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Metrics that matter: Navigate financial uncertainty with actionable KPIs

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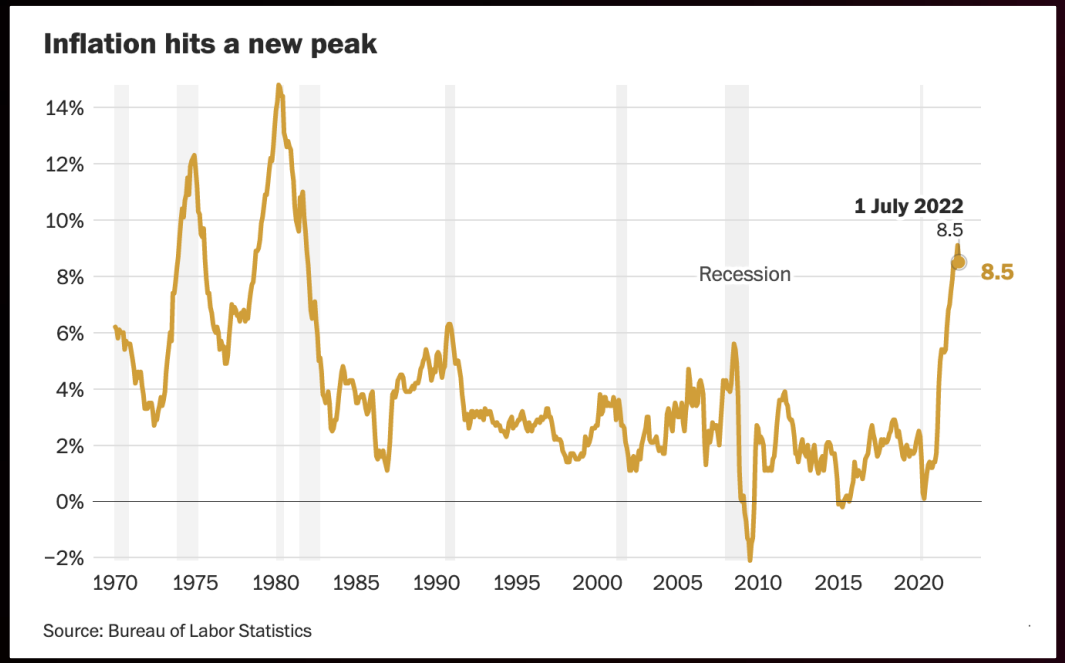
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Adapting to a high-inflation environment



In the US, June inflation soared to 9.1%, a new 40-year high

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Unique opportunity of cloud cost

- Operating, variable cost
- Immediate impact
- Savings are perpetuated to future months
- Levers available in both usage and pricing
- Fewer downsides compared to cutting staff and other costs

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Be guided by FinOps metrics

AVOID OVER-REACTING, WASTING TIME ON LOW IMPACT CHANGES AND - MOST IMPORTANTLY - STYMYING DRIVERS OF BUSINESS GROWTH

AGENDA

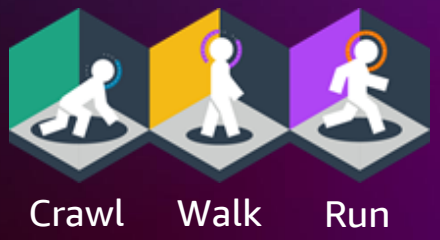
- FinOps overview
- Key metrics
  - Public cloud cost efficiency and optimization
  - Cloud program TCO
  - Unit economics
- Getting started

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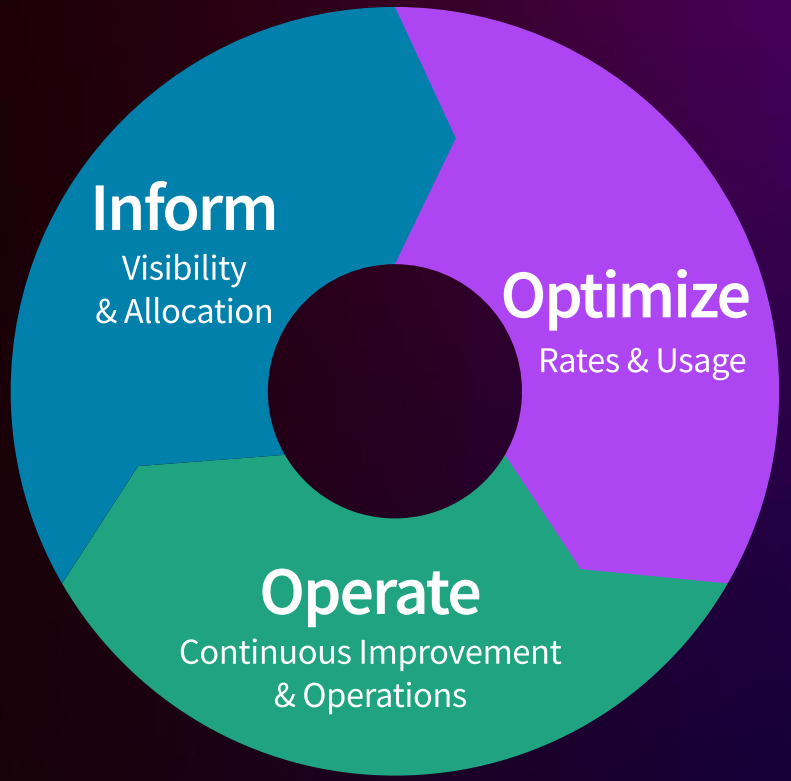
FinOps explained

FINOPS IS AN EVOLVING CLOUD FINANCIAL MANAGEMENT DISCIPLINE AND CULTURAL PRACTICE THAT ENABLES ORGANIZATIONS TO GET MAXIMUM BUSINESS VALUE BY HELPING ENGINEERING, FINANCE, AND BUSINESS TEAMS TO COLLABORATE ON DATA-DRIVEN SPENDING DECISIONS



Principles

- Teams need to collaborate
- Everyone takes ownership for their cloud usage
- A centralized team drives FinOps
- Reports should be accessible and timely
- Decisions are driven by business value of cloud
- Take advantage of the variable cost model of the cloud

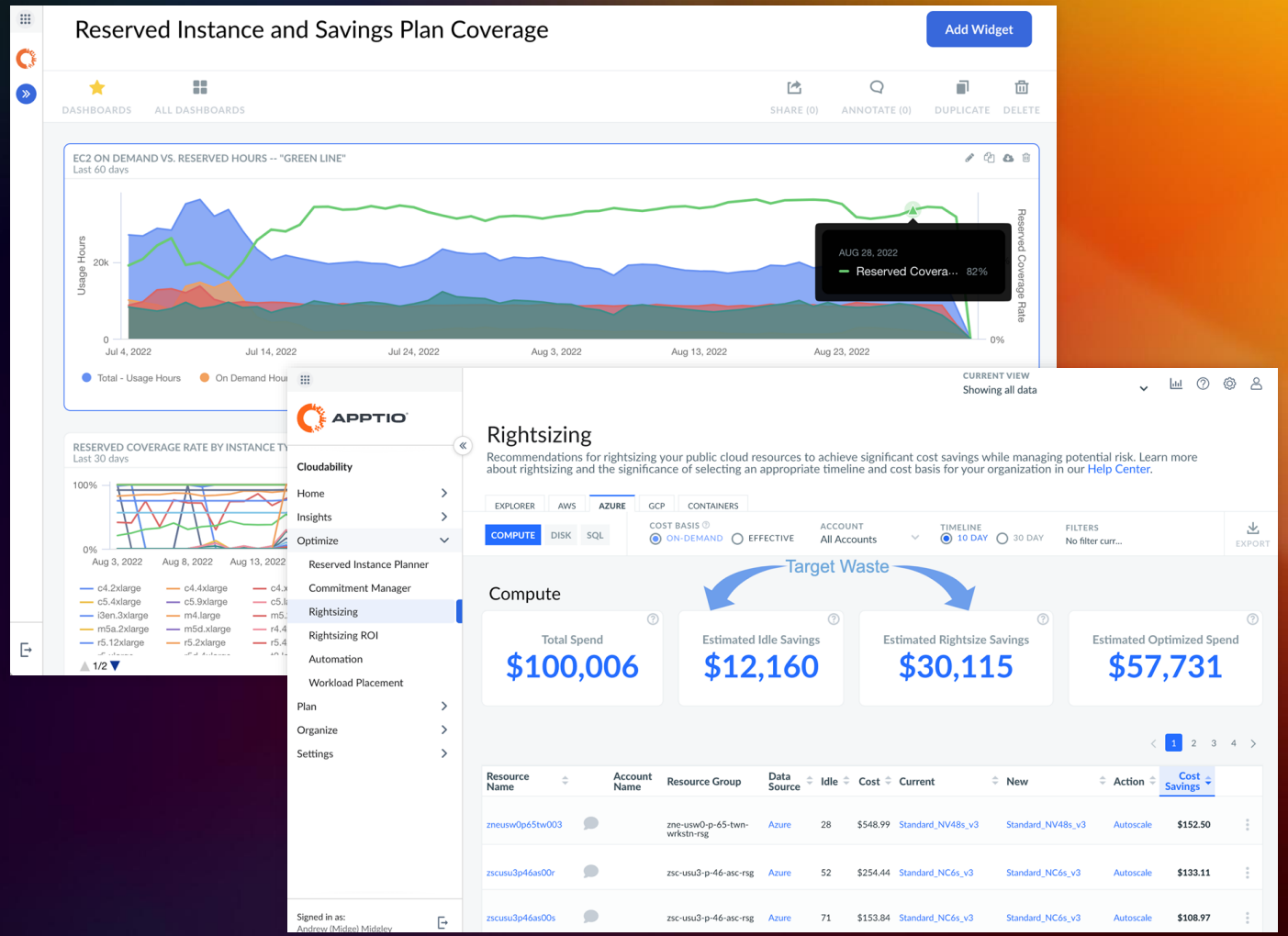


SOURCE: FinOps Principles by FinOps Foundation

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Metric 1: Public cloud cost efficiency and optimization

Set and adjust targets across both pricing and usage metrics to know when and where to take action



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Metric-driven cost optimization (MDCO)

Core principles

- Automated measurement: Computers perform the measuring, not humans
- Targets: Metrics without targets are just pretty graphs
- Achievable goals: You need a proper understanding of data to determine realistic outcomes
- Data-driven: Actions aren’t driving your data; the data is driving you to take actions

SOURCE: JR Storment & Mike Fuller, Cloud FinOps: Collaborative, Real-Time Cloud Financial Management 2nd Edition

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Efficiency and optimization: Cigna KPIs

Inform

- ❑ Tagging efficiency
  - Reduced untagged resources over time
- ❑ Top services/utilization
- ❑ Cost by application (unit economics)
- ❑ Budgets/forecasting
  - Manage budgets with forecasts and understand the variances
- ❑ Education/training
  - Measurement by skills (identify need for specific skill cohorts)
  - Certifications received

Optimize

- ❑ Coverage rate
  - Increase rate by reserved resource purchases (RI/SP)
- ❑ Underutilized/idle resources
  - Automated shutdown will reduce idle cost over time
- ❑ Rightsizing resources
  - Cost reduction over time by utilizing smaller instance type
- ❑ Unused/orphaned resources
  - Cost reduction over time by removing unused/orphaned resources
- ❑ Unused reserved instances/savings plans
  - Observe cost reduction by converting RIs/migrating to compute SPs

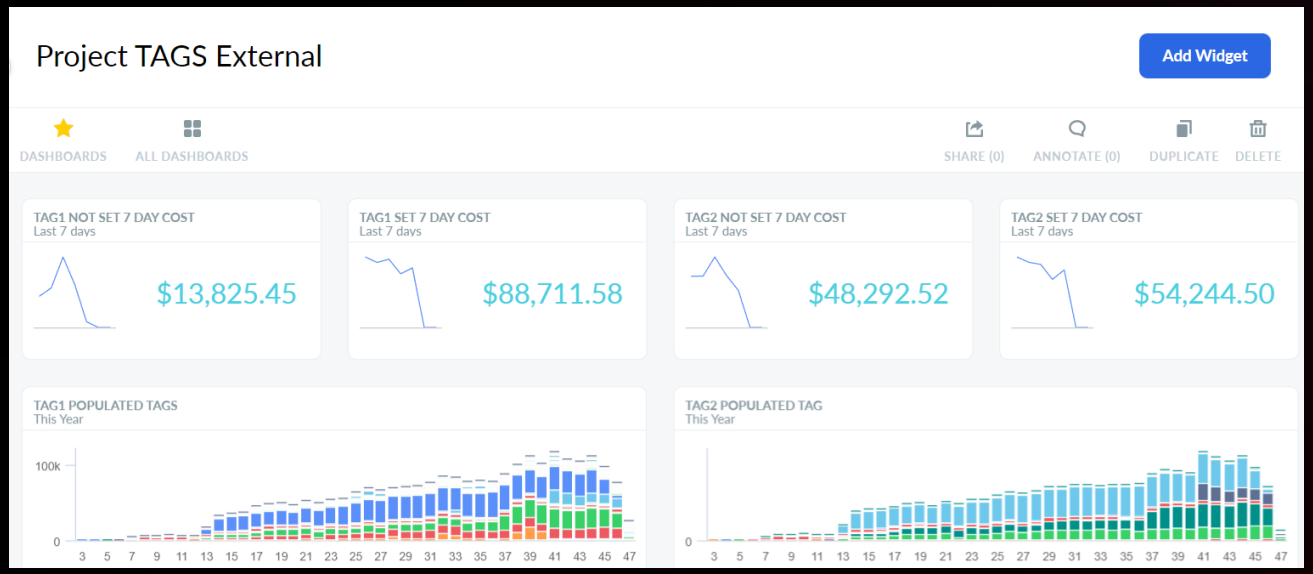
Operate

- ❑ Anomaly detection
  - Cost control on anomalies by alerting
- ❑ Unplanned instances
  - Policy restriction enforcement on large instances
  - Autoscaling policies
- ❑ FinOps adoption
  - Observe team members onboarded to third-party tools or access to native tools
  - Periodic reviews participation and communication
- ❑ Shared cost allocation
  - Measure of total cost transparency by services (% increase over time)

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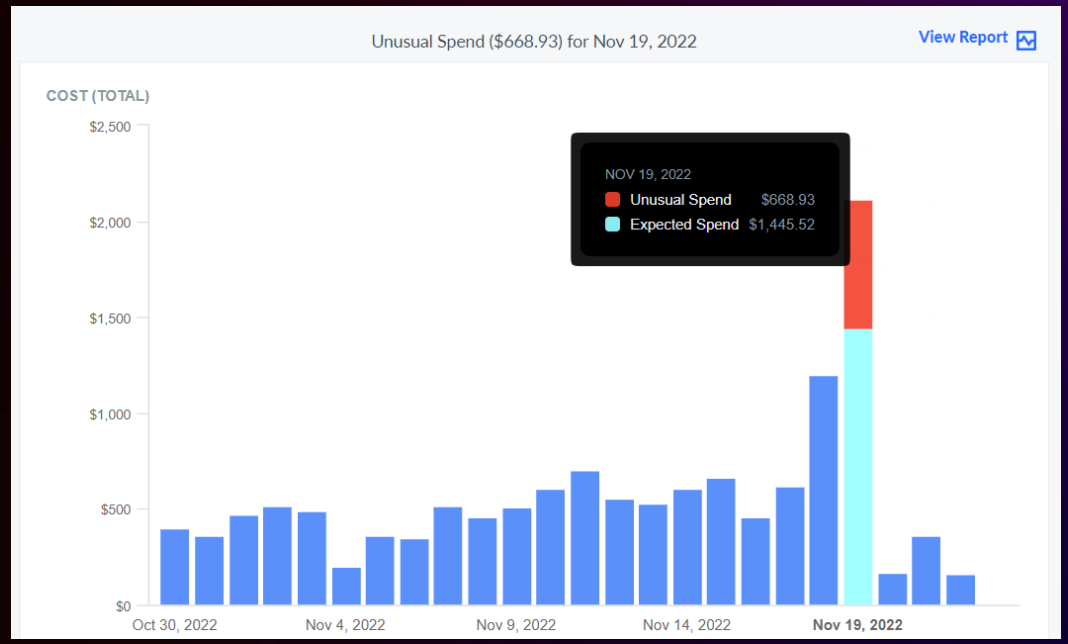
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Efficiency and optimization: Cigna KPIs



Tagging efficiency helps attains transparency for unit costs, and cost allocation

Anomaly Detection and alerting are key to cost management esp. for unplanned resources



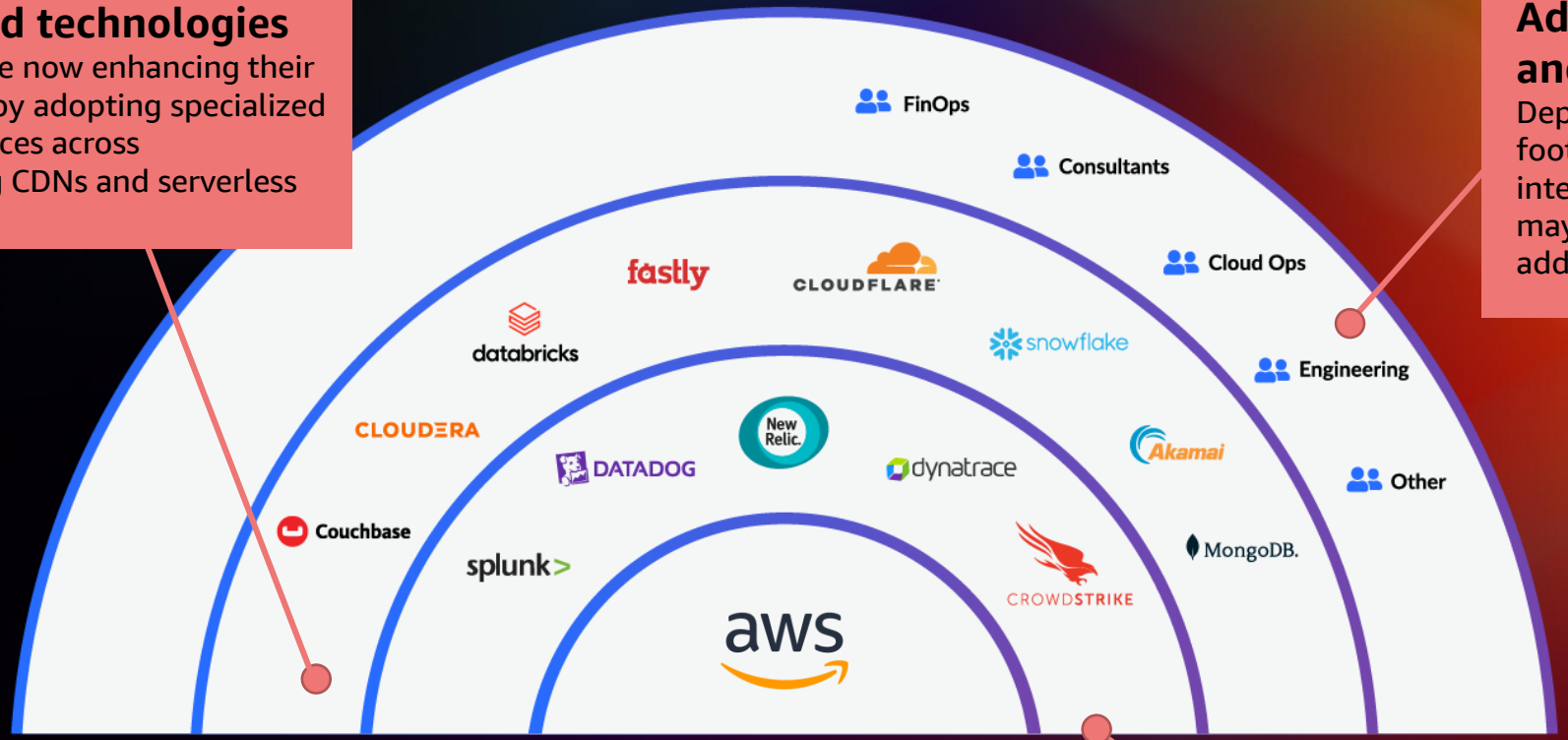
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Metric 2: Cloud program TCO

CAPTURE AND ALLOCATE TOTAL CLOUD PROGRAM SPEND

Specialized cloud technologies

Many organizations are now enhancing their business applications by adopting specialized third-party cloud services across technologies including CDNs and serverless data warehouses.



Additional vendors and labor

Depending on your cloud footprint and how you allocate internal resources, indirect costs may also include labor and additional cloud vendors.

Observability solutions

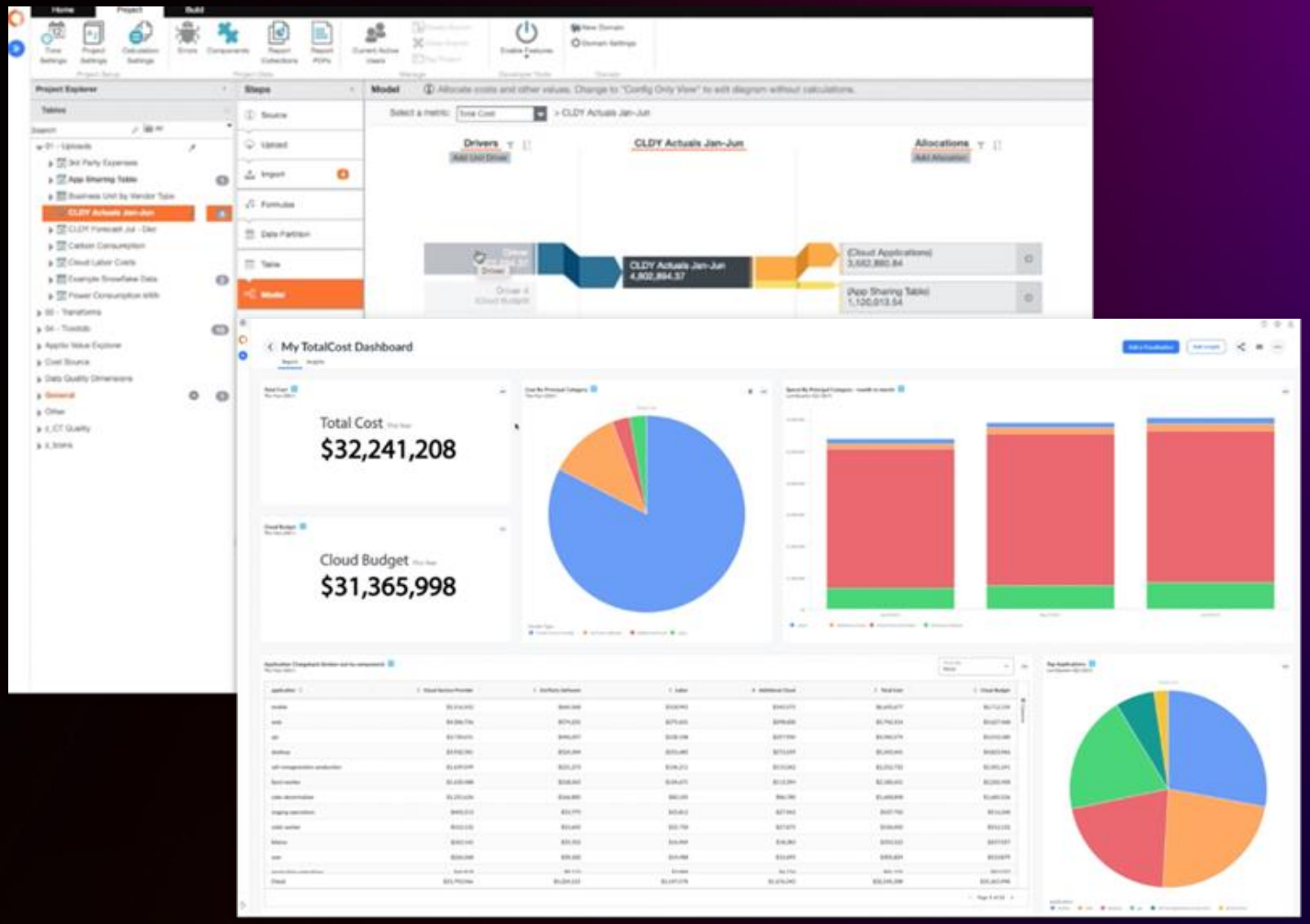
Most large cloud footprints leverage observability solutions to help ensure the operational and security integrity across a fleet of VMs.

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Metric 2: Cloud program TCO

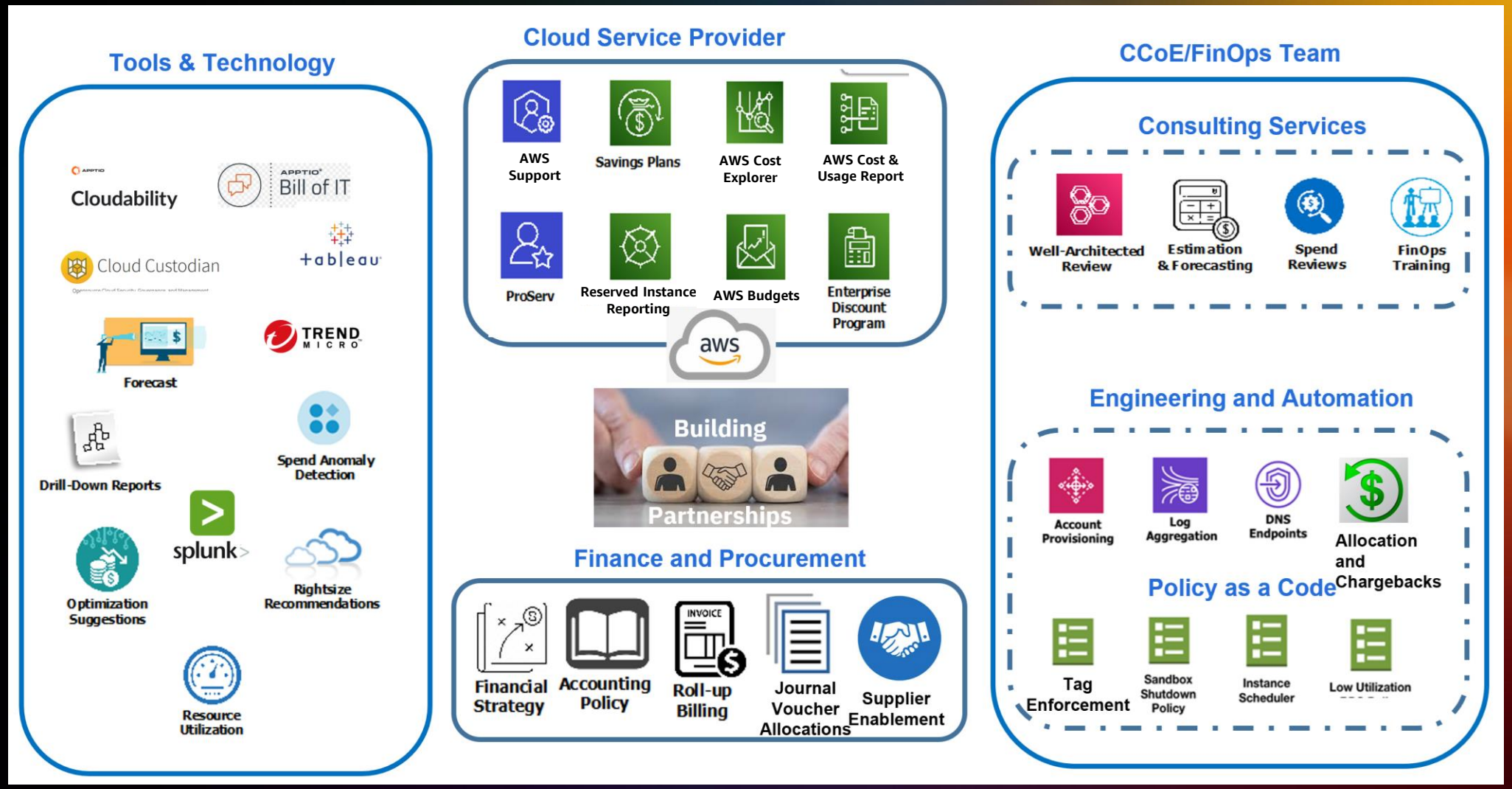
Determine cloud TCO by connecting direct and shared costs

Allocate by team, product, application, etc.



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Cloud program TCO: Cigna ecosystem



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Cigna financial integration: Cost allocation



Organize

Consolidate existing practices across the organization into a common financial process.

- Standardize accounts
- Centralized billing
- Centralized enterprise Support discount program enrollment



Foundation

Define key elements of FinOps practice for cost allocation (Inform) and begin to implement basics across the enterprise.

- Cost consultation
- RIs and Savings Plans management
- Dashboarding
- Basic alerting
- Forecasting and budgeting
- Shared cost allocation and chargeback

80%



Allocation at Scale

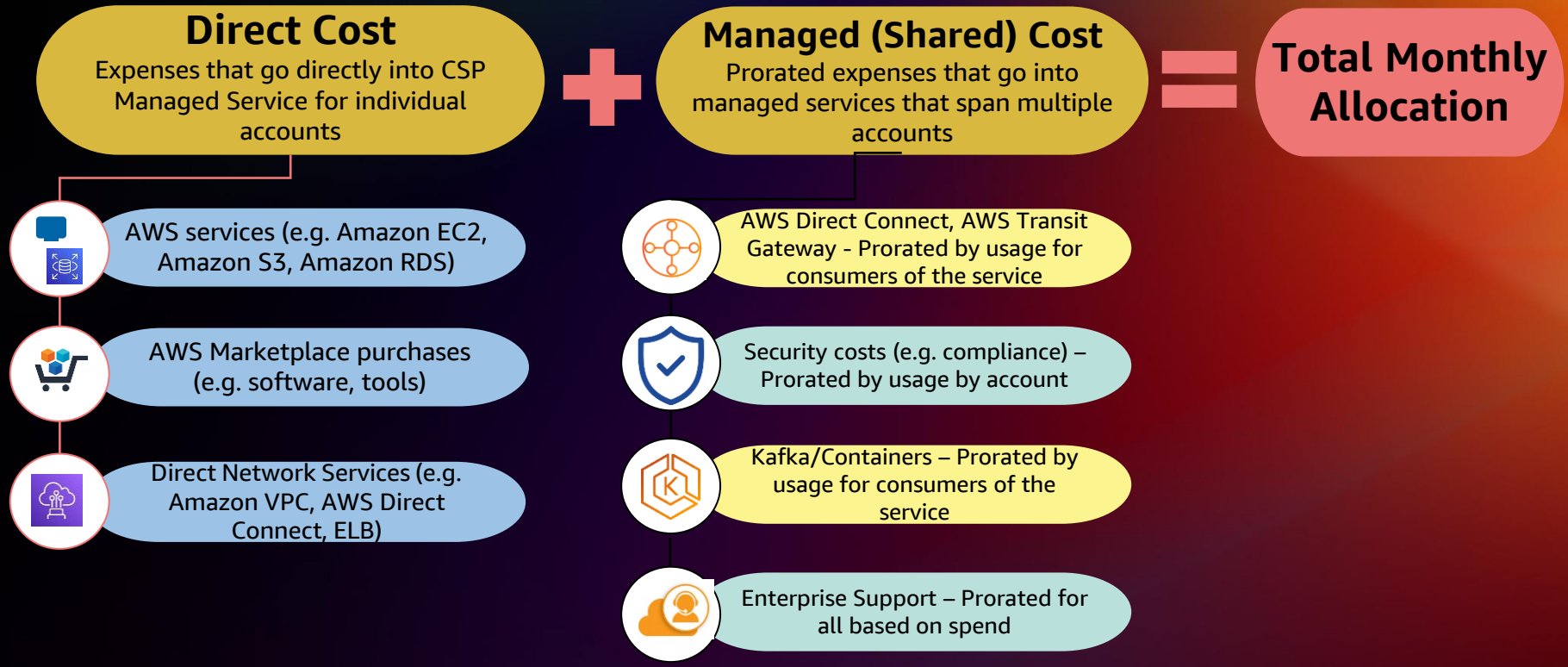
Bring financial transparency and accountability to the variable cloud spend. Enable various stakeholders (shared IT, finance, and business teams) to tune deployments for innovation, speed, and cost.

- Expanded tools and capabilities
- Automation to drive continuous improvement for efficiency and innovation
  - APIs enablement
  - Connectors for SaaS suppliers

>90%

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Cloud program TCO: Cigna Ecosystem

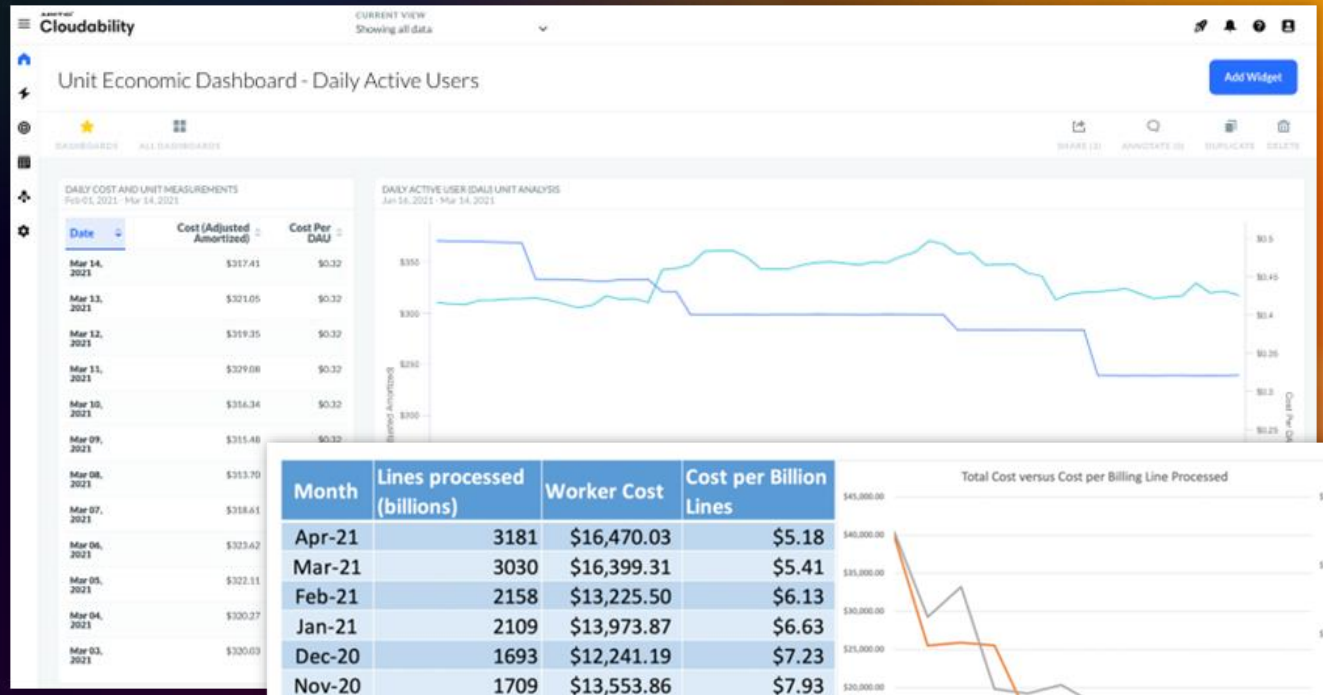


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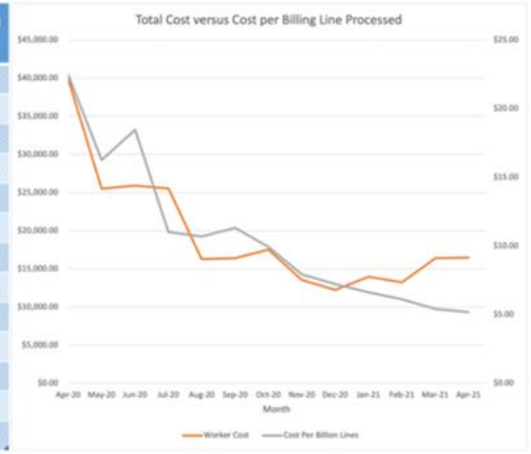
Metric 3: Unit cost

STARTING WITH UNIT COST

Quantify the cost of cloud per unit of business value delivered. For business value consider both financial metrics – such as total sales – as well as internal metrics that are proxies to customer activity.



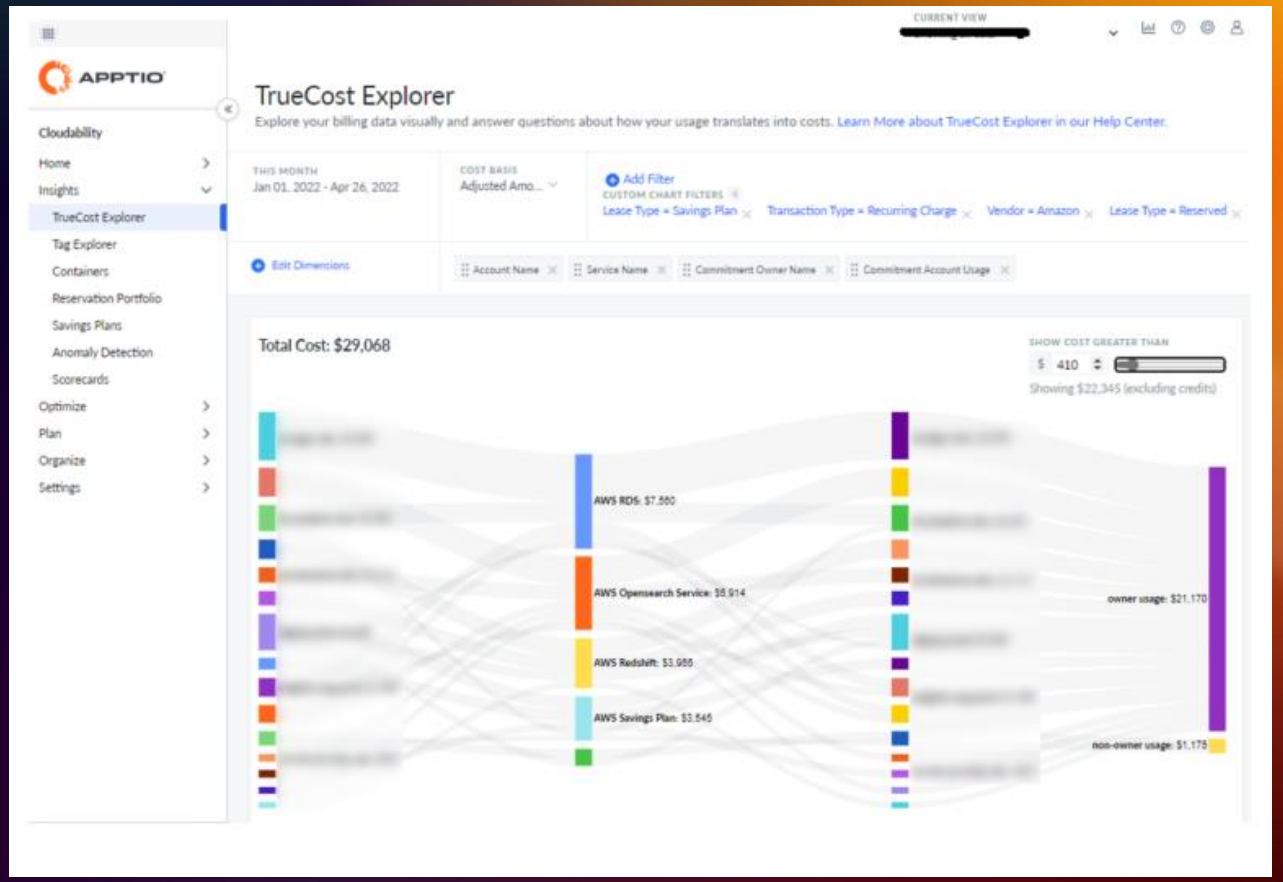
Month	Lines processed (billions)	Worker Cost	Cost per Billion Lines
Apr-21	3181	$16,470.03	$5.18
Mar-21	3030	$16,399.31	$5.41
Feb-21	2158	$13,225.50	$6.13
Jan-21	2109	$13,973.87	$6.63
Dec-20	1693	$12,241.19	$7.23
Nov-20	1709	$13,553.86	$7.93
Oct-20	1761	$17,513.20	$9.95
Sep-20	1448	$16,390.11	$11.32
Aug-20	1523	$16,276.57	$10.69
Jul-20	2318	$25,544.94	$11.02
Jun-20	1404	$25,910.00	$18.45
May-20	1569	$25,503.73	$16.25
Apr-20	1774	$39,835.08	$22.45



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Unit economics: Cigna application

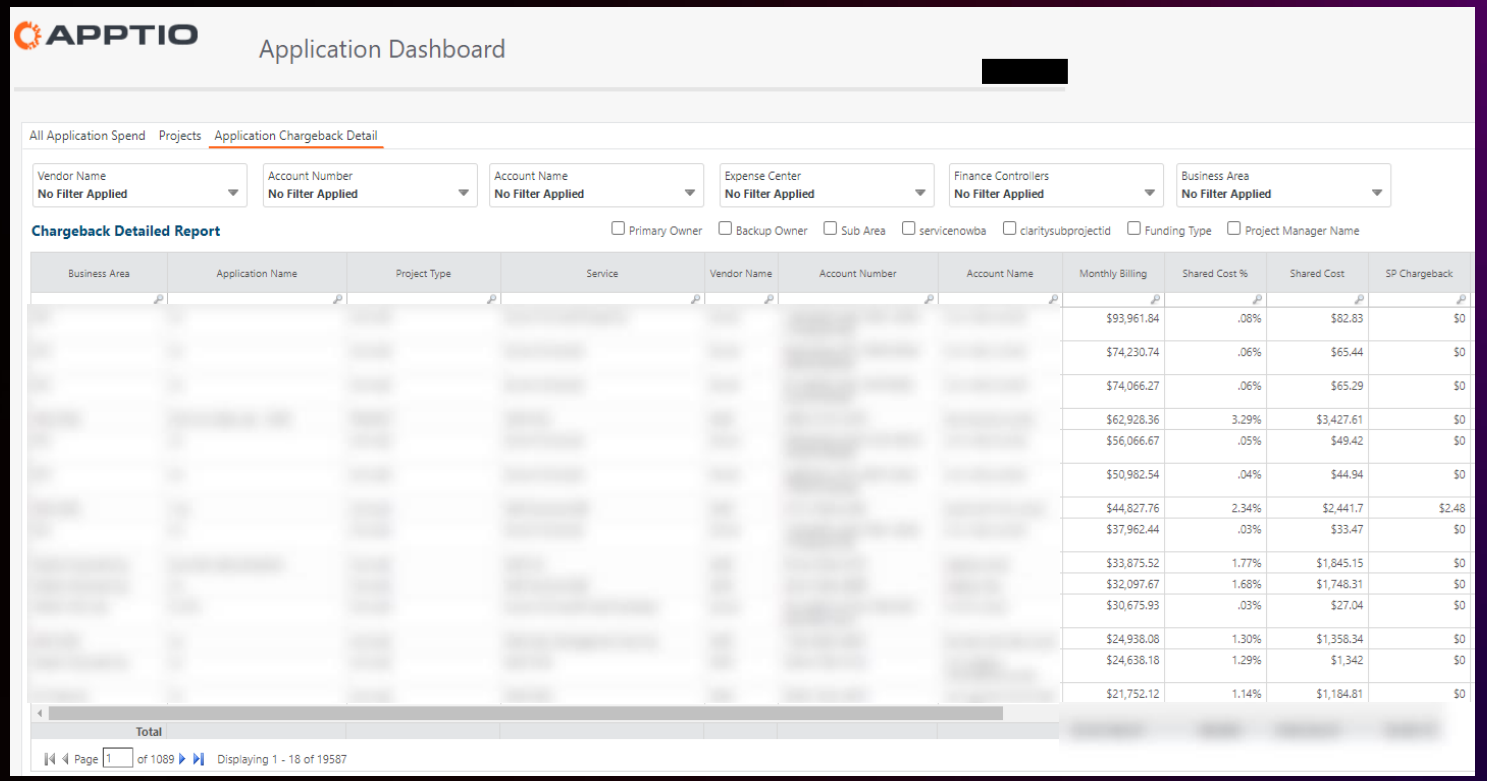
- ✓ Centralized/shared RI/SP purchase showback via Cloudability TrueCost Explorer and reporting
- ✓ Implement 2 Business Mapping for the owner of the RI/SP and consumer of the RI/SP
- ✓ For chargebacks, determine the RI/SP reservation ID for centralized purchases and model/map the cost with the necessary accounts and expense centers
- ✓ Repeat for new RI/SP purchases



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Unit economics: Cigna application

- ✓ Application dashboard integrates data from ServiceNow and Labor tracking system for Business IT teams to view charges by application, product and/or funding expense centers
- ✓ Data can be filtered by application/expense center, business areas or funding codes
- ✓ Utilized for forecasting and budgeting (90%+ accuracy) at application or product level



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Metric 3: Developing to unit economics

Recent whitepaper – **Introduction to Unit Economics**

Cloud unit economics is a system of profit maximization based on objective measurements of how well your organization is performing against not only its FinOps goals but as a business in the market. Cloud unit economics achieves these noble goals by leveraging the measurement of **marginal cost (a.k.a. unit cost metrics)** specific to the development and delivery of cloud-based software and **marginal revenue (a.k.a. unit revenue metrics).**

By calculating the difference between marginal cost and marginal revenue, you can determine where your cloud operations break even and begin to generate a profit – an important concept in economics overall and one of the most effective ways to make data-driven business decisions regarding your cloud investment.

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Getting started



Crawl Walk Run

SOURCE: FinOps Principles by FinOps Foundation

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Example: Maturing unit economics

Crawl



Unit cost

- Blended unit cost based on invoice
- Unblended unit cost based on contract pricing

Walk



Unit cost integration

- Unit cost used to convert unit forecast to budget
- Usage and cost conversations

Run



Unit economics

- Cost to produce
- Cost to serve a customer
- Cost to serve an application
- Cost to serve a file

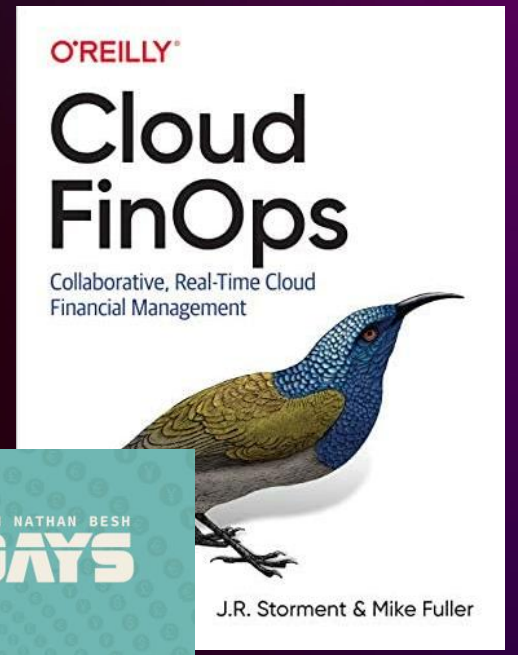
SOURCE: Unit Economics Playbook, FinOps Foundation 2022

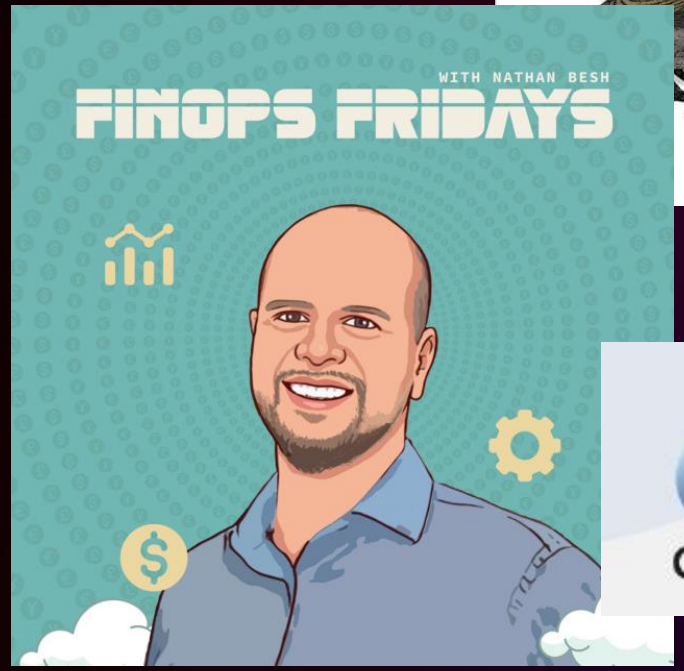
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Key resources

- J.R. Storment and Mike Fuller, *Cloud FinOps: Collaborative, Real-Time Cloud Financial Management* (2nd edition publishing soon)
- FinOps.org
- Apptio.com
  - FinOps Fridays
  - Cloudbusters







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Key resources

- Introduction to Cloud Financial Management
- Developing Your FinOps Practice – Make the Most of Your AWS Cloud Spend
- FinOps Foundation – Bringing accountability to cloud spend
- Showback and chargeback – How to Optimize IT Costs by Shaping Demand
- AWS Cost Optimization
- AWS Well-Architected Framework, Cost Optimization Pillar
- AWS Cloud Financial Management

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Thank you!

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