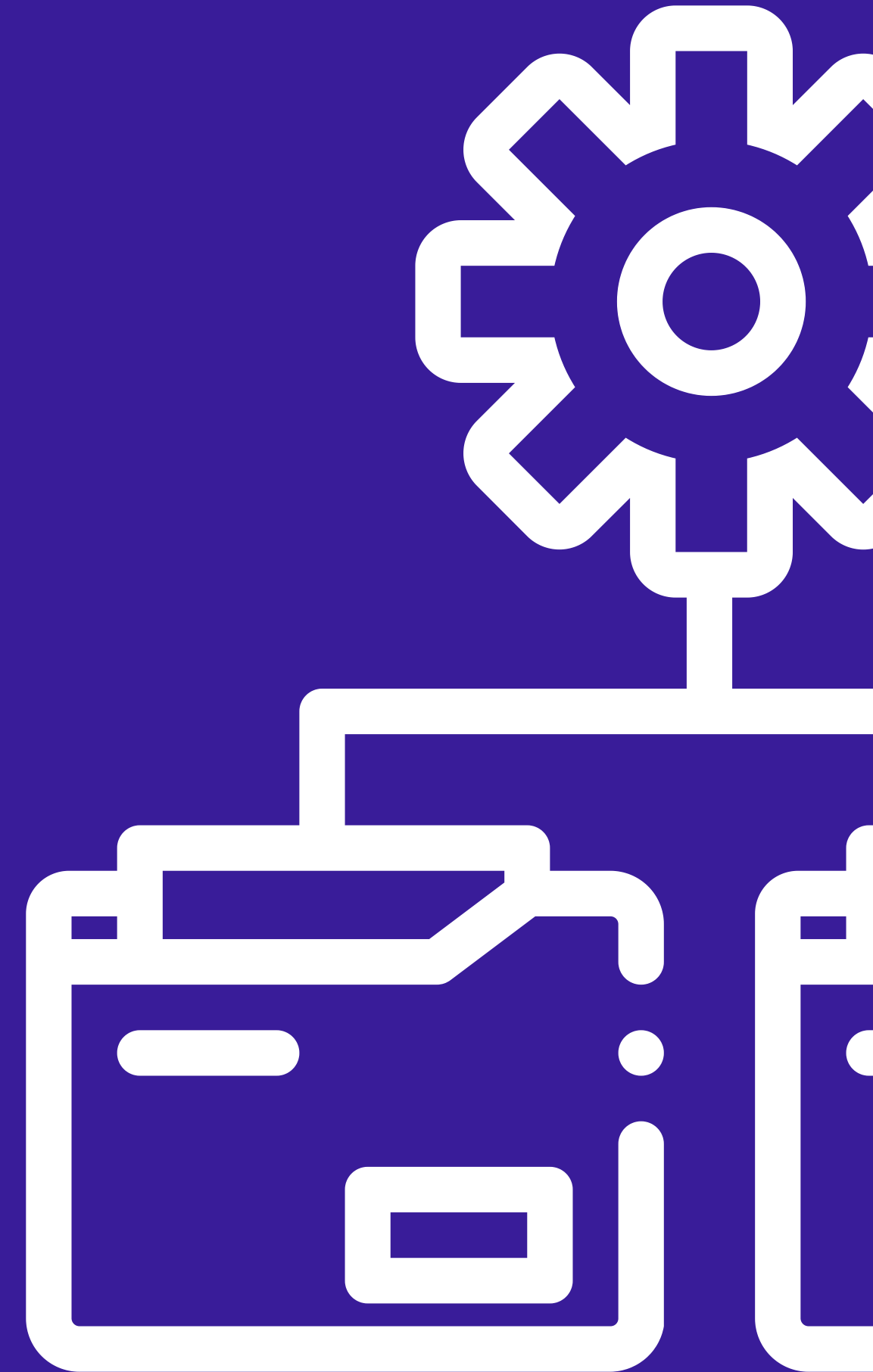
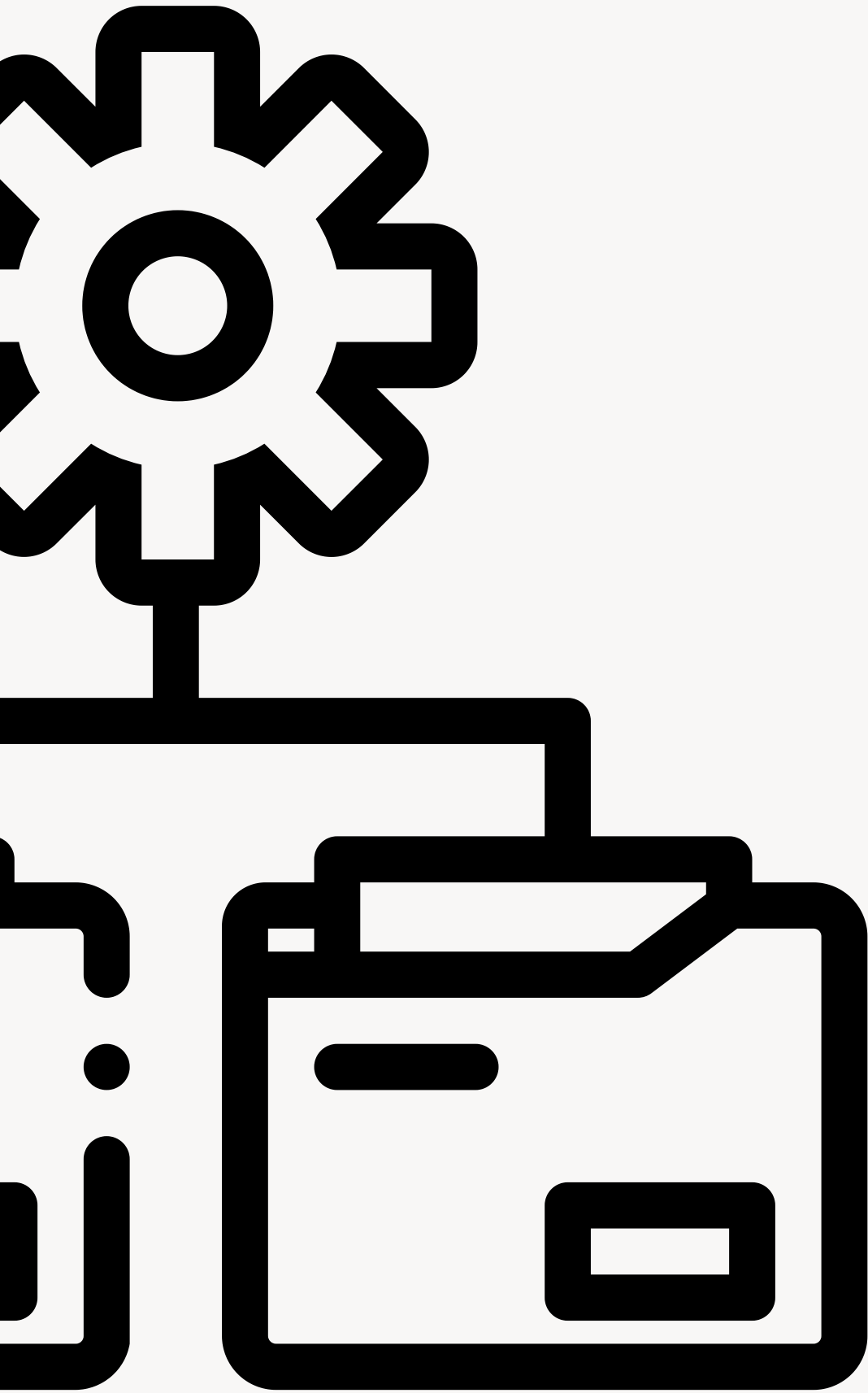


ENDAMA

BOLASA, JOSHUA G. 302-A





Topics:

**High Availability and
Disaster Recovery:**

**Big Data Management
and Analytics:**

**Cloud Database
Management:**

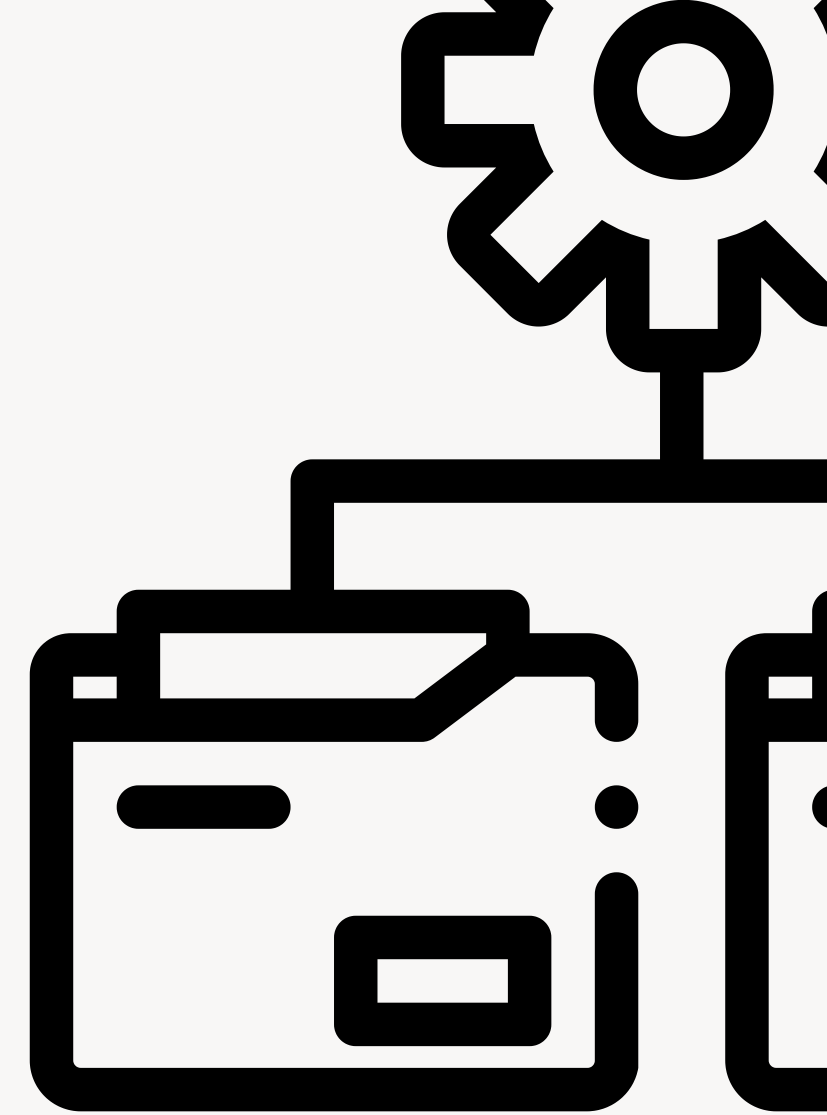
High Availability and Disaster Recovery

What is

High Availability and Disaster Recovery

High Availability

- HA means making sure your system is always up and running smoothly, without any interruptions or breakdowns.
- It's like having a backup plan in place so that if something goes wrong with one part of your system, another part immediately takes over to keep everything running smoothly.
- This helps prevent any downtime or disruptions for users trying to access your system.

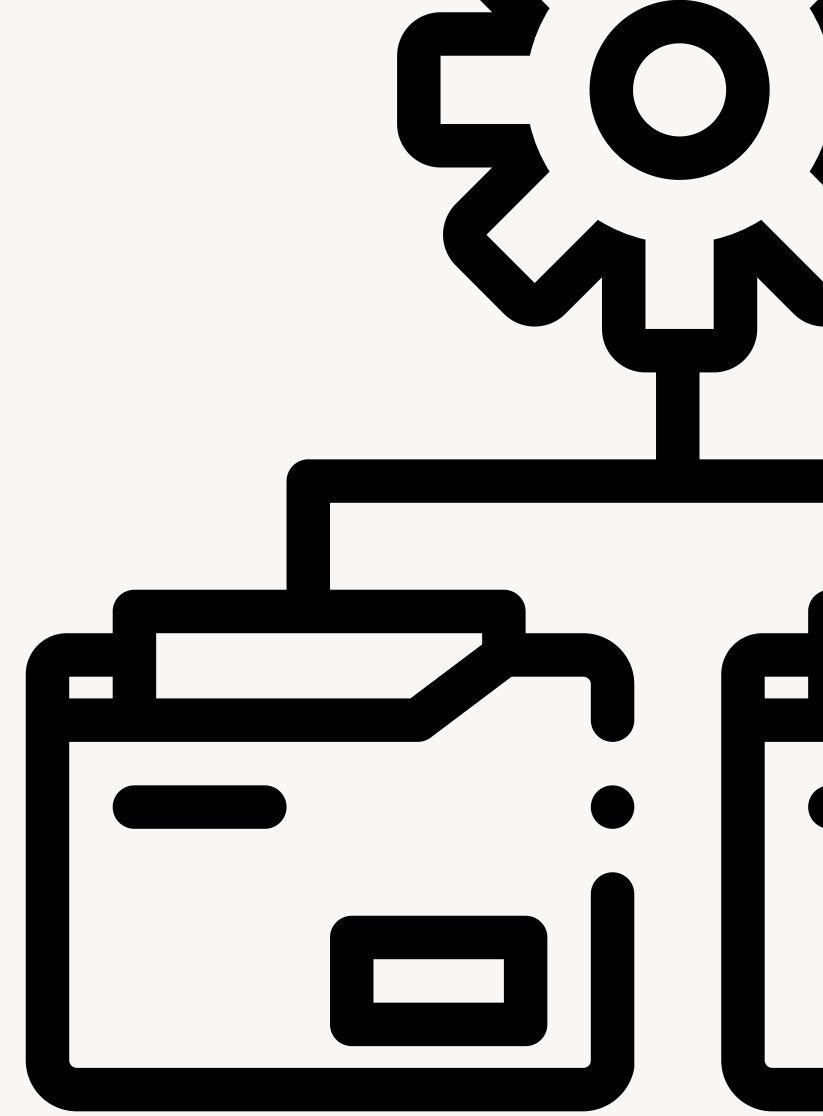


What is Purpose of

High Availability

High Availability

- **Continuous Functionality:** High Availability (HA) ensures that your systems, such as websites or software applications, remain operational around the clock, without any unexpected interruptions.
- **Reduced Downtime:** HA aims to minimize downtime, the periods when your systems are unavailable or not functioning correctly. By doing so, it keeps users productive and prevents frustration caused by outages.
- **Enhanced Dependability:** HA builds trust in your systems by providing backup mechanisms. If one part fails, another seamlessly takes over, ensuring uninterrupted service delivery and maintaining reliability.

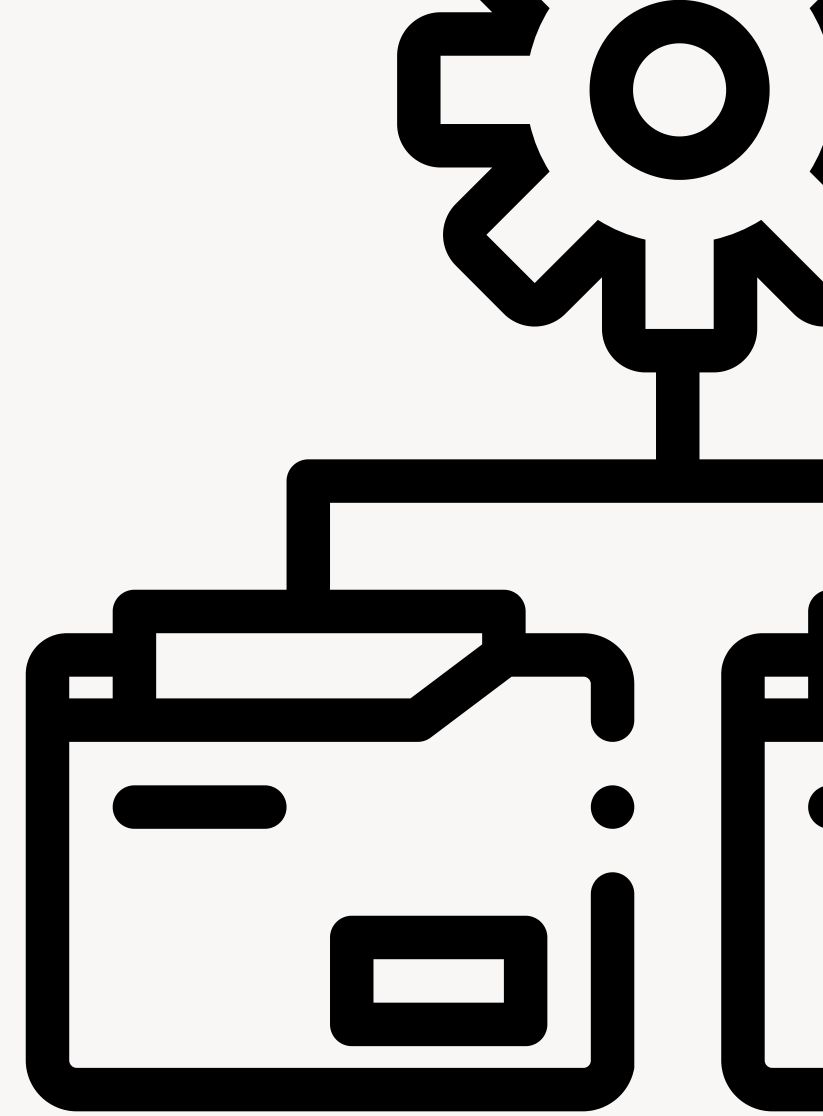


What is Purpose of

High Availability

High Availability

- **Business Resilience:** HA is crucial for business continuity. It ensures that even in the face of technical issues or failures, operations can continue smoothly, minimizing financial losses and maintaining customer satisfaction.
- **Scalability and Growth:** HA architectures are designed to accommodate growth and increased demand. They allow systems to scale up seamlessly to handle more users, transactions, or data without compromising availability or performance.

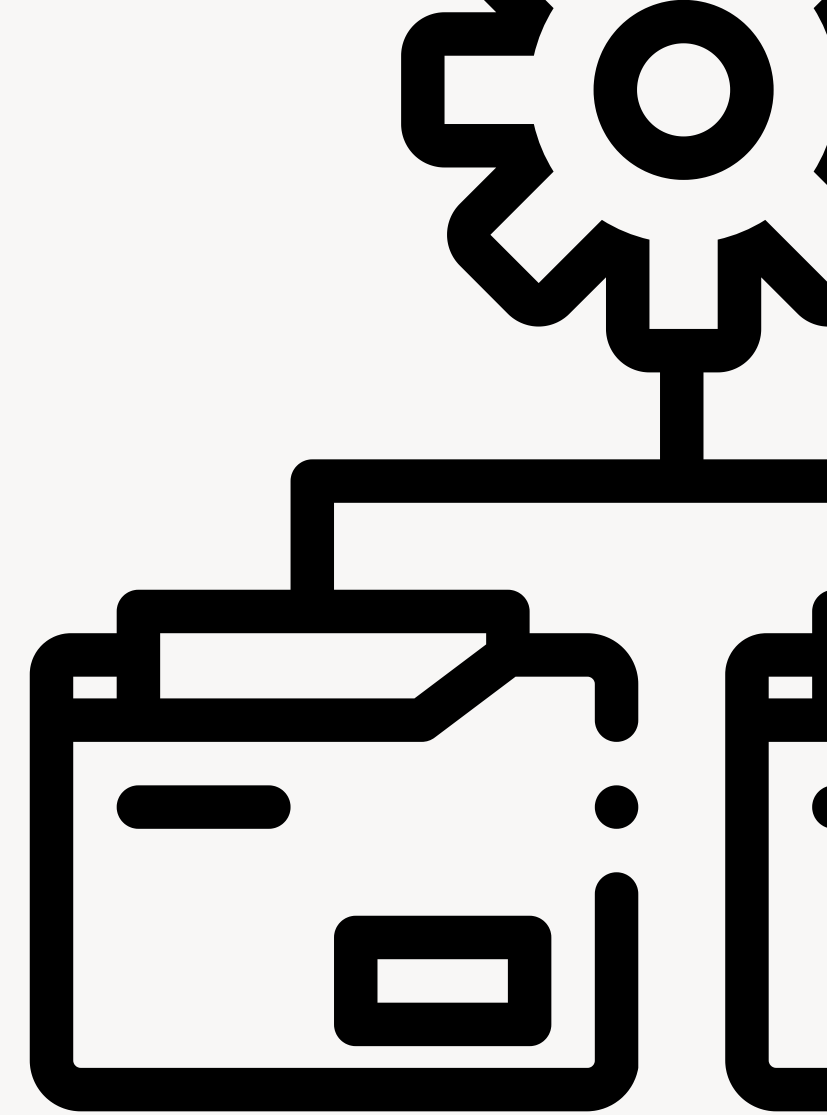


What is

Disaster Recovery

Disaster Recovery

- DR is all about preparing for the worst-case scenario, like a big disaster that could knock out your system entirely.
- This ensures that even if something really bad happens, you can recover your data and get your system running again as soon as possible, minimizing any loss or damage.



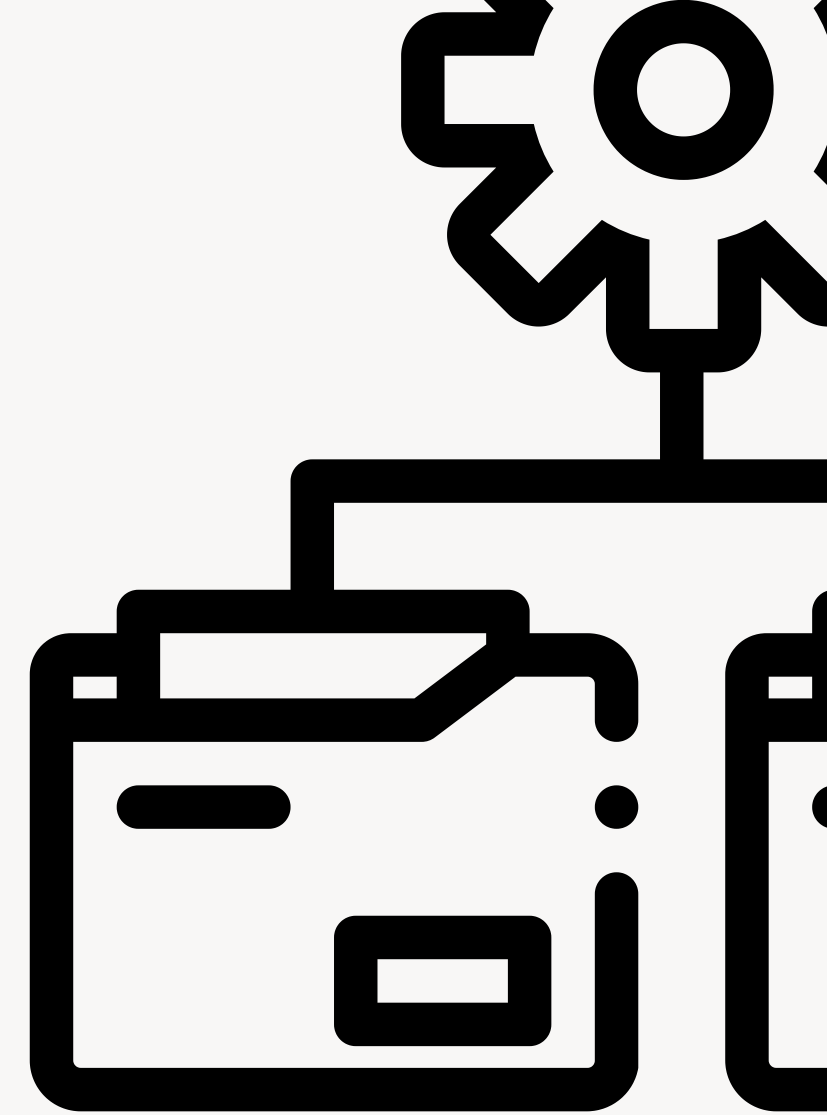
What is

Disaster Recovery

Disaster Recovery

A disaster recovery plan must address:

- Man-made disasters —including cyber attacks, terrorism, and human error.
- Natural disasters —including earthquakes, landslides, lightning, volcanic eruptions, wildfires, tornadoes, floods, hurricanes, and extreme weather conditions.

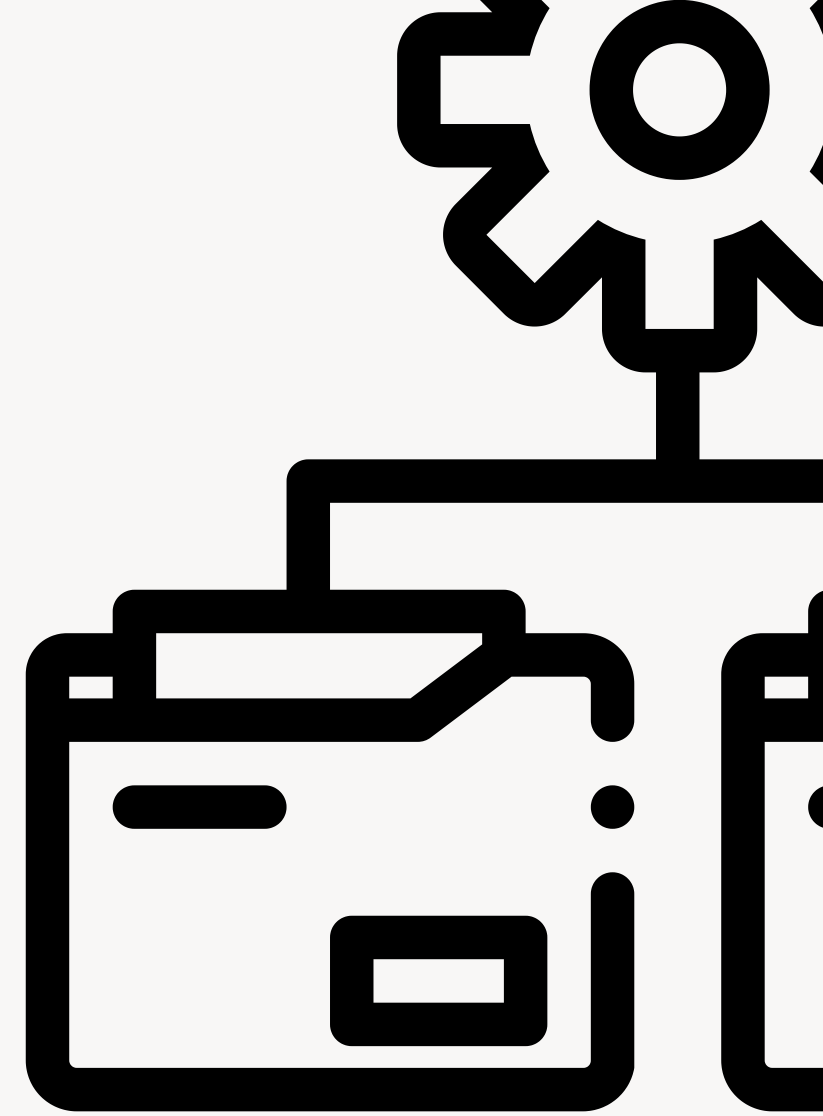


What is Purpose of

Disaster Recovery

Disaster Recovery

- Rapid Recovery: Its main goal is to get your systems back up and running as fast as possible after a major incident, minimizing any downtime and the impact on your business or users.
- Protection: DR protects your data and ensures that even if something catastrophic occurs, like a fire or cyberattack, your information remains safe and accessible.

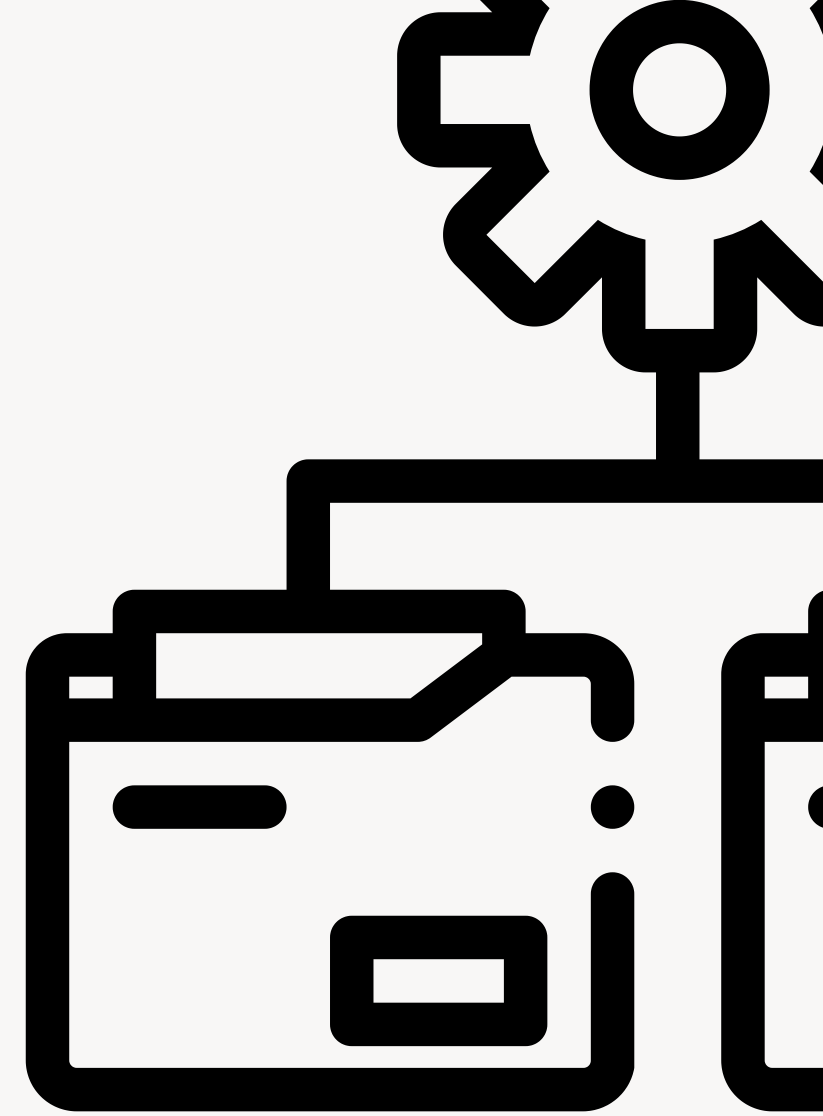


What is Purpose of

Disaster Recovery

Disaster Recovery

- **Peace of Mind:** Knowing you have a solid DR plan in place gives you peace of mind, like having insurance for your IT systems. You can rest assured that even in the worst-case scenario, you have a plan to bounce back quickly.
- **Saving Money:** Disaster Recovery helps you save money by reducing the financial impact of disasters. It does this by quickly getting your systems back up and running after a problem, which means you lose less money from not being able to do business. It also stops you from having to spend extra money fixing things.



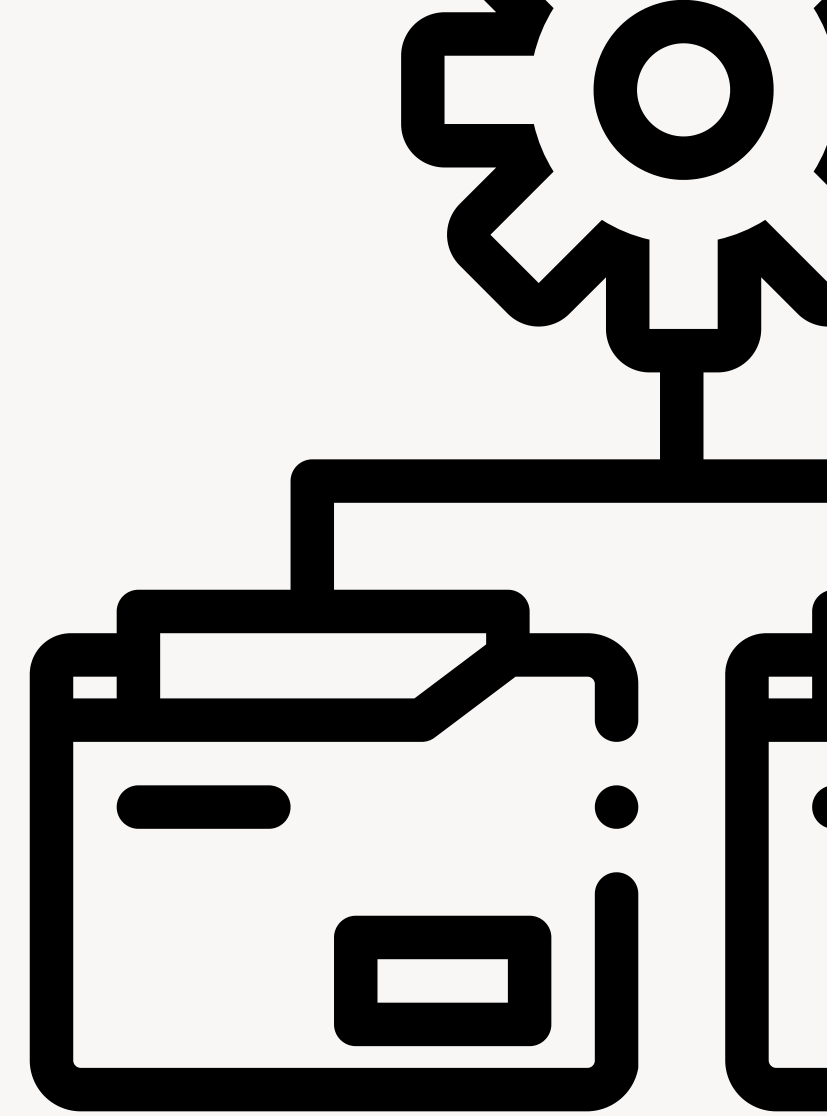
Big Data Management and Analytics

What is

Big Data Management and Analytics

Big Data Management

Big Data Management involves sorting, organizing, and controlling huge amounts of data, whether it's neatly organized or more chaotic. The main goal is to keep the data in good shape and easy to access so that businesses can use it for things like analyzing trends and making smart decisions. Essentially, it's about keeping a tight ship with data so that companies can use it effectively for things like understanding their customers better and improving their products or services.

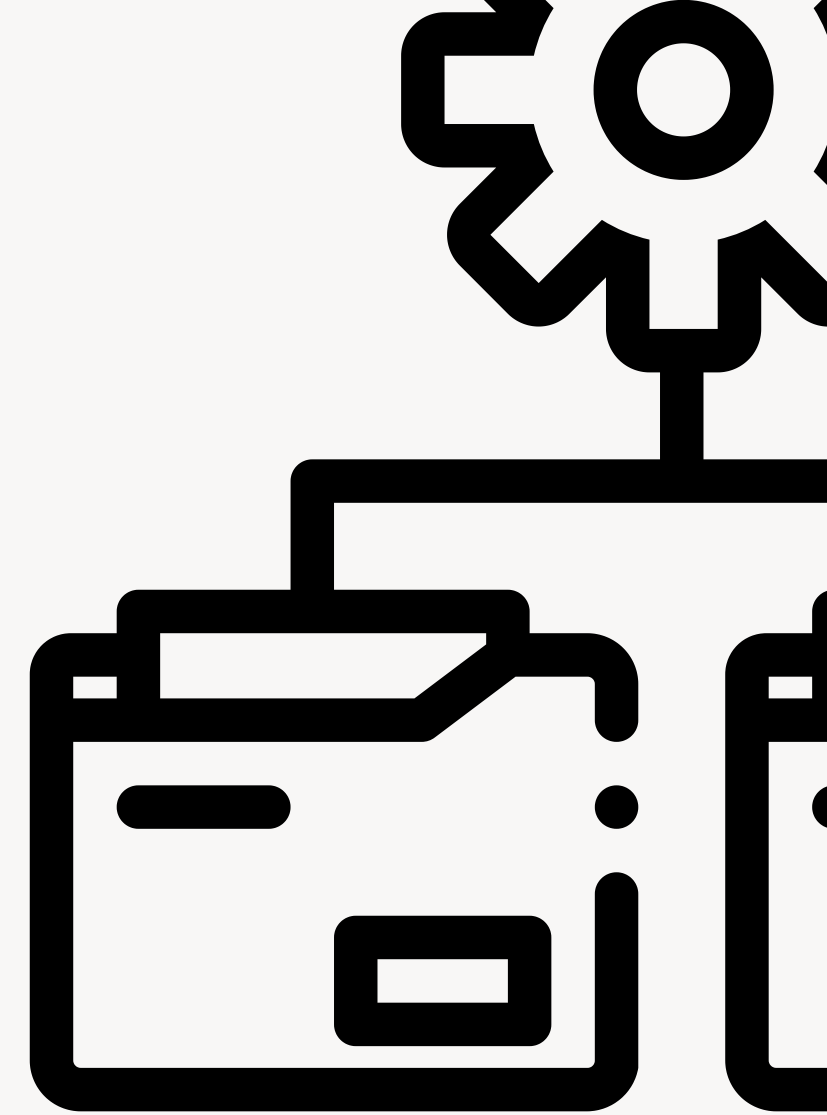


What is

Big Data Management and Analytics

Analytics

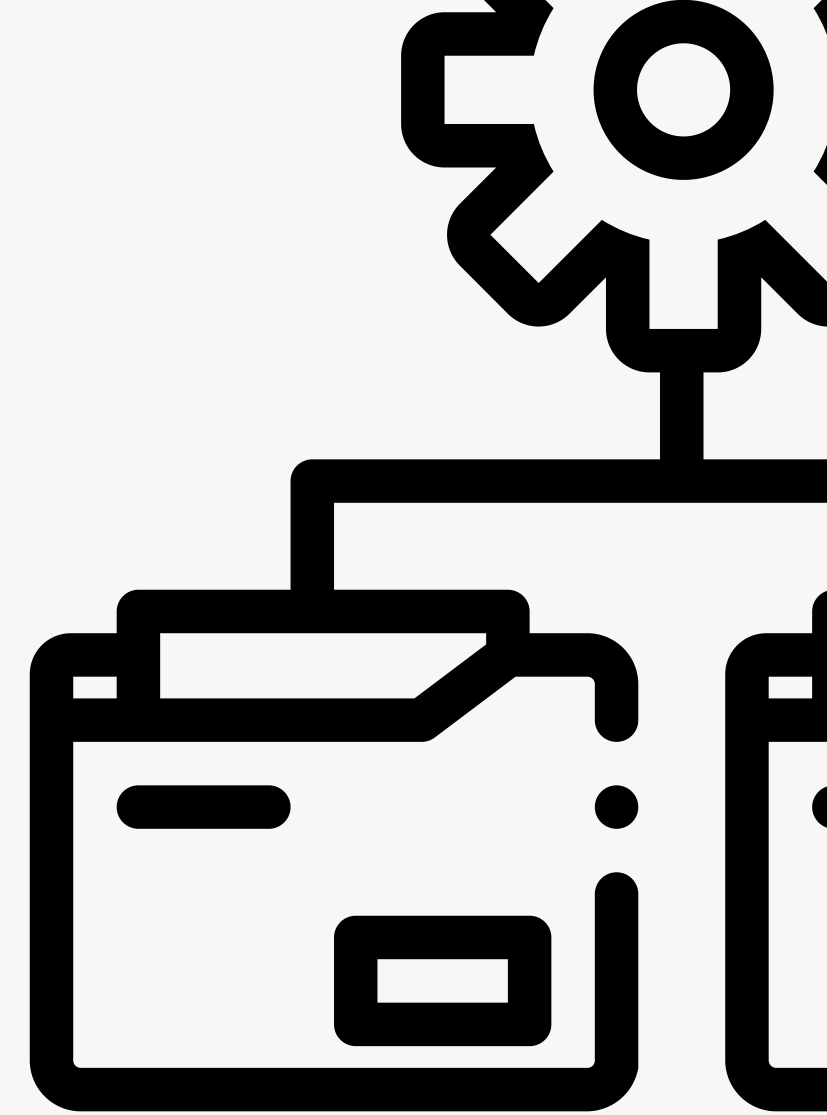
Analytics is a part of computer science that hunts for helpful patterns in data using tools like machine learning, statistics, and math. It's all about digging through massive amounts of data to discover, study, and share new insights. This process is known as data analytics or just analytics.



What is

Big Data Management and Analytics

Data analytics is about finding insights in data, while data management is about collecting, storing, organizing, and protecting data. Data management lays the groundwork for data analytics to happen.

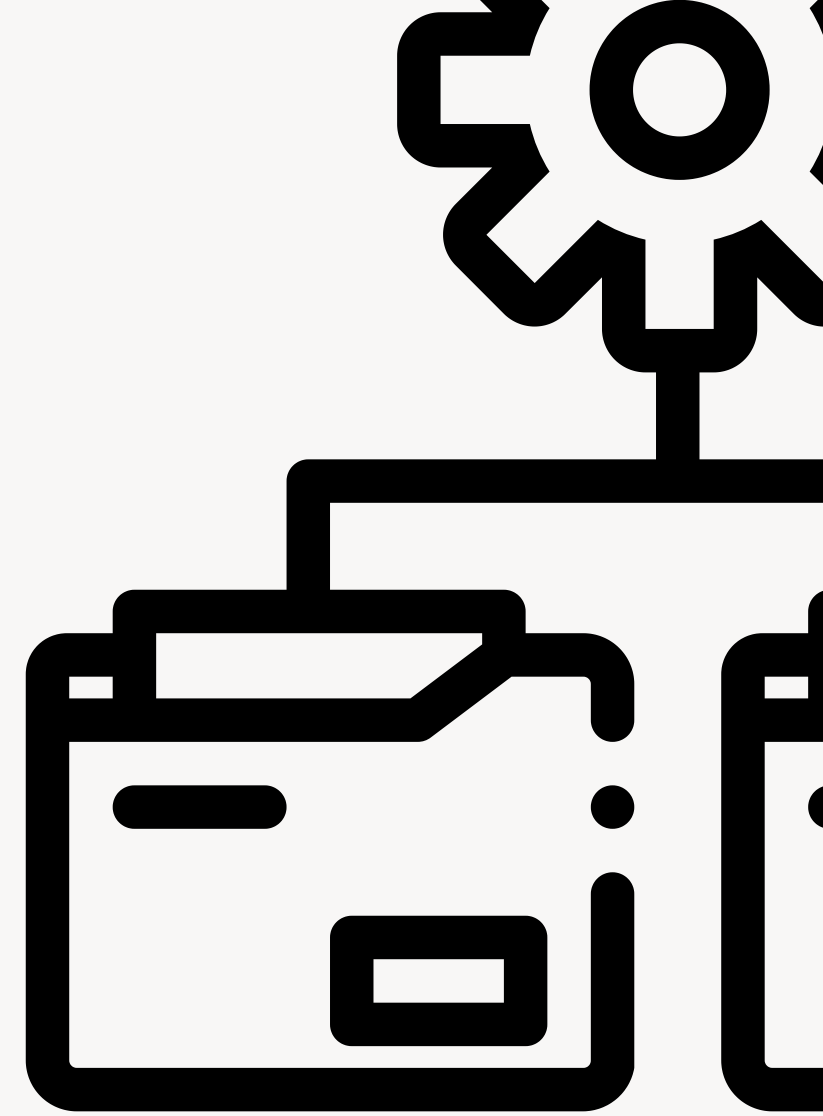


What is Purpose of

Big Data Management and Analytics

Big Data Management and Analytics

- Better Decision-Making: Helps businesses make informed decisions by handling large volumes of data efficiently.
- Insight Extraction: Extracts valuable insights from data to identify trends, understand customer behavior, and optimize operations.

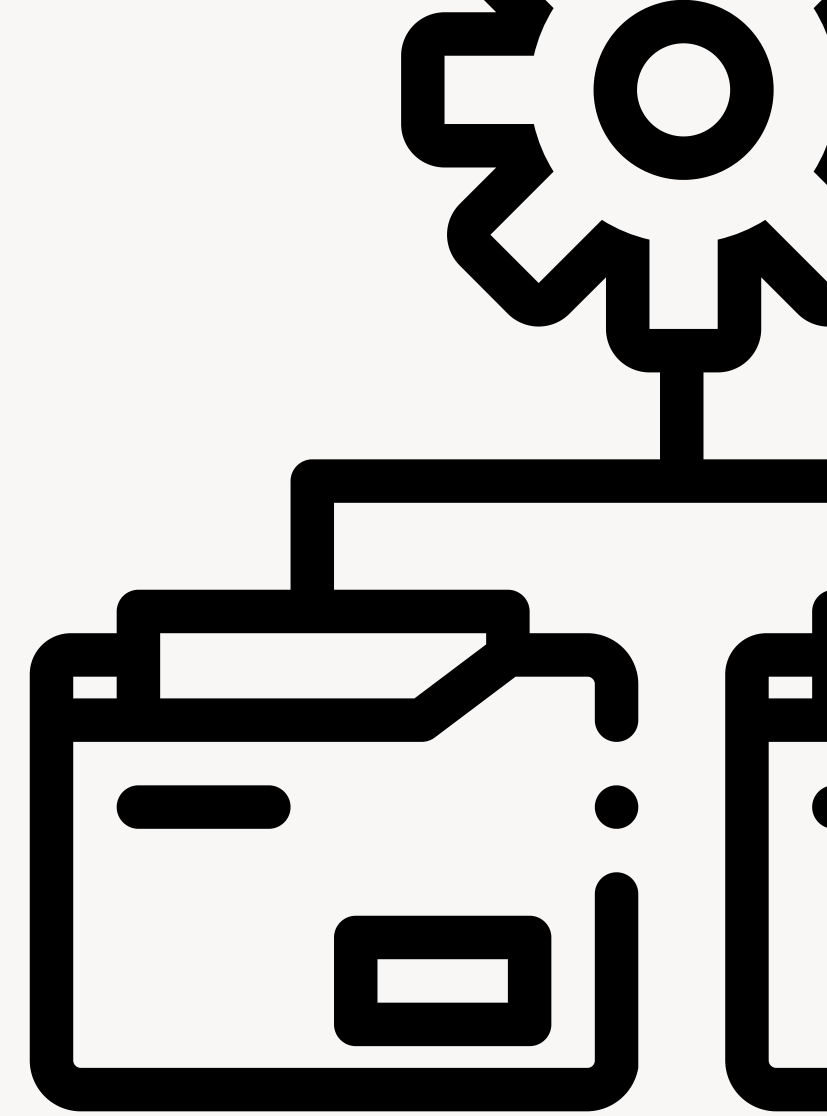


What is Purpose of

Big Data Management and Analytics

Big Data Management and Analytics

- Driving Innovation: Enables organizations to innovate by turning data into actionable information that improves business performance.
- Competitive Advantage: Provides a competitive edge by leveraging data to stay ahead in the market and meet evolving customer needs.

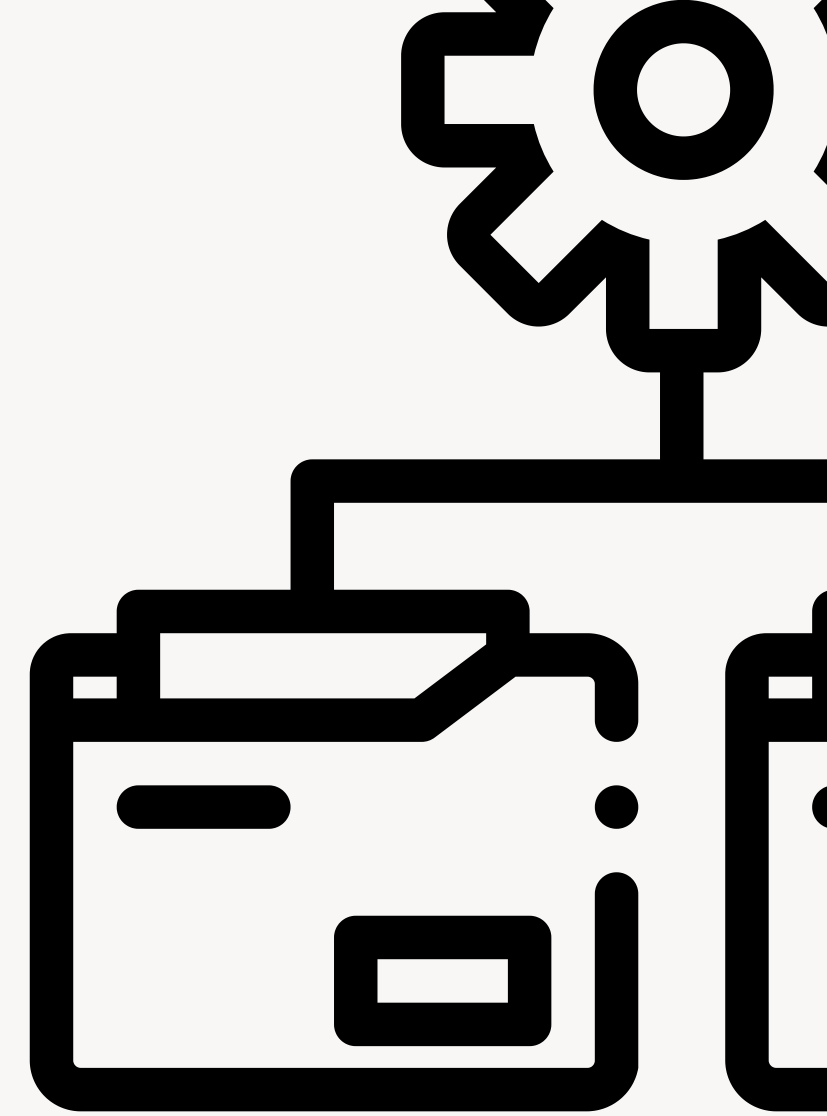


Cloud Database Management

What is

Cloud Database Management

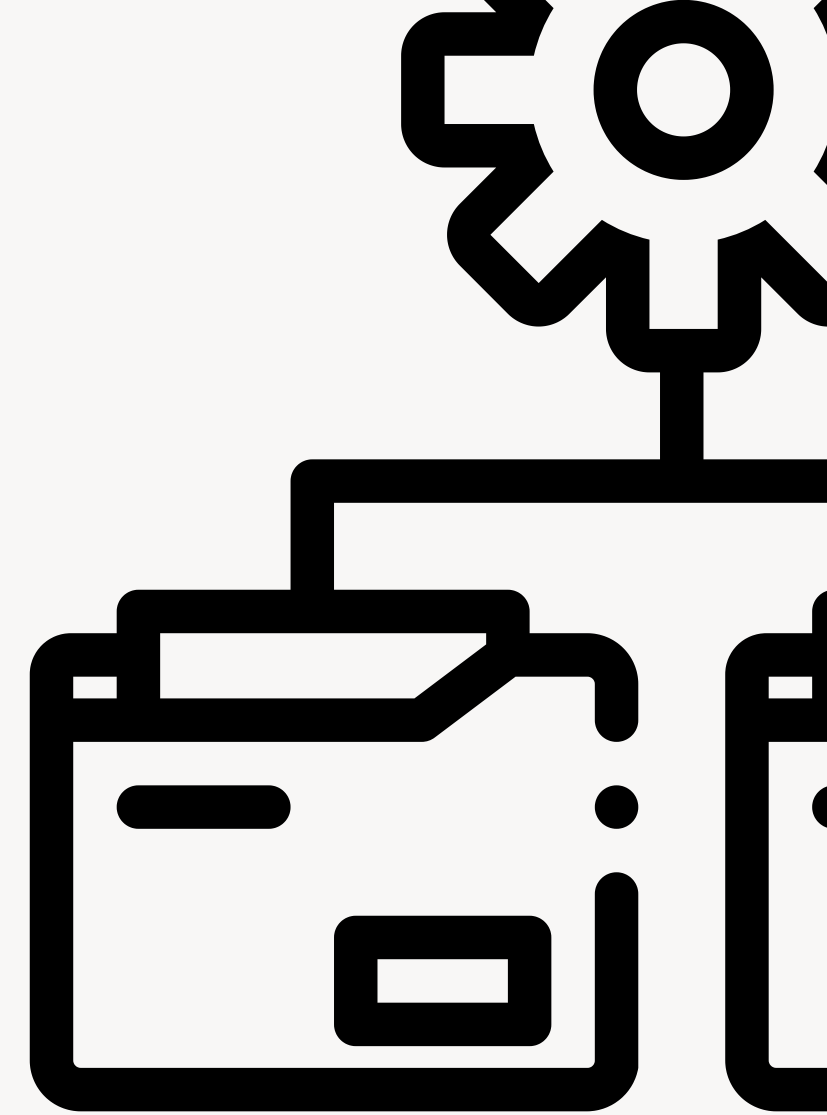
A cloud database is a system built to handle, arrange, and store data within a company. It works in either a public or private cloud setup. It's like a cloud-based tool that provides database services, combining the benefits of cloud computing with traditional database features. To set it up, users install software on their cloud platform.



What is

Cloud Database Management

Cloud databases use a hybrid cloud approach to gather, move, copy, and distribute an organization's data across different locations. With this setup, users don't have to install special middleware to send database requests globally. They can connect their applications directly to the database.



What is Purpose of

Cloud Database Management

Cloud Database Management

- **Efficient Data Organization:** Organize and structure data effectively within cloud environments for easy access and management.
- **Make it Run Well:** Cloud Database Management focuses on optimizing how the database operates in the cloud. This involves fine-tuning settings and configurations to ensure smooth and efficient performance, even when dealing with large volumes of data.
- **Make Things Easier:** Managing a database can be complex, but Cloud Database Management aims to simplify the process. By centralizing management tasks and automating routine operations, it reduces the time and effort required to keep the database running smoothly.

