

Cloud Data Warehouses Explained

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Data warehousing involves collecting data from disparate or various sources and storing the data inside a single repository or database that can be used to help in management decisions. This is because the data contains information that can be [used for business intelligence](#).

The data is used in terms of business intelligence to draw insights and make better business decisions within the company. Sometimes additional operations take place, such as data cleansing, to make sure the data is of quality useful for later reporting. Extract, transform, load (ETL) and extract, load, transform (ELT) are two of the main ways to build a data warehouse system.

The data is uploaded from transactional systems, relational databases, and other sources related to a company's operations.

A cloud data warehouse hosts the database within a public cloud managed service, which is optimized for analytics, scale and ease of use.

It is also the third wave of innovation, according to Dave Mariani of [ATSCALE](#), with on-premise and legacy data warehouse tech being abandoned in favor of the cloud. This is affecting data management as a whole within enterprises.

The benefits of cloud data warehouses range from easy access, scalability, performance and lower maintenance costs. This is because of the elasticity that the cloud provides - allowing businesses to harness its power rather than host all the information within its own servers on premise. This in turn saves companies costs and allows them to be able to scale faster as well as easier than if having to purchase its own equipment.

Companies can focus on running their business while freeing up server space or capital and leveraging it from a company specializing in such hosting. New hardware does not need to be purchased internally. Companies can scale easily this way and lower operational costs. Analysts are also able to analyze the data in real time data and this can help in overall analytics.

Many vendors exist in this space ranging from Amazon Redshift to Google BigQuery and Microsoft Azure SQL Data Warehouse. It is worth analyzing them carefully in order to consider the best option for your business needs.