

# EMA Radar for AIOps: Q3 2020

## A Guide for Investing in Innovation



An Enterprise Management Associates® Radar Report  
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Q3 2020

## INTRODUCTION



CloudFabrix is an innovative, emerging presence in the AIOps landscape with a surprising diversity of functionality integrated into a single, cost-effective platform. It is well-established with 65 active deployments that span a wide variety of verticals, with strengths in finance and banking, healthcare, retail, telecommunications, and managed services providers (MSPs).

The CloudFabrix AIOps Platform, cfxDimensions, delivers unique strengths in performance, change management, and capacity optimization by which cost, performance, and capacity can be effectively predicted, each in context with the other. CloudFabrix AIOps is also distinguished by its

outcome-driven approach in which audited results can be assessed for critical processes in operations and planning, while also reaching up the stack to support business goals. In leveraging cfxDimensions outcomes, organizations and the businesses they support can operate based on predefined objectives far beyond SLAs.

As cfxDimensions evolves, CloudFabrix intends to roll out a business and operational Outcomes Library while continuing to expand its integrations in support of IT service management (ITSM), DevOps, IT planning, and enterprise needs across the full range of cloud and legacy infrastructure and application environments.

## USE CASE PERSPECTIVES



### CHANGE IMPACT AND CAPACITY OPTIMIZATION

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The strengths of Asset Intelligence Advisor combine with ongoing capabilities for change impact awareness in cfxDimensions, with benefits such as:

- More efficient use of infrastructure capacity
- More efficient use of hybrid cloud resources
- More effective migration to public cloud
- More effective optimization of public cloud/multi-cloud
- Optimized capacity for service delivery
- Improved efficiencies in CMDB/CMS currency
- Better correlation between change and performance
- Faster time to deliver new IT services

To achieve this, the platform delivers:

- 360-degree IT asset visibility: cfxDimensions can discover, tag, and organize hardware and software IT infrastructure assets, including application dependencies. In this way, it can serve as a single source of truth while sending updates to a CMDB.
- Lifecycle insights and risk mitigation: This allows customers to identify obsolete or aging assets, as well as assets that are not covered under service contracts and assets that have risks from known vulnerabilities.
- Compliance and cost optimization: Here, cfxDimensions tracks and sends alerts on out-of-compliance assets. It also tracks asset utilization and identifies cost optimization opportunities.

## USE CASE PERSPECTIVES



### INCIDENT, PERFORMANCE, AND AVAILABILITY MANAGEMENT

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Central to cfxDimensions' strengths in incident, performance, and availability management is the platform's Incident Room, which was designed to promote better overall observability and more proactive remediation and decision-making. The Incident Room classifies incidents into categories that separate out actionable alerts from redundancies and alerts of low impact, while accelerating appropriate diagnostics and remediation. It does this through its own native strengths in correlation, anomaly detection, and predictive and prescriptive analytics. Because of Asset Intelligence, cfxDimensions can associate potential incidents with enriched awareness of context and attributes across all seven layers.

Another unique capability of the Incident Room is its knowledgebase-driven cost analysis for IT incidents as correlated with time to resolve and the number and level of stakeholders involved. This enables IT organizations to document their

progress in incident remediation in order to systematically improve both the quality of service performance and their OpEx efficiencies.

- Among the overall benefits delivered by cfxDimensions in this arena are:
- Faster time to repair problems
- Predictive alerting and root cause analysis
- Proactive capabilities to prevent problems before they occur
- Improved service delivery across hybrid cloud
- Reduction/consolidation of siloed toolsets
- More effective handoffs between development and operations
- Minimized time developers are forced to spend in production-level triage



### BUSINESS IMPACT AND IT-TO-BUSINESS ALIGNMENT

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With its outcomes-driven capabilities, CloudFabrix has already shown some impressive business-related values in active deployments, including serving as a vehicle for aligning IT organizations with business objectives more effectively. Moreover, business impact is potentially an area of much accelerated value given the vendor's outcome capabilities.

Currently, CloudFabrix supports non-IT executives, line of business management, business partner management, digital

transformation teams, enterprise operations, and business application owners.

To do this, the cfxDimensions platform can easily associate application performance and other criteria with a wide array of business parameters, such as revenue, business process efficiencies, digital transformation objectives, and improved end-user and customer satisfaction.

## SPECIAL AWARD: DYNAMIC ASSET INTELLIGENCE



CloudFabrix's Asset Intelligence Advisor provides usage and end-of-life (EOL) insights, spotlighting redundancies, compliance issues, and performance-related vulnerabilities across the data center and edge networks. It also provides valuable full-stack context for automated alert enrichment and incident root cause analysis. Asset Intelligence Advisor does this by leveraging cfxDimensions' strengths in discovery, dependency mapping,

and hardware and software asset inventory, as well as the platform's outcomes-driven approach to cost. This will become increasingly critical in assessing capacity for cloud migrations and other strategic initiatives as more and more IT organizations switch to a dynamic, consumption-based model for investing in infrastructure hardware and associated software.

## DEPLOYMENT, ADMINISTRATION, AND SERVICES

The cfxDimensions platform offers versatile deployment options, including SaaS, on-premises, hybrid, privately hosted, and multi-tenancy. It can be instrumented to collect data across the hybrid cloud, legacy, or multi-cloud application infrastructure. The platform typically takes two weeks to one month to effectively "learn" a large enterprise IT infrastructure (i.e., a company with 10,000 employees or more), so that its AI/ML capabilities can deliver significant results. It also supports what the vendor calls "unsupervised symptomatic clustering" to correlate operational data and accelerate time to value.

cfxDimensions' ongoing administrative requirements typically require 1.5-2 full-time employees in larger enterprises. Policies for data collection and analysis can be supported by scripting, templates, and self-learning algorithms. Reports can be created through drag-and-drop capabilities and customizable dashboards without requiring technical skills.

## COST ADVANTAGE

The software costs for cfxDimensions platform are modest, especially given its breadth of functionality. Pricing is subscription-based, with an added option for an enterprise license agreement that includes support costs for on-premises deployments. Otherwise, maintenance

fees range between 15% and 18% of the overall software investment. Pricing is calculated based on data requirements and device volumes. Meaningful ROI can be achieved in as little as a few months.

## ARCHITECTURE AND INTEGRATION

CloudFabrix has made significant investment in AI/ML-related heuristics, including analytics supporting predictive, prescriptive, and if/then decision-making, along with comparators, correlators, anomaly detection, and optimization algorithms. In addition, the vendor offers a Data Science App for customers with those skillsets available. While it is not at all required and remains rare in cfxDimensions deployments, the Data Science App offers rapid prototyping of deep learning models, building custom pipelines, and versioning of experiments, among other values.

CloudFabrix also approaches the need for big data flexibly, with two approaches. It can pull data in

from preexisting customer data lakes, or it can establish its own leveraging ELK stack capabilities, such as Elasticsearch.

In terms of data import, cfxDimensions can assimilate between 500,000 and 1 million metrics or data points within five minutes, with a minimum latency of 2-5 seconds for data assimilation and sequencing of KPIs based on 2-3-minute intervals. CloudFabrix data assimilation includes virtually all aspects of the hybrid cloud, multi-cloud, and legacy environments, including transactional data and business-related data, such as sentiment analysis and business process impacts.



# VENDOR PROFILE: CLOUDFABRIX

CloudFabrix has established more than twenty fully supported third-party integrations in critical areas, such as application performance management, IT asset management, IT service management, network and infrastructure management, and security. Its public cloud outreach is strong, with integrations targeting performance, capacity, and cost for AWS, Azure, Google, and Oracle cloud environments.

The cfxDimensions platform offers both agent and agentless discovery across cloud, hybrid, and legacy environments, including containers and microservices. Similarly, the platform's discovery and dependency mapping is both rich and versatile, capturing parameters such as application-to-infrastructure, virtual infrastructure-to-virtual infrastructure, application-to-application, big data application components, microservices and containers, multi-cloud infrastructure, and business services.

## FUNCTIONALITY

CloudFabrix has made a significant investment in automation through its own capabilities and supported integrations spanning:

- Automated event remediation
- Automation in support of incident team communication and trouble ticketing
- AI bots
- Workflow within and across IT
- Runbook or IT process automation
- Security-related process automation

- Automation in support of discovery and dependency mapping
- Automation in support of diagnostics collection

cfxDimensions support for applications spans mainframe-based applications, as well as microservices, containers, web-based applications, industry-specific applications, and custom-developed applications.

For reporting, CloudFabrix offers trend analysis, problem team identification, audits of past remediations, prescriptive recommendations, change impact assessments, and business impact analyses.

## VENDOR STRENGTH

Headquartered in Pleasanton, California, CloudFabrix has 65 customers spread across North America, Europe, and Asia. The vendor is growing and has recently accelerated the hiring of new personnel. Its customer expansion has been partly due to MSPs; 40 of its customers are cohosted.

For its partnership strategy, CloudFabrix works with OEM channel partners for asset intelligence, and with systems integrators for its broader capabilities. The vendor's direct sales remain primarily focused on North America.

## STRENGTHS AND LIMITATIONS

### STRENGTHS

- CloudFabrix provides a diverse and well-integrated solution that spans all AIOps use cases with strong cost efficiencies and functional integrity.
- CloudFabrix stands out in its unique capabilities for compliance and cost optimization through its Asset Intelligence Advisor. This brings financial planning and change management together in a powerful way.
- Another distinctive cfxDimensions strength is its outcomes-driven approach, which provides versatile options for IT and business stakeholders to assess progress based on predefined objectives.

- cfxDimensions' Incident Room has become a standout feature for both observability and proactive remediation by assimilating alert-related data into actionable categories.

### LIMITATIONS

- CloudFabrix is an emerging vendor with rich functionality, but still modest staff, which can limit the scope and range of its customer interactions.
- cfxDimensions may need to evolve in areas such as exporting to third-party tools, and importing from distinctive business sources.



## CUSTOMER QUOTES

“CloudFabrix will help to tell me where I have to refresh the infrastructure for performance and asset management reasons, three to five years out. And if I need to refresh part of the infrastructure, CloudFabrix will show me the cost in terms of both CapEx and operational expenditures. I can just plug in a number, say, targeting 500 assets per year, and all the data is there in ten to fifteen seconds. It’s amazing!”

“CloudFabrix helps us to identify incident outliers, to better understand if it’s a repeated offense. We can review incidents over the same day, the last week, the last six months, or twelve months, or whatever timeframe is a priority, and see what’s been repeated and what’s not. We can also see what the root cause analysis for the incidents were and map these to changes made and code revisions across the infrastructure.”

“When I was pursuing my use cases for network and data center planning, I already knew that CloudFabrix could serve more of our stakeholders. When we introduced it to engineering and operations, they found more and more value, for instance in real-time incident and problem management, where CloudFabrix does a lot of magic in the background to put incidents in context. We’re increasingly hearing, ‘I don’t need to dedicate my people to a waste of manual effort. This tool can do it!’”

*- Comments from an IT consultant solutions principal at a large, North American-based healthcare services conglomerate.*

“cfxDimensions delivers strong value in the assimilation of preexisting monitoring and other toolset investments, so insights can be visualized more cohesively and more dynamically. Using cfxDimensions, we exceeded what their vendors could do significantly—integrate both event and metric data and reduce the lag from two to three minutes to less than three seconds.”

“Some of our clients have fixed budgets, so we help them to better utilize their IT budgets to increase the health of the entire stack. The sites are scored for availability, performance, capacity compliance, and security needs—using often more than 20 to 30 outcomes to arrive at the final score. We were able to showcase their situation and place each environment on a scale of 1-100, then ask them, ‘Where would you like to be?’ by site, by application, and by relevant infrastructure.”

“Above all, what we liked about cfxDimensions was the fact that it was outcomes-driven. Rather than just looking proactively at different data, which was itself of value, with cfxDimensions we were able to take that up a level and relate what was happening to business outcomes and business objectives. That was good for our business because most CIOs we sell to are focused on business outcomes.”

*- Comments from a director of operations at a mid-tier North American-based managed services provider.*

## 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 | Strong      |

#### SUPPORT AND SERVICES

|                                  |         |
|----------------------------------|---------|
| Breadth of Professional Services | Strong  |
| Levels of Customer Support       | Strong  |
| User Groups                      | Limited |

#### EASE OF ADMINISTRATION

|                                        |             |
|----------------------------------------|-------------|
| FTEs Required for Admin                | Strong      |
| Breadth of Support for Data Collection | Strong      |
| Ease of Report Creation                | Outstanding |

### PRODUCT STRENGTH: ARCHITECTURE & INTEGRATION



#### ARCHITECTURE

|                                           |             |
|-------------------------------------------|-------------|
| Breadth of Analytics Technologies Applied | Outstanding |
| Scalability                               | Solid       |
| Granularity of Data Sequencing            | Strong      |
| Range of Data Sources                     | Outstanding |
| Breadth of Domain Support                 | Outstanding |
| Support for Cloud                         | Outstanding |
| Big Data Capabilities                     | Outstanding |
| Breadth of Discovery                      | Outstanding |
| Versatility of Dependency Mapping         | Outstanding |

#### INTEGRATION/INTEROPERABILITY

|                                    |         |
|------------------------------------|---------|
| Third-Party Integrations           | Strong  |
| Third-Party Technical Integrations | Strong  |
| Third-Party Business Integrations  | Limited |
| Open-Source Integrations           | Limited |

## EVALUATION SUMMARY



### FUNCTIONALITY

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

### COST ADVANTAGE

|                              |        |
|------------------------------|--------|
| Estimated Cost for 5,000 MEs | \$\$   |
| Licensing Model              | Strong |
| Maintenance Costs            | \$     |
| Estimated Time for ROI       | Strong |

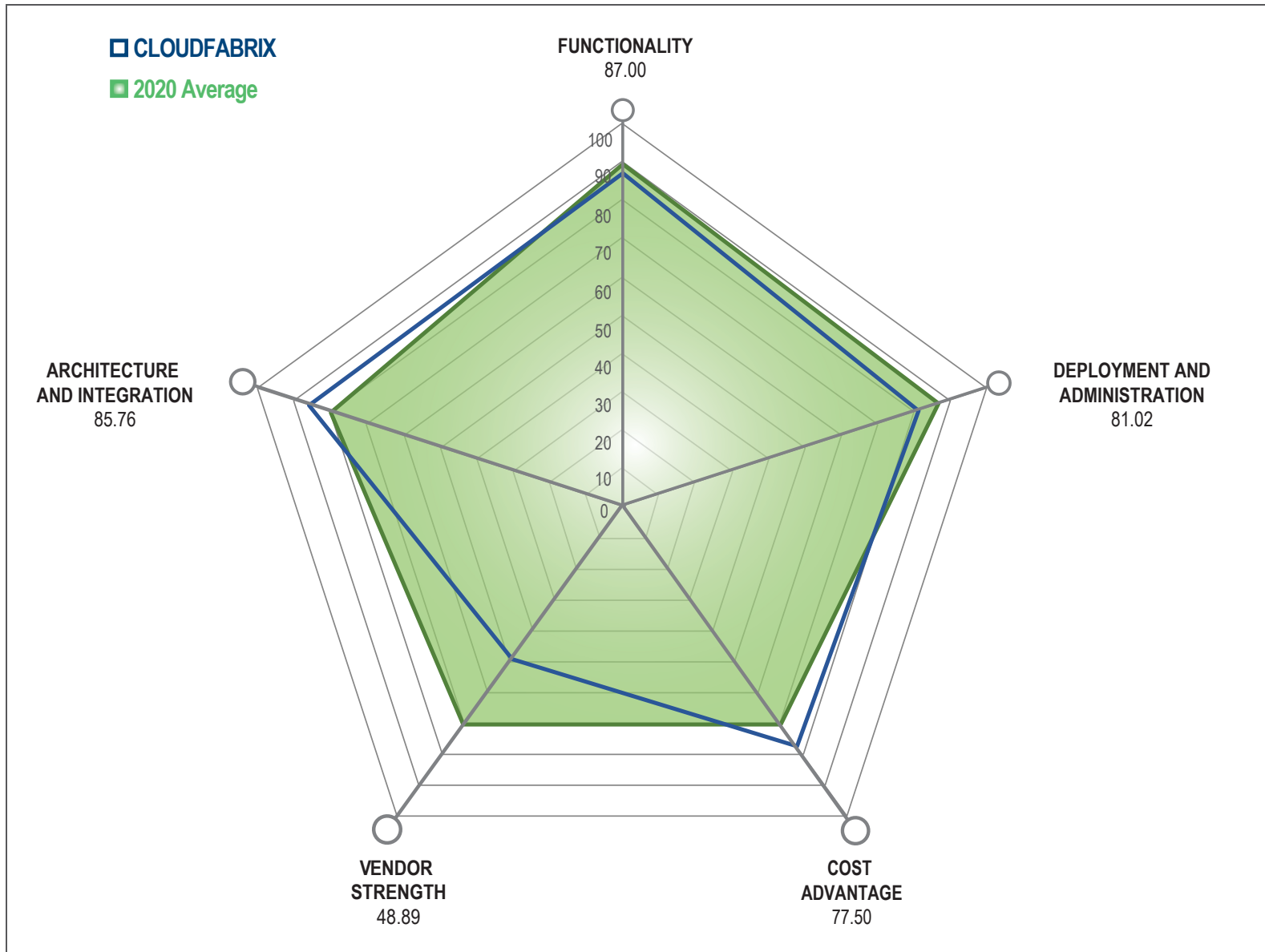


### VENDOR STRENGTH

|                        |             |
|------------------------|-------------|
| Financial Strength     | Solid       |
| Research & Development | Outstanding |
| Market Credibility     | Solid       |
| Geographic Coverage    | Limited     |



## 2020 AIOPS RADAR – AVERAGE OF ALL USE CASES



### About Enterprise Management Associates, Inc.

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4018-08262020-CLOUDFABRIX