



EBOOK

# Optimizing Cost on GCP


Take Charge of Your Cloud Analytics Costs with Kyvos





## Abstract


Enterprise data is increasing exponentially and while storage costs on GCP are affordable, the more computing you use to process and analyze this massive data, the more GCP costs add up. Kyvos' high-speed data analytics platform helps you reduce these costs with its AI-powered smart aggregation technology while delivering unparalleled analytics performance.





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## Introduction

Either you are already on GCP or migrating to it – that’s the new normal. While GCP promises lower costs, it’s not always true, especially when your computing needs are going through the roof.

When you store and analyze your data on cloud data platforms like Google Cloud, querying costs keep increasing with rising users and data volumes. Reducing cloud costs and optimizing the use of cloud resources is the need of the hour.

GCP cost optimization with Kyvos is your answer to this challenge. We apply a strategic process for trimming your GCP costs, so that you can reduce costs by 30-50%.

Reducing your cloud usage or migrating to a less expensive cloud provider isn’t the solution as data influx increases unpredictably and you need to scale up your analytics game as per your requirements. Kyvos helps you resolve these issues with the right strategies, technologies and methods that not only reduce your GCP costs substantially but also deliver exceptionally high analytics performance.

**For data leaders, the biggest impediment in higher GCP adoption is managing multiple resources and controlling costs without compromising on the speed of analytics or the scale of queries they need to run for critical decision-making.**

# Why Do Organizations Need to Optimize GCP Costs?

As you increasingly build your data programs on GCP, cost management will be a key challenge for your data engineering teams. Most cloud platforms offer scalability and elasticity to manage your overall costs, but they fail to deliver the same benefits when the size of data and the number of users start growing exponentially.

Optimizing GCP costs should not be a reactive control. Instead, adopt a proactive approach that helps build a robust and elastic BI architecture to prevent cost explosion without compromising on your analytical needs.

## Cloud Cost Optimization Benefits





## Monitor GCP Resources for Optimum Utilization

Your analytics architecture must be elastic to scale up and down with growing usage and data volumes. However, analytics and business leaders may find it difficult to rationalize these costs when analyzing massive volumes of data. You need to keep a track of your GCP resource consumption to mitigate these challenges.

If you don't monitor consumption, the cost explodes and decreases your ROI. On the other hand, if you plan only for the expected spikes, your system starts wasting resources when analyzing petabytes of data at once. Identifying the right cost metrics at the right time can prevent this disaster.

With GCP cost optimization, you'll enable your teams to make quicker decisions at every level. Use your cloud resources optimally to make data-driven decisions.

## Enable Data Democratization on GCP

When users increase in your organization, data consumption also increases proportionately. More users mean more queries and higher compute costs, even if GCP data storage is cost-effective. But you can allow easy and equitable data access to all these users by optimizing monthly consumption expenses.

Controlling your GCP costs facilitates resource optimization and allows you to adopt a culture of data democratization where all information is readily available to all users without any IT dependency. It ensures self-service analytics when any user can access the data to dig into details and get a unified view or a single version of the truth across the enterprise



## Get Better and Faster Insights on GCP

Don't let your teams grapple with high data volumes and out-of-control expenses instead of focusing on their core tasks. A proactive cost optimization strategy will help them plan their resources and operations more effectively.

The process will also bring more opportunities to improve your GCP analytics environment with new capabilities. When the number of users grows, it can simultaneously increase the number of concurrent requests on your GCP analytics tool.

You must prepare your Google Cloud Platform with the right resources to face this issue and offer unified, optimum visibility into your cloud costs, resources and tools.

## Enhanced Business Efficiency

When people have ready access to data without any limitations, they are more likely to focus on their core skills and innovate new ways of doing things. Better insights and faster analytics open new avenues to explore data and to make better business decisions.

Bring higher effectiveness to your processes and workflows by enabling teams at all levels without worrying about escalating cloud costs. Organizations with multiple teams using cloud resources routinely can thus save more costs on GCP without affecting the productivity of each team.



# Challenges of Managing Costs on GCP

Not every enterprise has the right resources to manage its cloud bills and avoid overspending on data storage and analytics. They may face challenges like:

## Over-Provisioning or Underutilization of Resources

Several factors can contribute to high cloud bills, but one of the most common is over-provisioning. This happens when you allocate more resources than you need to run your analytics workloads. While having some extra capacity to handle spikes in demand is essential, having too much can be a waste of money. GCP cost optimization can help you right-size your resources so that you only pay for what you need.

Another common problem is underutilization. This occurs when you have resources that are sitting idle most of the time. For example, you may have a server that's only used during business hours but stays powered around the clock.

## Performance Issues

For growth-oriented modern enterprises, democratizing data access to multiple users is the need of the hour. However, your data consumption will rise with more users. You may inadvertently increase computing costs on GCP if you analyze the stored data repeatedly.

Hence, investing in optimization platforms and tools that complement your GCP stack and enable analytics on large datasets without latencies or exploding computing costs is essential.

## Visibility Issues

When migrating your analytical processes to GCP, you can't risk losing critical enterprise data to any vulnerability. You must control access to crucial resources and enable data democratization at every level.

That's not all, either. Maintaining enterprise-wide visibility into data requires more than what GCP offers. Even if the dashboard is visually appealing and fulfills your analytical needs, it may not be fast enough to make the right business decisions at the right time.

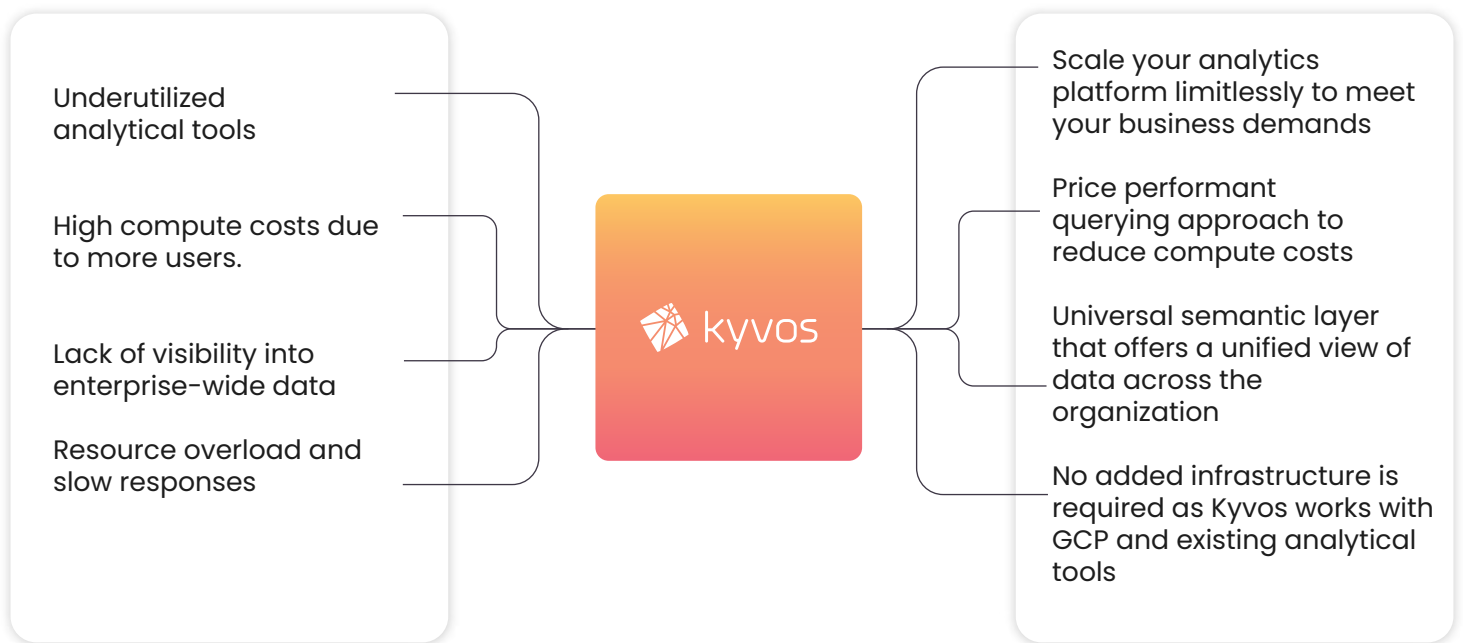


# The Kyvos Solution

## Your Analytical Tool. Your Cloud on GCP . Any Data Size.

Prioritize your business needs without worrying about analytical costs or efficiency with Kyvos. Our automated aggregation technology and smart data engineering can help you get deeper insights into massive data while optimizing costs on GCP.

As a cloud-native high-speed data analytics platform, we can augment your analytical functions and maximize your ROI. And if you are worried about integrations, don't fear. Our platform will complement your GCP stack and analytical tools seamlessly for fast and self-service analysis.





## Smart Aggregation Strategy

Kyvos' AI-powered smart aggregation technology lets you aggregate all your data in advance. Since most queries are already processed and aggregated, you save substantially on compute costs at runtime.

Our price performant querying approach lets users query any number of times without huge runtime costs.

Kyvos uses its ML-based recommendation engine to profile data and study query patterns which further optimizes your aggregates. It not only helps you improve performance but also reduces storage costs.



## Load-Based Elasticity

Our load-based elasticity ensures that in the case when no queries are running, all the Kyvos query engines will go down automatically and when a user queries next the query engines get started automatically.

It helps you manage system capacity and reduce unnecessary costs. Kyvos also provides auto-scheduling of query engines as per predicted loads. Based on the business usage pattern, you can scale up or scale down your querying capacity and reduce costs with optimal resource utilization.



## High Concurrency

In GCP, increasing the number of users and queries, processing infrastructure and costs to grow linearly or even exponentially.

However, with Kyvos, you can support 1000s concurrent users from the same infrastructure without impacting your costs.



## What's in Store for the Future

Experts and industry leaders predict that overall cloud spending will reach \$1.3 trillion in the next few years as more enterprises join this bandwagon. Kyvos can help you optimize your GCP ROI with a cloud-native architecture that keeps your analytics costs under check.

Our patented AI-powered smart aggregation technology delivers faster insights at minimum costs on unconstrained datasets. We believe - "With higher elasticity comes more cost savings."

Explore our platform more to see how.

## About Kyvos

Kyvos is a modern, cloud-native, high-speed data analytics platform that enables sub-second querying on massive datasets. The platform's universal semantic layer democratizes data for all users across the enterprise, enabling self-serve analytics. Its AI-powered smart aggregation technology modernizes advanced analytics, while reducing the time and cost to extract insights. With Kyvos, instantly analyze data at any scale using the visualization tool and underlying cloud platform of your choice.

To learn more, [request a demo](#) now.



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