

# Lesson 1

## What is Cloud Data Management? A Complete Guide



## Socialize the technology idiom of the day

### Break new ground

This idiom is used when somebody invents or introduces something completely new and innovative.

How to use it: “The company’s revolutionary product broke new ground in the smartphone market.”



## Group discussion:

### What is Cloud Data Management?

- How does cloud data management differ from traditional data management approaches, and what are the key advantages it offers?
- What are the main challenges organizations face when implementing cloud data management strategies, and how can these challenges be addressed?
- In what ways can effective cloud data management contribute to organizational efficiency, data security, and compliance with regulations?

# Key vocabulary for the reading activity

## Cloud Data Management

The practice of executing tools and policies to manage business data on cloud platforms or where the data remains sourced.

## Scalability

The ability of cloud data management solutions to be adjusted horizontally or vertically according to the requirements of a business, facilitating rapid expansion.

## Security

Ensuring the protection and integrity of data stored and accessed through cloud platforms, mitigating cybersecurity risks and unauthorized access.

## Pricing

The cost-effectiveness of cloud data management services, which often lead to immediate cost savings for companies due to tailored resource allocation.

## Automated backups and disaster recovery

Cloud storage suppliers handle and automate data backups, expediting the disaster recovery process and reducing the impact of emergencies.

## Data egress fees

Charges imposed by cloud management service providers for transferring data out of the cloud, whether back on-premises or to another cloud.

## Data integrity

Ensuring the accuracy and consistency of data stored on cloud-based devices, including measures to prevent duplication and resolve discrepancies.



# Reading comprehension activity:

## "What is Cloud Data Management? A Complete Guide"

IT infrastructure is becoming increasingly complicated to safeguard crucial business data better and work on advanced data Management applications.

Companies working in this business landscape must rely on scalable data -management solutions to remain competitive in their respective industry.

Hence it might not be wrong to say that data management in cloud data management computing has evolved as the go-to solution for many businesses.

In addition, organizations are comprehensively embracing cloud platforms to offer data availability, cost savings, adaptability, scalability, and more.

If you wish to leverage the potential of your IT infrastructure you must plan your data requirements. Build a step-by-step strategy to accomplish them. Keep reading below to learn more about cloud management services.

## What Do We Mean By Cloud Data Management?

Cloud handles data across cloud mediums, either with or without on-premises storage. In simpler terms.

Cloud management is the execution of appropriate tools, policies. These processes that allow companies to manage their business are on the cloud platforms or where the data remains sourced.



Companies increasingly acknowledge the significance of shifting workloads to the cloud platform, leveraging the benefits of the agility of the cloud platforms to optimize products and services better and reduce operational and capital expenditure.

Enterprises continue shifting enterprise functions and applications to cloud platforms. There is a vital requirement for cloud computing security measures and cloud-centric data administration tools to manage extensive business data.

## 7 Benefits of Cloud Data Management

In recent times, cloud storage has evolved as one of the most efficient and convenient approaches to gathering data online.

Higher data sources and volumes expanding and numerous individuals trying to access data from multiple locations. Handling that data has become increasingly challenging for numerous organizations.



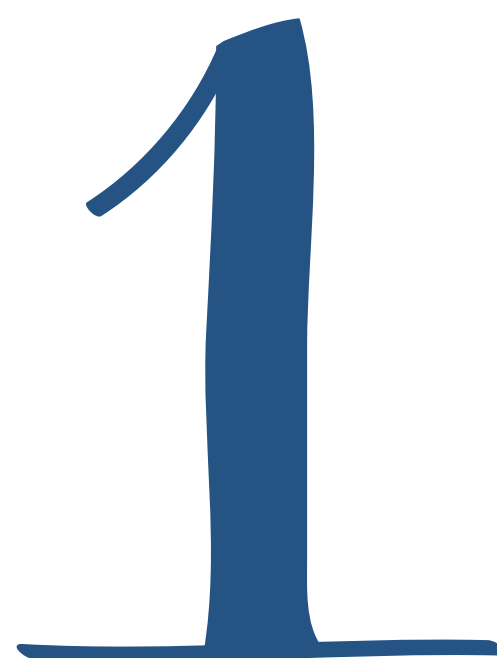
It is where cloud data-management comes into the picture. Here are some of the top advantages of cloud management.

### Security

Cybersecurity is a significant problem for almost every modern company. For example, 1.5 million Americans had their identity stolen last year alone.

Unfortunately, 2022 isn't looking any better. Data infringements can harm a company's earnings, prominence, and customers.

Cloud management services fix this by enabling cloud computing security to control authorizations and access to their services and resources. For instance, you could limit access to a crucial online file to a distinctive set of users.



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## Pricing

While the primary infrastructure migration may demand money, planning, and time, most companies instantly witness cost savings when switching to cloud management services.

Since cloud computing resources can be tailored per an enterprise's requirements. They would never levy more costs than the assistance they offer.

## Scalability

The IT requirements of every business are diverse. For instance, a multinational tech enterprise with thousands of employees requires more diverse resources than a newly started company with four to five employees.

Cloud data management is a perfect solution for both types of enterprises because their assistance can be scaled horizontally or vertically as per the requirement.

This scaling can be accomplished within a few minutes, which is excellent for a company expanding quickly. As demands grow, a company can quickly scale its cloud infrastructure without physical resources.

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## Automated backups and disaster recovery

The cloud storage supplier can handle and automate data backups so that the business can concentrate on other aspects and rest assured that its data is secure. Furthermore, having an accurate backup at all times expedites the disaster recovery process after emergencies and can help reduce the consequences of ransomware invasions.

## Enhanced data quality

A well-thought-out and integrated cloud data management solution helps organizations classify data silos and build a single repository for every data point. Data remains uncluttered, constant, up-to-date, and unrestricted for every use case, from real-time data analytics to cutting-edge Artificial Intelligence and machine learning applications to external sharing.

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## Zero maintenance

With enhanced security comes better peace of mind concerning controlled data access. In addition, cloud data management means team members can better access data for an extended time without maintenance. Likewise, this access sustains a cooperative work culture, as employees can brainstorm on a topic and share insights readily.

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## Better Integration

Cloud data management service providers are determined to deliver the best customer services to offer seamless integration. Also, when applications require revamping, cloud service providers operate these application updates automatically.

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The work force never has to hamper their work while they wait for the backend team to update everyone's system.

# Key Challenges With Cloud Data Management

Below are some fundamental challenges with cloud data management:

## Data egress fees

Numerous cloud management service providers levy a data egress fee if clients want to transfer data out of the cloud. These expenses apply whether the data is transferred back on-premises or to another cloud. Furthermore, data egress charges are designed to prevent businesses from extracting their data from the cloud platform where it presently remains.

## Data integrity

With the help of on-premises cloud data management mediums, cloud-based devices need a way of guaranteeing integrity. It usually implies avoiding duplication, fixing dissensions between contradictory documents, and other measures to guarantee information accuracy.

## Security

Even though cloud security has enhanced considerably over the past few years, it's eventually up to each company to set up data access guidelines that guarantee that only authorized employees or administrators can access the data.



# Best Practices For Managing Data on the Cloud

Cloud data management differs significantly from cloud storage, although cloud storage is an underlying need for cloud data governance. Therefore, it might not be wrong to say that cloud data management is all about data growth and access. Here are some cloud data management best practices:

## Determine your project goals

The initial step in any cloud data management task is determining the company's goals. Without explicit objectives, it becomes impossible to execute a cloud data administration strategy well suited to the company's unique objectives.

## Maintain a sophisticated infrastructure

Every process will seamlessly run if there is a chance to select whether you want to transfer data to on-premise storage or the cloud platform.

However, note that the cloud platform is not the only place for bulk data transfer. The cloud management structure must remain sophisticated, yet this entire system should maintain centralized administration.

## Establish a comprehensive framework

Before transferring data to cloud platforms, ensure you have a comprehensive framework to manage your cloud resources better.

## Getting Started With Cloud Data Management

In current times, cloud data management strategies are being voluntarily embraced across numerous industries. Still, leveraging its benefits without the appropriate cloud data management will make a slight difference to your overall enterprise experience. Therefore, it is time that you start with set cloud data management strategies to see measurable results.

Taken from: <https://www.datasciencecentral.com/cloud-data-management-a-complete-guide/>

## Multiple choice activity.

Para consolidar las respuestas ingrese al cuestionario online.

