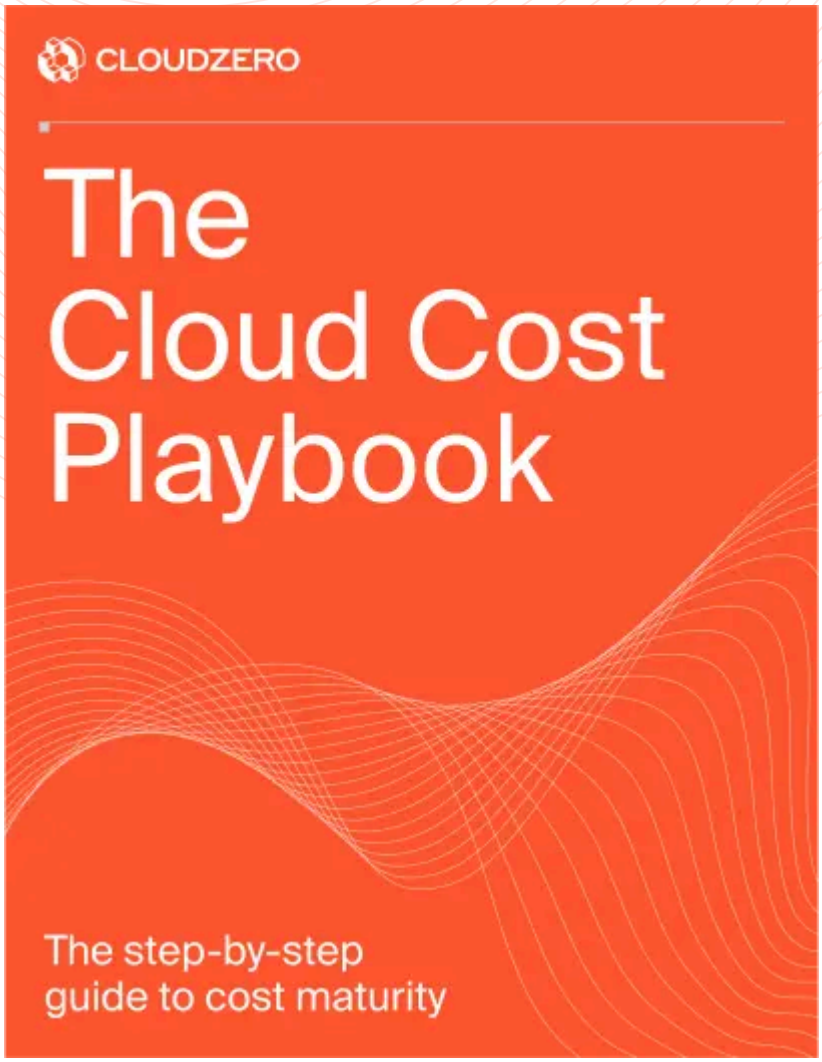
2024 Edition

# The Cloud Cost Playbook

The step-by-step guide to cost maturity




## Chapters

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# 1. Introduction

valuations plummet.

The result: These companies may not be able to raise as much capital as they would like, which could stall their growth.

**The shift emphasizes the need to balance growth with profitability.**

Yet, visualizing, understanding, and controlling cloud costs can be challenging. Figuring out where to start and what to do next can be intimidating, too.

In this guide, we're not just scratching the surface of FinOps and cloud cost optimization – we're diving deep. Think of this as your GPS through the often foggy and complex world of cloud costs.

Whether you're a small team feeling lost in the clouds or a large organization navigating through a storm of expenses, this guide is your beacon to clearer skies and smoother sailing.

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## 2.

## Why Are Cloud Costs Tricky To Optimize?

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Unlike traditional IT expenses, cloud costs are dynamic and can scale up or down based on usage. This is where the magic and mayhem lie.

Imagine driving a car without knowing how much fuel you're burning. Scary. That's what unoptimized cloud costs are like.

**The more companies spend on the cloud with untrackable ROI, the more it eats into their profitability, slashes their valuations, and makes it harder to survive — let alone thrive.**

From cloud storage to data analytics costs, they can spike without warning, leaving your budget in a tailspin.

Optimizing these costs ensures you're not just throwing money into the wind but investing it smartly to propel your business forward. This is where FinOps, short for Cloud Financial Operations, comes into play.

The 10-Step Framework To Developing A Cloud Cost Strategy

Efficient cloud cost management leads to:

- **Cost visibility in the cloud**: With a clear view of where your money is going, you can prevent costs from spiraling out of control.
- **Reduced waste**: Like turning off lights in an unused room, you save money by not paying for what you don't need.
- **Improved budget forecasting**: When you understand your cloud costs, predicting future expenses transforms from guesswork into a science.
- **Better decision-making**: With a clear view of your cloud expenses, you can make informed decisions about where to allocate resources for maximum impact.

Yet, to achieve these feats, you need to shift away from traditional cloud cost management .

# Where do most companies fall?

This may seem familiar if you are already doing it. If not, don't worry, we'll share more effective ways further down this guide.

- **Lack of precision**: Traditional methods often report average costs, which can be misleading. Imagine taking the total cost of a grocery trip and inferring that wagyu beef costs the same as celery. What's crucial is understanding the cost per unit to make informed decisions.
- **Over-reliance on tagging**: While tagging is a useful tool, relying on it too heavily is like herding cats – chaotic and costly. It takes endless effort, and even then a small error in labels makes everything inaccurate.

engineers out of the equation, creating a disconnect between finance and engineering teams. It's like trying to solve a puzzle without all the pieces – finance sees the numbers, but engineering understands the cost drivers behind those numbers.

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**Inflexible cost allocation models**: Traditional methods often use rigid cost allocation models that fail to adapt to cloud usage dynamics. This inflexibility can lead to inaccurate cost attributions, like using a one-size-fits-all approach in a world of custom needs.

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**Ignoring the impact of cloud architecture decisions**: Often, there's a disconnect between architectural decisions and their financial implications. Traditional cost management doesn't adequately account for how different cloud architectures can significantly impact costs.

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Yes, it's like choosing a route for a road trip based solely on distance, ignoring factors like traffic or road conditions that could affect fuel consumption and travel time.

So, where do you go from here?

Take a closer look at the FinOps Foundation; you'll notice it moves through three major phases. It is a "Crawl, Walk, Run" maturity model that encourages learning, action, and improvement.

It all does not have to be flawless from day one.

We'll break down each phase into real, actionable steps you can take to implement a working cloud cost intelligence strategy. Applying this FinOps maturity model can help you stay on the right track to cloud efficiency.

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## 3.

## Crawl: Save Money

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**Start here**: 10 FinOps Diagrams To Help You Better Understand The Value Of FinOps

At this point, you'll want to target "low-hanging fruit". To put it another way, it's time to look into traditional cloud cost savings.

# Step 1: Traditional cost savings: strengths and limitations

Imagine these as the foundational tools in your FinOps toolkit.

## What are traditional cost savings?

You find traditional cost savings in the cloud similarly to how you would reduce your monthly personal bills: Buy in bulk (Reserved Instances (RIs)), take advantage of off-peak rates (Spot Instances), and turn off the lights when not in use (terminating unused or idle instances).

**Resource:** 13 Key Cloud Cost Management Strategies (And How CloudZero Can Help)

## Benefits and limitations of traditional cloud cost savings methods

While these methods can yield immediate savings, they're a bit like using a hammer – effective for certain jobs but not a one-size-fits-all solution.

Their benefits include:

- **Immediate cost reduction**: They are the low-hanging fruit of cloud cost optimization.
- **Predictability**: Particularly with Reserved Instances, you get a clear view of some of your costs upfront.

However, their limitations are notable, too:

- **Inflexibility**: Once you commit to a discount program, you're somewhat locked in, which can be problematic in rapidly changing environments.
- **Not tailored to user patterns**: These methods don't always align perfectly with your specific usage and needs. For example, they won't show you how much you are spending on each of your customers or product features.

three-year period. Think of it as buying a season pass for a service you frequently use. Features include:

- Saving up to 72% on AWS standard rates (On-Demand pricing)
- More flexibility for changes in workloads without sacrificing discounts
- Pay all up-front, 50% down and then monthly (partial upfront), or monthly with no upfront payment.

**Learn more about AWS Savings Plans here:**

- What Are AWS Savings Plans? How They Can Lower Your AWS Bill

# Reserved Instances (RIs)

These are a commitment to use a specific type of resource for a defined term of one or three years, often at a discounted rate. All three major cloud providers offer RIs, unlike Savings Plans on AWS. So, what do you get here?

- Save up to 72% off the On-Demand rate
- Ideal for predictable and stable workloads
- Longer reservations offer higher discounts
- Convertible RIs offer flexibility akin to Savings Plans in case of workload changes

**Learn more about Reserved Instances here:**

- AWS Reserved Instances 101: The Complete Guide
- AWS Savings Plans Vs. Reserved Instances: When To Use Each
- How To Optimize Your Reserved Instances For Maximum Cost Savings

# Rightsizing

“Rightsizing” means using the resources and instance types for the job – not too little, not too much. Yes, it’s like tailoring your cloud wardrobe so it fits just right. And that’s great, because rightsizing ...

- Minimizes overprovisioning (to resource waste and unnecessary spending)
- Prevents underprovisioning (to avoid poor performance and service outages)

## Spot Instances

AWS, Azure, and GCP all offer huge discounts on their surplus cloud resources. But, if demand peaks, the cloud provider can reclaim the resources and assign them to other clients.

Depending on the provider, you'll only get a 30- to 120-second notice. It's like flying standby – cheaper, but with some uncertainty. So, why try?

- Cost-effective for flexible, interruption-tolerant workloads
- Save up to 90% on the standard rate
- With tools like Xosphere, you can automate workload switching between On-Demand and Spot Instances to prevent uncertainty/disruptions

**Learn more about Spot Instances here:**

- What Are Spot Instances? And When Should You Use Them?
- On-Demand Vs. Spot Instances: What's The Difference?
- What Is Spot Instance Advisor? A Beginner-Friendly Guide

# On-Demand Instances

On-Demand Instances use pay-as-you-go pricing in exchange for maximum flexibility. It's the cloud equivalent of a taxi ride; available whenever and however you want it. The downside is that flexibility makes this model the most expensive.

- No upfront commitment, payments, or contracts
- You pay only for what you use
- Ideal for highly unstable or unpredictable workloads
- Billing is per second, saving you considerable amounts for short bursts

**Learn more about On-Demand Instances here:**

- What Are On-Demand Instances And When Should You Use Them?
- Amazon EC2 Pricing Explained: An EC2 Cost Guide For 2024

# Data Transfer Fees

AWS NAT Gateway Pricing: How To Reduce Your Costs In 5 Steps

What Are The Hidden Costs Of Cloud Computing?

## Automated Cost Optimization (with ProsperOps and Xosphere)

These tools automate cost savings, like having a smart assistant to find the best deals for you while you focus on other areas of your business.

ProsperOps runs continuously to assess and optimize your RI and Savings Plan coverage and savings

Xosphere automates switching between Spot instances and On-Demand Instances based on spot price changes

# Step 2: Getting engineering, finance, and FinOps on the same page

This step is a lot like bringing together chefs, accountants, and restaurant managers to create a recipe for success.

**Engineering**: They're the architects and builders. Their decisions directly impact cloud costs. It's like chefs choosing ingredients — the technical choices they make can either balloon or shrink the grocery bill.

**Finance**: They hold the purse strings and need to ensure money is well-spent. They're like the accountants in a restaurant, balancing the books and ensuring profitability.

**FinOps**: This team is the bridge. They translate between cost and technology, ensuring financial and engineering goals align. Think of them as the restaurant managers, coordinating between the kitchen and the finances.

Getting these teams on the same page is not without its challenges. It's like asking people speaking different languages to work together without a translator, and then some. Common challenges include:

**Different objectives**: Engineers focus on performance and innovation, while finance cares about costs and ROI. Aligning these objectives requires a common language.

departments. It's like agreeing on a common menu that satisfies chefs, accountants, and managers alike.

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**Cross-departmental education**: Educate each team on the basics of the others' roles. This builds empathy and understanding, crucial ingredients for collaboration.

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**Unified tools and dashboards**: Implement tools that offer a single pane of glass for cloud costs. By sharing information and metrics, all teams can get on the same page faster. It's like having a unified scoreboard that everyone can understand and rally around.

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**Learn how to align engineering, finance, and FinOps in more detail here:**

- 5 Tactical Ways To Align Engineering And Finance On Cloud Spend
- How To Reduce Strife Between Engineers And Finance
- How Finance Can Instill An ROI Mindset In Engineering
- How FinOps Can Work With Engineering To Achieve Cost Intelligence Maturity
- 4 Ways FP&A Can Partner Successfully With Engineering
- Why Finance Teams Love CloudZero (Even if It's Built for Engineering)
- 7 Reasons Engineering and DevOps Teams Love CloudZero

By fostering collaboration between these departments, you can reduce the barriers to effective communication. It's a team effort, and each member plays a crucial role.

# Step 3: Complete cost allocation: ingest 100% of your cloud spend in a single pane of glass

Imagine having a crystal-clear view of every penny you spend on cloud services. This is what complete cost allocation does — it brings all your cloud costs into focus in one place.

Cloud cost allocation is the process of identifying and assigning cloud resource costs to the specific users, departments, projects, products, and/or any other entities that use them. It's like itemizing a restaurant bill to see exactly who ordered what.

- AWS Cost Allocation Tags Explained: When Should You Use Them?
- The Most Common Ways To Allocate Cloud Spend (+ The Pros And Cons Each)
- Guide: How To Overcome Tagging And Accelerate Cloud Cost Allocation
- AWS Cost Categories Vs. Tags: How To Get True Cloud Cost Visibility

**Code-driven approach:** Here, you use software and algorithms to allocate costs based on usage patterns and other metrics. Think of it as using sophisticated AI to automatically identify who ate what.

*Resources*:

- Breaking The Tag Barrier: A Better Way To Organize Cloud Spend
- How CloudZero Allocates Spend Differently (And Better) Than Anyone Else

**Telemetry:** This involves collecting and analyzing data from cloud resources to allocate costs accurately. Imagine it as having sensors on each dish to track consumption details.

*Resources:*

- Common Sources of Unit Cost Telemetry Data
- How CloudZero Allocates Spend Differently (And Better) Than Anyone Else

**Tagging** is like using a manual ledger; it's straightforward but labor-intensive and imprecise. **Code-driven allocation and telemetry** are like using a smart accounting system; they requires some setup initially but offer far more accuracy and insights over time.

Also, why a single view of cloud costs? Consider the following:

- **Holistic cost visibility**: A single source of truth for your cloud costs delivers a complete picture, minimizing blind spots and surprise costs. You can look at this as viewing the entire financial statement of an entire business rather than just one department's expenses.
- **Contextual reporting**: It is not enough to look *only* at either how much each department's or the entire organization's statements say on their own. The goal is to understand how each department's cost affects the rest, such as by affecting the bottom line or product pricing.
- **Higher efficiency**: A unified view of cloud costs saves time and reduces the risk of error, much like having all your financial information in one easy-to-access place. Plus,

Shared costs in the cloud are like shared dishes at a dinner party – they need to be fairly allocated among the participants. Proper cost allocation methods ensure that each department or project is charged its fair share, based on actual usage or an agreed-upon formula.

**Start here:** Solving Shared Cost Allocation With Telemetry-Driven Cost Organization

## Improving your tagging

While tagging has its limitations, it's still a valuable tool in the cost allocation toolbox. Improving your tagging strategy can enhance its effectiveness, much like refining a recipe can improve a dish's taste. Want a deeper dive into how to improve your tags without endless tagging?

**Start here:**

- AWS Tagging Strategy Guide: 15 Best Practices
- The Complete Azure Tagging Guide
- 5 Cloud Tagging Best Practices Every SaaS Company Should Use

The clarity you'll get from implementing Step 3 here can be a game-changer for making smarter cost decisions. In addition, you'll have what it takes to proceed to the next FinOps stage; the Walk stage.

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4.

# Walk: Promote Accountability

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The Walk stage is the intermediate phase where your teams deepen their understanding of FinOps concepts. It is now easier for engineering and finance to understand how their activities affect cloud costs. And leadership is actively encouraging the teams to routinely assess the business value and cost impact of their decisions.

Ultimately, the Walk stage is about getting everyone on the team to understand the cost implications of their actions and to take responsibility for them.

## and optimization

Cloud cost intelligence is like having a financial advisor specifically for your cloud costs. It extends beyond mere cost tracking to provide deep insights into how and why resources are used, and their impact on your bottom line.

The main focus of this step is to understand the cultural shift you need to make to reap the benefits of cloud cost intelligence. And it pays. Here's how.

**Resource**: What Is Cloud Cost Intelligence And Is It Right For Your Business?

Adopting cloud cost intelligence offers the following benefits:

- Empower your engineers with real-time data and trends, ensuring they can see exactly where your money is going
- Get a better understanding of how different customers affect your cloud spend
- Analyze cloud spending by business activity
- Easily explore your cloud costs with resource-level granularity
- Allocate cost using automated, telemetry-based processes instead of cumbersome, endless tagging
- Get real-time notifications about cost spikes (and the resources responsible)
- Align finance and engineering teams around common metrics and a common language

With precise data, you can make smarter choices about resource allocation, like a chef carefully selecting ingredients for a dish to reduce waste.

The table illustrates the transition from traditional, reactive approaches to next-generation, proactive optimization. It highlights the evolution from simply managing costs to actually understanding what drives your cloud costs so you can maximize their returns.

| | **Traditional Cost Management** | **Cloud Cost Intelligence** |
|---|---|---|
| **Focus** | Reducing bills, managing committed | Understanding the who, what, and why that's driving your cloud costs so you |

| | | |
|---|---|---|
| **Approach** | around procurement strategies | perspectives |
| **Engagement** | Mainly a finance concern: better buying, not better building | Takes a cross-functional approach involving engineers, finance, and FinOps |
| **Visibility** | Limited to contract and usage metrics | Deep insights into usage patterns, cost drivers |
| **Cost Analysis** | Based on historical data, reactive in nature | Proactive, data-driven, supports forward-looking strategies |
| **Flexibility** | Rigid, often locked into longer-term contracts | Adaptive, aligns with dynamic cloud usage |

# Step 5: Use engineering-led optimization to promote a cost-aware engineering culture

This approach integrates cost considerations into the engineering process. It's about giving engineers the tools and insights they need to understand and manage the cost implications of their design, coding, and deployment choices.

Here's what to do here:

**Give your engineers real-time insights into the cost impact of their actions**, rather than having them wait for monthly reports (when they can't do anything to optimize costs for that month).

**Help your technical teams understand costs at a detailed level,** like cost per deployment, cost per environment, and cost per product feature. Unlike traditional cost tools, modern cloud cost optimization platforms like CloudZero offer this level of granularity by default.

*Resources:*

- Reduce Cloud Spend With Engineering-Led Optimization — Not Just Discount Hunting
- 4 Ways To Help Engineers Understand How Their Choices Affect Cloud Costs
- 5 Ways Companies Gamified FinOps To Drive A Cost-Aware Engineering Culture
- How CloudZero Built an Engineering Culture of Cost Autonomy
- FinOps Foundation: Establishing FinOps Culture

As you might have noticed, the key component of cloud cost intelligence you'll need here is understanding your unit costs. And that takes us into the next stage of your FinOps journey.

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## 5.

## Run: Maximize Profit

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In the "Run" phase of your FinOps journey, the focus shifts to maximizing profit. This is where the strategies and practices you've implemented start paying off in practical ways. It's about turning efficiency into a competitive advantage and cost optimization into increased profitability.

At this stage, your teams should have a solid understanding of their capabilities. You can allocate over 90% of your spend, address difficult edge cases, set high KPIs for measuring success, and make automation your preferred approach.

In addition, key metrics include achieving 80% resource-based commitment discount target coverage (higher is better) and about 12% variance between forecast and actual spend (the lower, the better).

# Step 6: Make unit costs your North Star metrics

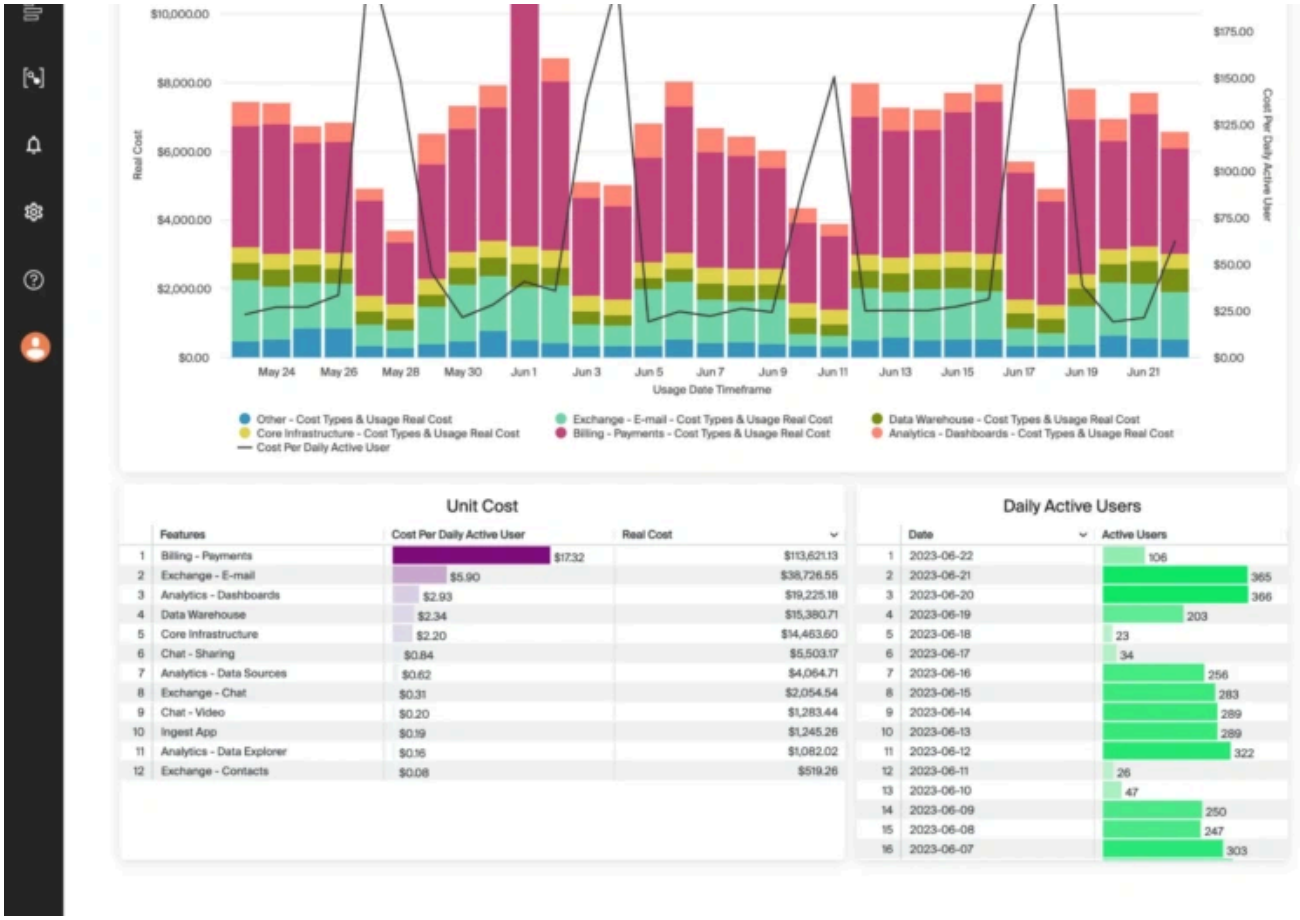
Unit costs show the costs incurred for each discrete unit of cloud resource consumption. This could be expressed in terms of cost per customer, cost per transaction, cost per

A unit cost approach shifts the focus from viewing total and average costs to pinpointing how those costs relate to specific aspects of your business. This is what unit economics is about.

*Resources:*

- Why Unit Cost Must Be Your North Star Metric In The Cloud
- What Is Cloud Economics? An Intro Guide To Measuring Costs
- The Ultimate SaaS Unit Economics Guide: Calculating Your Unit Costs
- Why Unit Economics Are The Key To Unlocking Forecasting
- 4 Real-Life Examples Of Companies Measuring Cloud Cost Per Customer
- How CloudZero Measures Cost Per Customer (Step By Step)
- The Unit Economics Journey: Cost Considerations At Each Venture Stage

CloudZero emphasizes unit costs to align cloud spend with business outcomes and activities. It's not just about how much is spent on the cloud, but about assessing what that spend achieves and how it drives value for your business.




*Dashboard: Cost Per Daily Active User (DAU)*

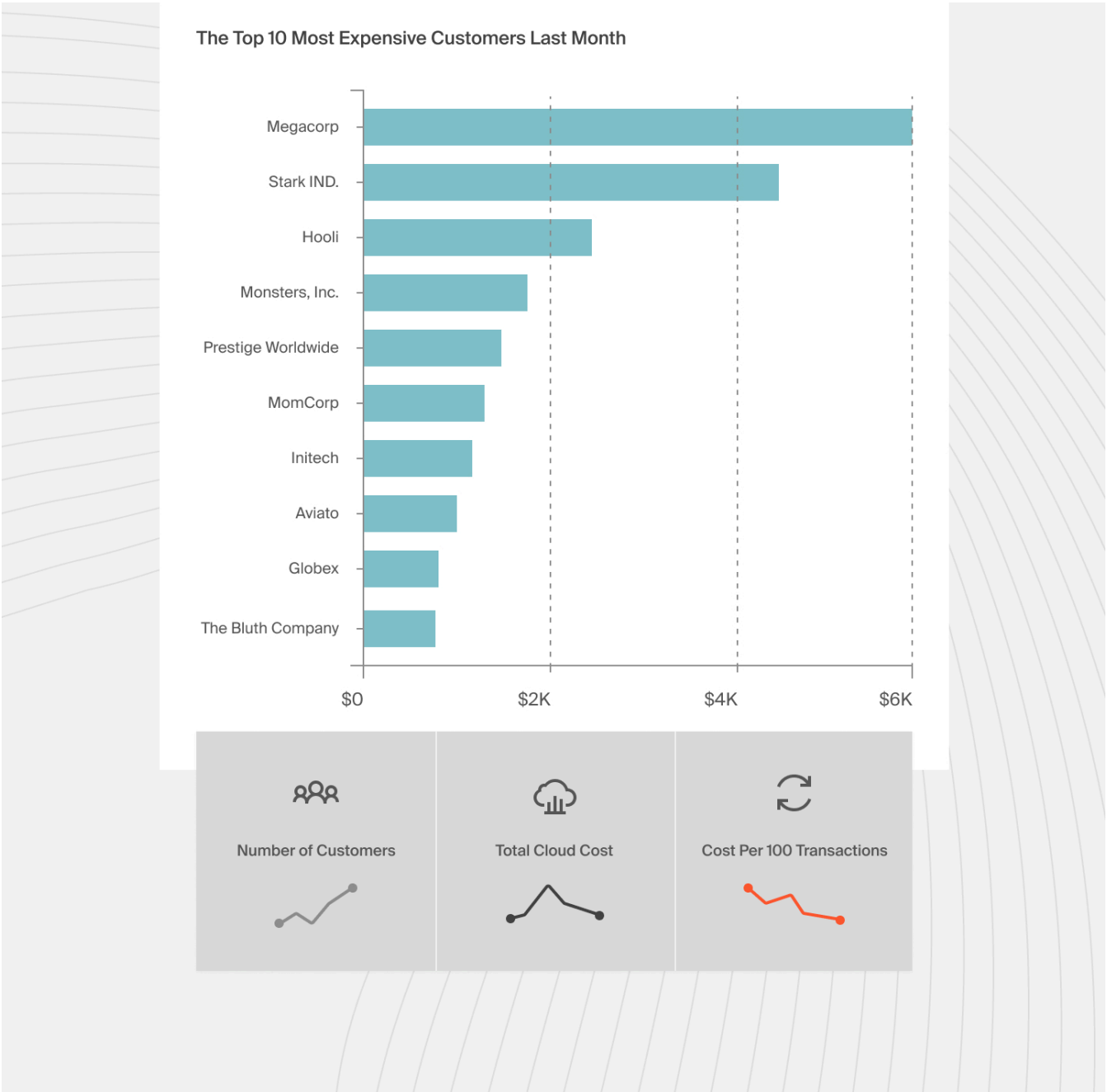
This perspective allows for more nuanced and strategic decision-making, such as enabling you to **see exactly which service or usage you can tweak to reduce costs without sacrificing performance or engineering velocity**. This is what true cloud cost optimization is about.

It's like a restaurant knowing the cost of preparing each plate, so they can tell how much to charge for each to protect margins per plate.

# Examples of cloud unit costs and how to use them

You may find the following unit cost metrics useful based on your business model.

## Cost per customer




Cost per customer lets you set custom pricing that is fair to your customers (considering how much it costs to serve them) and profitable to you (healthy margin for each contract).

By identifying your most profitable segments, you can develop better go-to-market strategies to attract, convert, and retain more profitable customers.

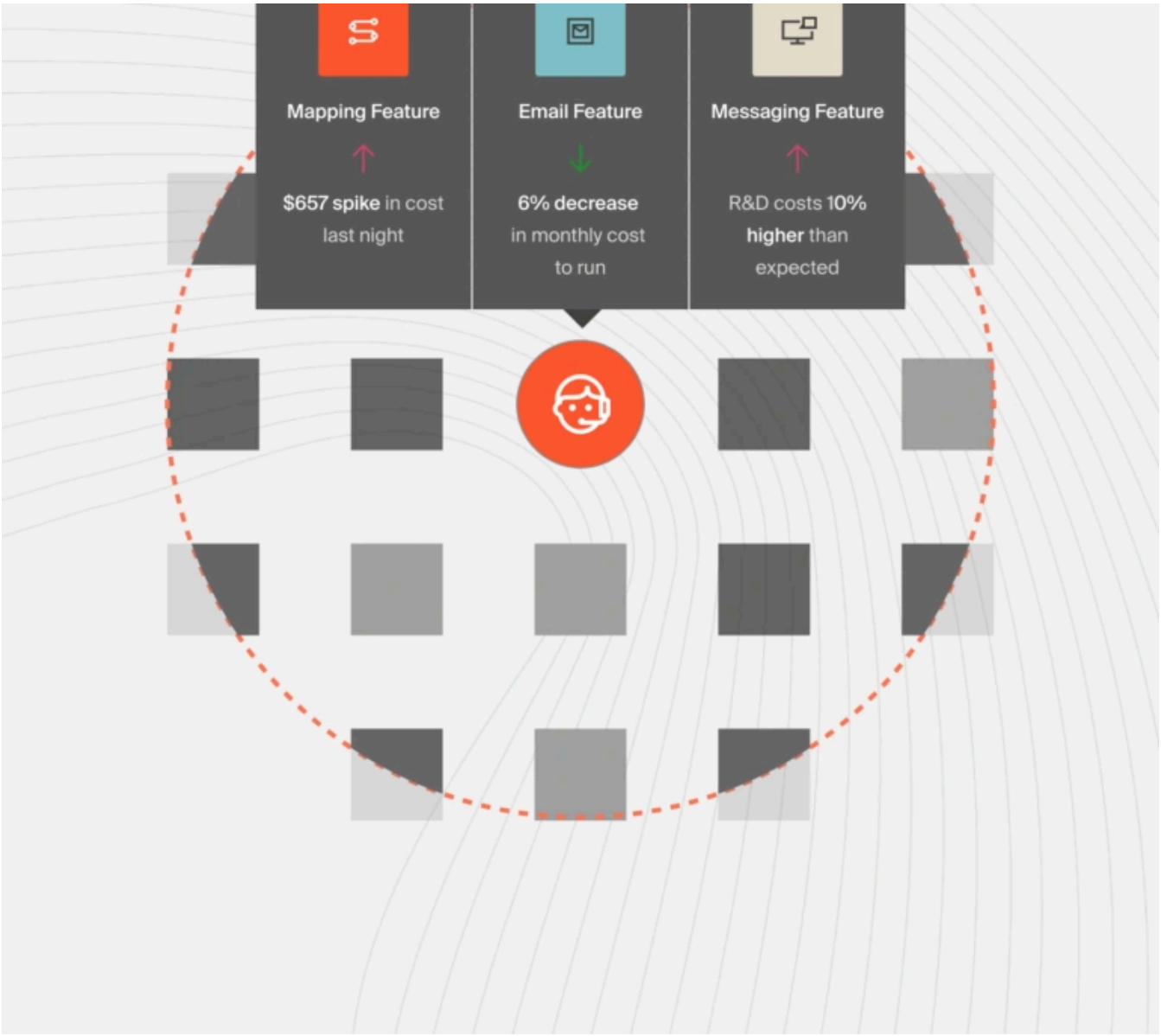
Results: Higher margins. Increased profitability. Improved valuations. Ideal investors. And you'll be able to substantiate healthier metrics, get better financing terms, and have more opportunities to grow.

*Resources*:

- The Simple Formula To Calculate SaaS Gross Margin
- 4 Ways SaaS Brands Evolved Their Pricing Strategy Using Cost Intelligence
- A Guide To Ensuring Profitability For Your SaaS Company
- How To Calculate Margin Analysis For SaaS (And Increase Profitability)
- The Last SaaS Pricing Guide You'll Ever Need
- SaaS Companies Are Reporting Weaker Margins Than They Need To — Here's Why
- What Is The SaaS Magic Number? Here's How To Calculate It
- What Is The Rule Of 40 For SaaS? Here's How To Calculate It

## Cost per feature

Cost per feature is an insightful way to measure the economic viability of a particular feature. It enables you to compare the cost of developing, maintaining, and upgrading a feature with the amount of revenue it generates.




You can use it to determine whether a feature is popular enough to warrant investing in it, such as rolling out updates.

For instance, if it is popular but expensive to maintain, you can consider moving it to a paid tier. If not, you may refactor it to serve a different purpose or decommission it altogether and focus on more sustainable features.

## Cost per environment

Cost per environment helps you assess the cost of an environment relative to the number of environments.

Cost per team can help you tell which teams are using more resources than others, allowing you to allocate resources more efficiently. It can also help identify which teams need additional resources or training to help them become more efficient, such as using more automation.

Ultimately, cost per team can be an indicator of the efficiency of your engineering team. It can help you identify projects that are running over budget so you can make early changes to ensure they are completed on time and on budget.

## Cost per deployment

Cost per deployment is particularly useful for engineers who want to track how changes to their code or deploying a new feature affect their costs.

We've used this metric at CloudZero to identify which engineering decisions aren't as cost-efficient as we would like and then tweaked those to build more cost-efficient solutions right from the beginning.

## Cost per project

Finance will love this one. It is an indicator of how much a project costs to complete.

Tracking cost per project can also help you be aware of costs to expect in similar projects in the future, enabling you to give better estimates and quotes to potential clients –and then follow through without surprise budget increases.

You can also use it to make decisions about where to allocate resources and which projects to prioritize. It can also be used to measure the success of a project.

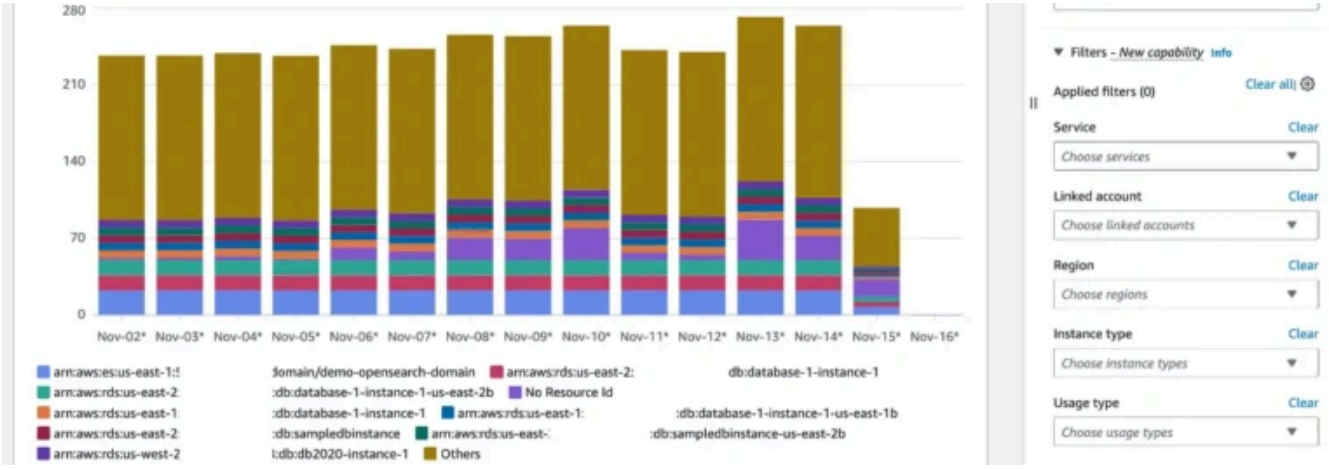
**We get it.**

Most contemporary cost tools do not offer this level of cloud cost intelligence.

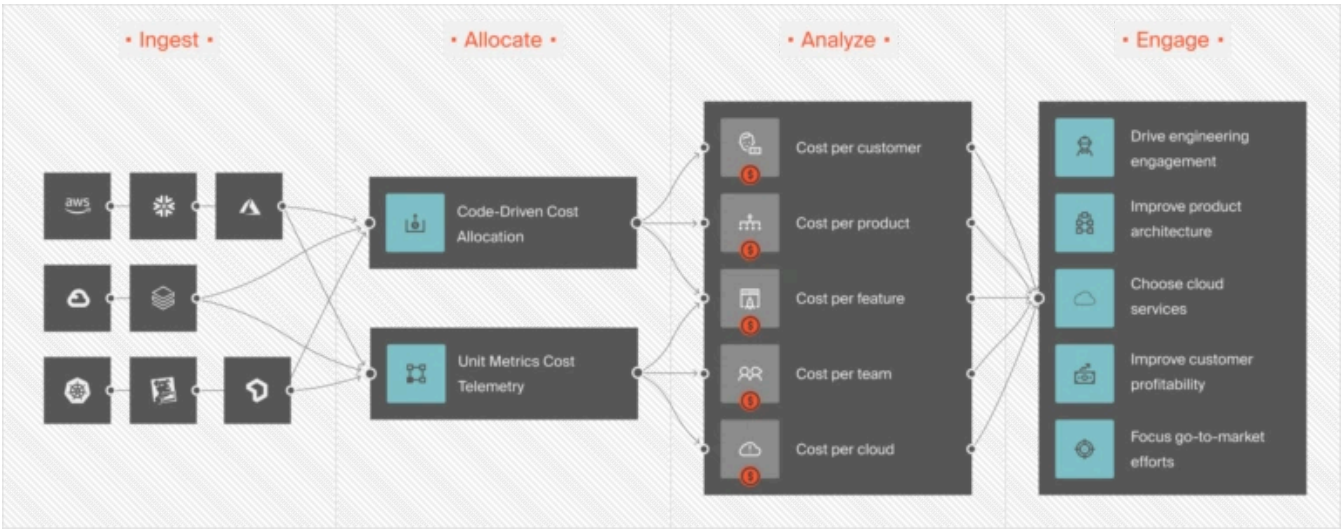
In AWS Cost Explorer, for example, you can get resource-level reports — even if for a few days at a time.

New: The AI Cost Optimization Playbook

Read Now




A more robust platform like CloudZero offers over a dozen unit cost metrics by default — the first platform to do so across all cost areas. CloudZero also lets you set up custom metrics to organize cloud cost insights however makes sense for your business.




# Step 7: Accurately control, forecast, and manage cloud spend

Now is the time to take what's working for your business to the next level. At this stage of your FinOps maturity journey, you will likely encounter challenges that can impact your cost visibility, forecasting, and cost management.

Here are a few challenges you might face. We also offer tips for overcoming them with confidence.

Choose a robust cloud platform to get comprehensive cost insights and eliminate blindspots without needing to manage multiple cost management tools.

*Resources*:

- 6 Examples Of FinOps KPIs That Will Improve Your Margins
- How FP&A Teams Can Tame Cloud Costs: 4 KPIs For Success

## Variable usage patterns

Cloud usage can fluctuate dramatically, influenced by business cycles, new projects, or unforeseen events, leading to unpredictable costs.

**Solution:** Once you have your unit costs and Cost of Goods Sold (COGS) down, you won't have to worry about fluctuations, since you'll be aware of why your costs are changing (what and who is responsible), showing you precisely where to optimize.

*Resources*:

- SaaS COGS: What To Consider In Your Cost Of Goods Sold
- Why COGS Isn't The Most Relevant Cost Metric For SaaS Companies

## Misaligned cloud cost management

With different teams or departments managing their own cloud resources individually, gaining a common view of overall cloud spend becomes challenging.

**Solution:** Align your teams to optimize costs using a common understanding as we suggested earlier. Each team can have its own metrics, such as cost per deployment for engineers. But all teams will want to use the common unit economics approach to optimize their spending.

*Resources*:

- Cloud Spend For Finance: How To Better Understand Your Cloud Costs
- Engineering-Led Optimization: How To Proactively Manage Cloud Costs Without Slowing Down Innovation
- Reduce Cloud Spend With Engineering-Led Optimization — Not Just Discount Hunting

allocation to prioritize the most profitable areas. Keeping efficiency high is key to maintaining a competitive advantage in any business environment.

*Resources*:

- Cloud Efficiency Rate: A New Metric To Quantify Cloud-Native Business Value
- How HighRadius Improved Their Cloud Efficiency Rate By 5% With CloudZero

## Ineffective cost allocation

Difficulty in correctly allocating cloud costs to the right projects or departments can lead to inaccuracies in spend tracking and forecasting.

**Solution:** Instead of relying on tags, embrace telemetry-driven cost allocation. This can help you account for the costs of tagged, untagged, untaggable, and shared resources in multi-tenant environments.

*Resources*:

- AWS Cost Allocation: A Guide To Allocating Cloud Spend
- The Most Common Ways To Allocate Cloud Spend (+ The Pros And Cons Each)
- The Quest For Sunken Treasure: Top-Down Vs. Bottom-Up Cloud Cost Allocation

## Inadequate forecasting tools

Some organizations rely on outdated methods or basic estimations to predict cloud spend, which leads to inaccuracies and surprise bills.

**Solution:** Understanding the cost drivers influencing your costs is the key to forecasting accurately. For example, when you know how much each feature costs to build, deploy, and maintain, you can better estimate how increased usage will impact costs.

*Resources*:

- 8 Steps To Take Before You Can Start Forecasting Cloud Costs
- Cloud Budgeting: A Guide To Accurately Forecasting Cloud Spend

## Inadequate FinOps expertise

constantly monitoring your environment. With granular, immediately actionable insights on costs, you can successfully build a cost-aware culture (FinOps at work).

*Resources*:

- 5 FinOps Best Practices To Effectively Manage Cloud Costs
- What Is Cloud Cost Optimization? 15+ Best Practices For 2024
- The 6 FinOps Principles: How To Apply Them To Your Software Dev Cycle

## Unexpected growth or scaling

Sudden increases in demand or rapid scaling can lead to unanticipated spikes in cloud spend.

**Solution:** Verify with your unit economics. It is easier to tell if the changes in your costs are caused by growth or by overspending when you already have an understanding of the people, products, and processes that drive them. In any case, you can still pinpoint where and why the increases are happening so that you can fix them and prevent budget overruns.

*Resources*:

- AWS Costs: Surprise, Surprise? It Shouldn't Be!

By addressing these challenges with effective strategies, partners, and tools, your organization can gain better control over its cloud spend, leading to more accurate forecasting and efficient budget management.

We've covered the strategy part. In the next section, we look into the tools and partnerships you can use to automate cost optimization and maximize your cloud ROI.

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# 6.

# Choose The Right FinOps Partner

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- Team up with the best FinOps partner
- Use continuous improvement to your advantage

Let's break each down into actionable insights.

# Step 8: Choose the right cloud cost optimization platform

So, why not just build a cloud cost optimization tool in-house?

## Build vs. buy

The decision to build versus buy software is often a source of conflict for companies. The rule of thumb is to build solutions that differentiate your business and buy everything else. Yet, the decision is not always straightforward.

**Factors like opportunity cost, complexity, technical debt, and long-term implications such as ongoing maintenance and updates often weigh heavily on the decision.**

Think of it as deciding between custom-building a car or purchasing a tested, feature-rich model. Building software in-house can lead to flexibility but may result in technical debt and lock-in, while buying off-the-shelf solutions can offer immediate benefits but offer limited customization.

Ultimately, the decision hinges on factors like budget, specific needs, quality concerns, and internal teams' expertise. Are you torn between building or buying?

**Start here:**

- Should You Build Your Own Cloud Cost Optimization Tool? 3 Questions To Ask
- CloudZero Vs. Homegrown Cloud Cost Tooling

Whichever method you deem best for your organization, you will need to decide what capabilities you want. We have already touched on some of them in this guide.

In this section, we'll offer a snackable guide to choosing the right cloud cost platform (or the capabilities you'll want to build into your own solution).

untaggable spend

Organize your spend any way you like by combining metadata from multiple sources, not just based on tags

Empower each employee to view spend directly related to them — in their own language and context — such as cost per feature to engineers or cost per project to finance

Provide cost insights in as close to real time as possible so you can catch potential issues before they become costly problems

Aggregate costs from multiple cloud providers together, presenting the cost intelligence in one place instead of in separate views, which often leads to blindspots

Help you capture, analyze, and act on cost data across platforms such as Kubernetes, Databricks, Datadog, and Snowflake in one place

Generate hourly, customizable, and easy-to-digest reports based on metrics you choose — not a grouping of numbers in CSV format once every 24 hours like most tools do

Support financial reporting such as invoice reconciliation and budgeting

Support proportional, fixed, or dynamic showback by your set usage metrics

Track as few or as many metrics as you want, so you can get and understand the complete picture of your costs in your language

Break down costs into comparable unit cost metrics, such as cost per customer or cost per transaction

Provide resource data alongside spend data

Optimize and reduce waste without sacrificing engineering velocity, system performance, or customer experience

Automate the usage of discount instruments such as Reserved Instances (RIs), Savings Plans, and/or Spot instances for industry-leading savings

Stay on top of your spending and detect anomalies in real time to prevent cost surprises

Keep it simple when you start out, then dive deep into granular unit economics later when you're more comfortable with your cost strategy

11 Best FinOps Tools Companies Should Consider In 2024

AWS FinOps: Tools To Use To Your Advantage

# Step 9: Team up with the best FinOps partner

Some of the best aspects of a good FinOps partner include:

1. **Expertise in cloud platforms**: A good FinOps partner should have experience with the specific cloud platforms your organization uses, such as AWS, Azure, or Google Cloud.

2. **Cross-functional collaboration**: A Certified FinOps Certified Practitioner should be able to work effectively with your finance, product, and engineering teams, ensuring alignment and collaboration.

3. **Trust-building behavior**: They should practice behaviors that build trust, such as sharing data, owning decisions, and being transparent about what they can do better.

4. **Cost visibility**: The FinOps partner should help improve cloud visibility across the organization, ensuring that teams understand how their activities impact cloud costs.

5. **Cost optimization strategies**: You'll want a partner who provides working strategies for cost optimization, such as using Cost per Customer data to set profitable service prices and optimizing your tagging policy.

6. **Financial accountability**: The partner should help bring financial accountability to the variable spend model of the cloud, enabling your distributed teams to make sound business trade-offs between speed, cost, and quality on the fly.

7. **Cost intelligence platforms**: You'll want a FinOps partner who is familiar with cost intelligence platforms like CloudZero to help you build a FinOps program that actually works for you, not against you.

With a good FinOps partner by your side, you can streamline your financial operations in the cloud without cutting corners or burning yourself.

# How CloudZero measures up

CloudZero has the right mix of FinOps partnership and comprehensive cloud cost optimization tooling. So, if you are sick of trying to find a platform that gets you, using

**Single source of truth for your cloud costs**: Get insights into AWS, Azure, GCP, and Oracle Cloud costs along with platform costs for Kubernetes, Snowflake, New Relic, Datadog, MongoDB, and Databricks. No need to create separate views.

**Unit cost and hourly granularity**: View your total and average costs along with more actionable insights, such as cost per customer, cost per feature, cost per team, and cost per project. Organize your cost intelligence how you like with hourly reports — not once a day, which could be 23 hours too late.

**Telemetry-based shared resource allocation**: Split up shared resources accurately by layering in telemetry metrics that tell you exactly how much to attribute to each customer, team, product, or anything else using the resource(s)..

**Engineering-Led Optimization**: Empower your engineers with the knowledge to identify technical decisions that lead to competitive, cost-effective solutions before it's too late.

**Cloud cost analytics at your fingertips**: CloudZero Analytics adds the space's most refined cloud business intelligence layer to its most powerful allocation engine, giving you one-click access to the custom views most relevant to your business .

**Real-time cost anomaly detection with smart alerts**: Send timely, noise-free, and contextual alerts directly to the relevant engineers, via email or Slack, and empower them to fix the root cause to prevent overspending.

**Industry-leading Kubernetes cost analysis**: CloudZero's Kubernetes cost analysis delivers both technical costs (such as cost per pod, node, cluster, namespace, etc), as well as business cost insights (such as cost per customer, environment, feature, etc), combining Kubernetes cost data with all other cost data — at a max level of hourly granularity.

**Reliable budgeting and forecasting**: Create a custom budget and receive alerts when overspending is imminent.

**Ongoing FinOps Account Management**: Conventional tools provide automated recommendations for cost savings. CloudZero's human, Certified FinOps practitioners help turn your cloud investment into ROI — in days, not months.

Want to see why engineering, finance, and SaaS leaders love CloudZero?

**Start here:**

6 Things Customers Love After Switching To CloudZero

8 Changes Drift Made To Save $2.4M In Cloud Cost

# Step 10: Practice continuous improvement best practices

After the Run stage, the next step is often to “Fly.” Here is what flying in FinOps looks like.

Cloud cost optimization. And yes, it is an ongoing process, not a one-time event. Continuous improvement in this area involves regularly evaluating and adapting your strategies to ensure they align with your evolving business needs and technological advancements.

Here’s a practical guide to encourage this approach in your organization:

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**Meet to leap forward**: Schedule monthly or quarterly reviews of your cloud costs and strategies. These sessions should involve key stakeholders from finance, engineering, and operations to discuss recent spending patterns. They should also involve identifying anomalies and assessing the effectiveness of current cost optimization strategies.

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**Stay sharp**: The cloud landscape is constantly evolving. You’ll want to keep abreast of the latest technologies and best practices in cloud cost management. This might involve attending relevant webinars and podcasts, reading industry publications, or following relevant online forums, such as the FinOps Foundation’s.
**Start here:** The 7 Best FinOps Blogs, Books, And Other Resources

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**Loop feedback to your advantage**: Set up ways to gather feedback from your team on the ground – those who manage and use the cloud resources day-to-day. This feedback can provide valuable insights into potential cost savings or efficiency improvements.

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**Leverage analytics**: Take advantage of tools that identify trends, forecast future costs, and surface additional revenue opportunities (such as profitable customer segments to explore).

Follow these steps and your organization will revel in a culture of continuous improvement for optimizing cloud costs.

# Conclusion

As we wrap up this guide, let's revisit the key takeaways and insights we've gathered on our FinOps maturity journey.

We started by understanding the basics of cost management in cloud computing. From the initial steps of traditional cost savings methods, we gradually moved towards more advanced strategies like cloud cost intelligence and engineering-led optimization.

Although traditional approaches provide a solid foundation, they often lack the depth and flexibility needed for dynamic cloud environments. **They often fall short in precision, over-rely on tagging, and miss engineering's crucial role in cost optimization**.

By contrast, next-generation approaches offer a holistic view, involving cross-functional teams in a more proactive, data-driven strategy. The ultimate goal here is not just to reduce costs, but to maximize value — getting the most out of every cloud resource for your organization.

By embracing the principles and practices outlined in this guide, your business can do more than reduce unnecessary costs. **It can also thrive in a culture of efficiency, accountability, and operational excellence (a major competitive advantage today)**.

One more thing. The journey to cloud cost maturity is ongoing. It's about constantly learning, adapting, and optimizing. With the right mindset, tools, and partner, you can turn cloud costs from a challenge into an opportunity for sustained growth and innovation.

To your success!

New: The AI Cost Optimization Playbook

Read Now

# Financial Control And Predictability In The Cloud

Eliminate wasteful spending, ship efficient code, and innovate profitably — all in one platform.

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Data Normalization

Cost Allocation

## Platform

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Overview

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Cost Optimization

Budget Management

For Engineering

For FinOps

For Finance

For DevOps

Optimization Insights

Dimensions

FinOps Enablement

Customer Success

Tour

Demo

Pricing

## Integrations

AnyCost

Amazon Web Services

Google Cloud Platform

Microsoft Azure

OpenAI

Anthropic

Snowflake

Datadog

Kubernetes

Databricks

MongoDB

New Relic

All Integrations

## Resources

Blog

Newsroom

Podcast

Events

Customer Stories

Free Cost Assessment

AWS Service Comparison

Academy

Documentation

FAQ

State Of Cloud Cost 2024

State Of AI Costs 2025

All Resources

## Company

About

Leadership

New: The AI Cost Optimization Playbook

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## The Best Tools By Category

Best Cloud Cost Management Tools

Best AWS Cost Optimization Tools

Best AWS Monitoring Tools

Best Azure Cost Management Tools

Best GCP Cost Optimization Tools

Best Multi-Cloud Management Tools

Best Cloud Monitoring Tools

Best FinOps Tools

## Cloud Cost Guides

The Cloud Cost Playbook

Cloud Cost Optimization 101

The Ultimate Guide To Cost-Efficient Cloud Spending

The Modern Guide To Managing Cloud Costs

FinOps 101: An Intro To The Basics Of FinOps

## Other Helpful Guides

The Top Cloud Service Providers

The Cost Of Cloud Computing

Cloud Storage Pricing Comparison

Types Of Cloud Computing



New: The AI Cost Optimization Playbook

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