

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



bigpanda

BigPanda has, in many respects, helped to redefine the AIOps market. It has done so with its focus on deployability, time to value, its Open Box Machine Learning, and its capabilities for improving incident lifecycle management through analytics-driven event management. The claim might be made that no other vendor in this Radar offers as clear and as singular a footprint for AIOps as BigPanda, which has made it much easier than average for its adopters to see and achieve value by not overextending its reach into a be-all and end-all solution.

BigPanda's solution features the following capabilities:

- An Open Integration Hub for bringing in events, topologies, and other data from third-party sources, including bidirectional data exchange.
- Its Open Box Machine Learning for “explainable AI” so that IT teams are immediately able to see where, how, and why their algorithms perform well.
- Unified Analytics with out-of-the-box dashboards, KPI, and easily accessible customization capabilities.
- An Operations Console for shared viewing of critical service behaviors across IT

operations, network operations, IT service management (ITSM) teams, DevOps teams and site reliability engineers (SREs), cloud management, online operations, and other IT and business stakeholders.

Automation is another area of focus for BigPanda. According to the vendor, “BigPanda believes that enabling autonomous IT operations as an end state is the vision for the future. Autonomous Operations (AO) is the next generation of IT automation that helps operations teams from being a bottleneck to becoming an enabler of digital transformation.”

USE CASE PERSPECTIVES



**INCIDENT, PERFORMANCE,
AND AVAILABILITY
MANAGEMENT**

INCIDENT, PERFORMANCE, AND AVAILABILITY MANAGEMENT

BigPanda has clearly prioritized incident management, and with that performance and availability, as its core focus. In this arena, the vendor has shown a wide variety of benefits including, but not limited to, faster time to repair problems, streamlined incident management, proactive ability to prevent problems, improved OpEx efficiencies within IT, faster onboarding of new technology, and reduction/consolidation/minimization of tools. In terms of triage, BigPanda's adaptable analytics can be applied to any sources that generate events, either directly or through third-

party tools across the application infrastructure and including hybrid and public cloud, microservices, and containers.

An added area of advantage is DevOps, in which BigPanda can help development teams surface preproduction issues while also providing feedback from operations to improve application performance and minimizing the time that developers spend troubleshooting. In looking at its customer base, BigPanda currently shows about 70% of its customers are focused in operations and 30% in DevOps.

USE CASE PERSPECTIVES



BUSINESS IMPACT AND IT-TO-BUSINESS ALIGNMENT

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BigPanda's values in business impact and business alignment stem largely from its abilities to associate business outcomes with service performance while also addressing performance and business-related behaviors in devices, such as point of sale systems. In terms of benefits, BigPanda's Autonomous Operations Platform has enabled faster onboarding of new customers, improved end-user/customer experience,

better alignment of IT with business service performance, improved business performance in terms of revenue and process efficiencies, and accelerated capabilities for digital transformation.

BigPanda currently supports line of business management teams, online operations, business application owners, digital transformation teams, and enterprise operations.



CHANGE IMPACT AND CAPACITY OPTIMIZATION

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BigPanda's main focus here is correlating changes with past and potential future incidents in support of strong change impact capabilities. This can also help to promote benefits such as more effective migration to public cloud, better correlation between change and performance, and faster time to deliver

new IT services. To help enable this, BigPanda's Autonomous Operations Platform can track application release changes, network and system configuration changes, service impact changes, and changes associated with public and provide cloud in containers and microservices dynamically.

SPECIAL AWARD: EXPLAINABLE AI



BIGPANDA

Explainable AI

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Open Box Machine Learning, BigPanda's unique Explainable AI implementation, provides users with transparency, testability, and control so that correlation patterns are not logged away in a black box, but clarified in plain English. This can help significantly both in building trust toward AI/analytics and automation, and in guiding analytic models toward continuous improvement and best results.

DEPLOYMENT, ADMINISTRATION, AND SERVICES

BigPanda is a SaaS solution, instrumented to collect data directly within and across the data center, from application components and from public cloud sources. Its administrative requirements are comparatively minimal—the vendor indicates that less than one full-time employee may be required for ongoing administration, which was confirmed in the interview cited in “Customer Quotes.”

BigPanda’s Open Integration Hub supports workbench capabilities for bidirectional data exchange across monitoring, change, topology, collaboration, ticketing/notification, and other tools. BigPanda

also enables administrators to establish their own KPIs, create policies for self-learning, set up their own correlation patterns, and edit patterns created by BigPanda’s Open Box Machine Learning technology.

In terms of professional services, BigPanda features a “customer success team” that helps its customers go live, while remaining available for further extensions and customizations. Other professional services target performance, service-level management, DevOps, IoT, cloud migration, and change impact.

COST ADVANTAGE

Subscription pricing for BigPanda’s SaaS-based Autonomous Operations Platform is done on a per-server or per-device basis. Its software costs are within the mid to lower end of the AIOps spectrum, and the company charges no ongoing maintenance fees. However, professional services for deployment and customization are often required. The company states that customer ROI has

been achieved in as little as two weeks to one month. Its strong advantages in EMA’s axis of “cost efficiencies” come first and foremost not just from pricing, but from ease of administration and fast time to value.

ARCHITECTURE AND INTEGRATION

BigPanda’s intellectual property is 100% its own, representing a significant investment in heuristics. Because the Autonomous Operations platform does not address time series data, BigPanda’s handling of anomalies and predictive outcomes is tuned to optimizing event management with machine learning and dependency insights proactively and cleanly. This deliberately narrowed data focus has turned out to be a benefit in many environments, especially those needing an AIOps solution to help them move from traditional ways of working to provable next steps in machine learning.

BigPanda can assimilate between one hundred and five hundred thousand events within five minutes, with real-time, subsecond data assimilation. In addition to event-specific data, it can also take in configuration/topology and change-related data.

The vendor’s Open Integration Hub is designed to support a breadth of third-party integrations, with nearly one hundred fully supported today. These include a wide range of tools and solutions, including application and network performance management, other event management systems, DevOps tools,

CMDBs, ITSM platforms, and social IT capabilities, such as SLACK.

BigPanda doesn’t offer its own native capabilities for discovery, but instead ingests and reconciles topology data from CMDBs, application performance and other monitoring tools, and service orchestration tools. Through these, the vendor’s real-time Topology Mesh creates a dynamic model of the application/infrastructure designed to provide ongoing dependency insights to help its users detect and visualize incident-related behaviors.

FUNCTIONALITY

Automation is central to BigPanda's view of autonomous operations, and its current support for automation is substantial both through its own capabilities and through third-party integrations. These include automated event remediation, alert-driven notification, automation in support of incident team communication, automated trouble ticketing, runbook or IT process automation, automated remediation and proactive service resolution, and configuration management, as well as workflow within and across IT. According to the vendor, "BigPanda's strategy is to automate as many aspects of the

incident management lifecycle as possible—but with technology that is easy to adopt, easy to use, and easy to maintain/administer."

BigPanda can support any applications that generate events, either directly or through third-party tools. Examples from past deployments include a wide range of options from web-based applications, SaaS, industry-specific applications, custom-developed applications, and even VoIP and rich media services—support for these last being rare across the current AIOps marketplace. However, the Autonomous Operations

Platform is not meant to replace APM vendor investments, but rather to complement them by providing full-stack incident management and minimizing redundant alerts.

In terms of reporting, BigPanda offers out-of-the-box support for trend analysis, problem area identification, problem team coordination, auditing past remediation efforts, and business impact and business outcomes. Its dashboards and overall visualization capabilities are broadly accessible through mobile browsers.

VENDOR STRENGTH

Headquartered in Mountain View, California, with development centered in Tel Aviv, Israel, Big Panda is a private company with fewer than 250 employees. The vendor is experiencing fast revenue growth, with a 150% year-to-year increase between

2018 and 2019. Nearly 80% of its client base of more than 50 customers is in large enterprises, with 20% in the mid-tier, focusing on verticals such as finance, healthcare, retail, hospitality/travel, transportation, high-tech, media, and MSPs.

Geographically, BigPanda currently targets North America exclusively. BigPanda partners with both systems integrators (SIs) and value added resellers (VARs). Among its more broadly used SIs are AHEAD, Sirius, and Trace3.

STRENGTHS AND LIMITATIONS

STRENGTHS

- BigPanda's Autonomous Operations Platform has shown itself to be highly deployable and easily administered compared to the vast majority of its competitors. This technology and resultant cost advantage is further enhanced through its use of customer success teams.
- BigPanda's Open Box Machine Learning and unique Explainable AI helps to set it apart in terms of visibility into how its AI/analytics work, and how they can best be understood and evolve, with transparency, testability, and control.
- The vendor's Autonomous Operations vision helps to place it center stage in how EMA sees IT organizations evolving to support the more dynamic requirements for cloud and digital transformation by integrating analytics with automation.

LIMITATIONS

- BigPanda's main limitation has also shown itself to be a strength. Unlike all the other vendors in this Radar, BigPanda is limited to events as opposed to time series, log files, and other data. This clearly narrows the scope of its analytics. But it also opens the door to faster deployment and faster time to value.
- Although it is a real and credible market presence, BigPanda remains an emerging vendor with limited geographical customer outreach.

CUSTOMER QUOTES

“

“We evaluated BigPanda against other leaders in the AIOps arena, and in the end we picked BigPanda because we could see more clearly what was relevant and how it was working.”

“We are leveraging BigPanda primarily for performance and availability, integrated with ServiceNow, VMware, Solar Winds, and Dynatrace, among other solutions.

“I would estimate no more than eight hours a week for basic, ongoing administrative overhead, not including adding new integrations or developing new use cases.”

“BigPanda nailed it. It became synonymous with ‘let’s make it all work.’ We have seen a 30% decrease in critical incidents caused by change, even though due to the current pandemic, we are seeing a 60% increase in stress to our systems, as more and more business is done digitally. We’ve also used BigPanda for insights on store and buying behaviors by leveraging its ability to monitor point of sale performance.”

“The great thing about working with BigPanda is that they are completely transparent. If they are not the best for a certain use case, they’re going to say it.”

These comments were taken from a manager of service management for a leading North American manufacturer/supplier.



EVALUATION SUMMARY



DEPLOYMENT COST EFFICIENCY: DEPLOYMENT & ADMINISTRATION

EASE OF DEPLOYMENT

PoC Availability	Outstanding
Versatility in Deployment Options	Strong
Automation for Deployment	Outstanding
Time for ML to “Learn” the Environment	Strong

SUPPORT AND SERVICES

Breadth of Professional Services	Strong
Levels of Customer Support	Strong
User Groups	Outstanding

EASE OF ADMINISTRATION

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

PRODUCT STRENGTH: ARCHITECTURE & INTEGRATION

ARCHITECTURE

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

INTEGRATION/INTEROPERABILITY

Third-Party Integrations	Outstanding
Third-Party Technical Integrations	Strong
Third-Party Business Integrations	Solid
Open-Source Integrations	Limited



EVALUATION SUMMARY



FUNCTIONALITY

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

COST ADVANTAGE

Estimated Cost for 5,000 MEs	\$\$
Licensing Model	Strong
Maintenance Costs	No cost
Estimated Time for ROI	Outstanding

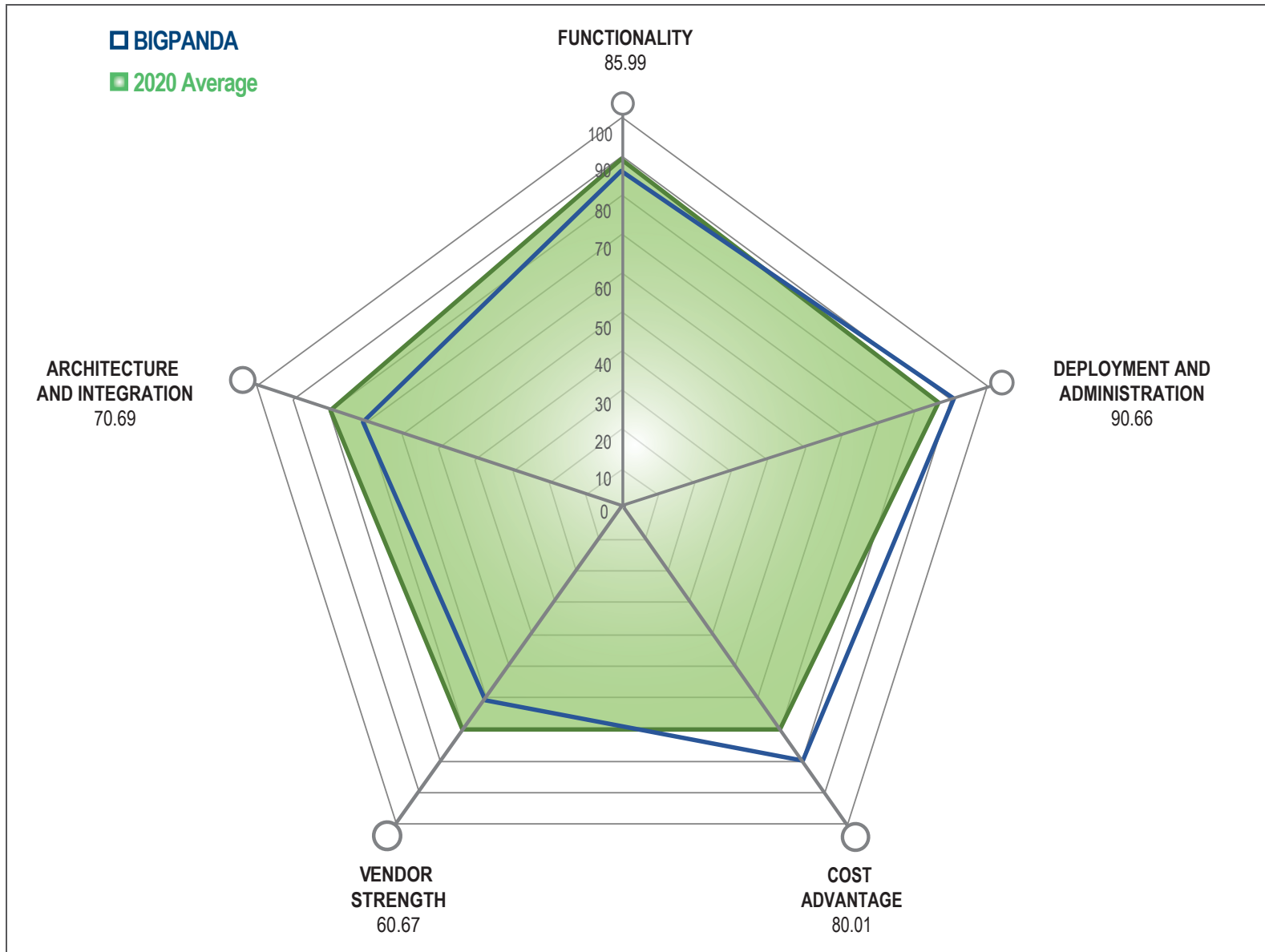


VENDOR STRENGTH

Financial Strength	Strong
Research & Development	Solid
Market Credibility	Strong
Geographic Coverage	Limited



2020 AIOPS RADAR – AVERAGE OF ALL USE CASES



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Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data 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 EMA's clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals, and IT vendors at www.enterprisemanagement.com or blog.enterprisemanagement.com.

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4018-08252020-BIGPANDA