

SQL PROJECT 1: UNDERSTANDING CUSTOMERS

Customer analysis using the Northwind sample Database

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BUSINESS QUESTION

- Who are our customers, and where do they come from ?
- Understanding customer geographic distribution to support business decision.

UNDERSTANDING THE DATA

- To answer the business question, we use the Customers table from the Northwind database.
- This table contains customer-level information that helps identify where customers are located.
- Key columns used:
 - CustomerName - Name of the customer company
 - City - City where the customer is located
 - Country – Country where the customer operates

SQL EXPLORATION

- Before performing analysis, the Customers table was explored to understand the available fields and data structure.
- This in initial step helped identify relevant columns for geographic analysis and ensured the data was suitable for answering the business question.

ANALYSIS : CUSTOMERS BY COUNTRY

(GROUP BY, COUNT, ORDER BY)

- Customers were grouped by country to understand geographic distribution.
- The analysis shows that customer presence is concentrated in a few key countries, while several regions have a smaller customer base.
- Key Observation
 - USA, France, and Germany have the highest number of customers
 - Brazil also shows a strong customer presence
 - Several countries have only one or two customers

RANKING COUNTRIES BY CUSTOMER COUNT (ORDER BY)

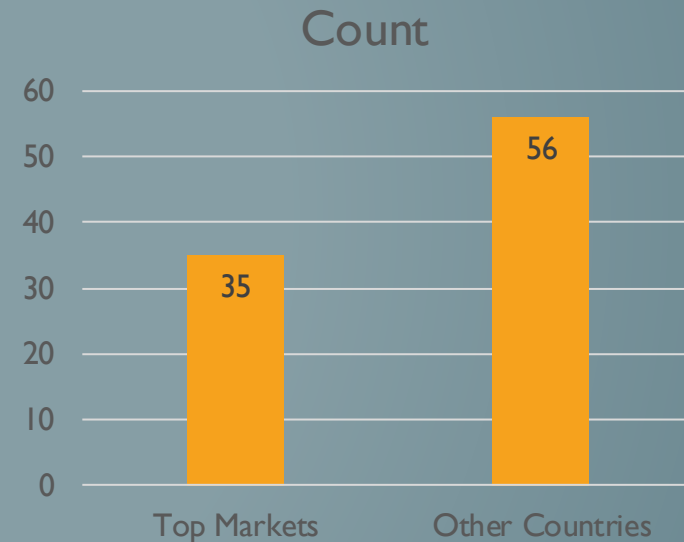
Business Question:

Which countries should be prioritized based on customer volume?

- Key Insights
 - USA should be the top priority with the highest customer count (13 customers)
 - France and Germany are the next highest customer count(11 customer each), showing strong European demand.
 - Brazil has 9 customers with clear growth potential.
 - Countries with low customer counts (1-2 customers) should be lower priority or targeted with selective strategies.

TOP MARKETS VS OTHER COUNTRIES (CUSTOMER CONCENTRATION ANALYSIS)

- **Objective**
 - Analyze whether a small number of countries contribute the majority of customers.
- **Approach**
 - Customers were grouped into **Top Markets** (USA, France, Germany) and **Other Countries** to understand geographic concentration and distribution.
- Nearly 40% of customers come from just three countries, highlighting strong geographic concentration in key markets.



BUSINESS INSIGHTS & IMPLICATIONS

- **Key Insight**
 - Customer distribution is geographically concentrated, with nearly 40% of customers coming from just three countries (USA, France, Germany), while the remaining customers are spread across multiple regions.
- **Business Implications**
 - Top Markets represent high-impact regions for customer engagement and growth.
 - Other Countries form a long-tail distribution, offering selective expansion opportunities.
 - Dependence on a few regions may introduce regional risk.

APPENDIX - (SQL LOGIC)

```
SELECT
  CASE
    WHEN Country IN ('USA', 'France', 'Germany') THEN 'Top Markets'
    ELSE 'Other Countries'
  END AS Market_Group,
  COUNT(*) AS Customer_Count
FROM Northwind.dbo.Customers
GROUP BY
  CASE
    WHEN Country IN ('USA', 'France', 'Germany') THEN 'Top Markets'
    ELSE 'Other Countries'
  END;
```