

Asmita Porwal  
Batch-1  
17/1/2023  
Data engineering

## **DATA WAREHOUSING**

- Data Warehouse is like a special storage space for data that helps managers make decisions.
- It's organized around specific topics, includes information from different sources, keeps track of changes over time, and doesn't easily lose data.
- The main goal is to give managers a clear and complete view of how the business is doing at any given moment, so they can make informed decisions.

### **Features of Data Warehouse**

1. Subject-oriented
2. Integrated
3. Time-variant
4. Nonvolatile

#### **Subject-oriented:**

Think of a Data Warehouse like a giant filing cabinet for a business. In a regular office, you might have different drawers for different purposes, like one for customer information, another for sales records, and so on. In a subject-oriented Data Warehouse, it's organized based on what the business cares about (subjects), not just how the information is used day-to-day. For example, instead of having separate folders for customer details in sales and finance, all customer information is neatly organized in one place for decision-makers to easily analyze.

#### **Integrated:**

Imagine the business has information stored in different formats and places, like files on a computer, databases, and records from online transactions. Integrated in a Data

Warehouse means bringing all this information together in a way that makes sense. It's like translating everything into a common language . This helps avoid confusion and makes it easier for decision-makers to trust and understand the information because it's all in one unified system.

### **Time-variant:**

Think of the Data Warehouse as a big diary for the business. Unlike day-to-day logs, this diary covers a much longer time imagine looking back at the last 5-10 years. It's like flipping through the pages of a company's history book, showing how things have changed over a significant period. Decision-makers can use this historical perspective to understand trends, patterns, and how the business has evolved.

### **Non-volatile:**

Once information goes into the Data Warehouse, it stays there like a permanent record. It's like adding chapters to the business's storybook, but you can't go back and erase or change what's already written. The warehouse keeps a complete history, and every new piece of information adds to it. This ensures that decision-makers have a reliable and unchanging reference point for understanding the company's past, helping them make decisions based on a solid historical foundation.