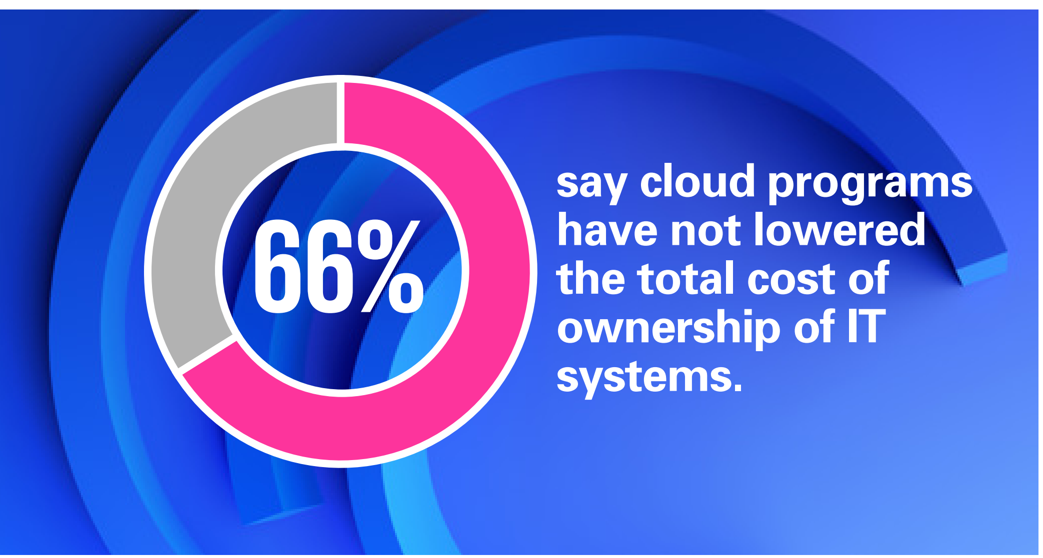
Taking control of cloud costs:

The FinOps imperative

Cloud costs are spiraling out of control. Finance and IT must work together to better manage cloud resources and reduce waste.

Remember how moving to the cloud was going to save your company money? Instead of endlessly acquiring more servers for future needs, you'd provision only as much data storage and computing capacity as you needed—no more, no less—in the cloud. You'd also gain the flexibility to adjust your usage up or down, on demand, as circumstance dictated. With that, you'd bid a cheerful goodbye to excess capital investments and much of the labor required to maintain on-premises IT systems.

Today those cost savings are an increasingly distant dream. While the cloud has delivered on many of its promises—boosting agility by allowing companies to quickly spin up new environments and resources, taking advantage of cloud-native services, and scale applications globally—it has fallen short of its loftiest financial promises. In the 2022 KPMG U.S. Technology Survey, 66 percent of business executives say their organization's cloud programs have not lowered the total cost of ownership of IT systems.



The culprit isn't the technology itself but rather a near universal failure to adapt to the nuances of managing a modern resource that works very little like the legacy environment it replaced. With the cloud, consumption is decentralized and IT departments no longer have tight control over on-site data centers and their costs. Shadow IT is more common, with business users able to provision technology platforms and IT infrastructure with a figurative click of the mouse. Wasteful cloud spending is further driven by complex billing structures, compounded in many cases by the use of multiple cloud service providers.

In short, the rush to the cloud has led to excess spending and insufficient oversight, leaving many organizations struggling to balance the value of cloud agility and innovation against the need for guardrails to control costs.

In working and speaking with clients, KPMG has identified several common challenges to efficient cloud resource management. Too often, IT financial management processes fall short when trying to account for the variable nature of cloud spend. KPIs are not focused on the right outcomes, and reporting isn't done in a language understood by all parties. Finance teams often lack the technical acumen to make recommendations for cost savings, while engineering and development teams lack incentives to think financially. Without the appropriate tools and governance in place, effectively planning, monitoring, analyzing, and reporting on cloud spend and performance becomes difficult—as does further decision-making about how the cloud should be used and managed. The sometimes adversarial relationship between IT and finance, especially when the latter is tightening the corporate purse strings, doesn't help because it discourages cooperative planning.

All these developments have left some organizations feeling a bit like the family that cut cable to save money, only to sign up for so many streaming services that the envisioned savings evaporated.

Seven ways the cloud challenges traditional financial management capabilities

		On-premesis	Public cloud
1	Accounting treatment	CapEx intensive	OpEx focused
2	Cost assignment	ITSM (CMDB) maturity	Account structure and tagging policies
3	Procurement	Requisition	Provision/Subscription
4	Scaling	Large step-function	On-Demand/Smooth curve
5	Budgeting/forecasting	Historically trend based	Active, cross-functional collaboration
6	Value management	Centralized	Distributed
7	Indirect costs	Decrease with volume	Grow with volume

Expecting your organization to manage its cloud spend the same way it managed legacy IT spend was always going to be a big ask. The differences between the two ways of operating are greater than the similarities, beginning with their **accounting treatment**. In the cloud, costs are annual operating expenses, not long-term capital expenditures—that shift needs to be anticipated and planned for. **Assigning costs** in the cloud relies on account/subscription structures and tagging policies, not the configuration management database (CMDB) your IT service management practices typically rely on. Without proper governance, the **near-instant provisioning** that's possible in the cloud can allow users to sidestep the formal requisitioning process that helps IT stay on top of spending in a legacy environment. Thanks to their near-instant **scalability**, cloud platforms don't require the same rigor of longer-term technology planning commonly found with on-premises systems, where long lead times force IT to build in extra capacity to meet future needs. **Budgeting** in the cloud is no longer a well-controlled capital planning process based on historical trends; budgeting on cross-functional collaboration between IT and business sponsors. **Value management** is distributed, not centralized. Finally, **indirect costs** in the cloud tend to grow—not decrease—with volume.

All of these differences present challenges for finance and IT alike, with implications for both costs and corporate performance. Both functions need to shift their mindset away from the fixed nature of legacy data center hosting models and embrace the variable, on-demand, consumption-based expenses of cloud resources. Importantly, budget planning for cloud must be done in tandem with technical planning for cloud, which almost no one is doing.

Introducing FinOps

As the cloud pushes IT spending and execution further and further toward the edge of the enterprise and closer to the end consumer, organizations need a new approach to managing their cloud spend. FinOps is that approach. The term is a play on "finance" and "DevOps." It refers to the financial management of cloud resources by cross-functional teams focused on spend accountability and business value optimization. With FinOps, teams from IT, finance and business units collaborate on data-driven spending decisions. Transparency is prioritized, and ownership of expenses is more visible.

While operating in the cloud may not always reduce IT costs, FinOps provides organizations the process to exert greater control over their cloud spending and reap better outcomes from that spending. It helps them seize opportunities for efficiency along the entire cloud value chain, from application architecture, choice of hosting platform, and provisioning of resources to cost optimization, and resource retirement.

A FinOps approach to cloud financial management requires coordination among IT and finance professionals as well as representatives from the business who are relying on cloud solutions to drive business capabilities and outcomes. The goal is to evolve both upstream IT operational processes and core financial management capabilities to appropriately manage your investments in the cloud. Engineers and accountants must learn to speak the same language as they track variable costs and measure the value delivered to the business.

Driving this sort of change requires cultural and operational shifts. Finance professionals need to be educated on cloud products and services to better understand how they are priced. At the same time, IT professionals need to consider cost when making decisions regarding architecture, security, and performance. Additionally, appropriate governance and reporting tools should be established to create transparency and facilitate the process and align/drive accountability.

To build out FinOps capabilities, some organizations may want to create a "cloud business office" to oversee the requisite planning, measurement, reporting, analysis, and optimization activities, with the head of the office reporting to either the CFO, the CIO, or the CTO. Others may prefer to create a cloud center of excellence in which people on the FinOps team are connected via dotted reporting lines.

Whatever your approach to building out FinOps capabilities, your organization should pursue five overarching objectives:

1. **Improve and maintain the predictability of costs.** Identify, plan, and track cost and usage metrics that provide clues for optimizing the use of cloud resources. Use financial modeling powered by machine learning and the tools available through cloud providers to better predict costs and set spend baselines.

2. **Optimize total cost of ownership.** Design the cloud architecture, right-size resources, purchase reserved capacity, and capitalize on favorable pricing models and commitment discounts to improve average cost rates and deliver a better return on cloud investments.

3. **Increase ownership and accountability.** Incentivize a culture of financial responsibility. Track and report data around cloud usage and costs to help hold the people who manage cloud environments accountable for their spending.

4. **Improve governance efficiency.** Create explicit policies to govern the provisioning of cloud resources.

5. **Improve monitoring and reporting capabilities.** Boost monitoring and reporting capabilities by creating data collection pipelines for cloud optimization metrics, automating controls and reports, and using both machine learning and human analysis to spot irregularities and find opportunities.

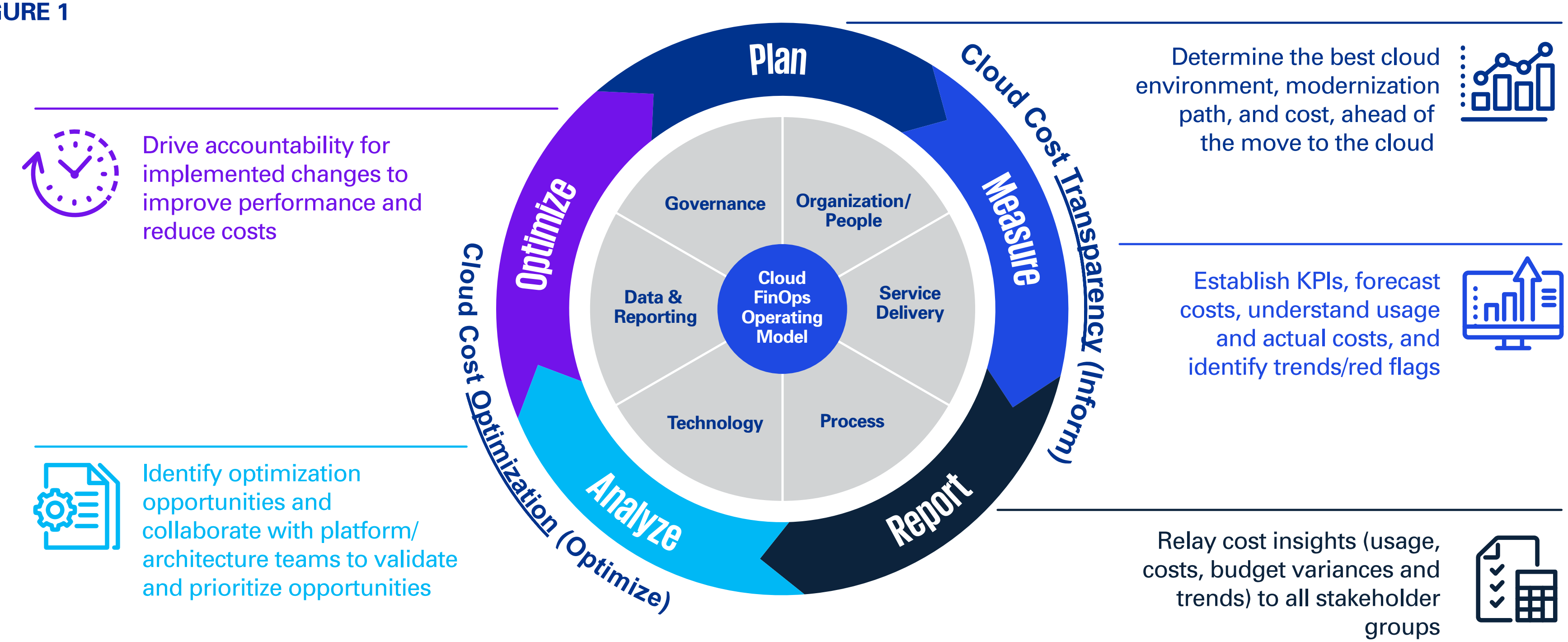
How KPMG can accelerate your FinOps journey

Our approach to FinOps addresses five key areas. We start with planning your cloud strategy to identify the most appropriate cloud environment and platform for your operations. We then move to measuring usage and costs, reporting results, and analyzing those results to identify opportunities to improve. Finally, we follow through on those insights to optimize your cloud environment, improve performance and reduce costs. (See Figure 1)

Implementing a FinOps model requires time and expertise many organizations may not have readily available. KPMG specialists have an in-depth understanding of and experience with cloud providers, products, and services and have an established track record of building and implementing customized cloud financial management strategies. Through this work, we have developed an effective roadmap for streamlining the shift to a FinOps model and for identifying and removing excess costs from existing cloud environments.

Once engaged, KPMG professionals can quickly analyze your cloud footprint and provide a list of opportunities to immediately reduce spend in your current environment. We also can help implement these recommendations and drive additional savings with broader operational enhancements over time.

FIGURE 1



Source: Taking Control of Cloud Costs: The FinOps Imperative, KPMG LLP (US), 2023.

Case Study:

Life Sciences in the Cloud

A global pharmaceutical manufacturer had moved aggressively into the cloud, quickly exceeding its annual spending targets across three separate providers. The company needed to develop sustainable FinOps capabilities to optimize its cloud usage and better manage its cloud costs. For help, the company turned to KPMG.

KPMG quickly implemented a FinOps strategy highlighted by initiatives to improve cloud usage transparency and ownership accountability and bring costs under control. We helped the company create a chargeback model for allocating the cost of its shared cloud services to end consumers. We developed a dashboard for cloud cost transparency and created a strategy for surfacing cost optimization opportunities and routing them to the appropriate parties for execution. We also assisted with an evaluation of various cloud financial management tools that could assist the company with its FinOps strategy and with forecasting future annual cloud spend across the company's three cloud providers.

Ultimately, we identified immediate opportunities for reducing the client's cloud costs by more than 15 percent through both usage and rate optimization. We also helped the company improve the efficiency of repetitive FinOps tasks, allowing members to focus on more impactful activities. Finally, we laid out a clear path for further development and maturation of the company's FinOps model.

Further reading:

Gartner, "The cloud budget overrun rainbow of flavors," Lydia Leong (November 24, 2021).

Gartner, "Cloud cost overruns may be a business leadership failure," Lydia Leong (October 20, 2021).

FinOps Foundation, "The State of FinOps 2022" (2022).

Flexera, "State of the Cloud Report" (2022).

CIO Institute, "FinOps: A New Approach to Cloud Financial Management" Apptio, (2019).

Contact us

To learn more about how KPMG can help your organization adopt a FinOps model to better manage its cloud investments, please contact:

Will DeMille
Managing Director,
CIO Advisory
312-852-6707
wdemille@kpmg.com

Len Epelbaum
Director,
CIO Advisory
773-255-3455
lepelbaum@kpmg.com

Marcus Murph
Principal, U.S. CIO Advisory
Practice Leader
214-840-2671
marcusmurph@kpmg.com

kpmg.com/socialmedia