

Good morning, my name is Amanda Leon and I will be presenting the findings from the Online Retail Data. Before I began working with the data in Power BI, I applied validation checks to ensure quantity values were at least 1 and unit prices were non-negative. This ensured that all analysis was based on accurate and reliable data.

I first looked into the total revenue generated in 2011. November generated the highest revenue at approximately 1.51 million dollars, with December coming in a close second at about 1.48 million dollars. This is likely due to seasonal factors such as Christmas shopping, Black Friday, and Cyber Monday deals. Starting in July, there was a consistent increase in sales each month, which may be driven by back-to-school shopping and fall holidays such as Halloween.

February generated the lowest revenue at around 520,000 dollars, possibly due to having fewer days than other months. April followed closely with approximately 540,000 dollars in revenue. Overall, these findings show that the first six months of the year generate significantly less revenue than the last six months. Revenue is highly seasonal, and it would be beneficial to focus on producing higher inventory levels starting in July.

Next, I analyzed the quantity sold and total revenue of the top ten countries. The top three countries in descending order are the Netherlands, EIRE, and Germany, showing that Europe is a dominant market. The Netherlands had the highest revenue at 285,000 dollars, but not the highest profit margin. EIRE had the highest profit margin at approximately 136,000 dollars, which is 52,000 dollars more than the Netherlands profit margin. It is apparent that the highest revenue does not automatically result in the highest profit margin, so it is important to focus on the latter rather than the former. EIRE may be operating more efficiently than the Netherlands, and it is worth exploring. Sweden had the smallest gap between quantity and revenue, which could indicate pricing inefficiencies. Belgium and Japan appear to be emerging opportunities, as they currently have lower profit margins as well as lower total revenues.

I also examined the top ten customers by revenue, who collectively account for approximately 17.2% of total revenue. This suggests that while top customers are important, revenue is relatively diversified, and the loss of any single customer would have a limited impact on overall performance. As a result, marketing efforts may be most effective when focused on broad-based demand and customer retention, rather than relying heavily on a small group of top clients.

Overall, Europe remains a strong market, with several countries showing high sales volumes. However, Belgium shows relatively low quantities sold despite being bordered by France, Germany, and the Netherlands, three countries with significantly higher sales volumes. While country size may partially explain this, the Netherlands is comparable in size and still generates one of the highest quantities sold. This suggests that factors beyond geography and population, such as market penetration or distribution strategy, may be influencing performance.

Outside of Europe, North America appears to be a potential untapped market, with lower sales volumes relative to its market size. Similarly, the Middle East shows low quantity levels overall,

and countries such as the United Arab Emirates may represent future growth opportunities. These insights highlight opportunities to better align marketing, pricing, and regional expansion strategies with the company's strongest revenue drivers. Thank you so much for your time.