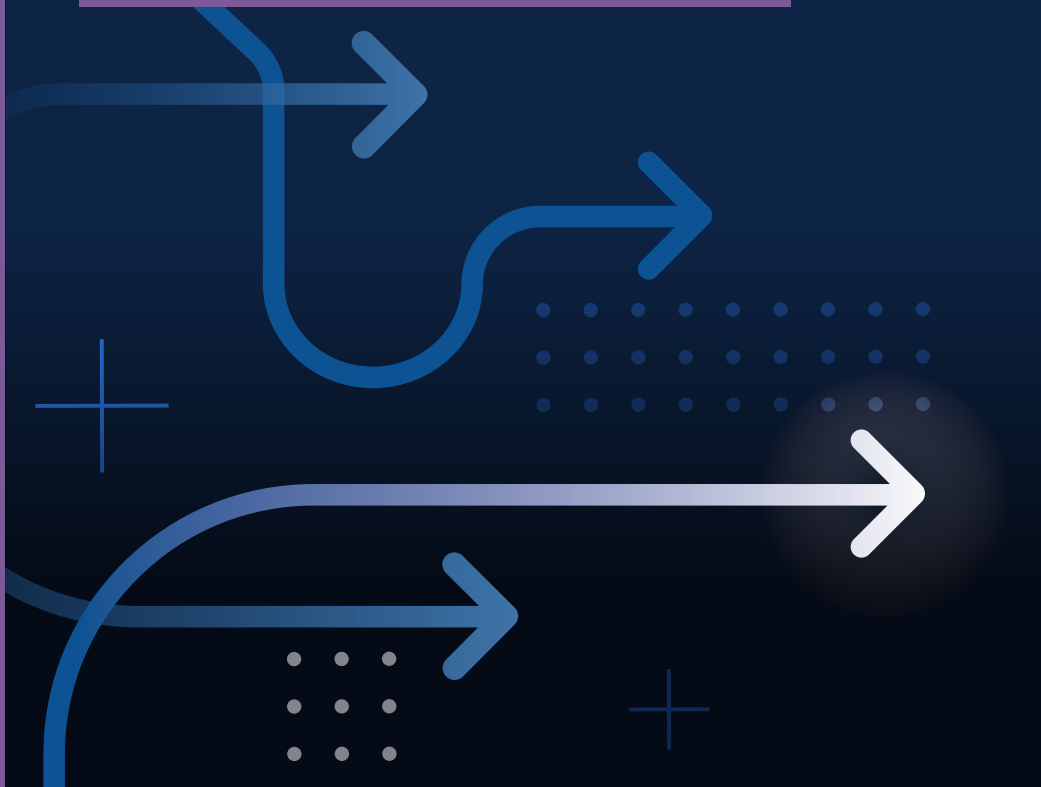
GIGAOM

COMMISSIONED BY:

NetApp

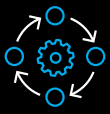
Optimizing SAN and Block Storage Efficiency

CLOUD, INFRASTRUCTURE & MANAGEMENT




GIGA
OM

GigaOm CxO Decision Brief: Optimizing SAN and Block Storage Efficiency



Solution Value

NetApp Data Infrastructure Insights is a comprehensive observability platform that streamlines IT operations by providing advanced analytics and AIOps capabilities. It detects performance anomalies, correlates them with infrastructure changes, and reduces operational costs through automation and enhanced cross-silo collaboration.

Benefits

NetApp Data Infrastructure Insights offers a robust infrastructure observability platform that enhances operational efficiency and reduces costs. By providing unified visibility across IT silos and leveraging a data-driven approach, it improves cross-functional collaboration and ensures alignment with strategic business objectives.

Urgency

Immediate consideration is essential for organizations relying on storage area networks (SANs) to support mission-critical workloads. Without effective monitoring and management, these environments face significant risks of downtime and inefficiency, increasing the demand for skilled technicians that are often hard to find.

Impact

Adopting NetApp Data Infrastructure Insights requires training and change management to ensure staff can fully leverage the platform. This can include updating help desk procedures, adjusting team structures for new observability tools, and ensuring consistent platform use across infrastructure resources, leading to a more resilient IT environment.

Risk

Organizations that adopt NetApp Data Infrastructure Insights must address integration complexities and staff training to avoid disruptions. While these challenges are manageable, investing in training and planning is important to optimize operations, reduce long-term costs, and improve overall system reliability.

01 Solution Value

BLOCK STORAGE AND STORAGE AREA NETWORKS (SANS) continue to be prevalent for mission-critical workloads due to their proven reliability and performance. Despite the emergence of alternative storage technologies, organizations still rely heavily on Fibre Channel (FC) and block (FC/block) storage for the predictable, high-performance demands of critical applications. With growth in the market expected to continue long term, ensuring the efficient management of these environments remains a priority.

Organizations managing block storage arrays face increasing challenges due to a shortage of FC/block subject matter experts (SMEs), which poses significant risks to maintaining operational efficiency and reliability. NetApp Data Infrastructure Insights directly addresses this challenge by providing a comprehensive infrastructure observability platform that enhances the manageability of complex IT environments. By enabling IT generalists to perform routine tasks with confidence, NetApp Data Infrastructure Insights frees up SMEs to focus on strategic initiatives, thus ensuring that operational bottlenecks are avoided and system performance remains optimized.

Beyond addressing the SME shortage, Data Infrastructure Insights delivers end-to-end visibility across the data path, including the SAN fabric. The platform's advanced analytics and AIOps capabilities automatically highlight performance anomalies and correlate them with infrastructure changes. This proactive approach reduces downtime and enhances cross-silo collaboration, ultimately improving overall operational efficiency.

For IT operations leadership, NetApp Data Infrastructure Insights offers the technical tools necessary to streamline IT operations, reduce the burden on specialized personnel, and lower operational costs. From a strategic perspective, the platform's robust data management and optimization capabilities–particularly in areas like CPU, memory, I/O, and network performance–support long-term IT initiatives, especially where AI is concerned in such areas as automation, predictive analytics, enhanced security, and resource optimization. NetApp's continuous innovation makes Data Infrastructure Insights a reliable choice for organizations looking to optimize their block storage management and future-proof their IT infrastructure.

02 Urgency & Risk

THE COMPLEXITY OF IT ENVIRONMENTS STEMS FROM MULTIPLE FACTORS, including the integration of various vendors, managing hybrid cloud and on-premises deployments, and the need to monitor and troubleshoot diverse storage architectures, such as storage-as-a-service (STaaS) and traditional storage systems. These complexities, coupled with the requirement for FC/block subject matter expertise, create a pressing need for comprehensive infrastructure observability solutions. Organizations that delay adopting such solutions risk significant operational inefficiencies, potential downtime, and missed opportunities for optimization. Selecting a capable provider with a well-formed solution, like NetApp with its Data Infrastructure Insights platform, is crucial for mitigating these risks and ensuring seamless, reliable operations.

Urgency

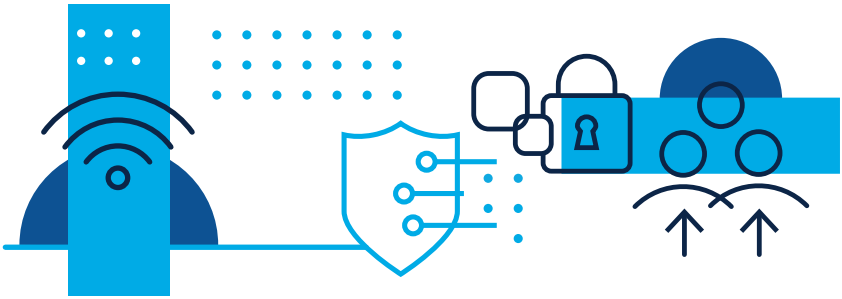
For organizations relying on SANs to support mission-critical workloads, the urgency to deploy a solution like NetApp Data Infrastructure Insights cannot be overstated. Without effective monitoring and troubleshooting tools, any disruption in these environments could have severe consequences, leading to significant downtime, data loss, and operational inefficiencies. The potential risks associated with not having a comprehensive observability platform in place include prolonged recovery times, financial losses, and reputational damage.

For IT Ops leadership, the ability to streamline operations and reduce dependency on increasingly scarce FC/block SMEs through immediate adoption of Data Infrastructure Insights can also be crucial. This can enable prevention of operational bottlenecks and ensure continuous monitoring and proactive problem resolution, which are vital for maintaining system reliability and performance.

Without effective monitoring and troubleshooting tools, any disruption in these environments could have severe consequences, leading to significant downtime, data loss, and operational inefficiencies.

02 Urgency & Risk

From the CIO and CTO perspectives, delaying the deployment of an observability platform can increase technical debt and slow response times to market demands. In sectors like finance and MSPs, where data integrity and uptime are paramount, the need for a robust observability solution is even more critical. Rapid implementation of a solution such as NetApp Data Infrastructure Insights will assist organizations in remaining competitive and resilient against disruptions.



Risk

Deploying NetApp Data Infrastructure Insights requires navigating integration complexities and ensuring proper training for IT staff. These tasks will help maximize the platform's capabilities and achieve comprehensive infrastructure observability. While they are common to any solution of this scope, thoughtful planning and resource allocation can ensure a smooth implementation. Temporary operational adjustments during deployment may be necessary to integrate the solution seamlessly with existing systems, but these can be managed effectively with the right approach.

With proper planning and execution, organizations can mitigate these risks and fully realize the benefits of enhanced visibility, proactive troubleshooting, and cross-silo collaboration. By investing in integration and training processes, companies will be well-positioned to optimize their operations, reduce long-term costs, and enhance overall system reliability. The key to success lies in recognizing and addressing these initial needs, ensuring that the transition to Data Infrastructure Insights strengthens the organization's operational framework without unnecessary disruptions.

03 Benefits

IMPLEMENTING NETAPP DATA INFRASTRUCTURE INSIGHTS brings significant advantages to both IT Ops leadership and executive decision-makers such as CIOs and CTOs. Data Infrastructure Insights offers a robust infrastructure observability platform that enables enhanced operational efficiency, reduced costs, and strategic alignment with business goals.

- **Enhanced operational efficiency:** Data Infrastructure Insights provides end-to-end visibility across the entire data path, including the SAN fabric. This comprehensive observability facilitates faster identification and resolution of performance issues, reducing downtime, improving overall system reliability, and decreasing total cost of ownership (TCO).
- **Enhanced cross-silo collaboration:** Data Infrastructure Insights facilitates collaboration across different IT silos by providing a unified view of the infrastructure, leveraging a data-driven approach, and providing full transparency into the infrastructure. This improves communication and coordination among teams, leading to faster issue resolution and more efficient operations.
- **Cost reduction:** By automating routine tasks and enabling IT generalists to handle complex environments, Data Infrastructure Insights reduces the dependency on scarce FC/block SMEs. This lowers staffing costs and minimizes the financial impact of operational disruptions, further decreasing (TCO).
- **Maximizing SME productivity:** By freeing SMEs from routine operational tasks, Data Infrastructure Insights allows them to focus on strategic initiatives and innovation. This maximization of SME productivity leads to improved job satisfaction, reduced turnover, and the ability to drive higher-value projects that contribute to long-term business growth.
- **Proactive problem resolution:** Leveraging advanced analytics and AIOps, Data Infrastructure Insights identifies unusual performance metrics or alerts, correlating them with infrastructure changes. This proactive approach expedites troubleshooting, preventing minor issues from escalating into major outages, and enables more effective strategic activities like capacity planning.
- **Future-proofing IT operations:** NetApp's continuous innovation positions Data Infrastructure Insights to evolve with emerging technologies and industry trends. This scalability and adaptability support long-term strategic IT initiatives, enabling organizations to remain competitive and resilient in a rapidly changing digital landscape.

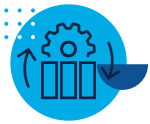
04 Best Practices

TO FACILITATE SMOOTH ADOPTION and avoid common pitfalls, the following guidance will help organizations optimize the deployment and utilization of this observability platform. These practices can guide organizations in effectively adopting NetApp Data Infrastructure Insights, leading to improved operational efficiency, reduced costs, and enhanced service reliability.

Deploy consistent infrastructure observability capabilities: Deploy tools consistently across all infrastructure resources to reduce tool-hopping and improve cross-silo collaboration. This provides a unified view of the entire IT environment.

Integrate SAN/block visibility into standard operating procedures (SOPs): Incorporate visibility for all IT stakeholders, including helpdesk and Level 1 support. This ensures that all team members are aware of and can act upon observability insights.

Leverage IT service management (ITSM) integration: Integrate ITSM tools within IT operations tooling to understand not just what infrastructure is consuming resources but also who (line of business, business units). This integration helps align IT operations with business needs and priorities.



Avoid fragmented solutions: Do not let the infrastructure footprint dictate tooling choices or create “science projects” to deal with observability challenges. Fragmented solutions create pockets of knowledge that are difficult to maintain as personnel changes occur.

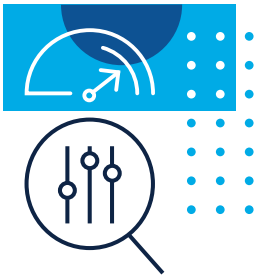
Proactive planning and training: Address the initial complexities of integration and provide training for IT staff. This preparation is essential for maximizing the platform’s capabilities and achieving comprehensive infrastructure observability. Proper planning and execution can mitigate risks, ensuring that the benefits of enhanced visibility, proactive troubleshooting, and cross-silo collaboration are fully realized.

05 Organizational Impact

IMPLEMENTING NETAPP DATA INFRASTRUCTURE Insights transforms organizational operations by providing a comprehensive infrastructure observability platform. This transformation enhances operational efficiency, reduces downtime, and improves cross-silo collaboration. The global impact on the organization includes the need for appropriate training and change management to ensure staff can leverage the platform's full capabilities. This may involve updating help desk procedures, adjusting team structures to support the new observability tools, and ensuring consistent use of the platform across all infrastructure resources. The result can be a more efficient and resilient IT environment that supports strategic business objectives and improves service reliability for the customer base.

While the initial costs include training and integration, the long-term savings from reduced downtime, optimized staffing, and improved operational efficiency can be substantial.

Investment Outlook



NetApp Data Infrastructure Insights requires a thoughtful investment strategy to ensure successful implementation and ongoing utilization. The platform is typically licensed on a subscription basis, with pricing models that may vary based on deployment size and specific organizational needs. Licensing terms are flexible, allowing scalability as the organization grows and its infrastructure needs evolve. While the initial costs include training and integration, the long-term savings from reduced downtime, optimized staffing, and improved operational efficiency can be substantial. Executives should budget for these initial expenditures while anticipating significant ROI from enhanced system reliability and performance. Additionally, as a SaaS solution, NetApp Data Infrastructure Insights can be rapidly deployed, minimizing supply chain risks associated with traditional hardware provisioning and further improving time to value.

06 Solution Timeline

ORGANIZATIONS CAN EXPECT TO FULLY IMPLEMENT NetApp Data Infrastructure Insights within a 6- to 12-week timeframe, depending on the complexity and size of their IT environment. Being a SaaS service, Data Infrastructure Insights can be quickly deployed into infrastructure over a matter of days to gather telemetry and monitor key workloads while working on other parts of the deployment. Key factors influencing the time to value include the initial setup and configuration of the observability platform, integration with existing systems, and appropriate training for IT staff to effectively utilize the toolset. Proper planning and dedicated resources can improve time to value by expediting the deployment process, ensuring a smooth transition and minimal disruption to operations.

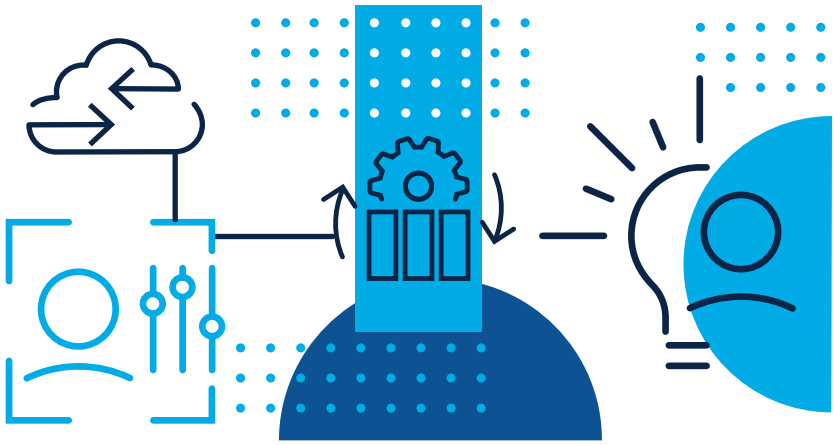
Key factors influencing the time to value include the initial setup and configuration of the observability platform, integration with existing systems, and appropriate training for IT staff to effectively utilize the toolset.

07 Future Considerations

Future Considerations

Over the next three years, organizations can anticipate several advancements and enhancements to NetApp Data Infrastructure Insights as part of their strategic roadmap. NetApp is focused on integrating more advanced analytics, AI-driven insights, and expanded support for hybrid and multicloud environments. Customers should plan for periodic updates that will enhance the platform's capabilities, including new features for improved data security, performance optimization, and scalability. As a SaaS offering, these updates are automatic. Continuous engagement with NetApp's updates and training sessions will be crucial to fully leverage these enhancements. This forward-looking approach ensures that Data Infrastructure Insights remains a vital tool in optimizing IT operations and maintaining a competitive edge in the evolving digital landscape.

Over the next three years, organizations can anticipate several advancements and enhancements to NetApp Data Infrastructure Insights as part of their strategic roadmap.



08 Analyst's Take

THE SECTOR OF INFRASTRUCTURE OBSERVABILITY is crucial for modern IT operations, particularly given the complexity of IT environments and the decreasing number of FC/block SMEs. NetApp Data Infrastructure Insights offers a comprehensive solution that addresses these challenges effectively. It provides end-to-end visibility and manageability, enabling IT generalists to handle complex tasks efficiently and allowing SMEs to focus on strategic initiatives.

NetApp aligns well with current market drivers by delivering advanced analytics, AI-driven insights, and robust support for hybrid and multicloud environments. These features enable Data Infrastructure Insights to remain relevant and valuable as IT landscapes evolve. Organizations must invest in appropriate training and careful integration to maximize the platform's benefits. Proper planning will mitigate deployment risks with enhanced operational efficiency and reliability. For IT Ops leadership and executive decision-makers, adopting NetApp Data Infrastructure Insights is a strategic move to optimize block storage management and maintain a competitive edge in an increasingly complex digital world.

Report Methodology

NetApp®

THIS GIGAOM CXO DECISION BRIEF ANALYZES a specific technology and related solution to provide executive decision-makers with the information they need to drive successful IT strategies that align with the business. The report is focused on large impact zones that are often overlooked in technical research, yielding enhanced insight and mitigating risk. We work closely with vendors to identify the value and benefits of specific solutions and to lay out best practices that enable organizations to drive a successful decision process.

About Howard Holton

HOWARD HOLTON IS AN ANALYST AT GIGAOM. He has worked in IT for three decades, the last half in executive leadership, as a CIO and CTO. He has been an engineer, an architect, and a leader in telecom, health care, automotive, retail, legal, and technology.

In the last decade, Howard focused on cloud technology and economics, data analytics, and digital transformation. As CTO of Hitachi Vantara, he spent his time developing digital transformation, IT, and data strategies for Fortune 1000 companies and global governments.

His years at Rheem Manufacturing, Hitachi Vantara, and others provided the experience that helped him develop a mind for leadership—the successful execution of vision and culture to inspire. Successful leadership is all about maximizing your team's potential, as Howard has demonstrated over the course of his career.

Howard is also a technologist at heart; passionate about how data science and new technologies can be used to accelerate time-to-market and better serve the customer, now and in the future. Howard has been a trusted advisor and agent of change to a number of organizations, bringing vision and successful execution to internal and external customers alike.

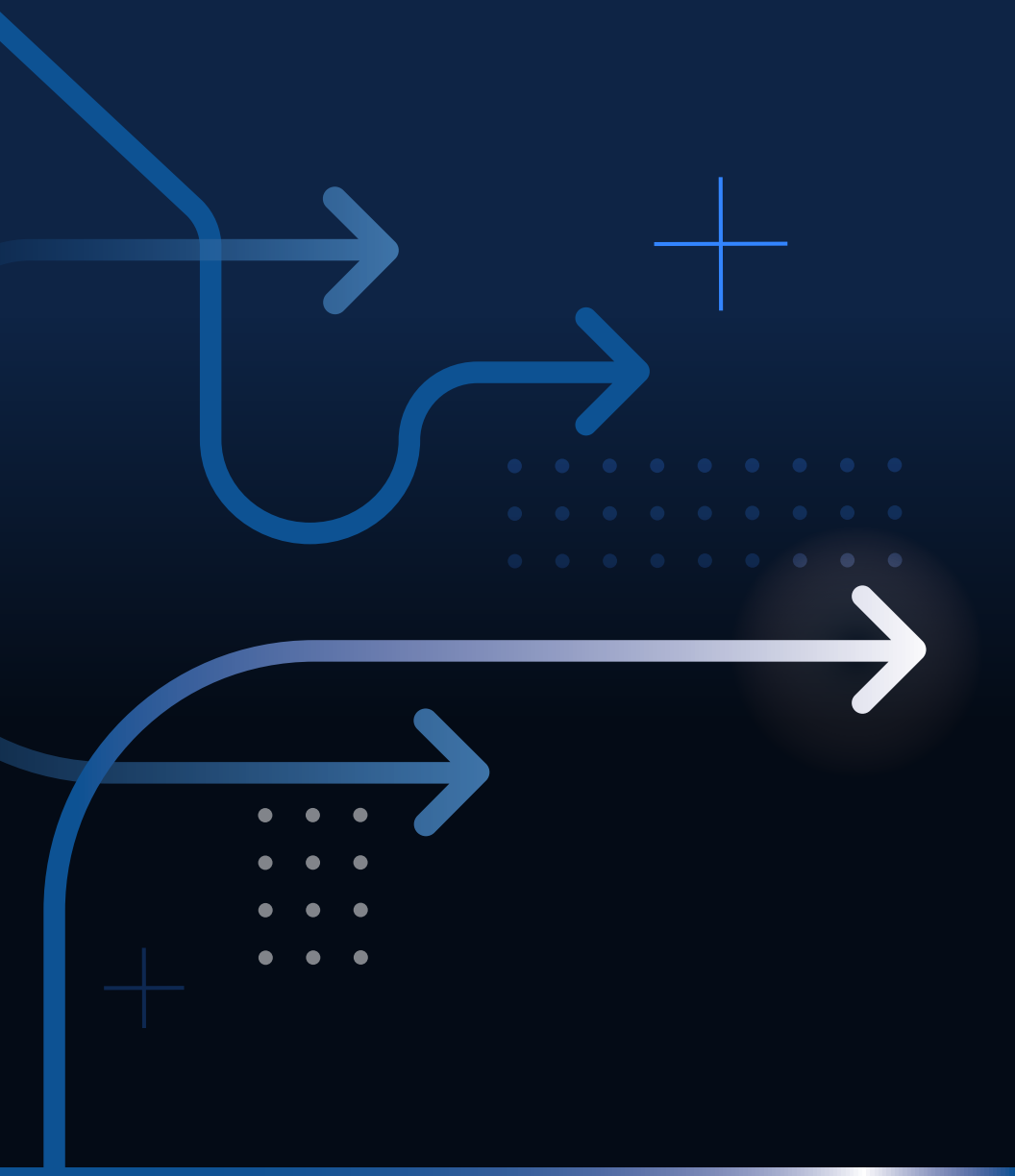
GIGAOM

About GigaOm

GigaOm provides technical, operational, and business advice for IT's strategic digital enterprise and business initiatives. Enterprise business leaders, CIOs, and technology organizations partner with GigaOm for practical, actionable, strategic, and visionary advice for modernizing and transforming their business. GigaOm's advice empowers enterprises to successfully compete in an increasingly complicated business atmosphere that requires a solid understanding of constantly changing customer demands.

GigaOm works directly with enterprises both inside and outside of the IT organization to apply proven research and methodologies designed to avoid pitfalls and roadblocks while balancing risk and innovation. Research methodologies include but are not limited to adoption and benchmarking surveys, use cases, interviews, ROI/TCO, market landscapes, strategic trends, and technical benchmarks. Our analysts possess 20+ years of experience advising a spectrum of clients from early adopters to mainstream enterprises.

GigaOm's perspective is that of the unbiased enterprise practitioner. Through this perspective, GigaOm connects with engaged and loyal subscribers on a deep and meaningful level.



GIGAOM

GigaOm democratizes access to strategic, engineering-led technology research. We enable businesses to innovate at the speed of the market by helping them to grasp new technologies, upskill teams, and anticipate opportunities and challenges. The GigaOm platform changes the game, by unlocking deep technical insight and making it accessible to all.