

Online store data analysis using power bi

Data extraction, cleaning, loading and Transformation

1. In this analysis, I have used Power BI Desktop to read data directly from an excel file that is shared by desk representatives at the stores. The excel file contains data on sales, inventory, and customer feedback for different products and regions. I have used the "Get Data" and "Transform Data" features in Power BI Desktop to import and transform the data from the excel file into a suitable format for analysis and visualization. I have created various charts and tables to show the trends, patterns, and insights from the data. I have also used filters and slicers to enable interactive exploration of the data.
2. I have used the "Transform Data" feature in Power BI Desktop to delete the empty columns and rows, change the fields to appropriate data types and split the fields and rename the columns. This helps to improve the quality and readability of the data and reduce errors and inconsistencies.
3. Some of the values in the column are abbreviated as FC, which stands for first class. I have used the "Replace Values" feature in Power BI Desktop to replace FC with first class in the column. This helps to make the data more consistent and clearer.
4. The address column has a complex format that combines different elements of the location separated by commas and dashes. I have used the "Split Column" feature in Power BI Desktop to split the address column by comma as a delimiter to create three new columns for City, State and Country. Then, I used the same feature to split the Country column by dash as a delimiter to create another new column for Pincode. This helps to make the data more granular and easier to analyze.

Data Modeling

1. Converting the flat file into STAR schema for better performance of the analysis.

Orders Fact Table

Column Name	Type
Order ID	Primary Key
Order Date	Date
Ship Date	Date
Customer ID	Primary Key
Product ID	Primary Key
Quantity	Integer
Discount	Decimal
Buy Price	Decimal
Sell Price (Price Per Each)	Decimal

Order Details Dimension Table


Column Name	Type
Order ID	Foreign Key
Ship Mode	Text
Postal Code	Text
Region	Text



Customer Dimension Table

Column Name	Type
Customer ID	Foreign Key
Customer Name	Text
Segment	Text

Product Dimension Table

Column Name	Type
Product ID	Foreign Key
Category	Text
Sub-Category	Text
Product Name	Text

 order-details



city

country

Order ID

pincode

Region

Ship Mode

state

Collapse ^

Orders

Σ

Buy Price

Customer ID

Σ

Discount

Order Date

Order ID

Σ

Price Per Each

Product ID

Σ

Quantity

Ship Date

Collapse


customer

Customer ID

Customer Name

Segment

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 product

Category

Product ID

Product Name

Sub-Category

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