboards, low-code to no-code automation, and generative AI through Now Assist for ITOM. ServiceNow's AIOps/observability vision is to deliver a fully dimensional solution with richly integrated ITSM, SecOps, asset management, cloud services, and a wide range of outcome automations to enable self-healing for enhanced IT and business effectiveness.

Splunk Inc.: Splunk brings ITOps, DevOps, security, engineering teams, and business stakeholders together through its compelling capabilities in observability, analytics, and automation. Splunk IT Service Intelligence (ITSI) is a premium app built on the Splunk Platform for comprehensive log analytics and management, centralized event correlation for alert noise reduction, anomaly detection, predictive analytics, business service monitoring, and automation. Splunk Observability Cloud provides ongoing, unified insights into application/infrastructure behaviors by leveraging log data, metrics, and trace data for highly scalable, multi-dimensional observability across cloud and non-cloud environments with industry-leading support for OpenTelemetry. The native integration of Splunk Observability Cloud and Splunk ITSI helps accelerate mean time to resolution (MTTR) by providing a directed-troubleshooting experience. Splunk's broad international outreach is enhanced through a unique breadth of partner relationships.

Special Awards

The EMA Radar analysis is a deep look at leading vendors in a market. While this particular report used three distinct use cases to evaluate the offerings in the AIOps space, there are key capabilities or vendor characteristics that can have greater importance to some potential buyers than is afforded in the analysis framework. Special Awards are used to highlight these capabilities and characteristics in addition to the broader analysis results. Five of the thirteen vendors received such awards. The goal was to promote a highly individualized approach to reviewing AIOps options based on need and priority.

Aisera: Creative Generative AI

Aisera Copilot has two arms – AiseraGPT and Aisera Generative AI. Copilot combines chat bots with action bots to facilitate human-like interactions, along with automation, log summarization, and analytics, with a focus on new levels of persona-based values and effectiveness.

BigPanda: AIOps Cost-Efficiency

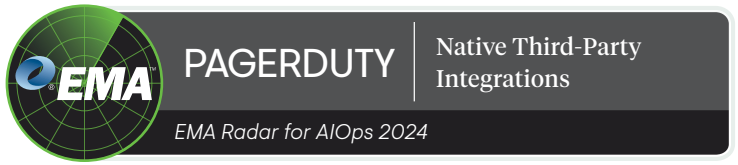
BigPanda's unique combination of reasonable, flexible pricing and its standout efficiencies in accelerated time to deployment make it a critical first-look vendor for businesses and enterprises seeking to invest in AIOps – especially those seeking fast time to value and minimal administrative overhead.

CloudFabrix: AIOps Deployment Innovation

CloudFabrix Robotic Observability Pipelines offer unique capabilities for data ingestion, topology/inventory, data enrichment, anomaly detection, predictive analytics, and collaboration. In the Robotic Data Automation Studio, customers can explore options and outcomes. These advances are complemented by the Macaw Generative AI Assistant to accelerate pipeline, dashboard, and service blueprint generation.

Digitate: Integrated Automation

Digitate stands out with more than 10,000 prebuilt automations enabling use cases ranging from self-healing, to more effective change management and capacity optimization, to business outcome responsiveness, all of which are complemented by integrations, promoting what EMA calls the "analytics/automation handshake."



PagerDuty: Native Third-Party Integrations

PagerDuty offers more than 750 fully supported third-party integrations. This enables a richer set of critical insights into both business and IT service performance. It also extends PagerDuty's native values for a unified and scalable approach to event management in support of more effective AIOps.

Who's not included?

While these thirteen vendors make up the heart of the AIOps landscape as EMA defines it, the list can never be 100% complete since the AIOps market is evolving with new and emerging vendors, as well as growing AI/ML strengths in more established vendors. However, these vendors do represent the industry leaders in AIOps overall, with a diverse landscape that nevertheless spans different approaches and values. The only two vendors that were invited but not included were BMC, for reasons of timing, and Moogsoft, because of its acquisition by Dell. A short BMC update is available in the addendum that follows.

Conclusion

In the course of EMA research over the last twelve years, the message for IT organizations looking to pursue a forward path in AIOps adoption is overall a strongly positive one. The benefits achieved are growing in diversity and value. The obstacles do remain similar because they reflect not only on a technology purchase, but also on processes, organizations, and cultural realities.

The AIOps marketplace is clearly evolving at an accelerated rate as these thirteen industry-leading vendors indicate. Both OpenTelemetry and generative AI have redefined the market in creative and positive ways. Deployment time is accelerating, along with time to achieve ROI. Volume and quality of data breadth have been substantially on the rise. The ability to promote more informed collaboration across IT, as well as between IT and the business, is also accelerating at AIOps' pace.

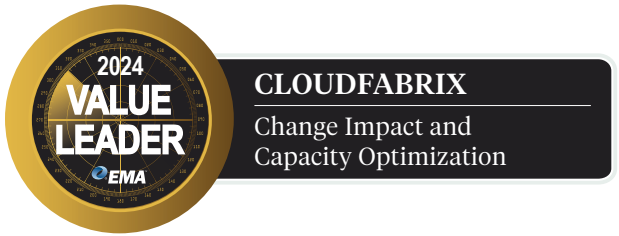
AIOps can and should be transformative in enabling more effective decision-making, data sharing, and analytics-driven automation. The recommendation here remains that buyers should consider their own realities in all these dimensions, then begin a search for the AIOps platform that most fits their requirements. Which vendor can most effectively address your top prioritized long-term goals? Which vendor is the most natural fit for your current technology environment? Which vendor is likely to bring you the fastest near-term wins? The answer could be any one of the thirteen presented in this Radar, depending on the answers to these and other questions.

Introduction

CloudFabrix's Robotic Data Automation Fabric is a data-centric AIOps platform with unique asset intelligence and broad AI capabilities that can support a wide range of stakeholders, from ITOps, to DevOps, to BizOps, to ITSM, to infrastructure planning. Its scalable microservices- and containers-based architecture assimilates data from cross-domain sources via its unique Observability Pipelines with ongoing, real-time awareness, as well as in-depth insights into historical trends as changes are made and assets age, impacting capacity and performance.

CloudFabrix leads the industry in this Radar with its balance of product strength and cost-efficiency in change impact and capacity optimization, with strong support for all three use cases evaluated. Its platform continues to evolve and broaden its solid set of third-party integrations for monitoring, configuration, security, business impact, and other values. Some of the overriding benefits include alert noise reduction, predictive insights, accelerated incident response, automated problem resolution, and 360-degree asset visibility across the application infrastructure to minimize risks and support compliance and cost optimization.

CloudFabrix is also one of several AIOps vendors to have meaningfully introduced generative AI capabilities in 2023 with its Macaw Generative AI Assistant to clarify observability data, generate Observability Pipelines and dashboards, and accelerate IT efficiencies. Overall, CloudFabrix has distinguished itself as one of the more creatively progressive AIOps vendors since our Radar in 2020, so perhaps it's no surprise that the company has more than doubled in size, with nearly five times the number of active deployments.



Use Case Perspectives

Change Impact and Capacity Optimization Value Leader

Aside from ongoing, real-time linkages between changes made and performance outcomes, CloudFabrix provides multi-dimensional awareness of all hardware and software assets across IT, including cloud-related interdependencies. As a single source of truth, the platform also can provide dynamic updates to existing CMDBs. It can identify obsolete and aging assets across their lifecycles, as well as those not covered by service contracts, while automatically tracking and alerting on compliance issues and identifying cost optimization opportunities for consolidation and capacity planning.

Given CloudFabrix's unique strengths in dynamic asset intelligence, it can also support a solid set of relevant roles, all of which also contribute to its value in addressing the other two use cases. These roles include:

- Engineering
- Change management
- Configuration management
- Asset management
- Financial planning
- Capacity planning
- Architecture

In terms of benefits, CloudFabrix's Robotic Data Automation Fabric (RDAF) can promote configuration and change management efficiencies; DevOps efficiencies; internal, hybrid, and public cloud efficiencies (including those that are cost-related); infrastructure optimization across networks, storage, and data centers; application optimization; and security-related issues and dependencies in managing change across the extended enterprise (partners, suppliers, service providers, etc.).

Incident, Performance, and Availability Management Value Leader

The CloudFabrix RDAF platform delivers effective alert noise reduction and event correlation, facilitated in part by a solid range of toolset integrations. It accelerates incident response through diagnostics, predictive insights, and automations to enable a contemporary, persona-based digital war room while supporting business stakeholders seeking to optimize business performance across their application services.

CloudFabrix's triage capabilities are among the most complete, analyzing issues residing in the application, server, network, DB, or other dependencies, with triage across application tiers including middleware issues; isolating issues with microservices and containers on-premises or in the public cloud; providing visibility into branch office issues such as QoS, bandwidth, or application latency, as well as end devices and browsers; and delivering insights into security-related issues for improved security information and event management (SIEM).

The benefits are also substantial:

- Event noise reduction
- Faster time to repair problems
- Proactive capabilities to prevent problems
- Less time writing rules and thresholds
- Reduction and consolidation of monitoring and other toolsets

Business Impact and IT-to-Business Alignment Strong Value

CloudFabrix can support a breadth of business stakeholders:

- Line of business management
- Business application owners
- Digital transformation teams
- Customer experience management
- Business partner management
- Marketing

CloudFabrix's RDAF platform can exchange data with business or financial planning systems, executive dashboards, customer experience management and enterprise operations software, as well as data warehouses and security audit and compliance systems relevant to business performance. Through this, it can affiliate a wide range of business metrics with IT service performance behaviors including revenue, user behavior and business activity metrics, data on the cost of service delivery, metrics on application usage to minimize cost and optimize relevance, and business-relevant security, risk, and compliance information.

Special Award

AIOps Deployment Innovation

CloudFabrix has taken the lead amid many industry innovators in AIOps deployment innovations. Their Robotic Observability Pipelines set the stage with unique capabilities for data ingestion, topology/inventory, data enrichment, anomaly detection, predictive analytics, and collaboration, which is one of the more outstanding contributions to making AIOps deployments a far more accelerated process than in years past. These values are enhanced by the Robotic Data Automation (RDA) Studio, where customers can explore options and outcomes, and the Data Science App for rapid deep-learning prototyping. All these advances in deployment and ongoing administration are complemented by the Macaw Generative AI Assistant to accelerate pipeline, dashboard, and service blueprint generation, along with the more than 1,000 low-code bots for data and AI automation.

Deployment, Administration, and Services

CloudFabrix's RDF platform can be deployed as a SaaS offering, on-premises, as a hybrid offering, or privately hosted. CloudFabrix estimates that 1.5-2 ongoing administrators may be required in enterprise environments with 10,000 or more employees.

Data can be brought in via agents and automated discovery, open APIs, out-of-the-box support for streaming data, Excel import, adapters for third-party toolsets, OpenTelemetry, and a variety of other resources. CloudFabrix's Robotic Data Automation (RDA) Studio stands out as a unique way for its customers to design, test, and iterate with AI, moving from experimentation to operationalization. With the RDA Playground, CloudFabrix users can test out questions, learn how to take action, and more effectively create critical data Observability Pipelines. CloudFabrix estimates that this can change deployment cycles from months to days. The RDA Studio is complemented by a Data Science App that offers rapid prototyping of deep learning models for platform engineers.

Without supervision, the CloudFabrix RDA Platform can discover and learn its environment and correlate, enrich, and contextualize operational data, such as alerts and incidents. As deployments begin, the platform also provides a dynamic incident room for accelerated incident response to link operations and ITSM teams more effectively. Then, with more deep learning and forecasting, more customized pipelines can evolve to support IT and business stakeholders in their unique requirements.

Cost Advantage

CloudFabrix pricing can be subscription-based or through an Enterprise License Agreement with options to extend the time limit for service access. The CloudFabrix RDAF platform is one of the more cost-effective in our AIOps Radar. Its subscription-based pricing varies on size, and while centered in large enterprises, CloudFabrix sees meaningful deployments in smaller enterprises and mid-tier businesses, with nearly 20 active small business deployments. Maintenance fees are between 15-18%. CloudFabrix has documented ROI in as little as under three months.

Architecture and Integration

The CloudFabrix RDAF Platform leverages an industry-leading range of advanced analytics capabilities, including comparators, correlators, machine learning for event pattern recognition, anomaly detection, object-based modeling, rule-based analytics, predictive algorithms, if/then change analytics, prescriptive analytics, optimization algorithms, streaming analytics, data mining, natural language recognition, generative AI, fuzzy logic, neural networks, case-based reasoning, chaos theory, application transaction analysis, and topology-based analytics.

CloudFabrix has also focused a lot of attention on data assimilation, composable analytics, and delivering on an overall framework to support machine-learning operations. The Macaw Generative AI Assistant, leveraging CloudFabrix's large language model (LLM) and Azure's OpenAI Service, can provide unique value in explaining and generating pipelines, creating dashboards, providing insights into data and metadata, and helping to create service blueprints.

With 21-30 out-of-the-box third-party integrations and 21-30 open source integrations (including OpenTelemetry), the CloudFabrix RDAF platform can assimilate up to ten million metrics, events, and other data within five minutes, with sequence-aware mapping in 2-5 seconds. CloudFabrix's breadth of data collection is among the most complete in our AIOps Radar, including events, time series metrics, log file data, flow, packets, application and business transaction performance, spreadsheets, configuration and topology, unstructured data (text, video, etc.), Internet of Things data, intrusion detection and prevention data, and security information and event management data.

The CloudFabrix RDAF Platform with its integrations also offers robust discovery options across the infrastructure and applications, with an eye to application transaction interdependencies and in-depth discovery of networks, data centers (including mainframe), microservices and containers, and cloud and hybrid environments. Similarly, the RDAF Platform's mapping of interdependencies puts a spotlight on the application infrastructure, including internal and public cloud environments, hybrid infrastructure with third-party dependencies, virtualized and non-virtualized environments, business services, and application-to-application or application ecosystem interdependencies.

Functionality

The CloudFabrix RDAF Platform has out-of-the-box capabilities to generate reports, including:

- Trend analysis
- Problem area identification
- Problem team identification
- Prescriptive recommendations on actions to be taken
- Change/impact assessments
- Auditing of past remediations to support improvements
- Business impact and outcome metrics

CloudFabrix's support for application types spans web, SOA, SaaS, and API-connected applications, native cloud applications, custom-developed applications, mainframe-based applications, VoIP and rich media applications, industry-specific applications, and productivity or business applications, such as CRM, ERP, and SAP.

CloudFabrix has placed a renewed focus on DevOps, enabling CI/CD pipelines to help optimize application performance by generating ongoing insights on application behaviors for development. CloudFabrix's distinctive pipeline approach also serves to minimize the time developers spend troubleshooting, streamline the handoffs between development and operations, and support security-related DevOps (DevSecOps) requirements.

For automation, CloudFabrix has created more than 1,000 low-code bots for data and AI automation, service automation for ITSM and ticketing, and intent-based automation using generative AI. These bots include data management bots, AI/ML bots, integration bots, streaming bots, and automation bots. The bots can work together to support complex workflows. Through its own capabilities and its various integrations, the CloudFabrix RDAF Platform also offers its users support for:

- Automated event remediation
- Automated trouble ticketing
- Automated remediation and proactive service resolution
- Multiple workflows across IT
- Configuration automation
- Security-related process automation or playbooks
- Automation in support of Q/A testing

Vendor Strength

Founded in 2015 and based in Pleasanton, California, CloudFabrix is a comparatively small but fast-growing company, having doubled in size since 2020, while its customer base grew more than 400% with 280 active deployments. Though centered in larger enterprises, its versatility in reaching across the spectrum to smaller and mid-tier businesses is also distinctive, with a significant presence in finance and banking, health care, retail, transportation, aerospace, and MSPs. CloudFabrix's geographical range also broadened since 2020, spanning six continents. CloudFabrix also stands out for its significant investments in research and development—ranging from 21%-29% of its revenue.

What's New

CloudFabrix is one of the leading AIOps vendors in innovation overall, with its Robotic Data Automation Fabric new since 2020, offering a more data-centric approach to AIOps with continuous assimilation of cross-domain sources using Observability Pipelines and a range of services supporting such things as log intelligence, SAP observability, and FinOps. The new RDAF Platform is also evolving its incident room to support more persona-based dashboards to promote improved collaboration.

CloudFabrix's Macaw Generative AI Assistant was introduced in June of 2023 to help accelerate pipeline productivity, dashboard creation, and overall improved IT efficiencies. It includes support for conversational queries, with CloudFabrix's LLM focused on localized customer environments rather than less relevant, standardized data. The Robotic Data Automation (RDA) Studio for customers to explore options and outcomes is another recent innovation, making CloudFabrix's AIOps deployments a far more accelerated process.

Strengths and Limitations

Strengths

- CloudFabrix provides a diverse and well-integrated solution that spans all AIOps use cases with strong cost-efficiency and functional integrity. Its dramatic rise in new deployments since 2020 and its more than doubling in company size are testaments to its adaptability and value.
- CloudFabrix's Dynamic Asset Intelligence continues to make it an AIOps standout by bringing a uniquely rich awareness to how IT assets can impact change, performance, and business outcomes with an eye to both cost and capacity optimization. CloudFabrix leads the AIOps landscape in change management and capacity optimization with its mix of cost-efficiency and product strength.
- The new Macaw Generative AI Assistant offers a solid complement to CloudFabrix's core strengths in improving IT efficiencies.
- CloudFabrix's more than 1,000 out-of-the-box bots with predefined functions and its Robotic Observability Pipelines promote its overriding focus on composability and automation advancement.
- The RDA Studio further strengthens CloudFabrix's composability, with a unique set of options to help shorten meaningful deployments into days versus months.

Limitations

- CloudFabrix is still an emerging vendor with a modest staff, which can limit the range of its customer interactions.
- Currently, CloudFabrix is looking to expand the range of its integrations for monitoring, ITSM, and specific vertical needs in areas such as application transaction analysis, user experience management, and endpoint management, just to name a few.

Customer Quotes

Interview with a solution architect at a multinational networking and digital communications technology provider

It's my role to make sure that whatever we deliver to our larger service provider customers, our solution is both effective and appropriate. Our key focus is to provide deep insights into network performance, availability, and capacity management with an eye to improved predictability. This required broad capabilities for AI/ML and observability, including support for OpenTelemetry."

CloudFabrix also stood out for its ease of data assimilation and accelerated time to deployment with its RDA Studio—as far as I know, no other platforms have that equivalent.

We were also looking for platforms with strong hooks into existing ITSM investments, such as ServiceNow, BMC, and others. Yet another criterion was scalability given our large customer environments.

After evaluating six different platforms over a period of several months, we chose CloudFabrix. It excelled in all areas. Singling out one—in scalability—it recently addressed a customer environment with 17 million events per day with no degradation in performance."

Evaluation Summary

Deployment Cost-Efficiency

Deployment & Administration	
Ease of Deployment	
PoC Availability	Outstanding
Versatility in Deployment Options	Outstanding
Automation for Deployment	Strong
Time for ML to "Learn" the Environment	Solid
Support & Services	
Breadth of Professional Services	Strong
Levels of Customer Support	Strong
User Groups	Outstanding
Ease of Administration	
FTEs Required for Admin	Strong
Breadth of Support for Data Collection	Outstanding
Ease of Report Creation	Outstanding

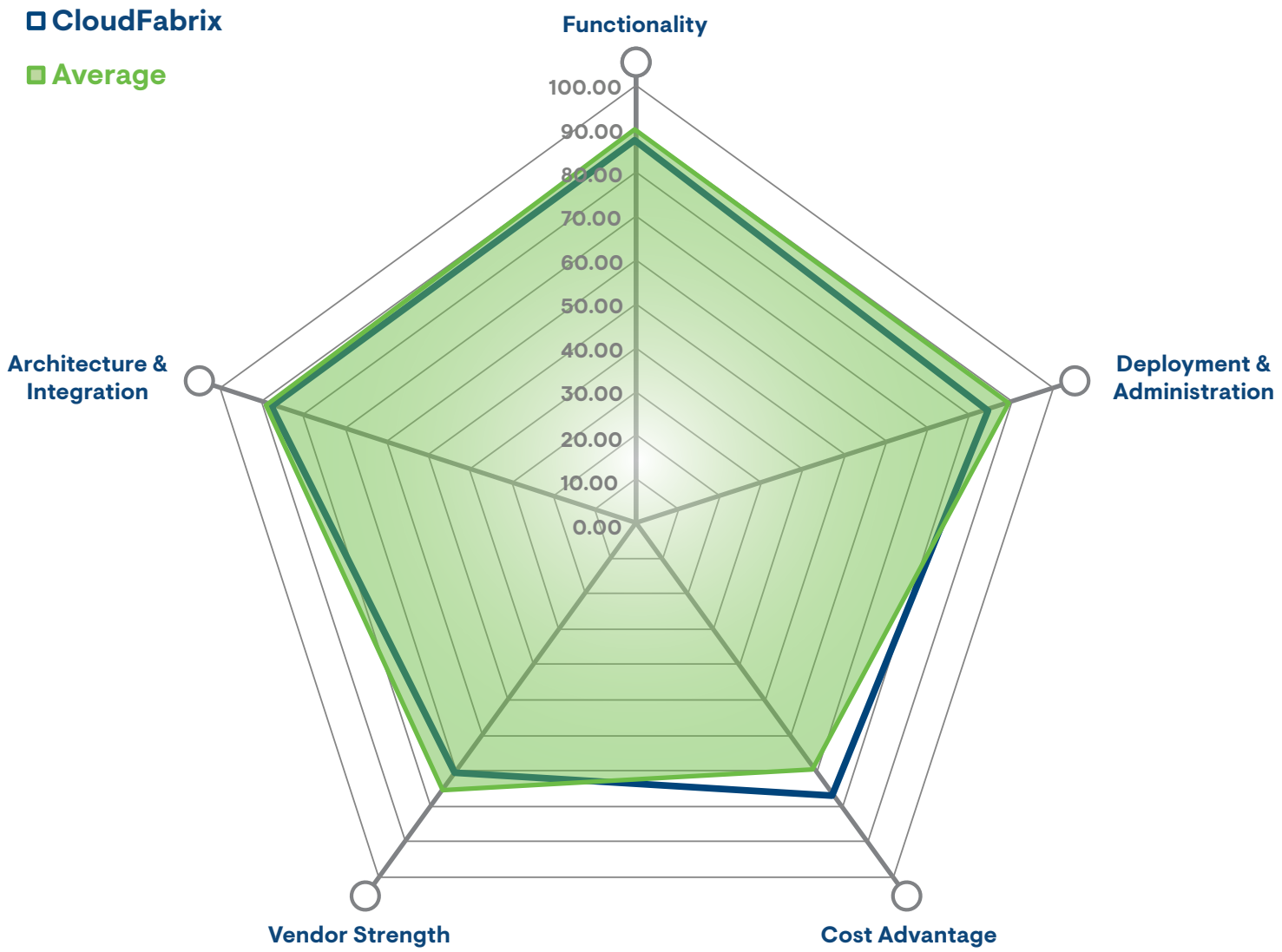
Cost Advantage	
Est. Cost for Large Enterprise Deployments	$
Licensing Model	Strong
Maintenance Costs	Solid
Estimated Time for ROI	Strong

Product Strength

Architecture & Integration	
Architecture	
Breadth of Analytics Technologies Applied	Outstanding
Scalability	Strong
Granularity of Data Sequencing	Strong
Range of Data Sources	Outstanding
Breadth of Domain Support	Outstanding
Support for Cloud	Outstanding
Big Data Capabilities	Strong
Breadth of Discovery	Outstanding
Versatility of Dependency Mapping	Outstanding
Integration & Interoperability	
Third-Party Integrations	Solid
Third-Party Technical Integrations	Outstanding
Third-Party Business Integrations	Solid
Open Source Integrations	Solid

Functionality	
Features	
Application Support	Solid
Business Impact	Outstanding
Reporting and Visualization	Strong
Triage	Outstanding
Change Impact/Optimization	Outstanding
DevOps Support	Solid
Automation	Outstanding
IT Roles	Outstanding
Business (non-IT) Roles	Solid

Vendor Strength	
Financial Strength	Solid
Research & Development	Outstanding
Market Credibility	Solid
Geographic Coverage	Strong


CloudFabrix
Average
Functionality
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Deployment & Administration
Cost Advantage
Vendor Strength
Architecture & Integration

Addendum: What's New with BMC?

The BMC Helix observability and AIOps is built on top of BMC Helix. It is a microservices-based extensible platform that uses machine learning including causal, generative, and predictive AI over large amounts of data including logs, events, metrics, and topology to enable reliable cloud service delivery and visibility. The ML-based, AI-powered solutions that BMC provides can analyze, isolate, and predict problems to help IT organizations more proactively resolve issues in real time.

BMC Helix ITOM is BMC's fully integrated AIOps and observability solution that includes BMC Helix Operations Management, BMC Helix Discovery, BMC Helix Intelligent Integration, BMC Helix Intelligent Automation, BMC Helix Log Analytics, BMC Helix Continuous Optimization, BMC Helix Service Management, and BMC Intelligent Connectors. In EMA's 2020 Radar, BMC was a Value Leader in business impact and IT-to-business alignment, in part because of the breadth of its support for non-IT roles and its strengths in end-user and customer experience management.

Worthy of note is BMC's 2023 announcements for new patented generative AI capabilities with HelixGPT, which connects and distills data sources across the enterprise to deliver plain language, actionable insights for operations, DevOps, and ServiceOps teams. Chief among the functionalities are: conversational engagement and search for better understanding queries and shared responses; event and incident summaries; and resolution insights to help promote a more optimized process.

Measurement Criteria: Appendix A

Research for the Q1 2024 AIOps Radar took place starting in Q3 2023. Vendor input is included in the process of updating the measurement criteria. EMA used the following requirements to evaluate the participating vendors. Please keep in mind that these categories were weighted differently depending on their importance to a versatile and effective AIOps platform, as well as their relevance to each of the three different use cases addressed: Incident, Performance, and Availability Management; Change Impact and Capacity Optimization; and Business Impact and IT-to-Business Alignment.

Deployment and Cost-Efficiency

Deployment and Administration

Ease of Deployment

Proof of concept availability: Asks if the vendor offers a PoC prior to deployment.

Versatility in deployment options: Where and how the solution is deployed and instrumented to assimilate data.

Automation for deployment: Automation for such functions as data assimilation, self-learning, configuration, and load balancing, as well as requirements for manual baseline settings and professional services.

Time for ML to "learn" the environment: Time for AI/ML to learn the dynamics of an enterprise environment with 5,000 managed entities.

Support and Services

Breadth of professional services: Breadth of professional services available directly and through partners for deployment and strategic initiatives.

Levels of customer support: From phone to on-premises options.

User groups: Such as formal conferences, ad hoc meetings, and online forums.

Ease of Administration

FTEs required for administration: Requirements for ongoing administration are based on vendor estimates and customer interviews.

Breadth of support for data collection: This examines to what degree a vendor has an effective administrative workbench for creating policies directed at data collection.

Ease of report creation: A look at how such features as templates and drag-and-drop widgets can facilitate report creation for technical and non-technical stakeholders.

Cost Advantage

Estimated cost for large enterprise deployments: Vendor provided cost estimates, including maintenance fees, that are supplemented by deployment interviews.

Licensing model: Breadth of options such as SaaS, on-premises, and privately hosted.

Estimated time for ROI: Vendor provided estimates for the shortest time to achieve ROI" that are supplemented by deployment interviews.

Product Strength

Architecture and Integration

Architecture

Breadth of analytics technologies applied: Range and kind of AI/ML heuristics in play, such as anomaly detection, predictive and prescriptive insights, topology-based analytics, and others.

Scalability: Volume of data that can be assimilated within five minutes.

Granularity of data sequencing: The shortest interval in which KPIs or other metrics can be sequenced—e.g., real time, near-real time, or minutes.

Range of data sources: Data sources, such as events, time series, and logs, are assimilated either directly or through third-party integrations.

Breadth of domain support: Span of domain coverage from traditional infrastructures, to virtualized infrastructures and cloud, to applications.

Support for cloud: Support for microservices, virtualized environments, and public cloud-specific vendors, such as AWS, Azure, and Google Cloud.

Big data capabilities: Support for big data lakes and associated technologies for data storage and search.

Breadth of discovery: Discovery as it maps to the full application/infrastructure stack, including cloud.

Versatility of dependency mapping: How application-to-application, infrastructure-to-infrastructure, and application-to-infrastructure interdependencies are captured and kept current.

Integrations and Interoperability

Third-party integrations: The number of fully supported third-party toolset integrations overall.

Third-party technical integrations: The types of fully supported technical toolsets, such as those for monitoring or ITSM, both for importing and exporting.

Third-party business integrations: The types of fully supported business integrations, such as business process systems and financial planning data, both for importing and exporting.

Open source integrations: The number of open source integrations supported, such as Kafka, Apache, Kubernetes, and OpenTelemetry-related data.

Functionality

Features and Use Cases

Application support: Breadth of application support in terms of application types, such as web, Web 2.0, custom-developed, virtualized applications, and microservices.

Business impact/business awareness: Natively available logical associations for IT service performance, such as revenue and business process impact.

Reporting and visualization: Types of reports supported out of the box, such as trend analysis, incident team communication, and prescriptive recommendations.

Triage capabilities: Where and how triage can be achieved across the broader application infrastructure, including cloud.

Change impact and capacity optimization: Types of configuration and other changes that can be traced and natively associated with metrics for efficiency, service impact, and infrastructure optimization.

DevOps support: Range of options to support development teams, Q/A test, ITSM, and operations throughout the application lifecycle.

Automation: Breadth of automation options available either directly or through integrations such as workflow, IT process automation, incident team alerting, and configuration automation.

IT roles supported: Domain and cross-domain roles supported in IT, including the IT executive suite.

Business (non-IT) roles supported: Business roles supported, such as application owners, business executives, and digital transformation teams.

Vendor Strength

Financial strength: Ongoing revenue and annual growth.

Research & development: Percentage spent on R&D.

Market credibility: Number of AIOps-relevant customers and range of verticals and company sizes.

Geographic coverage: Geographic customer reach and linguistic support.

About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading IT analyst research firm that specializes in going "beyond the surface" to provide deep insight across the full spectrum of IT management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services at **www.enterprisemanagement.com** or follow EMA on **X** or **LinkedIn**.

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