ETL - Design & Implement a Data Warehouse

Learn how to design, implement, and optimize a data warehouse. Drive business intelligence and decision-making using ETL processes. This presentation covers the key steps involved in creating an efficient data warehouse.

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Understanding ETL

ETL (Extract, Transform, Load) is a fundamental data management process.

1 Extract

Collecting data from various sources, APIs. data for analysis.

2 Transform

Cleaning, organizing, and processing as a data warehouse.

3 Load

Storing data in the target system, such such as databases and

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Star Schema Vs. Snowflake Schema

Understanding the key differences between Star and Snowflake Schemas. This helps to structure your data warehouse effectively.

Star Schema

- Central fact table.
- Directly connected dimension tables.
- Faster query performance.

Snowflake Schema

- Hierarchical dimensions.
- Saves storage space.
- Complex queries.

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Choosing a Business Case

Fashion boutique owned by an independent designer.

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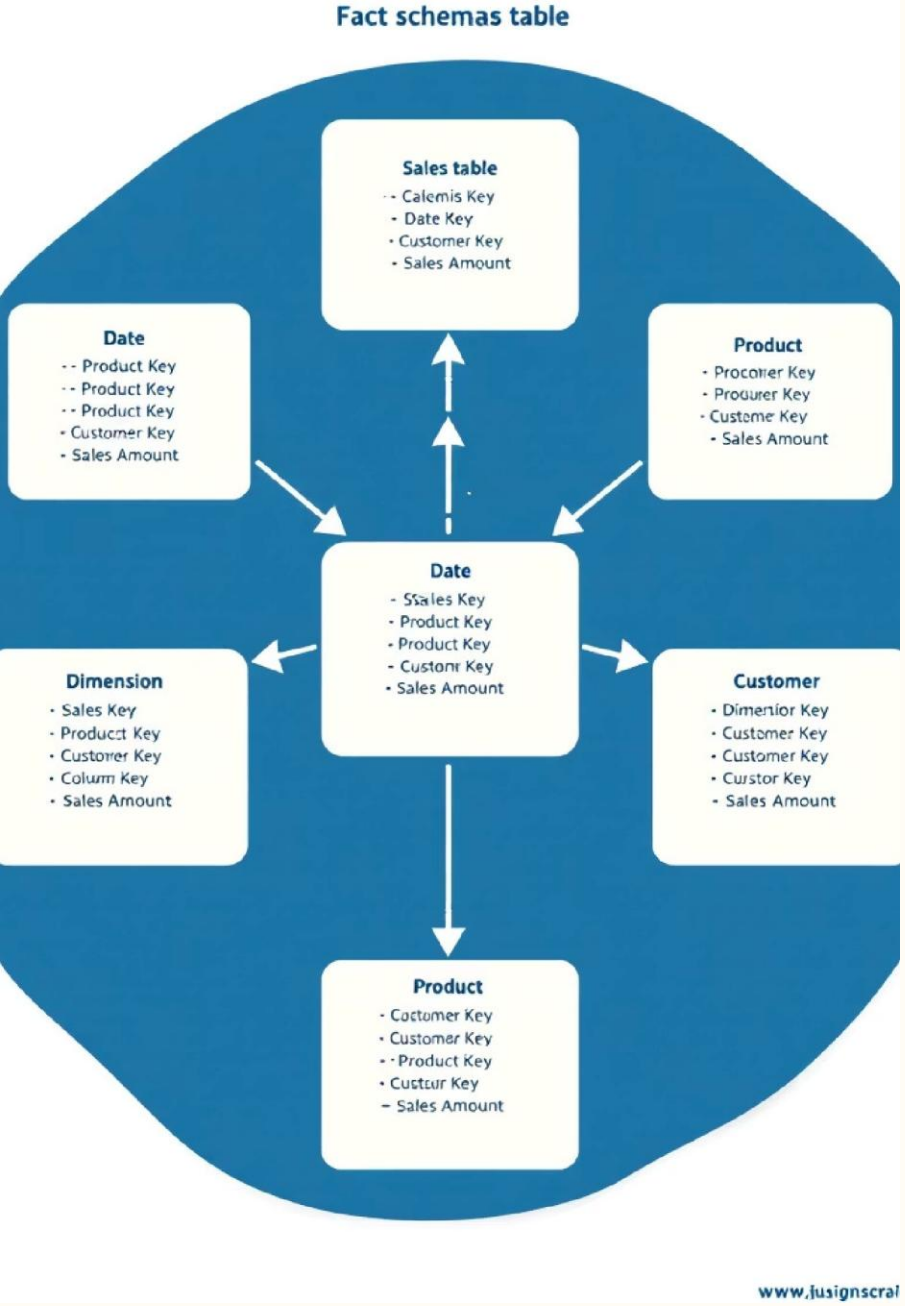

Customer

Product

Order

Employees

Payments

Purchases

Implementing a Star Schema

Star Schema Implementation.

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1

Fact Table

"Purchase Records"

2

Dimension Tables

Products, Employees, Orders, Payments, Customers.

Insights and Conclusions

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Communication among team members was crucial.

Standardized Codes

Identification codes across tables.

Consistent Naming

Table and column names for Foreign-Key relationships.

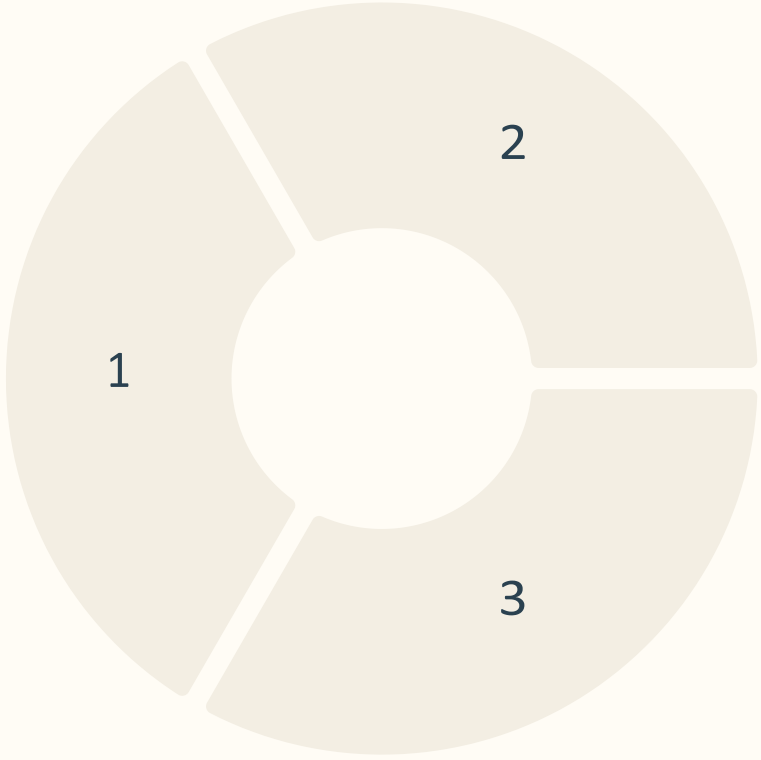

Table Order

Dimension tables first, followed by the fact table.

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Thank You

Thank you for listening. Sapir, Anan and Tomer.

Link to SQL code:

Click here

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