

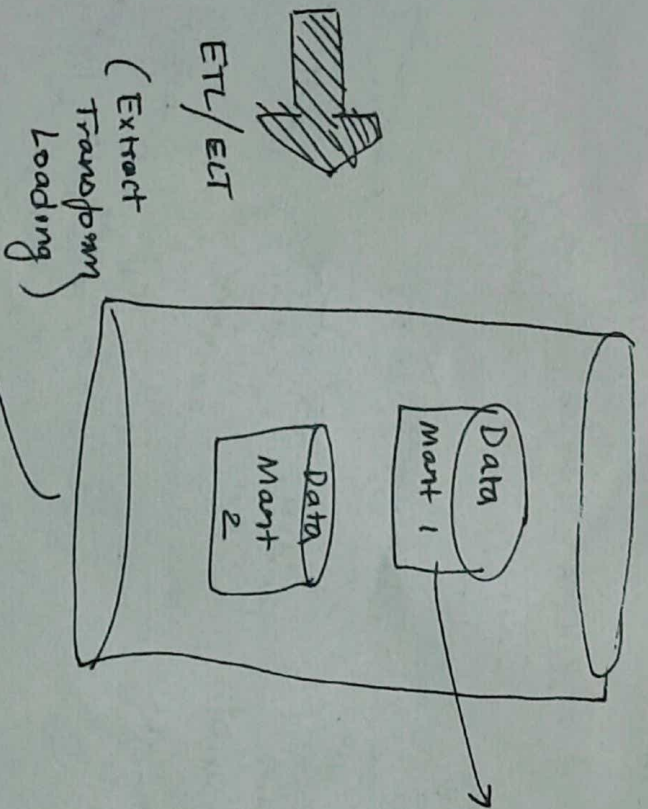
Data collection

- ① Clinical trial - gov./
- ② Who.int/
- ③ Data science.nih.gov/
- ④ Other External sources

I use these three architecture

- ① Web layer on Client layer
- ② Application
- ③ Storage layer.

In the Datawarehouse, All clients will not have access to all information present here. So, I have created a data mart, so they get only required information.



Data Warehouse

Covid 19 vaccine Related information

Different types of vaccine available under pre-clinical trials and clinical trial

[Status (whether Phase I/II/III)]

Results so far obtained

Funding

Experience of the company

Mechanism of action

Number & Nature of subjects

Manufacturing capacity

If contains one Database where it contains of the Data related to the subjects [Age, Group, Gender, Race/Nationality, Socio strata, Storage condition, no of visits].

Each Component Responsibility:-

① Data Warehouse -

A Database only contains the updated or current Data but it contains all data and even the historical data. It will be useful in the Decision making process.

② Data Mart - It is useful for clients to find a particular data for the ~~starts~~ reducing their time loss. Focuses on particular area of Data warehouse.

③ ETL/ETL - It is very useful for the Data Normalization. Transform plays an important factor in a datawarehouse to be Normalized.

④ Web layer - By using this layer we can access the web page. The main functionality of the layer is to communicate with application layer.

⑤ Application layer - It interacts with storage layer and sends required information to the web layer. App layer communicates

⑥ Store layer :- Data is stored in the layer. App layer communicates with store layer to retrieve layer.

⑦ ODBC (Open Database Connectivity)
It is the standard Application Interface for accessing database management system (DBMS).

Challenges Involved :-

① In Data collection, we have collected the information from various Database or Data sources. It was difficult to handle many data types (different DT) but Solved using ODBC.

② There making Data warehouse Schemas is very complicated as many data are collinear in the database. (Age, Gender, etc...)

ODBC - It used to access any data from any application Independent of DBMS.