

# AWS State, Local, and Education Learning Days

Boston



# Cultural Transformation Through FinOps

## Beyond Cost Management

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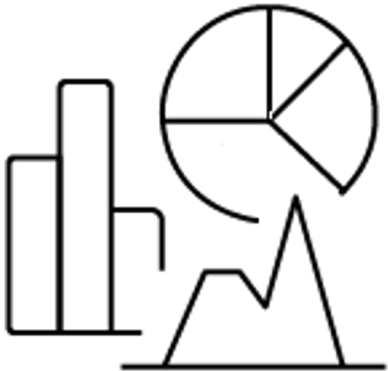
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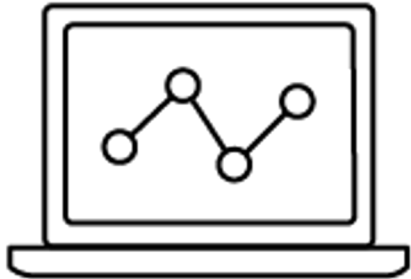
# Cost is an Operational Metric – a non-functional requirement



Decentralized



Scalable



Variable



# Every architectural decision is a purchase decision



Cost



Sustainability



Performance efficiency



Operational excellence

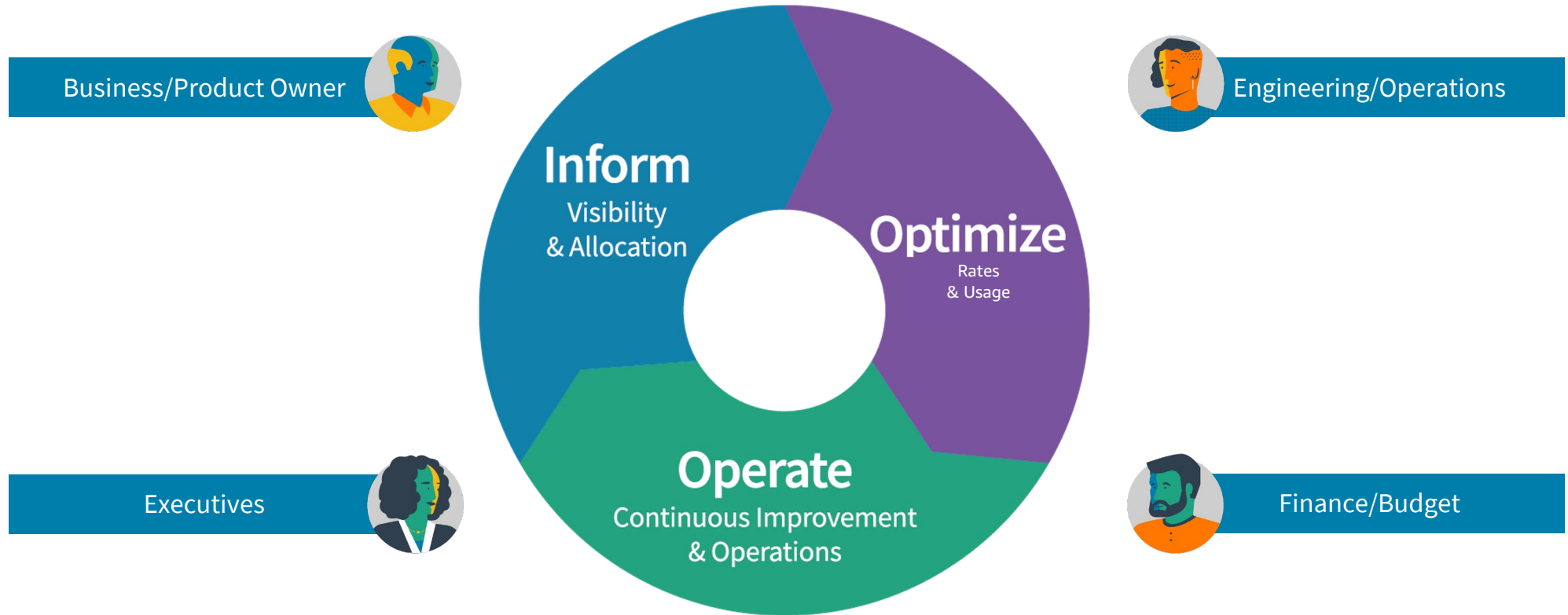


Reliability



Security

# FinOps is the enabler for cost-aware culture



is not just



**FinOps  $\neq$  cost optimization**

# What is FinOps ...

**FinOps is an operational framework and cultural practice which...**



**...maximizes the business value of cloud,**

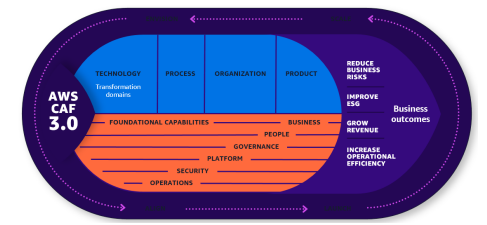


**...enables timely data-driven decision making, and**

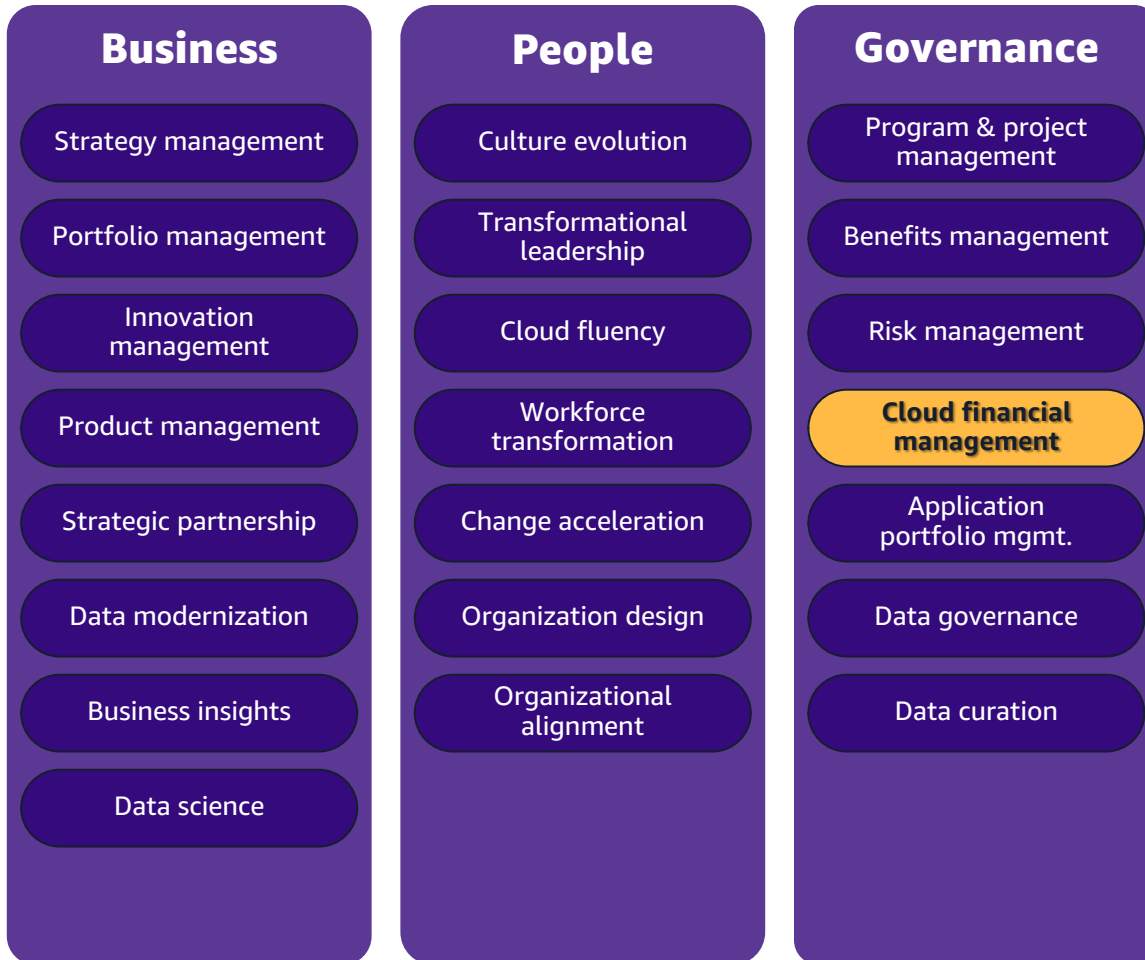


**...creates financial accountability through collaboration between engineering, finance, and business teams.**

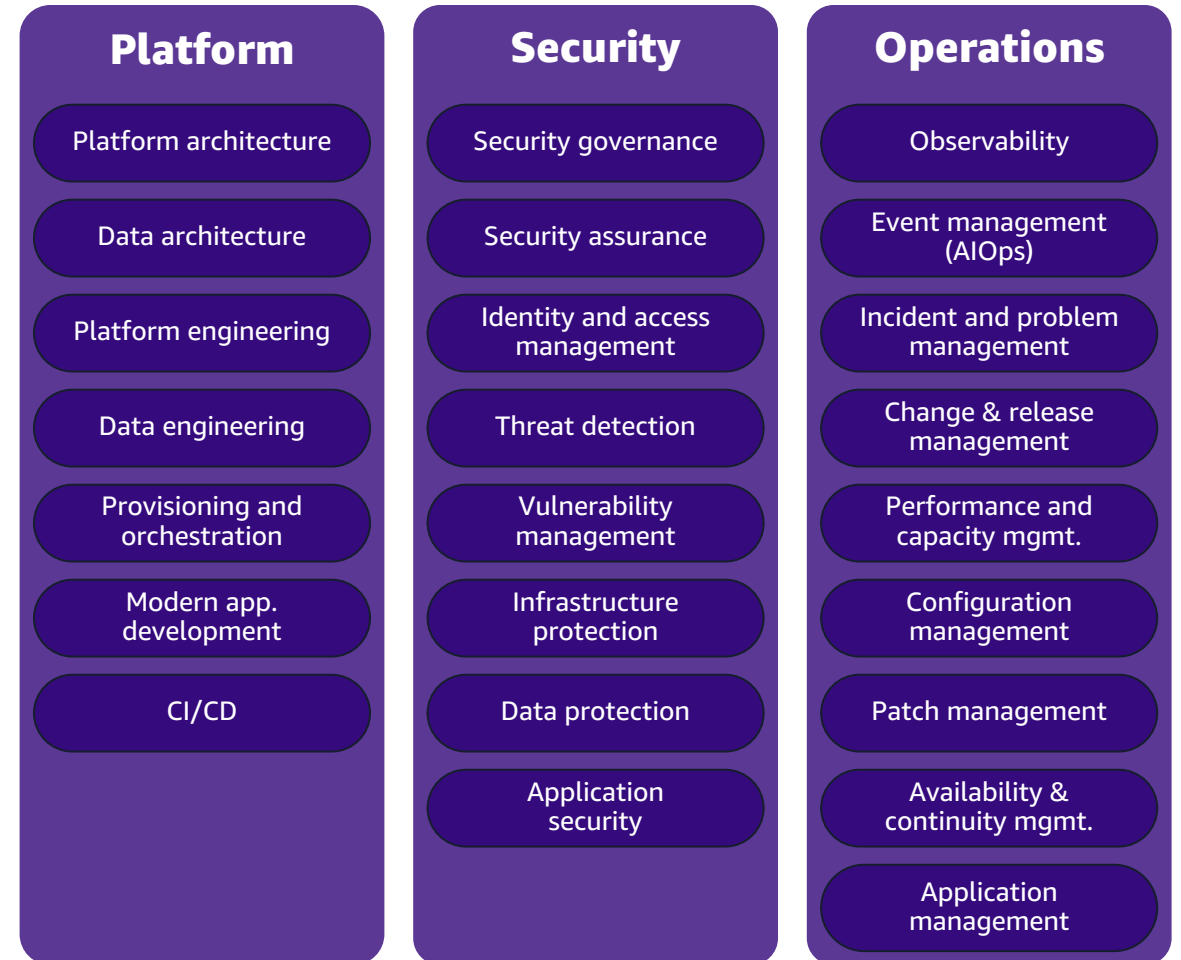
# Where is FinOps



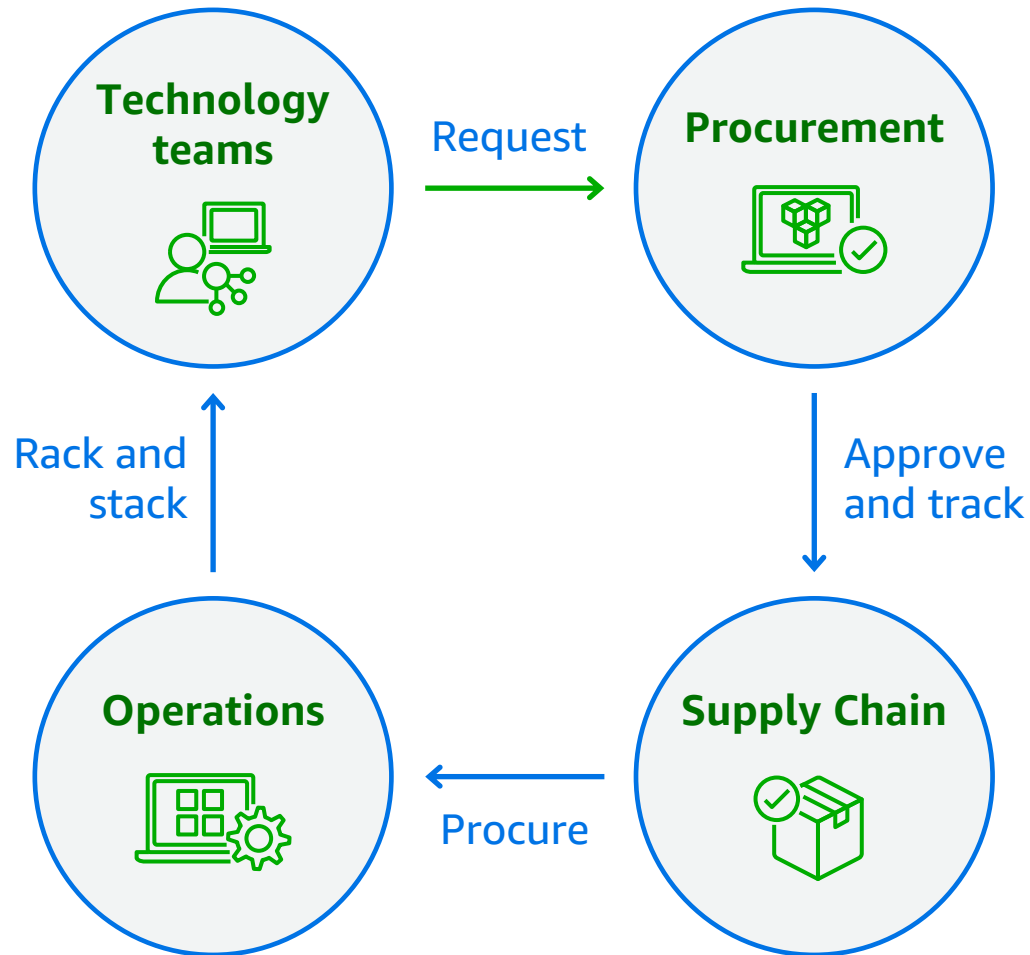
## NONTECHNICAL PERSPECTIVES



## TECHNICAL PERSPECTIVES



# Traditional technology consumption



## Model

Long, central approval, procurement, and installation cycles

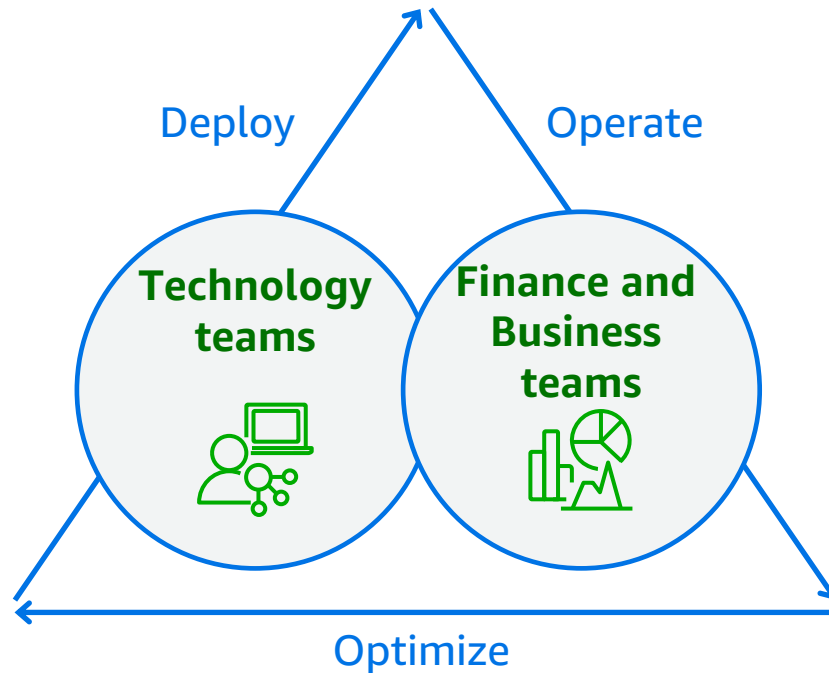
Upfront estimates of cost and capacity

Unfavorable experimentation conditions

High cost of failure

Limited, retrospective view of data

# Cloud technology consumption



## Model

Democratized access to resources

Variable costs with ongoing acquisition and depreciation

Experiment and create value

Low cost of failure

Real-time access to cost and usage data

# Adapting traditional processes to be cloud-ready



## Forecasting

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Mapping to AWS

Dynamic, rolling forecast

Cross-functional alignment



## Control

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Consolidated billing

Governance and agility

Simplified procure-to-pay



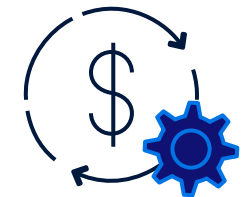
## Traceability

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Clean account structure

Meaningful cost reporting

Charge/show back ready



## Oversight

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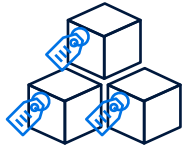
Cost-aware architecture

Match demand with supply

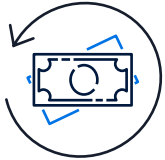
Various purchase options

# Cost aware culture

## OUTCOMES



Reduce unit costs as you scale



Reinvest wasteful spend and increase business agility



Improve financial predictability



Establish cost-aware behaviors and culture

# Cloud financial management

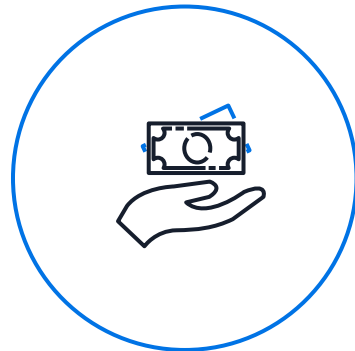
MANAGE, OPTIMIZE, AND PLAN AWS COST AND USAGE

See



Measurement and  
accountability

Save



Cost  
optimization

Plan



Planning and  
forecasting

Run



Governance and  
operations

# See

## Activities

Implement an account structure and tagging dictionary

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Establish cost reporting and monitoring processes

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Perform show/charge back for business units

---

Measure and circulate efficiency/value KPIs

## Outcomes

Map cost and usage to workloads and org structure

---

Proactively detect and address cost variances

---

Drive cost-aware cloud consumption

---

Validate cloud investment decisions and outcomes



# Save

## Activities

Cost-aware architecture, design and service selection

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Match capacity with demand

---

Choose the right pricing model

---

Implement processes to identify resource waste

## Outcomes

Increase staff productivity and operational resiliency

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Eliminate spend related to overprovisioning  
while scaling to meet demand

---

Improve unit economics and reduce unit costs

---

Reinvest wasteful spend into innovation  
and experimentation



# Plan

## Activities

Establish a process for budgeting and forecasting variable cloud usage using business drivers and unit costs

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Estimate costs through proof of concept

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Build a business case and articulate expected value

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Understand how the cloud can enable or support strategic initiatives

## Outcomes

Increase business and usage predictability

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Make cost-based decisions, faster

---

Prioritize spend or projects based on expected value

---

Gain executive buy-in and establish long-term cloud strategy



# Run



## Activities

Secure executive sponsorship

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Establish a partnership between Finance and Technology organizations

---

Invest in people, governance and tools

---

Celebrate accomplishments

## Outcomes

Remove barriers that would otherwise decrease or delay success

---

Effective finance and technology collaboration

---

Maximize cost efficiency and agility in a continuous manner at scale

---

Establish cost-aware behaviors and culture

# Cloud FinOps stakeholders & collaboration

*In the same way that everyone is responsible for security with a central team enabling best practices (at scale), many roles do FinOps with help from a central team.*



## Engineering Leads

Cost per deployed application  
Infrastructure costs  
Engineering productivity



## Application & Project Owners

Cost per user  
Cost per product/feature



## FinOps practitioners

Organizational FinOps adoption  
Support FinOps champions  
Discount/Reservation coverage  
Cost Allocation  
Efficiency opportunity  
Best practices KPIs



## Finance, Budget & Procurement

Unit Cost Economics, Budget and forecast accuracy, Funding growth, Software license optimization



## Executives

Organization Growth YoY  
Faster time-to-market  
Cost per service

# FinOps landscape



Executives



Finance, Budget & Procurement



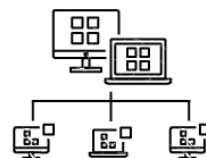
Engineering leads



Application & Project owners



FinOps practitioner



Organizational taxonomy, cost centers, departments



Business metrics



AWS Cost Explorer



AWS Compute Optimizer



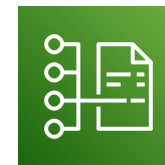
AWS Budgets



AWS Trusted Advisor



Reserved Instance (RI) and Savings Plans reporting



AWS Cost and Usage Reports

# Getting to cost-aware culture



FinOps metrics are “just another operational metric” teams monitor and optimize



Engineering and Finance collaborate to achieve better outcomes



Engineers are actively looking for FinOps opportunities



Leadership supports FinOps and recognizes success and wins



Solution architects understand that their design decisions drive cost



FinOps review part of application lifecycle



# AWS Cloud Financial Management journey...



## 1. CFM ownership

Identify an owner (individual or team) responsible for driving cloud financial management activities.



## 2. Organizational partnership

Create a Finance and Technology partnership and establish a regular communication cadence to create and maintain alignment.



## 3. Cost allocation

Implement an account structure, and tagging strategy to allow allocation of cost to lines of business, products or teams.



## 4. Cost visibility

Report cloud costs to Technology teams in order to raise cost awareness, and establish efficiency KPIs for finance and business stakeholders.



## 5. Cost optimization

Use services and tools to identify and implement cost savings opportunities.



## 6. Cost forecasting and monitoring

Improve cost predictability and monitor spend variances.



## Continuous education

Identify cloud-focused training offerings from AWS Training and Certification to eliminate knowledge blind spots for stakeholders.



# Thank you!

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Amazon Web Services  
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## Up Next in this Room

1:30pm – 3:00pm

**200**  
level

**Cloud Lab  
Potpourri**

Hands-On Cloud  
Adventure:  
**Customize Your AWS  
Learning with  
Interactive Technical  
Workshops and  
Personalized Lab  
Experiences.**

Please complete the survey  
for this session



**Track: Cloud Foundations**

Session: Cultural  
Transformation Through FinOps