Vega Platform Mapping to FinOps Domains and Capabilities

Vega Cloud's Solution for FinOps Domains

Cloud Usage & Cost

In Vega's Platform, we provide a clear understanding of cloud usage and costs across the three major cloud providers, identify opportunities to optimize cloud costs through analysis, develop budgets and forecasts, and establish accountability by dispersing responsibilities, implementing policies, guidelines, and controls.
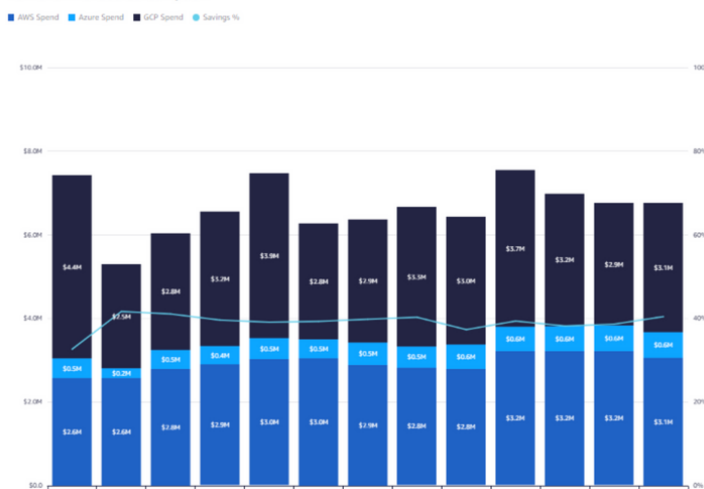
Performance Tracking & Benchmarking

For performance tracking and benchmarking, we integrate with your existing tools providing usage information. Budget and budget alerts are configurable at the workload level; as well as self-serve reporting allowing the user to view data and resources.

Real-Time Decision Making

Vega was designed to achieve real-time decision-making by continuously monitoring and analyzing cloud costs in near real-time, dynamically meeting performance requirements while optimizing costs, maintaining cost control, preventing unexpected expenses through alerts and notifications, and automating optimization actions, and/or adopting cost-saving measures.

Cloud Rate Optimization

Our Platform, compares and selects the most cost-effective pricing models based on resource requirements and usage patterns. Our cloud rate optimization features also include identifying, utilizing, and managing discounts or savings plans offered by cloud providers, ensuring cloud resources are appropriately sized to match workload demands, and continuously monitoring and optimizing the pricing options based on changes in workload patterns, business needs, and cloud provider offerings.
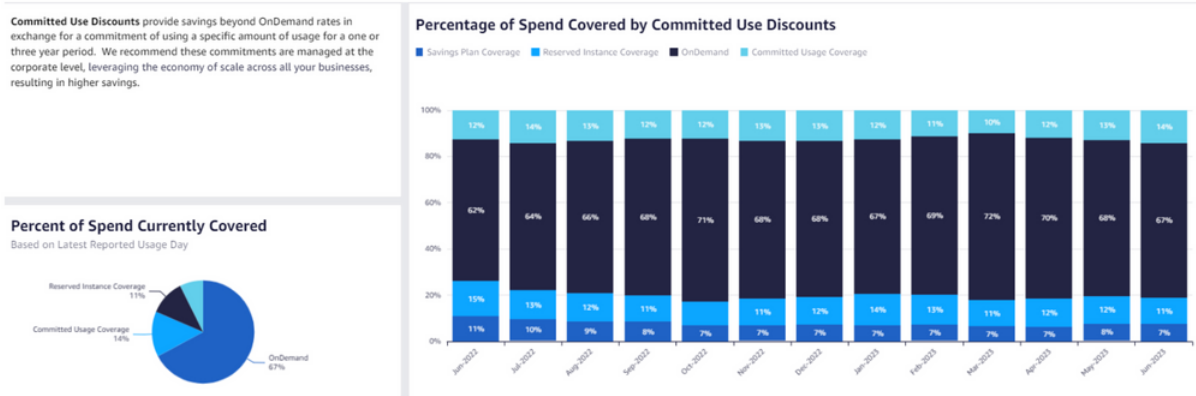
Cloud Usage Optimization

Cloud usage optimization is seen as we track resource utilization, identify underutilized or idle resources, and gain insights into workload demands. We automatically identify inefficiencies, provide detailed optimization recommendations and retro-tag, and categorize resources for more accurate cloud costs.

Organizational Alignment

Vega's solution also uses dashboards and reports to create a shared understanding of cloud costs, usage patterns, and optimization strategies, for organizational alignment. Our pre-established role-based profiles related to finance management ensure accountability and ownership of cloud costs and we then establish budgeting and forecasting mechanisms that align with financial management practices.

Vega Cloud's Solution for FinOps Capabilities

Chargeback & Finance Integration

Near real-time billing data is tagged, for example, by business unit and workload to allow each team to see their spending and react to changes and optimization recommendations. Tagging and grouping of cost resources is flexible enough to meet any company's reporting needs and allows visibility for each team to see their area of responsibility. Budgets and forecasting down to the workload level allows the edges of the organization to monitor and be accountable for their expense.
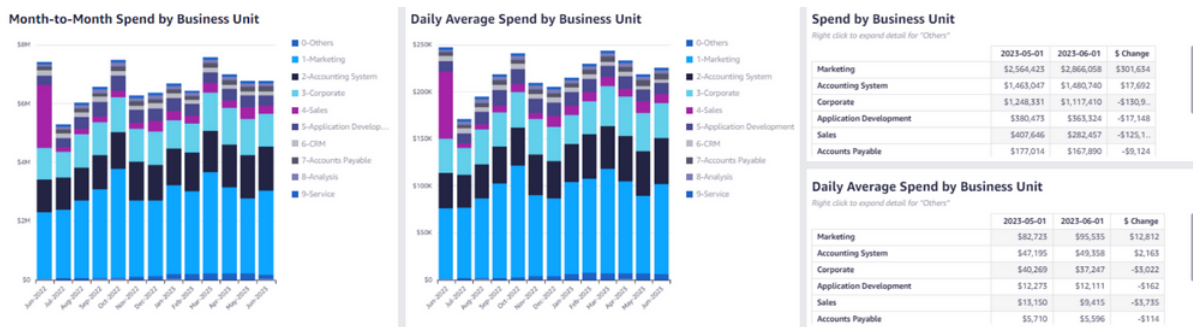
Budget Management

Budgets can be set at the workload level and alarms configured to notify responsible parties if the budgets are breached.
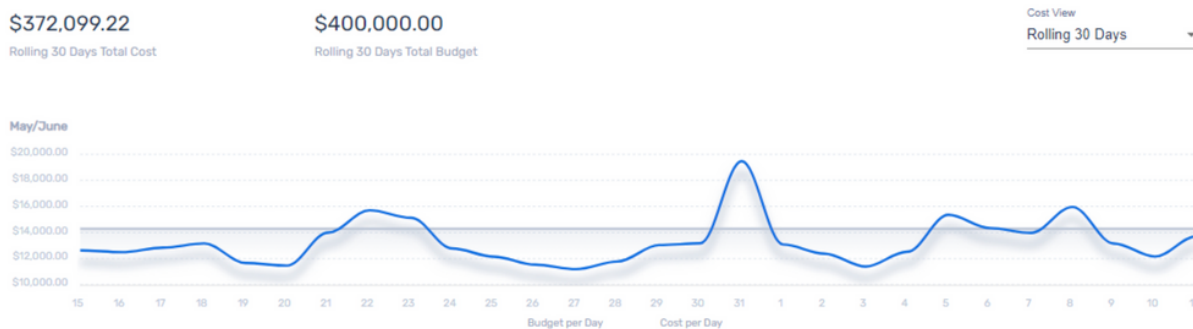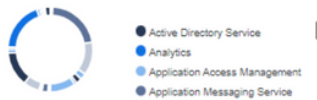
Forecasting

We have forecasting through the current year; as well as, the next two fiscal years, and automatic trends can be overridden to account for upcoming projects or known slowdowns. Advanced logic is used to tame usage spikes that may overestimate regular forecasting.

Vega Forecasting

Forecast models are based on a comparison of growth between different financial measures at an account level, measured daily for 3 month, 6 month and 12 month periods. This growth rate is then applied across the clouds/accounts/groupings/products for different time periods to demonstrate your potential cloud growth.

Forecast is based on the following selections:
Date Range: *Current Year + 2 Full Years*
Lookback Period: *3 Month*

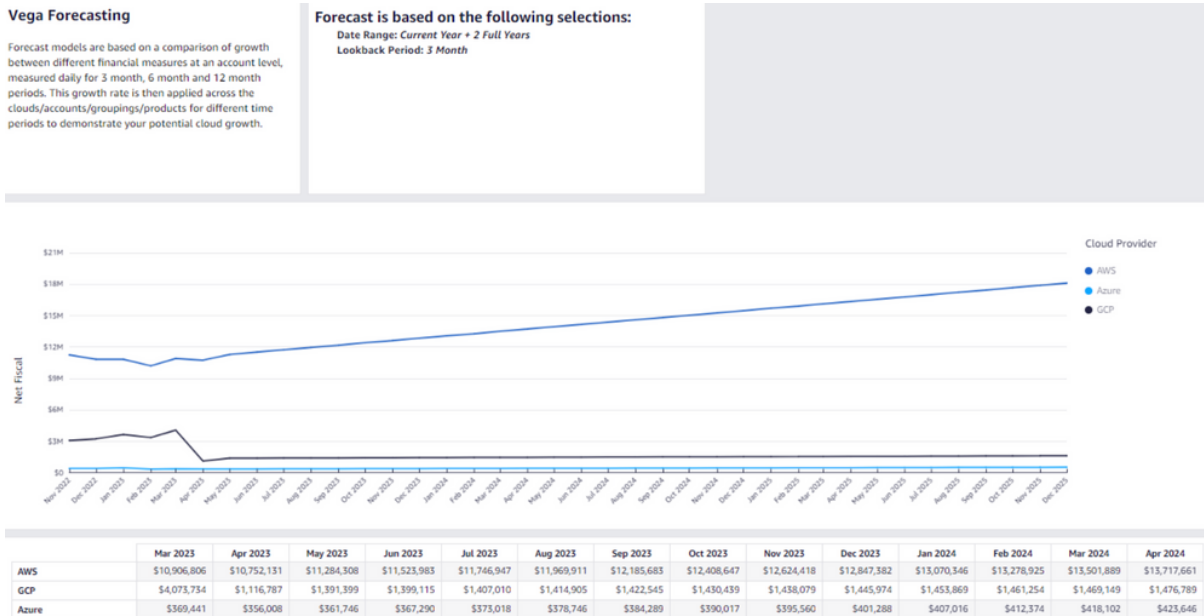|	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024
AWS	$10,906,806	$10,752,131	$11,284,308	$11,523,983	$11,746,947	$11,969,911	$12,185,683	$12,408,647	$12,624,418	$12,847,382	$13,070,346	$13,278,925	$13,501,889	$13,717,661
GCP	$4,073,734	$1,116,787	$1,391,399	$1,399,115	$1,407,010	$1,414,905	$1,422,545	$1,430,439	$1,438,079	$1,445,974	$1,453,869	$1,461,254	$1,469,149	$1,476,789
Azure	$369,441	$356,008	$361,746	$367,290	$373,018	$378,746	$384,289	$390,017	$395,560	$401,288	$407,016	$412,374	$418,102	$423,646

Managing Anomalies

Vega's solution manages anomalies through default anomaly detection alerts. These alerts occur when the spend for a specific resource is greater than 10% of the last 7-day average. A convenient drill-down lets the user explore the anomaly before acting. Users can change the day, percentage threshold, and dollar limit in real time to customize for their alerting needs.

Vega Anomaly Detection

By using a seven day moving average you have the ability to look at current and historical trend to identify anomalous spending for any of the last 50 days. If your spend on the day in question rises above a certain threshold for Usage, OnDemand Spend or Net Fiscal Spend you will be able to easily identify and break it out by any of the available filters.

Average Net Fiscal Anomaly Spike by Product

Daily Trending Net Fiscal by Product Detail Category

Net Fiscal Anomaly Detail Detected 2023-06-11

Cost Allocation

Using tagging within the curated billing data, Vega's FinOps experts work with the client to allocate costs across teams or individuals. Reporting defaults to a net fiscal financial view that shows the true cost to teams of their cloud spend. Net fiscal includes amortization of upfront cash associated with Committed Use purchases as well as large Marketplaces purchases which are amortized over the term of the agreement. This also includes premium support allocation to each line of billing data as well as any credit allocations and billing error corrections. Any changes to tagging or allocation automatically apply to historical spending which provides the transparency that our clients need to make informed decisions.

Trending by Business Unit

Business Unit
- 0-Others
- 1-Marketing
- 2-Accounting System
- 3-Corporate
- 4-Application Development
- 5-Sales
- 6-Accounts Payable
- 7-CRM
- 8-Media & Entertainment
- 9-Analysis

| Business Unit	2023-05-01	2023-05-02	2023-05-03	2023-05-04	2023-05-05	2023-05-06	2023-05-07	2023-05-08	2023-05-09	2023-05-10	2023-05-11	2023-05-12	2023-05-13
Marketing	80,039	84,032	93,633	89,129	87,268	75,858	77,650	77,250	81,188	77,842	80,442	86,188	76,817
Accounting System	147,586	45,837	45,619	45,983	44,631	42,394	42,066	45,112	46,247	45,611	45,286	44,248	41,451
Corporate	151,687	38,644	38,449	38,705	38,672	36,108	35,428	37,564	37,640	37,241	36,795	37,000	35,308

Data Analysis & Showback

Reports are updated nightly when CSP billing data is received, and with 100% cost allocation achieved, it is easy for organizations to see exactly what their cloud usage costs are. We also include role-based access controls to allow clients to limit users to only view the spend they are responsible for.

Data Ingestion & Normalization

The Vega Platform ingests data from cloud providers and monitoring tools such as New Relic and Data Dog. All cloud usage is mapped to our taxonomy which allows the grouping of products and sub-products for cost reporting. During ingestion, the Platform looks at tagging to correct misspellings or infer tags from similar resources, account names, or resource names.
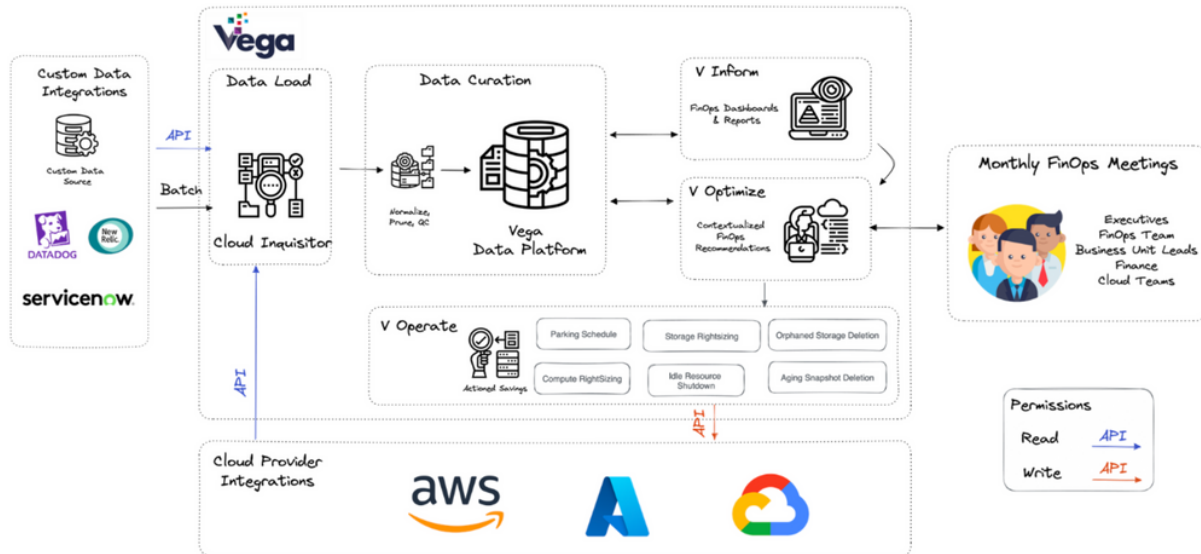
Managing Shared Costs

With all cloud spending tagged within the Vega Platform, whether you want consumption-based, proportional, fixed, or any other allocation strategy for shared costs the Vega Platform can handle it.

Onboarding Workloads

Onboarding a new client is easy with Vega Cloud. Infrastructure as code templates are provided, along with written documentation, to provide the Platform read-only access to CSP data. Technical experts are available to walk clients through the onboarding process as needed. Once onboarded, our FinOps experts will work with you to ensure tagging, cost allocation, custom reporting, etc. is handled per your business needs. As clients bring new workloads to their cloud environment, their cost is automatically included in reporting, and untagged resources are surfaced for further investigation.

Workload Management & Automation

The Operate portion of the Platform provides the client the ability to automate cost savings operations. Our built-in workflow allows the client to approve/deny some or all of recommendations, GUI interface allows engineers to create or modify parking schedules for servers to save money during off hours, and advanced parking configurations allow workloads to startup or shutdown in a predefined order. Our automation also includes orphaned storage, server rightsizing, volume resizing, and more.
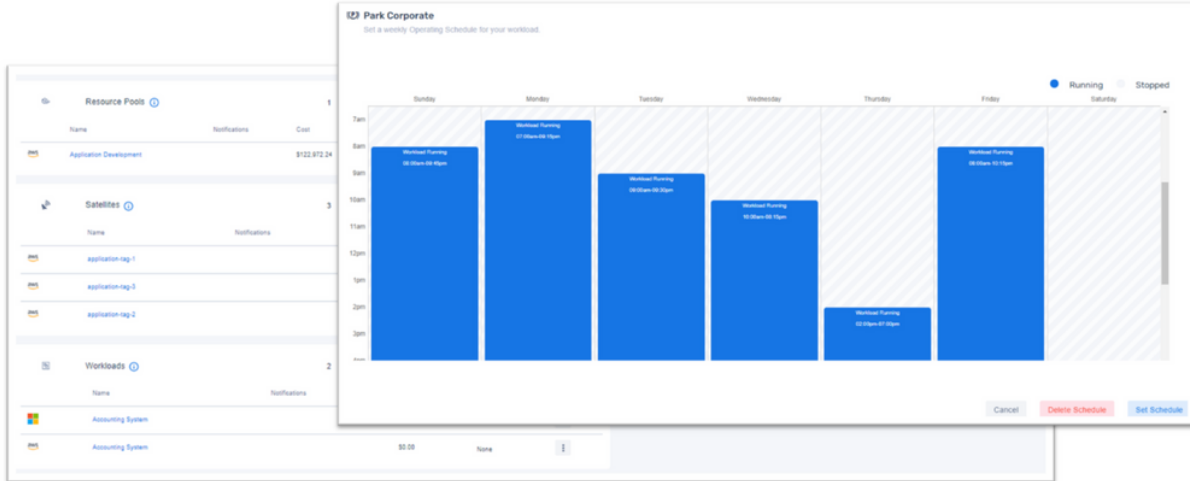
Cloud Policy & Governance

Tagging of cloud resources, within Vega, to workloads and business units, makes applying governance rules and automation easier. The allows action, such as auto-parking, to be taken on a specific set of resources within the tool. Anomaly detection can alert when a workload is outside a compliance threshold and optimization recommendations improve operational efficiency and align usage with business goals.

Establishing FinOps Culture

We encourage a FinOps culture by giving consistent and valid information from our platform, teams can seamlessly collaborate without having to waste time troubleshooting differing reports. We also created a Cloud Hero Program to reward good FinOps practices. Vega's Cloud Heroes program is designed to use positive reinforcement to align teams to your FinOps goals and act on savings opportunities. This encourages correct and mindful cloud behavior through incentives and recognition to increase customer retention, satisfaction, and involvement.
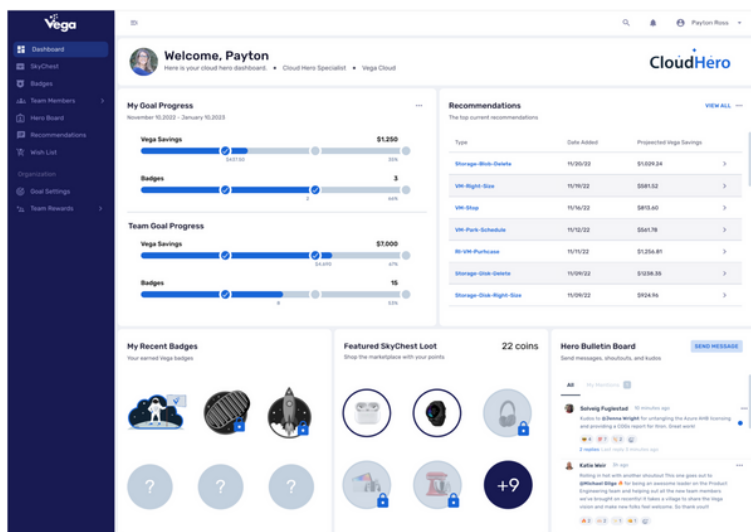
FinOps & Intersecting Frameworks

The Vega Platform integrates with many existing company frameworks. For example, The ITIL framework emphasizes the alignment of IT services with business needs, and the optimization of resources to deliver maximum value. The Vega Platform embodies these principles by providing actionable recommendations for cost optimization. This supports the ITIL continual service improvement phase, by helping organizations understand their spending patterns and identify opportunities for cost reduction.

Vega's approval workflows align well with ITIL's Change Management processes. As changes are a key part of managing any IT service, the Platform not only supports but enhances this process. By integrating approval workflows, the Platform ensures that all changes are vetted and approved in a controlled environment. This reduces the risk of unintended consequences and aligns with ITIL's focus on reducing the impact of change-related incidents and improving day-to-day operations.

The Platform's recommendation and approval features support ITIL's demand management, capacity management, and financial management practices. They facilitate more efficient use of resources, enable the prediction of customer demand, and ensure that IT services are able to deliver maximum value. This way, the Platform embodies the core values of service strategy and design as promoted by the ITIL framework.

FinOps Education & Enablement

We use common FinOps language throughout our platform to encourage teams to use the same language to break down educational barriers. The ease of use also provides engineers, without a financial background, to quickly see how their actions affect cloud costs and therefore affect the company.

Measuring Unit Costs

Vega's Cloud Platform provides visibility into cloud spend to allow companies to calculate unit costs. Cloud resource usage is tagged and visible through multiple filters to allow clients to get detailed cost information needed to determine the cost of supplying a unit of business value.
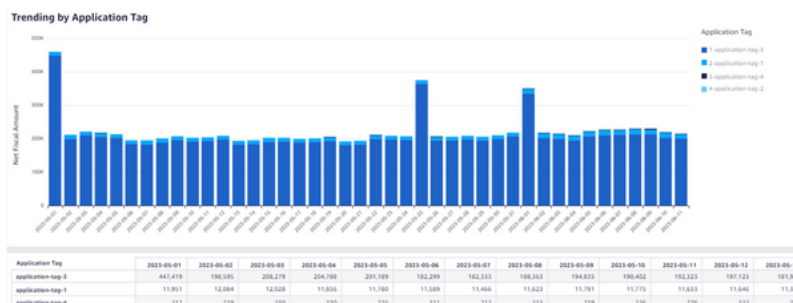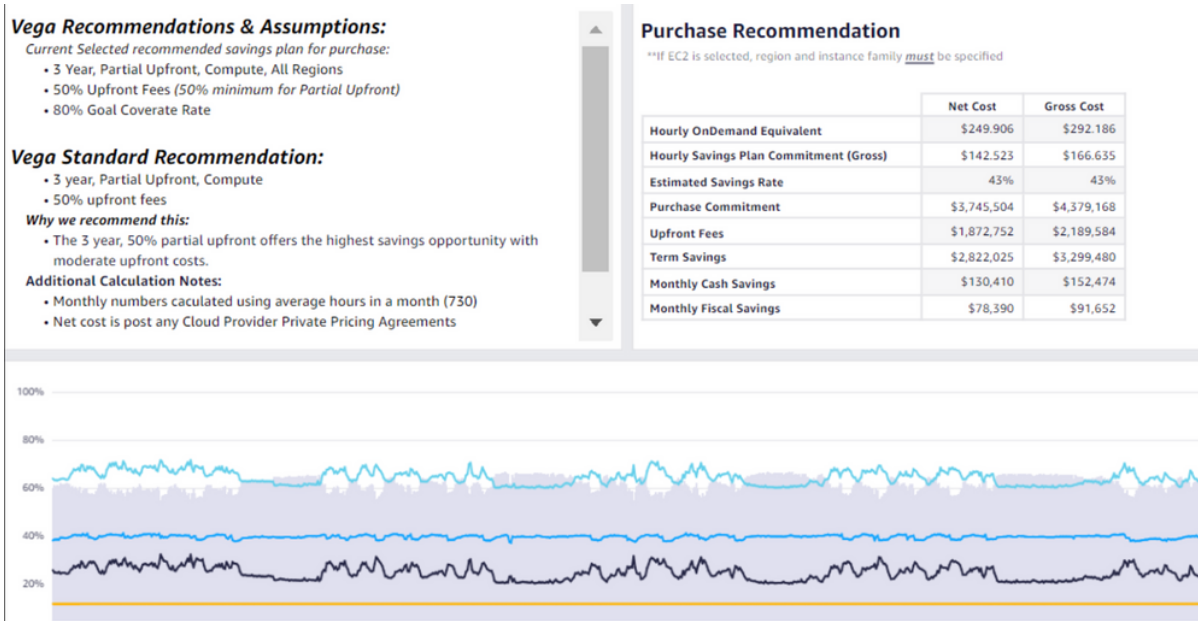
Establishing a FinOps Decision & Accountability Structure

Information is easy to access and share across the company. This helps to break down barriers and encourages a FinOps culture. Given the consistency and validity of the information the Platform provides, teams can seamlessly collaborate without having to waste time troubleshooting differing reports. Costs are grouped by client, business groups, business units, workloads, and any custom reporting structure a client may require.

In our Cloud Hero Program, goals are set to allow individuals and teams to see their cost-saving responsibilities. This creates and rewards proactive optimization of effective usage through accessible recommendations and their completion.

Managing Commitment Based Discounts

We have net fiscal cost reporting to allow users to see the net discount of their commitment discount within and across clouds. Our commitment dashboards also provide real-time coverage rates for all services that a CSP allows to be covered by a committed use. Our optimization recommendations for savings plans and reserved instances in the Platform can show what-if-scenarios for different purchasing options. For example, quickly compare the effective discount of a 3-year all-up-front to a 3-year partial up front without the need to create your own spreadsheets.

Vega Recommendations & Assumptions:
Current Selected recommended savings plan for purchase:
- 3 Year, Partial Upfront, Compute, All Regions
- 50% Upfront Fees *(50% minimum for Partial Upfront)*
- 80% Goal Coverate Rate

Vega Standard Recommendation:
- 3 year, Partial Upfront, Compute
- 50% upfront fees
Why we recommend this:
- The 3 year, 50% partial upfront offers the highest savings opportunity with moderate upfront costs.
Additional Calculation Notes:
- Monthly numbers caculated using average hours in a month (730)
- Net cost is post any Cloud Provider Private Pricing Agreements

Purchase Recommendation

**If EC2 is selected, region and instance family *must* be specified

	Net Cost	Gross Cost
Hourly OnDemand Equivalent	$249.906	$292.186
Hourly Savings Plan Commitment (Gross)	$142.523	$166.635
Estimated Savings Rate	43%	43%
Purchase Commitment	$3,745,504	$4,379,168
Upfront Fees	$1,872,752	$2,189,584
Term Savings	$2,822,025	$3,299,480
Monthly Cash Savings	$130,410	$152,474
Monthly Fiscal Savings	$78,390	$91,652

Resource Utilization & Efficiency

In addition to providing the visibility companies need to manage their cloud spend, the Vega Platform excels at presenting optimization recommendations to help optimize costs. The Vega Platform presents optimization recommendations including:

- Committed Use Discounts
- Aged Snapshots
- Right Sizing & Family Refresh
- Disk Optimization
- Auto-Parking
- Orphaned Disks
- Multi-AZ RDS
- Idle Databases
- Idle Load Balancer
- Auto-Stop Virtual Desktops
- Idle Virtual Machines

The Vega optimization recommendations can be actioned on by the client or the Platform provided automation for many functions such as auto-parking, right sizing, and deleting aging snapshots.

FinOps
Savings Opportunities

	Azure	AWS	Total Monthly Savings
Committed Use Discounts	$29,300	$270,340	$299,640
Right Sizing & Family Refresh	$4,341	$44,344	$48,685
Disk Optimization	$22,560	$23,287	$45,847
Auto-Parking	$11,751	$32,946	$44,697
Orphaned Disks	$16,941	$14,512	$31,453
Aged Snapshots	$6,772	$1,051	$7,823
Multi-AZ RDS		$7,542	$7,542
Idle RDS		$3,815	$3,815
Idle Load Balancer		$1,963	$1,963
Auto-Stop Workspaces		$914	$914
Idle VMs	$472		$472
Idle NatGateway		$104	$104
Total Monthly Savings	**$92,138**	**$400,817**	**$492,955**