EMA
IT & DATA MANAGEMENT RESEARCH,
INDUSTRY ANALYSIS & CONSULTING

EMA Radar™ Report

AIOps: A Guide to Investing in Innovation

CloudFabrix Vendor Profile

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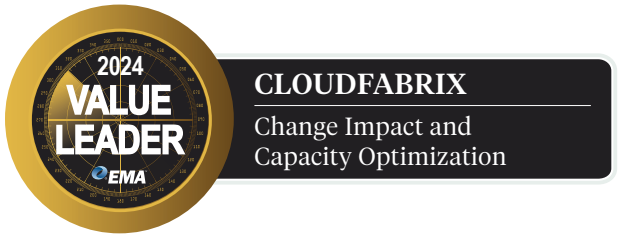
Introduction

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

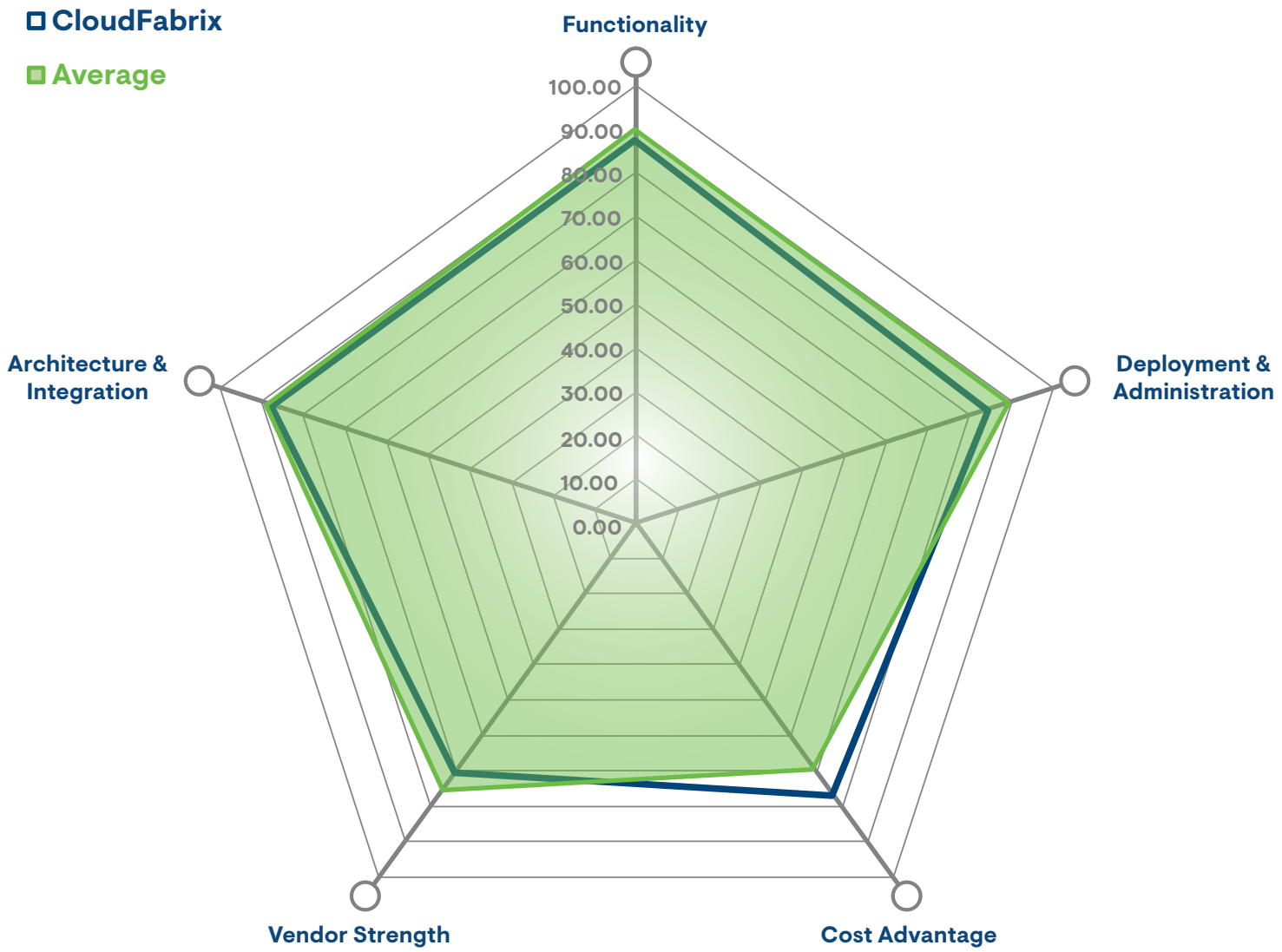
Cost Advantage	
Est. Cost for Large Enterprise Deployments	$
Licensing Model	Strong
Maintenance Costs	Solid
Estimated Time for ROI	Strong

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

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