

10 strategies to keep your cloud costs under control



Tidjani Belmansour

ConFoo.ca

DEVELOPER CONFERENCE

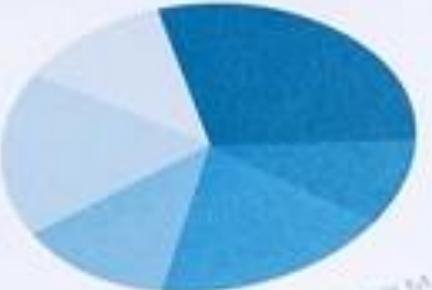
Montréal, Canada, 26-28 Février 2025



DO YOU CLOUD ?







CAC



« The Cloud is expensive! »

Why prioritize cloud cost optimization?



Maximizing
(ROI)



Ensuring financial
predictability



Encouraging efficient
resource use



Empowering
innovation



Mitigating
risks



Enhancing competitive
advantage

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inactive-vms
auto-scaling
turn-off
right-sizing
reserved-instances
cloud-native

delete-unused
savings-plans

budgets
resources
monitor-usage



10 STRATEGIES TO KEEP YOUR CLOUD COSTS UNDER CONTROL

Hi, my name is ...

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CEA Director, Cloud Architect, Cofomo (<https://www.cofomo.com>)



Microsoft Azure MVP

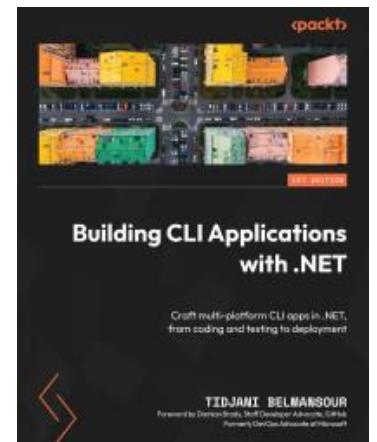
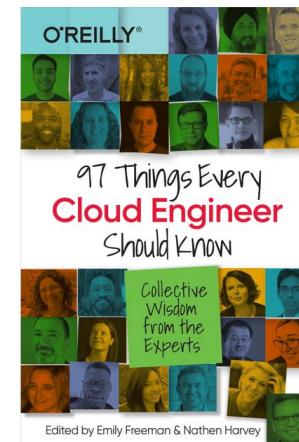


Co-host « Communauté Azure de Québec »
(<https://meetup.com/azureqc>)

Packt Author



/in/tidjani-belmansour

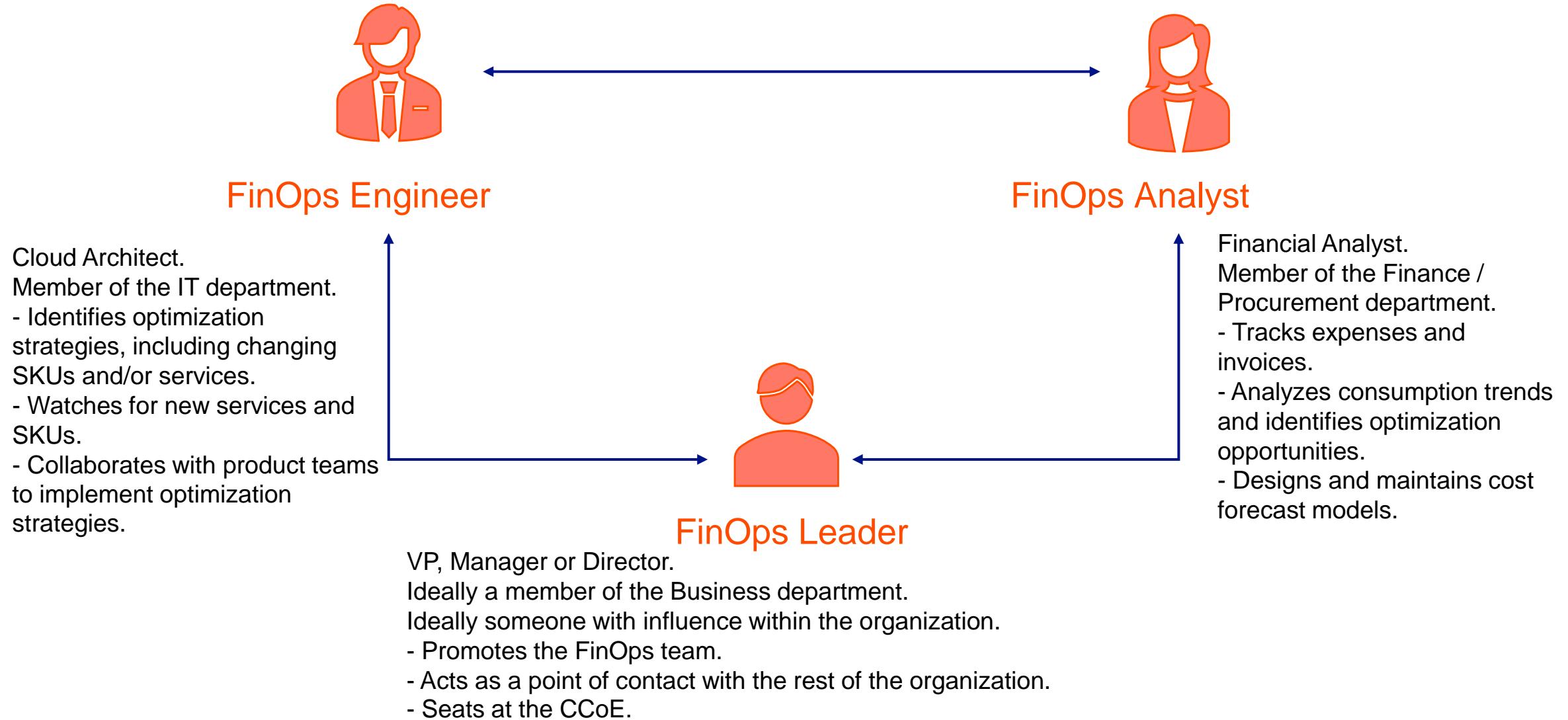




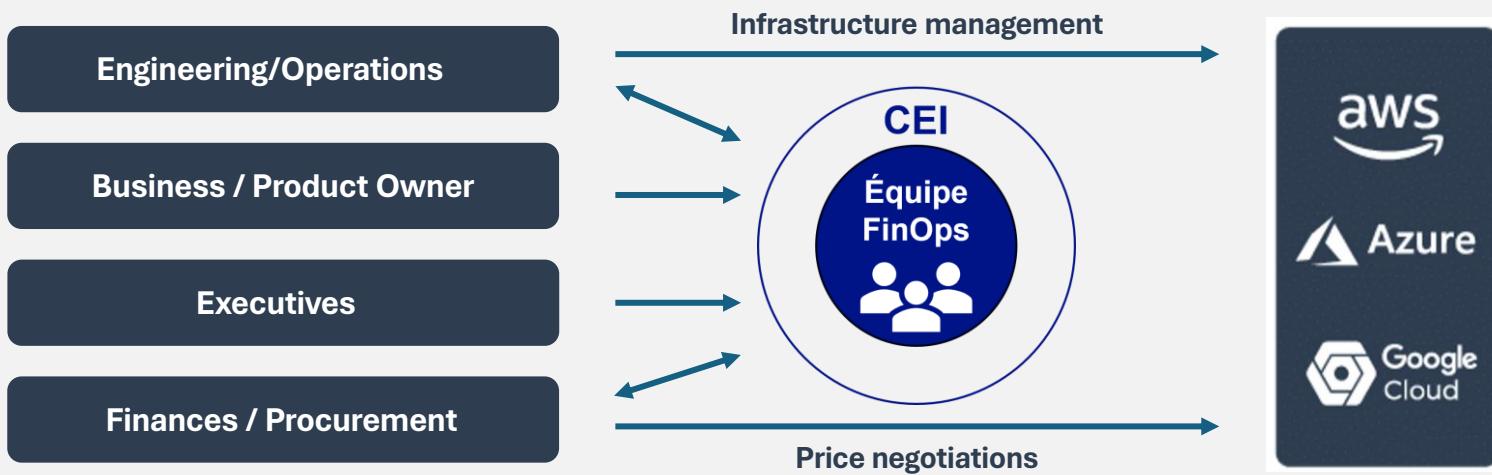
STRATEGY #1 : Get a FinOps Team



The FinOps Team



The FinOps Team





Resources
identification (TAGS)



STRATEGY #2 : A tagged resource is a governed one



List of commonly used tags

Tag Key	Allowed values	Relevance	Compliance	Description
costcenter	AGAA,AGAB	Business	Mandatory	Cost center codes
Workload	frontend, backend, ingestion, cache	Operations	Optional	Component Name
createdby	abc team,xyz team	Operations	Recommended	The team who creates the resource
managedby	abc team,xyz team	Security/Operations	Recommended	The team who manages the resource
confidentiality	pri- private pub- public	Security/Operations	Mandatory	Data classification
environment	development , testing, production, perf	Operations	Mandatory	Environment where the resource is being used
criticality	p0,p1,p2,Mission-critical, unit-critical	Operations	Mandatory	Importance of your resources
buregion	NA, EMEA,APAC,SA	Business	Mandatory	Business Unit Region
servicelevel	basic, standard, premium, critical	Business, Operations	Optional	Service Level Provided to customers
state	active, readytodelete, archive	Operations	Optional	Current state of resource
businessimpact	high,medium,low	Business	Mandatory	Business impact of resource

Resources Recommendations (27)

Filter for any field... Type == all Location == all Add filter

Showing 1 to 37 of 37 records. Show hidden types

- Name ↑↓
- adlsdatadest
- ASP-DEMORG-86a0
- ASP-DEMORG-9568
- CentralnDB

Add filter

Filter: env
Operator: contains
Value: DEV

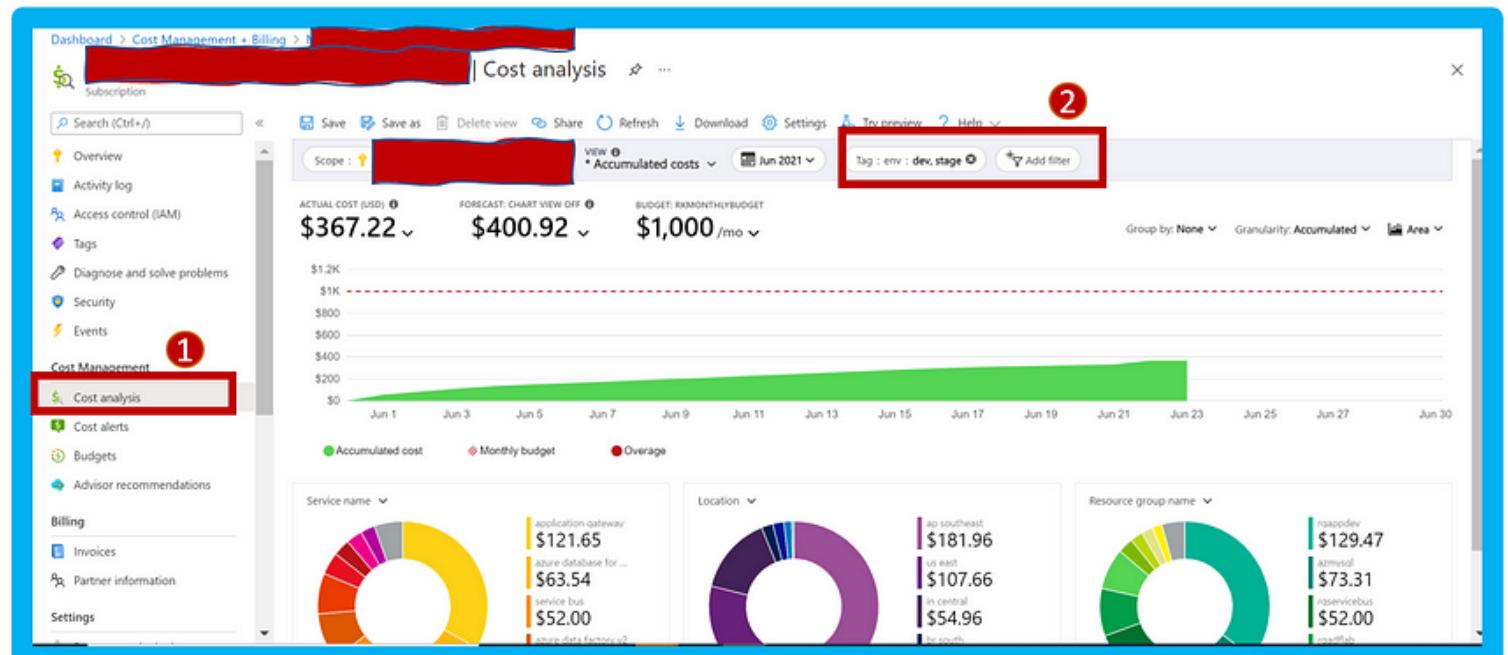
Apply Cancel

grouping List view

Location ↑↓

- Southeast Asia
- Southeast Asia
- Central US
- Central India

Filtering resources by tag



Filtering costs by tag



STRATEGY #3 : Code optimization







STRATEGY #4 : Re-architecting the solution







License Agreement

STRATEGY #5 : Beware of the license costs!

Select a VM size



Showing 34 of 609 VM sizes. Subscription: Trey Research Corporate Region: UK South Current size: Standard_D2s_v3 Image: Windows Server 2022 Datacenter: Azure Edition Learn more about VM sizes ▾ Group by series ▾									
VM Size ↑↓		Type ↑↓	vCPUs ↑↓	RAM (GiB) ↑↓	Data disks ↑↓	Max IOPS ↑↓	Temp storage (GiB) ↑↓	Premium disk ↑↓	Cost/month ↑↓
The latest generation E family sizes for your high memory needs									
E16-4ads_v5	Memory optimized	4	128	32	25600	600		Supported	\$923.36
E16-4as_v5	Memory optimized	4	128	32	25600	0		Supported	\$776.72
E16-4ds_v5	Memory optimized	4	128	32	25600	600		Supported	\$986.96
E16-4s_v5	Memory optimized	4	128	32	25600	0		Supported	\$864.32
E16-8ads_v5	Memory optimized	8	128	32	25600	600		Supported	\$923.36
E16-8as_v5	Memory optimized	8	128	32	25600	0		Supported	\$776.72
E16-8ds_v5	Memory optimized	8	128	32	25600	600		Supported	\$986.96
E16-8s_v5	Memory optimized	8	128	32	25600	0		Supported	\$864.32
E16ads_v5	Memory optimized	16	128	32	25600	600		Supported	\$923.36
E16as_v5	Memory optimized	16	128	32	25600	0		Supported	\$776.72
E16bds_v5	Memory optimized	16	128	32	44000	600		Supported	\$1,153.40
E16bs_v5	Memory optimized	16	128	32	44000	0		Supported	\$1,030.76
E16ds_v5	Memory optimized	16	128	32	25600	600		Supported	\$986.96

Region: West US Operating system: Windows Type: SQL Server Tier: Standard

Category: All Instance Series: Eadsv5-series INSTANCE: E16ads v5: 16 vCPUs, 128 GB RAM, 600 GB Temporary storage, \$7.920/...

Virtual machines: 1 License: SQL Enterprise

Savings Options

Explore pricing models to help optimize your Azure costs.

[Learn more](#)

Compute (E16ads v5)

- Pay as you go
- 1 year savings plan (~31% discount)
- 3 year savings plan (~53% discount)
- 1 year reserved (~41% discount)
- 3 year reserved (~62% discount)

\$923.36

Average per month
(\$0.00 charged upfront)

OS (Windows)

- License included
- Azure Hybrid Benefit

\$537.28

Average per month
(\$0.00 charged upfront)

Software (SQL Server)

- License included
- Azure Hybrid Benefit

\$4,380.00

Average per month
(\$0.00 charged upfront)

= \$5,840.64

Average per month
(\$0.00 charged upfront) 

Region: West US Operating system: Windows Type: SQL Server Tier: Standard

Category: All Instance Series: Eadsv5-series INSTANCE: E16-4ads v5: 4 vCPUs, 128 GB RAM, 600 GB Temporary storage, \$3.420...

Virtual machines: 1 x 730 Hours License: SQL Enterprise

Savings Options

Explore pricing models to help optimize your Azure costs.

[Learn more](#)

Compute (E16-4ads v5)

- Pay as you go
- 1 year savings plan (~31% discount)
- 3 year savings plan (~53% discount)
- 1 year reserved (~41% discount)
- 3 year reserved (~62% discount)

\$923.36

Average per month

(\$0.00 charged upfront)

OS (Windows)

- License included
- Azure Hybrid Benefit

\$537.28

Average per month

(\$0.00 charged upfront)

Software (SQL Server)

- License included
- Azure Hybrid Benefit

\$1,095.00

Average per month

(\$0.00 charged upfront)

= \$2,555.64

Average per month

(\$0.00 charged upfront)



A female scientist with dark hair tied back is wearing a white lab coat and blue safety goggles. She is looking through the eyepiece of a light-colored microscope. Her hands, wearing blue gloves, are positioned on the microscope's body. The background is a blurred laboratory setting with other equipment and shelves.

STRATEGY #6 : Leverage Dev / Test subscriptions!

Acquire a Dev/Test subscription

Search resources, services, and docs (G+/)

Copilot



tidjani.belmansour@

Select an offer for your subscription

PREVIEW

Microsoft Azure Sponsorship 2

This offer provides customers sponsored access to Microsoft Azure for a set monetary limit and time duration, whichever is reached first. [Learn more](#)

[Check eligibility](#)

Pay-As-You-Go Dev/Test

This offer is for teams of active Visual Studio subscribers to run dev/test workloads on Microsoft Azure, providing discounted rates on Windows virtual machines and access to exclusive images in the Azure Gallery. [Learn more](#)

[Check eligibility](#)

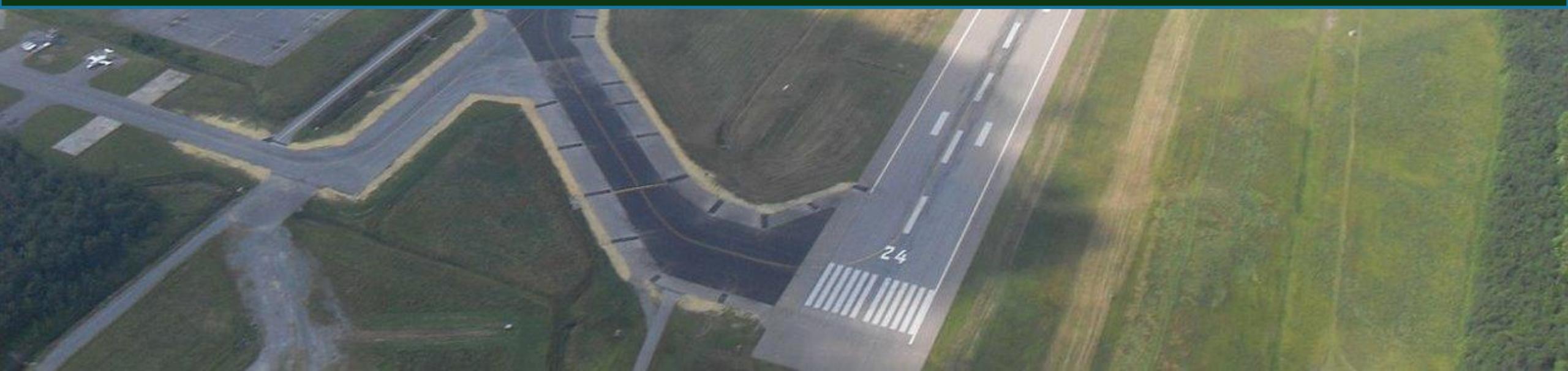
Savings up to 55%

No SLA

Ideal for Dev / Test scenarios



STRATEGY #7 : Controlling costs through guardrails





STRATEGY #8 : Reserved Instances & Savings Plans

Reserved Instance

Home >

Purchase reservations

Products Review + buy

Receive discounts on your Azure services

Filter by name...

	Name	Region	Instance flexibility group	vCPUs	RAM (GB)
Standard_DS1_v2	West US 2	DSv2 Series	1	3.5	
Standard_DS1_v2	East US 2	DSv2 Series	1	3.5	
Standard_DS3_v2	East US	DSv2 Series	4	14	
Standard_DS2_v2	Southeast Asia	DSv2 Series	2	7	
Standard_DS2_v2	Central US	DSv2 Series	2	7	
Standard_DS2_v2	East US	DSv2 Series	2	7	
Standard_F2s_v2	Southeast Asia	FSv2 Series	2	4	

Showing recommendations based on your usage over the last 60 d... [Learn more](#)

Not seeing what you want? [Browse all products.](#)

Saving Plan

Dashboard > Savings plans >

Add a plan

Basics Review + buy

Billing subscription * [Cost Management Research \(1caa5a...\)](#)

Your provider has not enabled Savings Plan purchase on this subscription.

Apply to any eligible resource [\(i\)](#)

Shared across the subscription's billing scope

Only in the subscription (-)

In a specific resource group in the selected subscription

In a management group of the selected subscription

Term length [\(i\)](#)

3 years

1 year

Hourly commitment in USD [\(i\)](#)

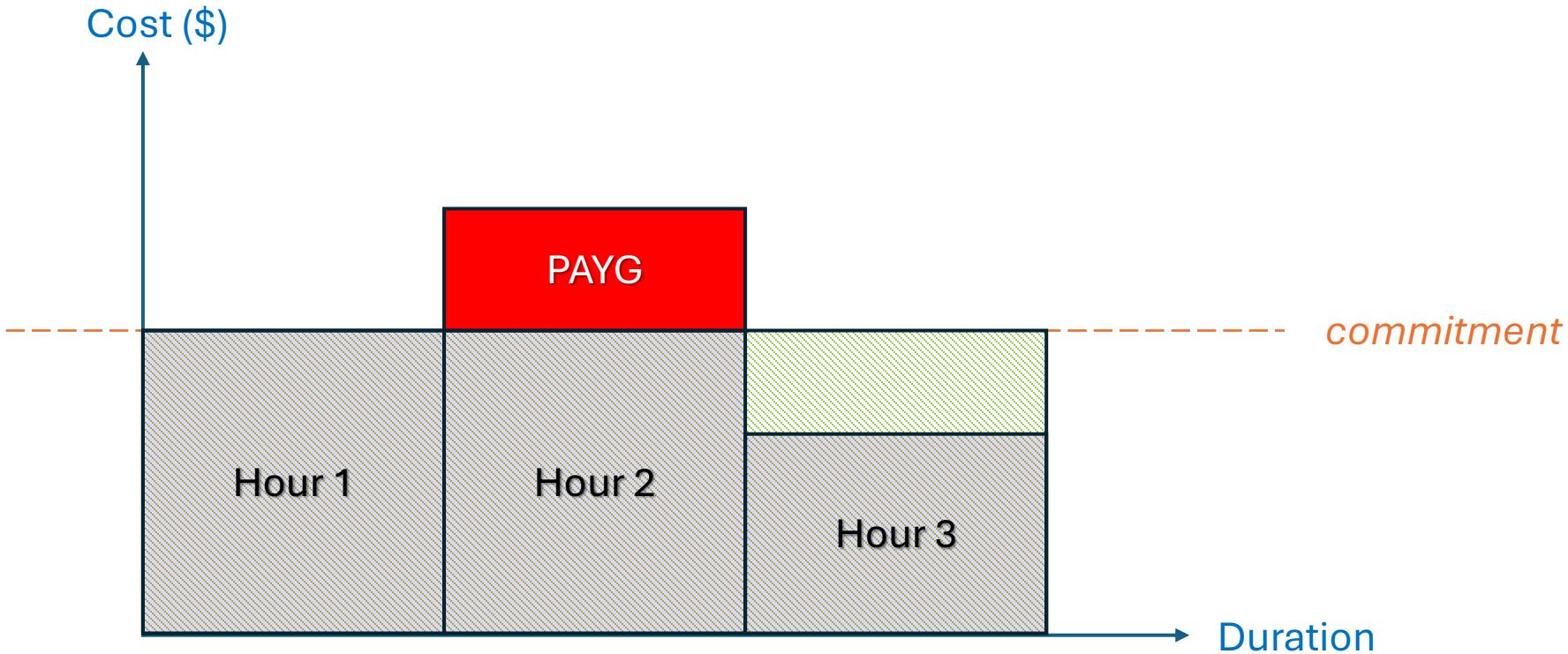
Enter an amount

Billing frequency [\(i\)](#)

Monthly

All upfront

Cost evaluation for a Savings Plan



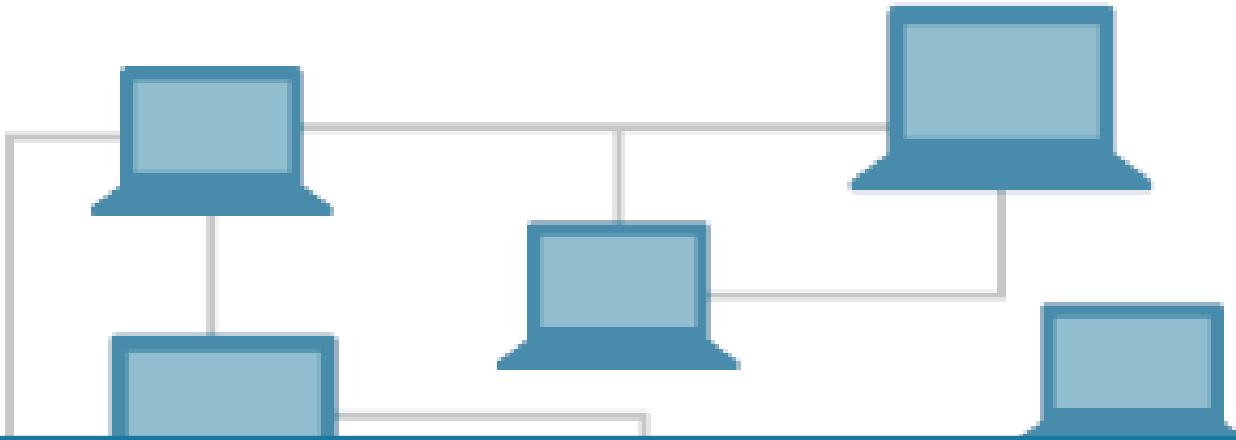
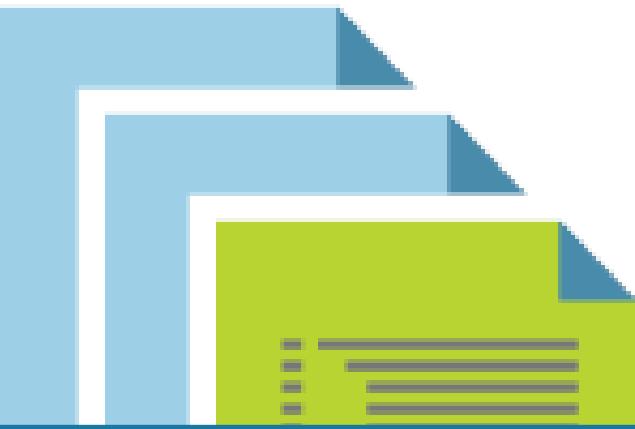
Comparing RI and SP

Basis	Azure Savings Plans	Azure Reserved Instances
Commitment	1 or 3-year term commitment based on a fixed hourly cost and monthly usage limit	1 or 3-year commitment to a specified cloud service and available region
Scope of Application	Only available for compute services (virtual machines, container instances, app services, etc.) with wide region availability	Used for a wide selection of cloud resources (virtual machines, container instances, app services, etc.) but with specified region availability, thus flexibility is lower
Roll-over Savings	No roll-over of unused resources or usage	No roll-over of unused resources or usage
Administration and Management	Less planning and more control over resource allocation	Requires more planning and monitoring to avoid under/over-provisioning
Cost Savings	Up to 65% compared to pay-as-you-go	Up to 72% compared to pay-as-you-go
Use Cases	Businesses with varying or unpredictable workloads	Businesses with stable, predictable workloads

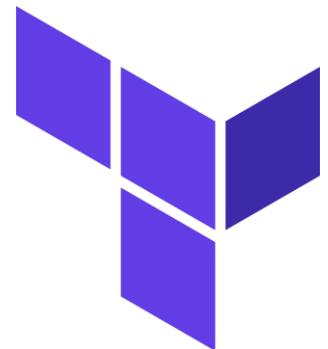
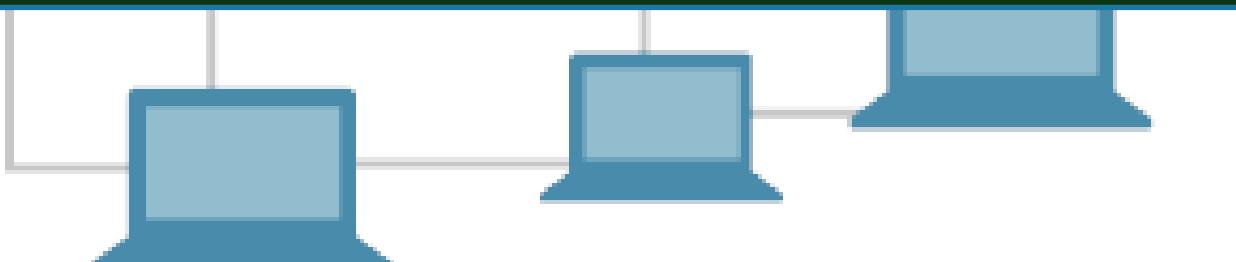
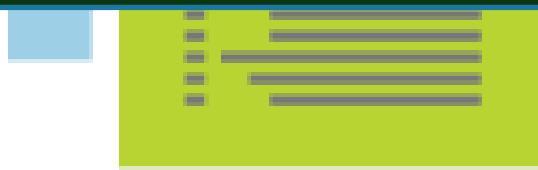


STRATEGY #9 : Chargeback vs Showback





STRATEGY #10 : Leverage IaC



BONUS:

Common mistakes



MISTAKE #1: Believing that Cost optimization is about saving money

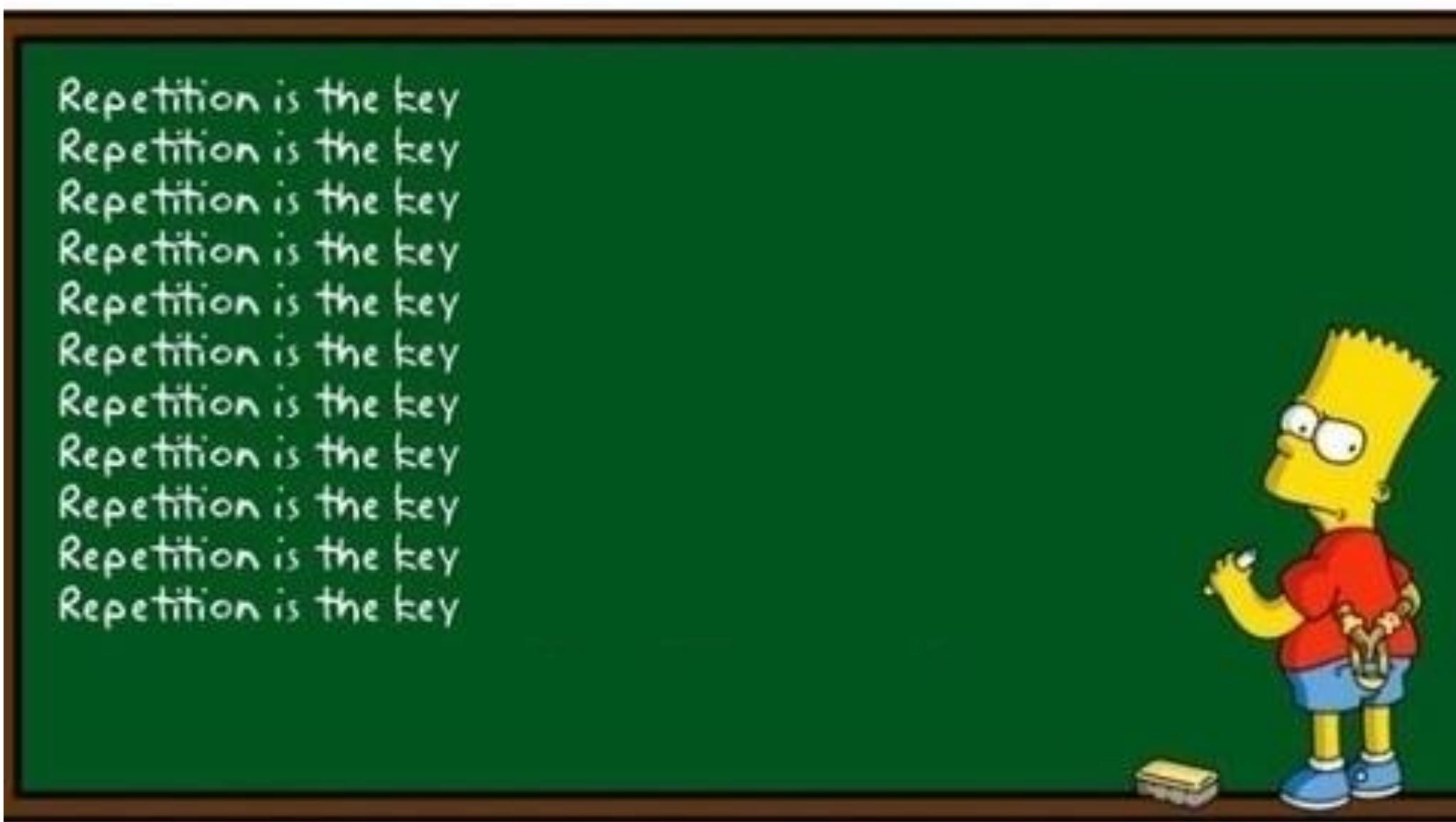




Now that the project is over, you can optimize the costs!

MISTAKE #2: Applying Cost optimization at the end of the project

MISTAKE #3: Cost Optimization is a one-time operation



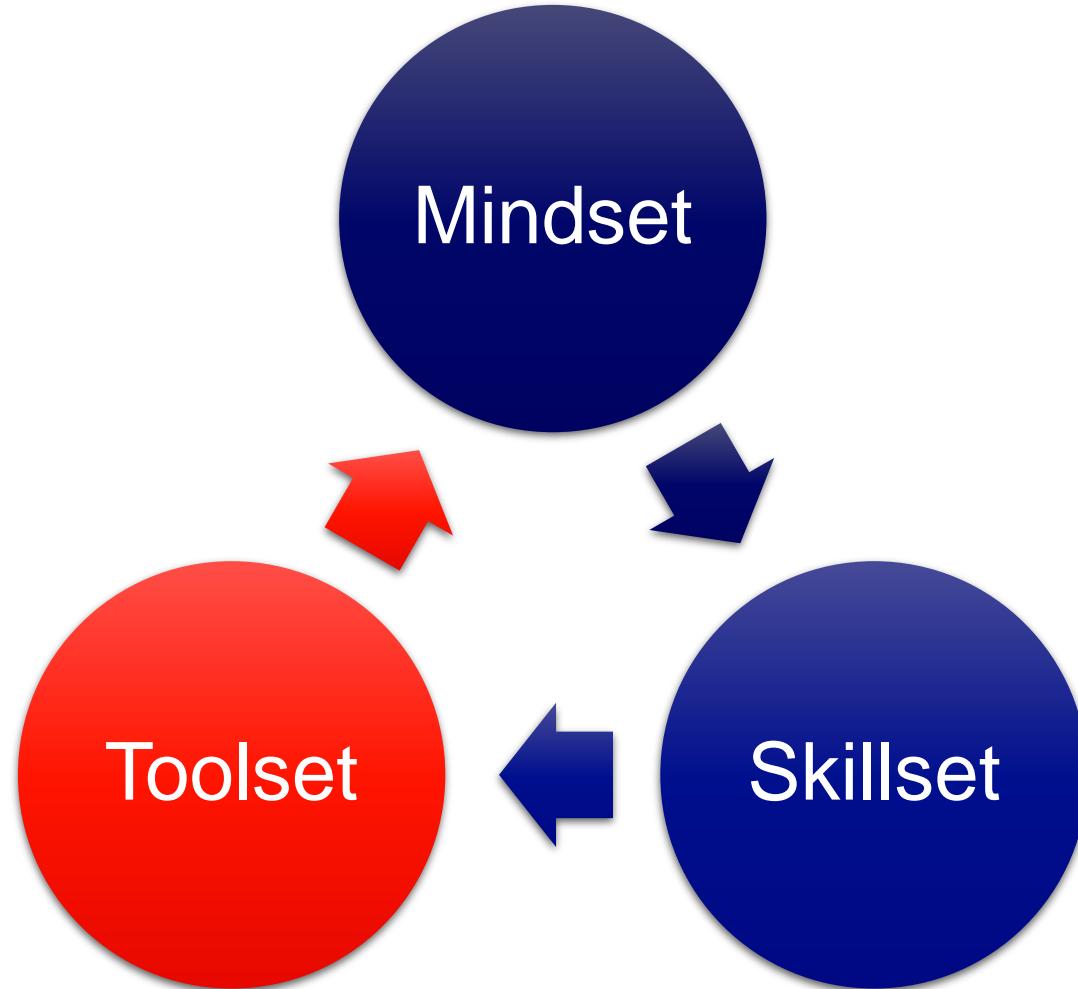
MISTAKE #4: Making the wrong comparisons



MISTAKE #5: Beware of SaaS costs!

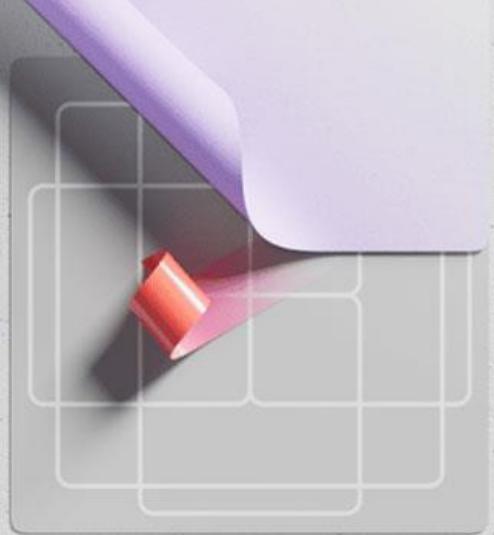


The keys to success in Cloud costs control





Tidjani Belmansour



Thank you!

Come visit us at the Cofomo booth

My LinkedIn



Feedback

