



**BMW Global Sales Performance Dashboard Project**

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## **Introduction**

Intended Users : Executives, regional sales managers, product strategy teams, marketing analyst, and production planners

Purpose : To monitor global sales performance, analyze regional and model demand, guide marketing and pricing decisions, and support production and supply chain planning based on reliable sales data.

## **Nature of the Variables ( Attributes)**

The dataset contains the following:

- 1) Categorical ( nominal)
  - a) Region
  - b) Model
  - c) Color
  - d) Fuel type
  
- 2) Quantitative ( continuous)
  - a) Sales Revenue (\$)
  - b) Sales Volume (units)
  - c) Average price (\$)
  - d) Yearly Sales Volume over time

## **Project Objectives:**

- Measure BMW's overall sales performance using key performance indicators.
- Compare regional contributions to total revenue.
- Identify the most popular and highest-selling BMW mode.
- Examine fuel-type revenue distribution.
- Analyze sales trends from 2010–2024.
- Present insights that can guide strategic marketing, product planning, and regional sales decisions.

## Dataset Overview

*Dataset Source: Kaggle BMW Worldwide Sales Records (2010 – 2024)*

## Tasks that are performed

- a) Identify total global revenue and pricing patterns
- b) Rank regions by total sales
- c) Determine which BMW models sell the most units globally
- d) Compare model performance across regions
- e) Understand fuel type revenue contribution
- f) Analyze sales patterns over time (2010-2024)

## DASHBOARD OVERVIEW

### 1) KPI tiles and Sales Summary

Idiom – big number KPI display

Marks - Text Marks

Channels - Size and position of text communicate emphasis

Color - Hue

Other aesthetics – clean spacing, no gridlines

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**Top Region**

**\$3,251B**

**Avg price**

**\$75K**

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**Total Sales Revenue \$19,012B**

b) **Sales by Region Revenue (\$)**

Idiom – Highlight Table

Marks – Text marks, cell background color encoding magnitude

Channels – Color saturation, showing higher vs lower sales

Labelling – Region names and precise dollar amount clearly labeled

| Sales by Region Revenue (\$) |          |
|------------------------------|----------|
| Region                       |          |
| Asia                         | \$3,251B |
| Europe                       | \$3,188B |
| North America                | \$3,183B |
| Middle East                  | \$3,168B |
| Africa                       | \$3,109B |
| South America                | \$3,114B |

2) **Model Popularity ( Sales Volume by Model)**

Idiom – bubble chart representing total model demand

Marks – Circles sized by sales volume

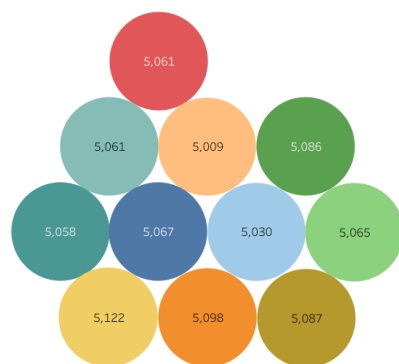
Channels – Size encodes magnitude, color distinguish model category

Color – Each model assigned a unique color for separation

Labelling – Each bubble with exact average volume.

Other Aesthetics- even spacing avoids visual clutter. No axis needed because values are printed directly

Global Sales Volume by Model  
(units)



Model

- 3 Series
- 5 Series
- 7 Series
- i3
- i8
- M3
- M5
- X1
- X3
- X5
- X6

### 3) Regional-Model Performance Heatmap

Idiom – Heatmap table

Marks – Text marks. Cell background color encodes value

Channels – Color saturation highlighting high volume and low volume. Spatial arrangement links region rows with model columns

Color – Saturation effectively highlighting variation with consistent scale across the table

Labelling – Exact unit values displayed in each cell. Region and model headers are clearly visible

Other Aesthetics – no gridlines needed because cell shading creates natural boundaries

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### Average Sales Volume by Region (units)

| Region        | Model |         |         |       |       |       |       |       |       |       |       |
|---------------|-------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|
|               | 3 S.. | 5 Ser.. | 7 Ser.. | i3    | i8    | M3    | M5    | X1    | X3    | X5    | X6    |
| Europe        | 5,183 | 5,113   | 5,130   | 4,943 | 5,106 | 5,006 | 5,246 | 5,113 | 4,994 | 5,180 | 5,161 |
| Asia          | 5,166 | 5,001   | 5,107   | 5,094 | 5,117 | 5,052 | 5,102 | 5,138 | 5,123 | 5,025 | 4,988 |
| Africa        | 5,142 | 5,096   | 5,013   | 5,067 | 4,907 | 4,969 | 4,955 | 5,115 | 5,120 | 5,100 | 4,899 |
| North America | 5,104 | 4,982   | 5,167   | 4,964 | 5,323 | 4,977 | 4,922 | 5,373 | 5,134 | 4,986 | 5,023 |
| Middle East   | 5,038 | 4,992   | 5,038   | 4,937 | 5,138 | 5,257 | 5,106 | 5,111 | 4,934 | 5,059 | 5,010 |
| South America | 4,771 | 4,994   | 5,129   | 5,061 | 4,926 | 5,126 | 5,190 | 4,880 | 5,041 | 5,021 | 5,281 |

#### 4) Fuel Type Revenue Distribution

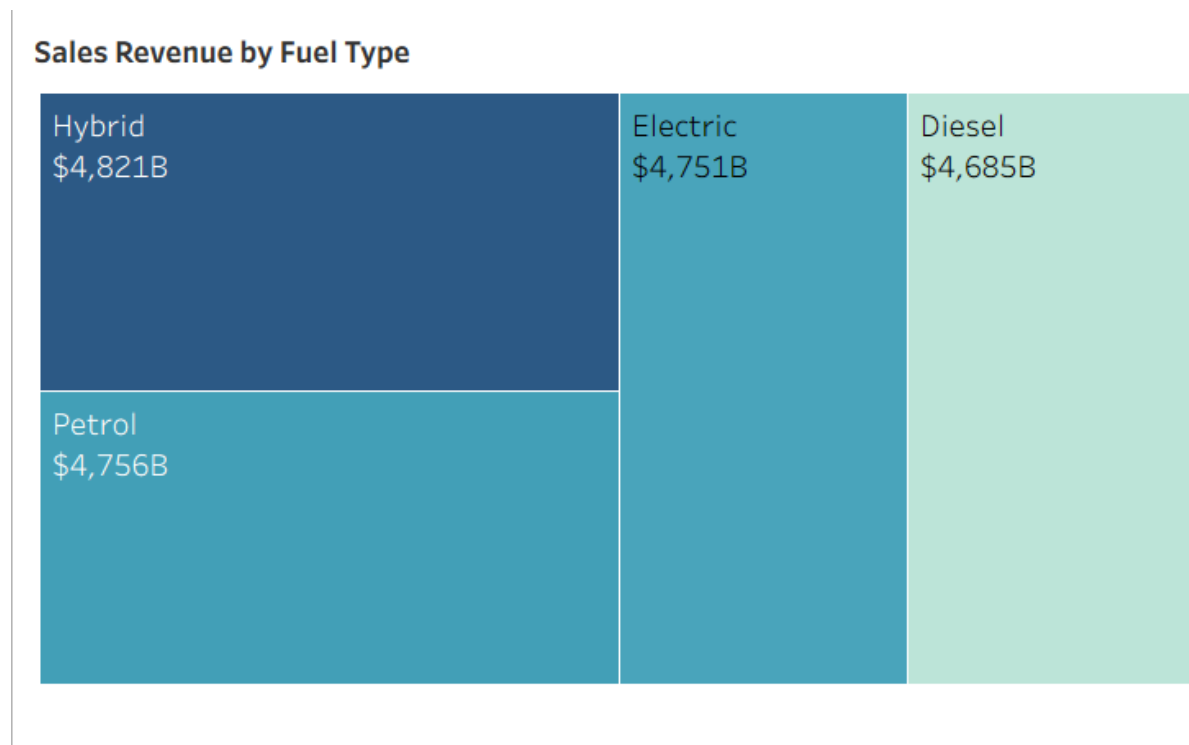
Idiom – Tree map

Marks – Rectangles sized by sales revenue

Channels – area represents magnitude ( hybrid largest) and Color to differentiate categories

Color – Saturation

Labelling – each block labeled with fuel type and revenue



5) **Sales Trend (2010-2024)**

Idiom – Line graph

Marks – Line representing each color category

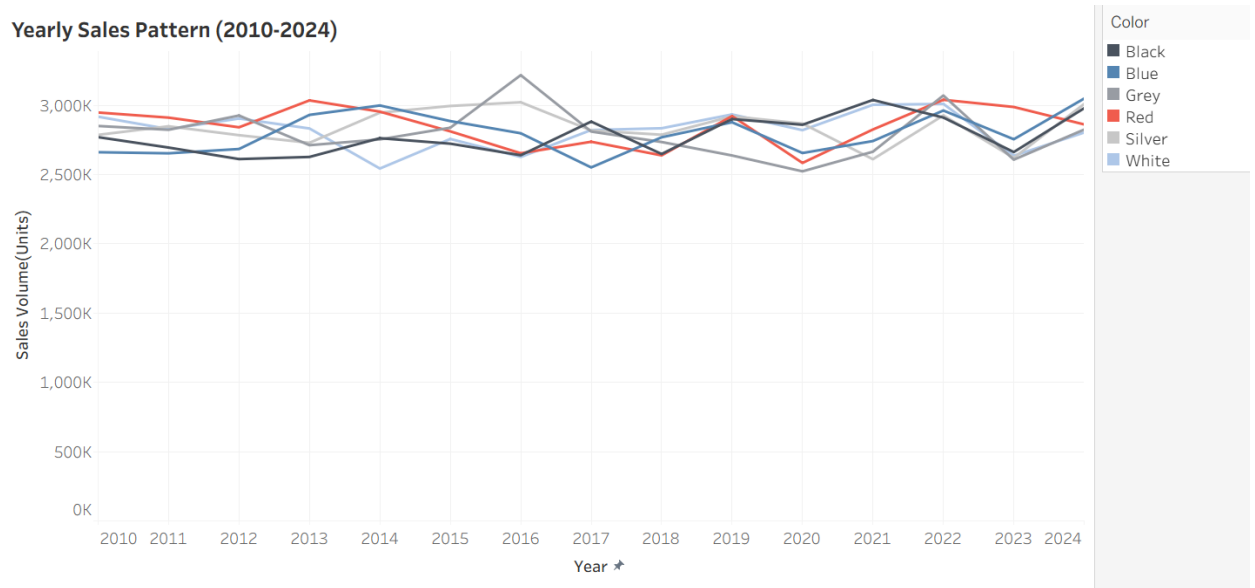
Channels – Position along the y-axis encodes sales volume (\$) and X-axis encodes year

Color – Hue, and legend clearly map color names

Labelling – Axis labels and Color legend placed on the right

Other Aesthetics – smooth line paths showing trends

Yearly Sales Pattern (2010-2024)



## The Dashboard



BMW Global and Regional Sales Performance Dashboard (2010 - 2024)

Total Sales Revenue \$19,012B      Avg price \$75K

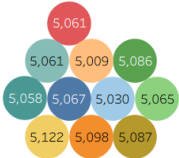
Top Region

\$3,251B

Sales by Region Revenue (\$)

| Region        | Revenue (\$) |
|---------------|--------------|
| Asia          | \$3,251B     |
| Europe        | \$3,188B     |
| North America | \$3,183B     |
| Middle East   | \$3,168B     |
| Africa        | \$3,109B     |
| South America | \$3,114B     |

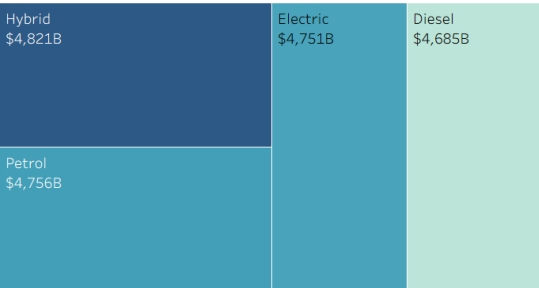
Global Sales Volume by Model (units)



Average Sales Volume by Region (units)

| Model     | 3 S... | 5 Ser.. | 7 Ser.. | i3    | i8    | M3    | M5    | X1    | X3    | X5    | X6    |
|-----------|--------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|
| Region    | 5,183  | 5,113   | 5,130   | 4,943 | 5,106 | 5,006 | 5,246 | 5,113 | 4,994 | 5,180 | 5,161 |
| Europe    | 5,166  | 5,001   | 5,107   | 5,094 | 5,117 | 5,052 | 5,102 | 5,138 | 5,123 | 5,025 | 4,988 |
| Asia      | 5,142  | 5,096   | 5,013   | 5,067 | 4,907 | 4,969 | 4,955 | 5,115 | 5,120 | 5,100 | 4,899 |
| Africa    | 5,104  | 4,982   | 5,167   | 4,964 | 5,323 | 4,977 | 4,922 | 5,373 | 5,134 | 4,986 | 5,023 |
| North ..  | 5,038  | 4,992   | 5,038   | 4,937 | 5,138 | 5,257 | 5,106 | 5,111 | 4,934 | 5,059 | 5,010 |
| Middle .. | 4,771  | 4,994   | 5,129   | 5,061 | 4,926 | 5,126 | 5,190 | 4,880 | 5,041 | 5,021 | 5,281 |
| South ..  |        |         |         |       |       |       |       |       |       |       |       |

Sales Revenue by Fuel Type



Yearly Sales Pattern (2010-2024)

