

Good day and thank you for joining me. In this presentation, I will walk you through my analysis of the company's online retail dataset, with a focus on four key questions raised by the leadership team.

This process began with a structured data-cleaning phase. I filtered out any records with negative quantities, removed transactions with zero or erroneous unit prices, and excluded rows where customer IDs were missing. These steps ensured that the insights generated were reliable and based on valid transactions only.

Let's now explore the insights derived from each of your core questions.

Question 1 – Monthly Revenue Trends (CEO Perspective)

The first question focused on understanding monthly revenue trends for the year 2011. I created a time series chart that captures revenue per month, derived by multiplying quantity sold with unit price.

As the chart shows, revenue begins relatively steady through the early months of the year. February and April see slight dips, while September onwards we observe a clear and consistent upward trend. Revenue peaks in November, crossing 1.16 million, which is the highest monthly total for the year.

This indicates potential seasonality in customer purchasing behaviour, possibly influenced by holiday sales or marketing pushes in the fourth quarter. These findings could be useful in planning inventory and marketing initiatives for future peak seasons.

Question 2 – Top 10 Countries by Revenue and Quantity (CMO Perspective)

The second analysis highlights the top 10 countries contributing the highest revenue, excluding the United Kingdom, and compares it with the number of units sold.

The side-by-side bar chart illustrates that Netherlands, EIRE, and Germany are not only top contributors in terms of revenue but also rank high in quantity sold. This consistency indicates healthy demand and purchasing power in these regions. Countries like Switzerland and Sweden also appear on the list, showing substantial quantities sold despite relatively lower revenue—this may point to high volume, low-margin sales.

These insights are especially relevant from a marketing standpoint. The company can prioritize markets that show both strong revenue and unit demand while identifying regions where price optimization strategies may improve profitability.

Question 3 – Top Customers by Revenue (CMO Perspective)

Next, we explore the top 10 revenue-generating customers, based on customer ID.

The visual shows a clear descending pattern, with Customer ID 14646 alone contributing over 280,000 in revenue, followed by 18102 and 17450. The top three customers contribute significantly more than the rest, suggesting a core group of high-value customers.

This pattern highlights the importance of customer retention. By identifying and engaging with these key customers through personalized offers or loyalty programs, the company can reinforce relationships and potentially increase repeat purchases from these segments.

Question 4 – Product Demand by Country (CEO Perspective)

The final analysis looks at overall demand by country, visualized through a filled map. Here, demand is measured as total quantity sold, excluding the United Kingdom.

The map reveals that Australia stands out significantly with over 83,000 units sold, followed by strong demand in Japan, Sweden, and Germany. North American markets such as USA and Canada show moderate performance, suggesting that awareness or accessibility may be areas to improve.

This geographic insight is helpful for identifying countries with expansion potential. Markets like Australia and Germany, where demand is already high, could be prioritized for logistics investment or targeted growth campaigns.

Conclusion

- Revenue patterns show seasonality, with a strong Q4 performance
- Key international markets like the Netherlands and Germany are driving sales
- A small segment of high-value customers contributes significantly to overall revenue
- And product demand is concentrated in a few high-potential countries, especially Australia

These insights can serve as the basis for informed planning around marketing strategies, customer retention programs, and international expansion.

Thank you for your attention. I'm happy to discuss any aspect of this analysis in further detail.