



# Cloud Finance Onboarding (CFO)



# CFO

**Cloud Finance Onboarding by** 

CLOUD FINANCE ONBOARDING (CFO): MODULE 1

# Cloud Visibility & Accountability

# AGENDA

- 1 Cost and Usage Visibility on AWS
- 2 Cloud Cost Allocation
- 3 Account Hierarchy Strategy
- 4 Tagging Strategy
- 5 Other Cost Allocation Models
- 6 Improving Cloud Visibility & Accountability



# Cost and Usage Visibility on AWS



# First things first: establishing cost visibility

- A mechanism to orient and inform stakeholders
- Influence efficient cloud consumption behaviors
- Proactively identify concerning cost trends

Where can I find my AWS bills?

What AWS services are driving my costs?

How do I prioritize AWS cost reduction efforts?



# Tool ONE: AWS Billing Dashboard

With the AWS Billing Dashboard, you can [view](#) your paid / unpaid bills, manage [payment methods](#), [monitor](#) and [analyze](#) your costs and usage

## More specifically:

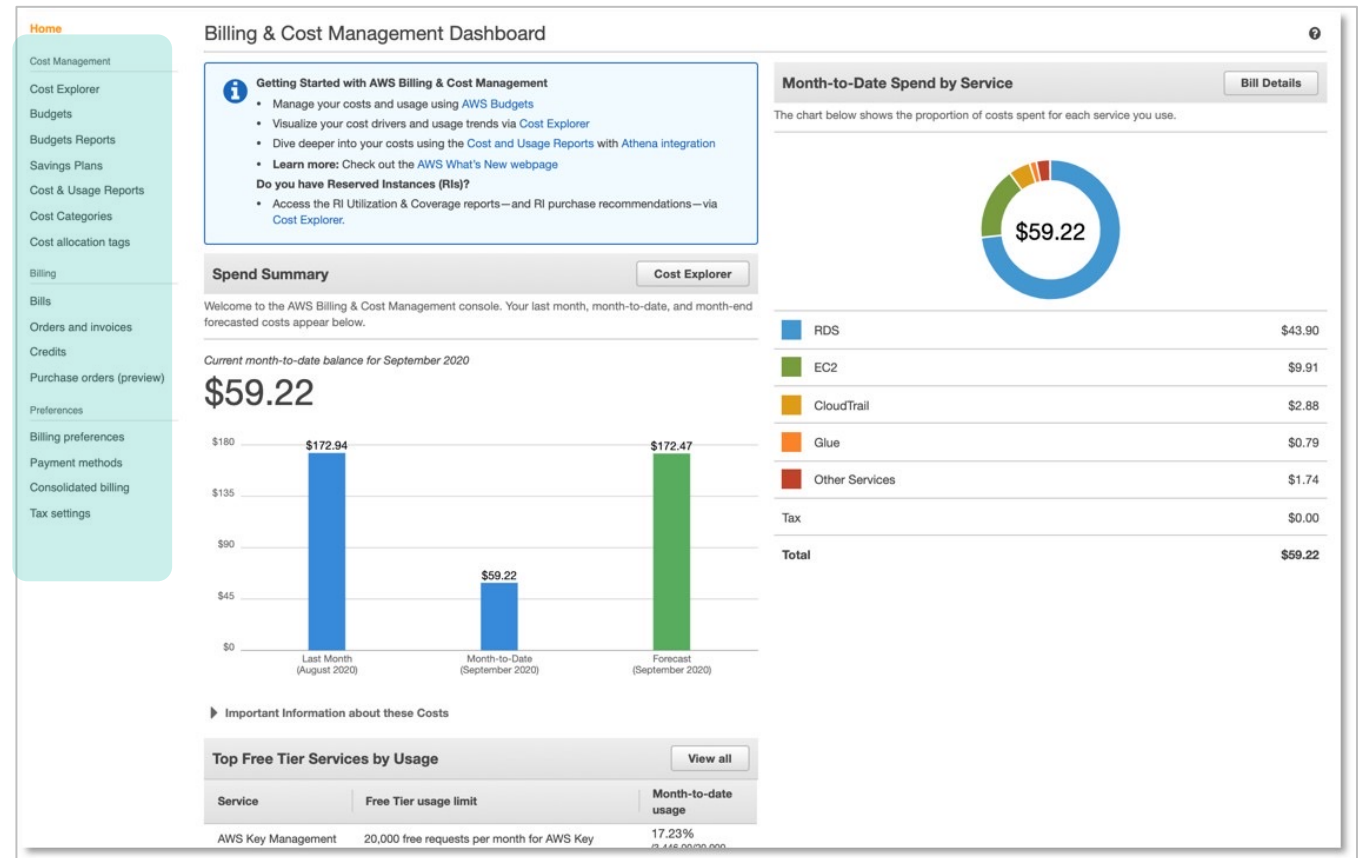
- Estimate and plan your AWS costs
- Receive alerts if your costs exceed or expected to exceed a threshold
- Assess your biggest investments in AWS resources



# Tool ONE: AWS Billing Dashboard

## Landing page

- Free Tier usage
- MTD spend by service
- MTD vs. Forecast\* spend



<https://console.aws.amazon.com/billing/home#/>

Use AWS Cost Explorer for forecasting\*



# Tool TWO: AWS Cost Explorer

With the AWS Cost Explorer, visualize, **understand**, and manage your AWS costs and usage **over time**.

## More specifically:

- Get costs and usage information, and business insights with preconfigured views
- Deep dive into your cost and usage data with filtering and grouping
- Forecast cost and usage for a future time range
- Create, save, and share custom reports to explore different sets of data

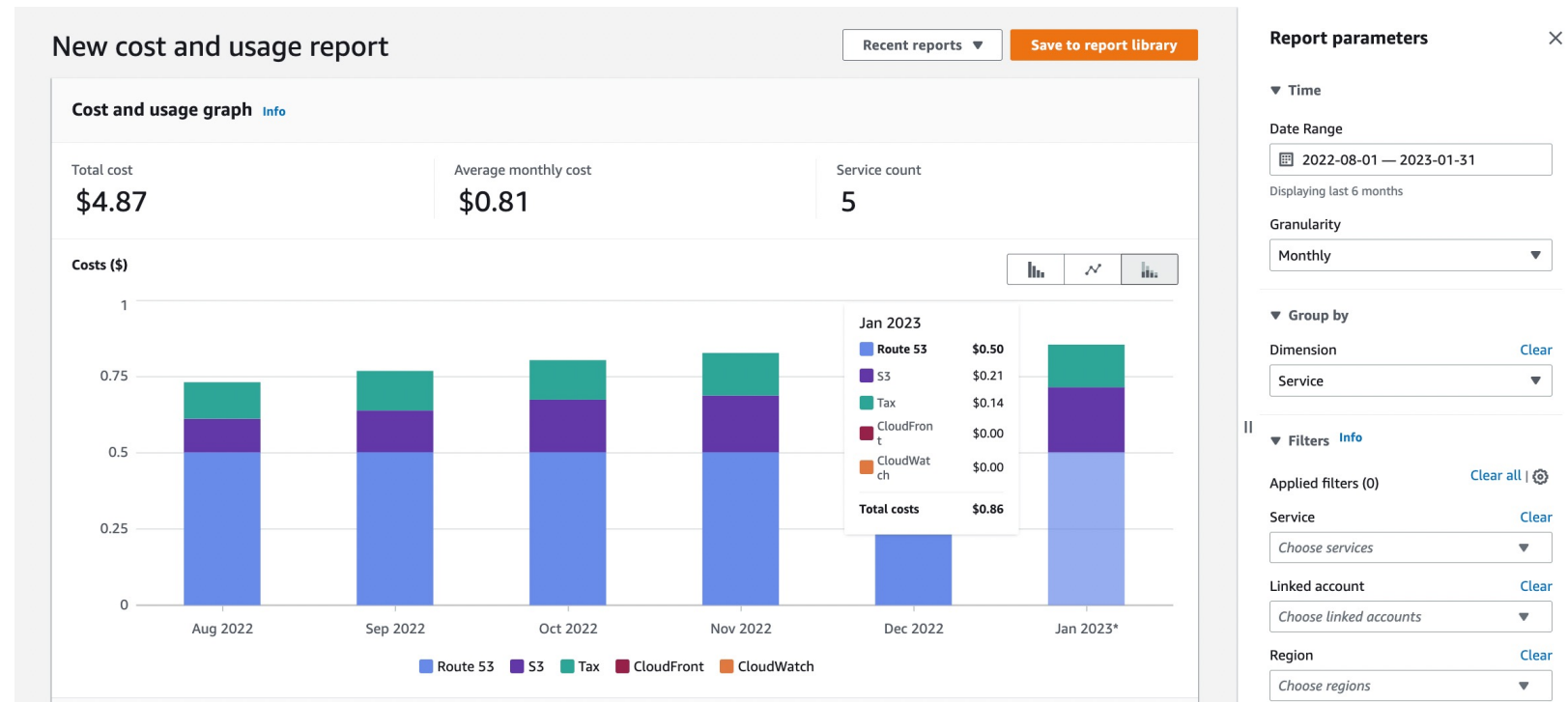




# Tool TWO: AWS Cost Explorer

## Landing page

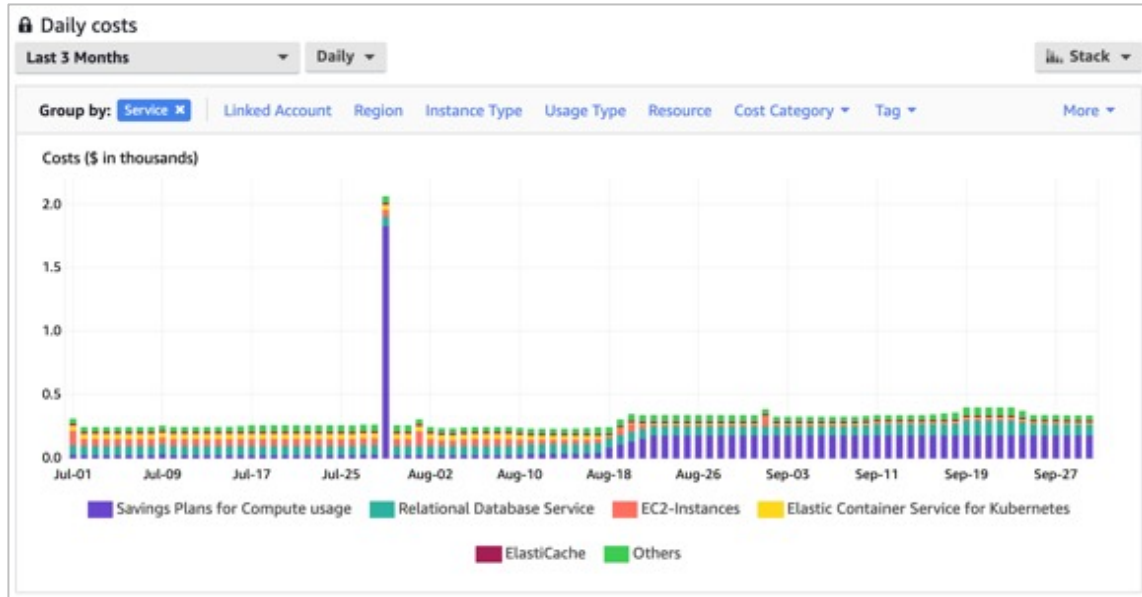
- Views
  - UI: Graphs, tables
  - APIs
  - CSVs
- Default reports
  - Cost and usage reports
  - Reservation reports
  - Savings Plans reports



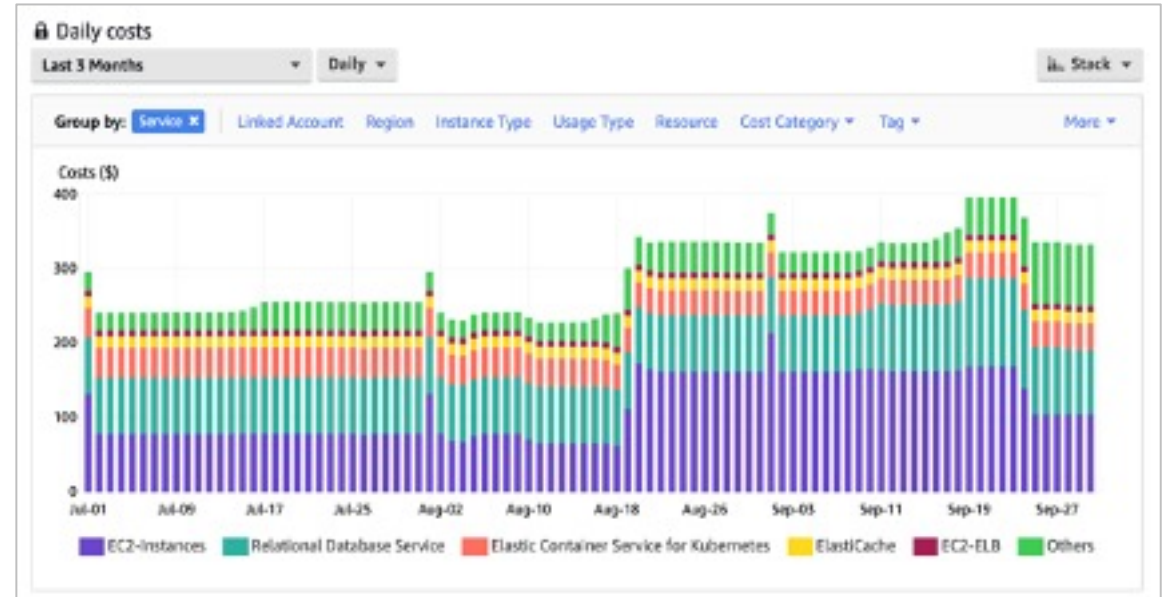


# Tool TWO: AWS Cost Explorer

## Unblended Costs View



## Amortized Costs View





# AWS Cost & Usage Report (CUR)

- ✓ Most comprehensive set of cost and usage data available
- ✓ Enabled through billing console
- ✓ Updated to Amazon S3 continuously
- ✓ View reports using **spreadsheet software** or access from application using **Amazon S3 API**
- ✓ For cases when cost reporting needs are required **in more depth**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	identity/LineItem/identity/Time	bill/invoiceid	bill/BillingEn	bill/BillingType	bill/PayerAcct	bill/BillingPc	bill/BillingPc	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage	lineitem/Usage
2	jqwr16ntb0y	2018-10-16T	153750431	AWS	Purchase	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Fee	2018-10-16T	2019-10-16T	AmazonEC2	USE2-HeavyRunInstances				1		USD
3	uuz5dfb3q	2018-10-16T	153750428	AWS	Purchase	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Fee	2018-10-16T	2019-10-16T	AmazonEC2	USE2-HeavyRunInstances				2		USD
4	3wmjhgdhw	2018-10-16T	153750428	AWS	Purchase	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Fee	2018-10-16T	2019-10-16T	AmazonEC2	USE2-HeavyRunInstances				2		USD
5	jp4m74kuc	2018-10-16T	153750430	AWS	Purchase	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Fee	2018-10-16T	2019-10-16T	AmazonEC2	USE2-HeavyRunInstances				3		USD
6	rt6engvhuu	2018-10-16T	153750425	AWS	Purchase	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Fee	2018-10-16T	2019-10-16T	AmazonEC2	USE2-HeavyRunInstances				1		USD
7	vqju3zw3fq	2018-10-16T05:34:06Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	RiFee	2018-10-16T	2018-10-31T	AmazonEC2	USE2-HeavyRunInstances				756.863333	4	3027.45333	USD
8	pxicmpxwz	2018-10-16T05:34:06Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	RiFee	2018-10-16T	2018-10-31T	AmazonEC2	USE2-HeavyRunInstances				378.431667	4	1513.72667	USD
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12	mdfwywhdi	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AWSCloudTr	USE1-FreeTxNone				64			USD
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19	n6pnm5mbe	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AmazonS3	Requests-Tx*ReadACL			cloudtrail-aw	2			USD
20	fdfnsgu46j	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AmazonS3	USE1-APN1-PutObject			cloudtrail-aw	3.502E-07			USD
21	zpf7c5wdk	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AmazonS3	USE1-APN2-PutObject			cloudtrail-aw	3.511E-07			USD
22	77vbbqbjpri	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AmazonS3	USE1-APN3-PutObject			cloudtrail-aw	3.558E-07			USD
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28	u76ach5etys	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AmazonS3	USE1-EU-C1-PutObject			cloudtrail-aw	3.548E-07			USD
29	mc7y6bv7nj	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AmazonS3	USE1-EU-W2-PutObject			cloudtrail-aw	3.502E-07			USD
30	fhos6nu5jog	2018-10-05T21:00:00Z/20	AWS	Anniversary	5.3049E+11	2018-10-01T	2018-11-01T	5.3049E+11	Usage	2018-10-05T	2018-10-05T	AmazonS3	USE1-EU-W3-PutObject			cloudtrail-aw	3.483E-07			USD
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# Tool THREE: Amazon Athena (with CUR)

Serverless query service that enables you to analyze data from your AWS CUR using standard SQL

Avoid creating your own data warehouse



```
SELECT line_item_product_code,  
sum(line_item_blended_cost) AS cost, month  
FROM mycostandusage_parquet  
WHERE year='2018'  
GROUP BY line_item_product_code, month  
HAVING sum(line_item_blended_cost) > 0  
ORDER BY line_item_product_code;
```

Based  
on SQL



# Tool FOUR: Cloud Intelligence Dashboards

The Cloud Intelligence Dashboards are customizable and accessible dashboards to help create the **foundation of your own cost management and optimization** (FinOps) tool.

## More specifically:

- Create chargeback/showback reports for business units, accounts, or cost centers.
- View resource-level detail: hourly AWS Lambda; single Amazon S3 bucket costs
- Quickly locate cost-optimization opportunities such as infrequently used S3 buckets, old EBS snapshots, and Graviton eligible instance usage



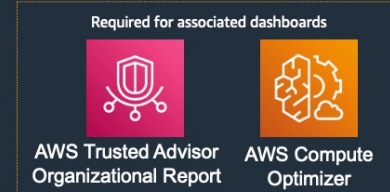
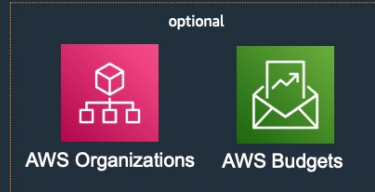


# Tool FOUR: Cloud Intelligence Dashboards

3 steps to  
get started

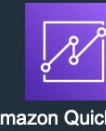
## The Cloud Intelligence Dashboards Framework

1. Start with  
your Cost  
and Usage  
Reports



2. Setup the  
framework

SQL Queries  
Summary View  
Account Name Map  
KPI Views  
Compute Optimizer Views



3. Access your  
dashboards



The Cost Intelligence Dashboard



CUDOS Dashboard



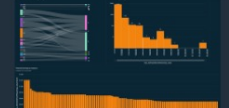
KPI Dashboard



Trends Dashboard



Trusted Advisor  
Organizational (TAO)  
Dashboard



Compute Optimizer  
Dashboard





# Tool FOUR: Cloud Intelligence Dashboards

Introductions to install using  
AWS Well-Architected Labs

[https://wellarchitectedlabs.com/cost/200\\_labs/200\\_enterprise\\_dashboards/](https://wellarchitectedlabs.com/cost/200_labs/200_enterprise_dashboards/)



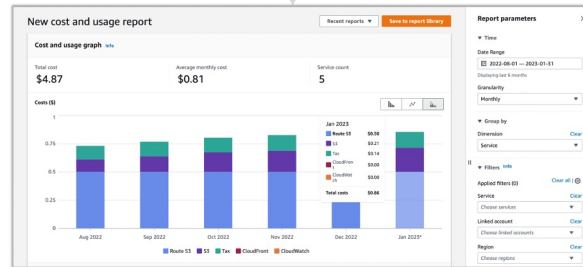
AWS provides services and tools to enable **cost and usage visibility**

Ability to  
customize

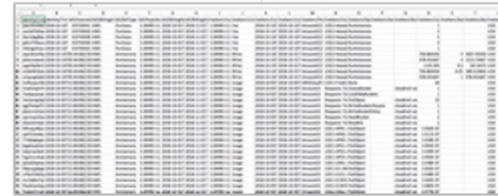
AWS Billing  
Dashboard



AWS Cost Explorer



AWS Cost & Usage Report  
using Amazon Athena



Cloud Intelligence  
Dashboards



Level of cost and usage detail





# Cloud Cost Allocation



# Cloud Cost Allocation

The process of defining **which entity** (people, team, business unit, product, customer) owns **which part of the AWS bill**, by using relevant **allocation models**, in order to **establish ownership**

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- ✓ Enables intelligent cloud financial decision making
- ✓ Answers critical questions:
  - Who owns the spend?
  - What product is incurring the spend?
  - What spend areas are growing fastest?
  - Who is responsible for optimizing spend?
  - How much spend should be deducted from a cloud budget?



# First Allocation, then Accounting

## Cost Allocation Models

*How to define who owns which part of the bill*

Start w/ Native

Then w/ Apportioned

If needed ...

Account-  
based

Equal  
Allocation

Tag-based

Fixed  
Allocation

Telemetry-  
based

AWS Cost  
Categories

Consumption-  
based

## Accounting Methods

*How to use that information*

Showback

Chargeback



# Allocation: Essential Considerations

## Account Hierarchy

Account structure should accurately reflect how AWS is used in the organization (business unit, product, environment)

This is your **starting point** for getting any successful showback or chargeback

## Tagging

Tags help you drive **further granularity** by putting a **label on each individual resource**.

- Which cost center will pay for the resource?
- What application/environment does the resource belong to?

## Stakeholder Alignment

Make sure Tech, Business, and Finance are part of the cost allocation discussion – from accounts and tag policy creation, to cost accounting

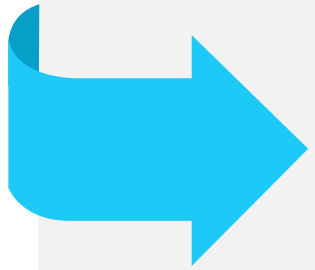
## CFM Ownership

Ensure there is an identified owner (individual or team) responsible for driving the cost allocation process across stakeholder groups



# Allocation: Gathering Requirements

Work backwards from **stakeholders** and **desired outcomes**



## Stakeholders

- › Finance (allocation units)
- › Technology
- › Security
- › Business



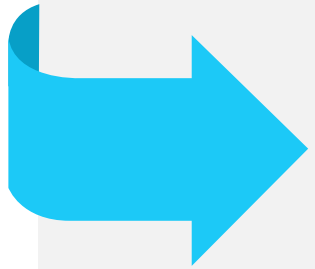
## Outcomes

- › Cost allocability
- › Deployment strategy
- › Governance
- › Automation

This also establishes a baseline level of awareness



# Accounting: Showback



verb

The act of **calculating** and **reporting** incurred costs by a **category of cost**

- › Example: The infrastructure engineering team was responsible for \$X of AWS spend last month



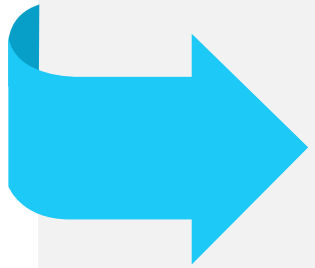
noun

Costs incurred by a **category of cost**

- › Example: The infrastructure team's showback was \$X spend last month



# Accounting: Chargeback



**verb**

The act of **calculating** and **charging** incurred costs to a **category of cost**

- › Example: \$X was deducted from the infrastructure engineering team's AWS budget



**noun**

Costs charged to a **category of cost**

- › Example: The infrastructure team's chargeback was \$X last month



# Account Hierarchy Strategy





# AWS Accounts

An AWS account is a container for your AWS resources. You create and manage your AWS resources in an AWS account, and the AWS account provides administrative capabilities for access and billing.



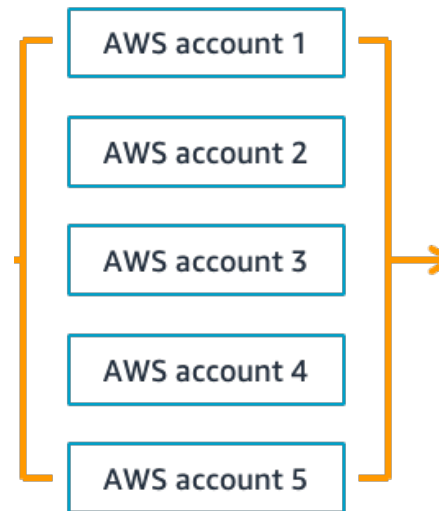
- ✓ The **main access point** to AWS
- ✓ You need an **email address** and a **credit card**
- ✓ For **individuals** and **organizations** alike
- ✓ It works like a **container (folder)** for all your AWS resources, workloads, and **monthly bill**



# Multi-Account Strategy

Using **multiple AWS accounts** is a best practice for scaling your environment, as it provides a natural billing boundary for costs, isolates resources for security, gives flexibility or individuals and teams, in addition to being adaptable for new business processes.

- ✓ Fiscal isolation
- ✓ Administrative isolation
- ✓ Minimizing blast radius
- ✓ AWS service limits
- ✓ Capacity reservations
- ✓ Maximize discount potential



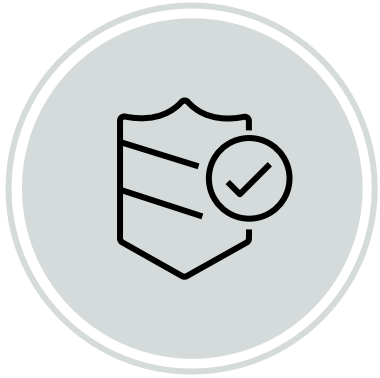
AWS account 1	\$ 8.92
AWS account 2	\$ 35.04
AWS account 3	\$ 119.27
AWS account 4	\$ 5.14
AWS account 5	\$428.75



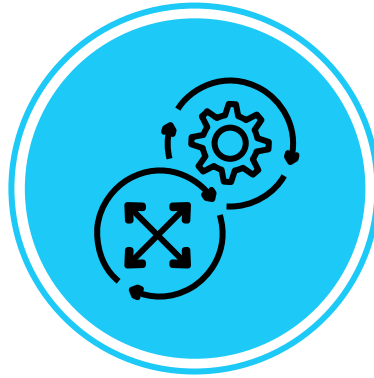
# AWS Organizations (1/2)

AWS Organizations lets you **create (and centrally manage) multiple AWS accounts** at no additional charge. With accounts in an organization, you can easily allocate resources, group accounts, and apply governance policies to accounts or groups.

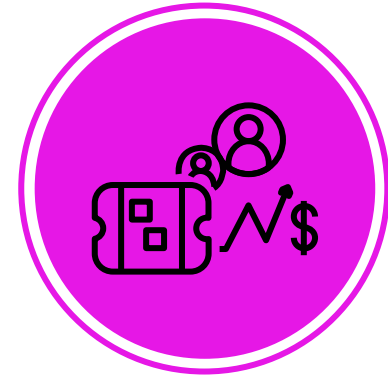
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Control AWS service use  
across accounts



Automate  
account creation



Consolidate billing and  
usage reporting



# AWS Organizations (2/2)

Get set up in two simple steps:

1. Designate a **management account (payer)**; responsible for **paying all charges of member (linked) accounts**
2. Attach multiple member (linked) accounts

Moving from a  
'**standalone**' set of  
accounts, to an AWS  
Organization with  
**consolidated billing**



**Master account**

AWS account 1

AWS account 2

AWS account 3

AWS account 4

AWS account 5

## Monthly consolidated bill

<b>Master account</b>	<b>\$ 39.52</b>
-----------------------	-----------------

AWS account 1	\$ 8.92
---------------	---------

AWS account 2	\$ 35.04
---------------	----------

AWS account 3	\$ 119.27
---------------	-----------

AWS account 4	\$ 5.14
---------------	---------

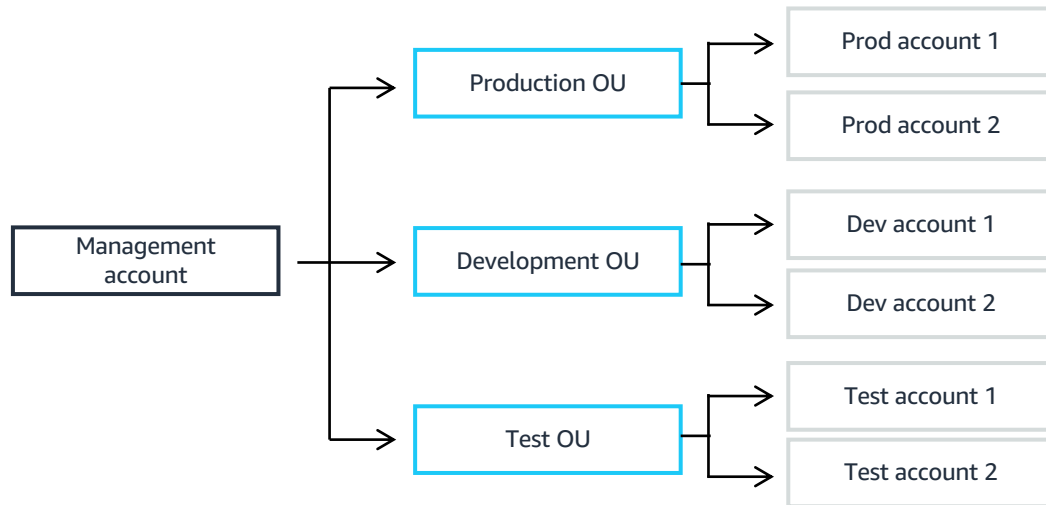
AWS account 5	\$428.75
---------------	----------

Total charged to paying account:	\$636.64
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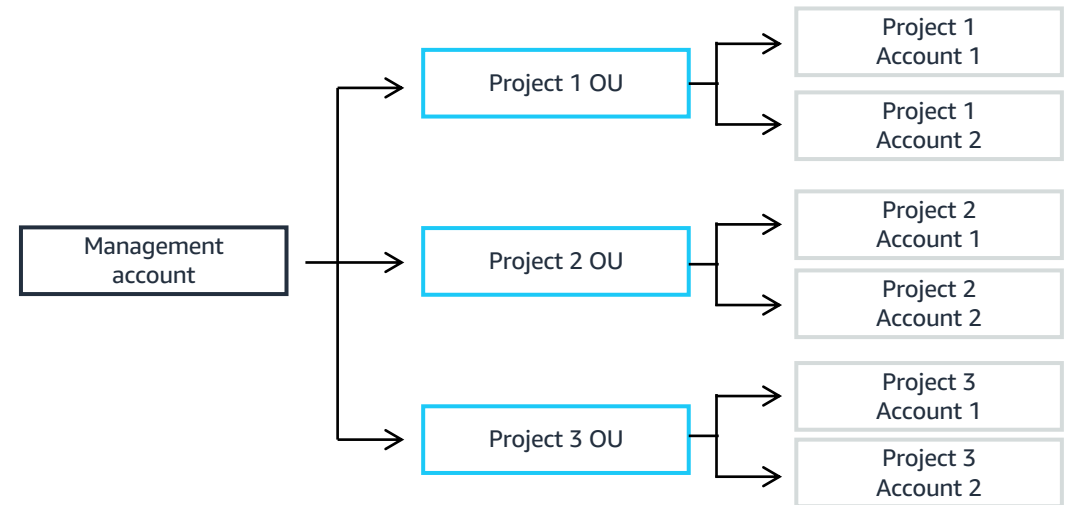


# AWS Organizations: Examples (1/2)

## Environment-lifecycle-based multi-account structure



## Project-based multi-account structure



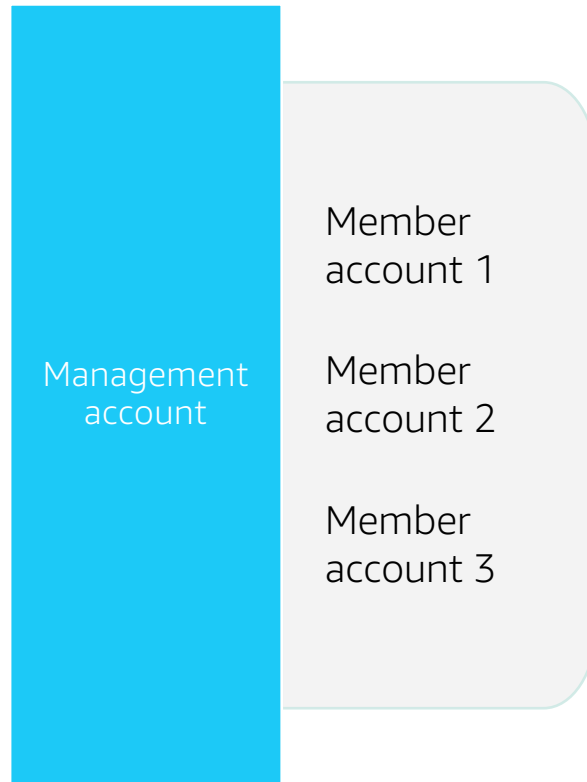


# AWS Organizations: Examples (2/2)

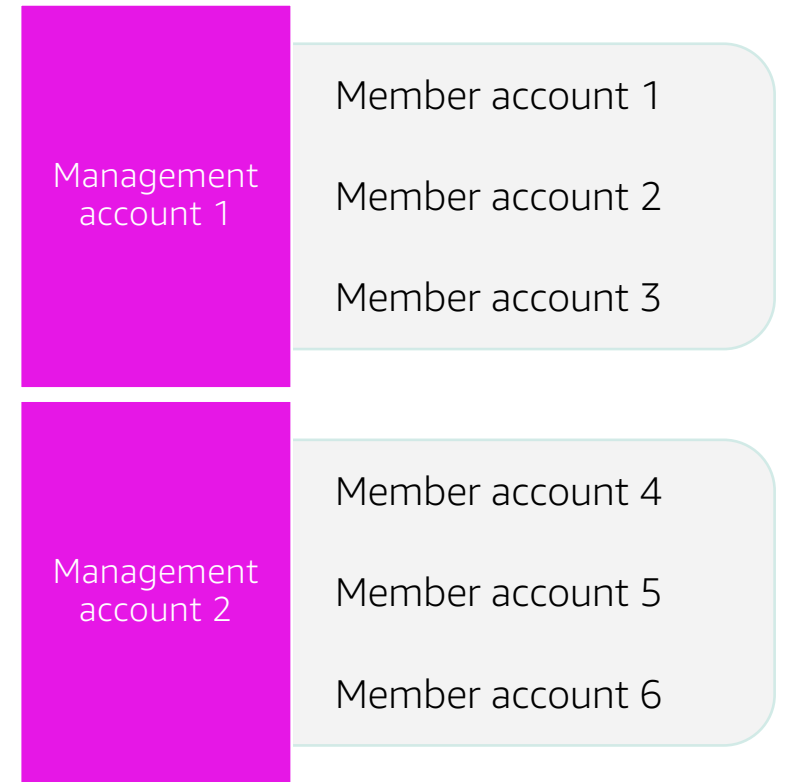
## Standalone accounts



## Single-payer account structure



## Multi-payer account structure





# AWS Organizations: Key Benefits

- ✓ Free
- ✓ Single invoice
- ✓ Share **Reserved Instance and Savings Plans** financial benefits
- ✓ Volume pricing discounts
- ✓ Restrict credits



# Account-based Cost Allocation

Group  
by account

Costs allocated  
by account







# Account Hierarchy Strategy: Tips

An open conversation is always required between **Tech, Business, and Finance**, to evaluate the following key considerations:

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- ✓ Who can create a new account?
- ✓ When should a new account be created?
- ✓ Do new accounts need to be linked to a management account?
- ✓ Is there a need for more than one management account?
- ✓ Is there a need for an account naming convention?
  - ✓ I.e., digital-webapp01-prod
- ✓ What are the tax details for the account?
- ✓ Do accounts require special financial isolation/treatment?



# Tagging Strategy



# AWS Tags

Within an AWS Account, you can assign **metadata to your AWS Resources** in the form of tags.

Each tag is a **label** consisting of a **user-defined key and value**.



- ✓ Tags can help you manage, identify, organize, search for, and filter resources.
- ✓ You can create tags to categorize resources by purpose, owner, environment, or other criteria.
- ✓ There are also tags for **cost allocation** purposes



# Tag-based Cost Allocation Report

AWS Cost Explorer and detailed billing reports let you **break down AWS costs by tag**. Typically, you use **business tags** such as **cost center/business unit, customer, or project** to associate AWS costs with traditional cost-allocation dimensions. The following is an example of a partial cost allocation report.

Total Cost ▾	user:Owner ▾	user:Stack ▾	user:Cost Center ▾	user:Application ▾
0.95	DbAdmin	Test	80432	Widget2
0.01	DbAdmin	Test	80432	Widget2
3.84	DbAdmin	Prod	80432	Widget2
6.00	DbAdmin	Test	78925	Widget1
234.63	SysEng	Prod	78925	Widget1
0.73	DbAdmin	Test	78925	Widget1
0.00	DbAdmin	Prod	80432	Portal
2.47	DbAdmin	Prod	78925	Portal



# Tagging Governance

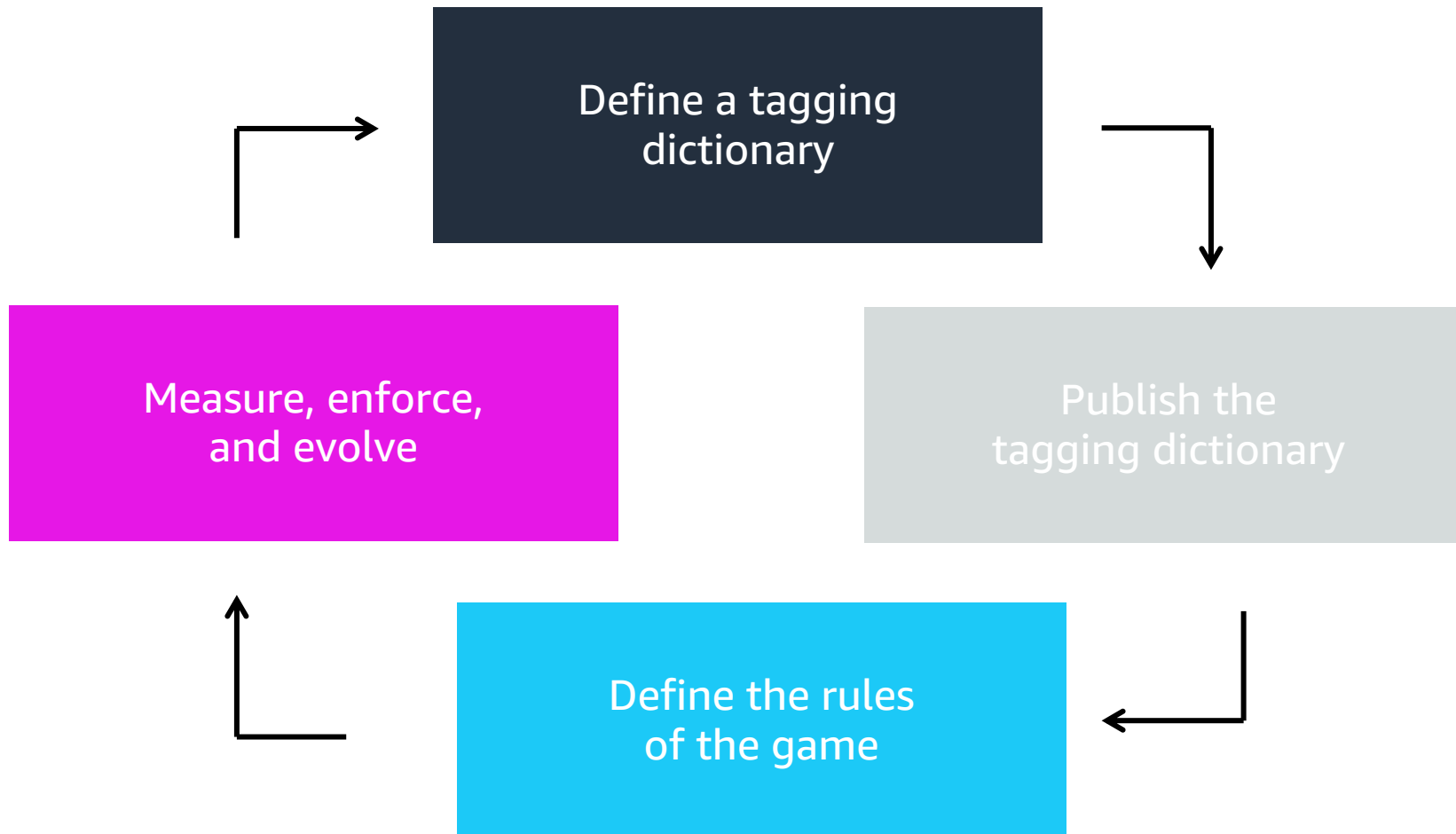
An effective tagging strategy uses **standardized** tags and applies them **consistently** and **programmatically** across AWS resources. You can use both **reactive** and **proactive** approaches for governing tags in your AWS environment.

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- Who can create a new tag value?
- Should there be a set of mandatory vs. optional tags?
- How are tags going to be enforced?
  - Proactive vs. reactive
- How to measure success?



# Implementing a Tagging Strategy





# Measure



## Measure

### Tagging KPIs

Tag coverage rate (per tag key)

Tag coverage rate (aggregate)

% of total spend tagged

% non-allocable spend

### Outcome-based KPIs

# resources terminated

\$ saved

Time saved (i.e., automating financial allocations)



# Enforce (Proactive)



**Enforce**  
*(proactive)*

## Proactive

Restrict non-compliant resources from being created

Top-down approach

Impedes business agility

Attains tag coverage rate targets

Enables accurate cost allocations

Minimizes resource waste





# Enforce (Reactive)



**Enforce**  
*(reactive)*

## Reactive

Fix existing, non-compliant resources

Relaxed approach

Enables business agility

Misses tag coverage rate targets

Increases non-allocable spend

Increased resource waste



## Evolve

Today's tagging dictionary is good for today

Are measures/KPIs improving over time?

Are the envisioned outcomes being realized?

Is the enforcement mechanism too strong, or weak?



# Tagging Enforcement Tools

	Proactive enforcement	Reactive enforcement	Reporting
Methods	Stakeholder approved tagging policy/dictionary	Resources with non-compliant tags are stopped and/or terminated	Awareness and gamification
AWS	<a href="#">AWS Organizations (Service Control Policy)</a> <a href="#">AWS CloudFormation (tags as code)</a> <a href="#">AWS Service Catalog (TagOptions)</a> <a href="#">Amazon IAM (tag read/write controls)</a>	<a href="#">AWS Tag Policies (supported services)</a> <a href="#">AWS Config (required-tags rule)</a> <a href="#">AWS auto-tagging solutions (link)</a> <a href="#">Marketplace AMI cost allocation and tagging (link)</a>	<a href="#">AWS Cost Categories</a> <a href="#">AWS Cost Explorer</a> <a href="#">AWS Budgets</a> <a href="#">Amazon Quicksight (+ AWS CUR)</a> <a href="#">AWS Resource Groups</a> <a href="#">Amazon CloudWatch (tag alerts)</a> <a href="#">AWS Config Dashboard</a>
AWS Partners	<a href="#">Terraform (tags as code)</a> <a href="#">Configuration Management (Puppet, Chef)</a> <a href="#">AWS Cloud Management Competency Partners</a>	<a href="#">AWS Cloud Management Competency Partners</a>	<a href="#">AWS Cloud Management Competency Partners</a>
Open source	<a href="#">GorillaStack (auto-tag)</a>	<a href="#">Cloud Custodian</a> <a href="#">GorillaStack (retro-tag)</a> <a href="#">Graffiti Monkey (tag propagation)</a> <a href="#">AWS Tagger (by Washington Post)</a>	
DIY	Custom solutions via fill-in form integrated with AWS APIs	Custom enforcement solutions	Custom dashboards



# Other Cost Allocation Models



# AWS Cost Categories

- ✓ Define custom rules to categorize your cost to your internal business and organizational structures
- ✓ Use dimensions such as account, tag, service, charge type, and even other cost categories
- ✓ Get an overview of your cost allocations within your Cost Categories
- ✓ Define split charge rules to equitably allocate your costs across your Cost Categories
- ✓ Set up integrations and use cost categories in AWS Cost Explorer, AWS Budgets, and AWS Cost and Usage Report (CUR)

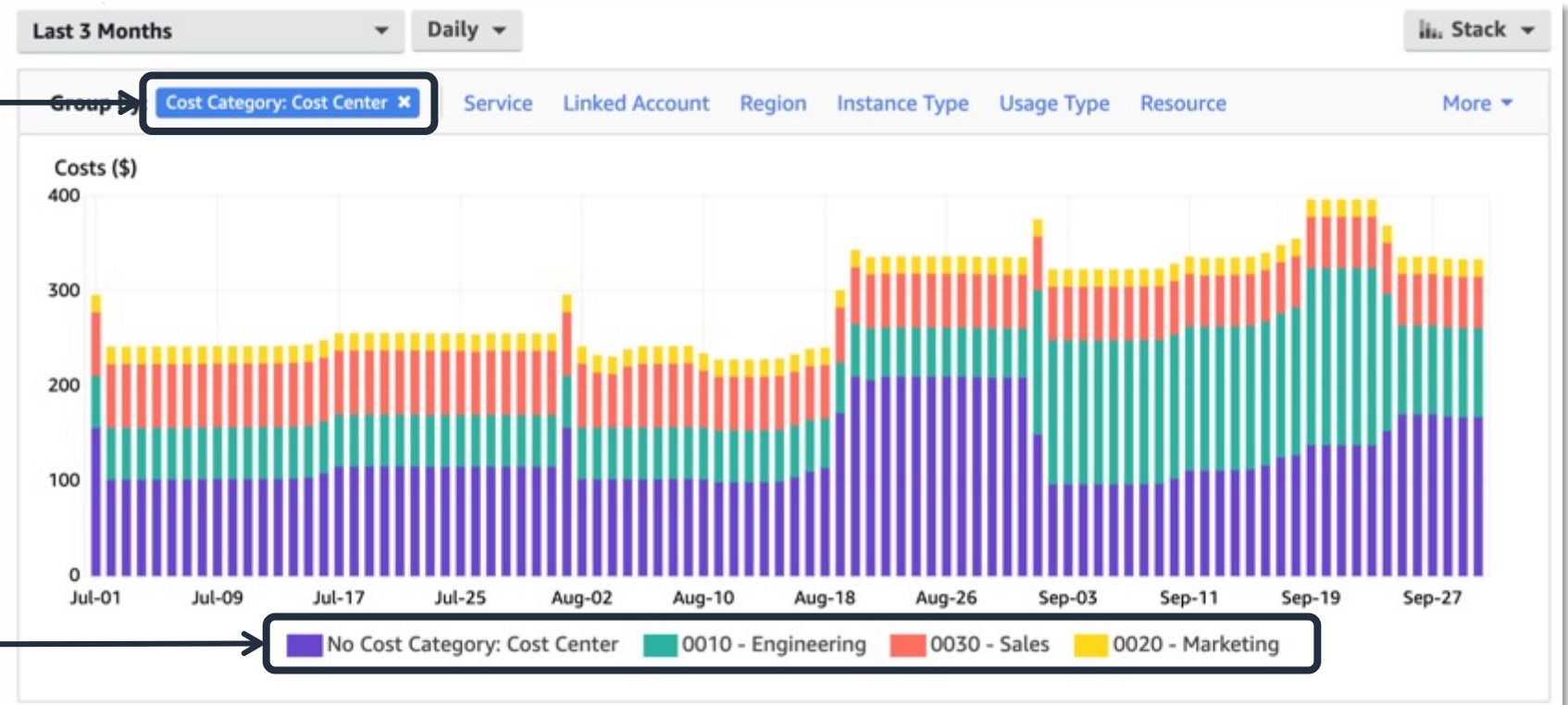
The screenshot displays the AWS 'Edit cost category: Project' interface. The 'Rule builder' tab is active, showing a rule configuration for '1. Alpha'. The rule is defined by a 'Project value' of 'Alpha' and two dimensions: 'Dimension 1' (Account is 123456789000) and 'Dimension 2' (Tag key domain is prod). The 'JSON editor' tab is also visible. The interface includes buttons for 'Collapse all', 'Expand all', 'Remove', and 'Add dimension'. The footer shows 'Feedback', 'English (US)', and copyright information.



# AWS Cost Categories-based Cost Allocation

Group by  
Cost Category

Costs allocated  
by Cost  
Categories





# Other resources and charge types

## Shared Resources

Consumption-based

Telemetry-based

## AWS Enterprise Support

Consumption-based

Equal allocation

## AWS Marketplace

Consumption-based

Fixed allocation

Telemetry-based

## Credits and Discounts

Consumption-based

Fixed allocation

Equal allocation



# Customer Example: Finance Sector



## Challenge

Provide application TCO capabilities that reconcile to the total monthly bill

Additional requirement to allocate AWS costs to respective Lines of Business (i.e. internal consumers)



## Solution

Account structure with one management account and member accounts (with a 1:1 mapping to business applications)

Hybrid approach using Fixed and On-Demand ratio allocation methods

Calculation performed by 3<sup>rd</sup> party tool



## Benefits

Fair allocation does not penalize early adopters

Accurate application TCO calculation

Increased accountability, and pilot for full chargeback

Exposed costs of data hygiene issues & untagged resources

A			B	C	D	A+B+C+D
Business Unit	Monthly Cost	% of Total Cost	Allocated Savings Plans	Allocated Support Costs	Allocated Untagged	Chargeback to Business
Wholesale	100k	50%	20k x 50% = 10k	1k + (6k x 50%) = 4k	5k x 50% = 2.5k	116.5k
Retail	50k	25%	20k x 25% = 5k	1k + (6k x 25%) = 2.5k	5k x 25% = 1.25k	58.75k
Operations	30k	15%	20k x 15% = 3k	1k + (6k x 15%) = 1.9k	5k x 15% = 0.75k	35.65k
Others	20k	10%	20k x 10% = 2k	1k + (6k x 10%) = 1.6k	5k x 10% = 0.5k	24.1k
Sub Total	200k	100%				
Savings Plans	20k		20k			
AWS Premium Support	10k			10k		
Untagged	5k				5k	
Bill Total	235k					235k





# Summarizing

## Cost Allocation Models

*How to define who owns which part of the bill*

Start w/ Native

Then w/ Apportioned

If needed ...

Account-  
based

Equal  
Allocation

Tag-based

Fixed  
Allocation

Telemetry-  
based

AWS Cost  
Categories

Consumption-  
based

## Accounting Methods

*How to use that information*

Showback

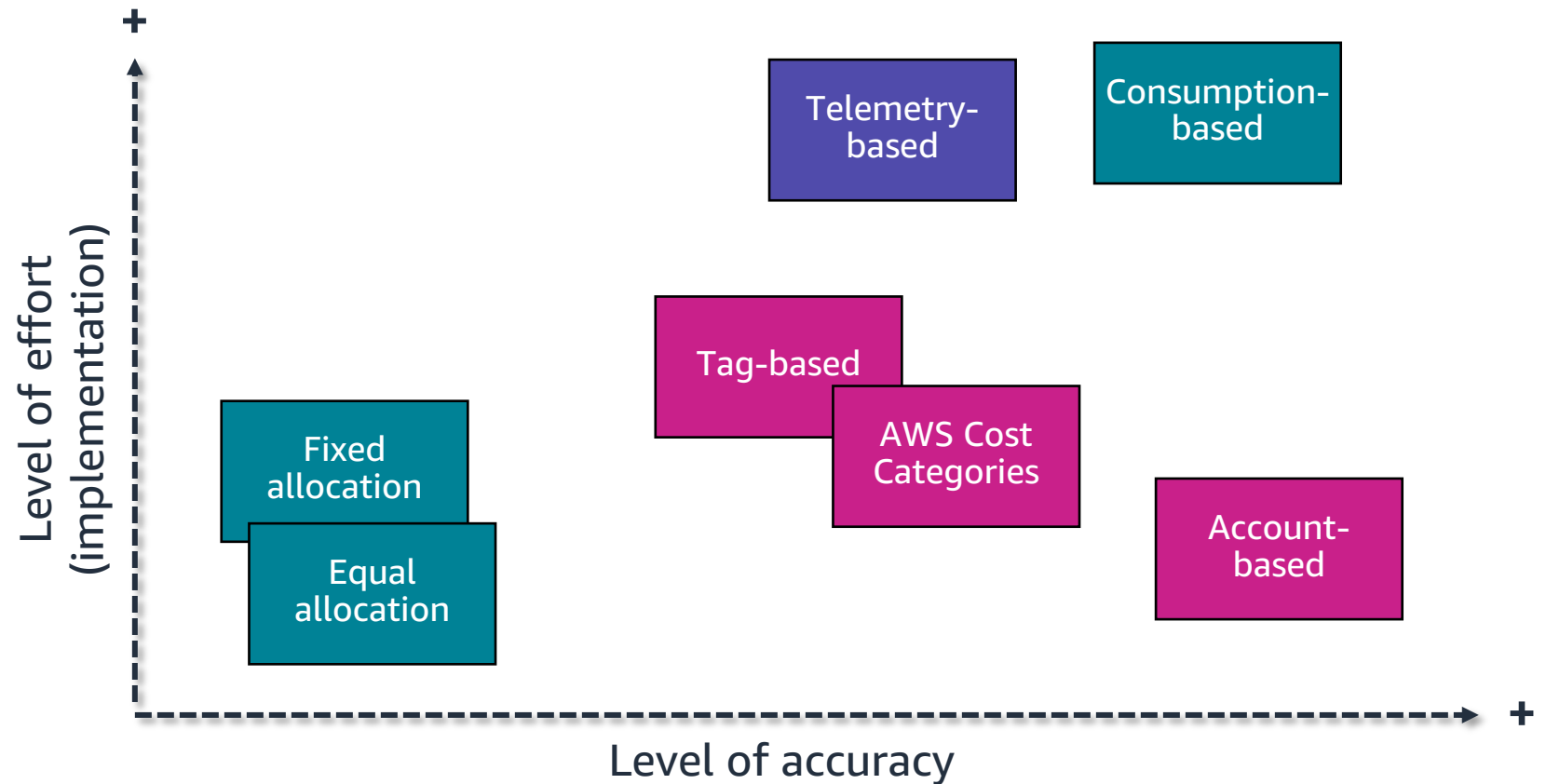
Chargeback



# Choose (and evolve) your allocation model(s)

Start with a model(s) that aligns with level of effort to implement vs. desired accuracy

Adjust your approach as your data usage and sophistication needs evolve





# 'Real World' Best Practices (1/2)

- 'We have numerous shared applications, and each one with a *separate methodology* for allocating costs'
- 'For new shared applications (or for changing the methodology on one), we make sure to *first gain buy-in from relevant/impacted organizations* (e.g. no one should feel caught off guard); and this allows finance to align budgets as necessary'
- 'For new shared applications, we *allocate based on roughly estimated percentages* until we get more accurate data (e.g. assume a 50/30/20 split for the next six months while we research better ways to allocate costs)'
- 'For storage-heavy applications, each S3 bucket is initially mapped to a organization; and we then spread all costs (compute and storage) of the application *based on storage consumption*'
- 'For license based, *we map users to organizations*, so we can allocate costs based on the line of business'



# 'Real World' Best Practices (2/2)

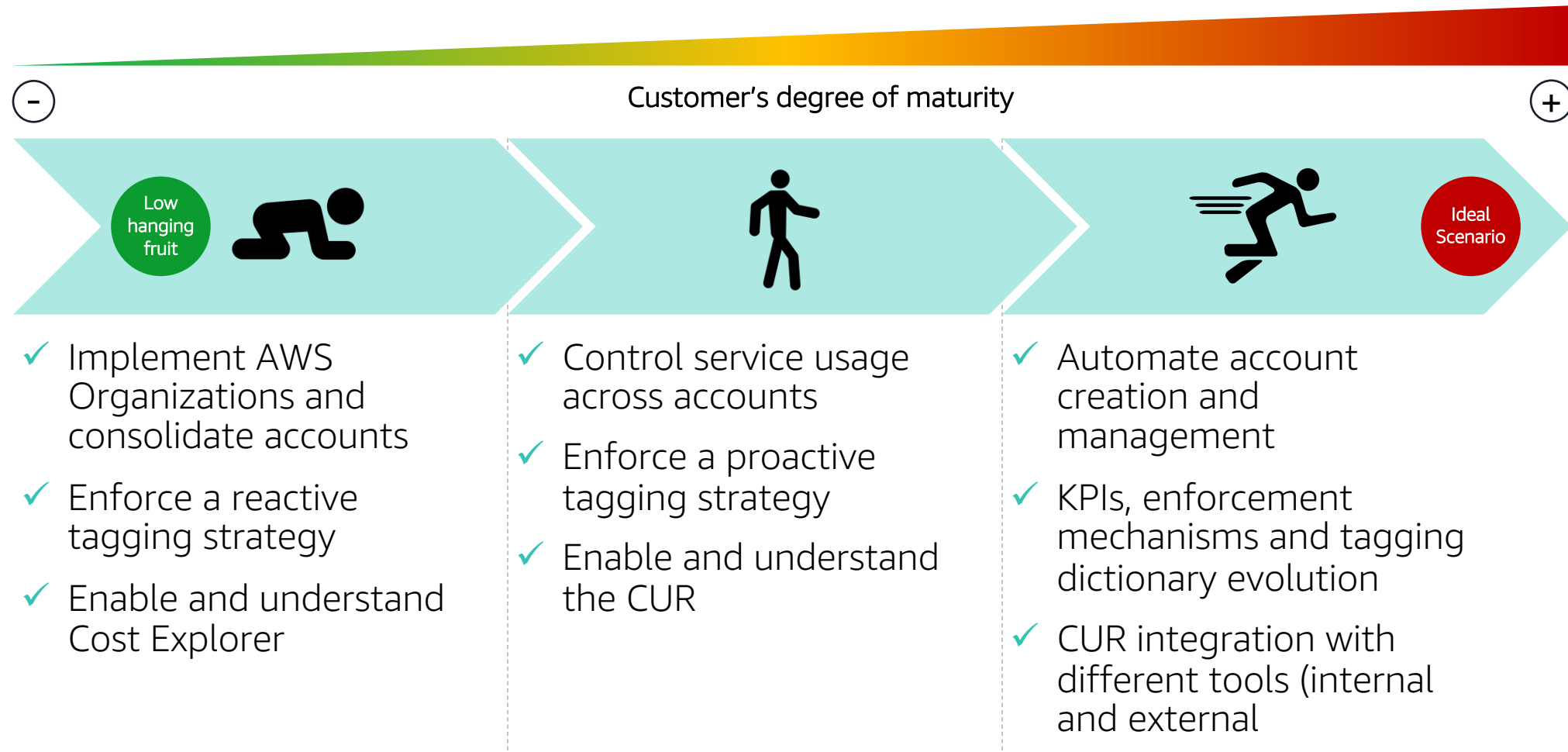
- 'We have *ringfenced our workloads by Application*, so infrastructure resources like Amazon EC2 and Amazon S3 are *tagged with an Application name*'
- 'Infrastructure *costs not tagged with an Application name* (untagged by mistake, or untaggable like Amazon CloudWatch), are *attributed to the Account* where they sit
- 'Applications can *span across multiple Accounts*, especially for large shared Applications'
- 'We are *constantly monitoring untagged costs* to make sure everything is tagged properly'
- 'Account naming convention includes *terms like Prod, Dev, and QA*; including tags for those categories; and this has been especially helpful to properly *analyze costs in our non-production accounts*'
- 'Accounts and Applications have *default cost centers / department IDs* that are *fully aligned with Finance*'



# Improving Cloud Visibility & Accountability



# Where to start?





# Who is responsible for what?



## Finance Persona

- ✓ Define and deploy **showback and chargeback** strategies: when teams will only be informed of their incurred costs, and when teams will actually be charged for them
- ✓ Establish consolidated billing with **AWS Organizations**
- ✓ Define a cost **allocation model** that best suits your organization



## FinOps Persona

- ✓ Set a **cadence/meetings** with Tech and Finance together to guarantee stakeholder alignment
- ✓ Convince the Finance department to **consolidate** their accounts
- ✓ Create AWS Cost Categories that are aligned with what the Finance department wants to see
- ✓ Implement **Tagging KPIs**
- ✓ Establish organizational cost accountability
- ✓ Deliver reports in a timely manner and **enable alerting** to not be caught by surprise by integrating the CUR with other services (Athena, QuickSight or Redshift)



## Tech Persona

- ✓ Implement a **tagging strategy**
- ✓ Tagging your resources making sure it includes **1)** the cost center it relates to, **2)** the application name, **3)** the team or person responsible for it, **4)** expected date to have the product finished
- ✓ **Automate** AWS account creation and management with AWS Organizations
- ✓ Implement the necessary **Tagging Enforcement Tools** (Proactive enforcement, Reactive Enforcement and Reporting)



Thank you