

Cloud Costs out of control?

FinOps is the fix!!



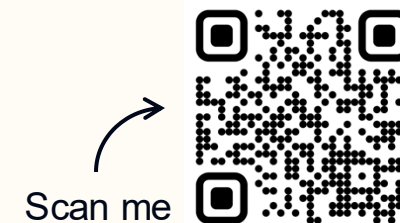
Agenda

- 01. Why cloud costs spiral out of control?
- 02. What FinOps really is?
- 03. The FinOps Playbook
- 04. Real world Azure cost lessons
- 05. Tools, habits & wins
- 06. Q&A

HOUSSEM CHARFEDDINE

SENIOR CLOUD SOLUTIONS ARCHITECT @ Redeploy

With over 8 years of hands-on experience in cloud architecture and infrastructure, I specialize in designing and implementing scalable, cost-efficient solutions across AWS, Azure. My focus is on driving performance, ensuring high availability, and aligning cloud strategies with business goals. Passionate about innovation, automation, and helping teams build resilient systems that grow with their needs.



Why cloud costs spiral out of control?

Companies' Journey

Organizations of all sizes are on a unique path when it comes to cloud adoption — each with distinct goals, constraints, and priorities that influence how cloud costs evolve over time.

Types of Companies

- **Startups:** Focused on speed — rushing features to market to capture momentum and investor attention. Cost optimization often takes a backseat to growth and agility.
- **Mid-tier Companies:** Balancing scale and sustainability. These organizations aim to support steady growth while maintaining performance and keeping cloud budgets in check.
- **Large Enterprises:** Focused on innovation and staying competitive. With legacy systems and massive infrastructure, cloud adoption is complex, and visibility into cost drivers can be blurred.

Where They Are in the Cloud Journey

- **Fully Operating in the Cloud:** Cloud-native or cloud-mature organizations maximizing cloud benefits — but often dealing with runaway costs due to scale and decentralized usage.
- **Transitioning to the Cloud:** In the process of migration, often dealing with dual infrastructure costs and unexpected migration complexities.
- **Hybrid Cloud:** Managing both cloud and on-premise environments, which adds overhead, tool sprawl, and inefficiencies that can drive up costs.
- **Primarily On-Premise:** Early in their cloud journey, facing challenges in forecasting costs and justifying the shift with CAPEX-heavy investments.



So why costs spiral out of control?

Cloud Chaos

Companies that have been in the cloud for years often accumulate a sprawl of services, environments, and teams. Without strong governance, things get messy:

- Unused resources
- Over-provisioned instances
- Shadow IT and rogue deployments

Lack of Visibility

Without proper tagging, monitoring, or reporting:

- Teams don't know what's running
- Costs are hard to attribute or forecast
- Optimization becomes guesswork

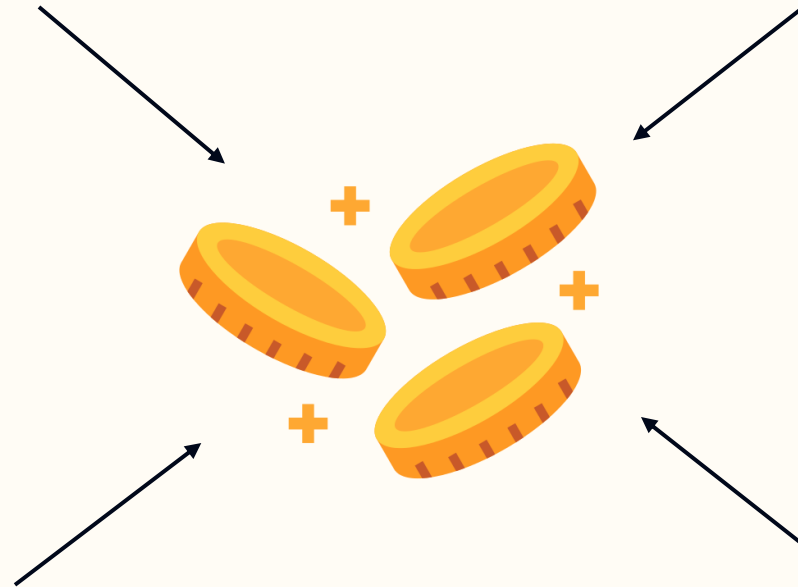
On-Premise Mindset

Organizations that are new to the cloud or still operating on-premise often underestimate costs because:

- On-prem feels “free” after CAPEX investment
- Cloud's pay-as-you-go model brings surprise bills
- No culture of cost accountability yet

Finance vs. Engineering

- Engineers optimize for speed and performance
- Finance optimizes for cost control
- Without shared goals or tools, friction grows



What FinOps really is?

FinOps

FinOps (Financial Operations) is a cultural practice that brings together finance, engineering, and business teams to collaborate on data-driven spending decisions for cloud usage — with the goal of maximizing business value.

FinOps isn't just about cutting cloud costs — it's about **empowering teams** to make smarter, data-driven decisions.



Cost Awareness

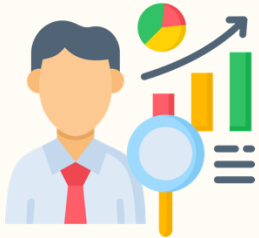
Making cloud spend visible, understandable, and actionable
Empowering engineers to see the cost impact of their work



Cross-Team Collaboration

Balancing speed, cost, and quality

Making conscious choices: *"Is the extra cost worth the performance gain?"*



Informed Trade-offs

Bridging the gap between engineering, finance, and business
Aligning around shared goals and KPIs

The FinOps Playbook

FinOps Principals

The core principles of FinOps guide how teams **collaborate**, **make decisions**, and **drive value** in the cloud.

Teams need to collaborate

Finance, technology, product, and business teams need to work together to continuously improve for efficiency and innovation.

Business value drives technology decisions

It's not just about saving money — it's about making informed trade-offs and making conscious trade-off decisions among cost, quality, and speed.

Everyone takes ownership for their technology usage

Decentralized usage doesn't mean decentralized responsibility. Each team owns the **costs and outcomes** of their cloud decisions.



FinOps data should be accessible, timely, and accurate

Real-time cost visibility drives better cloud and technology utilization..

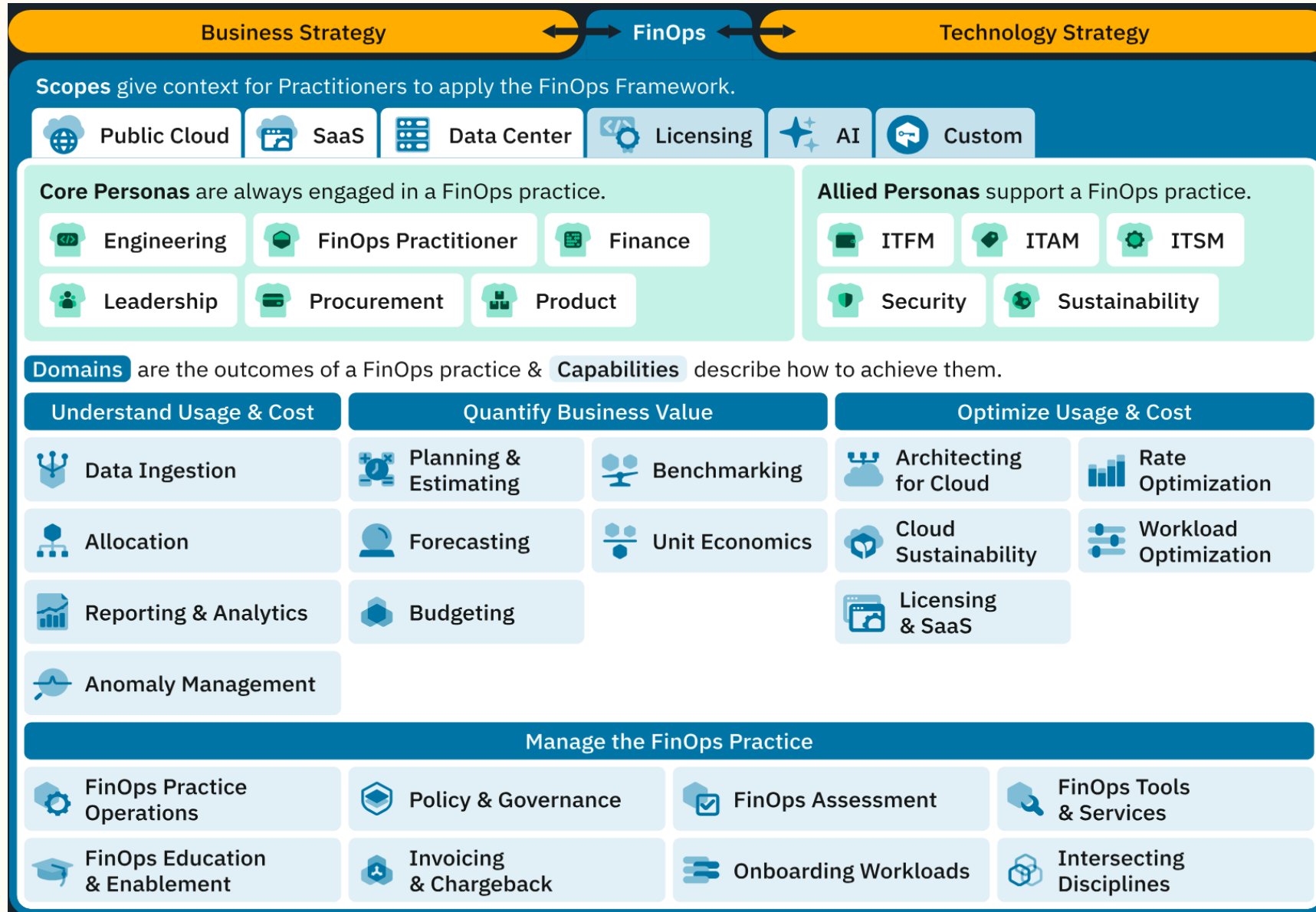
FinOps should be enabled centrally

Dedicate a central team that handles Rate, commitment, and discount optimization so engineer and operation focus more on usage and optimization

Take advantage of the variable cost model of the cloud.

The variable cost model of the cloud should be viewed as an opportunity to deliver more value, not as a risk.

FinOps Domains & Capabilities



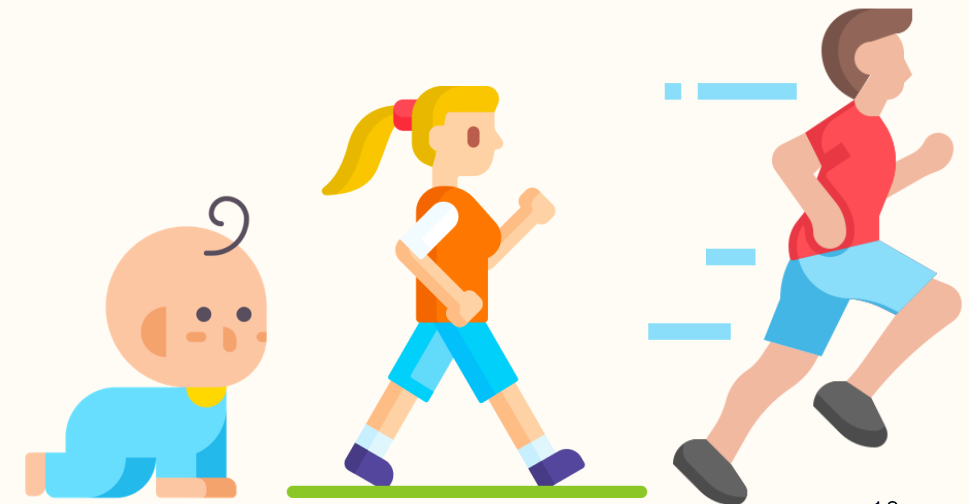
FinOps Maturity model

FinOps is not a one-size-fits-all framework — it's an iterative, evolving practice. Maturity grows over time, based on business needs, team readiness, and measurable outcomes.

The “Crawl, Walk, Run” approach to FinOps encourages starting small and maturing capabilities as business value demands. Not every capability needs to reach “Run” — the goal is to focus efforts where they drive the most impact. Success in FinOps is measured by outcomes, not maturity levels.

Stage	Estimated Cost Reduction reported by some partitioners in different organizations
Crawl	5% – 15%
Walk	15% – 30%
Run	30% – 50%

These numbers are not published by the foundation but reported by different practitioners in different sized organizations



Crawl Maturity model

Characteristics

- Very little reporting and tooling
- Measurements only provide insight into the benefits of maturing the capability
- Basic KPIs set for the measurement of success
- Basic processes and policies are defined around the capability
- Capability is understood but not followed by all the major teams within the organization
- Plans to address “low hanging fruit”

Goals/KPI

- Should be able to allocate at least 50%
- Resource-based commitments discount target coverage of approximately 60%
- Forecast spend to actual spend accuracy variance is 20%



Walk Maturity model

Characteristics

- Capability is understood and followed within the organization
- Difficult edge cases are identified but decision to not address them is adopted
- Automation and/or processes cover most of the Capability requirements
- Most difficult edge cases (ones that threaten the financial well-being of the organization) are identified and effort to resolve has been estimated
- Medium to high goals/KPIs set on the measurement of success

Goals/KPI

- Should be able to allocate at least 80%
- Resource-based commitments discount target coverage is approximately 70%
- Forecast spend to actual spend accuracy variance is 15%



Run Maturity model

Characteristics

- Capability is understood and followed by all teams within the organization
- Difficult edge cases are being addressed
- Very high goals/KPIs set on the measurement of success
- Automation is the preferred approach

Goals/KPI

- Greater than 90% of spend can be allocated
- Resource-based commitments discount target coverage is approximately 80%
- Forecast spend to actual spend accuracy variance is 12%

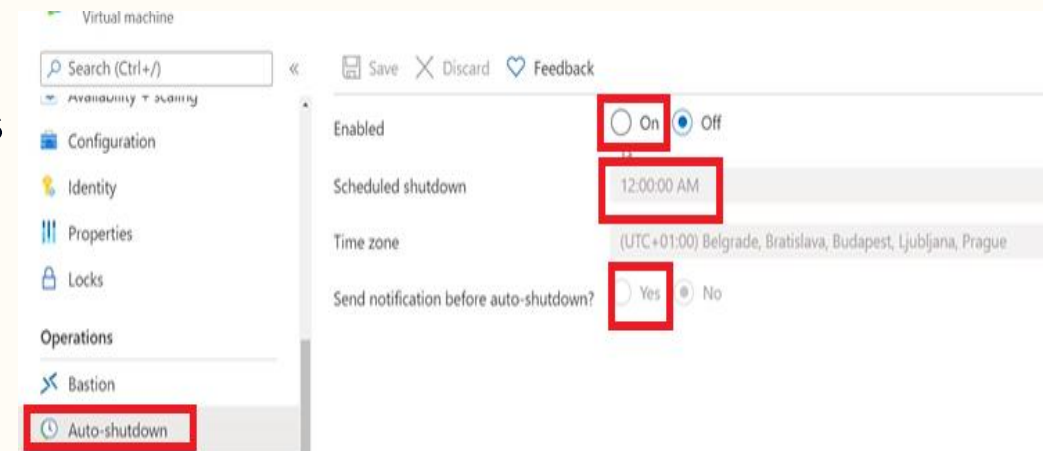


Real world Azure cost lessons

Auto-Shutdown

Azure's Auto-shutdown feature allows you to schedule virtual machines to automatically power off at specific times — typically during non-business hours.

- Ideal for development, test, or training environments
- Set via the Azure Portal, ARM templates, or Azure DevTest Labs
- Can include notifications before shutdown



Example

You have a dev vm that is being used by a team during office hours to work on feature development
Standard_D4s_v3 power by windows OS hourly rate -> (3.94 SEK/hour)

	Usage	Hours/Month	Estimated Cost
VM only needed during business hours: 8am – 6pm, Monday to Friday (10 hrs/day, 5 days/week)	Running 24/7	720	~2,836.80 SEK
	With Auto-Shutdown	200	~788.00 SEK

Hidden costs

Not all cloud costs show up clearly in your compute or storage line items. Some of the **most impactful expenses are hidden** in usage patterns and managed service overhead.

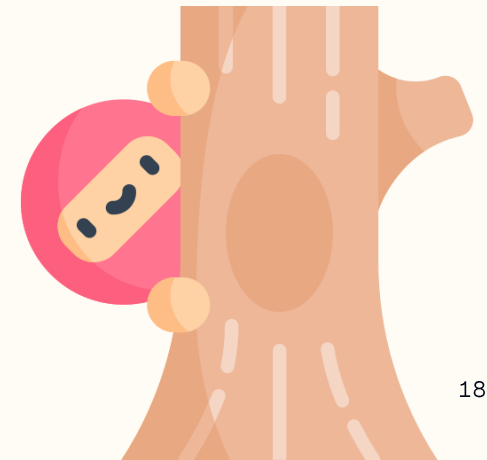
- Moving data out of Azure (to the internet, other regions, or on-prem) incurs egress fees
- Services like Azure SQL, Cosmos DB, AKS, and App Services simplify operations — but come at a **premium**
- Orphaned & Idle Disks, IPs, snapshots, and old backups still generate costs
- Shared resources among teams, they are not technically hidden, but they are hard to associate per product usage

Example

Internet Egress (Routed via [Routing preference transit ISP network](#))

Source Continent	First 100 GB/Month	Next 10 TB/Month	Next 40 TB/Month	Next 100 TB/Month	Next 350 TB/Month
From North America, Europe to any destination	Free	0.8014 kr per GB	0.6511 kr per GB	0.6011 kr per GB	0.4007 kr per GB
From Asia (China excluded), Australia, MEA to any destination	Free	1.1019 kr per GB	0.7513 kr per GB	0.7012 kr per GB	0.6011 kr per GB
From South America to any destination	Free	1.2021 kr per GB	0.8515 kr per GB	0.8014 kr per GB	0.7513 kr per GB

Note: 1 TB = 1,000 GB



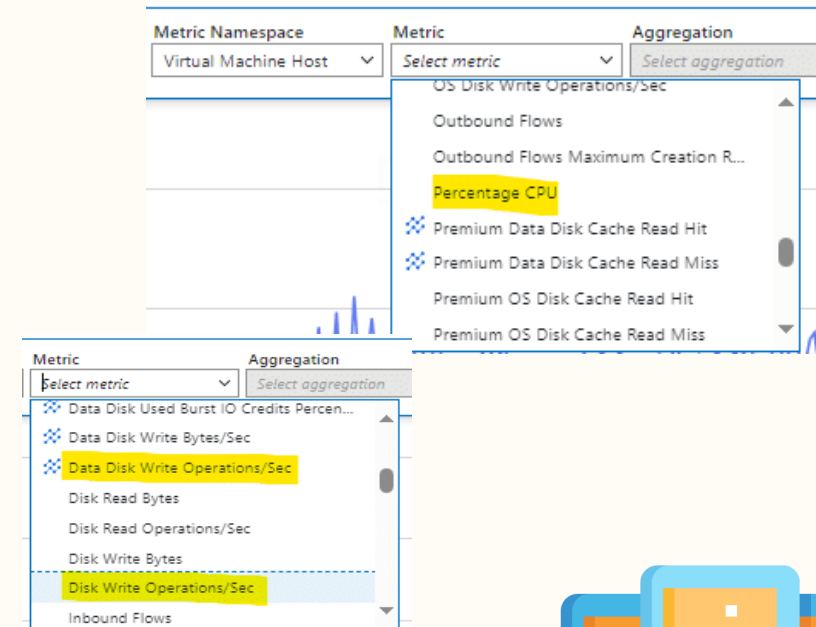
Over-provisioning

Many cloud resources are sized for peak usage but run far below capacity — wasting money every hour they operate. This is usually quite common when companies has a legacy system that used to reside on-premise and was shifted at point to the cloud

To right size effectively, you need real performance data — not guesses.
Metrics like

- CPU
- Memory
- Disk I/O
- Network Throughput

Tools such as Azure Monitor, Log Analytics and Application Insights could prove to be very valuable to finetune your workloads and reduce waste in capacity.

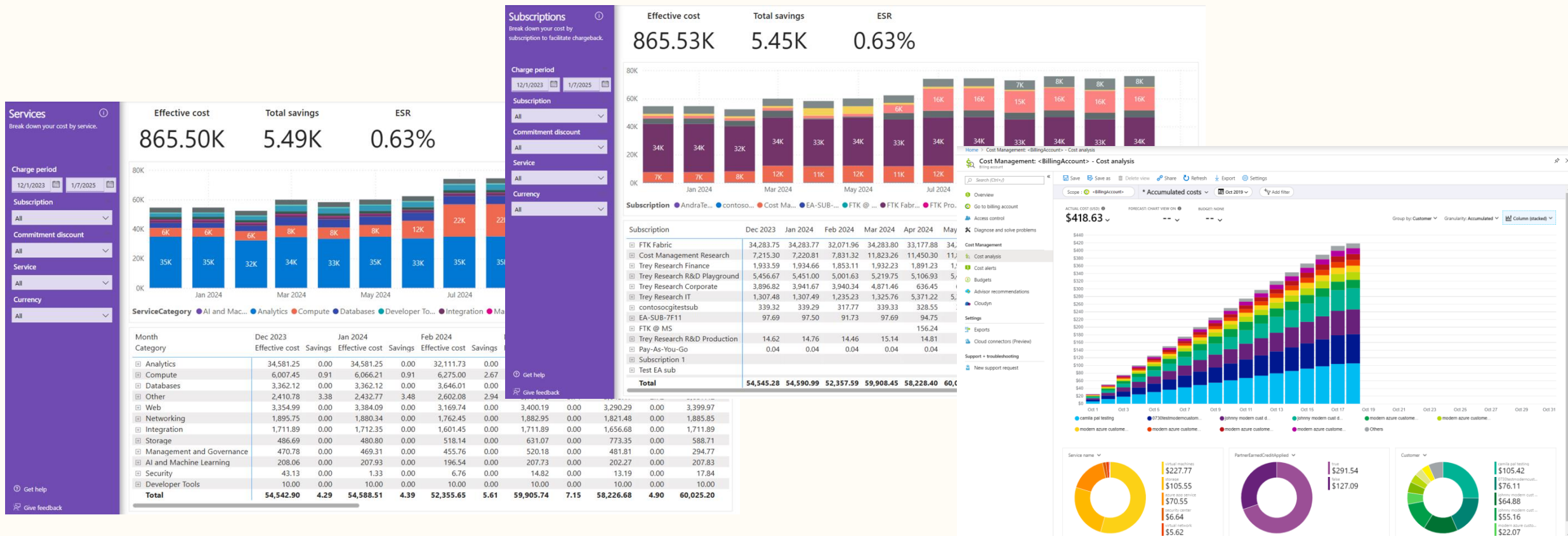


Tools, habits & wins

Azure Cost Management + Power BI

Native Azure tool for analyzing spend and usage

Integrate with **Power BI** for custom dashboards, trend analysis, and team-specific reporting



Azure Advisor

Azure Advisor is a native free of charge service by azure that provides personalized, actionable recommendations to help you optimize your cloud resources for cost, performance, security, and reliability — all based on your actual usage.

- Identify idle or underutilized resources (e.g., VMs running below capacity)
- Suggests VM resizing, auto-shutdown, and reserved instance opportunities

PS: Azure Advisor takes a **conservative approach** to recommendations — it aggregates real usage metrics over time which might lead sometimes to false positives

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The screenshot displays the Microsoft Azure portal interface for the 'Advisor recommendations' section, specifically focusing on the 'Shut down or resize your virtual machine' recommendation.

Recommendation details: The interface states, 'We've analyzed the usage patterns of your virtual machine over the past 14 days and identified virtual machines with low usage. While certain scenarios can result in low utilization by design, you can often save money by managing the size and number of virtual machines. [Learn more](#)'. A prominent callout indicates 'potential yearly savings* 59,670.29 USD'.

Impacted resources: A dropdown menu shows '6 selected subscriptions' and 'No grouping'.

Active (39) Postponed & Dismissed (0): A table lists specific recommendations for two virtual machines:

VIRTUAL MACHINE	RECOMMENDED ACTIONS	POTENTIAL SAVINGS*	SUBSCRIPTION	RECOMMENDATION RULE	UPDATED AT	ACTION
SharonLoh	Resize the virtual machine View Usage Patterns Shut down the virtual machine	2,249.86 USD	Azure Customer Success team	Average CPU < 5%	2/19/2019, 12:24:55 PM	Postpone Dismiss
testing	Resize the virtual machine View Usage Patterns Shut down the virtual machine	1,044.58 USD	Azure CXP Community Internal Consumption	Average CPU < 15%	2/19/2019, 12:26:31 PM	Postpone Dismiss

Advisor Overview: The bottom section provides a summary of recommendations across various categories:

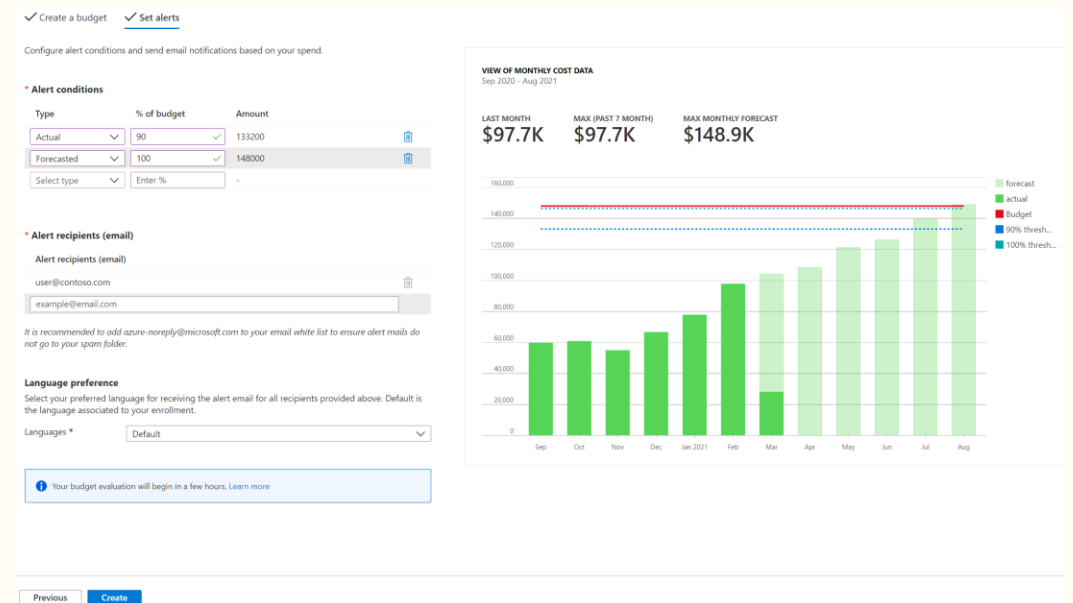
- Cost:** 5 Recommendations, 15 Impacted resources. Potential savings of 2,004 USD/yr.
- Security:** 63 Recommendations, 522 Impacted resources.
- Reliability:** 10 Recommendations, 197 Impacted resources.
- Operational Excellence:** 2 Recommendations, 11 Impacted resources.
- Performance:** 2 Recommendations, 16 Impacted resources.

The interface includes a sidebar with navigation options like Overview, Recommendations, Monitoring, and Settings. A search bar and various utility links (Feedback, Download as CSV, Download as PDF) are also present.

Budgets & Alerts

Azure Budgets and Alerts help you **stay in control of cloud costs** by creating proactive triggers before things spiral out of budget — aligning perfectly with FinOps principles.

- Set spending thresholds at the subscription, resource group, or service level
- Track against actual usage or forecasted spend
- Use in both production and non-production environments
- Set budgets for each team, project, or environment
- Monitor forecast vs. actual monthly spend



Budgets and alerts turn reactive firefighting into proactive cost control



Third-party services

While native tools like Azure Cost Management offer a great starting point, third-party FinOps platforms can help organizations scale, standardize, and dive deeper.

Apptio Cloudability

Enterprise-grade FinOps platform focused on cost allocation, forecasting, and optimization.

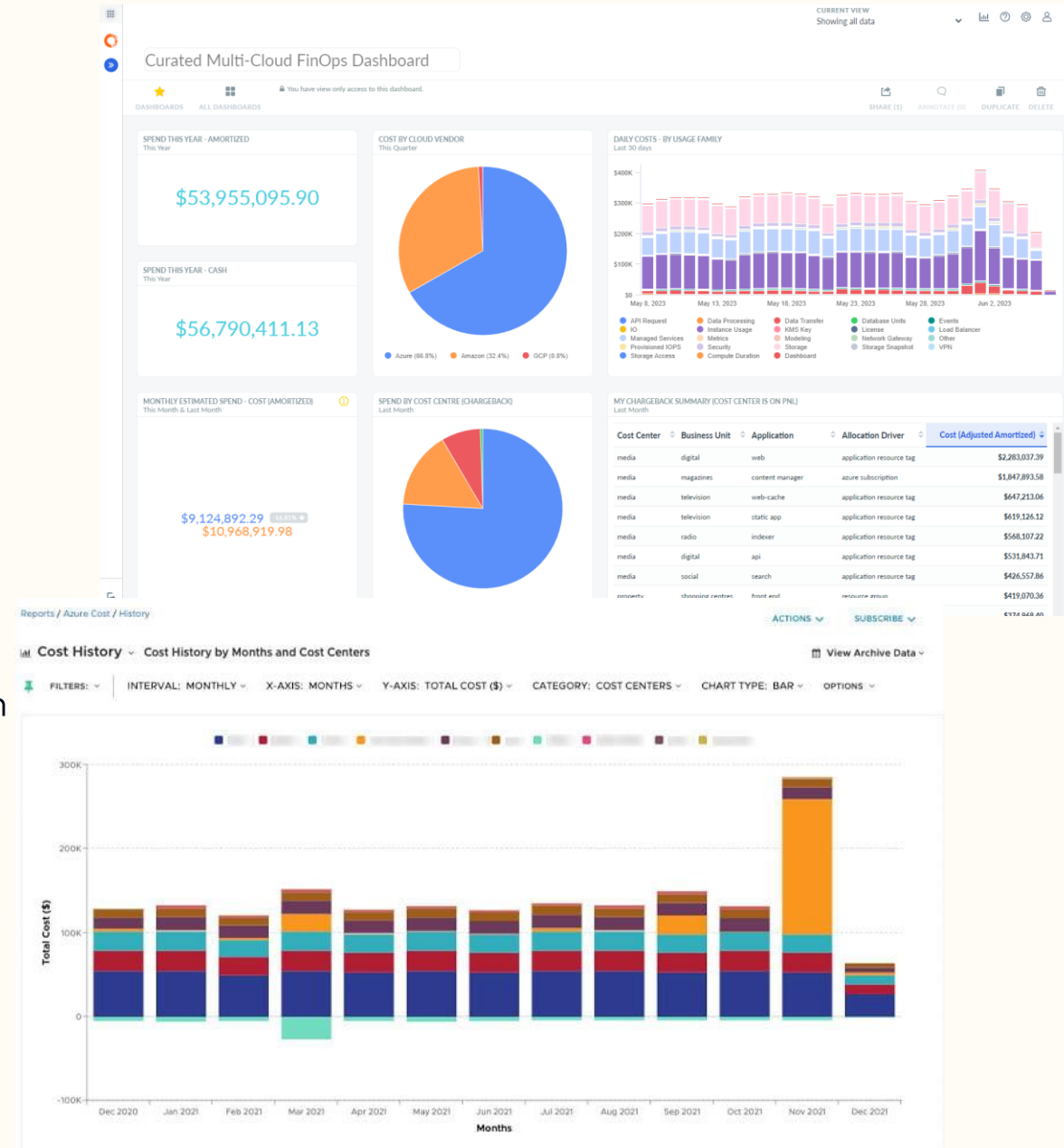
VMware CloudHealth

Offers multi-cloud management with robust policy enforcement, savings recommendations, and asset tracking.

Redeploy

Helps organizations build their FinOps practice, implement tooling, and align cloud strategy to business outcomes

redeploy



Tagging strategy

There's no one-size-fits-all tagging standard — the most effective tagging strategies are tailored to your organization's needs, structure, and goals.

- Align tags with how your business thinks about cost (teams, products, cost centers)
- Avoid over-engineering or using few tags the more you add tags to your resources the more context you bring to your overall cost view.
- Drive actionable reporting that makes sense for your organization
- Build governance around your tagging strategy
- Monitor tag coverage and report on untagged resources

Eg:

Limited amount of family SKU for dev environment.



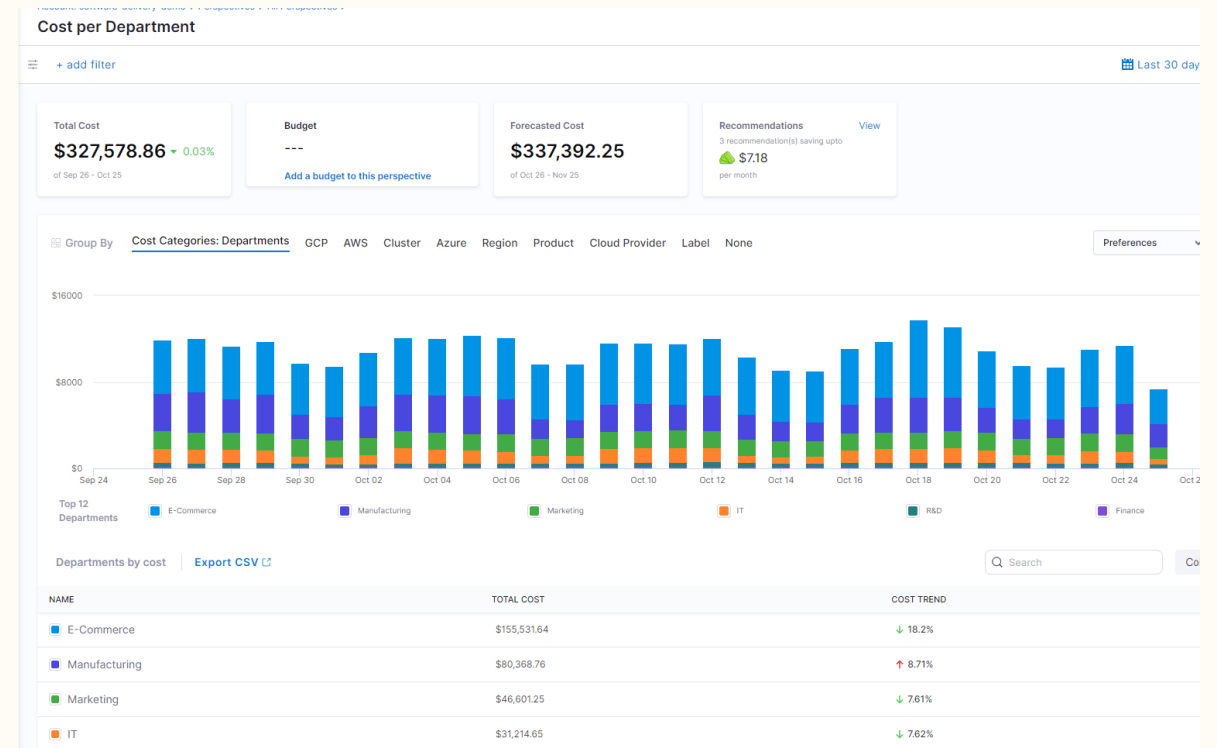


Showback Model

It is important for organizations to scale in the cloud; cost ownership must shift from centralized finance to individual teams — without creating blame or bottlenecks.

Start with **Showback** to build awareness before introducing financial accountability

- Hold monthly or sprint-aligned reviews with product and engineering
- Follow usage trends, spikes, anomalies, and optimization wins
- When costs spike unexpectedly, analyze without blame
- Focus on understanding what happened, why it happened, and how to prevent it



FinOps Levers

we already have access to powerful **FinOps levers** — the key is learning to use them. When we combine data, habits, and collaboration, we unlock smarter decisions and real impact.

- The cloud doesn't have to feel chaotic — visibility = control
- FinOps isn't about spending less — it's about spending smart
- Empowered teams make better decisions when they have the right data
- Start small, stay consistent, and evolve based on value



Q&A

Thank you!

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