TABLEAU INTERNSHIP

PHARMACEUTICAL SALES ANALYSIS

Objective:
Provide insights into pharmaceutical sales across different European countries, specifically focusing on Germany and Poland including analysis by sub-channel, product class, sales trends over months and years, and sales team performance.

Dataset Overview:
1.<u>Number of rows:</u>
254082

2.<u>Number of columns:</u>
18

3. <u>Column names</u>: 'Distributor', 'Customer Name', 'City', 'Country', 'Latitude', 'Longitude', 'Channel', 'Sub-channel', 'Product Name', 'Product Class', 'Quantity', 'Price', 'Sales', 'Month', 'Year', 'Name of Sales Rep', 'Manager', 'Sales Team'.

Visualizations & Key-Insights:
1.<u>Top-Left: Sales Per Country-</u>
- Chart Type: Map Visualization
- Metrics Analyzed:

-->Distribution of sales across two countries—Germany (blue) and Poland (orange).

● Insight:

-->The map shows a denser concentration of sales in Germany compared to Poland.

-->This suggests that Germany may be a larger market or have higher sales volume in the pharmaceutical sector than Poland.

● Actionable Insight:

-->Focus on expanding market presence in Poland to increase sales density, possibly through localized marketing strategies.

2. <u>Top-Center: Total Quantity per Sub-Channel-</u>

● Chart Type: Table

● Metrics Analyzed:

-->Quantity of products sold through different sub-channels:
- Government: 7,521,996 units
- Institution: 6,956,170 units
- Private: 6,138,254 units
- Retail: 8,062,358 units

● Insight:

-->The retail sub-channel accounts for the highest quantity of sales, followed closely by government channels.

-->This highlights the importance of retail and government sectors in the overall sales strategy.

● Actionable Insight: Strengthen relationships with retail and government partners to maintain and grow these critical sales channels.

3. Top-Right: Sales per Product Class-
- Chart Type: Treemap
- Metrics Analyzed:

-->Sales distribution across different product classes:
    - Analgesics and Antibiotics appear to dominate the sales.
    - Other notable classes include Antiseptics, Antipyretics, Mood Stabilizers, and Antimalarial drugs.

- Insight:

-->The treemap clearly shows that certain drug classes are more prominent in sales, possibly indicating higher demand or priority.
-->This can guide inventory and production decisions.

- Actionable Insight:

-->Focus on boosting the production and marketing of top-performing drug classes like Analgesics and Antibiotics to meet demand.

4. Bottom-Left: Month & Year-Wise Sales-
- Chart Type: Stacked Bar Chart
- Metrics Analyzed: Monthly sales over different years (2017, 2018, 2019, 2020).

- Insight:

-->Sales show significant fluctuations throughout the year, with peaks around June and July.
-->The year-wise color coding shows that each year follows a similar trend, with overall growth visible from year to year.

- Actionable Insight:
-->Prepare for higher sales volumes during mid-year months by ensuring adequate stock and promotional activities during this period.

5. Bottom-Right: Avg. Price & Quantity per Sales Team-
- Chart Type: Bar Chart
- Metrics Analyzed:
-->Avg. Price and Avg. Quantity sold by different sales teams: Alfa, Bravo, Charlie, and Delta.

- Insight:
-->Team Bravo seems to have the highest average price, but a lower quantity sold compared to others.
-->Team Charlie balances both average price and quantity effectively.

- Actionable Insight:
-->Investigate Team Bravo's pricing strategy to understand why they are able to sell at higher prices but in lower quantities.
-->Leverage Team Charlie's strategy as a benchmark for other teams to optimize both price and quantity.

6. Filters:
- Manager Filter: Allows selection of different managers to analyze their specific performance.
- Year Filter: Enables analysis of sales trends specific to a selected year.
- Sales Rep Filter: Drill down to individual sales reps' performance, providing granular control over the data.

Conclusion:

-The dashboard provides a comprehensive view of pharmaceutical sales across Germany and Poland, highlighting key sub-channels, product classes, and sales trends over time.
 - The analysis suggests that Germany is a stronger market, with significant sales occurring in the retail and government sub-channels.

- Product classes like Analgesics and Antibiotics are crucial to sales performance, and certain months (June and July) see higher sales volumes, requiring strategic planning.

- Team performance varies, with certain teams excelling in either price or quantity, offering opportunities for cross-team learning and optimization.

This report can serve as a valuable tool for stakeholders in the pharmaceutical industry to make informed decisions regarding sales strategies, market expansion, and product focus.