

## DATA LAKE VS DATA WAREHOUSE

# Simple explanation for data learners

Most beginners get this wrong ❌



## WHY IS THIS CONFUSING?


- Both store data
- Both sound similar
- Explanations are too technical

But they solve different problems



THINK OF IT LIKE THIS



 Data Lake = Storage room

 Data Warehouse = Office desk

Both are useful. For different jobs.



## DATA LAKE

- Stores raw data
- Any format (CSV, logs, images)
- No fixed structure

Store first. Decide later.





## DATA WAREHOUSE

- Stores clean data
- Structured tables
- Validated before storing

Clean first. Store later.



## USE A DATA LAKE WHEN

- You don't know your questions yet
- You want flexibility
- You work with AI / ML
- You want cheap storage



## USE A DATA WAREHOUSE WHEN

- You need dashboards
- You track KPIs
- Business depends on accuracy
- Speed matters



KEY DIFFERENCES

Data Lake	Data Warehouse
Raw data	Clean data
Flexible	Structured
Discover insights	Trust insights





## WHAT SHOULD YOU LEARN?

- Beginner analyst → Warehouse
- Data scientist → Lake
- Career growth → Both



Explore in a Data Lake



Decide in a Data Warehouse



THE REAL SECRET 🤫

Top companies  
use BOTH

*Mahfuzatul*  
B U S H R A