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# Data Warehouse vs Data Mart: Delineating the differences

Organizational success requires valid, reliable data to make good business decisions. Complicating that task is the exponential proliferation of decentralized data to be consolidated and analyzed for real accuracy. From the top of your organization down to a single line of business, understanding the data tools that best serve you is essential.

In this article, we examine the data warehouse and the data mart. The data warehouse aggregates large volumes of data from all over your organization for analytics, reporting, and decision-making on a large-scale basis. On the other hand, the data mart uses smaller subsets of data warehouse information for accurate analysis on specific areas, departments, and lines of business. Let's start with the data warehouse.

## The data warehouse for large scale aggregation and analytics

The data warehouse acts as a central data repository that ingests and consolidates multiple data sources from disparate areas within an organization, such as marketing, sales, finance, and more. It accepts structured, semi-structured, and unstructured data from internal and customer-facing applications, as well as external systems. The data warehouse integrates the information for easy reporting and data analytics that enable the holistic business intelligence you need to strategize and execute.

## How the data warehouse works

The data warehouse has four different stages:

1. Offline operational database – Operating system data is copied to a server so that data loading, processing, and reporting do not affect the system's performance.

2. Offline data warehouse – Data warehouse receives updates from the operational database on a regular cycle for business insights.
3. Real-time data warehouse – Transactions and events in the operational database are updated to the data warehouse in real time.
4. Integrated data warehouse – All daily organizational database transactions update in the warehouse simultaneously, then are forwarded to the operational database.

## Improving business outcomes with data warehousing

Multiple industries, spanning from banking, to healthcare, retail, and more, are realizing the benefits from the large-scale power of data warehousing. From analyzing stock markets and trade patterns, to medical treatments and patient outcomes, to customer buying patterns and revenue forecasting and beyond, data warehousing is essential to business outcomes.