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Why Data Warehouse is Still the Lynchpin to Manage Data

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When the world is shifting gears fast to digital transformation, data management has become more important than ever. Data ain't the only factor to fuel the transition of businesses from analogue to digital. Still, it is so critical to riding the digital wave. **Digital transformation** needs the deployment of emerging technologies. The application of such cutting-edge technologies has proliferated the use of connected devices. Every moment, the devices are generating swarms of data.

Leveraging the volume, variety and velocity of data is vital to derive actionable insights. We have new age and futuristic data management solutions in data marts, **data lakes**, data lakehouses, and **data fabric**. It begs the question- Are the time-honoured data warehouses getting obsolete in data management?

The Most Valued Data is Still in Data Warehouses

For any enterprise, the data warehouse continues to be the crown jewel. The lynchpin, too, in managing and governing data. These systems contain highly refined and curated economic data.

"**When combined, the enterprise data warehouses of the top 2000 companies worldwide have in them the most valuable portion of the global economic data. They are like the dinosaurs of the database business, but a species never threatened with extinction.**"

Fed by a multitude of sources, data warehouses are the single source of truth. When the cloud wars are centred on data technology, a data warehouse in the cloud represents a massive centre of gravity for the rest of the enterprise. A Data Warehouse environment contains an extraction, transformation, and loading (ETL) solution, an online analytical processing (OLAP) engine, customer analysis tools, and other applications that can handle terabytes of data.

Why Data Warehouses Are Crucial for Emerging Tech adoption

Data is the new oil. Like oil, data needs to be refined for monetizing and unlocking business value. This is where a data warehouse assumes significance. No business can grow without a repository of legacy data. The lineage and quality of data determines the scale of adoption of **Emerging Technologies** like **Artificial Intelligence (AI)**, Machine Learning (ML) etc. ML models rely on four data types - numerical data, categorical data, time series data, and text data. Since a data warehouse is capable of storing terabytes and petabytes of data, it helps you analyze different time periods and trends in order to make future predictions.



What’s more, a good data warehouse gives a headstart to any AI solution. A data warehouse aggregates raw data from multiple sources into a central repository, structured using predefined schemas designed for **data analytics**.

To make sure that supervised learning AI is trained to an adequate level, it relies on the availability of high-quality data as in data warehouses.

You cannot develop accurate insights with inferior quality of data. Compromised data quality is also a drag on the productivity of a focused data team. Data warehouse overcomes this bottleneck by catering to the entire data cycle- sourcing, ingestion, analysis, data wrangling (organizing messy and complex data), data transformation and data exploration.

Data warehouses are anchoring the transformation of businesses in a **digital-first** world. From mining data for extracting business insights to running business on data- are you buying in the change?



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