Presentation Script

Project: *Data Visualization: Empowering Business with Effective Insights*
Organization: Tata Group (Forage Virtual Experience)
Presenter: Ann Mary

Good Afternoon Sir,

I'm Ann Mary, and I'm pleased to walk you through the analysis I conducted as part of the Tata virtual experience program titled *"Data Visualization: Empowering Business with Effective Insights."* Thank you for outlining the business questions in advance — they helped me focus my analysis and deliver the insights that matter most to you and your team.

Before diving into the findings, I want to confirm that the data has been thoroughly cleaned to ensure that the results are both accurate and reliable. Specifically, I removed all records with a quantity less than 1, which typically indicate returns, and I excluded entries where the unit price was less than zero, as these were likely data entry errors. With this cleaned dataset, I was able to move forward with confidence.

First Visual

The first question, posed by the CEO, involved analyzing monthly revenue trends for the year 2011 to assess if there are any seasonal patterns. In the line chart I created, we can see that revenue from January through August remained relatively steady, averaging around $685,000 per month. Starting in September, we observe a noticeable increase in sales, with November reaching a peak of approximately $1.5 million. This suggests a clear seasonal pattern — likely related to holiday shopping behavior in Q4. The December data appears incomplete, so no conclusions were drawn for that month. Overall, this seasonal pattern indicates that we may benefit from increased inventory and marketing activity toward the end of the year.

Second Visual

The second request, from the CMO, involved identifying the top 10 countries by revenue, excluding the United Kingdom. The bar chart I created shows that countries like the Netherlands, Ireland (EIRE), Germany, and France are strong performers, not just in terms of revenue but also in quantity sold. These regions appear to have both a strong demand and good sales volume, making them ideal candidates for focused regional marketing and expansion efforts. Excluding the UK allowed us to surface growth opportunities that may otherwise be overshadowed.

Third Visual

The third visualization focused on our top 10 customers by revenue. I created a column chart that displays the highest revenue-generating customer first, followed by others in descending order. What's notable here is that the difference between the top customer and the tenth-ranked customer is relatively small — the top customer only spent about 17% more than the second. This indicates a healthy and well-distributed revenue base, which is a good

sign for business stability. At the same time, this presents an opportunity to introduce loyalty programs or personalized offers that help retain these valuable customers and possibly increase their lifetime value.

Final Map Visual

Lastly, the CEO requested a country-level view of demand to explore potential expansion markets. Using a map visualization, I highlighted product demand across all countries, excluding the UK. Once again, countries like the Netherlands, Germany, France, Ireland, and Australia stood out. The map also revealed that most of our sales are concentrated in Europe, with very limited presence in Asia, Africa, and North America. This suggests a clear opportunity for global expansion, especially if we pilot campaigns in underrepresented regions to test the market response.

Conclusion

In summary, the analysis supports four key recommendations: first, to prepare for increased demand in Q4 by boosting stock and campaigns; second, to invest further in high-performing regions like the Netherlands and Germany; third, to strengthen relationships with top customers through retention-focused efforts; and finally, to explore new regions for business growth outside Europe.

Thank you for your time. If you have any questions or would like deeper analysis in any specific area, I would be happy to assist further.

Sincerely,
Ann Mary