

Getting Started with FinOps on Google Cloud



Google Cloud Learning Services

Course Outline - Day 1 Practitioner



Time Slot	Duration	Subject
9:00-9:30	30 Mins	Course Introduction and Logistics
9:30-10:00	30 Mins	Cloud FinOps Overview
10:00-10:10	Break	
10:15-11:45	90 Mins	Cost Optimization on Google Cloud (Part 1)
11:45-12:00	15 Mins	Kahoot Quiz 1
12:00-13:00	Lunch	
13:00-14:00	60 Mins	Lab 1 - Understanding and Analyzing your Costs with Google Cloud
14:00-14:15	15 Mins	Kahoot Quiz 2
14:15-14:30	Break	
14:30-15:30	60 Mins	Lab 2 - Visualizing Billing Data with Google Data Studio
15:30-15:40	Break	
15:40-16:10	30 Mins	Optional Lab - Looker Data Explorer

Course Outline - Day 2 Practitioner



Time Slot	Duration	Subject
9:00-9:15	15 Mins	Logistics and Q&A
9:15-10:15	60 Mins	Cost Optimization on Google Cloud (Part 2)
10:15-10:30	Break	
10:30-10:45	15 Mins	Kahoot Quiz 3
10:45-11:45	60 Mins	Cost Optimization on Google Cloud (Part 2 - cont.)
11:45-12:45	Lunch	
12:45-13:15	30 Mins	Lab 3 - Fundamentals of Cloud Logging
13:15-13:30	Break	
13:30-13:45	15 Mins	Kahoot Quiz 4
13:45-14:45	60 Mins	Cost Optimization Best Practices for BigQuery
14:45-15:00	Break	
15:00-16:00	60 Mins	Optimizing your Google Cloud spend with BigQuery and Looker - Demo
16:00-16:30	30 Mins	Lab 4 - Analyzing Billing Data with BigQuery

Course Outline - FinOps Engineer




Time Slot	Duration	Subject
9:00-9:15	15 Mins	Logistics and Q&A
9:15-10:15	60 Mins	Using Recommendations for Infrastructure as Code
10:15-10:30	Break	
10:30-11:30	60 Min	Optimizing Network Spend
11:30-11:45	15 Mins	Kahoot Quiz 5
11:45-12:45	Lunch	
12:45-13:45	60 Mins	Lab - Exploring Cost Optimization for GKE
13:45-14:00	Break	
14:00-15:00	60 Mins	Lab - Understanding and Combining GKE Autoscaling Strategies

Solving for Value in the Cloud

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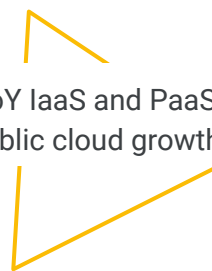
Public cloud consumption continues to grow at an exponential pace and CIOs across the enterprises are challenged with attaining the desired cost savings of migration to the cloud

\$1 T+¹




Cloud EBITDA value drivers
across Fortune 500 in 2030

~22%²



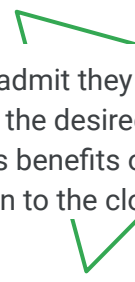
YoY IaaS and PaaS
public cloud growth

~32%³



Wasted cloud spend
estimated in 2021

80%⁴



of CIOs admit they haven't
attained the desired
business benefits of
migration to the cloud

Source: (1) McKinsey: Cloud's trillion-dollar prize is up for grabs, February 2021, (2) IDC's Whole Cloud Forecast 2022, (3) Flexera 2022 State of Cloud Report, (4) McKinsey Study: Unlocking business acceleration in a hybrid cloud world, July 2019

Optimizing Cloud Costs

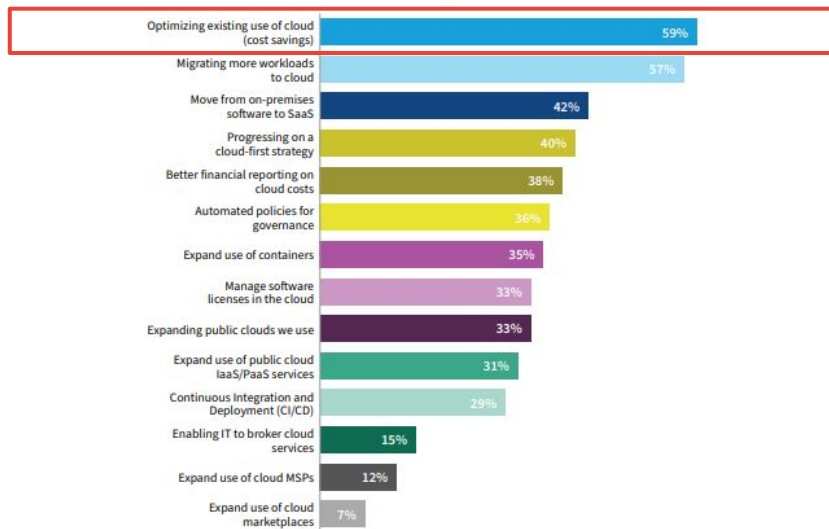
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Cloud cost optimization and governance are top priorities for enterprises to realize the desired value and cost savings benefits of cloud adoption

Even though cloud cost optimization remains the top priority...

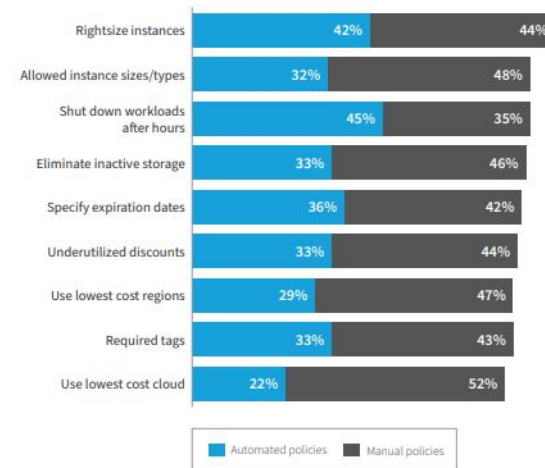
Many enterprises are still in the early stage of optimizing cloud costs.

Top cloud initiatives for 2022 across all organizations



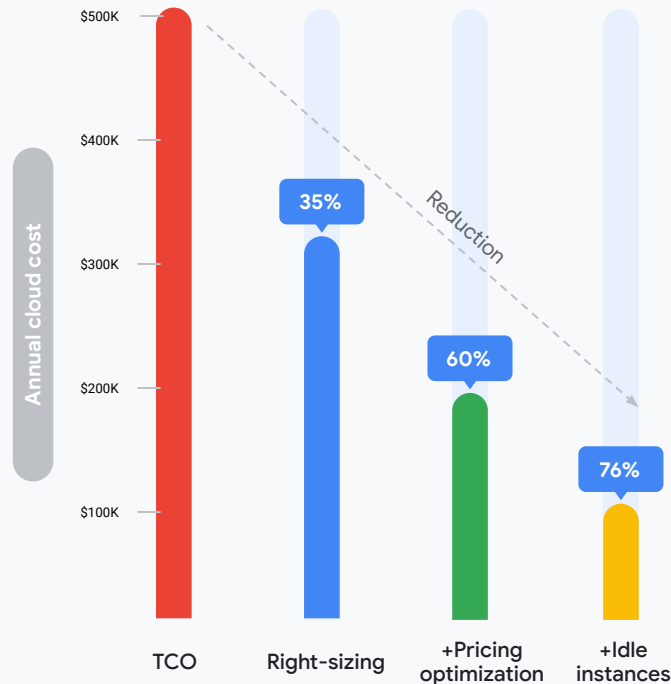
% of Respondents

Types of policies used to optimize cloud costs



So why can cloud costs vary so much?

Cloud computing services configuration sizing, pricing models, and resource management can significantly impact costs








* Comparison of 100 compute instances in N. Virginia Region (1) e2-standard-16 On Demand, (2) e2-custom-8-55296 On Demand (assuming max 50% CPU utilization/87% RAM utilization on standard config), (3) e2-custom-8-55296 on 1 Year CUD (4) e2-standard-16 On Demand 8 hours/day 5 days/week

Common cloud financial governance challenges

Traditional IT financial controls have limited ability to effectively manage and predict cloud spend.

Bringing traditional financial processes...

creates new challenges in the cloud.

	Budget cycle	IT budget set during annual planning cycle>	Dynamic changes to migrations and consumption can challenge static budgets
	Cost ownership	Centrally-owned IT budget; BU allocations by revenue or headcount>	Limited visibility to usage and source of cost overruns
	Spend controls	CapEx budget and purchase order process used to control IT spend>	Limited ability to effectively control largely OpEx-driven spend; 30+% average wasted spend
	Predictability	Quarterly financial forecasts built off of depreciation run-off and trend-based OpEx spend>	Forecast variances can exceed 25%
	Resource investment	Procurement of standard fixed capacity hardware configurations on ~5 year refresh cycle>	Use of standard data center configurations for cloud resources introduces 30 - 75% overhead waste

Cloud FinOps

An operational framework and cultural shift that brings technology, finance, and business together to drive financial accountability and accelerate business value realization through cloud transformation.

Building blocks of Cloud FinOps

Cloud FinOps enables enterprises making significant investments in cloud the ability to identify and manage consumption and spending in order to make the right economic decisions.



Cloud FinOps capabilities maturity

Organizations can start on the cloud transformation journey and build up their Cloud FinOps capabilities as the organization matures to maximize and realize the business value of cloud.

