

Whitepaper

Prove ROI with a Cloud Cost Optimization Strategy

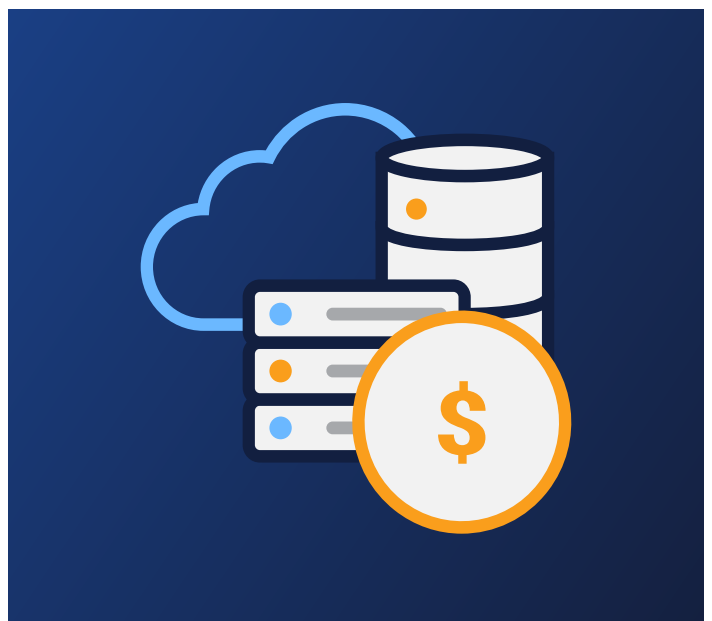
Why is Leadership Scrutinizing Cloud Costs and How Can IT Teams Prove ROI?

Does leadership have cloud costs under a microscope?

While the pandemic has greatly accelerated the move to the cloud, internal and external drivers that have increased cloud costs may have leadership scrutinizing spend and asking IT teams to rein it in.

Current economic volatility is putting pressure on businesses to cut costs, reduce their cloud spend, and minimize waste. Meanwhile, internally, cloud costs are rising due to poor usage visibility, misconfigurations, and lack of governance, cost optimization strategies, and proper management.

Public cloud allows for rapid scalability and enables organizations to spin up resources on-demand. However, this ease can have a downside. Without appropriate governance, cost optimization, and management measures in place, excess resources can turn into unnecessary spend that goes unchecked for months or years.



A lack of visibility or understanding into cloud usage and cloud costs can be primarily due to the overall complex nature of the cloud environment, not to mention that the complexity can be stretched over multiple providers. How can leaders in the IT world build a strong reputation as innovators, driving ROI throughout their organization and keeping an eye on strategy and vision, while simultaneously managing day-to-day technology?

Company leadership wants to know how the strategy and vision is impacting the bottom line. Therefore, IT leaders need to create a strategy that proves they can effectively spend in the cloud and rationalize their cloud usage. While cloud cost optimization can easily get lost in the shuffle, it plays an important role in driving organizational innovation forward.

What is Cloud Cost Optimization?

Cloud cost optimization is a multilayered strategic approach that looks for ways to reduce overall cloud spend while maximizing cloud value. This process works in tandem with cloud cost management, which includes issuing, monitoring, reporting, and tracking cloud spend.

Organizations start by auditing their cloud through a cloud cost management (or cost intelligence) analysis and identifying areas for improvement. These could be misconfigured resources.

Cloud Optimization Drives ROI for Organizations in Several Ways, Including:

- **Improved visibility**

When businesses optimize for the cloud, they're also able to unearth more information on how internal resources are being used, where potential efficiencies are, and how cloud spending could be used to support and grow important business functions.

- **Budget optimization**

The more the cloud is optimized for efficiency and performance, the more likely it will also be optimized for spend by proxy. Budget optimization also gives leadership the ability to plan and forecast cloud expenses.

- **Smarter use of resources**

Gaining visibility over your cloud environment also means being able to identify idle instances and shutting them down when they're not being used. For example, turning off development instances in off-hours can save on resources and spend, allowing you to reduce your budget or move your spend to other modernization projects.

Cloud Cost Optimization and Cloud Optimization Need to Work Together

Closely tied to the idea of cloud cost optimization is cloud optimization, a process where cost plays a considerable role, but isn't the exclusive focus.

While the biggest priority in cloud cost optimization is finding opportunities to save money, for cloud optimization, it's one part of a greater network of decisions. IT leaders working on cloud optimization are concerned with finding the right resource to fit intended purposes - what resources need to be used to run workloads effectively, which workloads and applications belong where, and so on. An optimized cloud considers both. Costs should be kept to a minimum without sacrificing performance or compliance standards.



4 Key Areas of Cloud Financial Management

AWS has tied cloud optimization and cloud cost optimization together in four Cloud Financial Management principles: **See**, **Save**, **Plan**, and **Run**.

1. **See.** To ensure the right cloud strategy is in place, you'll first need to understand your environment. This requires an audit of spending and usage in your current environment. You'll want to account for licenses, fees, and tools that are being used.

Cloud measuring and monitoring tools should provide cost and usage data, as well as recommendations to reduce and optimize spend. When you measure spend and usage, you're establishing organizational cost transparency. This ensures that there is visibility into and accountability for cloud spend, instead of letting costs rise without being checked.

Review all active and idle instance types so that you can refine your spending patterns and consolidate applicable computing functions into fewer instances. From there, you can review and rightsize your infrastructure to match your business needs. Tools can be used to analyze and modify your computing services, offer change recommendations across instance families, and optimize servers based on graphics, memory, and storage capacity, among other things.

Improve visibility, allocate and benchmark spend, and improve proactivity through budgeting and forecasting. Bringing everyone up-to-speed on the state of cloud and

how spend is being allocated, as well as future goals, prepares the organization for optimization.

2. **Save.** The main buckets of cost optimization involve identifying waste, building cloud-friendly architectures that scale based on demand, and improving cost efficiency. Tactics include right-sizing instances, increasing application elasticity, choosing the appropriate pricing model, and optimizing storage.
3. **Plan.** There's no guarantee you'll get where you're going without a comprehensive plan. Understanding current and future costs, as well as IT needs, can help organizations drive accurate planning. This is a vital piece for IT leaders.
4. **Run.** Many companies lack the dedicated resources needed to monitor cloud spend. They're also usually missing tools that provide visibility into cloud usage (be that one cloud or a multicloud infrastructure), automation that can optimize spend, and cost governance policies and practices that can reinforce a solid framework. Organizations need to identify and invest in people, processes, tools, and automation to monitor and optimize their cloud spend. This is all part of cloud financial operations.

The financial process is never fully over. It is a continuous effort that explores ongoing improvement to spend and operations. This is where a culture focused on cloud cost optimization is built internally, with repeated reinforcement of goals and a focus on a Cloud Cost Center of Excellence - centralized governance that outlines policies and models around cloud spend.

How to Optimize for Costs in the Public Cloud

How much you use public cloud will depend on the nature of your workloads, your business needs, and what in your current framework can be easily migrated to the cloud. Luckily, there are many ways to leverage public cloud to achieve cloud cost optimization, including:

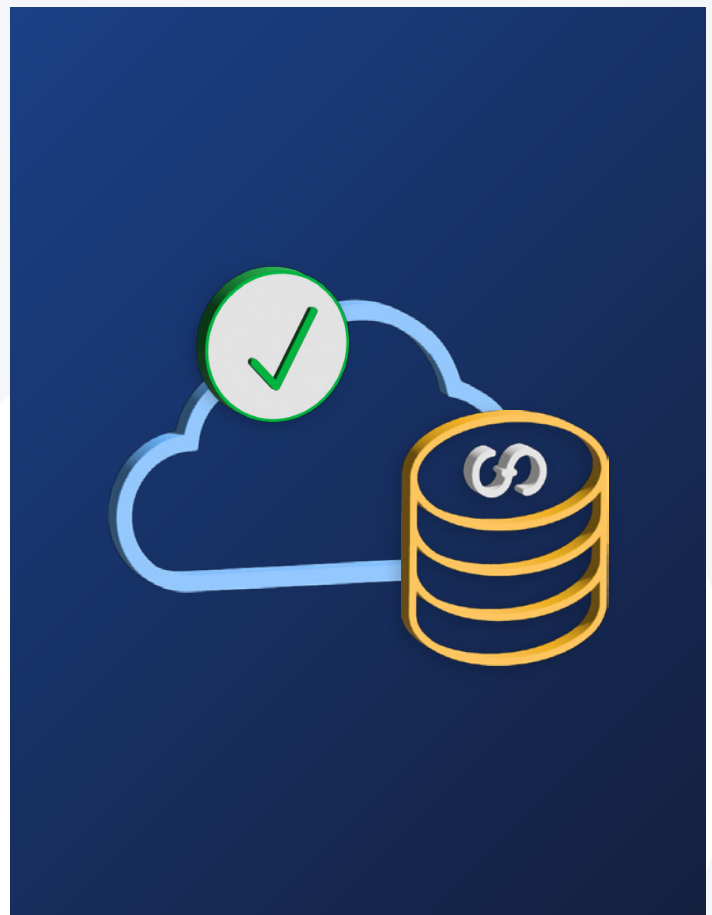
- Turning off unused instances: If there are off-hours when you don't need certain resources (for example, hours that fall outside of your workday), optimize usage through scheduling. Start and stop usage on a schedule through Azure Automation Runbooks or Instance Scheduler on AWS. By using tools like Azure Advisor, you can identify resources that could be completely turned off or resized.
- Incorporating cloud cost management tools: Your FinOps plan can be bolstered with AWS tools like Cost Explorer and Cost and Usage Reports (CUR) or Azure's Microsoft Cost Management to monitor spend. Third-party cost optimization tools can present consolidated dashboards across multiple providers, giving organizations greater reporting capabilities and more cross-platform functionality.
- Establishing internal processes: Once cloud monitoring has been established, develop internal processes that detail when it's time to decommission a cloud resource that's no longer needed.
- Improving usage awareness: By attributing costs to teams and projects, you can see optimization opportunities more clearly. AWS and

Azure have several tools for cost and usage allocation and analysis, and the findings can then be used to set budgets, service quotas, and cost controls.

- Moving the right workloads to public cloud: While some workloads are potentially better suited for private cloud or on-premises frameworks, whether they require hyper-specific compliance measures or are more difficult to modernize, other workloads are likely ready to make the move. Focus on achievable wins - what can you move to save on costs without compromising internal productivity or the experience for the end-user?
- Implementing autoscaling and rightsizing: One of the major benefits of moving to the cloud is being able to scale up and down resources as needed without investing or wasting major infrastructure and hardware. In fact, scaling can often be automated through certain cloud services provided by Microsoft Azure and other public cloud providers. Server sizes need to be determined not just by cost but how quickly a process will run at the size you're choosing.
- Using storage tiering: Chances are, you don't need to access every corner of your data on a daily basis. While some data may be important enough to store, your access needs could be less frequent, which is where storage tiering can come in handy. Azure Blob Storage, for example, offers different pricing for premium, hot, cool, and archive storage tiers.
- Signing up for reservation pricing: Reservation pricing can be used

for workloads that are more predictable to save over pay-as-you-go models. Public cloud providers may offer 1-year or 3-year contracts that can save users 50% or more compared to on-demand pricing.

- Using managed cloud services: When it comes to optimizing cloud cost, it pays to bring in a team of experts. Managed cloud services providers can offer guidance on the numerous configuration options and best virtual machine (VM) types for your workloads. This kind of advice is essential when your organization is taking measures to lower spend. Providers can also help with monitoring and leveraging well-architected frameworks that balance cost, performance, security, reliability, sustainability, and operational excellence.





Learn more with TierPoint

Cloud cost optimization isn't a one-and-done process, and the complexities can be a lot to sort through. However, you don't have to fly solo. TierPoint provides a free scan of AWS and Azure resources to identify cost-saving opportunities. For customers looking for ongoing support, our [Managed AWS services](#) and [Managed Azure services](#) can help you optimize your IT costs without sacrificing performance or losing your competitive edge. Our experts handle the intricacies of cloud cost optimization so you can get back to finding avenues for future innovation and growth.

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