



AHEAD

Proven FinOps Methodology
for *Optimized Savings*

Introduction

Cloud is variable and ever-changing, and while some FinOps principles never really change, AHEAD likes to evolve our philosophy with both best practices and the state of the market in mind. The FinOps Foundation recently released their [2024 State of FinOps Report](#), and found that priorities are shifting for many organizations. Reducing cloud waste and managing commitment discounts are now top of mind for many organizations, reflecting the economic uncertainty of the last year.

At the same time, organizations are preparing for the costs of running [AI and machine learning](#) in the cloud. Since there is little to no baseline for such costs, organizations have been investing heavily in tools that can more accurately forecast cloud usage and spend. There is also a push to empower engineers to take action and optimize workloads to help control costs.

With so many moving parts and changing priorities, managing a successful FinOps program is more challenging than ever. But it can be done. This ebook is designed to break down the methodology that AHEAD uses to both help save clients up to 30% in YoY cloud costs and deliver more innovations through the cloud than ever.



Part One

Key FinOps KPIs

How do you measure the success of a FinOps program?

Without access to the right data, it's impossible to know if costs are actually under control. Read on to learn which metrics AHEAD prioritizes in its reporting to help clients derive critical insights into the effectiveness of their FinOps program.

Top 10 KPIs of a Healthy FinOps Program

As organizations continue to adopt cloud, the need to measure success of FinOps programs becomes more and more crucial. There are dozens of [KPIs](#) through which an organization can measure the success of their FinOps program, but the following are the ten KPIs that we see as the best overall indicators for our clients' needs and goals in 2024.

01. Percentage Variance of Budgeted vs. Forecasted Cloud Spend

WHAT IT IS:

The difference between budgeted and forecasted costs for using public cloud services.

WHY WE MEASURE IT:

This gives us insight into how well your budget aligns with your forecasts of actual cloud expenses. An initial budget usually won't match the real-time data that reveals your actual spending on a rolling basis. Taking your past cloud consumption and anticipated changes in cloud utilization or utilization rates into consideration helps your forecasts become more accurate and your future cloud budgets become more realistic.

02. Anomaly Detection Cost Avoidance and Unpredicted Variance of Spend

WHAT IT IS:

The money you were able to avoid spending by identifying and remedying an anomaly in cloud usage, and the unpredicted variance of cloud usage over a period of time, respectively.

WHY WE MEASURE IT:

Both calculations are unique to your organization, as both depend on how frequently you monitor your cloud usage. As your FinOps program matures, both calculations are key indicators of how well you're avoiding unpredicted – and unbudgeted – costs.

Top 10 KPIs of a Healthy FinOps Program

03. Percentage of Commitment Discount Waste

WHAT IT IS:

The percentage of commitments in relation to what is deployed.

WHY WE MEASURE IT:

This is like asking how much money you're leaving on the table, or how many coupons you've let expire. In short, this KPI measures how well you're using the credits you've earned for the spend you've already committed to your CSP.

04. Percentage of Compute Spend Covered by Commitment Discounts

WHAT IT IS:

Pretty much what it sounds like – the percentage of your compute spend covered by your commitment discounts for the previous month.

WHY WE MEASURE IT:

Getting the best price on cloud usage involves actually using your commitment discounts. The higher this ratio becomes, the more you save. We work with customers to determine if Reserved Instance, Reserved Capacity, or Savings Plans are the best course of action. For more dynamic environments, lower-level environments, test environments, etc., a Savings plan will likely be the best opportunity for a commitment discount. Savings Plans span the entire compute estate for any given customer (VMs, Kubernetes clusters, Web Apps, etc.). For production environments, we work with customers to configure a Reserved Instance (if a VM) or Reserved Capacity (for things like storage). Once configured, we track usage via tooling so the customer does not have to worry about calendar dates or reminders to reap the commitment discount at the end of the commitment discount period.

Top 10 KPIs of a Healthy FinOps Program

05. Untagged or Mis-Tagged Resources

WHAT IT IS:

Measuring the costs associated with untagged or mis-tagged resources.

WHY WE MEASURE IT:

While not all cloud resources can be tagged, many can, and the more metadata associated with your resources, the easier it becomes to build the right visibility and forecasting for cloud workloads. Mistagged resources or untagged resources leave a lot of cloud spend hard to detect or create forecasts for, so cloud spend becomes challenging if a customer wants to build a show back or charge back mode. A big charter we work on with customers is creating the best tagging baseline possible, related to what they're trying to achieve. From there, we help clients plug in the right dashboards, reporting, and structure for ongoing maintenance.

06. Percentage Resource Utilization

WHAT IT IS:

The measure of cloud resource utilization such as compute, block storage, or object storage.

WHY WE MEASURE IT:

How many of each type of resource is being utilized as a percentage of the total capacity allocated? We compare these utilization rates over time to the expected utilization rate based on your running workloads. We also want to ensure every resource deployed is actually used, otherwise we need to build a plan to decommission underutilized or idle workloads. Using these measurements help us keep environments in a good hygiene state and keep cost optimized and contained.

Top 10 KPIs of a Healthy FinOps Program

07. Percentage of Idle or Unused Resources

WHAT IT IS:

The measure of your unused cloud resources.

WHY WE MEASURE IT:

To reduce cloud waste. Monitoring tools help us catch unattached or orphaned storage volumes, underutilized VMs, underutilized PaaS instances, unattached elastic IPs, unattached load balancers, idle snapshots and more. This metric helps us keep workloads optimized and make the most of your available cloud resources.

08. Hourly Cost per CPU Core

WHAT IT IS:

Measuring the hourly average cost of each of your CPU cores.

WHY WE MEASURE IT:

The average cost per CPU core helps determine the unit cost per CPU core. Are you paying for more compute than you need? Can reservations or migrating to instance types with better performance save you more?

Top 10 KPIs of a Healthy FinOps Program

09. Cost per Gigabytes Stored

WHAT IT IS:

The average cost per gigabyte stored in the cloud.

WHY WE MEASURE IT:

Like Hourly Cost per CPU Core, Cost per Gigabytes Stored is a metric related to unit economics, which should inform the decision-making of your engineering teams to help meet cloud cost and usage goals. Storage tiers and proper [data lifecycle management](#) can help optimize this number.

10. Total Amortized Monthly Spend

WHAT IT IS:

The average monthly cost of cloud resources when accounting for long-term investments. Instead of recognizing expenses all at once, amortization spreads the cost of cloud resources over a term (e.g. 1 year or 3 years).

WHY WE MEASURE IT:

Tracking total amortized spend on a monthly basis helps customers understand the true cost of cloud resources by spreading upfront expenses over their useful life. This provides a more accurate view of ongoing costs, aids in budgeting and forecasting, and helps identify cost optimization opportunities.

Part Two

The FinOps Maturity Model

A Variable Cloud Model Means a Variable Cloud Journey

At AHEAD, we often see customers who claim to have a FinOps team, but after further discussion and investigation, it's revealed that this team is not well equipped to deliver results. This is often no fault of their own – cloud is expansive and expensive, and these team members are often pulled in a million different ways, faced with steep learning curves, or both.

One way we like to take the pulse of where these teams are successful or falling short is by looking at the FinOps Maturity Model. This model is defined by the [FinOps Foundation](#), and breaks down what every organization might expect to see at a Crawl, Walk, or Run stage for various cloud domains and capabilities.

Cloud is variable, and your journey to FinOps maturity will be, by necessity, iterative. But it's important to note that virtually no organization will be able to reach the Run stage in every domain. This is partly because it's impractical and expensive to do so, and partly because achieving maximum outcomes for every aspect of cloud does not mean you are achieving the maximum outcomes for your particular business goals.

Read on to learn more about the stages of FinOps maturity and how AHEAD has helped customers along their journeys.

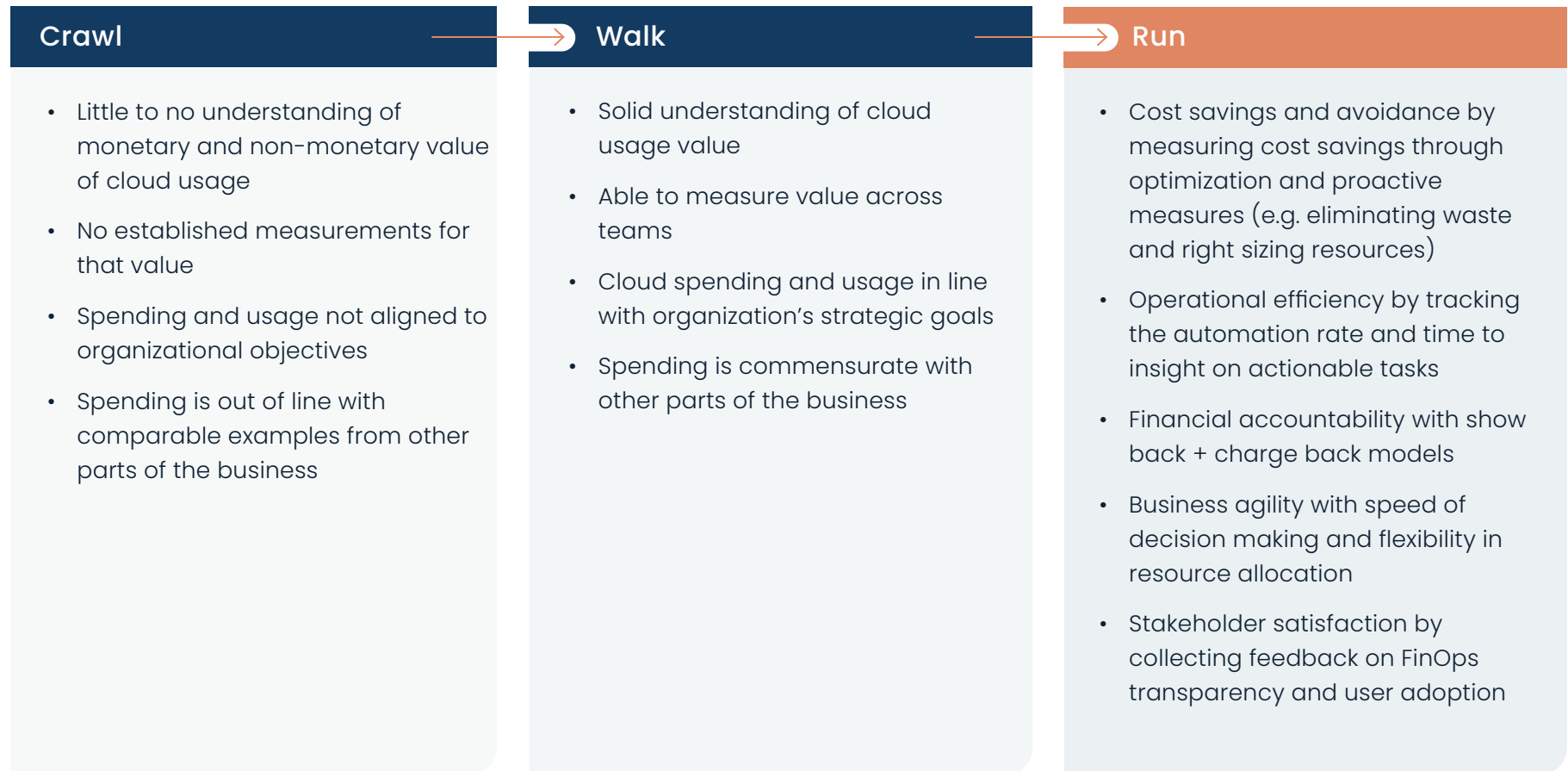
Domain 1: Understand Cloud Usage and Cost

This is the area where you work to fully understand your use of the cloud. What are you using in the cloud, what are you spending, who is responsible for the spending, what metrics matter to you in cloud, and what are the impact of those metrics on other parts of the business? For example, your cloud usage could impact anything from overall budget to carbon emission or other ESG goals. And finally, who has access to all this cloud data, and does that access enable other teams to adhere to FinOps processes?



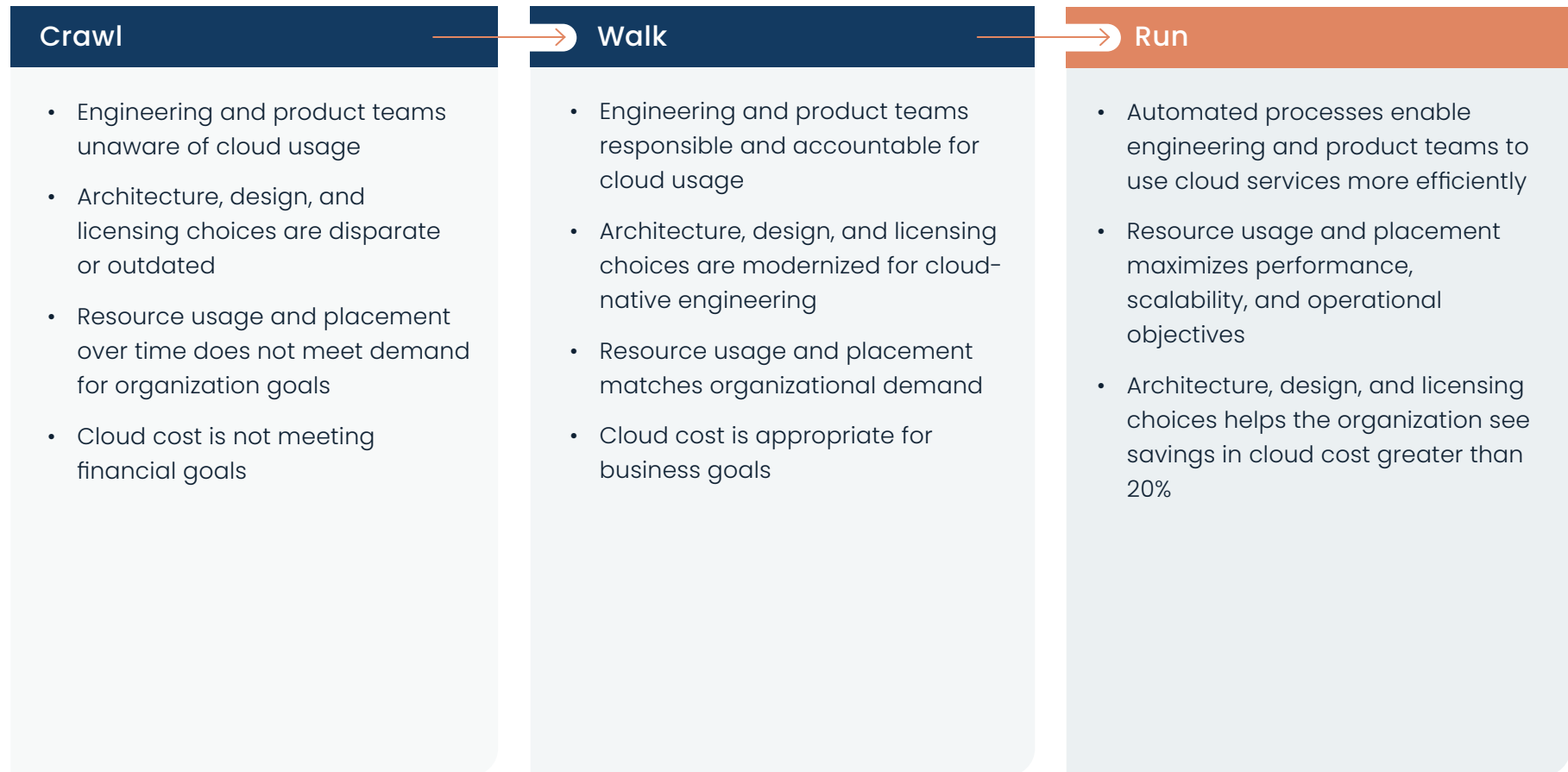
Domain 2: Quantify Business Value

Here's where you connect your cloud usage and cost data to the business value it creates. Cost refers to more than just money, as you can and should also weigh usage costs against application availability and reliability, or customer satisfaction with an app. Maturing the ways in which you map value to budget helps you decide how to forecast costs, establish KPIs, and benchmark performance across teams and business units.



Domain 3: Optimize Cloud Usage and Cost

Once you understand your cloud usage and business value, it's time for your architects to focus on cloud efficiency. How can you limit the use of resources to when they provide value to the organization? How do you ensure that resource costs are low or that licensed and SaaS products aren't eating up too much of the budget? How does a modern cloud architecture and rate and workload optimization further drive down cloud costs?



Domain 4: Manage the FinOps Practice

FinOps doesn't end with optimizing cloud usage. It requires continuous change management of the entire organization. This is the area that enables the entire organization to use cloud to generate value for the business. It heavily involves everyone's favorite activity – breaking down organizational silos – but that effort pays off in continuous efficiency, even in times of major changes to infrastructure or monumental pivots in business goals.





Why No Organization Ever Quite Reaches Run

The Run stage in any cloud domain is full of lofty goals, and it is difficult if not impossible for organizations to reach this stage themselves. After all, FinOps is more than just technology – it's people, processes, and technology. Organizations that build out internal FinOps teams find that even the most savvy technologists or financial analysts only have so many hours in their day. There's competing business requirements and tasks that take time away from their FinOps focuses. And there is always a new cloud resource or service, a new process, a new workload, a new evolutionary state, a new standardization, a new you-name-it to consider in the ever-growing list of calculations they must make to save their organization money on cloud.

The goal of every AHEAD FinOps engagement is to get you speed walking. Our teams take a holistic look at your finances, tools and technologies, and operational practices to make sure your organization is getting the most business impact out of every dollar you spend on cloud. We track cloud spending across your business, eliminate costs through rightsizing, workload placement, and automation, and devise the right governance and chargeback models to contain runaway spend. And we help you accurately forecast your cloud spending with Predictive Cloud Modeling grounded in your business forecast, not tech specs.

Part Three

Why FOCUS? A New Framework for FinOps

In June, Version 1.0 of the FOCUSTM standard reached general availability. Introduced by the FinOps Foundation, this new open-source framework defines how cloud providers should generate simplified and unified cost and billing data for their end users. This is a win-win for vendors and clients alike: taking the complexity out of billing makes it easier than ever to understand cloud usage, optimize cost, and maximize cloud value for the business.

All major hyperscalers plan to adopt this new format for cost data, making all of billing more user friendly – and eliminating the need for **all** cloud personnel to be black belts in **all** clouds.

Read on to learn more about the framework and how it will benefit all FinOps practitioners.

What is FOCUS? The FinOps Open Cost and Usage Specification Explained

In short, FOCUS defines requirements for cloud vendors to generate billing files in a single format. FOCUS was developed in tandem with the largest cloud providers in the world (AWS, Microsoft, Google, and Oracle) and with some of the largest cloud spenders. It enables a common FinOps lexicon for cost analysis, spend allocation, commitment optimization, invoice reconciliation, and unit economic reporting.

FOCUS aims to eliminate time spent on data ingestion and data normalization. Version 1.0 establishes a common terminology, taxonomy and metrics for major IaaS/PaaS providers, but will eventually expand to other cloud SaaS billing datasets like networking, observability, or security tools. Much like the rest of FinOps, it's an ongoing, iterative process. But the end goal is to make it easier for FinOps teams to mature and optimize their programs by reducing the amount of work needed to begin analyzing cloud cost and usage.

In Version 1.0, there are 43 columns of qualitative or quantitative data that cloud providers should generate for a billing statement. You can learn more about those columns in the FinOps Foundation's detailed breakdown [here](#).

The rest of this section will focus (pun intended) on the benefits of adopting the framework.



What are the benefits of FOCUS?

The greatest single benefit of FOCUS is that FinOps teams now only have to learn one single process to run queries on cloud billing data, no matter the vendor. Data skills are now transferrable across clouds, FinOps tools, and organizations. Specialists, no need to despair -- reducing the time and effort needed to normalize and analyze cloud billing data enables you channel that energy into strategic initiatives and drive home the business value of a strong FinOps program.

Other benefits of FOCUS include:

- Fewer billing discrepancies for more accurate reporting
- Little to no new hire training needed around data normalization
- More self-service reporting across the organization
- Easier integration of new vendors
- Cheaper data processing
- Better decision-making and fewer data silos
- Better understand how cloud offerings drive business growth

FOCUS will be adopted everywhere soon enough, so getting comfortable with the framework sooner than later is strongly recommended. In the meantime, if you're not getting a billing dataset in the FOCUS format, there are tools to help. An official [Data Validator](#) can check if your bill aligns to FOCUS, and the [FOCUS Converter](#) can help re-write the bill in the proper format and make a best-effort conversion for any required FOCUS data that might be missing from the vendor's bill.

AHEAD FinOps-as-a-Service can help you fast-track utilization of the FOCUS framework and help you see cloud cost optimizations of up to 20% in your first year of our service.



AHEAD As a Proven FinOps Partner

Identifying the right frameworks and KPIs for your FinOps program is challenging enough, and it can often be muddled by disparate data sources that aren't giving you the visibility you need for accurate measurement. And while it's completely possible to build some of this reporting yourself in PowerBI – namely spend and cost trends, individual subscription or project costs, application costs, and even tracking Azure usage (which in itself is a much more complicated dashboard build) – the DIY approach can still leave you missing some critical elements of measurement.

AHEAD FinOps Services can deliver tooling, data analysis, insight reporting, and backlog development equivalent to the workload of two full time employees. Our custom tools offer more detailed insights than your standard reporting. We can create budgets and budget alerts, tagging activities, and shutdown recommendations, and our automated Cloud Reporting Insight dashboards constantly provide recommendations and courses of action for optimal cloud usage and savings.

Our work across many different verticals allows us to leverage what we learn and apply best practices to your organization immediately. AHEAD's certified and skilled resources are experienced in cloud optimization tools and all major public clouds, and apply insights from our reporting to drive average first-year cloud cost reductions of 20-30% for our clients.



Selected Client Wins

Through AHEAD Cloud FinOps teams, clients have consistently achieved 10-30% savings on average over three-year engagements. Some of our recent projects include:



Helping a major airline reduce cloud costs by **\$12 million**, implementing governance practices to ensure sustained savings.



Cutting monthly cloud expenses by **\$90,000** for a large energy company, delivering annual savings of approximately **25%**.



Identifying a **\$2 million yearly** savings opportunity for a leading American food distributor. Through focused, monthly sprints, we are driving substantial savings tailored to their needs.

Let our teams focus on savings, and your cloud experts focus on cloud.
Learn more about how to speed walk with [AHEAD FinOps](#).

[Contact AHEAD](#) to learn more about our comprehensive set of services to implement your fleet of industrial edge devices faster and more efficiently.

AHEAD

AHEAD builds and manages digital platforms that power the most successful organizations in the world. Our consultative approach, unmatched engineering, and innovative solutions combine to accelerate the impact of technology for every client we serve.

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