

Benefits of a Data Lake

- ▶ **Ensure data availability all the time.** It gives room for the democratization of data, which implies that data is available not just to managers but to all employees irrespective of their levels or designation. All employees have access to all, and they also have the option of only using those that are essential in meeting their business or department needs.
- ▶ **Cheap Scalability.** One of the biggest benefits of a Data Lake to the enterprise is the ability to keep a large amount of data for a considerable price, which is less than a managed data enterprise warehouse.
- ▶ **Chance to legitimately hoard organization data.** Because the use of Data Lakes is cheap, and it offers a huge variation in data types, companies have the chance to hoard their data. This implies that if a particular data is of no value now, a company can store it for the future when will have significant value. Also, Data Lakes allows data to be fed through in native format, which means that it can be stored and added over time, making it more useful for future analysis.
- ▶ **Provides quality data for real-time analytics.** Due to the processing power of Data Lakes and the tools used, various departments can have access to quality data. This is because Data Lake leverage on the large quantities of data and deep learning algorithms to arrive at real-time decision analytics.
- ▶ **Supports SQL and other languages.** Although the traditional data warehouses technologies support SQL, which is good only for simple data analytics. In advanced cases, a Data Lake is employed because it offers various options and language support for analysis; it also provides features to tackle advance requirements.
- ▶ **Preserves raw data for exploration.** Data Lake has the capability of preserving raw data for data exploration and data science. It provides analytics environment for data scientist where data exploration and data related task can be performed without waiting for the IT department to model data and load them.
- ▶ **Versatility and scalability.** Unlike the traditional data warehouse, Data Lake offers scalability at a very cheap price. Data Lake makes use of a scalability tool known as Hadoop, which leverages the HDFS storage to handle a growing amount of data and accommodate data growth. It is also versatile, which implies that it can be used to store both structured and unstructured data from diverse sources. It can store multiple media, chat, social data, binary, and any other form of data.

- Data Scientists / Power Users
- Batch Processing
- Data refinement / Cleaning
- ETL Workloads
- Store older / backup data
- Sandbox for data exploration
- One-time reports
- Quick access to data
- Don't know questions

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