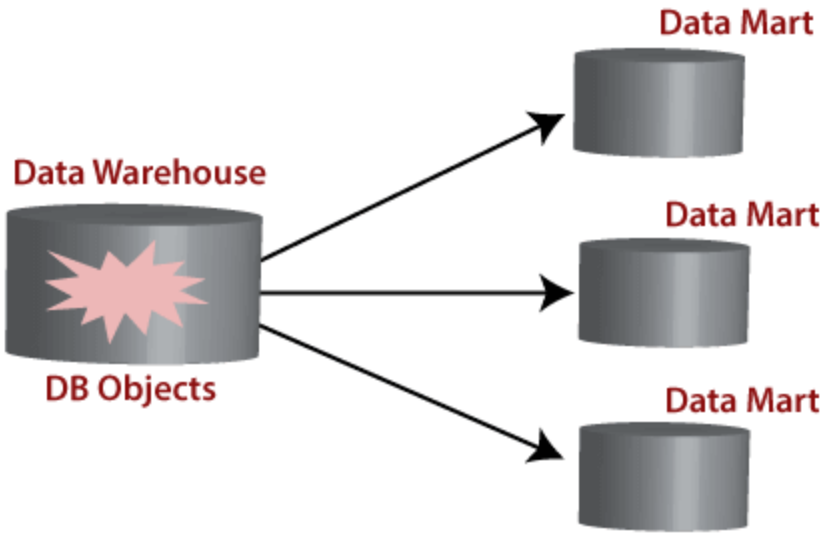
Data mart

- It is a subset of the data stored in the data warehouse. Data mart is focused only on particular function of an organization and it is maintained by single authority only, e.g. finance, Marketing. Data Marts are small in size and are flexible.
  Data mart is such a storage component which is concerned on a specific department of an organization.



Reasons for creating a data mart

- Creates collective data by a group of users
- Easy access to frequently needed data
- Ease of creation
- Improves end-user response time
- Lower cost than implementing a complete data warehouses

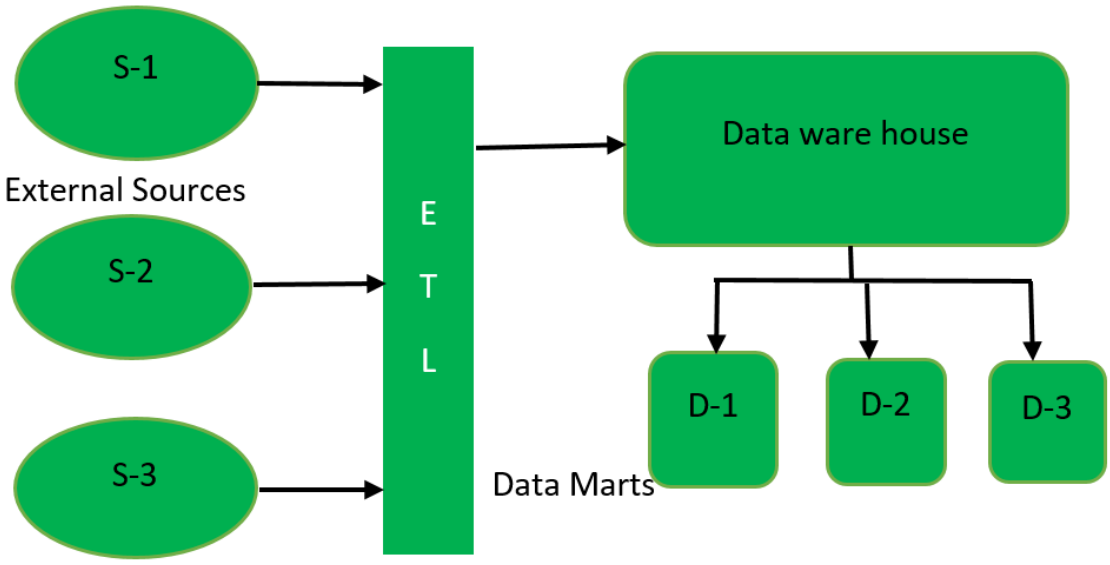
- Potential clients are more clearly defined than in a comprehensive data warehouse
- It contains only essential business data and is less cluttered.

Types of Data Marts

➢ There are mainly two approaches to designing data marts. These approaches are

- **Dependent Data Marts**
- **Independent Data Marts**
- **Hybrid Data Mart**

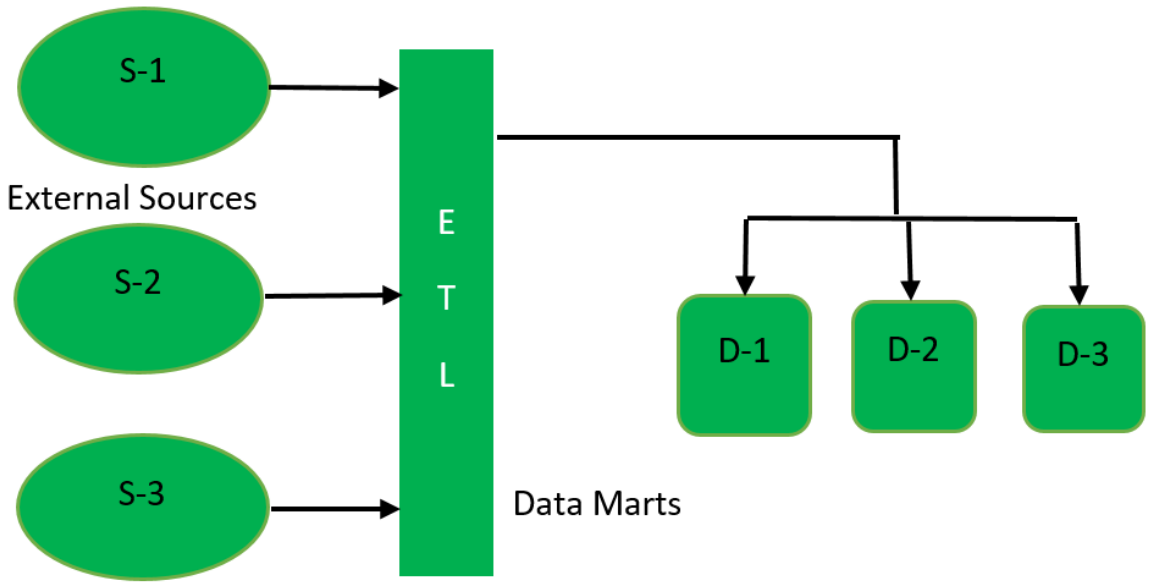
1. Dependent Data Marts



- Dependent Data Mart is created by extracting the data from central repository, Datawarehouse. First data warehouse is created by extracting data (through ETL (Extract/load/transform) tool) from external sources and then data mart is created from data warehouse.

- Dependent data mart is created in top-down approach of data warehouse architecture. This model of data mart is used by big organizations.

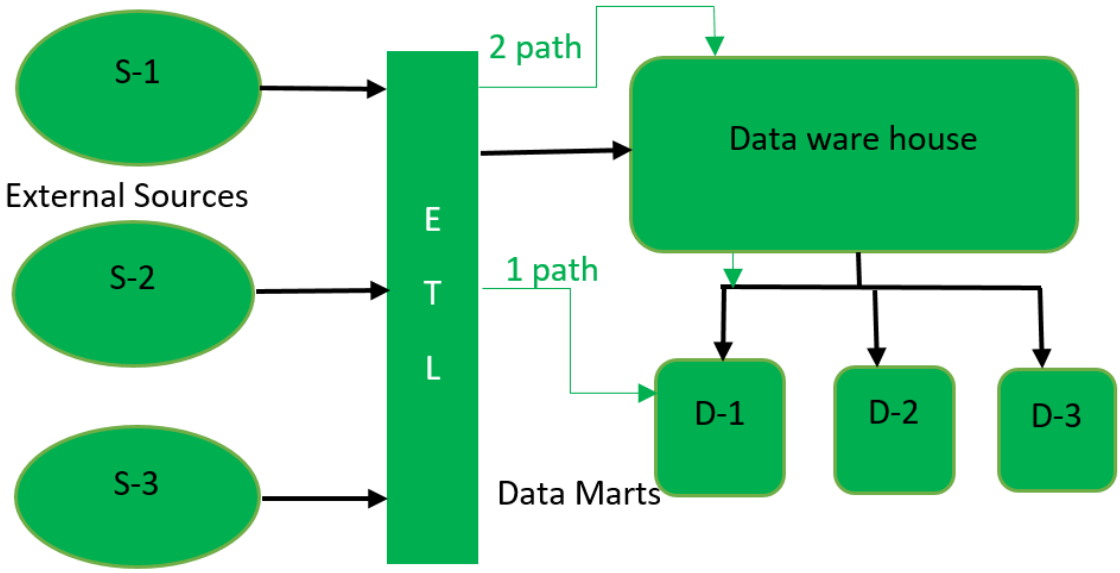
2. Independent Data Marts



- Independent Data Mart is created directly from external sources instead of data warehouse. First data mart is created by extracting data from external sources and then data warehouse is created from the data present in data mart.

- Independent data mart is designed in bottom-up approach of data warehouse architecture. This model of data mart is used by small organizations and is cost effective comparatively.

3. Hybrid Data Mart



- This type of Data Mart is created by extracting data from operational source or from data warehouse. 1Path reflects accessing data directly from external sources and 2Path reflects dependent data model of data mart.