



# Data Analysis Project: Tata Online Retail Store

This presentation summarizes a data analysis project conducted for Tata Limited's online retail store.

The goal was to analyze sales data and provide actionable insights to the CMO and CFO.

This analysis will help optimize marketing efforts, improve customer satisfaction, and identify growth opportunities.



by **Utkarsh Sharma**



# Tata Limited's Business Questions

## 1 Revenue Time Series (2011)

Seasonal trends and deeper insights for forecasting.

## 2 Top 10 Countries by Revenue

Identify key markets (excluding the United Kingdom).

## 3 Top 10 Customers by Revenue

Target high-value customers for retention.

## 4 Product Demand by Region

Expansion strategy based on demand (excluding the United Kingdom).

# Data Overview

## Datasets Fields

- Invoice Number
- Order data
- Stock Code
- Description
- Quantity
- Invoice Date
- Unit Price

The data covers January 2010 through December 2011.





# Methodology



## Data Cleaning

Power Query for data cleaning and preprocessing.



## Exploratory Analysis

EDA to identify trends and patterns.



## Visualization

Power BI for visualizing results.

# Key Findings: Questions 1 & 2

## Revenue Time Series (2011)

Revenue remained constant in the first three quarters.

A significant increase occurred in the fourth quarter.

Revenue jumped from 600K to 1.4 million.

## Top 10 Countries

- Netherlands
- Eire
- Germany
- France
- Australia
- Switzerland

# Key Findings: Questions 3 & 4

## Top 10 Customers

Customer ID 17841 spent \$1.49 million.

This customer generates significant revenue.

## Product Demand by Region

Australia has the highest product demand.

Demand is about 1152 orders.

# Recommendations

## **Focus marketing efforts on the fourth quarter**

Maximize revenue by concentrating marketing activities during the peak sales period.

## **Expand operations in key countries**

Prioritize growth in the Netherlands, Eire, Germany, France, and Australia.

## **Develop retention programs for high-value customers**

Create targeted initiatives for customers like 17841 to ensure loyalty.

## **Prioritize product demand in Australia**

Focus expansion strategies based on high product demand in the Australian market.

These recommendations aim to optimize marketing efforts, improve customer satisfaction, and identify growth opportunities for Tata Limited's online retail store.



# Tata Online Retail Store

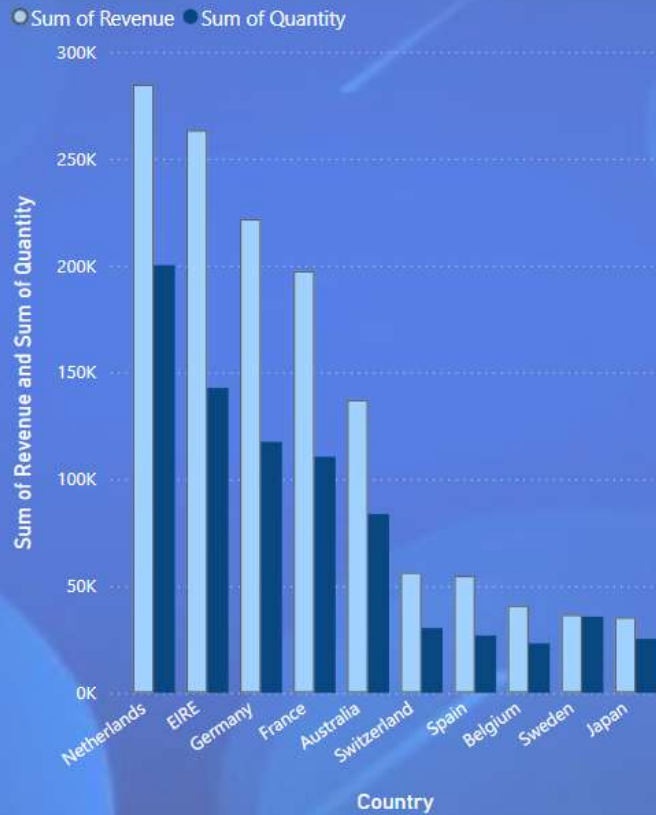
01-12-2010

09-12-2011

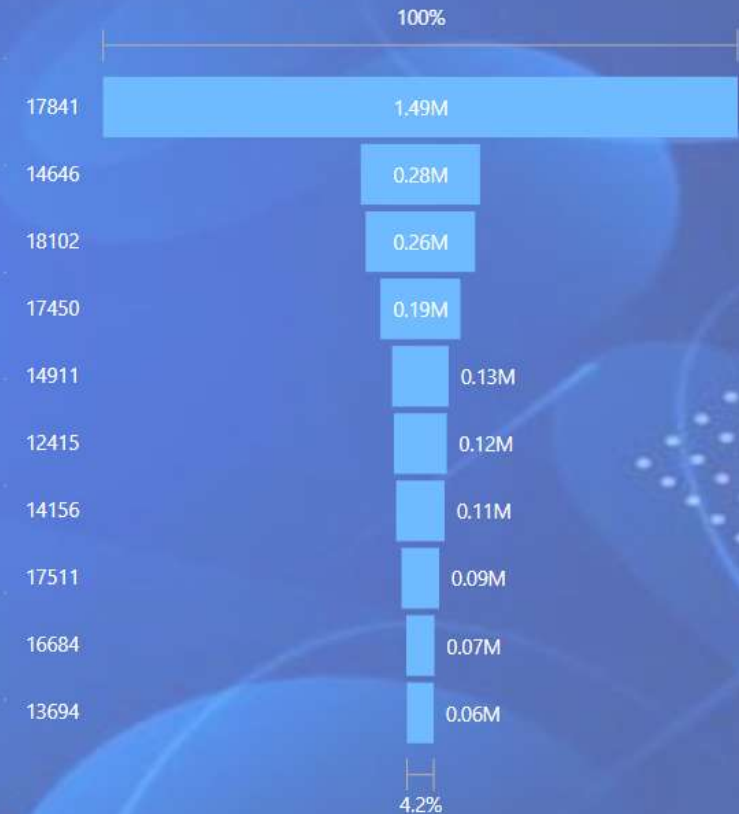
## Revenue by Month



## Top countries by Revenue and Demand



## Top Customers



## Region wise Demand

