Google Cloud

Cost optimization tips

You've learned that cloud data analytics can provide organizations with powerful data storage, management, and analysis solutions. You've also learned that by practicing cloud cost optimization, cloud tools can actually be a cost benefit. Cloud cost optimization is the process of reducing cloud expenses by implementing cost-reduction strategies. There are some really important benefits of cloud cost optimization besides just saving money. For example, cost visibility, improved performance of applications, and cutting carbon emissions are all benefits of cloud cost optimization. As a cloud data professional, cost optimization will help you provide the most benefits to your organization. In this reading, you'll explore some quick tips for cost optimization best practices.

Five best practices for cost optimization

1. Delete unused resources and consolidate idle systems

It's common for users in a cloud system to develop temporary functions or maintain data storage that's no longer needed. Unfortunately, your organization will continue to be charged for these resources, even if they aren't using them. So, it's a good idea to check for unused jobs and resources that can be stopped and deleted. Some cloud services even offer auto shut-down features that you can adopt to avoid paying for unused resources.

2. Rightsize your system

Rightsizing is the process of adjusting computing resources, like processing power and storage, to fit the exact needs of an application or workload. This optimizes usage and ensures that your organization isn't paying for computing resources that they don't actually need.

3. Autoscale computing needs

Autoscaling is a cloud service that monitors applications, automatically scaling up or down according to the computing resources needed to meet user demands. There may be resources or jobs your organization needs occasionally that are expensive to keep running constantly. So, it's a better practice to scale these applications as needed to optimize cost while still providing necessary computing tools.

4. Use heat maps

Heat maps are visualizations that represent peaks and troughs in usage. When you use heat maps to track system usage, you can determine what systems are being used most often, and how to optimize them.

5. Single cloud vs multi cloud environment

Developing a multi cloud system can increase availability and uptime, but it can also have some drawbacks when it comes to optimizing costs. While it seems more efficient to set up a multi cloud environment, it can actually drain resources by forcing users to switch between platforms. There's also an increased cost to supporting network traffic between clouds. To avoid these challenges, consider your organization's needs to determine if a single cloud environment might actually be a better choice.

Key takeaways

Cloud environments can provide a cost-effective solution for organizations with big data needs. As a cloud data professional, part of your job is to ensure that your organization is optimizing their cloud costs, and getting the most value possible from their system.