

EMA AllStars 2024

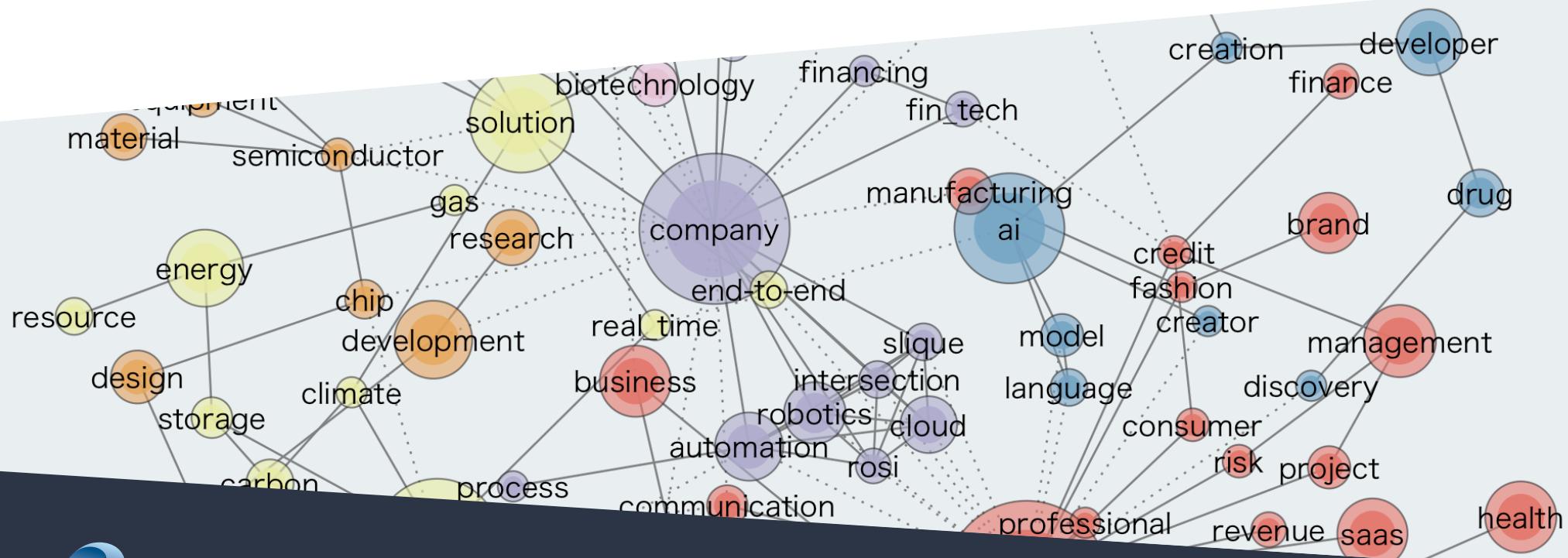
Artificial Intelligence – Observability – Automation – DevSecOps – DevOps – GitOps – Governance as Code – Hybrid Cloud – Infrastructure as Code – Kubernetes Management – Machine Learning – Microservices Management



January 2024 EMA AllStars Report

By Torsten Volk

Managing Research Director for Cloud-Native, DevOps, Machine Learning, and AI





Elastic Observability

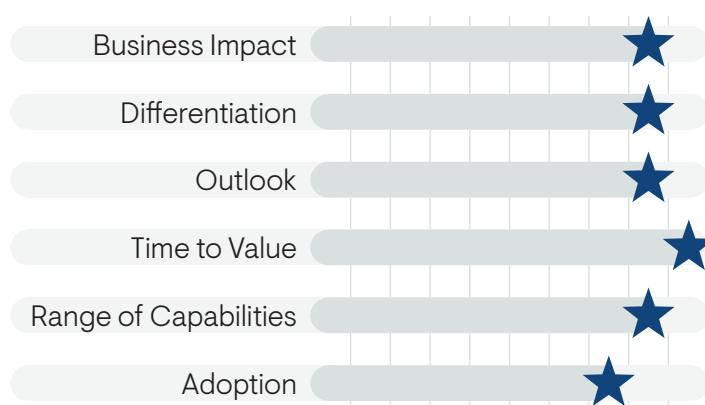
AI-Assisted Observability

Unified Visibility and AI-Powered Insights

Key Focus

01	02	03
Unified Visibility	Real-Time Analytics	Operational Flexibility

Product Score



Elastic Observability

From Data to AI-Powered Insights

Elastic Observability represents a significant advancement in data management by unifying various data types, including logs, metrics, uptime, application traces, user experience, synthetics, and profiling into a single, integrated stack. High-cardinality and high-dimensionality data ingested directly into Elasticsearch undergoes further processing and enhancement, enabling comprehensive visualization in Kibana. This unified approach not only breaks down data silos, but also facilitates a more effective analysis of system and application performance. Elastic Observability also provides flexible data retention, a key feature for modern application and operations teams that require flexibility in determining the relevance of data over time. This retention capability is crucial for long-term trend analysis. Elastic AI Assistant for Observability provides developers, operators, and SREs with the context required to quickly understand the root cause of an issue, the impact of new code, or the behavior of complex systems under varying conditions. By leveraging advanced machine learning algorithms, the Elastic AI Assistant for Observability can predict potential issues before they escalate, providing proactive alerts and recommendations. This enhances the ability to anticipate problems and also significantly reduces the time to resolution, streamlining operational workflows. Furthermore, the integration of AI and machine learning into Elastic Observability allows for the automation of routine tasks, such as anomaly detection and pattern recognition, freeing valuable resources for more critical tasks.

Key Personas

DevOps Engineers: Monitor applications and infrastructure in real time.	Site Reliability Engineers (SREs): Ensure high availability and performance of services.	IT Operations Managers: Gain insights into operational data for decision-making.	Security Analysts: Use for security monitoring and threat detection.	Data and Business Analysts: Analyze logs, metrics, and APM data for actionable insights.
---	--	--	--	--

Market Challenge

The market for IT observability is characterized by a growing need for comprehensive solutions that can monitor and analyze complex IT environments. This market demands tools capable of aggregating and processing vast amounts of data from various sources, such as logs, metrics, and application traces. The key requirements include real-time analytics for rapid issue detection and resolution, high system availability, and performance maintenance. Scalability to accommodate both traditional on-premises setups and modern cloud infrastructures is essential. Organizations in this market prioritize proactive issue detection, operational efficiency, and continuous improvement to stay competitive and maintain operational reliability.

Business Impact

Increased Efficiency: Elastic Observability helps organizations monitor and troubleshoot their applications and services, reducing manual processes and increasing operational efficiency.

Cost Savings: Elastic Observability provides dashboards that allow businesses to measure and track cost savings over time, and that also help companies efficiently store data. These features help businesses quantify their cost-efficiency and potential savings.

Improved Security and Compliance: Elastic Observability provides visibility into the organization's infrastructure, helping manage risk and streamline compliance.

Faster Deployment: Elastic Observability integrates with many popular CI/CD and DevOps tools, enabling faster deployment times and improved performance.

Integration and Flexibility: Elastic Observability supports a wide range of data sources and integrates with AWS, Azure, and GCP observability services, providing flexibility and choice for metrics tooling.

Improved Customer Experience: Elastic Observability enables organizations to monitor and optimize end-user experience, potentially leading to increased customer retention and loyalty.

Why Elastic Observability is an EMA AllStar 2024

- 1 Unified observability, visibility, and monitoring for hybrid and multi-cloud environments is included.
- 2 Elastic Observability seamlessly observes cloud native and microservices technologies, optimizing inefficient code and infrastructure configurations.
- 3 The platform collects telemetry data seamlessly, supporting open instrumentation standards and open source projects. This consolidates monitoring tools and efficiently stores high-cardinality data at affordable costs.
- 4 The many integrations with infrastructure, databases, application frameworks, and cloud environments accelerate deployment and prevent observability gaps.

Key Innovation

Unified Observability: Elastic Observability offers a unified view of IT operations by integrating metrics, logs, traces, and profiling data from diverse sources. This holistic approach breaks down data silos, providing a more complete understanding of system performance.

AI-Powered Insights: Leveraging AI, the platform transforms data into actionable insights, significantly improving issue detection and resolution. This AI-driven analysis is key for proactive system maintenance and enhances overall reliability and user experience.

Hybrid and Multi-Cloud Visibility: The platform excels in complex IT environments, particularly in hybrid and multi-cloud setups, ensuring comprehensive visibility essential for modern IT landscapes. Its capability in monitoring cloud native technologies and microservices architectures stands out, offering detailed insights into these dynamic environments where traditional tools may struggle.

Observation of Cloud Native Technologies: Additionally, Elastic Observability's seamless integration of various business and operational data, adhering to open instrumentation standards, facilitates a holistic and adaptable approach to telemetry data collection. This versatility ensures that organizations have an integrated view of their IT operations, which is important for effective decision-making and strategic planning.

“

As a data-driven organization, the unified view of logs, metrics, and traces that Elastic Observability provides has been invaluable. It's enabled our teams to have a more comprehensive understanding of our systems' performance. The learning curve was there, but the depth of insights we're now able to extract makes it worthwhile.



Senior DevOps engineer, large financial services corporation

”





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](#).

This report, in whole or in part, may not be duplicated, reproduced, stored in a retrieval system or retransmitted without prior written permission of Enterprise Management Associates, Inc. All opinions and estimates herein constitute our judgement as of this date and are subject to change without notice. Product names mentioned herein may be trademarks and/or registered trademarks of their respective companies. "EMA" and "Enterprise Management Associates" are trademarks of Enterprise Management Associates, Inc. in the United States and other countries.

©2024 Enterprise Management Associates, Inc. All Rights Reserved. EMA™, ENTERPRISE MANAGEMENT ASSOCIATES®, and the mobius symbol are registered trademarks or common law trademarks of Enterprise Management Associates, Inc.