

Advantages of cloud data warehouses

Recently, you learned about cloud data warehouses, a large-scale, data storage solution hosted on remote servers by a cloud service provider. Cloud data warehouses are a great way for organizations to collect, store, integrate, and analyze data, while also benefiting from the cloud. In this reading, you'll explore the differences between cloud data warehouses and traditional data warehouses. You'll also learn why cloud storage might be the best solution for your organization.

Cloud vs traditional warehouses

Traditional data warehouses are a great storage solution because they consolidate data from multiple source systems for data consistency, accuracy, and efficient access. Cloud data warehouses have these same benefits, along with other improvements that organizations can take advantage of. Review the table to learn about the added benefits of Cloud data warehouses compared to traditional data warehouses.

Benefit	Cloud data warehouses	Traditional data warehouses
Cost	Save time and resources since servers don't need to be hosted locally	Require resources to implement, maintain, and optimize servers
Scalability and flexibility	Can be adjusted to match changing data needs at any time, often through autoscaling	Require additional physical computer resources any time a change is requested
Uptime	Have more uptime than traditional server warehouses, meaning the system is operational more often	Have less uptime and are only operational when the server is running
Accessibility	Data is more accessible to users in different locations working at different times, meaning both analysts and stakeholders can access the data they need when they need it	Accessing data on-site involves more security mechanisms, limiting how and when data can be accessed by users

Data management	Managed by the cloud provider, which requires fewer internal resources	Require on-site experts and resources to manage storage systems
Real-time analytics and new tools	Easier to provide real-time analytics because they can ingest and immediately analyze data using AI and ML tools	Require more resources to analyze streaming workloads, and add AI and ML tools into data warehouses

Key takeaways

Cloud data warehouses are a really common storage solution for organizations using cloud data analytics. As a cloud data professional, recognizing how organizations can improve their current storage systems can help you design the most effective data storage for your organization.