
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

BSI304

Optimize your AWS cost and usage with Cloud Intelligence Dashboards

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AWS

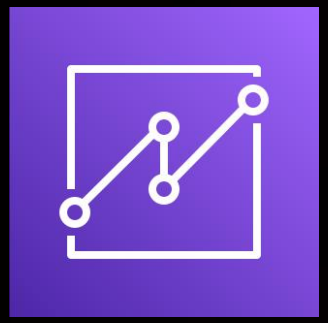
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Amazon QuickSight

UNIFIED BI SERVICE AT HYPERSCALE

Build data-rich experiences fast

Unified BI for all your analytics needs

Consistent high performance at scale

Lower costs with consumption-based pricing

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Agenda

What is the value of Cloud Financial Management?

How Cloud Intelligence Dashboards help?

Demo – FinOps Use Cases

How to scale financial awareness?

Customer story — Dolby

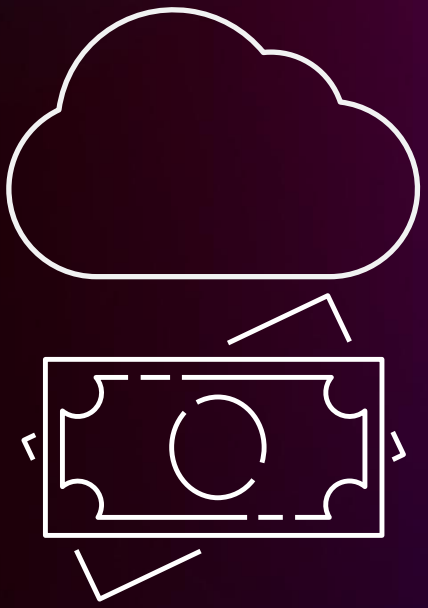
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The value of Cloud Financial Management

Global cloud spend to hit $495B in 2022[1]

Enterprises waste 32% of spend on average[2]

67% of enterprises say CFM helped grow revenue[3]



1. Gartner Forecast for 2022
2. Flexera State of the Cloud report 2022
3. (451 Research Report) CFM Study Q1 2020

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This is Amy

She is a FinOps practitioner.

She’s just joined a new company.

The company has just migrated to AWS and is looking to optimize their AWS spend.



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Amy learns about AWS Cost Explorer.

She logs into the payer account and sees all spend.

She exports a report and shares with the CFO.



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The CFO says ”that’s great… but…”

I need you to come up with a strategy to lower out costs.

What will our costs be next month so I can set pricing for our products?

Few people have AWS Console access. How will you scale ongoing insights with everyone? Including the C-suite?



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What Amy needs to do

Amy does some research and learns that she has many options for optimizing on AWS.

She can buy Savings Plans and Ris.

But how can she get her teams to use Amazon EC2 Spot, AWS Graviton, gp3, and other optimized services?

What about right-sizing?



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AWS has many tools



AWS Cost Explorer

She can filter and group her spend and usage



AWS Trusted Advisor



AWS Compute Optimizer

She can use these two tools for right-sizing recommendations



AWS Budgets

She can set budgets and alerts



Cost Anomaly Detector

She can use this tool to detect cost anomalies



Reserved Instance (RI) and Savings Plans Reporting

She can export these reports to see realized savings

aws

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See everything all at once

But Amy needs to see cost optimization KPIs so she knows what to track.

She needs to see her unit costs so she can understand the impact of optimizing.

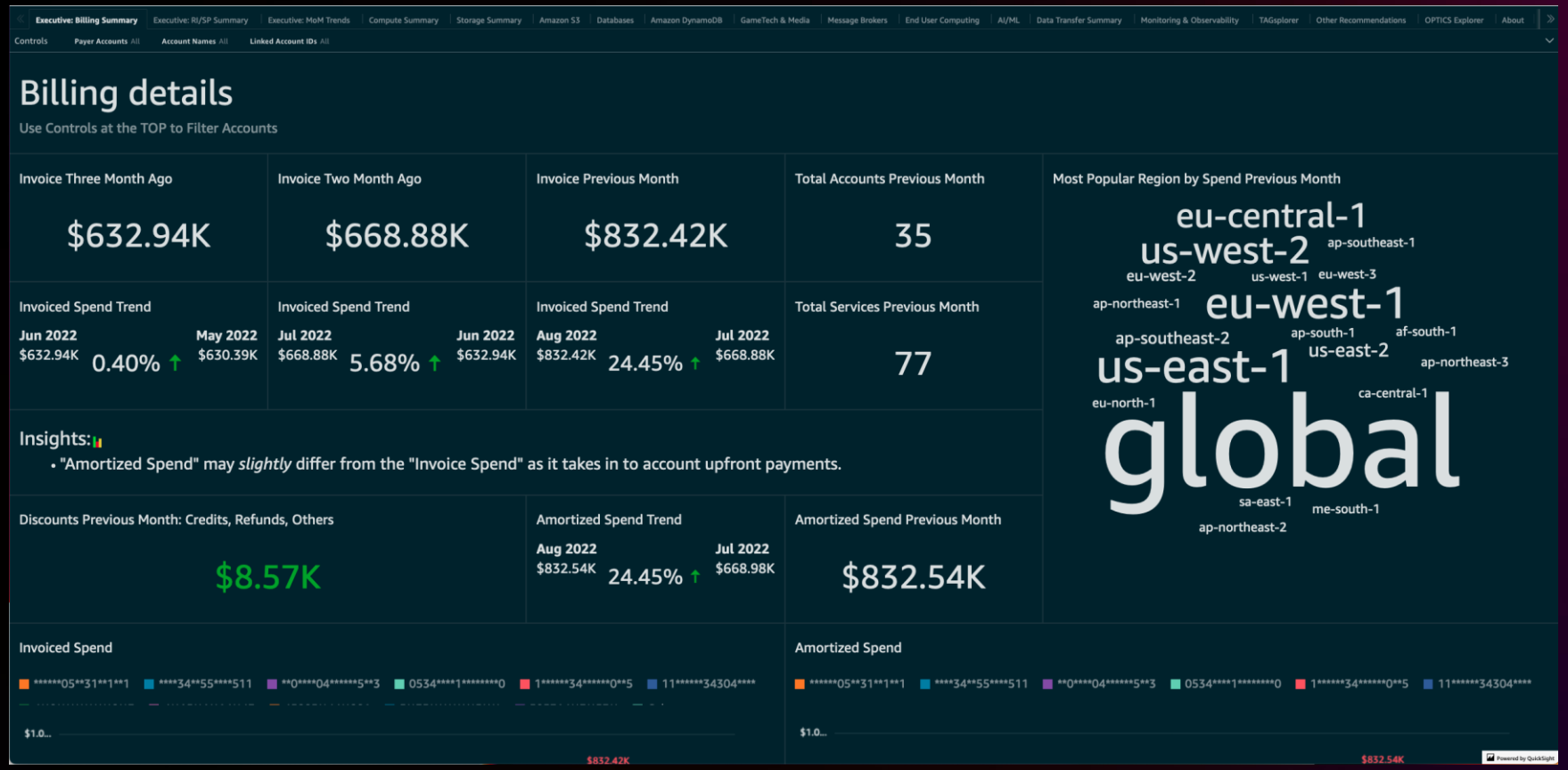
She needs this all in one place, shareable with her organization.



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Let’s explore

The Cloud Intelligence Dashboards



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What dashboard do I need?

Trends Dashboard



Executive summary

Cost Intelligence Dashboard



- Track success
- High level

CUDOS Dashboard



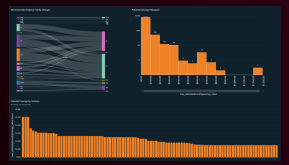
- In-depth insights
- Targeted recommendations

KPI Dashboard



- Define and track KPIs
- Take action

Compute Optimizer Dashboard



- Track wasted spend
- Find right-sizing opportunities

Trusted Advisor Organizational (TAO) Dashboard



Track security, performance, cost opt, and fault tolerance flags

Executives

Finance/Procurement

Business/Product Owners

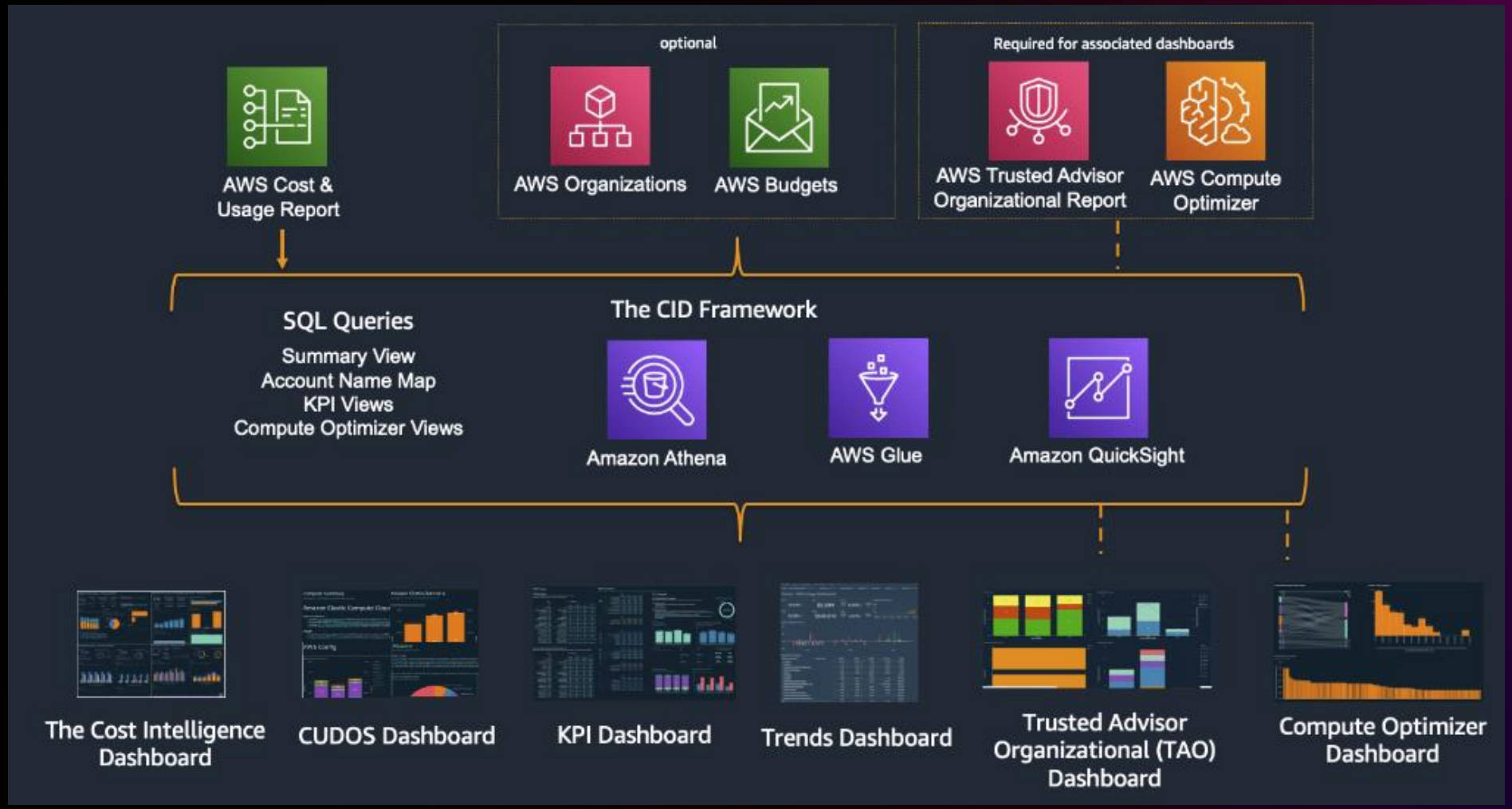
FinOps Practitioners

Engineering and Operations

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Remember all those tools?

They become sources of data



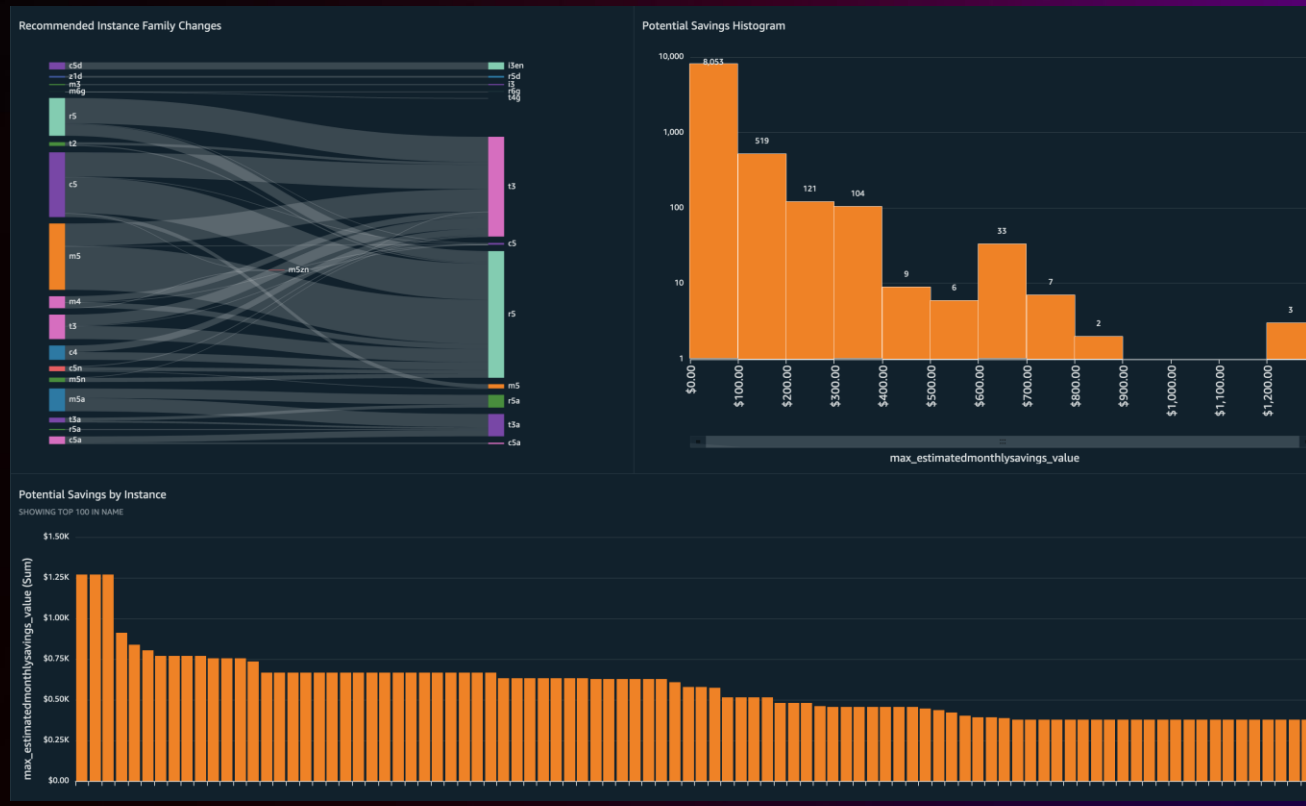
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Compute Optimizer Dashboard Demo

Great for DevOps and IT managers.

Discover potential savings from right-sizing.

Generate reports with recommendations for individual resources.



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TAO Demo

Great for DevOps and IT managers.

See org-wide Trusted Advisor flags over time.

Find and take action on underutilized resources, security, and other issues quickly.



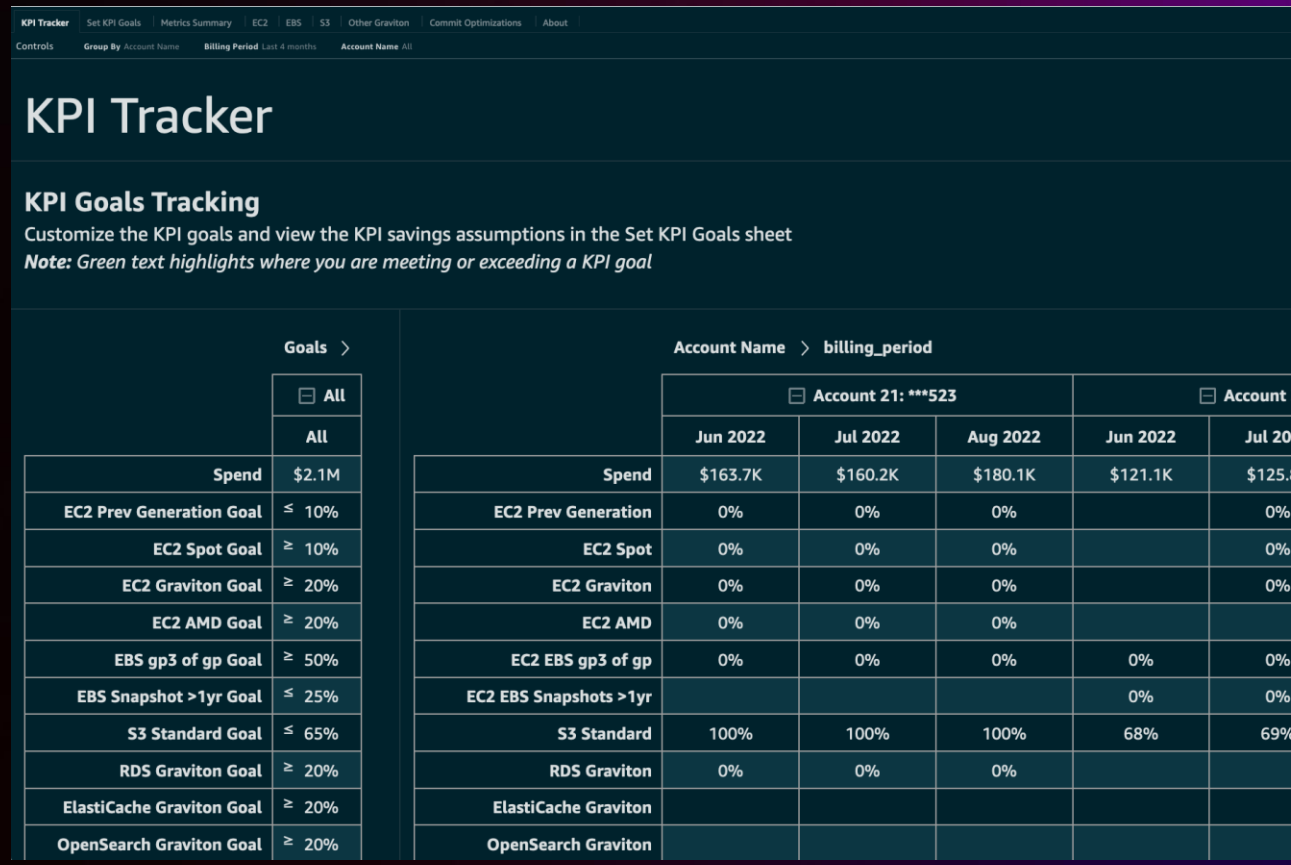
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KPI Dashboard Demo

Great for the whole team.

Track cost-optimization KPIs across teams.

Forecast estimated future savings.



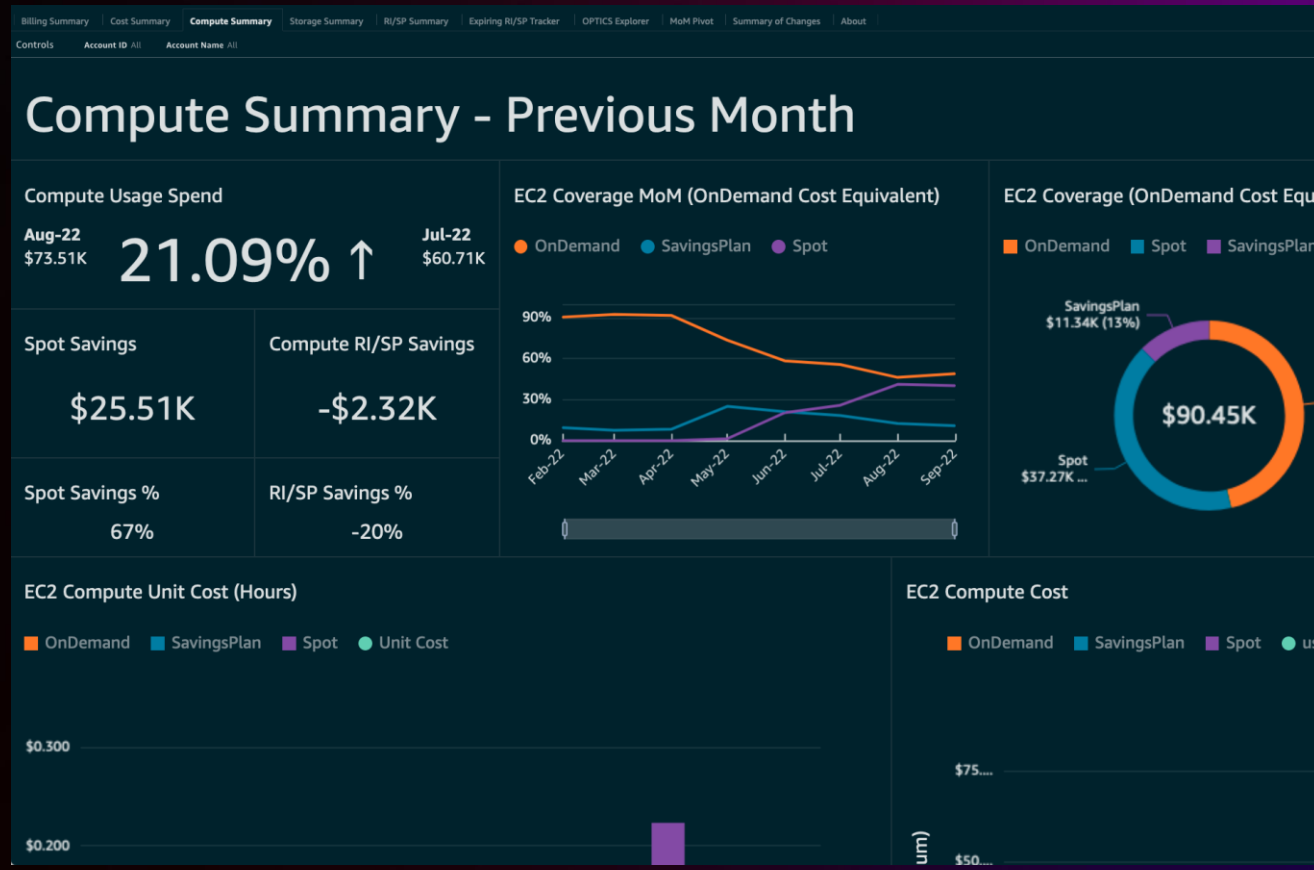
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Cost Intelligence Dashboard Demo

Great for finance and executives.

Track unit cost and past savings.

Strategize for purchasing Savings Plans and Spot Instances.



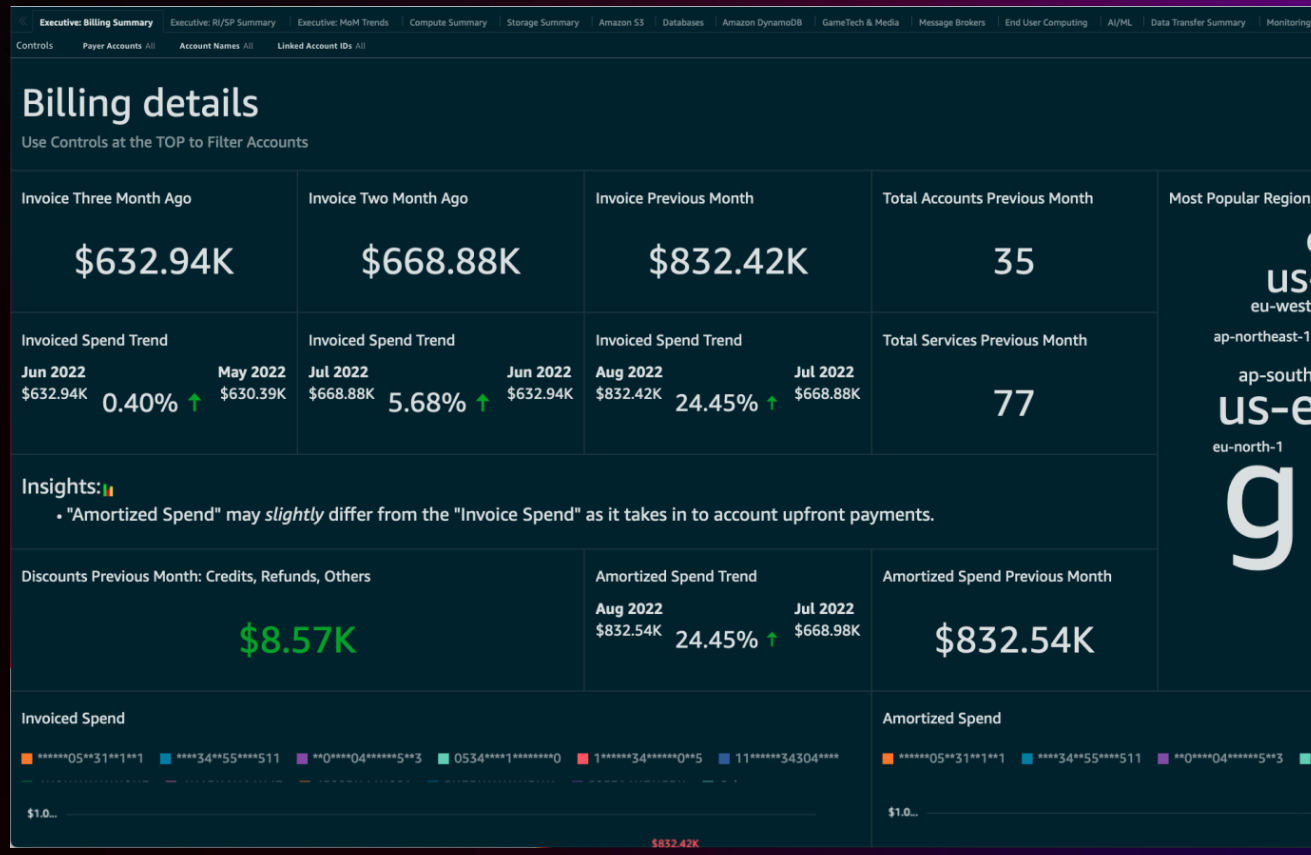
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CUDOS Demo

Great for DevOps and IT managers.

Drill down to individual resource cost and usage.

See cost-optimization recommendations for services large and small.



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Scale financial awareness with QuickSight

UNIFIED BI SERVICE AT HYPERSCALE



Unified BI for all needs

Interactive dashboards, Q, embedded analytics, and paginated reports from the same source of truth



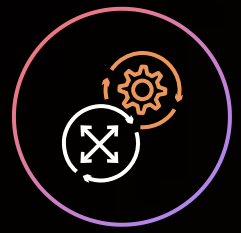
Insights anywhere

Embed easily with extensive APIs, look-n-feel customizations for seamless data experiences in any app or portal



Augmented analytics

Ask questions in natural language with Q—explore forecasts, anomalies, narratives with built-in ML



Auto-scaling

Scale effortlessly to 100k's of users with no servers to manage; scale to 1B+ row datasets with SPICE in-memory data engine



Policy-based governance, security

Share securely with row & column-level security, role-based access control, with automated user provisioning



Get more with less

Reduce costs with pay-per-use pricing—no long-term contracts or hidden costs for scaling

Over 100,000 customers use QuickSight

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With the Cloud Intelligence Dashboards

https://wellarchitectedlabs.com/cost/200_labs/200_cloud_intelligence/

- Report on monthly spend trends
- Get into the weeds with resource level costs
- Track cost optimization KPIs
- Find right-sizing recommendations
- Report on her unit costs
- And show her CFO how she's been helping to grow their business



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The CFO is happy because she gets the daily insight she needs to drive the business.

Amy is happy because she doesn’t need to do any manual reporting and risk errors.

As their business grows, the dashboards help them continue to optimize, helping them reach profitability in record time.

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Dolby



Mike Graff
Infrastructure Architecture Director

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About Dolby







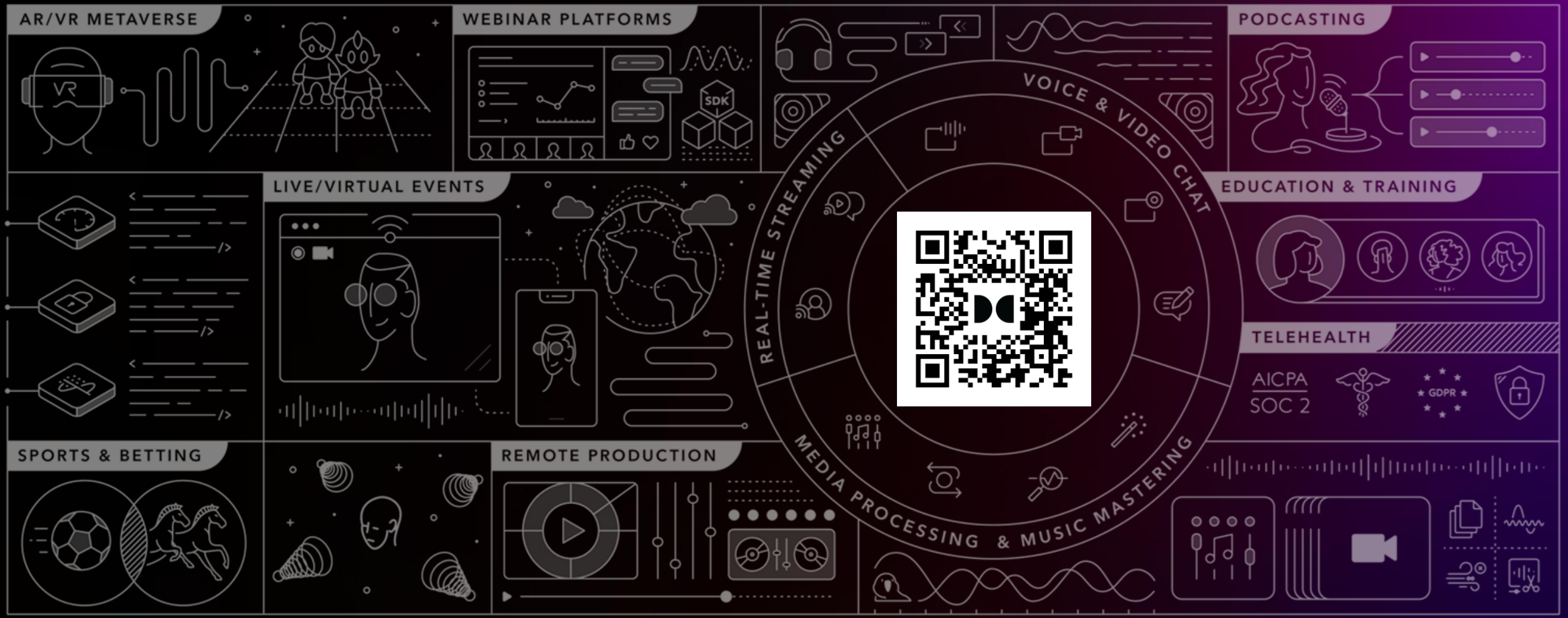




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The APIs of Sight and Sound

Dolby.io



aws

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How it started...

- Began using public cloud in 2015
- Finance not a fan of chargeback
- Leveraging third-party reseller for billing
- Dependent on commercial tool for spend analysis and reporting



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How it’s going...

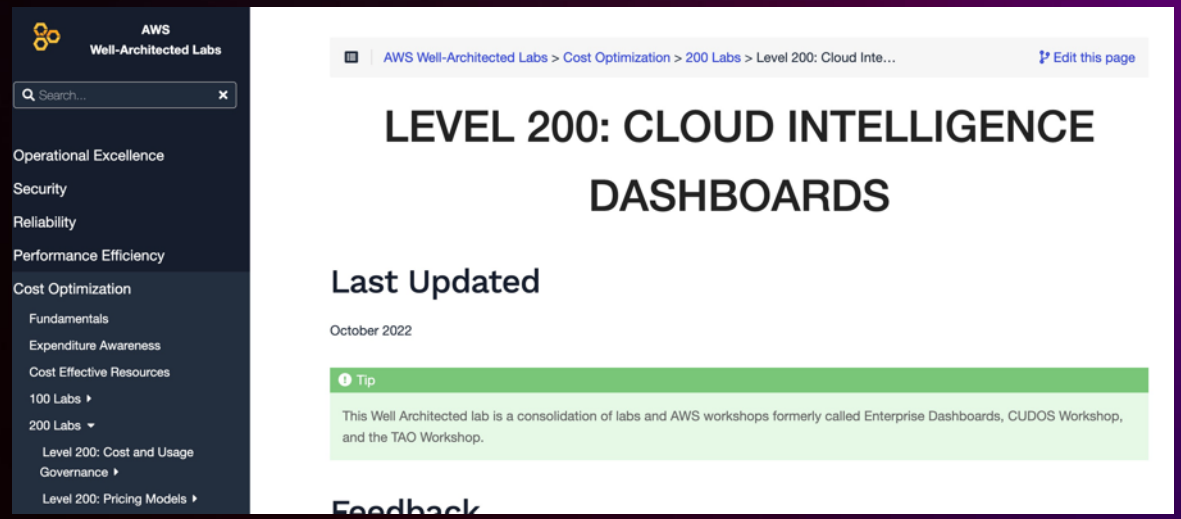
- Moved billing in-house in 2022
- No more POs
- Single invoice
- Cost allocation using Cost Categories
- Detailed reporting with Cloud Intelligence Dashboards
- Cloud governance using AWS Config

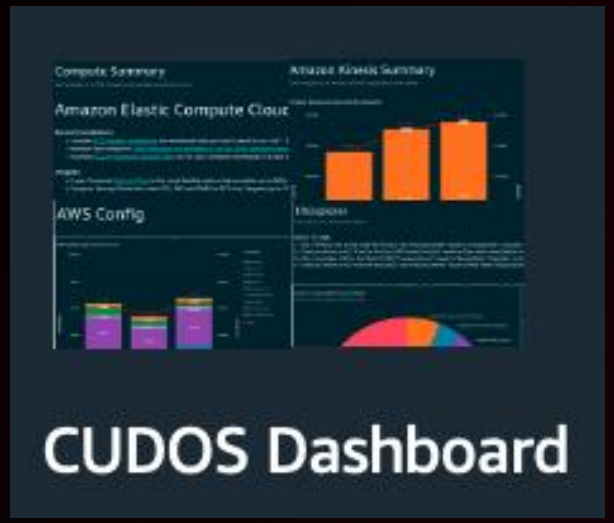


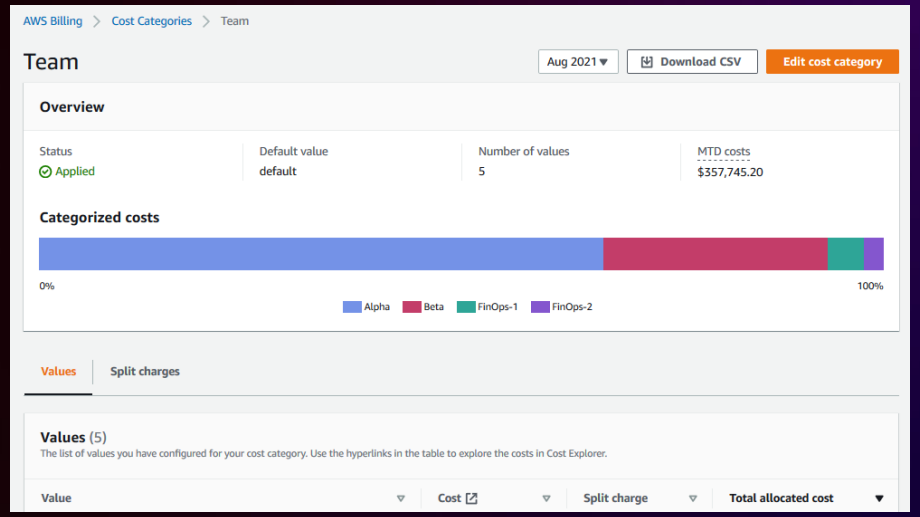
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The Solution: Cloud Intelligence Dashboards

- Easy to deploy
- Customizable to our needs
- Fully compatible with Cost Categories
- Easy to share
- Low cost to operate



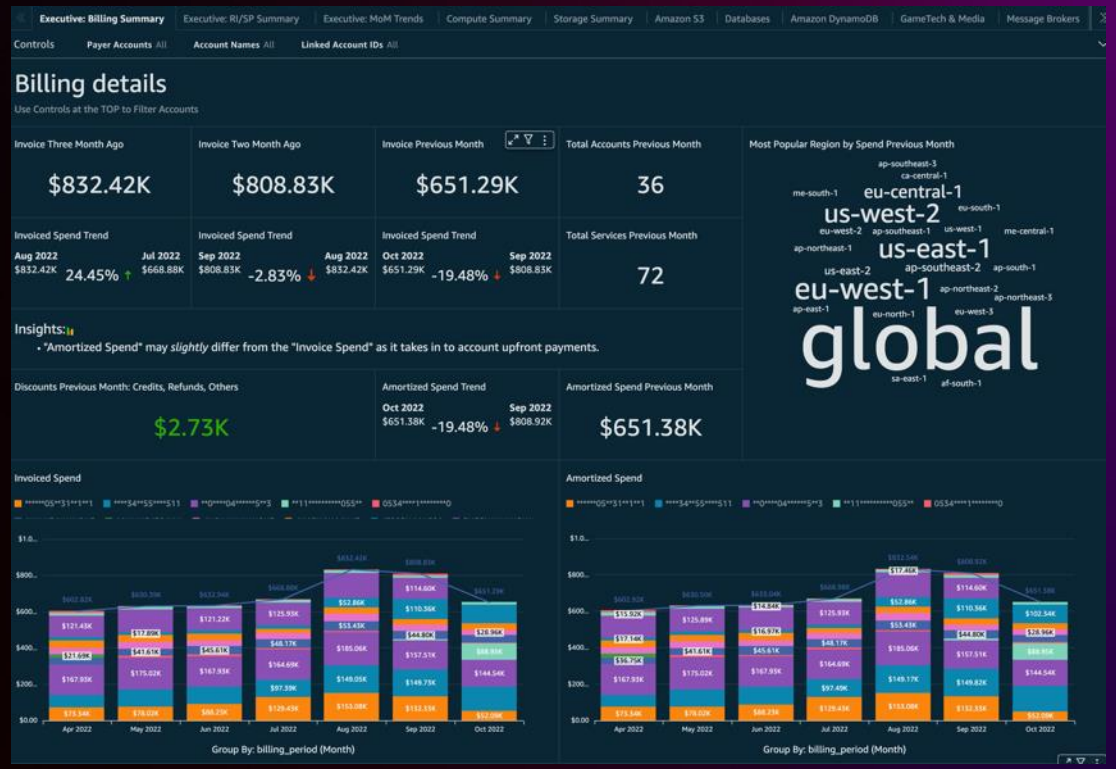




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Deep Dive on Dolby's deployment

- We began with CUDOS as our first offering to account holders
- Gave our account holders the multi-account view we needed
- We customized the dashboard to meet specific stakeholder requirements

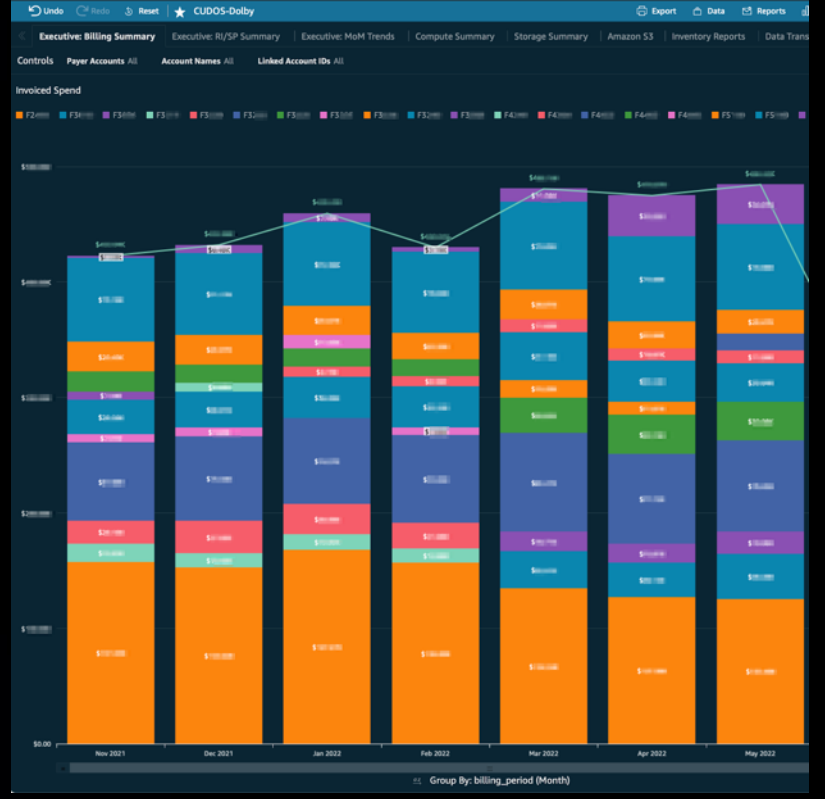


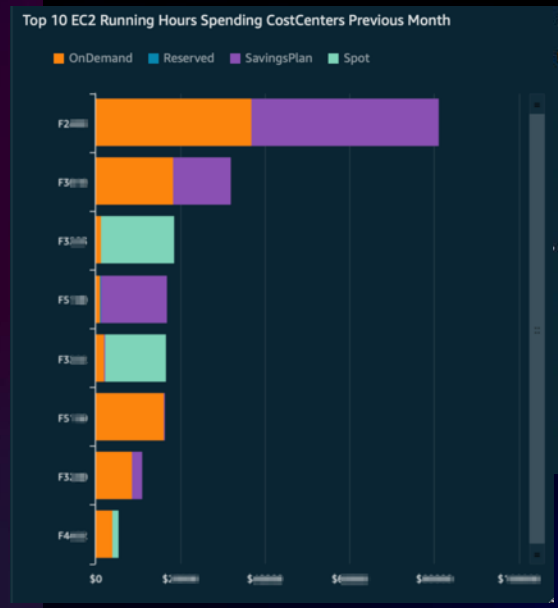
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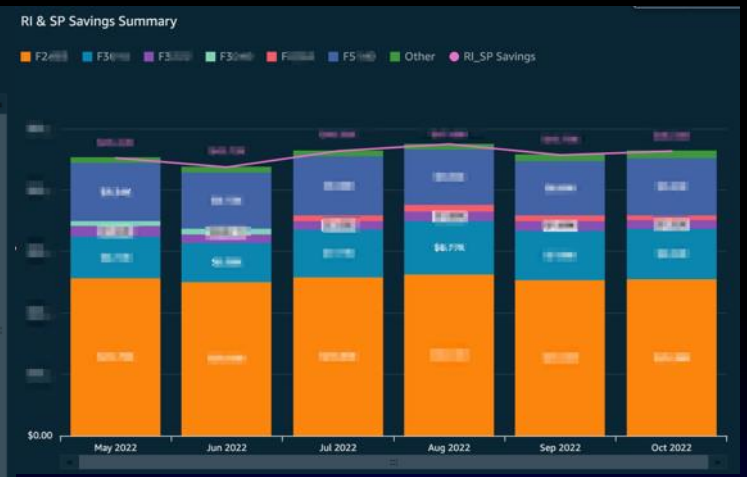
Customizations

Report spend based on Dolby defined Cost Categories and cost allocation tags

- Cost Center/Business Group
- Project







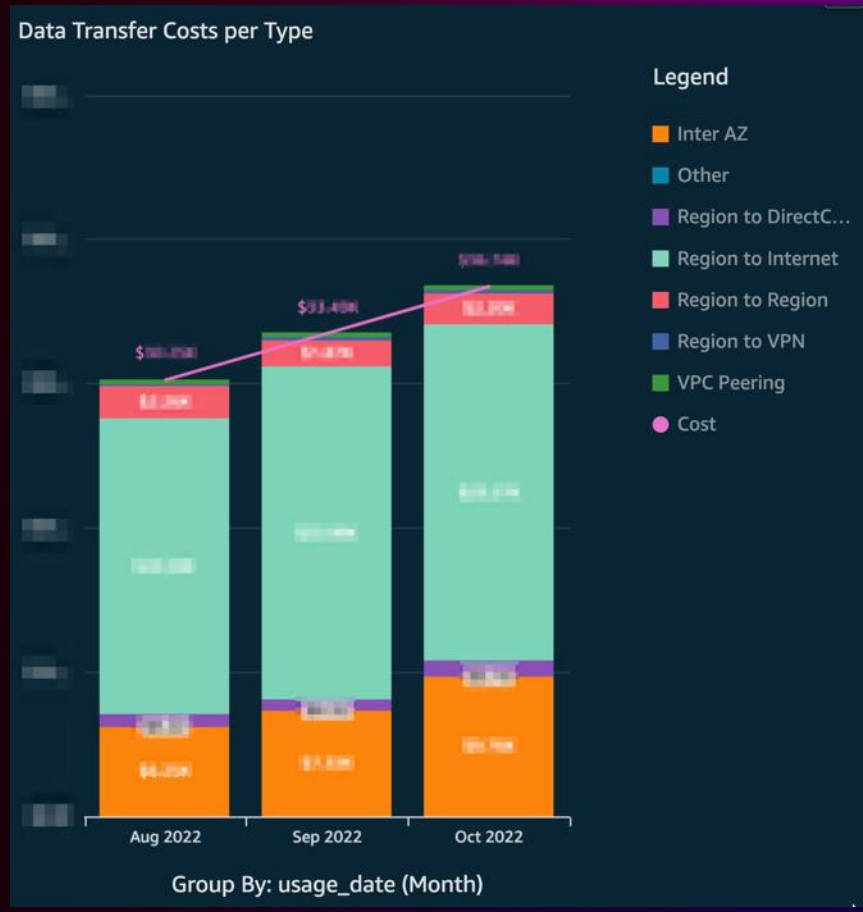
Gamify cost optimization by comparing performance across cost centers or business groups

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Delivering insights into Data Transfer usage

- Easily visualize where data transfer spend is happening
- Identify architectural problems that are impacting spend





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“The AWS Cloud Intelligence Dashboards provide us with great insight into our AWS environments, allowing us to better understand and control the costs of delivering our services.”

Faiyaz Memon

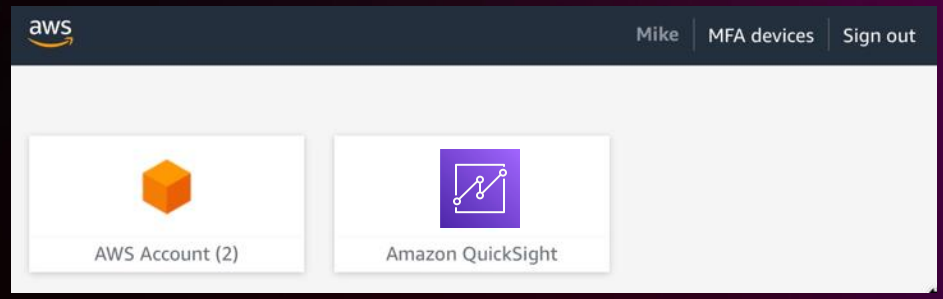
Senior Manager, SRE @ Dolby

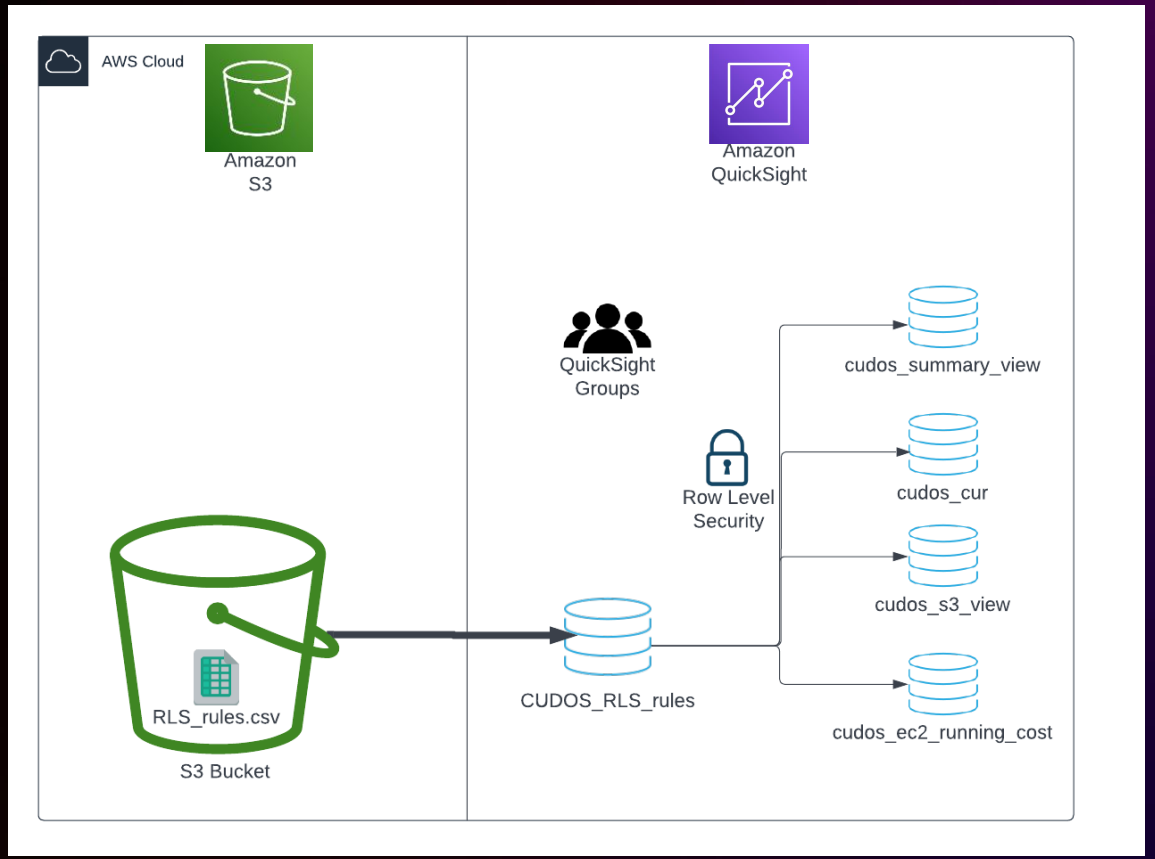
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Enhancements for an Enterprise deployment

- AWS SSO integration allowed us to grant access to QuickSight without giving access to AWS Console

- QuickSight groups and Row Level Security to filter data for each cloud team.





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Learn more!

Implementing CUDOS for an Enterprise – Deployment and SSO Integration

Implementing CUDOS for an Enterprise – Part 2: Filtering Data using Row Level Security

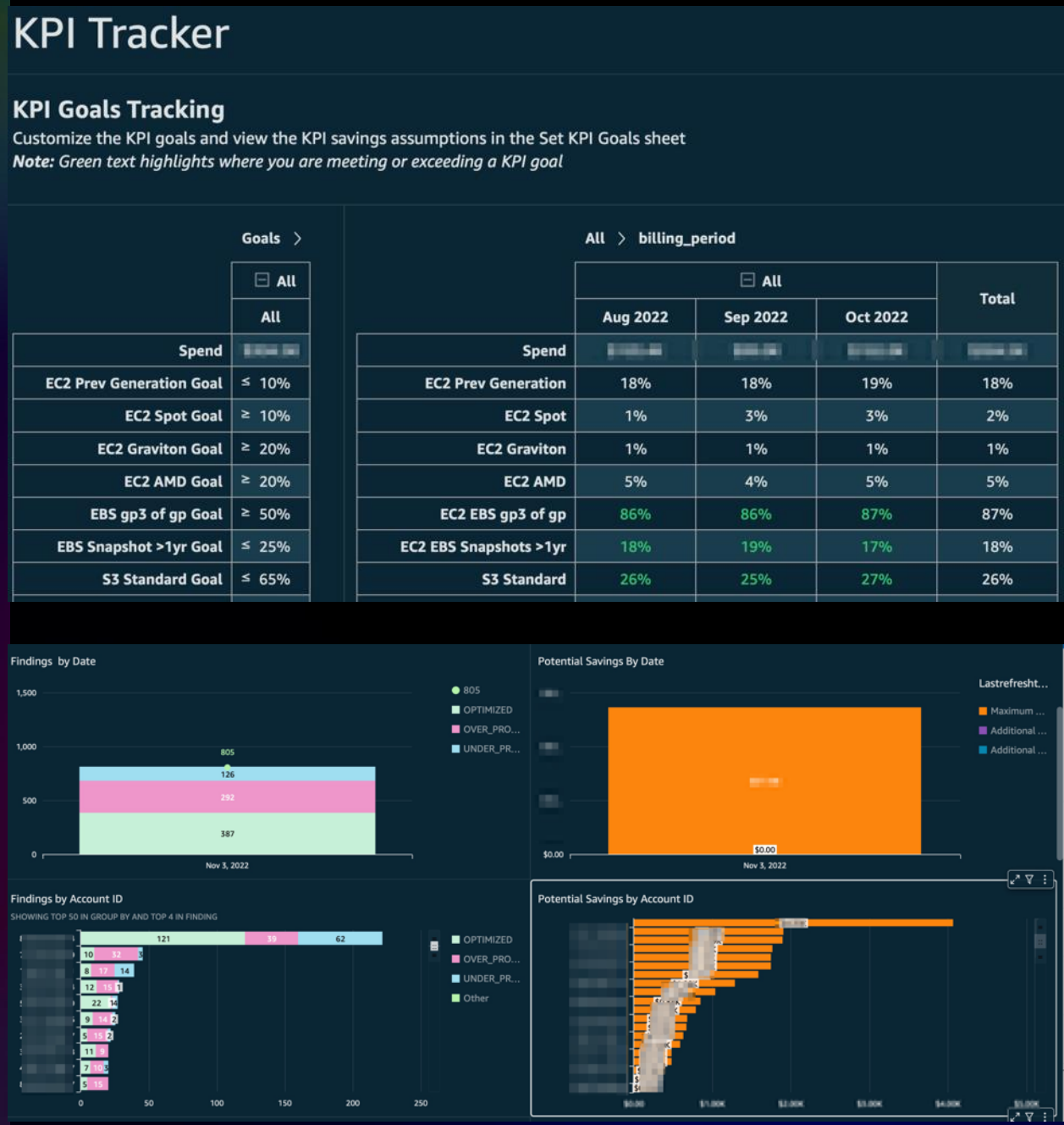
Build Easy Chargeback Reports using Cost Categories

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What's Next

- Implementing KPI Dashboards to help track optimization efforts

- Compute Optimizer Dashboard to help drive rightsizing conversations



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Business benefits



Self service



Multi-account insights



Track cost-optimization progress



Save money

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“To be an inventor, you have to be willing to live with a sense of uncertainty, to work in this darkness and grope towards an answer, to put up with anxiety about whether there is an answer.”

Ray Dolby

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Launch the Cloud Intelligence Dashboards today from AWS Well-Architected labs.



Once setup is complete, you'll get links to the QuickSight dashboards where you can realize value right away.



Customize your dashboard, add in more data, and build a complete picture of your operation in no time.

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Thank you!

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