BMW SALES PERFORMANCE ACROSS REGIONS

Objective

Assess sales performance and identify anomalies across multiple regions for better market positioning

About the data

The data is extracted from online sources like Kaggle.com and the real time data may vary. It is a sample data that contains sales volume for different variants of BMW cars.

Data cleaning: The data was extracted and checked for duplications, typos, null values, and other errors. The data was cleaned using MS Excel.

Analysis

Visualisation 1: Yearly sales by region
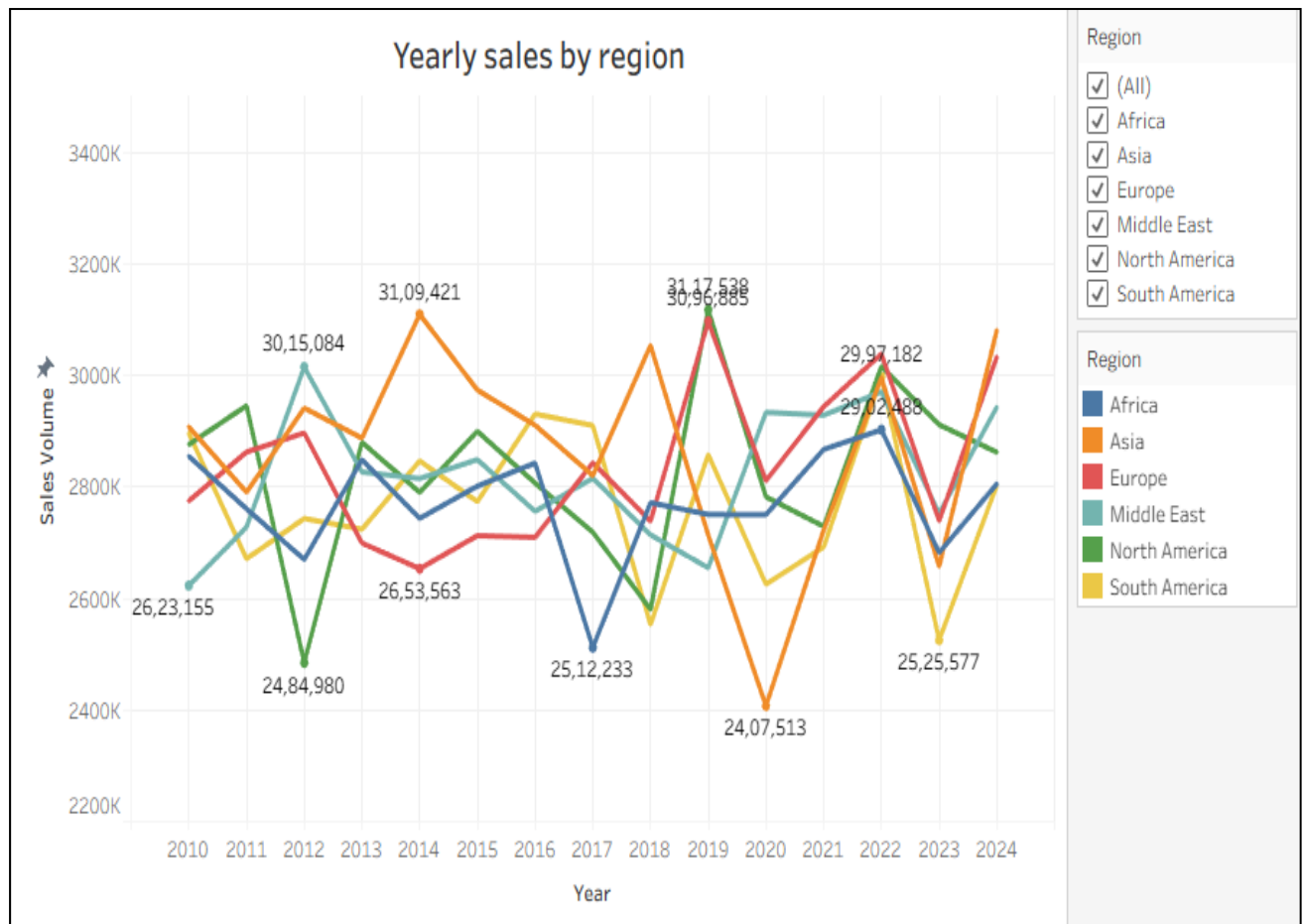
- Although the overall sales have been increasing over the years, certain regions show steady growth and decline in sales.

- Regions like Africa, Middle East, and Europe show steady growth.

- Asia is the only region in the last 5 years that has shown a reasonable increase in sales volume and is currently the biggest market.

- BMW's performance has been poor in the Americas, as sales in South America have hit the lowest in the last decade, and North America sees a steady decline.

Inferences:
1. There is no drastic improvement in sales performance across regions.
2. BMW is performing well in Asia and Europe.
3. Poor performance in NA, which is one of the biggest markets for BMW historically.
4. Sales have historically been low in SA and continue to do so

Visualisation 2: Model performance across regions
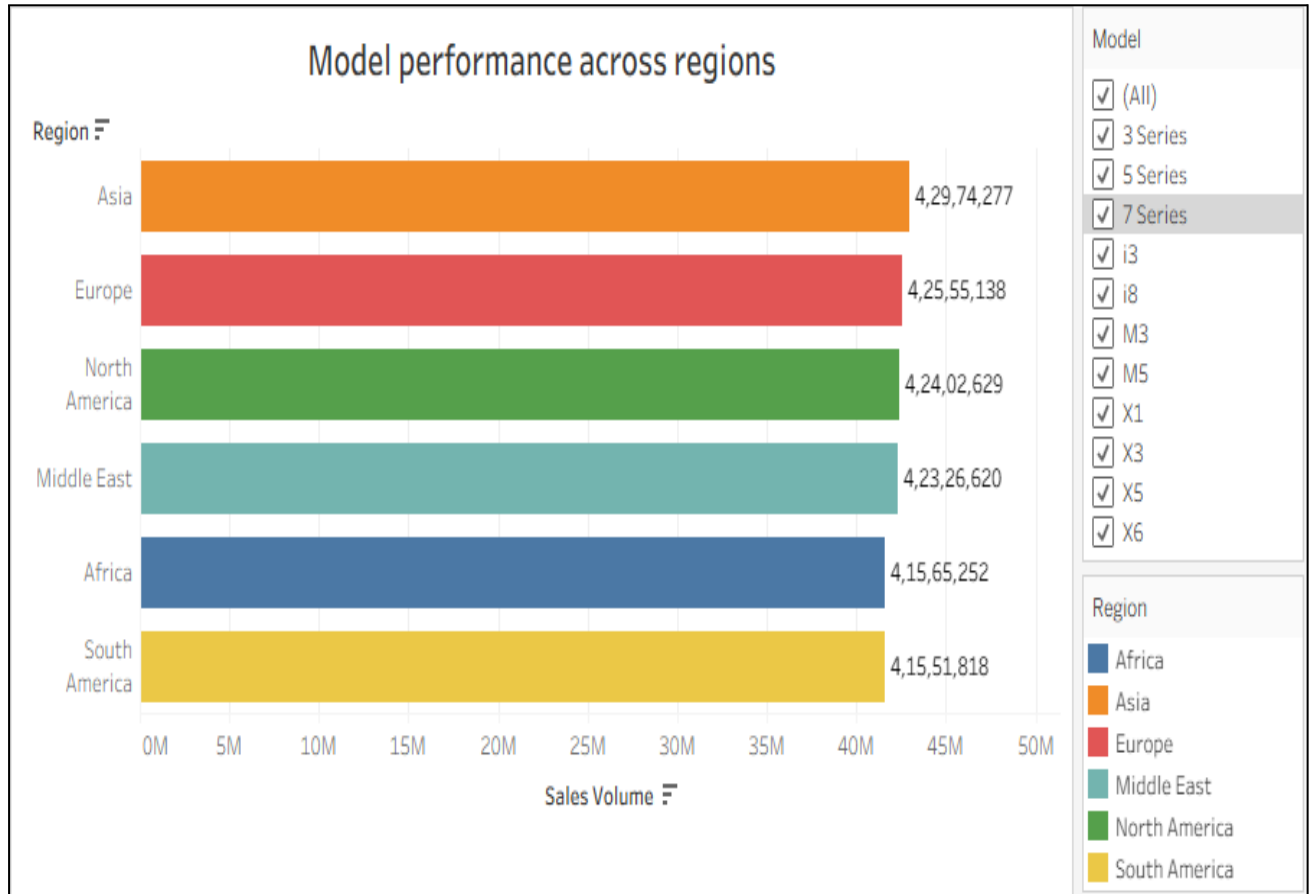
For the last 14 years the total sales volume is the highest for Asia, making it the biggest market.

BMW market size according to sales volume
1. Asia
2. Europe
3. North America
4. Middle East
5. Africa
6. South America

Model performance across regions

- **Africa**
  High: 3 series, 5 series, i3, X1, X5
  Low: 7 series, i8, M3, M5, X6

- **Asia**
  High: 3 series, 5 series, 7 series, M3, M5, X1, X3,
  Low: i3,

- **Europe**
  High: 3 series, i3, i8, M5,
  Low: M3, X3, X5

- **Middle East**
  HIgh: 7 series, M3, M5, X5, X6
  Low: 5 series, i8, X1

- **North America**
  High: 7 series, i8, X1, X3
  Low: 3 series, 5 series, M5, X6

- **South America**
  High: X6, 7 series,
  Low: 3 series, i3, i8, M3, M5, X1, X3, X5

Inferences:
1. Asia and Europe are the biggest markets for BMW
2. i3 is the only low performing model in Asia
3. Most of the models are performing worse in Africa and South America
4. Low price models such as 3 series and 5 series have a huge success in economically poor regions like Africa
5. M and X series have seen a decline in Europe and SA

Visualisation 3: High-performing models by fuel type
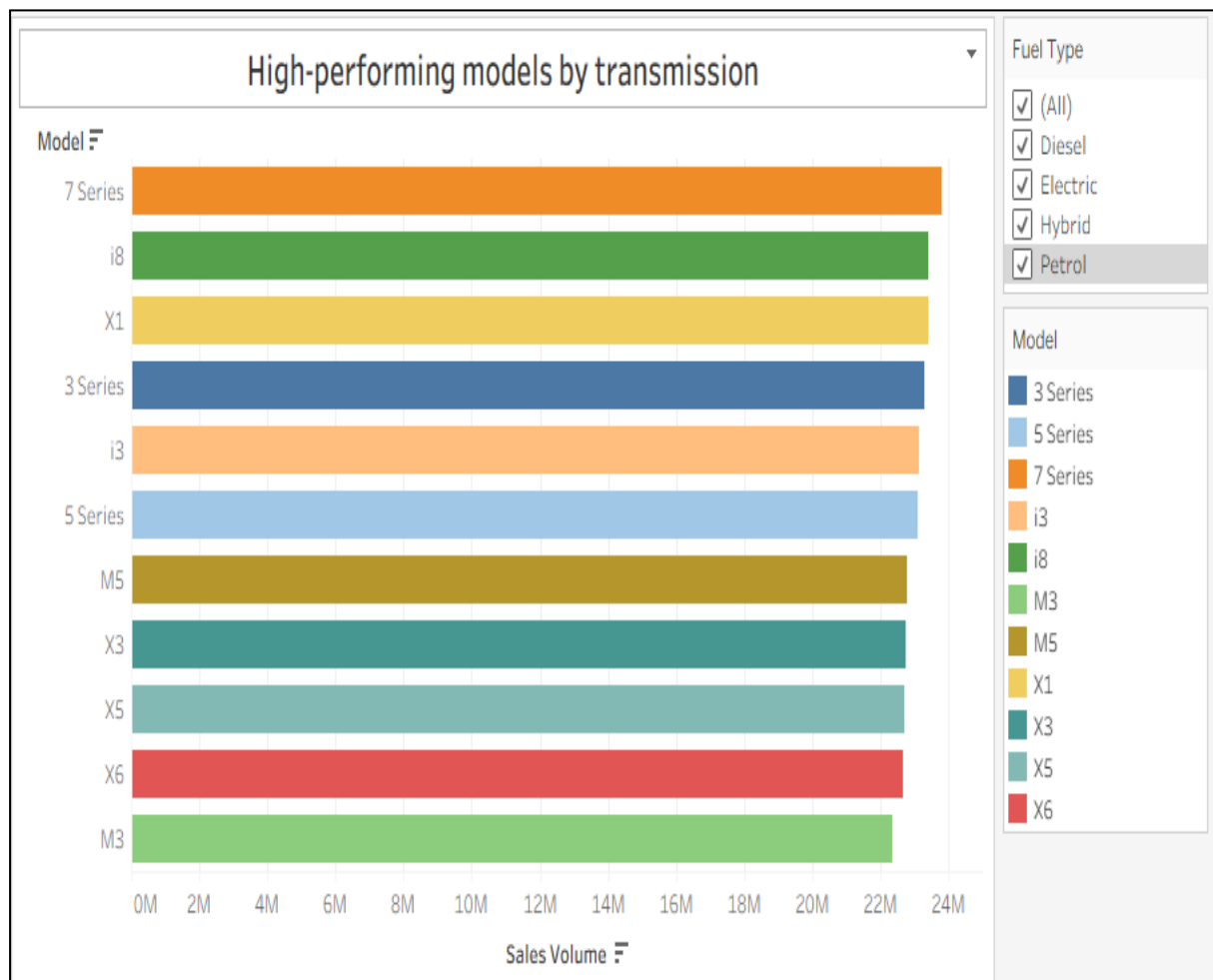
- Diesel: 7 series, 3 series
- Petrol: 5 series, 8 series, X6
- Hybrid: 7 series, 3 series, M5
- Electric: iX1, i3, i8

Inferences:
1. There is no huge difference in sales volume among the top 4 high performing models as they have been performing well across all regions.

Visualisation 4: Transmission and fuel type preferences across regions

Transmission and fuel type preferences by region
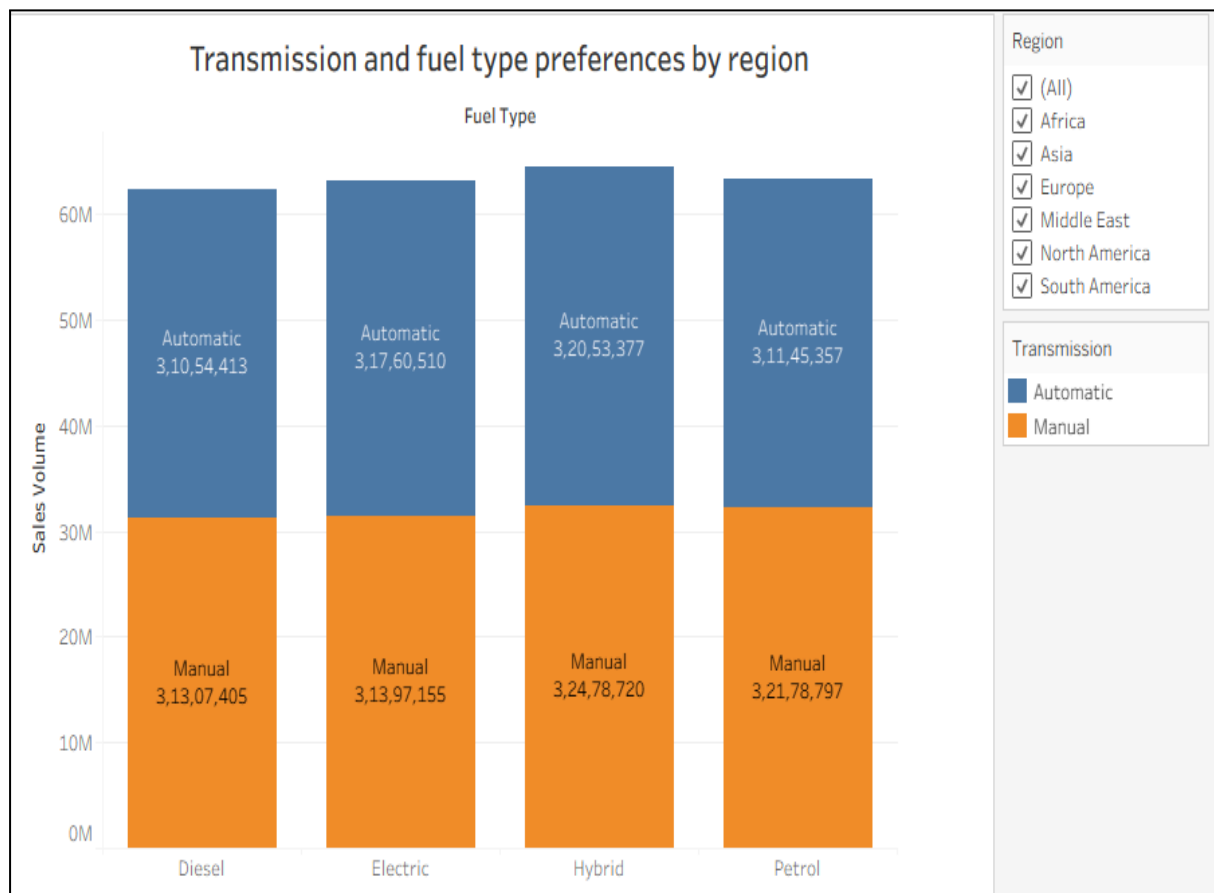
Fuel type and transmission preferences

- **Africa**
  Fuel type: No distinct preference
  Transmission type: No distinct preference

- **Asia**
  Fuel type: Hybrid
  Transmission type: No distinct preference

- **Europe**
  Fuel type: No distinct preference
  Transmission type: No distinct preference

- **Middle East**
  Fuel type: No distinct preference
  Transmission type: No distinct preference

- **North America**
  Fuel type: Hybrid and Electric
  Transmission type: Automatic

- **South America**
  Fuel type: Diesel
  Transmission type: Manual

Inferences:
1. There is no clear preference for transmission type in most of the regions, while **NA** market shows a clear shift towards EVs and Automatic variants.

Conclusion

BMW's performance across (Asia, Europe, and NA) have been great over the years, but it seems to be losing out on NA region against its competitors recently. This is explained by low sales in diesel and petrol based vehicles, as NA shows a clear shift towards EVs and automatic transmission. While Asia and Europe are performing well across most of the variants, BMW needs to shift its focus majorly towards SA and NA regions to position and in the market.

Africa and the Middle East have been steady performers over the decade.
Diesel and Petrol based variants within the lower price vehicles have a huge sales potential in Africa.

Overall there is a steady growth in sales globally, but the recent decline in revenue is likely due to decreasing market share in NA, and intense competition globally.