



BMW Global Sales Performance Dashboard Project

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Applied Data Science, 2025

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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

Top Region

\$3,251B

Avg price

\$75K

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



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

Average Sales Volume by Region (units)

Region	3 S..	5 Ser..	7 Ser..	i3	i8	M3	M5	X1	X3	X5	X6
	Model	Model	Model	Model	Model	Model	Model	Model	Model	Model	Model
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

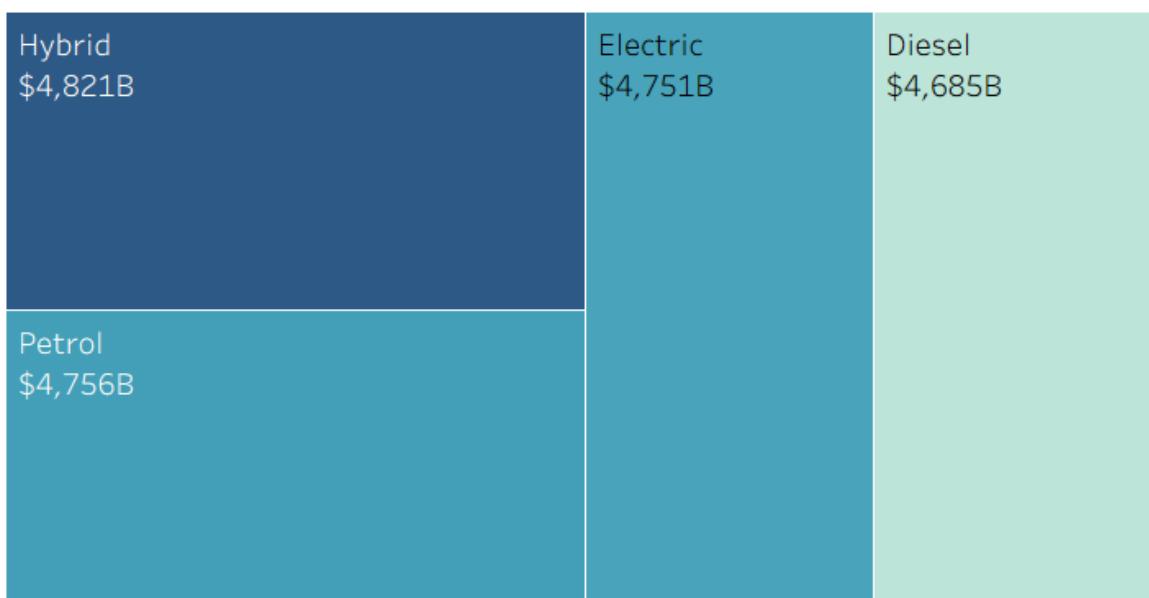
Marks – Rectangles sized by sales revenue

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

Color – Saturation

Labelling – each block labeled with fuel type and revenue

Sales Revenue by Fuel Type



5) Sales Trend (2010-2024)

Idiom – Line graph

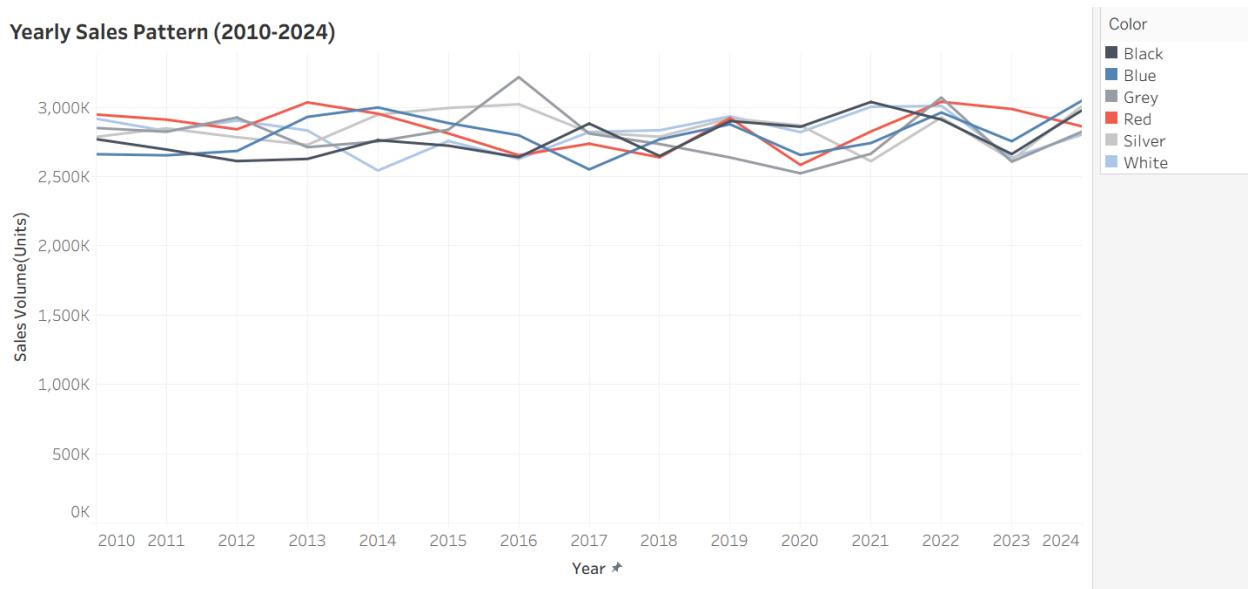
Marks – Line representing each color category

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



The Dashboard

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

Total Sales Revenue \$19,012B

Avg price

\$75K

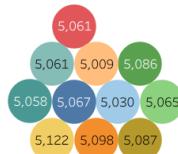
Top Region

\$3,251B

Sales by Region Revenue (\$)

Region	Revenue (\$)
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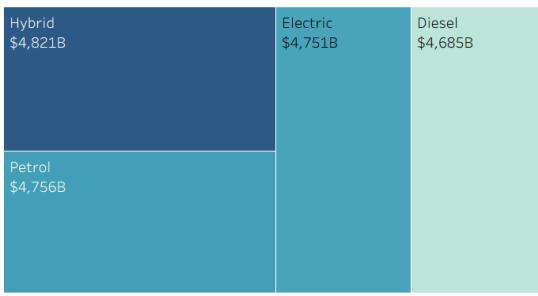
Global Sales Volume by Model (units)



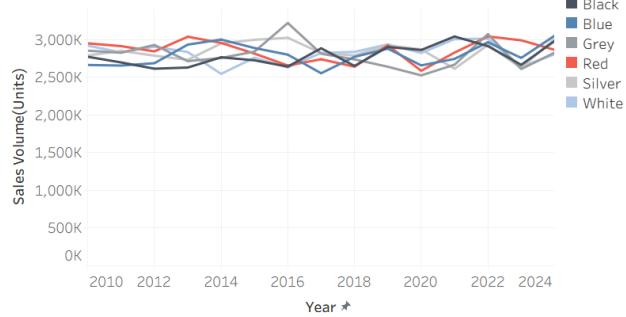
Model Average Sales Volume by Region (units)

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

Sales Revenue by Fuel Type



Yearly Sales Pattern (2010-2024)



Color

- Black
- Blue
- Grey
- Red
- Silver
- White