LIVE! 360
TECH EVENTS WITH PERSPECTIVE
The Ultimate Education Destination
ORLANDO 2023
CCW04: The Fin-tastic Way to Boost Your Cloud ROI
René van Osnabrugge
Xebia | Xpirit
Level: Intermediate
Visual Studio LIVE!
SQL Server LIVE!
TECHMENTOR
Artificial Intelligence LIVE!
Cloud & Containers LIVE!
Cybersecurity & Ransomware LIVE!

#KATRINA
EAT THE RICH
EAT THE RICH
EAT THE RICH

CLOUD & DEVOPS GO HAND IN HAND

The same model that brought freedom removed control

THIS IS ABOUT YOU!

WHY NOW?

THE CLOUD PROMISE

ZDNET tomorrow belongs to those who embrace it today

Home / Innovation / Cloud

Survey: Cost, scalability are primary drivers for cloud usage

There's nonstop talk about how cloud computing is in its infancy this week at GigaOm's Structure conference in San Francisco. Nevertheless, more companies are favoring the cloud each day for different reasons, but there are a few that stick out.

Written by **Rachel King**, Contributor on June 23, 2011

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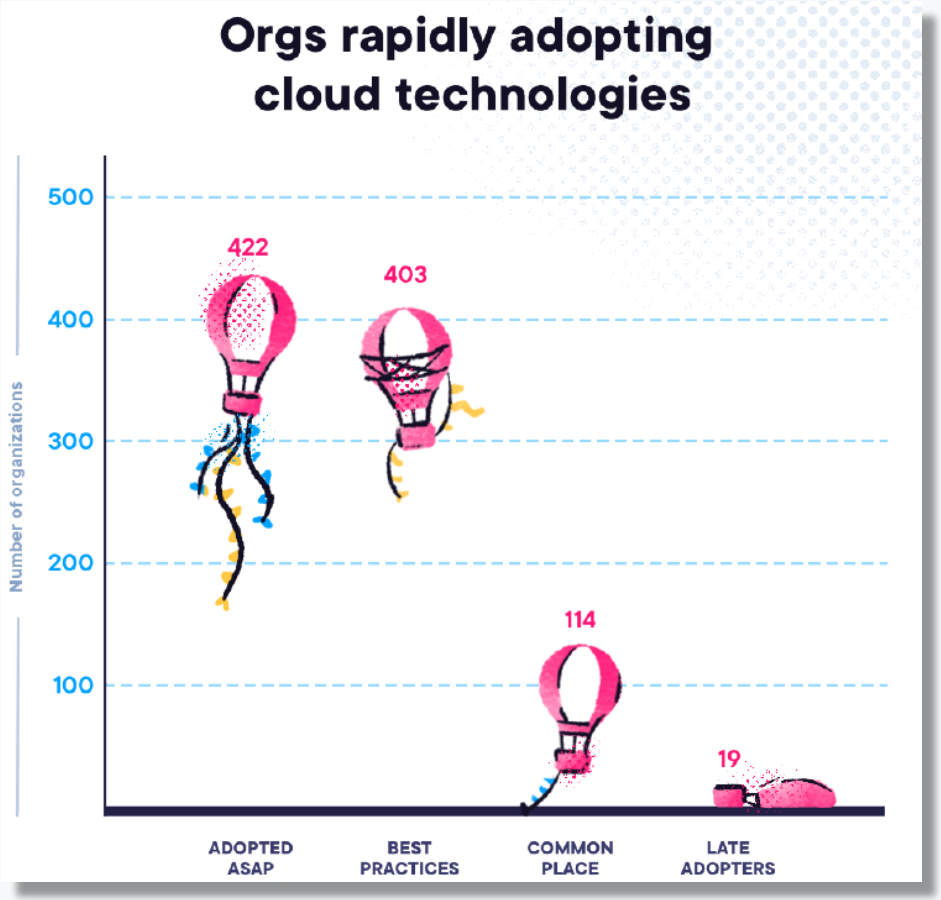
According to the "inaugural Future of Cloud Computing Survey," the primary drivers for cloud usage are more flexible scalability and the potential for lower costs on the part of the customers.

Survey: Cost, scalability are primary drivers for cloud usage | ZDNET

And cloud is here to stay…

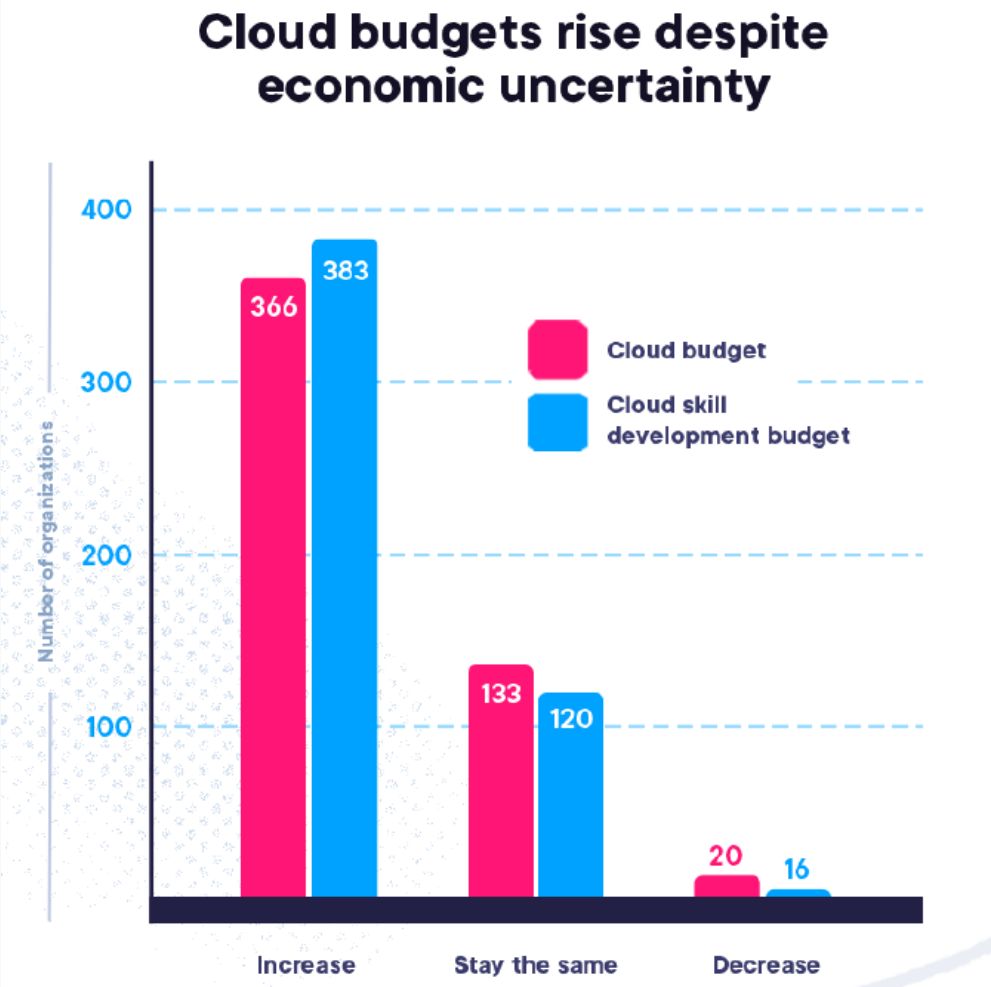


70% of organizations has over 50% of their infrastructure in the cloud.

49% actively move data to the cloud.

Source: 2023 State of Cloud | Pluralsight

Cloud budgets rise

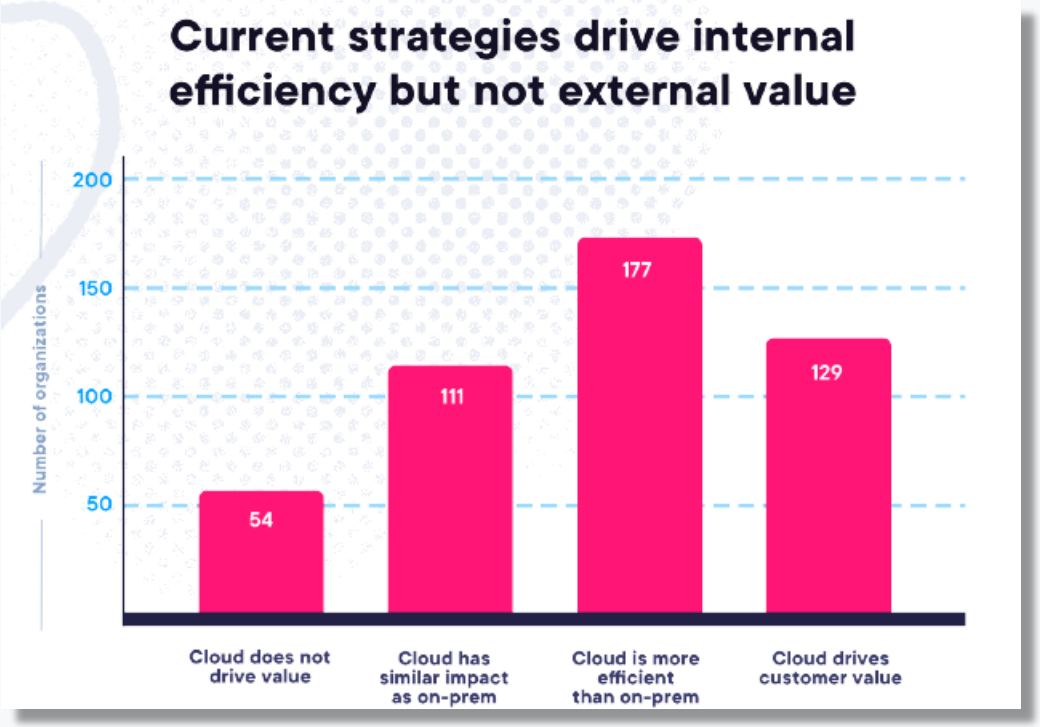


71% of leaders saying their cloud budgets will increase over the next 12 months

74% of leaders also expect their cloud skill development budgets to increase

Source: 2023 State of Cloud | Pluralsight

But cloud does not reach its full potential



80% struggle to improve performance and measurement of cloud systems.

27% of leaders succeed in driving consumer value with their cloud solutions

61% of organizations able to push out new code to consumers more than once per month

Source: 2023 State of Cloud | Pluralsight

BEFORE & AFTER

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businesswire

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anodot

New Survey Reveals that Organizations Struggle with Skyrocketing Cloud Computing Costs Amidst the Move to Remote Work

Independent Survey Sponsored by Anodot Points to Need for AI-Based Cloud Monitoring and Machine Learning to Reduce Cloud Costs Within 30-60 Days

June 10, 2021 09:00 AM Eastern Daylight Time

ASHBURN, Va.--(BUSINESS WIRE)--Anodot, the autonomous business monitoring company, today announced the results of an independent survey that reveals how organizations struggle to control skyrocketing cloud computing costs of the remote workforce, even as business moves to a hybrid model.

"Cloud costs are extremely hard to track"

Tweet this

In Q2 of 2021, Anodot surveyed more than 100 senior IT, finance, and operations leaders on their experiences managing cloud costs during the pandemic and shortly thereafter as vaccinations became commonplace and more people returned to work. The survey revealed the following:

- **Cloud costs are skyrocketing, and most organizations are having a hard time controlling these costs**
  - Fewer than 20% of survey respondents stated that they were able to immediately detect spikes in cloud costs
  - Greater than 25% stated that it can take months or weeks or several days to notice a spike in cloud costs

WHAT WE HEAR

SAVE COST OPTIMIZE COST EXPENSIVE POLICIES PREDICT COST CLOUD SPEND INVISIBLE CLOUD FEAR DATA CENTERS SAVE COST OPTIMIZE COST EXPENSIVE POLICIES PREDICT COST CLOUD SPEND INVISIBLE CLOUD FEAR DATA CENTERS SAVE COST OPTIMIZE COST EXPENSIVE POLICIES PREDICT COST CLOUD SPEND INVISIBLE CLOUD FEAR DATA CENTERS SAVE COST OPTIMIZE COST EXPENSIVE POLICIES PREDICT COST CLOUD SPEND INVISIBLE CLOUD FEAR DATA CENTERS SAVE COST OPTIMIZE COST EXPENSIVE POLICIES PREDICT COST CLOUD SPEND INVISIBLE CLOUD FEAR DATA CENTERSSAVE COST OPTIMIZE COST EXPENSIVE POLICIES PREDICT COST CLOUD SPEND INVISIBLE CLOUD FEAR DATA CENTERS SAVE COST OPTIMIZE COST EXPENSIVE POLICIES PREDICT COST CLOUD SPEND INVISIBLE CLOUD FEAR DATA CENTERS SAVE COST

SOME QUESTIONS
TO YOU

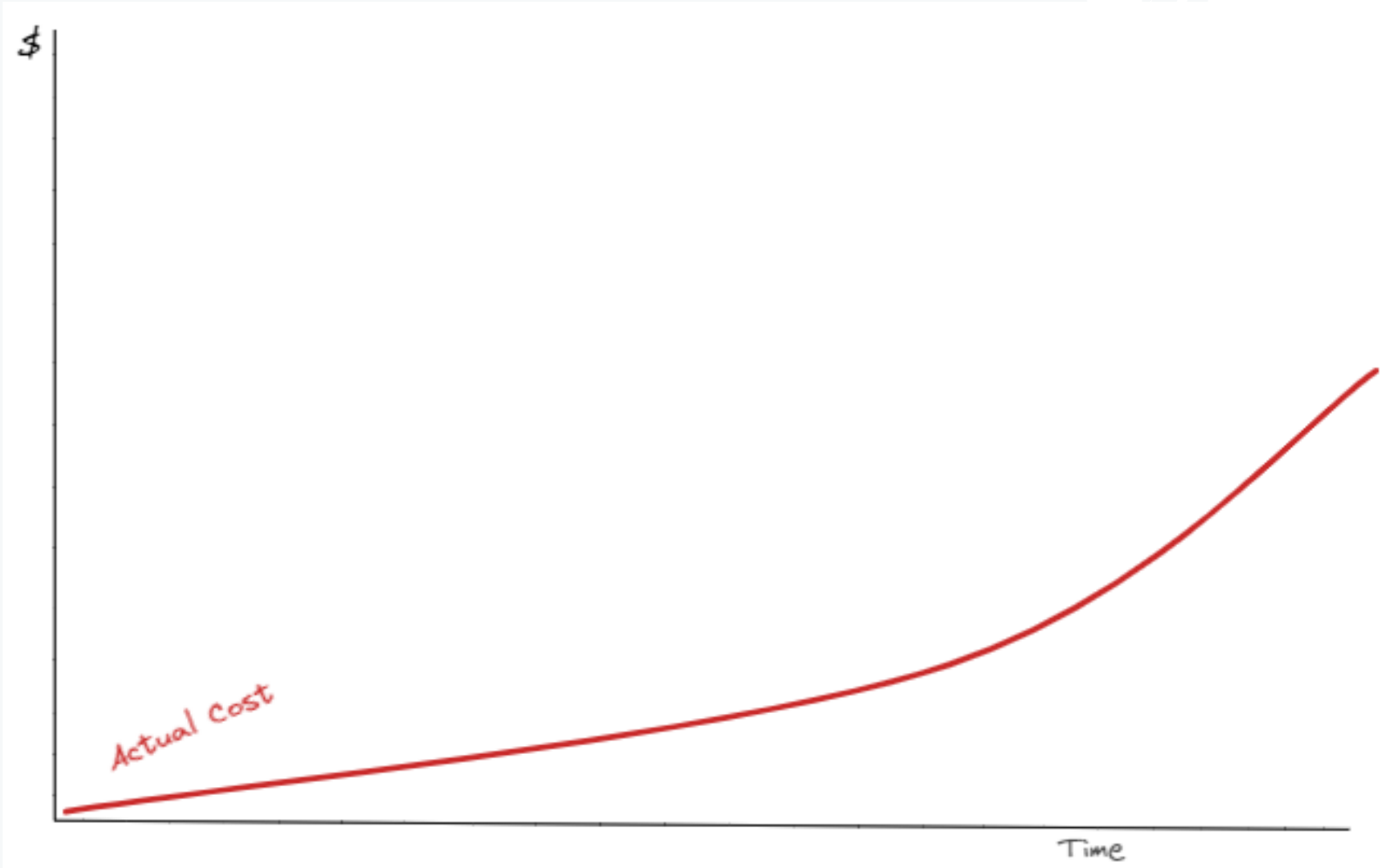
WITH GREAT
POWER
COMES GREAT
RESPONSIBILITY

YET ANOTHER ...OPS

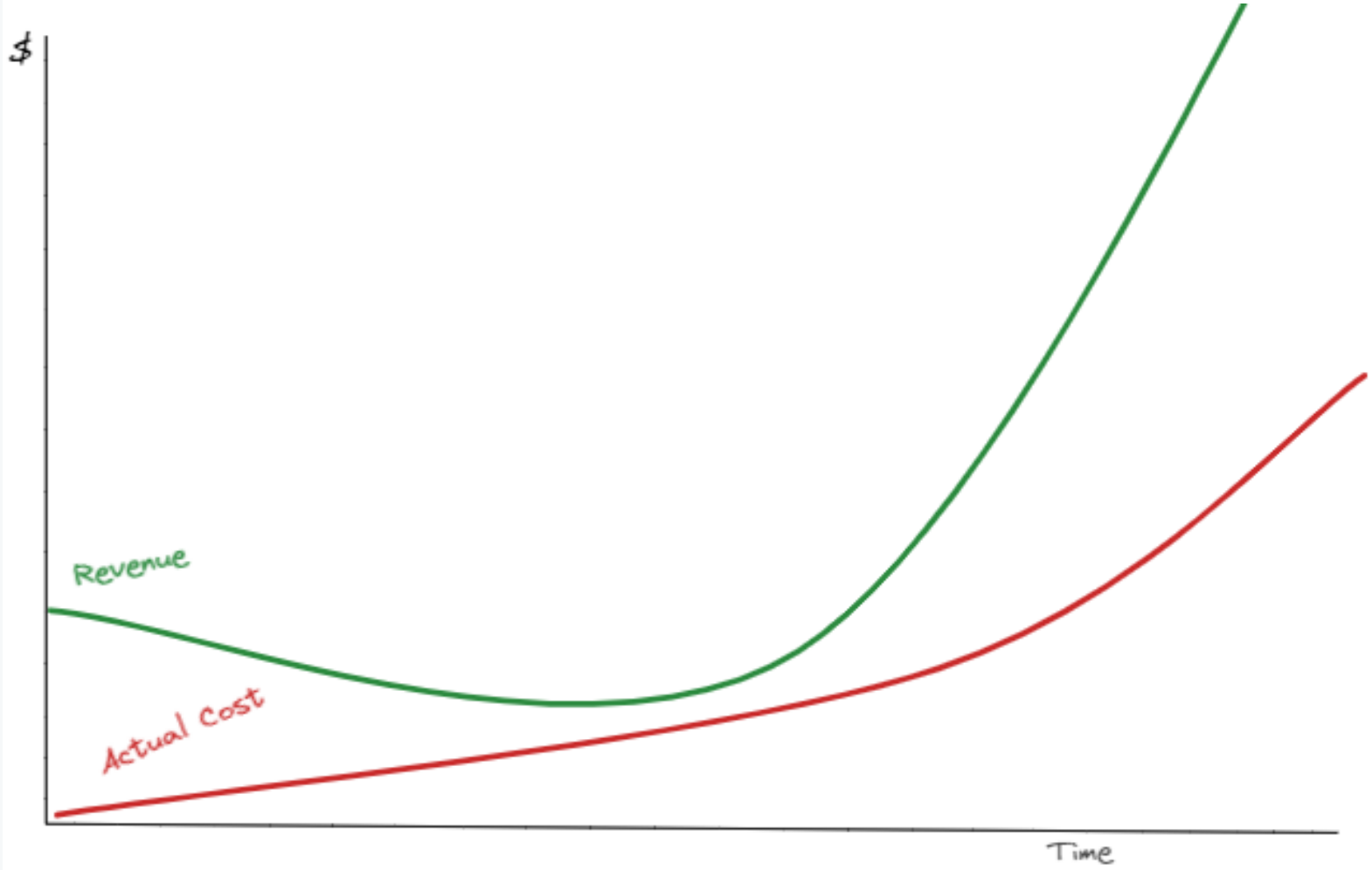
FINOPS IS AN EVOLVING CLOUD FINANCIAL MANAGEMENT DISCIPLINE AND CULTURAL PRACTICE THAT ENABLES ORGANIZATIONS TO GET MAXIMUM BUSINESS VALUE BY HELPING ENGINEERING, FINANCE, TECHNOLOGY AND BUSINESS TEAMS TO COLLABORATE ON DATA-DRIVEN SPENDING DECISIONS.

VISIBILITY
COST
ARCHITECTING
OWNERSHIP

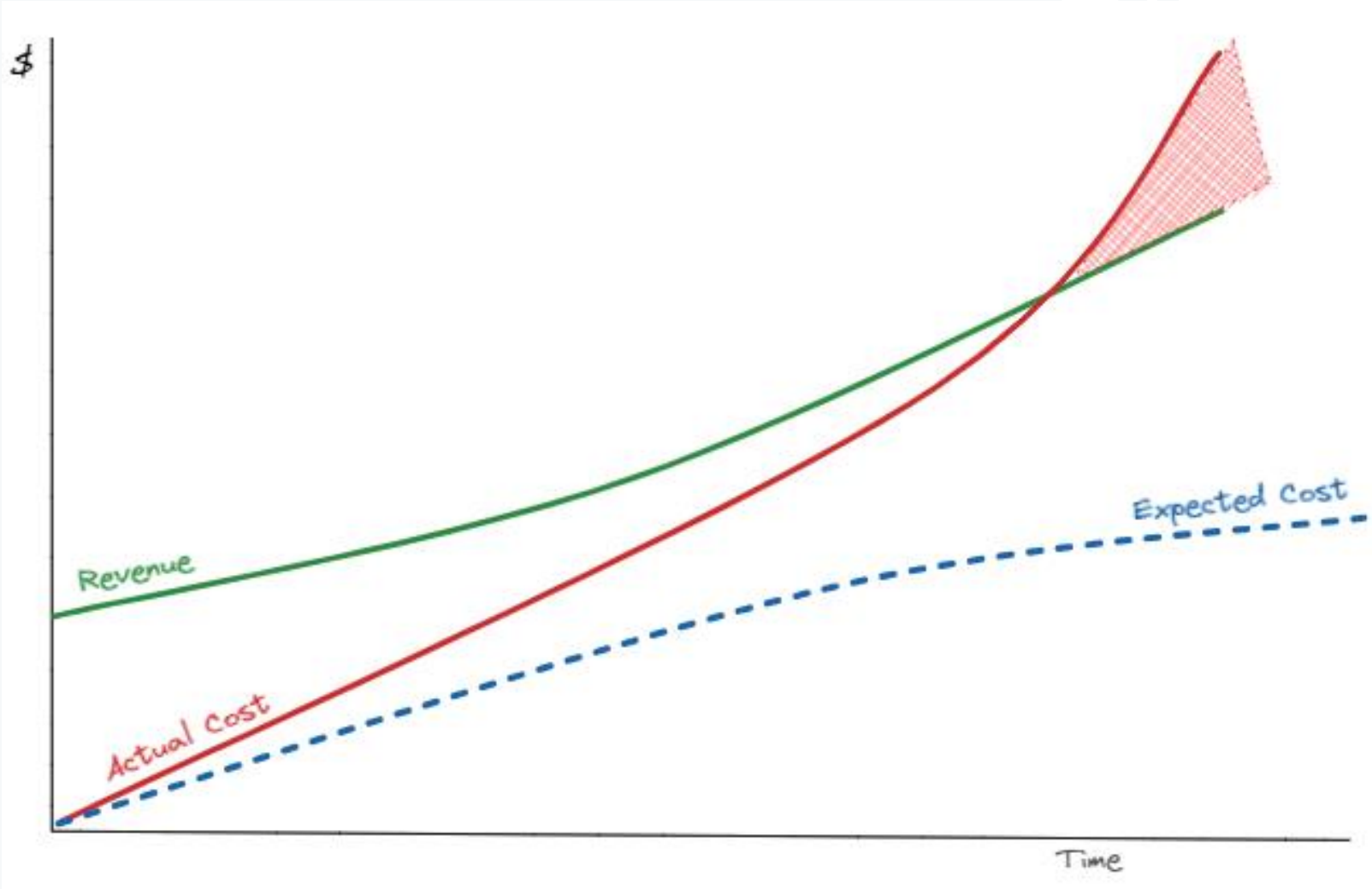
Cloud is too expensive!



And now?



And now?



#PERSPECTIVE

WHAT IS
CLOUD
SPEND?

Microsoft Azure

Bill to

Contoso
1234 Address Way
City, State Zip

Customer PO No.	512
Invoice No.	E12345JTHE
Billing Cycle	3/5/2017 to 4/4/2017
Invoice Date	4/5/2017
Payment Method	Credit Card

Pay-As-You-Go

Account Owner Email Joe@contoso.com

Invoice Summary

Production Storage

Previous balance	664.14
Payment - Thank you!	-216.00
Outstanding balance (from previous billing cycle)	448.14
Current Charges	
Usage charges	219.45
Adjustments	-20.00
Total Pre-Tax Charges	199.45
VAT (0.000%)	0.00
Total Amount	**647.59** USD

*Payment instructions on page 2

Usage Charges

Name	Type	Resource	Region	Consumed	Included	Billable	Rate	Value
Storage	Locally Redundant	Standard IO - Page Blob/Disk (GB)		1505.0000	0.0000	1505.0000	.0500	75.35
Virtual Machines	BASIC.A3 VM (Windows)	Compute Hours	EU North	365.9500	0.0000	365.9500	.3000	109.79
Storage	Locally Redundant	Standard IO - Table (GB)		318.7142	0.0000	318.7142	.0700	22.31
Data Management		Standard IO - Block Blob Write Operation Units (in 10,000s)		30.0000	0.0000	30.0000	.4000	12.00

Sub-Total	219.45
Grand Total	**219.45** USD

SPEND
=
USAGE X RATE

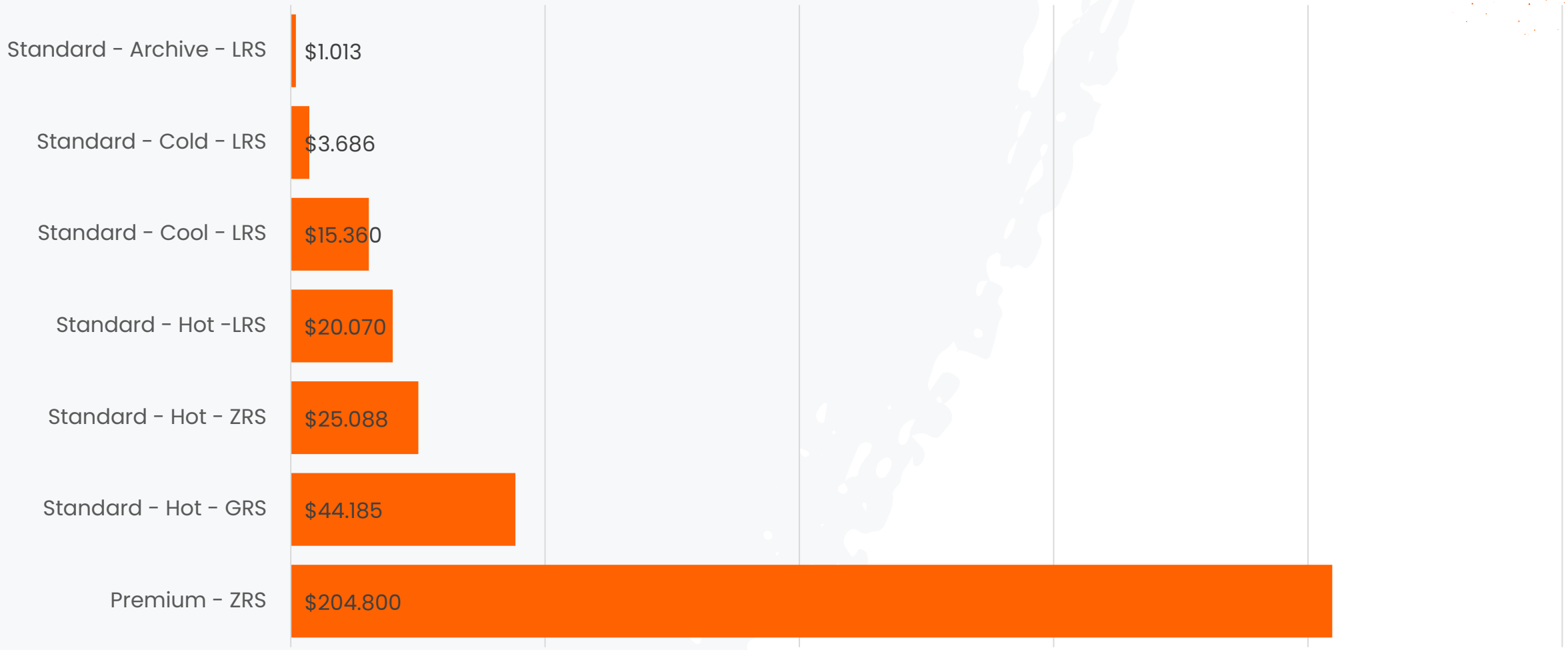
DEMO

Usage

- Compute power
- Storage space
- Disks
- Network inbound/outbound
- IP Addresses
- Security features
- AI functionality
- Number of instances
- Redundancy
- Etc.

PAY WHAT
YOU USE?
PAY WHAT
YOU PROVISION?

Example of Storage Account SKU



1 Petabyte storage / month in West Europe

Rates

The amount of money charged or paid for a particular service, product, or activity

Different rates for many different services

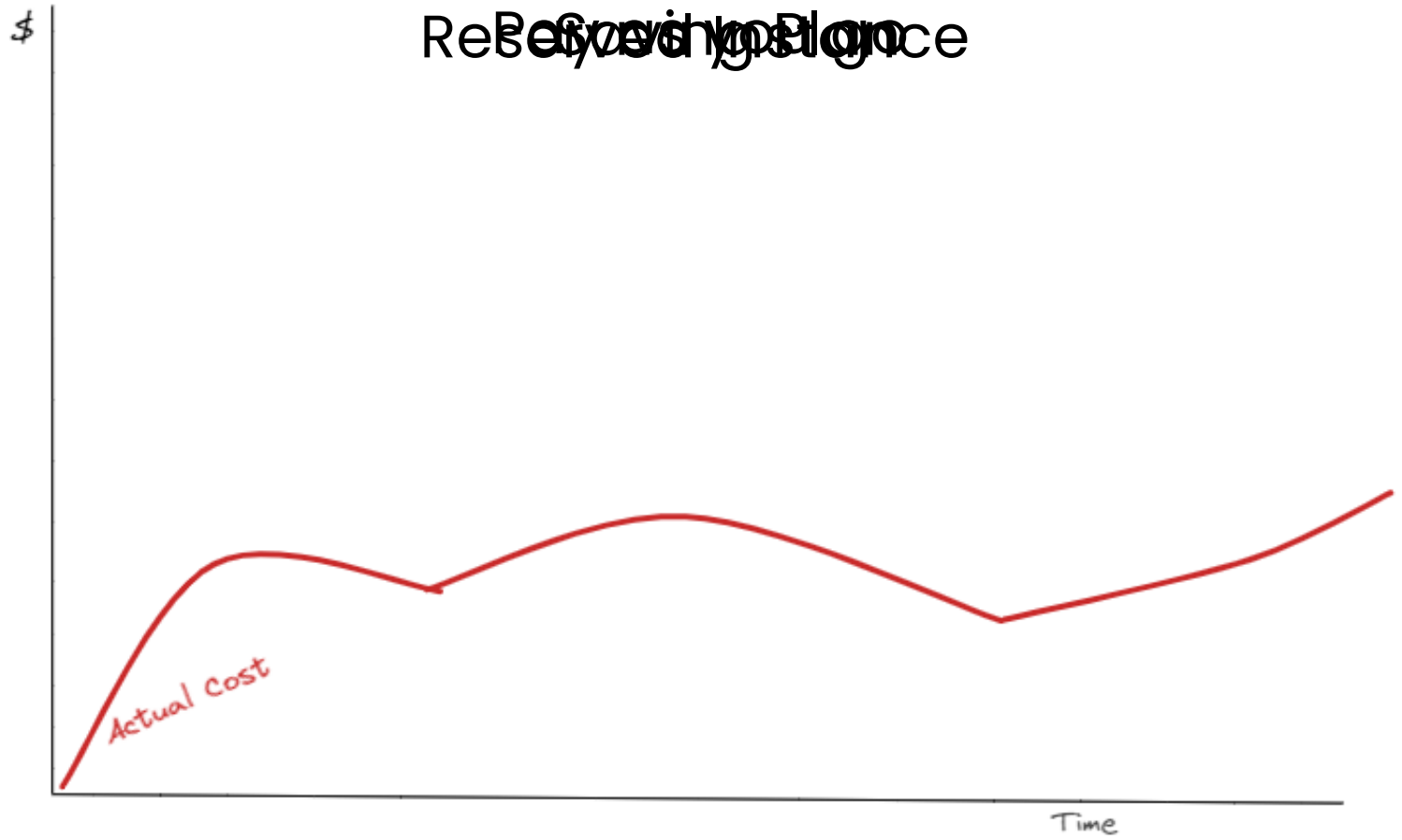
- Compute, Network, I/O, Scaling, Instances, SKU, Availability

Rates vary depending on usage

PRICE IS WHAT YOU PAY.
VALUE IS WHAT YOU GET.
WARREN BUFFET

RATE REDUCTION

COST AVOIDANCE


$
Actual Cost
Time

Rate Reduction

Pay-as-you-go (on-demand)

Spot Instances

Reserved Instances

Saving Plans

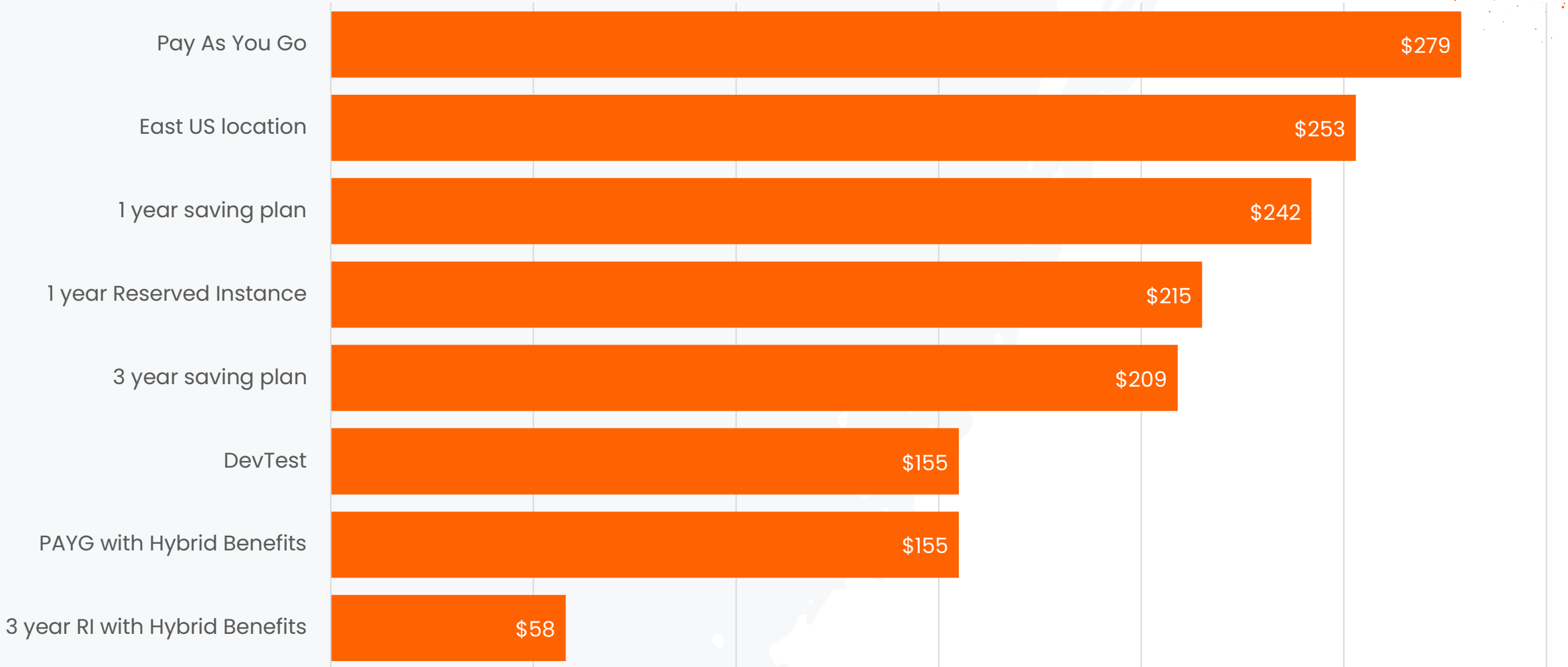
Commitment-Based Discounts

Enterprise Agreement

Dev/Test subscriptions

Hybrid Benefits

Example VM rates



1 VM in West Europe - D4 v5 - 730 Hours – Standard Windows, per Month

Cost Avoidance

Which resources show a stable usage?

Removing / Moving

- Data Retention Policies
- Delete Resources

Rightsizing

Smart Combining

Shared Services

Prod or Non-Prod?

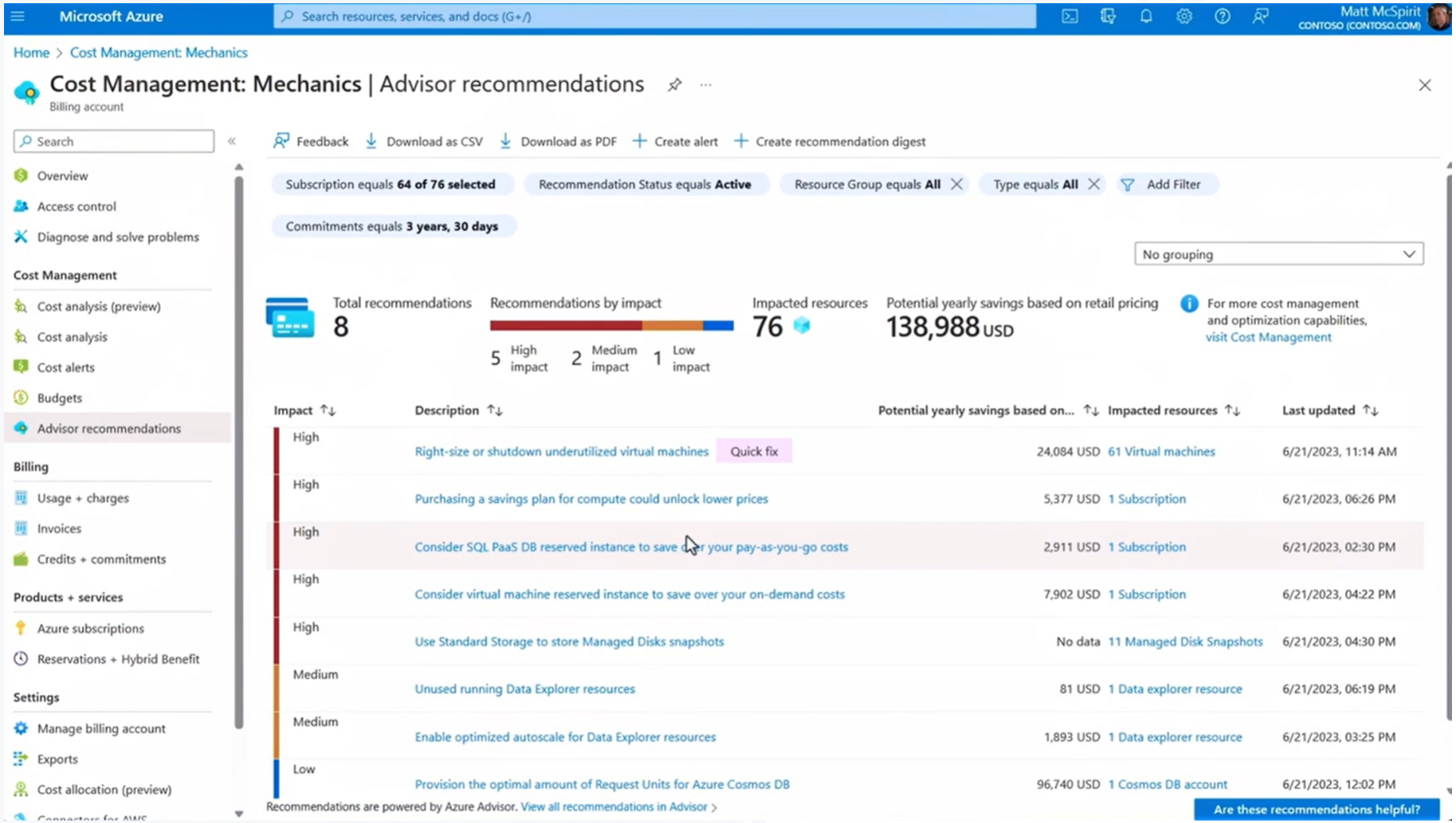
Selective Use / Scaling

Re-Architecting

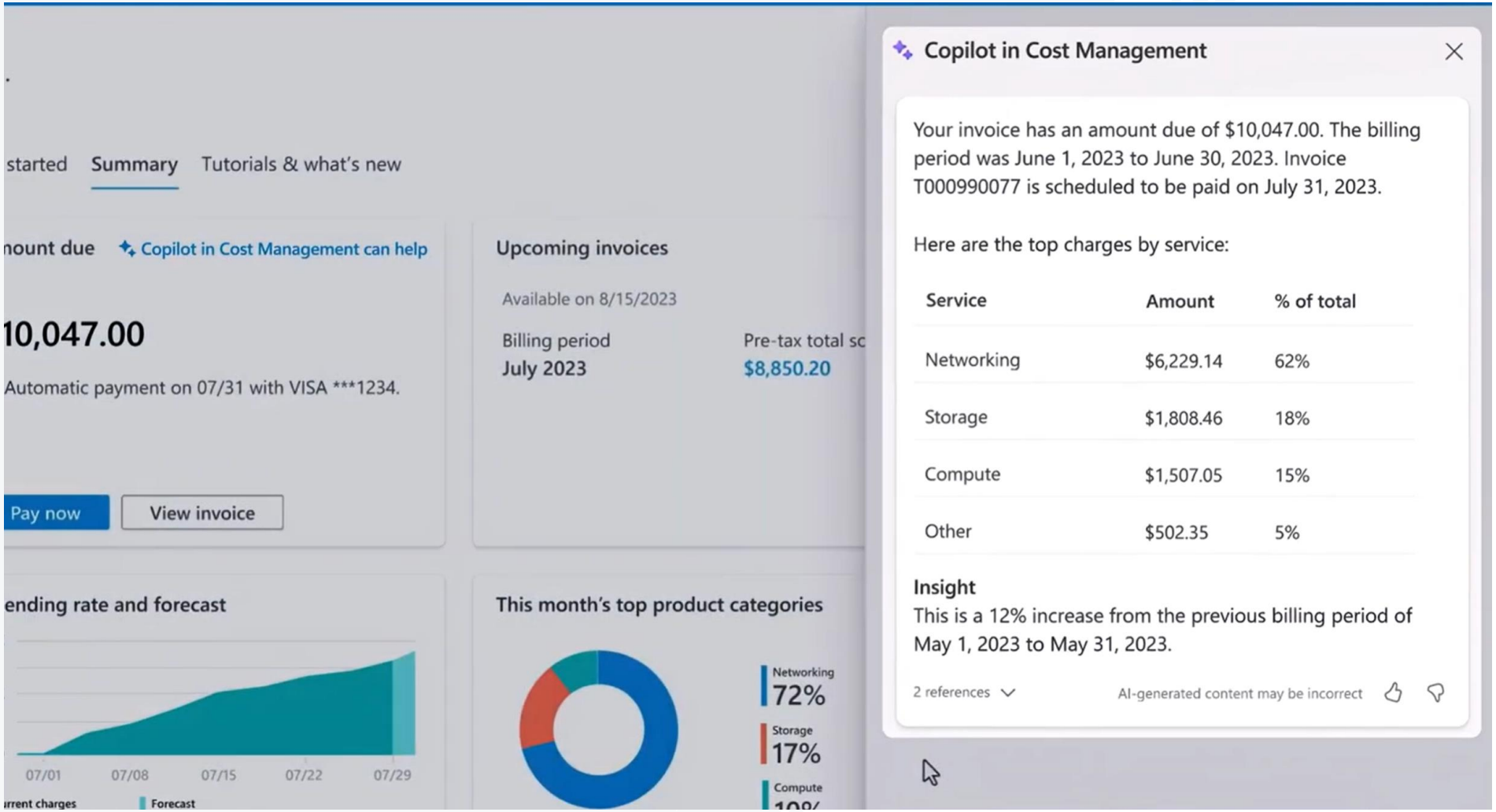
SKU

DEMO
COST
ADVISOR

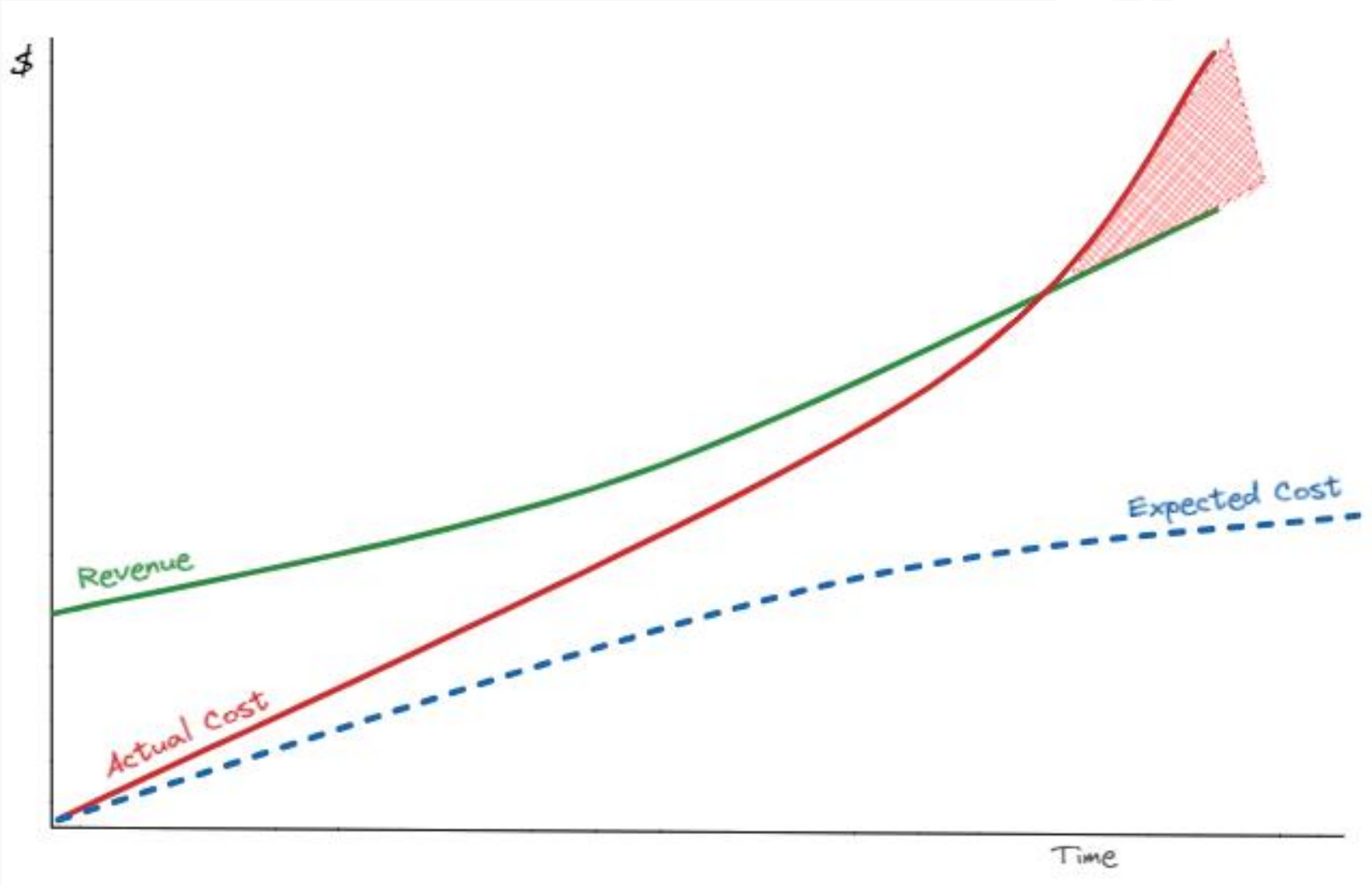
Azure Cost Recommendations



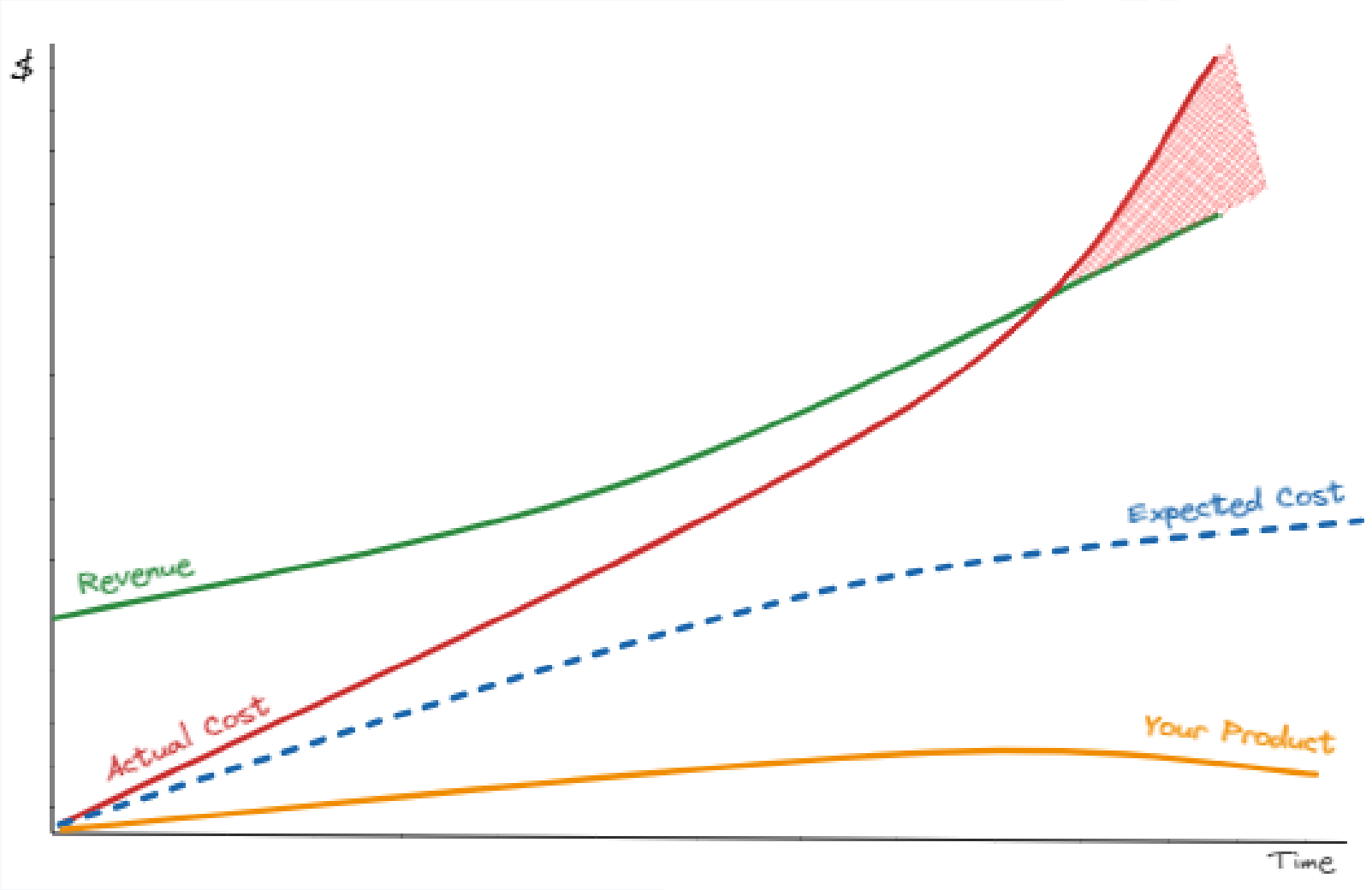
Azure Cost Recommendations



Development teams need to save cost!

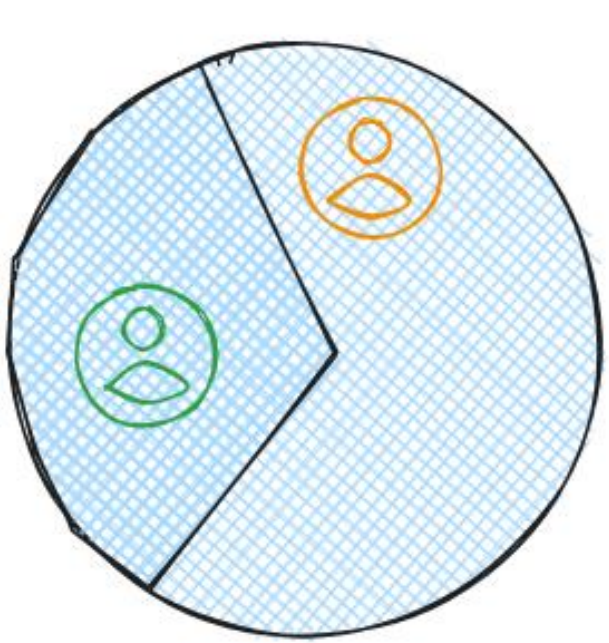


Is that true?

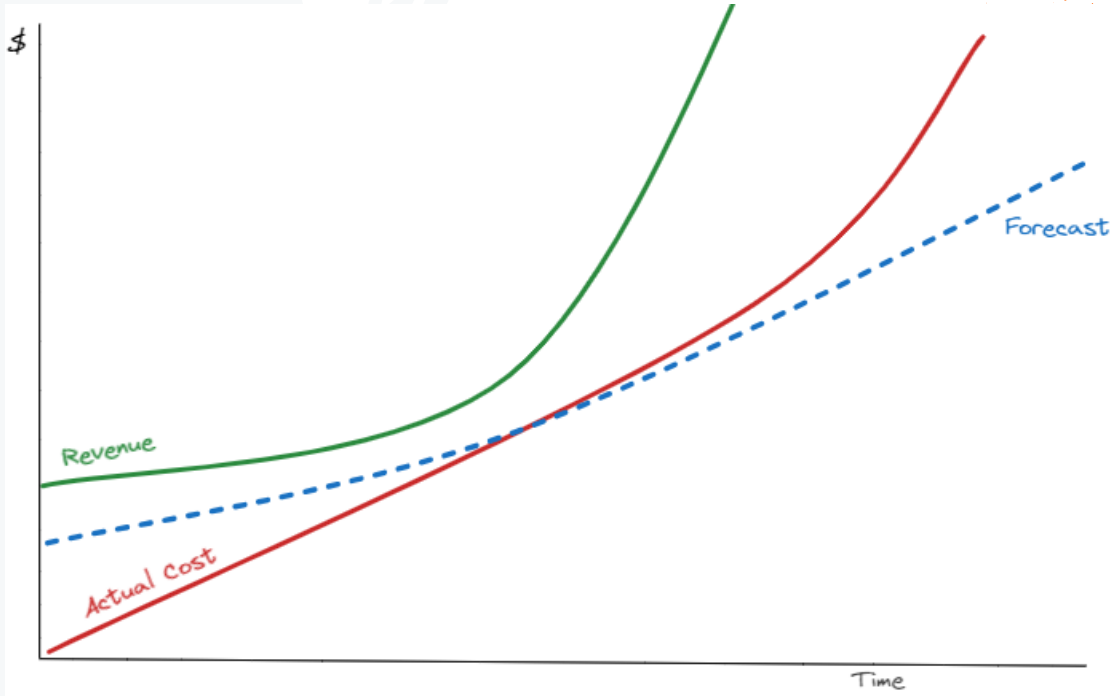


$
F1
F2
F3
F4
T
DO YOU KNOW WHAT A FEATURE COSTS?

We need ownership..



..and budgets



OWNERSHIP!

Ownership

Who owns the cost?

- per product
- per department
- per unit
- per ?

Who owns the shared cost?

How to showback or chargeback?

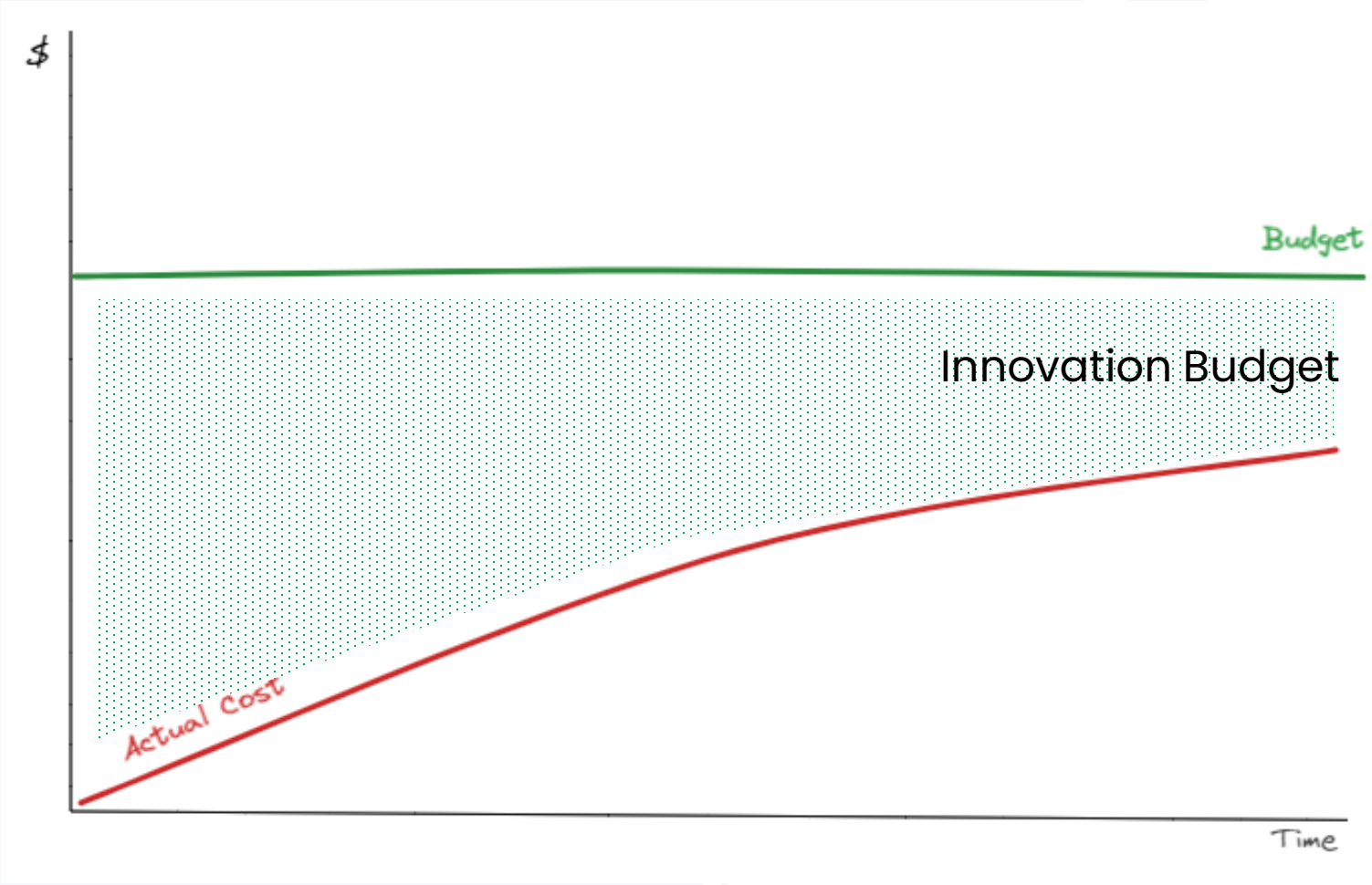
DEMO

AND CONTAINERS?

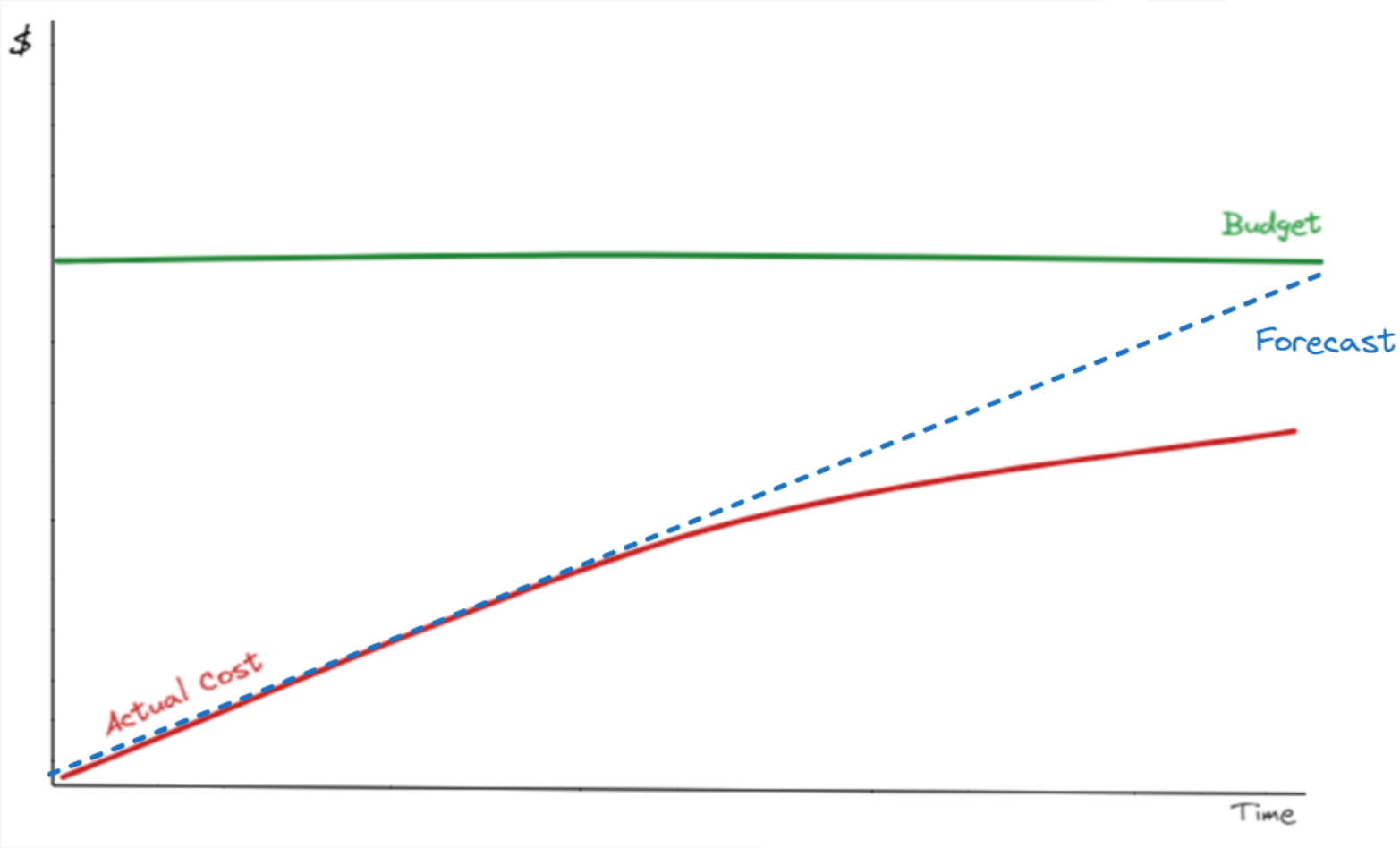
CREATE VALUE INSTEAD OF CONSUME IT?

Source: 2023 State of Cloud | Pluralsight

Budgets are real



Forecasts are needed



Understand growth with Cloud Unit Economics

Unit economics is about understanding the money you make and spend on each thing you sell.

Cloud unit economics does this specifically for cloud products or services, helping you see if they're making you money.

Introduction to Cloud Unit Economics (finops.org)

DIFFERENT PEOPLE
DIFFERENT
PERSPECTIVES

Examples

Financial SaaS Company

Product: SaaS platform

Metric: Cost per analyzed financial transaction

Benefit: Tied to cost to serve, Tied to pricing

Governmental Organization

Product: Application to let residents request literature

Metric: Cost per user

Benefit: Understand better how the site usage affects their costs

Online Hotel Booking company

Product: Booking platform

Metric: Cost per reservation

Benefit: Understand the impact of seasonality on infrastructure consumption

Rideshare company

Product: Ridesharing app

Metric: Cost per ride

Benefit: Determine cost-effective scaling strategies connected to passenger demand

Video Conferencing Company

Product: Video Conferencing SaaS

Metric: Cost per active user

Benefit: Track who their most expensive customers are

Professional Services Company

Product: Internal application used to provide accounting services

Metric: Cost per client engagement

Benefit: Per-engagement profitability analysis; identify inefficient use of application by engagement teams

AND NOW WHAT

APPLY FINOPS

TEAMS NEED TO COLLABORATE

DECISIONS ARE DRIVEN BY BUSINESS VALUE OF CLOUD

EVERYONE TAKES OWNERSHIP FOR THEIR CLOUD USAGE

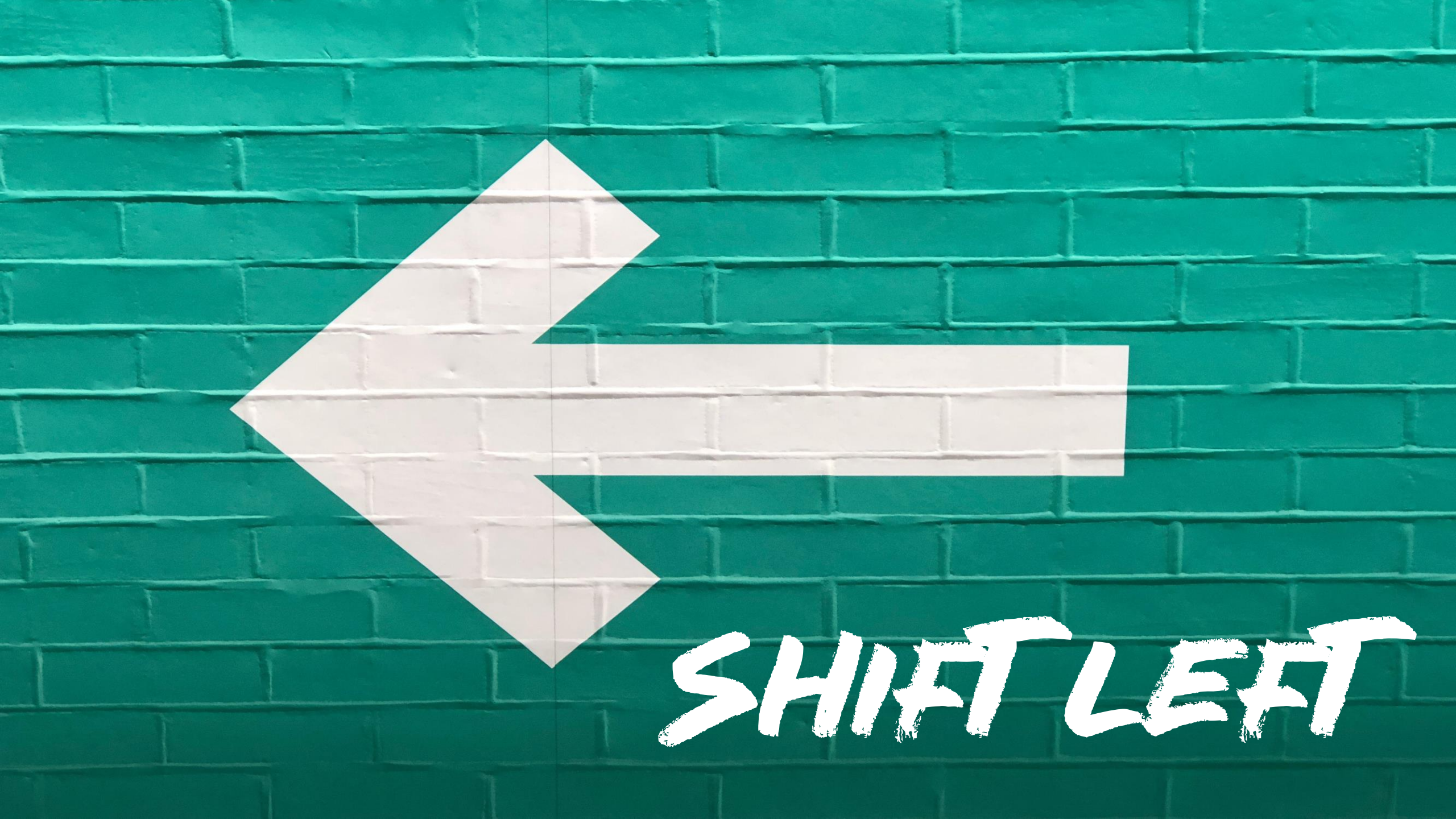
REPORTS SHOULD BE ACCESSIBLE AND TIMELY

A CENTRALIZED TEAM ENABLES FINOPS

TAKE ADVANTAGE OF THE VARIABLE COST MODEL OF THE CLOUD

APPLY FINOPS

IT SAYS NOTHING ABOUT SAVING COST!


SHIFT LEFT

REQUIREMENTS

COST IN THE DOD
PRICING CALCULATOR

BUILD

COST ARCHITECTING
DIRECT FEEDBACK LOOPS

RUN

MONITORING & INSIGHTS
ALERTS

DEMO

WRAP-UP

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Music:	Spotify
Thanks:	Michiel, Matthijs, Geert

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