PHARMA DATA ANALYSIS

CREATED BY - PRATHAM SRIVASTAVA

DATASET

or	Customer Name	City	Country	Latitude	Longitude	Channel	Sub-channel	Product Name	Product Class	Quantity	Price	Sales
C	Hermiston and Sons Pharmaceutical Ltd	Geislingen an der Steige	Germany	48.6244	9.8306	Pharmacy	Retail	Spiroderall	Mood Stabilizers	10	₹ 653	6,5
C	Monahan Ltd Pharmaceutical Ltd	LÃ¼neburg	Germany	53.2525	10.4144	Pharmacy	Retail	Pazofenac	Mood Stabilizers	10	₹ 123	1,2
C	Hayes-Kilback Pharmaceutical Limited	Springe	Germany	52.2167	9.55	Pharmacy	Retail	Hepavice	Mood Stabilizers	10	₹ 140	1,4
C	Hoeger Ltd	Heidenheim	Germany	48.6761	10.1544	Pharmacy	Retail	Lovapur	Mood Stabilizers	10	₹ 551	5,5
C	Reynolds, Jast and Mante	Achern	Germany	48.6314	8.0739	Pharmacy	Retail	Presetron	Mood Stabilizers	10	₹ 216	2,1
C	Schuppe Inc	Bensheim	Germany	49.6811	8.6228	Pharmacy	Retail	Primatate Univatol	Mood Stabilizers	10	₹ 172	1,7
C	Cassin PLC Pharmaceutical Limited	WeiÃŸenfels	Germany	51.2	11.9667	Pharmacy	Retail	Angioparin Brimosumab	Mood Stabilizers	10	₹ 682	6,8
C	Miller-Satterfield Pharmaceutical Limited	Bad Kissingen	Germany	50.2	10.0667	Pharmacy	Retail	Alarudin Azarolac	Mood Stabilizers	10	₹ 567	5,6
C	Kuhic LLC	Schleswig	Germany	54.5153	9.5697	Pharmacy	Retail	Topipizole	Mood Stabilizers	10	₹ 368	3,6
C	Miller-Satterfield Pharmaceutical Limited	Bad Kissingen	Germany	50.2	10.0667	Pharmacy	Retail	Lovapur	Mood Stabilizers	10	₹ 551	5,5
C	Romaguera, Moen and Hagenes Pharm	UnterschleiÃŸheim	Germany	48.2833	11.5667	Pharmacy	Retail	Factofribrate	Mood Stabilizers	10	₹ 99	9
C	Hansen, Fadel and Schroeder Pharmaceutical Ltd	Herrenberg	Germany	48.5967	8.8708	Pharmacy	Retail	Trazozaprine	Mood Stabilizers	10	₹ 708	7,0
C	Leuschke, Waters and Schowalter Pharma Plc	Herzogenrath	Germany	50.8667	6.1	Pharmacy	Retail	Adriacaine	Mood Stabilizers	10	₹ 361	3,6
C	Hermiston LLC Pharmaceutical Ltd	Weingarten	Germany	47.8078	9.6417	Pharmacy	Retail	Clinolan Pitoletra	Mood Stabilizers	10	₹ 130	1,3
C	Hahn, Rutherford and Gislason Pharmacy	WolfenbÃ¼ttel	Germany	52.1622	10.5369	Pharmacy	Retail	Lovavatol Azelavarix	Mood Stabilizers	10	₹ 106	1,0
C	Nitzsche, Effertz and Maggio Pharmaceutical Limited	Northeim	Germany	51.7067	10.0011	Pharmacy	Retail	Feruprazole	Mood Stabilizers	10	₹ 115	1,1
C	Hirthe, Williamson and Macejkovic	Schwandorf	Germany	49.3236	12.0993	Pharmacy	Retail	Hepavice	Mood Stabilizers	10	₹ 140	1,4
C	Emard-O'Connell Pharmaceutical Ltd	Kevelaer	Germany	51.5833	6.25	Pharmacy	Retail	Feruprazole	Mood Stabilizers	10	₹ 115	1,1
C	Torphy, Pfeffer and Jakubowski Pharmaceutical Ltd	Leipzig	Germany	51.35	12.3833	Pharmacy	Retail	Solasteride	Mood Stabilizers	10	₹ 520	5,2
C	Leuschke, Waters and Schowalter Pharma Plc	Herzogenrath	Germany	50.8667	6.1	Pharmacy	Retail	Cephovelam	Mood Stabilizers	10	₹ 542	5,4
C	Heathcote, Kovacek and Parker	Hof	Germany	50.3167	11.9167	Pharmacy	Retail	Rositroban	Mood Stabilizers	10	₹ 481	4,8
C	Pfeffer-Hodkiewicz Pharm	Pulheim	Germany	51	6.8	Pharmacy	Retail	Ergomethate	Mood Stabilizers	10	₹ 604	6,0
C	Osinski-Botsford Pharm	Meerbusch	Germany	51.2667	6.6667	Pharmacy	Retail	Pazofenac	Mood Stabilizers	10	₹ 123	1,2
C	Buckridge, Dach and Carroll	Friedrichshafen	Germany	47.6542	9.4792	Pharmacy	Retail	Liomulin	Mood Stabilizers	10	₹ 490	4,9
C	Schaefer-Rolfson Pharma Plc	Freiberg	Germany	50.9119	13.3428	Pharmacy	Retail	Trazobalamin	Mood Stabilizers	10	₹ 762	7,6
C	Kozey Ltd Pharmacy	Stralsund	Germany	54.3	13.0833	Pharmacy	Retail	Exotropin Empizine	Mood Stabilizers	10	₹ 785	7,8
C	Gleason PLC Pharma Plc	Bad Reichenhall	Germany	47.7247	12.8769	Pharmacy	Retail	Hepavice	Mood Stabilizers	10	₹ 140	1,4
C	Hermiston LLC Pharm	Moers	Germany	51.4592	6.6197	Pharmacy	Retail	Agalsiline	Mood Stabilizers	10	₹ 64	6
C	Sauer-Herzog Pharmacy	Winsen	Germany	53.3667	10.2167	Pharmacy	Retail	Dexmeprazole Transnuvia	Mood Stabilizers	10	₹ 180	1,8

Calculated Columns vs. Measures: Calculate the total sales for each product both as a calculated column and a measure. Compare the results and explain the differences

Calculated Columns vs. Measures:

Calculated Column for Total Sales:

```
TotalSalesColumn = PharmaData[Quantity] *
PharmaData[PricePerUnit]
```

Measure for Total Sales:

```
TotalSalesMeasure =
SUM(PharmaData[SalesAmount])
```

Time Intelligence: Using DAX, create a measure that calculates the year-to-date (YTD) sales for each month.

Time Intelligence - YTD Sales:

```
YTDSales = CALCULATE(SUM(PharmaData[SalesAmount]),
DATESYTD(PharmaData[Date]))
```

. Filter Context vs. Row Context: Write a DAX calculation that shows the total quantity sold by each sales rep. Explain how filter and row contexts apply

Filter Context vs. Row Context:

- Filter Context is applied by filters or slicers in the report, while Row Context operates on individual rows within the table.
- Example DAX to show total quantity sold by each sales rep

```
SalesRepTotalQty =
CALCULATE(SUM(PharmaData[Quantity]),
ALLEXCEPT(PharmaData, PharmaData[SalesRep]))
```

Ranking: Create a DAX measure that ranks products by sales. Display the top 5 products by rank in a visual.

Ranking Products by Sales:

```
RankBySales = RANKX(ALL(PharmaData[Product]), [TotalSalesMeasure], , DESC)
```

Calculated Columns: Add a calculated column to your data model that calculates the total cost of each product (Quantity x Price).

Calculated Columns - Total Cost:

TotalCost = PharmaData[Quantity] *
PharmaData[PricePerUnit]

Time-Based Calculations: Create a measure that calculates the year-over-year (YoY) growth in sales for each month

Time-Based Calculations - YoY Growth:

```
YoYGrowth =
VAR PreviousYearSales =
CALCULATE(SUM(PharmaData[SalesAmount]),
SAMEPERIODLASTYEAR(PharmaData[Date]))
RETURN
DIVIDE(SUM(PharmaData[SalesAmount]) -
PreviousYearSales, PreviousYearSales, 0)
```

Cumulative Total: Develop a measure to show the cumulative total of sales over time and visualize it in a line chart

Cumulative Total:

```
CumulativeSales =
CALCULATE(
SUM(PharmaData[SalesAmount]),
FILTER(
ALL(PharmaData[Date]),
PharmaData[Date] <= MAX(PharmaData[Date])
)
)
```

DASHBOARD

PHARMA DATA ANALYSIS

TOTAL PRODUCT

240

TOTAL SALES

₹ 11.8bn

TOTAL QUANTITY SOLD

29M

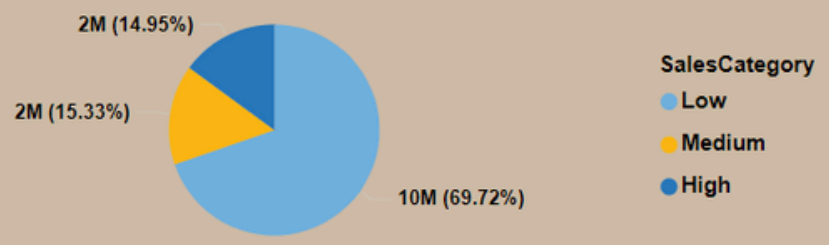
TOTAL CUSTOMERS

254.08K

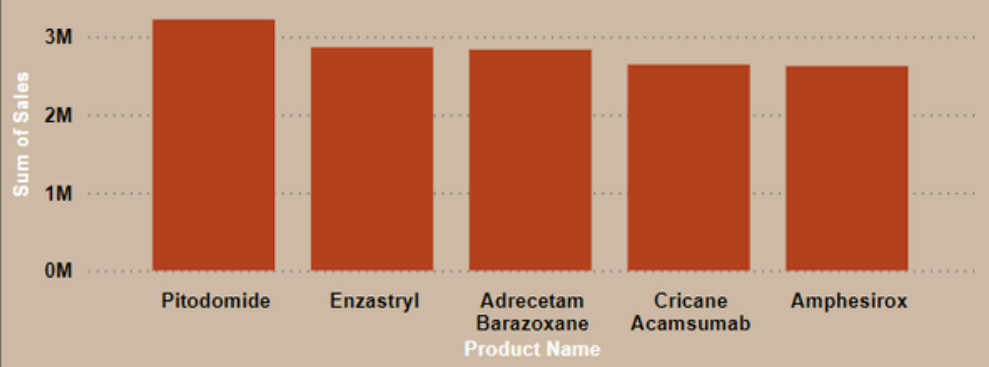
TOTAL SALES BY SALES REPRESTATIVES

Name of Sales Rep	Total Sales
Jimmy Grey	₹ 98,59,69,993.9448
Abigail Thompson	₹ 98,10,56,993.8649
Sheila Stones	₹ 95,82,03,898.2441
Daniel Gates	₹ 95,06,58,635.1859
Anne Wu	₹ 92,01,68,301.1736
Morris Garcia	₹ 90,11,95,482.5
Stella Given	₹ 88,83,40,902.419
Jessica Smith	₹ 88,16,98,369.0024
Steve Pepple	₹ 87,54,49,982.5714
Mary Gerrard	₹ 87,52,70,762.9109
Erica Jones	₹ 87,13,72,192
Thompson Crawford	₹ 86,69,64,886.1783
Alan Ray	₹ 84,26,37,242.2
Total	₹ 11,79,89,87,642.1953

SALES BY CATEGORY



TOP 5 PRODUCT BY SALES



CITY

All

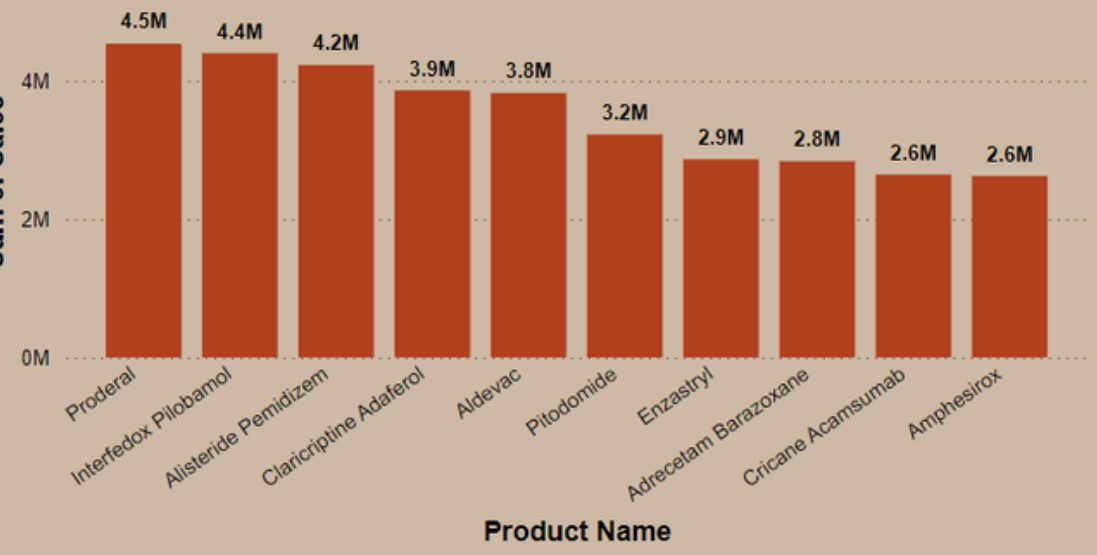
SALES REPRESENTATIVE

All

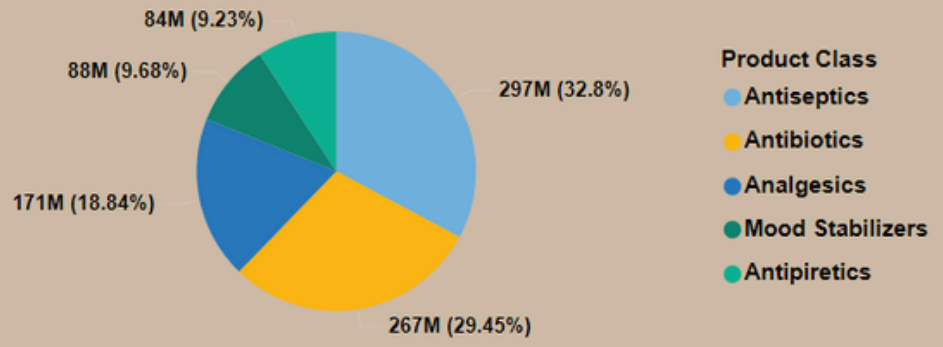
YEAR

- 2017
- 2018
- 2019
- 2020

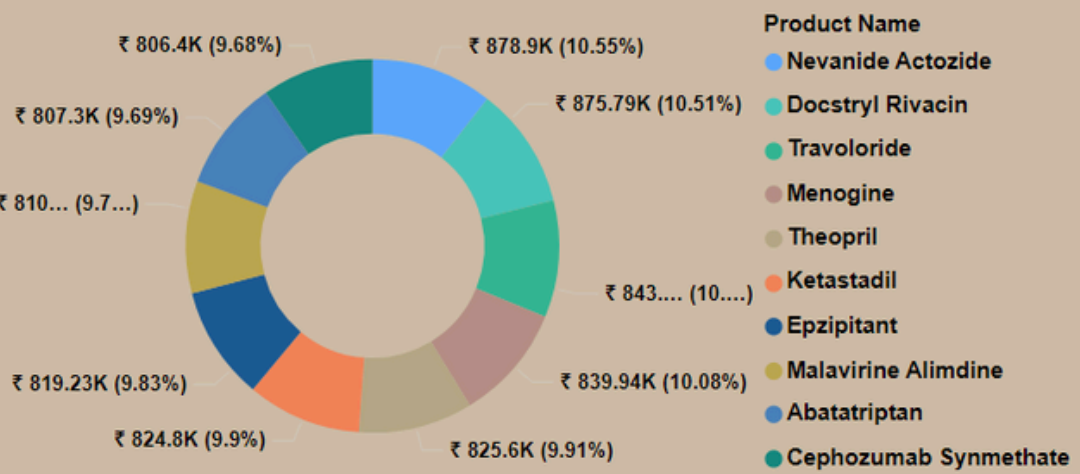
TOP 10 PRODUCTS BY SALES



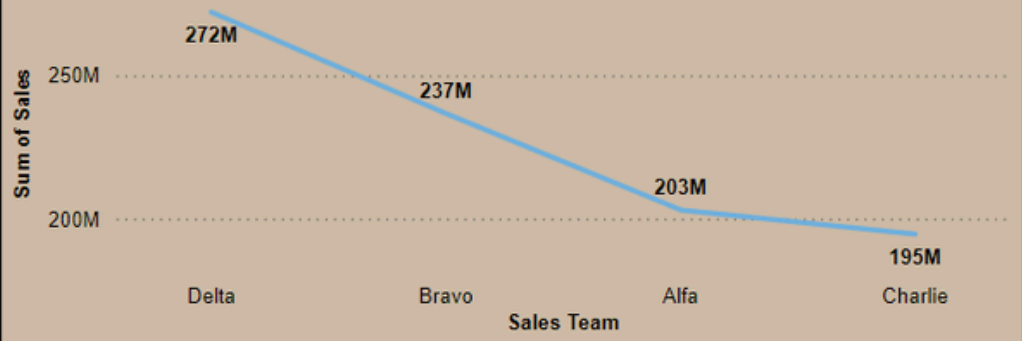
SALES BY PRODUCT CLASS



TOP 10 PROUCTS BY PRICE



SALES BY SALESS TEAMS



YEAR

All

MANAGER

All

THANKYOU