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GigaOm Radar for Cloud FinOps

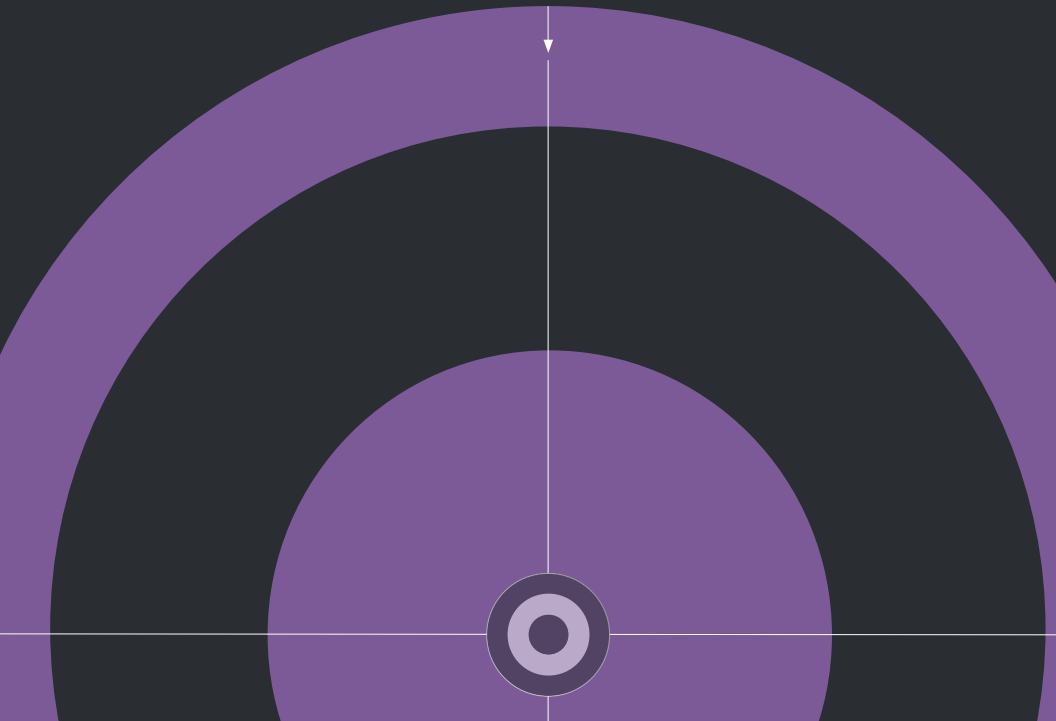
CLOUD, INFRASTRUCTURE & MANAGEMENT





GigaOm Radar for Cloud FinOps

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01

Executive Summary

IN MODERN IT ENVIRONMENTS, hybrid and multicloud infrastructures are now the norm, but runaway costs due to unmonitored growth and unanticipated spending have emerged as a major challenge. Enterprise finance departments are currently unable to do accurate cost breakdowns of cloud spends to the correct cost centers, and there's no transparency in monthly billing or accurate forecasts of future spend. As a result, many organizations pay for services, resources, and licenses that they don't use or need.

Thankfully, Cloud FinOps has emerged to help businesses realize the value of their cloud investment by fostering both financial accountability and data-driven decision-making.

Cloud FinOps encompasses cloud financial management, an approach centered on bringing finance, business, engineering, and IT teams into closer alignment on cloud spend—the term FinOps in this case is viewed as a blend of finance and DevOps rather than traditional financial operations. FinOps enables finance, development, and operations teams to work together to achieve faster product delivery while predicting and managing cloud costs. The goal is to ensure that cloud spending aligns with business objectives and strategic initiatives, and the focus is on efficiency, optimization, and continuous improvement.

Cloud FinOps differs from the traditional IT procurement CapEx model. Instead of finance allocating budgets to product teams, a cross-functional FinOps team (or cloud center of excellence) coordinates technology, business, and finance to optimize cloud vendor management, service rates, and discounting. This helps organizations better understand the tradeoffs among cost, speed, and quality, which ultimately allows them to gain financial control, drive predictability, and enable faster product delivery while reducing issues of transparency and accountability.

Cloud FinOps encompasses more than just processes and procedures; it also embodies culture, mindset, and best practices adopted at all levels of the organization. It's all about establishing financial accountability and ensuring value in cloud spending.



Cloud FinOps encompasses more than just processes and procedures; it also embodies culture, mindset, and best practices adopted at all levels of the organization.

This is our third year evaluating the cloud FinOps space in the context of our Key Criteria and Radar reports. This report builds on our [previous analysis](#) and considers how the market has evolved over the last year.

This GigaOm Radar report examines 16 of the top cloud FinOps solutions and compares offerings against the capabilities (table stakes, key features, and emerging features) and nonfunctional requirements (business criteria) outlined in the companion Key Criteria report. Together, these reports provide an overview of the market, identify leading cloud FinOps offerings, and help decision-makers evaluate these solutions so they can make a more informed investment decision.

GIGAOM KEY CRITERIA AND RADAR REPORTS

The GigaOm Key Criteria report provides a detailed decision framework for IT and executive leadership assessing enterprise technologies. Each report defines relevant functional and nonfunctional aspects of solutions in a sector. The Key Criteria report informs the GigaOm Radar report, which provides a forward-looking assessment of vendor solutions in the sector.

02

Market Categories and Deployment Types

TO HELP PROSPECTIVE CUSTOMERS find the best fit for their use case and business requirements, we assess how well cloud FinOps solutions are designed to serve specific target markets and deployment models (Table 1).

For this report, we recognize the following market segments:

Small-to-medium business (SMB): In this category, we assess solutions on their ability to meet the needs of organizations ranging from small businesses to medium-sized companies. Also assessed are departmental use cases in large enterprises, where ease of use and deployment are more important than extensive management functionality, data mobility, and feature set.

Large enterprise: Offerings are assessed on their ability to support large and business-critical projects. Optimal solutions in this category have a strong focus on flexibility, performance, data services, and features to improve security and data protection. Scalability is another big differentiator, as is the ability to deploy the same service in different environments.

Multinational: This market segment needs the ability to report financial requirements normalized on currency as well as the ability to track the particular operational and financial aspects of working in different countries. These organizations typically have the basic needs of large enterprises but are complicated by operational issues arising from running in multiple countries.

Managed service provider (MSP): MSPs or system integrators (SIs) that run cloud-like services or broker larger clouds and provide value-added services require multitenancy and may want to rebrand the user interface. A few enterprises that act as holding companies and offer shared services to their wholly owned companies may also value the multitenancy functionality. Some may also require features to track markup, discounts, and cloud credits differently from traditional business needs in a FinOps tool.

In addition, we recognize the following deployment models:

SaaS: These solutions are available only in the cloud. Often designed, deployed, and managed by the service provider, they are available only from that specific provider. The advantage of this type of solution is integration with other services and functions offered by the cloud service provider, as well as simplicity.

Hybrid: These solutions are meant to be installed both on-premises and in the cloud, allowing customers to build hybrid or multicloud infrastructures. Integration with a single cloud provider may be limited compared to cloud-only options, and these solutions may be more complex to deploy and manage. On the other hand, they are more flexible, and the user usually has more control over the entire stack in areas such as resource allocation and tuning.

Self-managed: With these solutions, the vendor provides the software, but the customer is responsible for installing it on compute platforms supported by the vendor. The OS or Kubernetes integration and all patching and software lifecycling is the customer's responsibility. This model is often chosen by buyers who need to run on-premises or in private clouds where it would be impossible to route traffic to and from a SaaS solution.



Table 1. Vendor Positioning: Market Segment and Deployment Model

	TARGET MARKET				DEPLOYMENT MODEL		
	SMB	Large Enterprise	Multinational	MSP	SaaS	Hybrid	Self-Managed
Anodot	✓	✓	✓	✓	✓	-	-
Apptio	✓	✓	✓	✓	✓	✓	✓
Broadcom (VMware)	✓	✓	✓	✓	✓	-	-
CloudBolt	✓	✓	✓	✓	✓	-	-
CloudZero	✓	✓	-	-	✓	-	-
DoiT	✓	✓	✓	✓	✓	-	-
Exivity	✓	✓	✓	✓	✓	✓	✓
Flexera	✓	✓	✓	✓	✓	-	-
Harness	✓	✓	✓	✓	✓	-	✓
Kubecost	✓	✓	✓	-	✓	✓	✓
Morpheus	✓	✓	✓	✓	✓	✓	✓
Neos	✓	✓	✓	✓	✓	-	-
NetApp	✓	✓	✓	✓	✓	-	-
OpenText	✓	✓	✓	✓	✓	-	-
Ternary	✓	✓	✓	✓	✓	-	✓
Yotascale	-	✓	✓	✓	✓	-	-

Source: GigaOm 2024

Table 1 components are evaluated in a binary yes/no manner and do not factor into a vendor's designation as a Leader, Challenger, or Entrant on the Radar chart (Figure 1).

“Target market” reflects which use cases each solution is recommended for, not simply whether that group can use it. For example, if an SMB could use a solution but doing so would be cost-prohibitive, that solution would be rated “no” for SMBs.

03

Decision Criteria Comparison

ALL SOLUTIONS INCLUDED IN THIS RADAR REPORT meet the following table stakes—capabilities widely adopted and well implemented in the sector:

- Dynamic extraction of pricing data from multiple public clouds
- Budget threshold management and alerts
- Identification and management of shared costs
- Cost allocation and showback
- Security, authorization, and audit controls

Tables 2, 3, and 4 summarize how each vendor included in this research performs in the areas we consider differentiating and critical in this sector. The objective is to give the reader a snapshot of the technical capabilities of available solutions, define the perimeter of the relevant market space, and gauge the potential impact on the business.

- Key features differentiate solutions, outlining the primary criteria to be considered when evaluating a cloud FinOps solution.
- Emerging features show how well each vendor is implementing capabilities that are not yet mainstream but are expected to become more widespread and compelling within the next 12 to 18 months.
- Business criteria provide insight into the non-functional requirements that factor into a purchase decision and determine a solution's impact on an organization.

These decision criteria are summarized below. More detailed descriptions can be found in the corresponding report, [“GigaOm Key Criteria for Evaluating Cloud FinOps Solutions.”](#)

Key Features

- **Normalized billing across multiple cloud vendors:** In a multicloud environment, it's vital to hide complex and nonstandard cloud billing and instead show directly comparable costs. This allows end users to make decisions based on the architectural requirements of any product and understand associated costs.
- **Cloud vendor cost comparisons:** One of the key elements of any FinOps tool is the ability to compare costs across multiple cloud providers to ensure the business is consuming the right cloud resources with the right product at the right price.
- **Cloud rate optimization:** Cloud rate optimization works to ensure that an organization is using the most cost-effective cloud resources for each application or workload. Optimization should be a balance of cost, performance, compliance, and value.
- **IT finance integration and chargeback:** As cloud computing challenges traditional IT finance processes, the finance team needs a comprehensive view of cloud costs. This is enabled through the use of chargebacks from FinOps solutions via integration with financial systems.
- **Identification of cost optimization opportunities:** FinOps tools can help organizations identify cost optimization opportunities and understand historical consumption trends. Tools can suggest how to reduce the cost for various cloud resources (compute, storage, network, database).
- **Integrations:** FinOps solutions need integrations and APIs for cloud vendors, financial and operational data, systems, and processes to enhance efficiency, transparency, and cost-effectiveness.
- **Tagging:** Tagging—adding an identifying label to a resource or instance—is essential to providing an accurate view of all costs across cloud usage.
- **Forecasting, trend, and variance analysis:** By incorporating variance analysis and forecasting as part of the FinOps practices, organizations can ensure they identify anomalies and have the right resources to provide value to the company, meet cloud needs, and keep costs under control.

Table 2. Key Features Comparison

		KEY FEATURES								
		AVERAGE SCORE	Normalized Billing Across Multiple Cloud Vendors	Cloud Vendor Cost Comparisons	Cloud Rate Optimization	IT Finance Integration & Chargeback	Identification of Cost Optimization Opportunities	Integrations	Tagging	Forecasting, Trend & Variance Analysis
5	Exceptional									
4	Superior									
3	Capable									
2	Limited									
1	Poor									
–	N/A									
Anodot	3	4	–	3	3	4	3	4	3	
Apptio	4.3	4	4	5	4	5	4	4	4	
Broadcom (VMware)	3.1	5	3	3	2	3	2	3	4	
CloudBolt	3.5	4	3	4	3	4	3	3	4	
CloudZero	3.1	4	1	2	2	4	4	5	3	
DoiT	2.9	3	1	4	2	4	2	3	4	
Exivity	3.4	5	1	3	4	3	3	4	4	
Flexera	3.8	5	4	4	4	4	3	3	3	
Harness	3.5	4	3	4	2	4	3	4	4	
Kubecost	2.5	2	2	3	2	3	1	3	4	
Morpheus	3.6	4	4	2	2	4	5	4	4	
Neos	2.8	3	3	2	2	2	3	3	4	
NetApp	4	4	4	5	2	5	4	4	4	
OpenText	3.1	3	2	4	2	4	3	4	3	
Ternary	3.4	5	3	3	2	4	3	4	3	
Yotascale	3.1	3	3	3	2	3	3	4	4	

Source: GigaOm 2024

Emerging Features

Container and serverless computing support: Most FinOps tools leverage IaaS costs and show optimization options. Tracking container and serverless deployment cost metrics can have additional benefits in showing both overall cost and unit cost.

Governance and policy support: FinOps tools should be able to support statically configured governance and policies and consume policy as code. In addition, more advanced solutions can pinpoint violations of regulations such as GDPR or HIPAA.

Predictive modeling: FinOps tools should be able to get cost estimates from the CI/CD pipeline and to consume outputs of performance management tools to show the cost impacts of an application release.

Sustainability and carbon footprint tracking: By tracking asset usage with environmental information and cloud financial data, organizations can gain insight into how their IT resources impact their sustainability goals and financial performance. With this knowledge, they can make informed decisions about how to balance performance, cost, and environmental concerns.

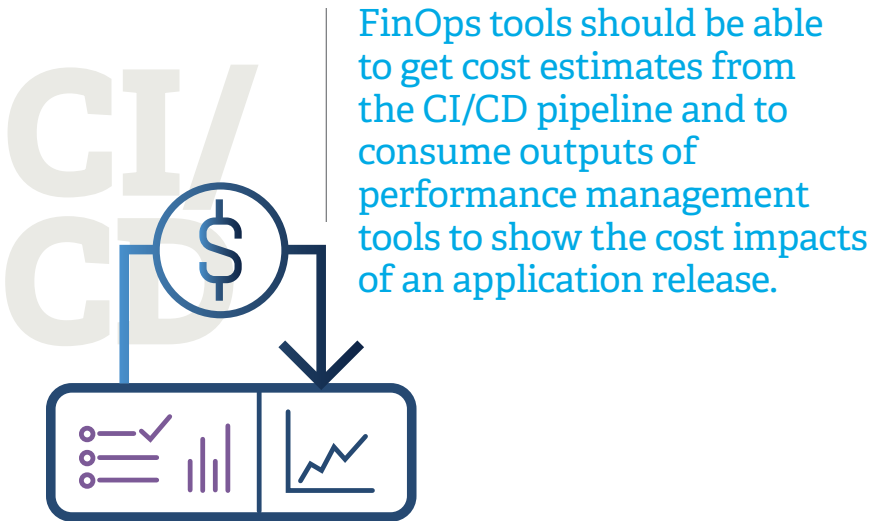


Table 3. Emerging Features Comparison

EMERGING FEATURES					
	AVERAGE SCORE	Predictive Modeling	Container & Serverless Computing Support	Governance & Policy Support	Sustainability & Carbon Footprint Tracking
5 Exceptional					
4 Superior					
3 Capable					
2 Limited					
1 Poor					
– N/A					
Anodot	2.3	3	4	2	–
Apptio	2.5	3	4	3	–
Broadcom (VMware)	2.8	2	3	3	3
CloudBolt	3	4	3	3	2
CloudZero	2.3	3	4	2	–
DoiT	2.8	3	3	3	2
Exivity	2	1	4	–	3
Flexera	3	3	3	3	3
Harness	2.8	3	4	4	–
Kubecost	3	–	5	–	–
Morpheus	2.8	3	4	2	2
Neos	0.3	1	–	–	–
NetApp	3.5	4	4	3	3
OpenText	2	–	3	2	3
Ternary	2.8	3	3	2	3
Yotascale	2	3	3	1	1

Source: GigaOm 2024

Business Criteria

- **Flexibility:** FinOps modernizes traditional processes to align with cloud cost management, a continuous process in which all enterprise entities must participate. Tools must assist companies in adapting to the variability of cloud costs.
- **Scalability:** FinOps solutions should be able to start small and grow with the business without limits or migrations.
- **Ease of use:** A FinOps tool must be easy to use and make it easy for users in different areas and departments to accomplish their goals.
- **Real-time decision-making:** The dynamic nature of cloud computing requires near real-time data to enable real-time decision-making and optimal business outcomes.
- **Security and compliance:** Cloud FinOps solutions must address security and compliance requirements to ensure that sensitive data and critical systems are adequately protected. This includes testing for vulnerabilities, data encryption, access controls, and compliance with industry regulations.
- **Cost:** The cost of FinOps solutions includes licensing of the product and platform, as well as training and professional services.

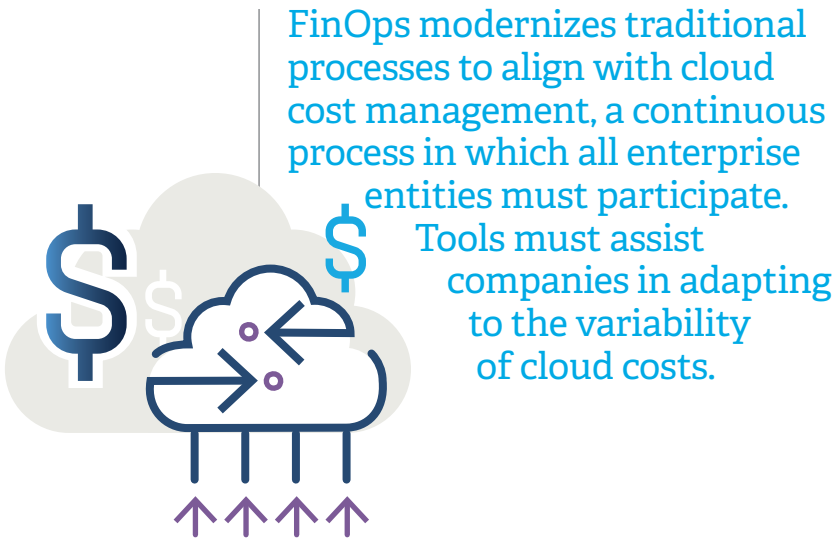


Table 4. Business Criteria Comparison

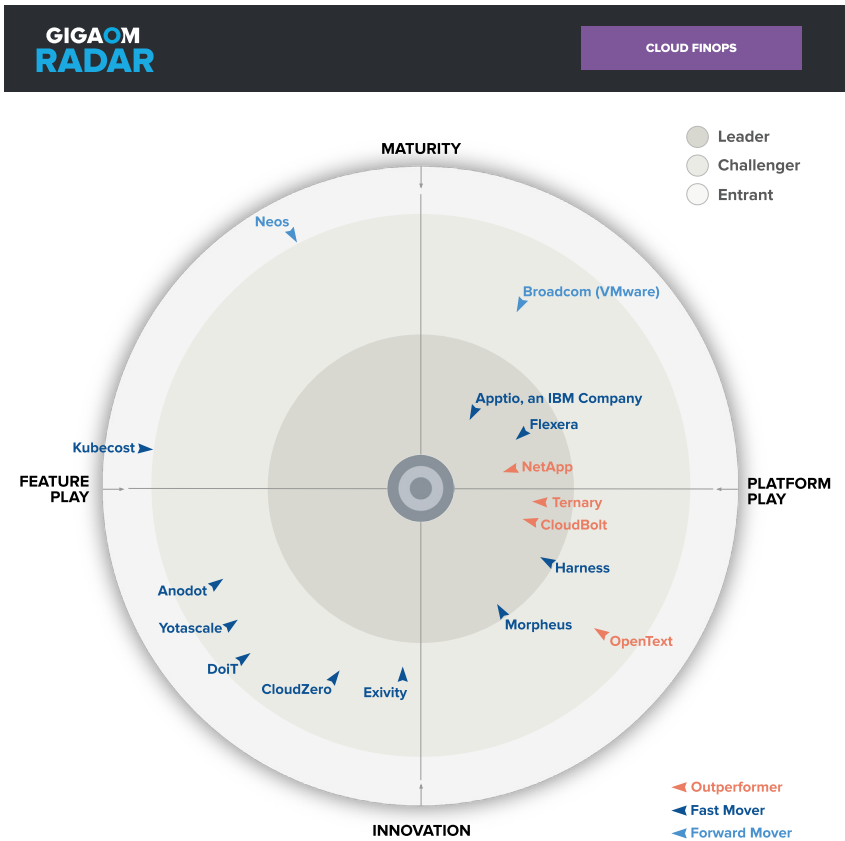
BUSINESS CRITERIA							
	AVERAGE SCORE	Flexibility	Scalability	Ease of Use	Real-Time Decision-Making	Security & Compliance	Cost
5 Exceptional							
4 Superior							
3 Capable							
2 Limited							
1 Poor							
– N/A							
Anodot	3.3	4	3	4	3	3	3
Apptio	3.7	4	4	4	4	3	3
Broadcom (VMware)	3.3	4	4	3	3	3	3
CloudBolt	4	4	5	4	4	3	4
CloudZero	3.5	4	4	4	3	3	3
DoiT	3.2	4	4	3	2	3	3
Exivity	3.5	4	5	3	2	3	4
Flexera	3.8	4	5	4	3	4	3
Harness	3.7	4	4	3	4	3	4
Kubecost	3.3	3	3	4	4	3	3
Morpheus	3.5	4	5	3	3	3	3
Neos	3.3	3	4	3	3	4	3
NetApp	3.7	4	4	4	4	3	3
OpenText	3.2	3	4	3	3	3	3
Ternary	4.2	5	5	4	4	3	4
Yotascale	3.2	4	3	3	3	3	3

Source: GigaOm 2024

04 | GigaOm Radar

THE GIGAOM RADAR PLOTS VENDOR SOLUTIONS across a series of concentric rings with those set closer to the center judged to be of higher overall value. The chart characterizes each vendor on two axes—balancing Maturity versus Innovation and Feature Play versus Platform Play—while providing an arrowhead that projects each solution’s evolution over the coming 12 to 18 months.

Figure 1. GigaOm Radar for Cloud FinOps



As you can see in the Radar chart in Figure 1, most of the vendors are in the Innovation half of the chart, which reflects the newness of this technology and ongoing changes in it.

The vendors in the Maturity half of the chart have had platforms in the FinOps market for a long time. Several are key members of the FinOps Foundation. They continue to be strong players in this market and continue to build out their FinOps functionality.

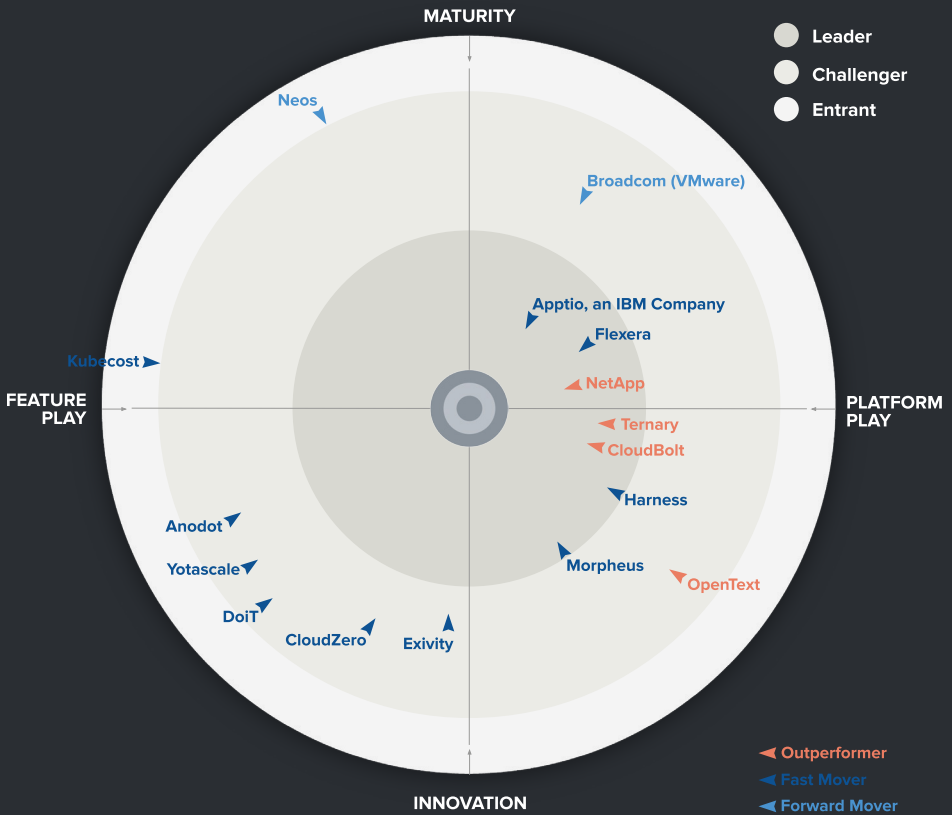
Vendors in the Innovation/Platform Play quadrant have FinOps solutions that integrate into wider portfolio offerings, providing customers opportunities and visibility beyond just FinOps. These vendors are expanding their FinOps functionality and are poised to capitalize on these capabilities as a part of their overall strategy.

There are several vendors to watch in the Innovation/Feature Play quadrant. These vendors have promising feature sets but are lacking in one or two particular areas, which may limit the number of use cases they're a fit for. Some vendors are focused on billing accuracy; others concentrate on short-term optimization, while others extend their value by providing intelligent forecasting for the next three years.

Overall, an organization's operational complexity, mix of clouds, and preferred deployment model will help decision-makers choose the best cloud FinOps solution for their requirements.

In reviewing solutions, it's important to keep in mind that there are no universal "best" or "worst" offerings; there are aspects of every solution that might make it a better or worse fit for specific customer requirements. Prospective customers should consider their current and future needs when comparing solutions and vendor roadmaps.

Overall, an organization's operational complexity, mix of clouds, and preferred deployment model will help decision-makers choose the best cloud FinOps solution for their requirements.



INSIDE THE GIGAOM RADAR

To create the GigaOm Radar graphic, key features, emerging features, and business criteria are scored and weighted. Key features and business criteria receive the highest weighting and have the most impact on vendor positioning on the Radar graphic. Emerging features receive a lower weighting and have a lower impact on vendor positioning on the Radar graphic. The resulting chart is a forward-looking perspective on all the vendors in this report, based on their products' technical capabilities and roadmaps.

Note that the Radar is technology-focused, and business considerations such as vendor market share, customer share, spend, recency or longevity in the market, and so on are not considered in our evaluations. As such, these factors do not impact scoring and positioning on the Radar graphic.

For more information, please visit our [Methodology](#).

05

Solution Insights

Anodot: Cloud Cost Management

Solution Overview

Anodot Cloud Cost Management (CCM) visualizes and optimizes cloud costs by monitoring cloud environments end to end, which includes providing an accurate breakdown of SaaS and Kubernetes costs. The solution is cloud agnostic and offers accurate billing in near real time.

Anodot for Cloud Costs supports MSPs, providing cost tracking and management of each tenant's discount or markup costs and generating billing for the MSP's customers. Its ability to identify cost optimizations exceeds the market average. Whereas many products simply extend a trendline (which can introduce risks in budget forecasts versus actuals as few projects grow linearly forever), Anodot for Cloud Costs is AI-powered and helps to predict future costs. This allows better negotiation of long-term discounts with cloud providers.

Strengths

Anodot uses AI to predict costs based on historical trends and identify cost optimizations beyond computing instance size. It is strong in normalizing billing across cloud vendors, which allows it to excel at identifying cost-reduction opportunities. It also supports Kubernetes workloads and exceeds the market on the variety of use cases it supports, as well as on its ability to scale to meet enterprise demands.

Anodot creates budget settings based on tags, services, and accounts. It also allows the integration of internal tools via an API that enables reading data from Anodot and loading it to external data warehouses. Alerts warn users before thresholds are crossed based on usage forecasts. The solution connects to cloud provider billing reports and uses anomaly detection to detect spikes in real time. The granularity and speed-to-awareness of cloud spend and the ability to correlate spending by application across cloud vendors exceeds the market on the key feature for normalizing billing across providers.

Anodot can identify and manage shared costs. Its cost explorer enables showback and chargeback based on applications, environments, services, and accounts. Forecasting is a strength, with the ability to produce a 95% accurate one-year

forecast based on two months of historical data. The system lets users create custom dashboards for each user/persona in the organization and supports dashboard and report sharing. Additionally, it recognizes new services offered by cloud providers and new generations of servers and creates recommendations accordingly.

Anodot's platform enables MSPs to automate rebilling processes with accuracy, eliminating manual processes and third-party solutions. It provides transparent cost and usage data across multiple cloud services, backed up by detailed, white-labeled invoices that match the cloud provider format.

Anodot also works with serverless and container spend and provides similar accuracy in forecasting those workloads. This is an emerging area of FinOps that few vendors have addressed.

Anodot scored high on scalability and flexibility, exceeding others in the market in terms of scalability to meet global enterprise needs and the flexibility to deal with new types of workloads or IT projects.

Anodot has a newly released AI tool called CostGPT. It provides real time insights into cloud cost structure, and its features include uncovering hidden costs, inefficiencies in pricing models, and unused resources that might lead to costly cloud charges.

Challenges

Anodot is relatively weak in advising about which cloud vendor to use to host an application and on modeling applications before they go live. Like several other cloud-native FinOps tools that work with hyperscale cloud providers, Anodot does not provide cloud vendor cost comparisons (one of the key features). This feature is needed by companies that want to estimate spend before deployment or to evaluate the cost of changing cloud vendors.

Purchase Considerations

It is a member of the FinOps Foundation and has a certified FinOps platform. Its base pricing is 1% of managed multicloud spend. Customer support is critical to Anodot, so organizations with less than \$5 million of annual cloud spend under management are supported through its network of managed services provider partners.

Anodot focuses on various industries for FinOps support, such as telecom, e-commerce, financial services, gaming, and advertising. In addition, it has capabilities directed at MSPs to support their customers and FinOps. Key capabilities for these industries include: multicloud cost visibility, cloud cost tagging, multicloud cost allocation, Kubernetes costs, cost reporting, showback and chargeback, cost-saving recommendations, and cloud unit economics.

Radar Chart Overview

Anodot leverages AI to predict costs based on historical trends and identify cost optimizations beyond computing instance sizing. It exceeds the market in normalizing billing across cloud vendors, which allows it to excel at identifying cost-reduction opportunities, but it is lacking in vendor comparison capabilities. As such, it lands as a Challenger in the Innovation/Feature Play quadrant.

Apptio, an IBM Company: Cloudability

Solution Overview

Apptio Cloudability enables IT, finance, and DevOps teams to work together to optimize cloud resources for speed, cost, and quality. Cloudability organizes billing, utilization, and metadata from across the major cloud providers to bring visibility and financial accountability to the variable, consumption-based spend model of public cloud, supporting teams as they establish and mature their FinOps practices. It addresses such areas as reserved instance planning, workload placement, rightsizing of cloud resources, container cost allocation, cost sharing, and anomaly detection. It uses tagging and business mapping to track billing and usage, and to provide near real-time insight and accountability across business units.

Apptio was involved in the early days of the FinOps Foundation and continues to contribute to the FinOps Framework. The platform supports additional clouds, like IBM Cloud and Oracle Cloud Infrastructure (OCI), to complement its public cloud capabilities on Google Cloud Platform (GCP), Microsoft Azure, and Amazon Web Services (AWS). Budgets can be automatically ingested into Cloudability from financial systems, matched to reporting periods, and tied to flexible allocation rules.

In August 2023, IBM completed its acquisition of Apptio.

Strengths

Cloudability provides single-pane-of-glass cost visibility across AWS, Azure, GCP, and OCI, normalizing concepts covering how cost is measured and categorized. In terms of measuring cost, some examples include converting all cost metrics into a single preferred currency, surfacing invoice cost, amortized cost, adjusted cost (applying any relevant custom pricing rules), and list cost. This means a user can review any report or dashboard across all clouds with a cost metric(s) that makes sense for them.

This cloud-based FinOps system provides users a daily summary email of estimated spend. More detailed analyses are provided for the current month, projected future

spend, and historical spend. Its ability to do chargebacks provides bidirectional links with financial systems, reduces the work needed to maintain the FinOps tool, and increases the accuracy of data provided to the finance system. Rate optimization takes full advantage of Apptio's near real-time spending awareness and knowledge of cost optimization possibilities.

Cloudability helps clients reduce hourly rates by increasing the commitment coverage and utilization. Recommendations for reserved instances (RIs), savings plans (SPs), and committed use discounts (CUDs) (across AWS, Azure and GCP) are generated by analyzing historical usage patterns, comparing them to the current commitment position and identifying purchase opportunities that will deliver additional savings. The portfolio features automatically notify users via email of impending expiration of these commitment contracts. Multiple-year commitments can be profiled using the commitment planning tools. In 2023, Apptio launched Cloudability Savings Automation, which enables customers to offload their day-to-day management of commitments.

Cloudability supports containers and serverless computing, and it provides governance and normalization of billing tags, allowing Apptio to support governance and policies.

Apptio allows its customers to integrate third-party observability solutions, ensuring high quality utilization data is available for its optimization recommendations and reducing dependency on the cloud vendors. The combined impact allows Apptio to exceed the market standard on the flexibility and scalability business criteria without degrading its usability.

Challenges

Sustainability and carbon emissions information is currently not available in the Cloudability product. This input is continuing to increase in importance to the FinOps community and to businesses and governments around the world. Given the depth of data the solution processes, and the potential benefit to customers, sustainability is a key area of opportunity for Apptio.

Purchase Considerations

Apptio is a premier member of the FinOps Foundation and has a certified FinOps platform. It is charged as a percentage of monitored cloud spend, with tiering as this increases (lower rates for higher spend). There is no limit or pricing connected to seats or users. A Cloudability license gets you access to all features of Cloudability (no tiering); however, there are additional license charges for add-ons (Cloudability Financial Planning, Cloudability TotalCost, and Cloudability Savings Automation).

From a platform perspective, Cloudability can be hosted entirely within the EU

(important for data residency needs) and is currently rolling out in APAC.

Cloudability customers come from different market segments and verticals. The most crucial factor driving the need for FinOps, and in turn Cloudability, is the scale of the cloud footprint itself and the need to push out financial accountability across a broad set of stakeholders. Therefore, larger organizations with large cloud bills will get the most value from Cloudability. Additional factors that support Cloudability use cases are scenarios in which cost allocation has some complexity due to issues like having multiple cloud providers, many business groups, or disparate categories of use due to mergers and acquisitions or other historical reasons.

Radar Chart Overview

Apptio, with its Cloudability platform, has been a long-time leader in the FinOps market. Its strength as a provider of broad FinOps functionality continues to grow. This places the vendor as a Leader in the Maturity/Platform Play quadrant.

Broadcom (VMware): Tanzu CloudHealth (Formerly VMware Aria Cost powered by CloudHealth)

Solution Overview

In November 2023, Broadcom acquired VMware. VMware Tanzu CloudHealth (formerly VMware Aria Cost powered by CloudHealth) simplifies financial management, streamlines operations, and improves organizational collaboration across multicloud environments. It provides robust functionality and optimization throughout the entire environment: on-premises, public, hybrid, or multicloud. The platform ingests and aggregates data from the multiple data streams to provide a holistic view of applications, infrastructure, and business.

Strengths

Using open APIs, Tanzu CloudHealth collects data from cloud providers including AWS, Azure, GCP, OCI, Alibaba, and VMware. It also connects and pulls data from third-party tools for application performance management, configuration management, and the like, allowing Tanzu CloudHealth to be the single source of truth for multicloud management.

Using Tanzu CloudHealth Perspectives, users can organize resources into business groupings using cloud native tags, custom tags, and asset metadata. Perspectives automatically pulls new resources in the environment into the appropriate Perspective groups and dynamically reallocates assets and costs when reorganizations occur. Additionally, FlexOrgs provides control over user access and permissions across multiple levels of organizational hierarchy. It enables businesses to grant

permissions and role-based access as desired across users and limit the data they can see to only what is necessary.

Tanzu CloudHealth FlexReports gives users the ability to run SQL queries to analyze data and answer critical business questions. To manage and govern their large multicloud environments, Tanzu CloudHealth's policy engine allows users to stay aware of changes and automate governance. Policies can be configured to apply only to specific groups or globally, can be used to incentivize more efficient cloud usage, and can be either created on the fly or scheduled. Policies can also be used to trigger third party integrations via Webhooks.

Users can identify opportunities to reduce wasted spend with custom rightsizing recommendations and terminate unused assets for greater efficiency. Tanzu CloudHealth provides cost optimization recommendations for specific resources across AWS, Azure, and GCP, including compute, storage, database, and containers. The solution can help manage commitment-based discounts (such as reserved instances, savings plans, and all Azure reservable services) throughout their lifecycle to maximize savings using Tanzu CloudHealth purchase modeling, optimization, and amortization capabilities. Tanzu CloudHealth can also analyze AWS EC2 reserved instance overages, modify and optimize existing reserved instances, and exchange convertible RIs.

Tanzu CloudHealth Anomaly Detection allows companies to view unexpected changes in spend (both positive and negative) by region, account, and service. It highlights historical trends in behavior, including views into the cost impacts of the service, helping teams to pinpoint the most severe anomalies in the environment. Machine learning algorithms adjust to periodic, seasonal, or other patterns that might be expected for workloads. In addition, the solution is able to receive user feedback and send it directly to the algorithm to train it for specific business scenarios.

Tanzu CloudHealth's ML-powered forecasting engine for all three major clouds allows users to generate forecasts of up to 36 months based on 12 months of historical data. Forecasts can be limited to Perspective groups, so you can see the predicted costs for a desired subset of workloads. Users can also apply growth factors for a desired time period, region, or service and save snapshots of forecasts for side by side analysis (up to three at a time).

Tanzu CloudHealth GreenOps capabilities allow customers to view data, share dashboards, and report on carbon emissions (CO₂e), power consumption (megawatt hours), and carbon intensity per region (metric tons of CO₂e) across cloud environments. With a built-in policy engine, Tanzu CloudHealth enables businesses to start and stop cloud instances at appropriate times, reducing the total

power consumption, and thus reducing carbon emissions. Granular data is available as a FlexReports dataset with power consumption and CO2e alongside daily per-instance metrics and location-based carbon intensity. It is mapped to FOCUS standards and supported in Perspectives.

Challenges

Tanzu CloudHealth has limited support for integrations to third-party financial systems such as SAP, Microsoft, and so forth. It does provide finance information and chargeback through reporting categorized by FlexOrg and Perspectives (with the ability to subscribe to reports and share them with external users). It offers only limited capabilities for predictive pricing prior to provisioning or deployment to understand the budget impact of cloud resources being deployed. However, what-if scenarios can be generated for migrating workloads to other on-premises data centers or public clouds by analyzing performance and configuration of physical and virtual servers.

Purchase Considerations

VMware is a premier member of the FinOps Foundation and has a certified FinOps platform. Online training at Tanzu Academy is available to users free of charge. Tanzu CloudHealth Customer Success Service is also offered with purchase at no additional charge.

Limited pricing information is available online for Tanzu CloudHealth. What public documentation is available states that license bundles are tiered based on the amount of cloud spend managed in the product and that discounts are available for longer term contracts. If customers overspend the managed tier, additional charges would apply.

Tanzu CloudHealth supports all industry types with this solution. Industries supported include healthcare, automotive, financial, and manufacturing as a start. Key scenarios include cost allocation and chargeback, budget management and forecasting, rightsizing and waste reduction, commitment-based discount management, and anomaly detection. Tanzu CloudHealth is also available for MSPs with a dedicated partner solution for managing multiple customers and generating unique customer bills in a central location.

Radar Chart Overview

Tanzu CloudHealth is a solid FinOps solution that can provide normalization of data across six of the largest cloud providers. This solution is part of a much larger platform focused on many areas of cloud operations. As such, it is positioned in the Maturity/Platform Play quadrant. Its scores across the decision criteria we evaluated classify it as a Challenger.

CloudBolt

Solution Overview

CloudBolt offers advanced hybrid cloud automation, orchestration, and financial management solutions that enable teams to support global IT delivery more efficiently at scale. CloudBolt offerings include Cloud Fabric Orchestration and Cloud Financial Management solutions.

Cloud Financial Management includes financial dashboards, self-service reporting, automated optimization, budgeting and forecasting, allocation and chargeback, and cloud commitment management.

Cloud Fabric Orchestration includes features to cover a modern cloud experience (architecting, deploying, and managing cloud services in a hybrid cloud environment), citizen development, paved roads (exposing only the choices and inputs needed for a particular service), day-two orchestration, technology integration, and a unified hybrid cloud.

Augmented FinOps involves natural language interaction, adaptable financial policies, maturity band scoring, workload placement, advanced financial orchestration, and extending FinOps to any cloud.

Strengths

CloudBolt offers forecasting, trend, and variance analysis functionalities. These features are part of the comprehensive cloud budget management suite that enables organizations to set and manage structured budgets within their organizational frameworks, encompassing multiple accounts and services. This unified approach allows for a complete overview of all cloud budgets, aligning spending with the company's financial strategy. CloudBolt supports IT finance integration and chargeback across major finance and accounting solutions such as SAP, Oracle, and Microsoft.

CloudBolt provides the capability to compare the pricing of basic cost deployments across multiple cloud vendors, including on-premises options. This feature is accessible during the provisioning process, when CloudBolt can model the cost implications for new builds across both private and public clouds, giving users initial insights into the cost variances among different cloud environments. Additionally, customers can easily visualize and compare the cost of services across multiple geographies, clouds, or service types for resources already deployed using advanced reporting functionality.

CloudBolt employs advanced proprietary algorithms for functions such as forecasting and anomaly detection. CloudBolt also suggests optimization options

based on historical cost and usage trends correlated to resource history. These sophisticated algorithms are a precursor to the more advanced AI capabilities that are slated for release on the 2024 roadmap.

The solution is able to scale globally across a vast number of applications and regions. Enterprises with over 300 internal users and multinational presence across eight global regions exemplify CloudBolt's capability to handle large-scale, global operations.

Challenges

CloudBolt uses SaaS for part of its functionality, which requires some acceptance of a permanent SaaS dependency. However, some features can run wherever required—on-premises or in private or hybrid cloud environments. CloudBolt should continue to broaden resource support to encompass more advanced cloud services, including intra and inter-container analysis.

Purchase Considerations

CloudBolt is a premier member of the FinOps Foundation. Its licensing model matches industry-defined standards for FinOps solutions and offers versatile options for commitments and growth planning:

- For SaaS-based solutions, CloudBolt offers a pricing model tied to a percentage of public cloud spend, allowing for dynamic pricing as a customer's infrastructure expands or contracts.
- For all solutions, it provides multiple-year, fixed fee, or rolling billing options for maximum flexibility for organizations to align to either CapEx or OpEx billing approaches.

While CloudBolt's solutions are designed for straightforward implementation, allowing organizations to proceed without the mandatory use of professional services, CloudBolt does offer professional services for those who seek additional support.

CloudBolt supports nearly every vertical for accelerating and optimizing cloud financial programs. This includes FinOps, multicloud visibility, showback, financial integration, and chargeback programs, automation to optimize and govern at scale, and self-service and orchestration. In addition, CloudBolt provides MSPs fast, accurate, and reliable cloud billing, improved revenue and margin controls, advanced customer management features, and more effective and efficient service offerings.

The solutions are used in nearly every vertical globally, more often in organizations with more than 1,000 employees.

Radar Chart Overview

CloudBolt has a strong offering in both FinOps capabilities and cloud operations as a whole. It continues to make innovative enhancements to the solution. The strength of these capabilities puts this solution in the Innovation/Platform Play quadrant as an Outperformer and Leader.

CloudZero

Solution Overview

CloudZero's platform automates the collection, allocation, and analysis of cloud cost data to uncover savings opportunities, remediate anomalous cost spikes, and improve unit economics. CloudZero controls spending and translates cloud cost into a shared language for engineering and finance. It dynamically ingests cost data from cloud vendors (AWS, Azure, and GCP), software providers (Snowflake, Databricks, MongoDB, New Relic, and Datadog), and Kubernetes—plus whatever else customers might need analyzed in near real time—and enriches billing data with context, such as AWS metadata and event streams like container insights and application telemetry.

Strengths

CloudZero takes a code-driven approach to allocating and organizing cloud spend—using an automated solution called CostFormation—even on containerized and multitenant infrastructure or in the case of untagged, untaggable, and shared resources. It has an AI-powered solution that detects cost anomalies by service, feature, and customer, then sends alerts to engineers responsible for the affected infrastructure. In addition to showback and chargeback, users can track budgets, forecast spend, and measure cost units.

A key differentiator is that spend is organized into business categories (or dimensions as CloudZero calls them), such as features, development teams, customers, and microservices. This is useful in detecting cost spikes for a product feature or single customer and tracking the ways business changes impact spend. CloudZero heavily focuses on unit economics that create a common language between finance and IT staff.

Another strength is that CloudZero facilitates a shared understanding of cost across organizational stakeholders. In particular, it helps engineering to take action based on FinOps feedback. This includes providing alerts for engineers and reports to help them quickly understand the costs associated with cloud architecture and software development decisions.

CloudZero alleviates the pains of tagging in a unique and different way. While customers can and do use tags as part of their allocation process, the company developed code-driven allocation functionality called CostFormation that dynamically and automatically allocates costs regardless of tagging strategy or hygiene. This highly-flexible approach allows customers to create rules and dimensions to assign costs, even costs related to shared resources, without having to constantly spin up tagging initiatives that force engineers to spend hours adding or cleaning up tags on cloud resources. This means you can still get great value even if your tagging efforts are ineffective.

It also helps developers adopt a FinOps mindset by quickly showing them the negative impacts to budgets on a deployment, then providing them with the context to connect the dots between cost and architecture. It also delivers on the idea of providing traceability between the owner of an IT product and the various parties involved in delivering and paying for the services.

Challenges

The product lacks native, prebuilt integration with IT finance systems and other IT management tools. It does provide APIs for teams to create their own integrations, however.

Purchase Considerations

CloudZero is a premier member of the FinOps Foundation and has a certified FinOps platform. The CloudZero platform features a tiered, consumption-based pricing model. Each customer is placed in a spend tier depending on its expected total annual cloud spend, allowing the management of their cloud spend up to a certain amount at a flat rate.

There is no charge for monthly overages because CloudZero tries to maintain consistent, predictable pricing for customers as their environment changes. After a customer has exceeded its spend tier for two straight months, it can move to the next tier.

All agreements are for a minimum of 12 months and include support that ensures customer success. In addition, it has add-ons that allow customers to expand things like data retention beyond the default standard provided.

While the product is available and valuable across all types of cloud-driven organizations, the primary target is technology solutions in different industries, such as cybersecurity, financial technology (FinTech), marketing technology (MarTech), and medical technology (MedTech).

The top solution use cases include unit economics (cost per customer, cost per feature, and so forth), cost allocation and showback, anomaly detection, forecasting

and budgeting, insights into cost optimization opportunities, single view of all cloud spend, and savings plans and reserved instances.

Radar Chart Overview

CloudZero has a notable feature set built around dynamically and automatically tagging untagged and mistagged items. It also offers AI-driven anomaly detection capabilities. It's positioned as a Challenger in the Innovation/Feature Play quadrant.

DoiT

Solution Overview

DoiT Cloud Navigator consists of several native products that help companies optimize their public cloud (AWS, Azure, and GCP) use. It includes the following products:

- **DoiT Flexsave** optimizes cost by automating compute commitment management. This product allows companies to gain the savings benefits of compute commitments without having to dedicate engineering resources to forecasting usage or managing the commitments themselves.
- **Cloud Analytics** displays visibility by providing granular reporting functions that can be grouped across teams, resources types, product lines, and so forth, and be tied to budgets and forecasting tools within the DoiT console.
- **Anomaly Detection** alerts teams to unpredicted cost spikes and provides drill-down capabilities for investigation. This product identifies the source(s) of the spike and offers best-practice recommendations so companies can prevent it from occurring in the future.
- **BigQuery Lens** provides visibility and cost optimization through usage insights, recommendations, and savings opportunities within GCP BigQuery.
- **Spot Scaling** optimizes cost by automating the use of AWS Spot instances to maximize savings and minimize risk.

DoiT enables FinOps for organizations with both its services and expertise (DoiT Cloud Solve) and technology (DoiT Cloud Navigator). Previously, DoiT maintained a resold version of the product; however, in 2023, it began to offer technology to new greenfield customers, independent of their cloud procurement. This has already begun to attract new customers who need support outside of their current cloud agreements for visualizing, analyzing, and governing their public cloud spend.

Strengths

DoiT's budget capabilities leverage ML to predict the point when budget thresholds will be reached, allowing users to guard against overspending. They can create custom forecasts for any combination of cloud resources and rapidly analyze trends in spend. Period-over-period analysis (actuals or percentage) can be performed to understand cloud consumption changes. Actual spend versus budgeted spend is displayed in two ways: from the overall budgets list or within the budget itself.

Cloud Analytics capabilities can filter cost components specific to a single cloud or filter out costs not relevant to a certain analysis. An internal TCO calculator offers GCP to AWS cost comparisons. GCP and AWS customers can leverage Flexsave to ensure their compute unit costs are optimized for good rates. In addition, DoiT Anomaly Detection can define normal behavior across each project and/or account and automatically alert stakeholders to any abnormal cost spikes. Specific functions are available by role for FinOps practitioners, heads of infrastructure, product owners, engineering leads, procurement, engineers, and developers.

DoiT has integrations with tools such as email, Slack, SSO tools, AWS, and GCP. It also provides a complete set of public APIs that can be customized and integrated with FinOps workflows. This includes features such as data, alerts, tickets, and notifications between platforms and tools. These are normally consumed by custom tooling and data warehouses.

Challenges

While the solution tracks costs to the product and provides accurate showback and chargeback information, there are no automatically generated general ledger entries. Integrations with key financial systems can reduce the complexity of ensuring accurate financial information is maintained and correct chargeback entries are made automatically. In addition, DoiT does not currently provide vendor cost comparisons. It works with customers who need this on options to fill those requirements.

Purchase Considerations

DoiT is a member of the FinOps Foundation and has a certified FinOps platform.

It has a straightforward pricing plan. Customers can create an account using business emails, then connect their cloud billing data to start using the product. They have a 45-day free trial before they have to commit to a pricing tier. For the DoiT Cloud Navigator product offering, there are three pricing tiers ranging from \$200 to \$3000/month. Each tier has additional features for more complex cloud operations. The DoiT Cloud Solve services offering includes three pricing tiers ranging from \$200 to \$5000/month. The higher tiers include a percentage of cloud spend in addition to the monthly fee.

Use cases for DoiT include many different industries and verticals including healthcare and life sciences, FinTech, ISV/SaaS, AI, crypto/block, cybersecurity, and gaming. In addition, the most common aspects used by departments such as engineering and finance are cost visibility and allocation, cost optimization, cost governance, and establishing and maturing a FinOps practice.

Radar Chart Overview

DoiT has moved from reselling a solution to offering a solution suite to greenfield customers. This solution has innovative features that allow dynamic workload shifting and optimization efforts by other tools that IT uses to manage compute needs, so it falls within the Innovation/Feature Play quadrant. It also excels in optimizing cloud rates.

Exivity

Solution Overview

Exivity provides full financial visibility for any cloud-based and on-premises resource. It enables metering and billing for public, private, and hybrid cloud environments, and it reports on cloud consumption from any IT resource. Exivity extracts IT consumption data from various endpoints and maps it to services, SKUs, customer IDs, names, and contracts. This can be used for internal chargeback and showback for enterprise IT, and it also enables MSPs, CSPs, and ISPs to apply specific billing rules to customers.

Strengths

Exivity streamlines normalized billing across multiple cloud vendors by integrating IT consumption data with business systems via a robust API for comprehensive reporting and management. This process ensures that billing information from public and private clouds is accurately consolidated and seamlessly aligned with the organization's financial systems.

A key differentiator is that this platform supports all major public clouds using various data extractors for consumption, discount, and pricing information, as well as on-premises and data center IT resource systems. It emphasizes making IT costs visible across the entire enterprise. Customers can modify templates to meet specific use cases. These templates are frequently updated and available directly from within the software.

Budget revisions can be configured for any level of an enterprise. Allocating budgets can be done by application, resource group, or subscription level. Budget

thresholds can be configured based on a percentage spend, which can trigger an event (email, Slack, SMS, or webhook). These features and the ability to link Exivity to popular financial systems contribute to a high score for this key feature. It also gets a high score for its support of multicloud and hybrid application deployments without losing visibility of the application's TCO.

Shared hybrid IT costs can be automatically allocated to business units, departments, or external clients. Exivity can use equal or percentage-based distribution methods, manual lookup tables, or resource tagging to achieve any type of charging distribution logic. Automation is accomplished via mapping techniques involving a combination of tags, naming conventions, lookup tables, and third-party data source integration.

Exivity ships with a Microsoft Power BI plug-in, enabling users to execute forecasting and trending reports based on an out-of-the-box Power BI report. The platform supports authentication via local account, LDAP, or SAML2 identity providers (IdPs). Authorization (global permissions and fine-grained account access) can be managed within the software or provisioned from SAML attributes.

Exivity is a single-product SaaS-based platform that can be wholly managed by the customer and deployed anywhere: on-premises, private clouds, or inside hyperscaler environments. If a SaaS version is not viable, this may be a key purchase consideration for your company. The company also offers a fully managed solution called Exivity-as-a-Service (EaaS), which is hosted inside a hyperscaler. The SaaS solution targets companies of all sizes.

Challenges

The focus is on metering and billing of cloud providers, so Exivity provides limited capabilities for cloud vendor cost comparisons and predictive modeling.

Purchase Considerations

Exivity is a member of the FinOps Foundation and has a certified FinOps platform. Its overall goal is to differentiate on a cost-benefit basis. Therefore, it offers an all-in license (including all features, updates, upgrades, and support).

The license can be obtained in one of the following ways:

- Pay-as-you-go subscription
- Tiering (volume based)
- Multiple-year (commitment based)
- Perpetual

It is possible to switch between the licensing models. Exivity wants to provide

maximum flexibility for customers and acknowledges the dynamic requirements for spend and budget management.

In addition, Exivity offers a professional services QuickStart Package, though it also supplies extensive support services as part of the standard license.

Exivity wants to make deployment and configuration as simple as possible by providing training, tutorials, best practices, ready templates, and out-of-the box workflows.

Exivity's customer base is global and cross-industry. For enterprise users, key use cases include IT chargeback and showback, real-time visibility of IT budgets, and full financial visibility, along with understanding cost and support FinOps phases (inform, optimize, operate) and feeding aggregated usage data to enterprise resource planning (ERP) and general ledger. Exivity also serves XSPs, telecoms, resellers, and distributors whose use cases include enabling and automating consumption-based, pay-for-what-you-use business models, identifying service and contract profitability, and recalibrating legacy IT contracts.

Radar Chart Overview

Exivity is a strong metering and billing solution that provides key FinOps features. It supports one of the largest groups of cloud providers and ingests all types of cloud cost data. It doesn't provide vendor cost comparisons, however. This lands the company as a strong Challenger in the Innovation/Feature Play quadrant.

Flexera: Flexera One

Solution Overview

Flexera One is a comprehensive SaaS-based IT management platform that consists of multiple integrated (but individually packaged) modules that work in concert to optimize the value of an organization's technology investments across a hybrid IT estate. For purposes of this evaluation, it includes FinOps capabilities, which consist of cloud cost-optimization functionality, cloud migration and modernization, and SaaS optimization. Flexera One also includes industry-leading IT asset management (ITAM) capabilities and IT visibility functionality that enables a view into all resources used across the hybrid IT estate. Flexera provides near real-time data collection across all major cloud providers, including AWS, AWS China, Google, Azure, Azure China, Oracle, and Alibaba.

Strengths

The solution provides alerts to help users manage budgets by application, resource group, or subscription level. Billing centers can be configured in a hierarchical structure so that cost reporting can better match the organizational reporting structure. This exceeds the market and enables reports that are more useful and can be tailored to each manager and the scope of their needs.

Flexera has a broader platform that can reduce the vendors needed across IT spend management. Flexera One Cloud Cost Optimization can be bought independently or as a part of the Flexera One suite of tools. Either way, it uses the Flexera One Administration module to manage users, user groups, and roles across accounts. Flexera supports authentication with username and password or through an IdP.

Flexera models can track costs back to business services. Billing centers provide a method of allocating costs into certain groups or cost centers, which can be analyzed and reported or alerted on. Users can create any number of billing centers, each spanning multiple cloud vendors and accounts.

Flexera normalizes the cloud bill across AWS, Azure, and GCP with a direct connection to each provider, and any cloud or SaaS service can be ingested. In addition to cloud spend, the platform can encompass software licenses, purchase orders, and SaaS expenses. A cost optimization service provides cloud vendor cost comparison to highlight the best business value. Another strong feature compares the costs for migration to different public clouds.

Rate reduction recommendations help to reduce cloud spend. Further cost optimization features cover infrastructure as a service (IaaS) and platform as a service (PaaS)—including unused volumes, instances, and databases—as well as rightsizing databases and instances covering AWS, Azure, and GCP. Such recommendations can run at a frequency of 15-minute intervals, alerting the user about optimization opportunities in near real time. This functionality scored very well on the key feature ratings.

Flexera's customizable dashboards and table views allow reports to be created to suit specific needs. Hosted in AWS, Flexera One is a cloud-based, API-driven solution designed with a microservices-based architecture. Bill ingestion can scale to thousands of cloud accounts and billions of lines of cloud bills.

The solution includes a module for sustainability and carbon footprint tracking. This functionality is integrated within the IT Visibility Flexera One offering, leveraging the data available in Technopedia, the world's most comprehensive technology data reference catalog. It tracks all essential components, including device-level carbon footprint estimates, application-level impact assessments, and data center and network infrastructure evaluations.

Challenges

Flexera continues to address functional gaps that put it at a disadvantage compared to others in this market. For example, user reporting is a weaker area but based on customer feedback during 2023, Flexera is working to deliver an enhanced experience leveraging PowerBI to enable customers to create their own dashboards and reports.

Purchase Considerations

Flexera is a premier member of the FinOps Foundation and has a certified FinOps platform. Pricing for Flexera's FinOps/Cloud Cost Optimization offering is based on a simple flat fee per year, according to a customer's public cloud spend across all clouds managed in the solution. If public cloud spend increases during the year, there are no unexpected costs, offering predictability that customers appreciate. Pricing includes all features of the selected solution, with unlimited accounts, users, and support. Additional options are available for professional services, but professional services are not required to implement the standard solution. Additional discounting is available as part of multiproduct bundling options. MSPs are placed in a tier based on aggregated cloud spend across all customers managed.

The Flexera platform can serve a broad set of industries and use cases. Some of the key feature use cases include visibility and allocation of cloud costs (public, private, non-western regions, and so forth), optimization, operationalization, measuring of unit economics, budgeting, forecasting, committed use discount (reserved instances, savings plans, and the like), analysis and planning, and unit metric economic functionality.

Moreover, it also covers discovery and monitoring of SaaS applications, supporting the renewal and optimization of SaaS spend based on actual usage, application discovery, and mapping of business services to support cloud migration planning, workload modernization, and multicloud pricing comparisons for onboarding workloads to public cloud.

Radar Chart Overview

Flexera is positioned as a Leader in the Maturity/Platform Play quadrant. It can reduce the number of vendors needed for IT spend management. For example, Flexera One Cloud Cost Optimization solution can be bought independently or as a part of the Flexera One suite of tools. In addition, Flexera provides exceptional value in its functionality for a broad range of needs.

Harness: Cloud Cost Management

Solution Overview

Harness Cloud Cost Management (CCM) is an automated solution for managing, optimizing, and governing cloud costs. It gives FinOps, DevOps, and engineering teams the tools to maximize cloud cost savings while simplifying the activities involved. It provides out-of-the-box visibility of and cost savings for cloud workloads running on AWS, Azure, and GCP, as well as for containerized workloads running on Kubernetes, Amazon ECS, and on-premises solutions. A cloud-cost business intelligence feature includes reports and dashboards that visualize information and analyze complex budgeting and forecasting scenarios. Current costs can be compared against recommended changes and optimization opportunities throughout the infrastructure.

Strengths

With Harness CCM, users can create contextualized views at any layer of the organization using budgets set at the required level of granularity. Alerts can be set up for costs that are forecast to go over budget to alert stakeholders if and when they do go over budget. Users can create custom reports and dashboards that show high-level budgets, visualize groups of budgets across the organization, tie them to business key performance indicators (KPIs), schedule reports, and set alerts based on requirements.

Harness works across all major cloud providers, including single, hybrid, or multicloud environments. It gives customers deep business context into Kubernetes costs with cost perspectives, providing a single view of all containerized and non-containerized workloads by teams, applications, environments, and more. Harness provides recommendations for Kubernetes clusters to show resource optimization opportunities to potentially reduce monthly spend. The visibility is down to the pod level, allowing users to understand where and how resources are used and to find the right allocation of shared resource costs across cost centers.

Cost perspectives can allocate resources, see associated costs, and tie future resource changes to those same cost perspectives. This helps to simplify showback models. Costs can be allocated to internal cost centers down to the developer level, as well as to customers, products, teams, or any other configuration. Each of these scenarios can be supported by a custom dashboard for stakeholders that speeds up the process of validating showback or chargeback.

A notable feature for use in non-production environments (dev, test, staging) is Cloud AutoStopping, which is the ability to automatically turn off instances when not in use to reduce non-production hosting costs. The user can “spin up” the instance as

needed without knowing the instance was turned off. Based on rules, the instance will be turned off again when it is not in use. This feature received a high score.

Challenges

CCM's ability to support operations teams with health metrics is complicated by its limited ability to work with other IT service management (ITSM) systems, though it does have an integration with Datadog and relies on APIs for other ITSM solutions. While Harness provides integrations to its platform of products, it doesn't provide integrations to market-leading financial solutions for general ledger entries, or the interchange of financial data and budgets. It does provide APIs to help build integrations with other tools.

Purchase Considerations

Harness is a member of the FinOps Foundation and has a certified FinOps platform.

Its pricing scales to fit customers' specific needs. The lowest tier includes a generous "free forever" plan enabling organizations to get started. There is a start up tier with additional flexible features. The top tier is focused on enterprise organizations. All tiers have AIDA, an AI assistant. Cloud cost management is also available for all tier levels.

Harness use cases support a broad range of industries. Key scenarios include features such as AutoStopping that automatically manages idle cloud resources, right-size usage pattern analysis, and actionable recommendations for optimal cluster and cloud resource rightsizing, cost anomaly tracking, in-depth Kubernetes cluster management, automated governance of cloud assets, and automated management of commitments.

Radar Chart Overview

Harness is positioned as a strong Challenger in the Innovation/Platform Play quadrant. Innovation, such as Harness' ability to automatically stop and start instances behind the scenes, is key to long-term cost savings with minimal impact to users. It gives actionable recommendations for rightsizing node pools and compute resources.

Kubecost

Solution Overview

Kubecost is a specialty solution that provides real-time cost visibility and insights for teams using Kubernetes, helping users to continuously reduce their cloud costs. It breaks costs down by any Kubernetes concept, including deployment, service,

namespace, and label. It can also view costs across multiple clusters in a single view or via a single API endpoint. It is no longer focused solely on Kubernetes. Kubecost also provides monitoring and optimization insights for all cloud providers, and it recently added Datadog and Carbon Costs.

Strengths

Kubecost provides deep Kubernetes financial controls for developers, engineers, and other FinOps stakeholders. Kubernetes costs can be joined with any external cloud services or infrastructure spend. External costs can be shared and attributed to any Kubernetes concepts. Recommendations are offered on how to reduce spend without sacrificing performance, and prioritized based on key infrastructure or application changes for improving resource efficiency and reliability.

Kubecost is designed to catch cost overruns and infrastructure outage risks and provide real-time notifications before they become a problem. Engineering workflows can be preserved by integrating with tools like PagerDuty and Slack.

Kubecost natively integrates with AWS, Azure, GCP, and Alibaba, and it can custom integrate with other cloud platforms. Accurate cloud costs are shown for users within the application in a unified dashboard. Real-time alerts can be set for efficiency, budget thresholds, spend changes, infrastructure health, and recurring updates. These are configurable via the Kubecost interface or deployment values. Alerts can be received via email, Slack, the Kubecost interface, or custom tools such as PagerDuty. These alert-related features contribute to a high score for the real-time decision-making business criterion. Anomaly detection is a governance tool which detects when cloud services significantly deviate from their projected spend. This feature, as well as a forecasting feature, are powered by the forecasting container, which is enabled in Kubecost by default.

Kubecost supports SSO/SAML 2.0, enabling users to manage application access with IdPs like Okta, Auth0, AzureAD, PingID, and KeyCloak. It natively supports user authentication to restrict access internally and externally. It also has custom access roles and predefined user roles that restrict users to various product parts or assign admin or read-only access.

Kubecost forecasting looks at a period of usage and then extrapolates this over a longer time to predict future expenses. Customized reports can be tailored to various stakeholders within an enterprise, including engineers, managers, and executives from all departments. Newly released machine learning-based forecasting models leverage historical Kubernetes and cloud data to provide accurate predictions, allowing teams to anticipate cost fluctuations and allocate resources efficiently.

Challenges

Kubecost has historically focused on Kubernetes in public clouds and on-premises. It recently added monitoring and optimization insights for all cloud providers. It is worth assessing these new capabilities to ensure they are robust enough to match other vendors in this area and provide value-managed financial accountability for non-Kubernetes spend. If Kubernetes constitutes a majority of your cloud spend in the public cloud or on-premises and the newly added features address the multi-cloud non-kubernetes spend, this may be a great solution for your needs.

Purchase Considerations

Kubecost is a premier member of the FinOps Foundation and has a certified FinOps solution. Its on-premises version is licensed in two tiers: a free base tier and an enterprise tier that includes unlimited users and clusters, no infrastructure data shared, and open-core software, as well as upgrades such as enterprise-grade security and support. Each tier includes functionality from the lower tier, allowing organizations to start smaller and grow with the product.

Kubecost Cloud is the company's new multitenant SaaS solution, which runs the Kubecost agent locally on Kubernetes clusters, and supports unlimited clusters across AWS, Azure, GCP, and on-premises infrastructure. Kubecost Cloud can monitor cloud spending across the major cloud service providers (AWS, GCP, Azure, and Alibaba). It can be purchased through the AWS and GCP marketplaces and is available in three tiers. The base tier is free with limited nodes and support. The second tier is the pro version and builds upon the first tier with additional nodes and more functionality. The third tier is the advanced version, which includes unlimited nodes and users with the dedicated support of pro services.

Kubecost is useful for any company or organization running Kubernetes in the cloud or on-premises. While Kubecost can consume all cloud spending, it is focused on Kubernetes workloads and cost optimizations. It can be integrated with other cloud monitoring solutions as well.

Radar Chart Overview

As a Kubernetes-focused cloud cost monitoring tool, Kubecost lands in the Innovation/Feature Play quadrant. This specialty solution continues to grow its functionality and receives a high score in its defining area (container and serverless computing, an emerging feature). Although Kubecost is not as strong in some of the key features, it provides a solid solution for companies with heavy container and serverless operations.

Morpheus Data: Morpheus

Solution Overview

Morpheus is a full-stack cloud operations platform engineered from the ground up to enable hybrid cloud platform engineering and developer self-service while giving IT, finance, and security teams the ability to set proper governance guardrails and analyze data from across the hybrid cloud estate. It simplifies the consumption of hybrid clouds, container clusters, and automation tools so organizations can eliminate friction, improve efficiency, and optimize costs.

Strengths

One of the primary strengths of Morpheus as an abstraction layer is how it has normalized concepts and data across dozens of private and public clouds. This is the case with regard to orchestration, but it also ties into FinOps and reporting because the underlying data model is shared for both use cases. Within the platform, Morpheus uses the term “costing” to reflect what we call “billings.” This feature synchronizes public cloud invoice cost (billings) data and updates the projected costing. Current public cloud providers that support live costing sync include AWS, Azure, GCP, and Oracle.

The Morpheus Guidance feature enables the identification (and implementation) of cost optimization opportunities, including rightsizing memory, CPU, storage, and power schedules for brownfield discovered as well as Morpheus-provisioned instances. Guidance will also detect and clean up orphaned resources such as unattached storage volumes. It needs a minimum of five days of historical consumption data to provide initial recommendations, but the level of history considered in recommendations can vary according to the activity.

Integration is one of the core attributes of the platform, which has a robust plug-in framework. Morpheus integrates with over 75 different third-party tools and clouds natively and/or via plug-in. This service model extends to discovery and guidance tools in the FinOps area. For example, Morpheus and Exivity both show up in this report but tackle different elements of the FinOps challenge; the integration of the two platforms together has proven valuable for many enterprises and service providers.

Morpheus is a unified platform that is distributed as a standard Linux package. It can be installed as an all-in-one virtual appliance in under 30 minutes, a simplified highly available cluster with shared mySQL DB, or individual service tiers (app, db, and so on) can each be externalized in separate scale-out clusters for extreme scale and resilience. Many MSP customers and OEM/GSI partners run the solution as a multitenant control plane installed in the hosting facility or a hyperscale public cloud in order to provide a centralized SaaS offering to their customers.

Challenges

Morpheus intentionally does not provide a hosted SaaS version of the platform. Instead, it partners with MSPs and OEM/GSI partners to deliver fully managed and outcome-based services to both enterprise and midmarket customers. FinOps customers might benefit by being able to license a SaaS version of the product.

Purchase Considerations

Morpheus is a member of the FinOps Foundation.

Morpheus is a term-based subscription with options for monthly consumption as well as yearly and multiyear subscriptions for discounts. The license is aligned around customer use cases with independently set thresholds for infrastructure provisioning (IaaS and PaaS workloads, IaaS deployments, and so forth), cluster management (KVM and Docker hosts, Kubernetes workers), runbook automation (automation executions, XaaS instances), and cloud visibility and optimization (discovered resources and workloads).

To simplify options, Morpheus has organized around a tiered service model with limits on each of those use case elements but flexibility to add incremental quantities. As the tiers increase, the limits increase and shift from being more visibility- and optimization-focused for less mature customers to include higher thresholds on the advanced orchestration and automation features. The tiers are:

- **Essentials** (\$1,500/month): Enabling hybrid cloud visibility and optimization
- **Standard** (\$5000/month): Establishing self-service orchestration and automation
- **Professional** (\$10,000/month): Encompassing hybrid cloud platformOps
- **Enterprise** (\$20,000/month): Scaling hybrid cloud platformOps

In addition to the software license itself, Morpheus provides installation and QuickStart configuration packages that are fixed statements of work (SoWs) for common use cases. It can also provide custom SoWs with more intensive professional services. As part of its end-to-end customer support, many customers take advantage of its Platform Success Service (PSS) package, an annualized set of “tokens” that can be used for instructor-led training, professional services, and advisory hours; the PSS also includes dedicated customer success manager (CSM) and technical account manager (TAM) resources.

Morpheus does well in large heterogeneous environments and in highly regulated environments. These customers typically have a mix of on-premises workloads and public cloud workloads across multiple hypervisors and hyperscale public clouds. Specific use cases include provisioning (IaaS/PaaS), cluster management (K8s/KVM),

runbook automation, and visibility/optimization (FinOps). All these use cases are supported by a robust governance engine with fine-grained role-based access control.

In addition, it supports MSPs and CSPs that need to provide a multitenant and white-labeled orchestration and FinOps solution to provision and govern multiple clients. This route to market is currently the way Morpheus indirectly serves smaller enterprise and midmarket customers.

Radar Chart Overview

As a full stack hybrid cloud operations solution, Morpheus provides a strong platform combined with key FinOps features. While the main focus is cloud operations, the solution has a strong set of FinOps capabilities, positioning it as a Leader in the Innovation/Platform Play quadrant.

Neos: CloudVane

Solution Overview

CloudVane is a SaaS cost management and automation solution that helps users reduce cloud cost waste by enabling full visibility of cloud resources, with configurable dashboards and a broad set of reports that can be configured to suit customers' needs. It consolidates multicloud cost and usage data and enables overall visibility and management of cloud resources through automation, scheduling, cost allocation, recommendations, and reports. It also facilitates and simplifies the introduction of FinOps best practices into an organization.

Strengths

CloudVane brings all cloud data into a single unified view. It is built on OCI and supports Azure, AWS, and GCP as well. Cost and usage data is regularly downloaded by CloudVane and presented in near real time, contributing to a good score on the real-time decision-making criterion. Users can create multiple-scope budgets and define thresholds (actual and predicted) with alert notifications when thresholds are reached. A new feature can trigger the stoppage of all resources in an action group when a threshold is reached. A recommendations feature assists with discounts and committed spends, consolidating multiple public cloud providers and subscriptions on central points.

CloudVane supports extensive functionality for chargeback with cost markup, customer-specific rate cards, added value services as line items, automated invoice delivery, and API integration to external financial systems. This is particularly useful for MSPs supporting many clients and consulting companies.

Challenges

Some cloud cost optimization capabilities have been added to the product. The solution now includes a small BI reporting product with a predefined data set of information from all the providers. That dataset is used with its dimensions and metrics to create reports on cost data. Basic rate optimizations exist in the product, but this does not include tracking contract renewals on reservations. That functionality is on the roadmap.

Purchase Considerations

Neos is a member of the FinOps Foundation and has a certified FinOps platform. Neos also provides FinOps Certification training. The certification is designed for those who plan to hold a position on a FinOps team, support FinOps or cloud financial management, or act as consultants, vendors, or trainers in support of FinOps teams.

CloudVane is a single platform deployed as a SaaS on OCI, with an option of a private instance deployment. The CloudVane subscription model provides flexible pricing for all customer sizes and the SaaS and private instance deployment models cover all customers. The subscription model is a small percentage of cost managed by the platform. There is a volume-based licensing. Professional services are not needed to implement the solutions.

Neos supports many different industries around the world. In particular, it focuses on key industries such as telecom and MSPs. Its key functionality is centered around multicloud chargeback capabilities and normalization across four major cloud providers.

Radar Chart Overview

Neos is focused on a narrower set of FinOps use cases rather than offering a broadly applicable FinOps platform with a suite of services. This puts it in the Maturity/Feature Play quadrant. Given the company's extensive history as a strong Oracle partner, Neos should be considered by organizations heavy in Oracle cloud operations.

NetApp: Spot by NetApp

Solution Overview

Spot by NetApp brings together cost management and automated optimization in an integrated solution for FinOps. The solution makes it possible for organizations to “operationalize” FinOps, using data, analytics, and artificial intelligence to deliver

visibility and actionable insights and drive automated optimization that enables them to maximize the efficiency and impact of every dollar spent in the cloud.

This portfolio includes the following components, which can be purchased individually or in combination:

- **Cost Intelligence** delivers granular, actionable analytics on costs and resources across multicloud environments.
- **Billing Engine** streamlines invoicing and delivers comprehensive billing reporting with intelligent cost allocation including chargeback/showback.
- **Spot Eco** provides lifecycle management for reserved instances and savings plans, continuous commitment portfolio design, purchasing, rebalancing, and optimization.
- **Spot Elastigroup** automatically and continuously enables cost and capacity optimization of VMs that leverages the most cost-effective mix of resource types, locations, and purchasing models.
- **Spot Ocean** automatically and continuously delivers cost and capacity optimization of containers and Kubernetes infrastructure that leverages the most cost-effective mix of resource types, locations, and purchasing models.
- **Spot Connect** streamlines orchestration, automation, and integration by providing a visual interface to connecting products and services.

The portfolio includes CloudCheckr as a separate product under the Spot umbrella for cloud management, which provides full-cost visibility, best-practice checks for spend and cloud use, cost allocation and rebilling, and chargeback/showback capabilities for both enterprises and MSPs.

Strengths

Spot by NetApp scored high on several decision criteria. As both a premier member of the FinOps Foundation and a participant in the FOCUS project, it is actively contributing to the development of this specification and the products use the FOCUS standard to ingest and normalize cost data from cloud providers. The solution can thus normalize cloud costs across AWS, Azure, and GCP, allowing for consistent reporting processes, comparisons, and analysis regardless of cloud vendor.

For cloud rate optimization, Spot allocates and optimizes the use of multiple types of cloud discounts. Based on industry and proprietary best-practice checks, Spot provides analytics and reporting to visualize volume discounts and committed spend, along with potential optimization scenarios customers can take advantage of with savings estimates for each. Examples include RIs and SIs purchase

recommendations and rightsizing opportunities. Spot also uses ML-driven capacity planning and automated procurement to actively manage commitments between the consumer and their cloud providers by buying, selling, and converting commitments and leveraging excess capacity models to drive discounts deeper.

Spot adds a layer for containers and Kubernetes to enable cost allocation based on pods and/or deployments or application labels to address the cost complexity of microservices. It can break apart costs by application, business vertical, or other groupings. Costs can then be allocated to particular teams or business users to give them an exact view of the costs they're responsible for. The solution provides a number of showback reporting tools, including the ability to manipulate and allocate costs in artificial methods to align content to the appropriate business units or teams. Spot has the ability to provide cloud resource optimization (CRO) and automation through its cloud management platform (CMP) features, so therefore it can also automate the remediations (changes) to optimize costs. MSPs and CSPs get extra value from Spot because they can charge custom rates for cloud resources automatically, thus reducing MSP/CSP labor.

The products are ready to use out of the box, thanks to an intuitive UI. They include default settings so that customers can start instantly without needing to do significant configuration work in order to gain immediate value from the products. All the products are delivered as SaaS in order to simplify management, deployment, support, and enhancements.

Challenges

Spot is a robust solution that continues to add new features, modules, and integrations. It should continue to work on a simplified and unified user experience in a single console.

Purchase Considerations

NetApp is a premier member of the FinOps Foundation.

Spot by NetApp pricing is based on one of two models depending on product:

- A percentage of cloud spend under management for the broader cost analytics and management product.
- A percentage of cost savings delivered by the infrastructure optimization products.

The Spot suite is licensed separately or bundled depending on a company's needs. NetApp also offers volume and commitment purchase discounts. Professional services are not needed to implement the solution; however, follow the sun 24/7 technical support is available in the event that customers require assistance.

Spot by NetApp covers use cases for many industries and companies of all sizes. In particular, IT organizations with heavy cloud investments and complex environments will benefit from Spot by NetApp. Areas of strength for NetApp include FinOps visibility and insights, cost allocation including chargeback, showback, rebilling, automation of cost management, and optimization processes to continuously maximize the efficiency, automation, and optimization of cloud commitment purchasing and usage for RIs and SPs.

Radar Chart Overview

NetApp continues to enhance Spot by NetApp's already market leading FinOps capabilities. It has recently released new modules focusing on the billing engine and cost intelligence. This placed the company as a Leader in the Maturity/Platform Play quadrant.

OpenText: Hybrid Cloud Management X (HCMX) FinOps

Solution Overview

OpenText Hybrid Cloud Management X (HCMX) FinOps is a cloud-based solution that helps organizations manage their cloud services in terms of design, deployment, life cycle, cost management, budget management, and carbon footprint. It enables IT, DevOps, finance, and other business teams to apply the principles and practices of FinOps and promotes shared responsibility, transparency, and data-driven decision-making. HCMX FinOps Express is a standalone starter solution that offers cloud cost management and optimization.

Strengths

HCMX and HCMX FinOps Express both offer strong core FinOps functionality, benefit from the overall platform focus on streamlining operations, and are highly scalable. HCMX unifies management of cloud spend from AWS, Azure, and GCP. It includes personalized views for different teams (showback) by mapping spend to projects, business units, and cost centers.

HCMX identifies inefficiencies regarding idle, oversized, or over-provisioned resources via public cloud integrations and then helps with spending optimization by engaging engineers to act on collected recommendations. It also provides reports that identify spending spikes and inefficiencies. The tool leverages smart what-if analyses for commitment-based discounts, fine-tuning and outperforming native-cloud recommendations. It also looks for expiring reservations.

A differentiating feature of HCMX is that it allows end users to see and model their

cloud spend in real time, in a role-based enabled dashboard. This means end users don't have to wait until a report is sent to them to take action. The solution leverages a module for maintaining budgets and alerts for overspending.

HCMX is built on a shared, highly scalable, container-based platform that allows for (optional) seamless integration with OpenText Observability solution and OpenText SMAx for ITSM, as well as for integration with OpenText solutions for AIOps OpenText. Asset and software management are deployed as a part of the same platform, and data is available for cost/asset view correlation and more.

Challenges

While HCMX continues to add features, it is not as robust in some of the criteria as OpenText's competitors and lacks out-of-the-box integrations to financial systems. Customers should assess the key features and roadmap for these solutions as they relate to their own requirements.

Purchase Considerations

OpenText is a member of the FinOps Foundation.

Smaller companies can opt-in at a lower price and feature level via HCMX FinOps Express, and then scale to HCMX FinOps as they grow. Both are priced in tiers, depending on the annual cloud spend managed by the solution. This allows customers to start small and grow their cloud cost management practice.

HCMX FinOps is a cloud and cost management solution that offers cloud service design, deployment, life cycle, and cost management capabilities. It is priced across two vectors: per amount of annual cloud spend managed by HCMX FinOps, and/or per number of cloud services it manages (this includes broader proactive cost control, guardrails around provisioning, lifecycle service management, and broader cloud management use cases). Customers can upgrade from OpenText FinOps Express to OpenText HCMX FinOps Premium.

Professional services are not required but are available for advanced customizations or to assist with implementing the internal FinOps transformation often required to establish successful FinOps practice.

OpenText supports numerous key industries including financial services, IT/tech services, transportation, natural resources, and MSPs. Key use cases support cloud spend transparency across multiple providers, smart rate optimization planning, FinOps workflow automation, and GreenOps.

Radar Chart Overview

OpenText continues to grow its FinOps footprint on the HCMX platform. The FinOps solution benefits from a strong cloud operations background. The company is

moving quickly to add functionality year over year, placing it as an Outperformer and strong Challenger in the Innovation/Platform Play quadrant.

Ternary

Solution Overview

Ternary is a multicloud FinOps platform that supports leading public cloud providers (AWS, Azure, GCP) and other clouds (Oracle, Alibaba, and more). The platform organizes the thousands of services offered into business groupings (tags, labels), such as cost centers, applications, projects, and so on, and helps organizations drive accountability for cloud spend across these labels and business units. Ternary provides capabilities to support organizations through the phases of their FinOps journey; with visibility into spend, rate, and usage optimization, and financial governance (such as budget alerting and anomaly detection).

Strengths

Ternary is offered as a SaaS or self-hosted platform. The self-hosted platform is unique in this space, with the ability to run behind firewalls that would otherwise block functionality. Ternary plans to add support for on-premises data center costs in the future.

Ternary has a committed spend discount scenario modeler that allows the automatic import of regions and CPU types. It can demonstrate via a slider the optimal amount of CPU and RAM to purchase for one- and three-year committed-use discounts. The solution has recently added RI/SP modeling for AWS. Reference budgets can be set per team, label, resource, or project, and differential spend can be tracked over time. Trends are displayed by day, week, month, and variable periods. These features contribute to a high score on the identification of cost optimization opportunities key feature.

The solution's commitment tracker enables the full modeling of GCP, Azure, and AWS long-term contracts to give customers a real-time view of their progress in a commitment. This functionality gives an organization complete visibility as to when they are forecast to meet or exceed commitments. The vendor allows customers who want or have contractual minimum spend to get discounts with cloud vendors to track after a contract is signed or to optimize the commitment before they sign a long-term contract with a cloud provider.

Ternary's custom labeling solution is available by API or UI. Custom labels are available instantly within the platform and require no professional services

intervention. There is no limit to the number of labels. Full automation is available for customers; they can manage a source of truth in multiple ways, including as a .csv, or in a bucket, bigquery table, or snowflake data lake; and the solution automatically picks up changes and proliferates them across the data. This is unique in this market.

Budgets can be managed from the top-level billing account down to specific projects or custom groupings. The solution supports alerting based on actual spend and forecasted spend.

The Ternary reporting engine is a robust BI tool that allows the quick creation of reports and dashboards. It can also be used to generate reports that combine Ternary data with external data sources. It's built on GCP-native services with a BigQuery data lake. Graphs can load thousands of data points instantly, organized by a number of dimensions. It is fully integrated with the solution's collaboration tools and workflow management. These features contribute to a high score on the real-time decision-making criterion.

Ternary's Kubernetes tool is agentless and can track container costs across clusters, namespaces, and workloads. This allows for the identification of usage vs. waste, providing optimization recommendations for Kubernetes cost and usage across pod labels.

Challenges

Ternary is a robust platform that continues to make advancements in FinOps functionality. A bi-directional integration set with major financial systems would benefit customers.

Purchase Considerations

Ternary is a premier member of the FinOps Foundation and has a certified FinOps platform.

Ternary uses a tiered pricing model based on cloud spend to offer a predictable, fixed contract price. It does not charge for setup fees, support, professional services, or overages.

The customer success team helps with the initial implementation and provides ongoing support throughout the contract period. The platform is designed to be easy to use, and professional services are not needed.

Ternary can be purchased directly, through MSPs, or on the AWS and GCP marketplaces. It offers a flat pricing model with large spend buckets to allow for customer cloud spend growth with no penalties for overages. It is licensed per organization and does not charge per user.

Ternary is best suited to organizations with growing cloud spend across a variety of industries including financial services, insurance, media and entertainment, retail and consumer goods, and manufacturing. The platform provides capabilities within each of the FinOps use cases (“domains”) as defined by the FinOps Foundation.

Radar Chart Overview

Ternary is strong on normalization of billing and comparing costs among cloud vendors, and identifies areas of significant savings to justify moving an application from one cloud vendor to a competitor. The product has good support for real-time decision-making and identification of cost optimization opportunities, and this does not come at the cost of scalability, as Ternary has an exceptional ability to scale to meet the largest corporate needs. As such, Ternary is a Leader in the Innovation/Platform Play quadrant.

Yotascale

Solution Overview

Yotascale is a leading cloud cost management solution that provides comprehensive cost visibility, optimization, and allocation capabilities for businesses operating in public cloud environments like AWS, GCP, and Azure. Key capabilities include a conversational AI-enabled copilot, total cloud cost visibility, cloud cost optimization, cost allocation, budgeting and forecasting, and anomaly detection.

Strengths

Yotascale normalizes billing and cost data across AWS, Azure, and GCP, presenting an all-in-one view of multicloud costs, including containers. Yotascale provides multiple-currency support, normalizing cloud costs in the finance department’s preferred currency. The company also provides information via a conversation GenAI interface to complement traditional tables and reports. It offers GenAI detailed reports that cover budget and forecast, which analyzes the cost drivers, and provides recommendations on what action to take to keep costs under budget. Other reports cover overall cost trends, detection of anomalies, and cost optimization options. In addition, it offers a Chat Agent (Yota AI Assist) that can answer cost related questions with multiple levels of complexity.

Yotascale’s “Lens” hierarchy presents multiple views depending on the needs of the business. This enables Yotascale users to view costs from various customizable perspectives. Additionally, Yotascale allows reallocation or cost distribution of any cloud service to be shared among multiple business units or contexts by defining different allocation options.

Yotascale allows the breakdown of budgets so various stakeholders can better understand their cloud spend and future needs. Budgets can be set for any business context and are monitored in real time for cost anomalies using GenAI learning of historical cost trends. Cost anomaly alerts and notifications are sent in real time via Slack or email to the responsible engineers based on their roles or assigned resources.

Yotascale provides rightsizing, downsizing, and termination recommendations for cloud infrastructure based on historical usage of compute, memory, and network, leveraging its APIs to pull that information from performance monitoring tools. These recommendations are sent directly to the engineers responsible for those assets via Slack or email and provide a closed-loop feedback option for engineering to record the status of the recommendation.

Yotascale offers what-if analysis and recommendations for cloud provider savings plans and reserved compute instances, as well as reporting on usage relative to those plans. Multiple savings scenarios, from single to multiyear, and varying levels of the equivalent of AWS's reserved instances or spot pricing rates can be saved for team review and acted upon directly via API or links to the CSP contract tools.

Yotascale focuses on large enterprises with over \$1 billion in revenue, though it will support SMB organizations with high cloud consumption of \$15 to \$20 million annually.

Challenges

Integration with more DevOps tools will make it easier for engineering teams to incorporate cost management into their workflows. This is on the current roadmap for Yotascale. It is also important to improve the cloud rate optimization features to help companies plan for years two to three of a cloud budget cycle.

Purchase Considerations

Yotascale is a member of the FinOps Foundation and has a certified FinOps platform. It offers a flexible pricing model designed to align with the value customers receive from the platform. The pricing is based on hourly cloud consumption. This enables the cost of using Yotascale to scale with cloud usage, making it a cost-effective solution for businesses of all sizes. Pricing can vary based on factors such as the number of cloud accounts and the complexity of the customer's cloud environment. Yotascale provides any additional services or support the customer may require, like professional services.

Yotascale's cloud cost management solution is applicable across a wide range of industries and departments. Key industries include technology, financial services, healthcare, retail, and media and entertainment. Departments that are key use cases include finance/FinOps, DevOps teams, engineering/platform engineering, and executive management.

Yotascale focuses on engineering-based use cases that require detailed cost visibility, accurate cost allocation, and actionable cost optimization recommendations. Its GenAI machine learning capabilities make it particularly accessible and effective for use cases that involve large, complex cloud environments with diverse teams seeking context-sensitive answers.

Radar Chart Overview

Yotascale enables seeing costs through multiple views beyond those of engineering or business heads. Its design allows it to scale to the largest enterprise needs while providing the granular reports departmental heads and product owners typically need. Its feature set positions it in the Innovation/Feature Play quadrant.

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Analyst's Outlook

AS BUSINESSES MATURE IN CLOUD USAGE, their attention moves beyond just getting to the cloud to making sure spending is more in line with budgets. This is similar to what happened with the emergence of virtual machines in data centers over a decade ago. The promise of more business value for less money quickly pushed things out of control. Tools were needed to manage capacity, governance, and spending. Unfortunately, the lessons learned at that time were largely forgotten during the growth period of cloud deployments.

The FinOps Foundation is an outcome of the need to make financial accountability a permanent part of organizational response to uncontrolled cloud spending. The FinOps Foundation is codifying language, practices, and methodologies to accurately track cloud spend (and this can be extended to all IT spend). Finance, operations, and development all play a part in actively managing spending to align with budgeted values. For many companies, the immediate need is for little more than accurate billing. There are vendors in this review that mainly or exclusively focus on accurate billing. While this is critical, it's only a partial step on the journey. There are two types of partner memberships in the Foundation—premier and general. All the vendors in this report have partner memberships, and Apptio, CloudBolt, CloudZero, Flexera, Harness, Kubecost, Ternary, and VMware are premier members. Additionally, 11 vendors have FinOps Certified platforms and one has a FinOps Certified solution. These numbers are growing each year.

The FinOps Foundation project called FOCUS establishes much-needed open specifications for cloud billing data. The project defines a vendor-neutral, cross-cloud schema and terminology for key cost and usage dimensions and metrics to simplify ingestion and analysis of cost and usage data. This evolving standardized format is driving greater normalization of cloud and other costs. This initiative is continuing to improve the ability of companies to compare data across the organization and its cloud vendors with the goal of making the best choices in cloud computing to drive value and reduce costs.

The future of cloud FinOps will come in three formats. The first will be dedicated tools that support financial accountability of IT spend, moving beyond just cloud spending. The second will be merging tools for automated cloud deployments and management, cloud performance optimization, and financial accountability. The

third will be the use of consulting services and training certifications to support qualified outsourcing or upscaling of current staff.

Over the next several years, cloud FinOps tools will move beyond focusing on just enforcing compliance or exposing deviations from approved spending. The best tools will also provide intelligent forecasting of and optimization recommendations for future spending. They will also include capabilities for automated adjustments that require little or no human intervention. AI will continue to play a significant and changing role over the next several years. This year, several vendors have embarked on journeys into the area of sustainability and carbon footprints. We believe this area will continue to grow and mature over time.

FinOps continues to evolve, emphasizing waste reduction, forecasting, and sustainable practices. As cloud adoption grows, organizations increasingly recognize the need for disciplined financial management to optimize costs and drive innovation. These changes will continue to drive demand for the convergence of tools in the second half of this decade.

To learn about related topics in this space, check out the following GigaOm Radar reports:



GigaOm Radar for Cloud Resource Optimization



GigaOm Radar for Cloud Observability



GigaOm Radar for Cloud Management Platforms

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About Dana Hernandez



DANA HERNANDEZ is a dynamic, accomplished technology leader focused on the application of technology to business strategy and function. Over the last three decades, she had extensive experience with design and implementation of IT solutions in the areas of Finance, Sales, Marketing, Social Platforms, Revenue Management, Accounting, and all aspects of Airline Cargo, including Warehouse Operations. Most recently, she spearheaded technical teams responsible for implementing and supporting all applications for Global Sales for a major airline, owning the technical and business relationship to help drive strategy to meet business needs.

She has led numerous large, complex transformation efforts, including key system merger efforts consolidating companies onto one platform to benefit both companies, and she's modernized multiple systems onto large ERP platforms to reduce costs, enhance sustainability, and provide more modern functionality to end users.

Throughout her career, Dana leveraged strong analytical and planning skills, combined with the ability to influence others with the common goal of meeting organizational and business objectives. She focused on being a leader in vendor relationships, contract negotiation and management, and resource optimization.

She is also a champion of agile, leading agile transformation efforts across many diverse organizations. This includes heading up major organizational transformations to product taxonomy to better align business with enterprise technology. She is energized by driving organizational culture shifts that include adopting new mindsets and delivery methodologies.

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About 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.

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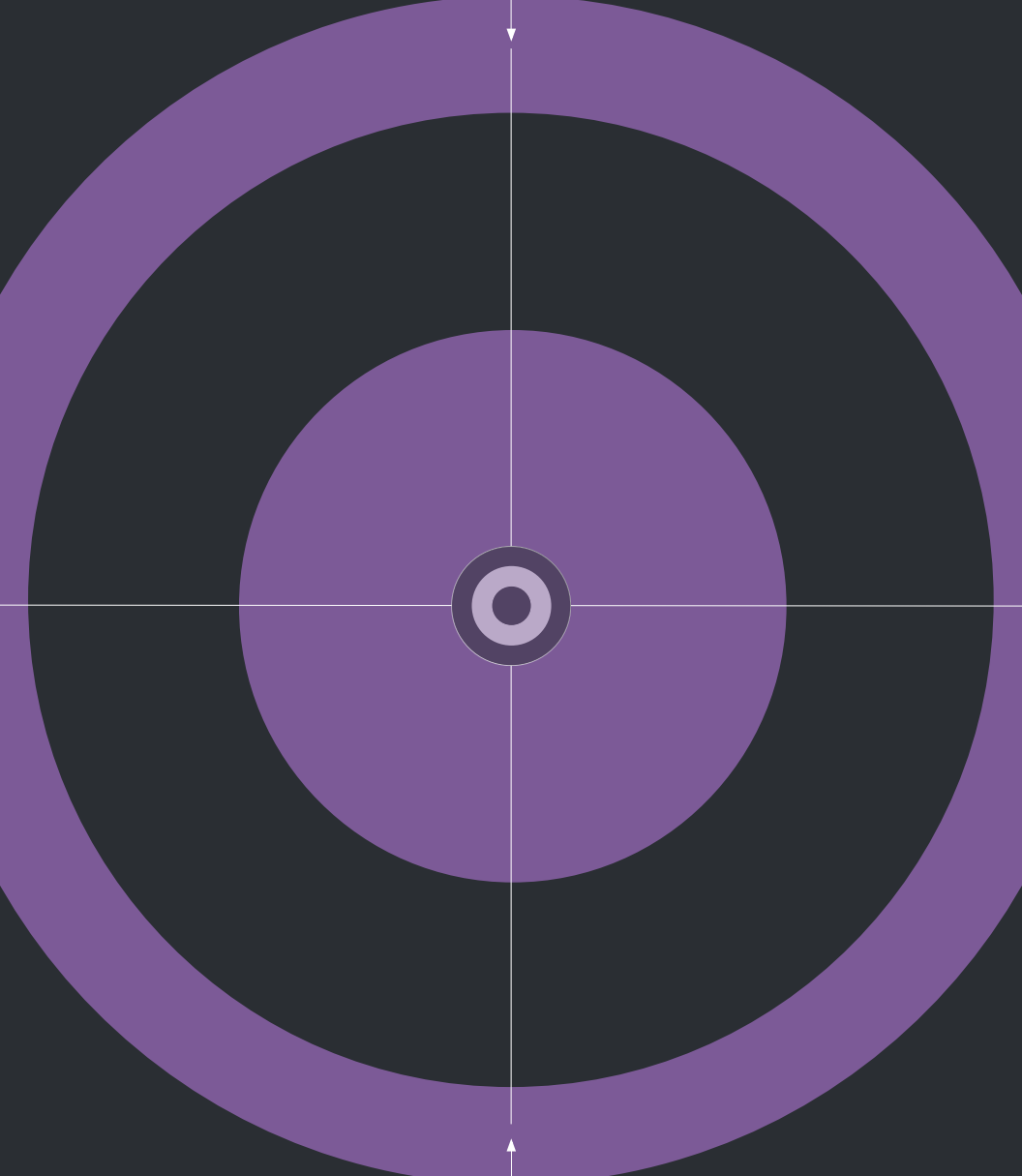
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Methodology

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