

BUSINESS ANALYST CAREER PROGRAM CAPSTONE PROJECT

Presented by: PRIYA TYAGI



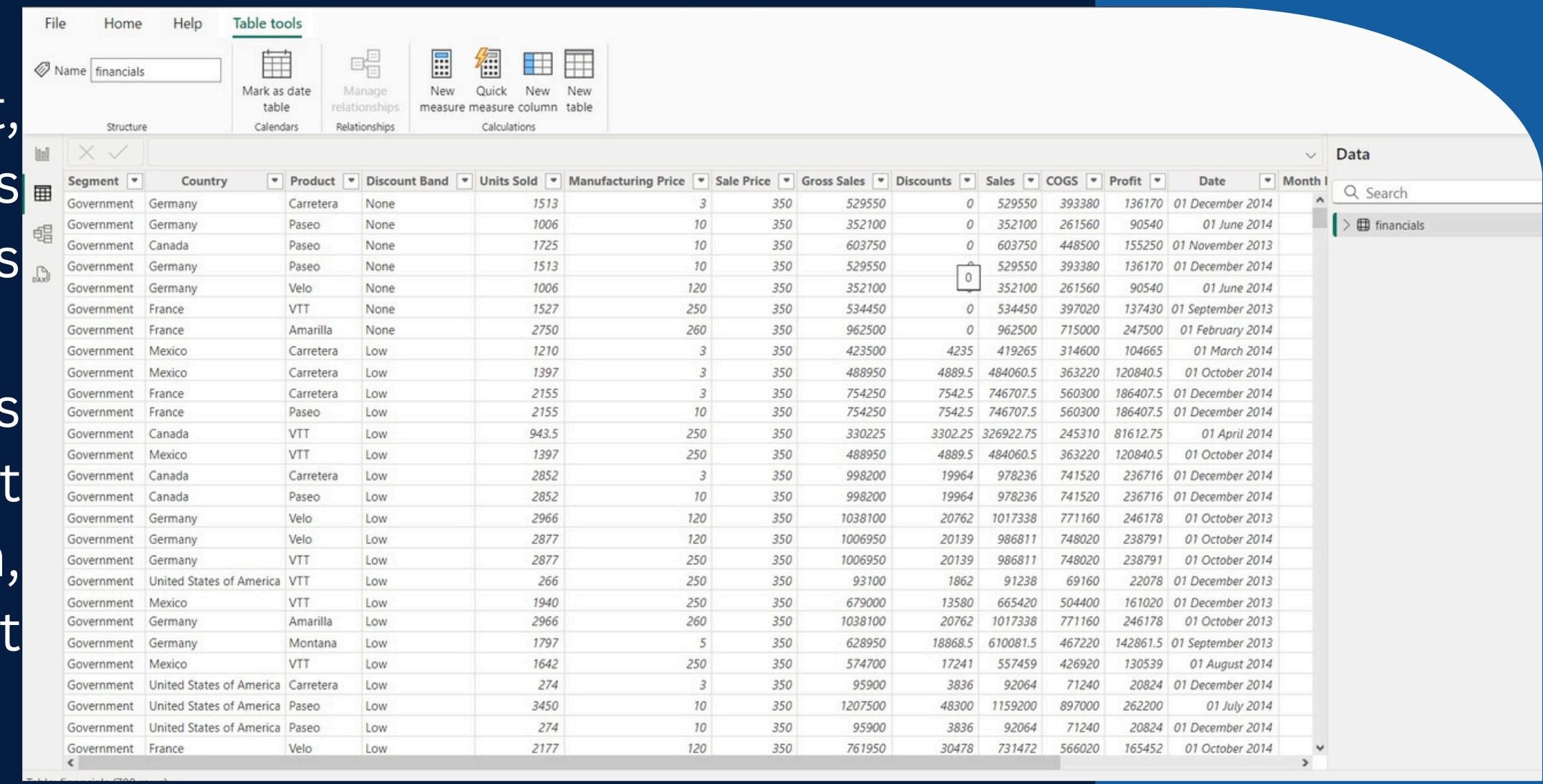
AGENDA

1. Data Exploration
2. Statistical Analysis using Excel
3. Graphical Analysis using Excel
4. Insert the given data into the SQL server
5. Import the Data from the SQL Database into PowerBI
6. Interactive Dashboard by using visualization tools
7. Conclusion and Inferences
8. Endnotes



DATA EXPLORATION

The dataset includes columns for Segment, Country, Product, Discount Band, Units Sold, Manufacturing Price, Sale Price, Gross Sales, Discounts, Sales, COGS, Profit, Date, and Month Number. These columns provide comprehensive information about sales transactions including categorization, geographical sales data, product performance, and discount impact.



A screenshot of the Microsoft Power BI Data view. The table is titled "financials". The columns are: Segment, Country, Product, Discount Band, Units Sold, Manufacturing Price, Sale Price, Gross Sales, Discounts, Sales, COGS, Profit, Date, and Month Number. The data shows various sales records across different countries (Germany, Canada, France, Mexico) and segments (Government, VTT, Amarilla, Paseo, Carretera, Velo). The table has 30 rows of data, with the last row being highlighted in yellow.

| Segment | Country | Product | Discount Band | Units Sold | Manufacturing Price | Sale Price | Gross Sales | Discounts | Sales | COGS | Profit | Date | Month |
|------------|--------------------------|-----------|---------------|------------|---------------------|------------|-------------|-----------|-----------|--------|----------|-------------------|-------|
| Government | Germany | Carretera | None | 1513 | 3 | 350 | 529550 | 0 | 529550 | 393380 | 136170 | 01 December 2014 | |
| Government | Germany | Paseo | None | 1006 | 10 | 350 | 352100 | 0 | 352100 | 261560 | 90540 | 01 June 2014 | |
| Government | Canada | Paseo | None | 1725 | 10 | 350 | 603750 | 0 | 603750 | 448500 | 155250 | 01 November 2013 | |
| Government | Germany | Paseo | None | 1513 | 10 | 350 | 529550 | 0 | 529550 | 393380 | 136170 | 01 December 2014 | |
| Government | Germany | Velo | None | 1006 | 120 | 350 | 352100 | 0 | 352100 | 261560 | 90540 | 01 June 2014 | |
| Government | France | VTT | None | 1527 | 250 | 350 | 534450 | 0 | 534450 | 397020 | 137430 | 01 September 2013 | |
| Government | France | Amarilla | None | 2750 | 260 | 350 | 962500 | 0 | 962500 | 715000 | 247500 | 01 February 2014 | |
| Government | Mexico | Carretera | Low | 1210 | 3 | 350 | 423500 | 4235 | 419265 | 314600 | 104665 | 01 March 2014 | |
| Government | Mexico | Carretera | Low | 1397 | 3 | 350 | 488950 | 4889.5 | 484060.5 | 363220 | 120840.5 | 01 October 2014 | |
| Government | France | Carretera | Low | 2155 | 3 | 350 | 754250 | 7542.5 | 746707.5 | 560300 | 186407.5 | 01 December 2014 | |
| Government | France | Paseo | Low | 2155 | 10 | 350 | 754250 | 7542.5 | 746707.5 | 560300 | 186407.5 | 01 December 2014 | |
| Government | Canada | VTT | Low | 943.5 | 250 | 350 | 330225 | 3302.25 | 326922.75 | 245310 | 81612.75 | 01 April 2014 | |
| Government | Mexico | VTT | Low | 1397 | 250 | 350 | 488950 | 4889.5 | 484060.5 | 363220 | 120840.5 | 01 October 2014 | |
| Government | Canada | Carretera | Low | 2852 | 3 | 350 | 998200 | 19964 | 978236 | 741520 | 236716 | 01 December 2014 | |
| Government | Canada | Paseo | Low | 2852 | 10 | 350 | 998200 | 19964 | 978236 | 741520 | 236716 | 01 December 2014 | |
| Government | Germany | Velo | Low | 2966 | 120 | 350 | 1038100 | 20762 | 1017338 | 771160 | 246178 | 01 October 2013 | |
| Government | Germany | Velo | Low | 2877 | 120 | 350 | 1006950 | 20139 | 986811 | 748020 | 238791 | 01 October 2014 | |
| Government | Germany | VTT | Low | 2877 | 250 | 350 | 1006950 | 20139 | 986811 | 748020 | 238791 | 01 October 2014 | |
| Government | United States of America | VTT | Low | 266 | 250 | 350 | 93100 | 1862 | 91238 | 69160 | 22078 | 01 December 2013 | |
| Government | Mexico | VTT | Low | 1940 | 250 | 350 | 679000 | 13580 | 665420 | 504400 | 161020 | 01 December 2013 | |
| Government | Germany | Amarilla | Low | 2966 | 260 | 350 | 1038100 | 20762 | 1017338 | 771160 | 246178 | 01 October 2013 | |
| Government | Germany | Montana | Low | 1797 | 5 | 350 | 628950 | 18868.5 | 610081.5 | 467220 | 142861.5 | 01 September 2013 | |
| Government | Mexico | VTT | Low | 1642 | 250 | 350 | 574700 | 17241 | 557459 | 426920 | 130539 | 01 August 2014 | |
| Government | United States of America | Carretera | Low | 274 | 3 | 350 | 95900 | 3836 | 92064 | 71240 | 20824 | 01 December 2014 | |
| Government | United States of America | Paseo | Low | 3450 | 10 | 350 | 1207500 | 48300 | 1159200 | 897000 | 262200 | 01 July 2014 | |
| Government | United States of America | Paseo | Low | 274 | 10 | 350 | 95900 | 3836 | 92064 | 71240 | 20824 | 01 December 2014 | |
| Government | France | Velo | Low | 2177 | 120 | 350 | 761950 | 30478 | 731472 | 566020 | 165452 | 01 October 2014 | |

They help quantify sales volume, revenue generation, and production costs. The dataset also includes essential financial metrics such as Gross Sales, Discounts, Sales (post-discount revenue), COGS, and Profit. Date and Month Number columns enable time-series analysis to identify sales trends and seasonality, allowing for data-driven decision-making to optimize business strategies.

STATISTICAL ANALYSIS USING EXCEL



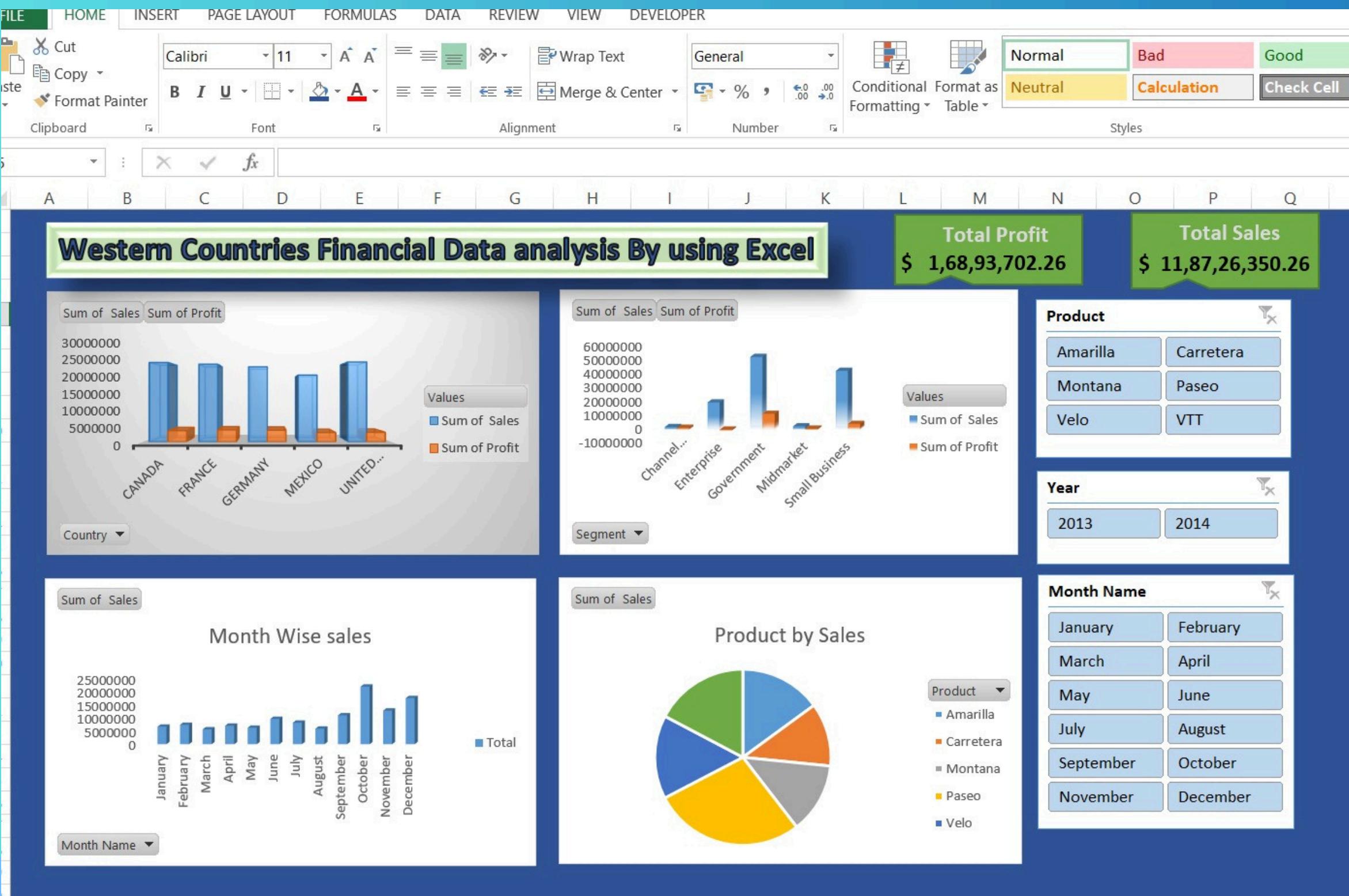
- Sum Calculation:** Using the **SUM** function, the total sales, total profit, and total discount are calculated, providing an overview of the financial performance.
- Profit Percentage Column:** A new column for profit percentage is added, with each cell using the formula $=(\text{Profit}/\text{Sales})*100$ to calculate the profit as a percentage of sales.
- Total Values:** The **SUM** function aggregates the total values for sales, profit, and discount, helping to understand the overall profitability and discount impact.
- Conditional Formatting:** Conditional formatting is applied to the profit percentage column to highlight high and low profit margins, making it easy to identify performance variations at a glance.
- Visual Analysis:** The use of color-coded conditional formatting visually distinguishes profitable entries from less profitable ones, facilitating quick and effective data interpretation.



| Sales | Discounts | Sales | COGS | Profit | Date | Month |
|-------|-----------|----------------|----------------|----------------|------------|-------|
| 0.00 | \$ - | \$ 32,370.00 | \$ 16,185.00 | \$ 16,185.00 | 01-01-2014 | |
| 0.00 | \$ - | \$ 26,420.00 | \$ 13,210.00 | \$ 13,210.00 | 01-01-2014 | |
| 0.00 | \$ - | \$ 32,670.00 | \$ 21,780.00 | \$ 10,890.00 | 01-06-2014 | |
| 0.00 | \$ - | \$ 13,320.00 | \$ 8,880.00 | \$ 4,440.00 | 01-06-2014 | |
| 0.00 | \$ - | \$ 37,050.00 | \$ 24,700.00 | \$ 12,350.00 | 01-06-2014 | |
| 0.00 | \$ - | \$ 5,29,550.00 | \$ 3,93,380.00 | \$ 1,36,170.00 | 01-12-2014 | |
| 5.00 | \$ - | \$ 13,815.00 | \$ 9,210.00 | \$ 4,605.00 | 01-03-2014 | |
| 6.00 | \$ - | \$ 30,216.00 | \$ 7,554.00 | \$ 22,662.00 | 01-06-2014 | |
| 0.00 | \$ - | \$ 37,980.00 | \$ 18,990.00 | \$ 18,990.00 | 01-06-2014 | |
| 0.00 | \$ - | \$ 18,540.00 | \$ 4,635.00 | \$ 13,905.00 | 01-06-2014 | |
| 0.00 | \$ - | \$ 37,050.00 | \$ 24,700.00 | \$ 12,350.00 | 01-06-2014 | |
| 7.50 | \$ - | \$ 3,33,187.50 | \$ 3,19,860.00 | \$ 13,327.50 | 01-07-2014 | |
| 0.00 | \$ - | \$ 2,87,400.00 | \$ 2,39,500.00 | \$ 47,900.00 | 01-08-2014 | |
| 2.00 | \$ - | \$ 15,022.00 | \$ 10,730.00 | \$ 4,292.00 | 01-09-2014 | |
| 5.00 | \$ - | \$ 43,125.00 | \$ 41,400.00 | \$ 1,725.00 | 01-10-2013 | |
| 5.00 | \$ - | \$ 9,225.00 | \$ 6,150.00 | \$ 3,075.00 | 01-12-2014 | |
| 0.00 | \$ - | \$ 5,840.00 | \$ 2,920.00 | \$ 2,920.00 | 01-02-2014 | |
| 0.00 | \$ - | \$ 14,610.00 | \$ 9,740.00 | \$ 4,870.00 | 01-02-2014 | |
| 6.00 | \$ - | \$ 30,216.00 | \$ 7,554.00 | \$ 22,662.00 | 01-06-2014 | |
| 0.00 | \$ - | \$ 3,52,100.00 | \$ 2,61,560.00 | \$ 90,540.00 | 01-06-2014 | |
| 4.00 | \$ - | \$ 4,404.00 | \$ 1,101.00 | \$ 3,303.00 | 01-07-2014 | |
| 1.00 | \$ - | \$ 6,181.00 | \$ 4,415.00 | \$ 1,766.00 | 01-08-2014 | |
| 5.00 | \$ - | \$ 8,235.00 | \$ 5,490.00 | \$ 2,745.00 | 01-09-2013 | |

| | | | | | | | | | | | |
|------------------------|-----------|-----------|----------------|------------------------|---------------------------|----------------|--------------------------|------------|-------------|------|-----------|
| 2574 | \$ 120.00 | \$ 300.00 | \$ 7,72,200.00 | \$ 1,15,830.00 | \$ 6,56,370.00 | \$ 6,43,500.00 | \$ 12,870.00 | 01-11-2013 | 11 November | 2013 | \$ 0.08 |
| 2438 | \$ 120.00 | \$ 125.00 | \$ 3,04,750.00 | \$ 45,712.50 | \$ 2,59,037.50 | \$ 2,92,560.00 | \$ (33,522.50) | 01-12-2013 | 12 December | 2013 | \$ (0.20) |
| 914 | \$ 120.00 | \$ 12.00 | \$ 10,968.00 | \$ 1,645.20 | \$ 9,322.80 | \$ 2,742.00 | \$ 6,580.80 | 01-12-2014 | 12 December | 2014 | \$ 0.04 |
| 865.5 | \$ 250.00 | \$ 20.00 | \$ 17,310.00 | \$ 2,596.50 | \$ 14,713.50 | \$ 8,655.00 | \$ 6,058.50 | 01-07-2014 | 7 July | 2014 | \$ 0.04 |
| 492 | \$ 250.00 | \$ 15.00 | \$ 7,380.00 | \$ 1,107.00 | \$ 6,273.00 | \$ 4,920.00 | \$ 1,353.00 | 01-07-2014 | 7 July | 2014 | \$ 0.01 |
| 267 | \$ 250.00 | \$ 20.00 | \$ 5,340.00 | \$ 801.00 | \$ 4,539.00 | \$ 2,670.00 | \$ 1,869.00 | 01-10-2013 | 10 October | 2013 | \$ 0.01 |
| 1175 | \$ 250.00 | \$ 15.00 | \$ 17,625.00 | \$ 2,643.75 | \$ 14,981.25 | \$ 11,750.00 | \$ 3,231.25 | 01-10-2014 | 10 October | 2014 | \$ 0.02 |
| 2954 | \$ 250.00 | \$ 125.00 | \$ 3,69,250.00 | \$ 55,387.50 | \$ 3,13,862.50 | \$ 3,54,480.00 | \$ (40,617.50) | 01-11-2013 | 11 November | 2013 | \$ (0.24) |
| 552 | \$ 250.00 | \$ 125.00 | \$ 69,000.00 | \$ 10,350.00 | \$ 58,650.00 | \$ 66,240.00 | \$ (7,590.00) | 01-11-2014 | 11 November | 2014 | \$ (0.04) |
| 293 | \$ 250.00 | \$ 20.00 | \$ 5,860.00 | \$ 879.00 | \$ 4,981.00 | \$ 2,930.00 | \$ 2,051.00 | 01-12-2014 | 12 December | 2014 | \$ 0.01 |
| 2475 | \$ 260.00 | \$ 300.00 | \$ 7,42,500.00 | \$ 1,11,375.00 | \$ 6,31,125.00 | \$ 6,18,750.00 | \$ 12,375.00 | 01-03-2014 | 3 March | 2014 | \$ 0.07 |
| 546 | \$ 260.00 | \$ 300.00 | \$ 1,63,800.00 | \$ 24,570.00 | \$ 1,39,230.00 | \$ 1,36,500.00 | \$ 2,730.00 | 01-10-2014 | 10 October | 2014 | \$ 0.02 |
| 1368 | \$ 5.00 | \$ 7.00 | \$ 9,576.00 | \$ 1,436.40 | \$ 8,139.60 | \$ 6,840.00 | \$ 1,299.60 | 01-02-2014 | 2 February | 2014 | \$ 0.01 |
| 723 | \$ 10.00 | \$ 7.00 | \$ 5,061.00 | \$ 759.15 | \$ 4,301.85 | \$ 3,615.00 | \$ 686.85 | 01-04-2014 | 4 April | 2014 | \$ 0.00 |
| 1806 | \$ 250.00 | \$ 12.00 | \$ 21,672.00 | \$ 3,250.80 | \$ 18,421.20 | \$ 5,418.00 | \$ 13,003.20 | 01-05-2014 | 5 May | 2014 | \$ 0.08 |
| \$ 11,25,806.00 | | | | \$ 92,05,248.24 | \$ 11,87,26,350.26 | | \$ 1,68,93,702.26 | | | | |

GRAPHICAL ANALYSIS USING EXCEL



A dashboard is created, summarizing total sales, total profit, and total discount using SUM functions for quick reference.

The dashboard is organized with clear headings and sections for each metric, ensuring a user-friendly layout that allows for quick and effective data analysis and decision-making.

Insert the given data into the SQL server

```
USE Project;
select * from westrendata;
```

The screenshot shows the SSMS interface. On the left is the Object Explorer tree, which includes a 'Project' node under 'Databases'. The main area has a query window with the T-SQL code: 'USE Project; select * from westrendata;'. Below it is a results grid displaying 17 rows of data from the 'westrendata' table. The columns are: Segment, Country, Product, Discount Band, Units Sold, Manufacturing Price, Sale Price, Gross Sales, Discounts, Sales, COGS, Profit, Date, Month Number, Month Name, and Year.

| Segment | Country | Product | Discount Band | Units Sold | Manufacturing Price | Sale Price | Gross Sales | Discounts | Sales | COGS | Profit | Date | Month Number | Month Name | Year |
|---------------------|--------------------------|-----------|---------------|------------|---------------------|------------|-------------|-----------|-----------|-----------|-----------|-------------------------|--------------|------------|------|
| 1 Government | Canada | Carretera | None | 1618.5 | 3.00 | 20.00 | 32370.00 | 0.00 | 32370.00 | 16185.00 | 16185.00 | 2014-01-01 00:00:00.000 | 1 | January | 2014 |
| 2 Government | Germany | Carretera | None | 1321 | 3.00 | 20.00 | 26420.00 | 0.00 | 26420.00 | 13210.00 | 13210.00 | 2014-01-01 00:00:00.000 | 1 | January | 2014 |
| 3 Midmarket | France | Carretera | None | 2178 | 3.00 | 15.00 | 32670.00 | 0.00 | 32670.00 | 21780.00 | 10890.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 |
| 4 Midmarket | Germany | Carretera | None | 888 | 3.00 | 15.00 | 13320.00 | 0.00 | 13320.00 | 8880.00 | 4440.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 |
| 5 Midmarket | Mexico | Carretera | None | 2470 | 3.00 | 15.00 | 37050.00 | 0.00 | 37050.00 | 24700.00 | 12350.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 |
| 6 Government | Germany | Carretera | None | 1513 | 3.00 | 350.00 | 529550.00 | 0.00 | 529550.00 | 393380.00 | 136170.00 | 2014-12-01 00:00:00.000 | 12 | December | 2014 |
| 7 Midmarket | Germany | Montana | None | 921 | 5.00 | 15.00 | 13815.00 | 0.00 | 13815.00 | 9210.00 | 4605.00 | 2014-03-01 00:00:00.000 | 3 | March | 2014 |
| 8 Channel Partners | Canada | Montana | None | 2518 | 5.00 | 12.00 | 30216.00 | 0.00 | 30216.00 | 7554.00 | 22662.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 |
| 9 Government | France | Montana | None | 1899 | 5.00 | 20.00 | 37980.00 | 0.00 | 37980.00 | 18990.00 | 18990.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 |
| 10 Channel Partners | Germany | Montana | None | 1545 | 5.00 | 12.00 | 18540.00 | 0.00 | 18540.00 | 4635.00 | 13905.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 |
| 11 Midmarket | Mexico | Montana | None | 2470 | 5.00 | 15.00 | 37050.00 | 0.00 | 37050.00 | 24700.00 | 12350.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 |
| 12 Enterprise | Canada | Montana | None | 2665.5 | 5.00 | 125.00 | 333187.50 | 0.00 | 333187.50 | 319860.00 | 13275.00 | 2014-07-01 00:00:00.000 | 7 | July | 2014 |
| 13 Small Business | Mexico | Montana | None | 958 | 5.00 | 300.00 | 287400.00 | 0.00 | 287400.00 | 239500.00 | 47900.00 | 2014-08-01 00:00:00.000 | 8 | August | 2014 |
| 14 Government | Germany | Montana | None | 2146 | 5.00 | 7.00 | 15022.00 | 0.00 | 15022.00 | 10730.00 | 4292.00 | 2014-09-01 00:00:00.000 | 9 | September | 2014 |
| 15 Enterprise | Canada | Montana | None | 345 | 5.00 | 125.00 | 43125.00 | 0.00 | 43125.00 | 41400.00 | 1725.00 | 2013-10-01 00:00:00.000 | 10 | October | 2013 |
| 16 Midmarket | United States of America | Montana | None | 615 | 5.00 | 15.00 | 9225.00 | 0.00 | 9225.00 | 6150.00 | 3075.00 | 2014-12-01 00:00:00.000 | 12 | December | 2014 |
| 17 Government | Canada | Danner | None | 202 | 10.00 | 20.00 | 5040.00 | 0.00 | 5040.00 | 2020.00 | 3020.00 | 2014-02-01 00:00:00.000 | 2 | February | 2014 |

- Open SQL Server Management Studio (SSMS).
- Connect to your database engine.
- Right-click your database in Object Explorer.
- Select Tasks > Import Data.
- In the Import Wizard, click Next.
- Choose Microsoft Excel as the data source.
- Click Browse to select your Excel file.
- Select the correct Excel version.
- Choose the destination database and table.
- Click Next, review settings, and finish the wizard.

Insert the given data into the SQL server



```
USE Project;
select * from westrendata;

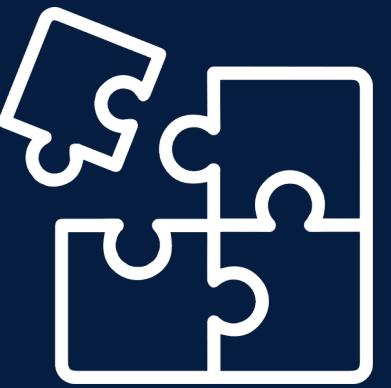
select count(Sales) from westrendata;

select * from westrendata where Segment = 'Government' and Country = 'Canada';
```

| | Segment | Country | Product | Discount Band | Units Sold | Manufacturing Price | Sale Price | Gross Sales | Discounts | Sales | COGS | Profit | Date | Month Number | Month Name | Year | |
|----|------------------|--------------------------|-----------|---------------|------------|---------------------|------------|-------------|-----------|-----------|-----------|-----------|-------------------------|--------------|------------|------|--|
| 1 | Government | Canada | Carretera | None | 1618.5 | 3.00 | 20.00 | 32370.00 | 0.00 | 32370.00 | 16185.00 | 16185.00 | 2014-01-01 00:00:00.000 | 1 | January | 2014 | |
| 2 | Government | Germany | Carretera | None | 1321 | 3.00 | 20.00 | 26420.00 | 0.00 | 26420.00 | 13210.00 | 13210.00 | 2014-01-01 00:00:00.000 | 1 | January | 2014 | |
| 3 | Midmarket | France | Carretera | None | 2178 | 3.00 | 15.00 | 32670.00 | 0.00 | 32670.00 | 21780.00 | 10890.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 | |
| 4 | Midmarket | Germany | Carretera | None | 888 | 3.00 | 15.00 | 13320.00 | 0.00 | 13320.00 | 8880.00 | 4440.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 | |
| 5 | Midmarket | Mexico | Carretera | None | 2470 | 3.00 | 15.00 | 37050.00 | 0.00 | 37050.00 | 24700.00 | 12350.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 | |
| 6 | Government | Germany | Carretera | None | 1513 | 3.00 | 350.00 | 529550.00 | 0.00 | 529550.00 | 393380.00 | 136170.00 | 2014-12-01 00:00:00.000 | 12 | December | 2014 | |
| 7 | Midmarket | Germany | Montana | None | 921 | 5.00 | 15.00 | 13815.00 | 0.00 | 13815.00 | 9210.00 | 4605.00 | 2014-03-01 00:00:00.000 | 3 | March | 2014 | |
| 8 | Channel Partners | Canada | Montana | None | 2518 | 5.00 | 12.00 | 30216.00 | 0.00 | 30216.00 | 7554.00 | 22662.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 | |
| 9 | Government | France | Montana | None | 1899 | 5.00 | 20.00 | 37980.00 | 0.00 | 37980.00 | 18990.00 | 18990.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 | |
| 10 | Channel Partners | Germany | Montana | None | 1545 | 5.00 | 12.00 | 18540.00 | 0.00 | 18540.00 | 4635.00 | 13905.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 | |
| 11 | Midmarket | Mexico | Montana | None | 2470 | 5.00 | 15.00 | 37050.00 | 0.00 | 37050.00 | 24700.00 | 12350.00 | 2014-06-01 00:00:00.000 | 6 | June | 2014 | |
| 12 | Enterprise | Canada | Montana | None | 2665.5 | 5.00 | 125.00 | 333187.50 | 0.00 | 333187.50 | 319860.00 | 13327.50 | 2014-07-01 00:00:00.000 | 7 | July | 2014 | |
| 13 | Small Business | Mexico | Montana | None | 958 | 5.00 | 300.00 | 287400.00 | 0.00 | 287400.00 | 239500.00 | 47900.00 | 2014-08-01 00:00:00.000 | 8 | August | 2014 | |
| 14 | Government | Germany | Montana | None | 2146 | 5.00 | 7.00 | 15022.00 | 0.00 | 15022.00 | 10730.00 | 4292.00 | 2014-09-01 00:00:00.000 | 9 | September | 2014 | |
| 15 | Enterprise | Canada | Montana | None | 345 | 5.00 | 125.00 | 43125.00 | 0.00 | 43125.00 | 41400.00 | 1725.00 | 2013-10-01 00:00:00.000 | 10 | October | 2013 | |
| 16 | Midmarket | United States of America | Montana | None | 615 | 5.00 | 15.00 | 9225.00 | 0.00 | 9225.00 | 6150.00 | 3075.00 | 2014-12-01 00:00:00.000 | 12 | December | 2014 | |
| 17 | Government | Canada | Promo | None | 202 | 10.00 | 20.00 | 5940.00 | 0.00 | 5940.00 | 2920.00 | 2920.00 | 2014-02-01 00:00:00.000 | 2 | February | 2014 | |

IMPORT THE DATA FROM THE SQL DATABASE INTO POWERBI

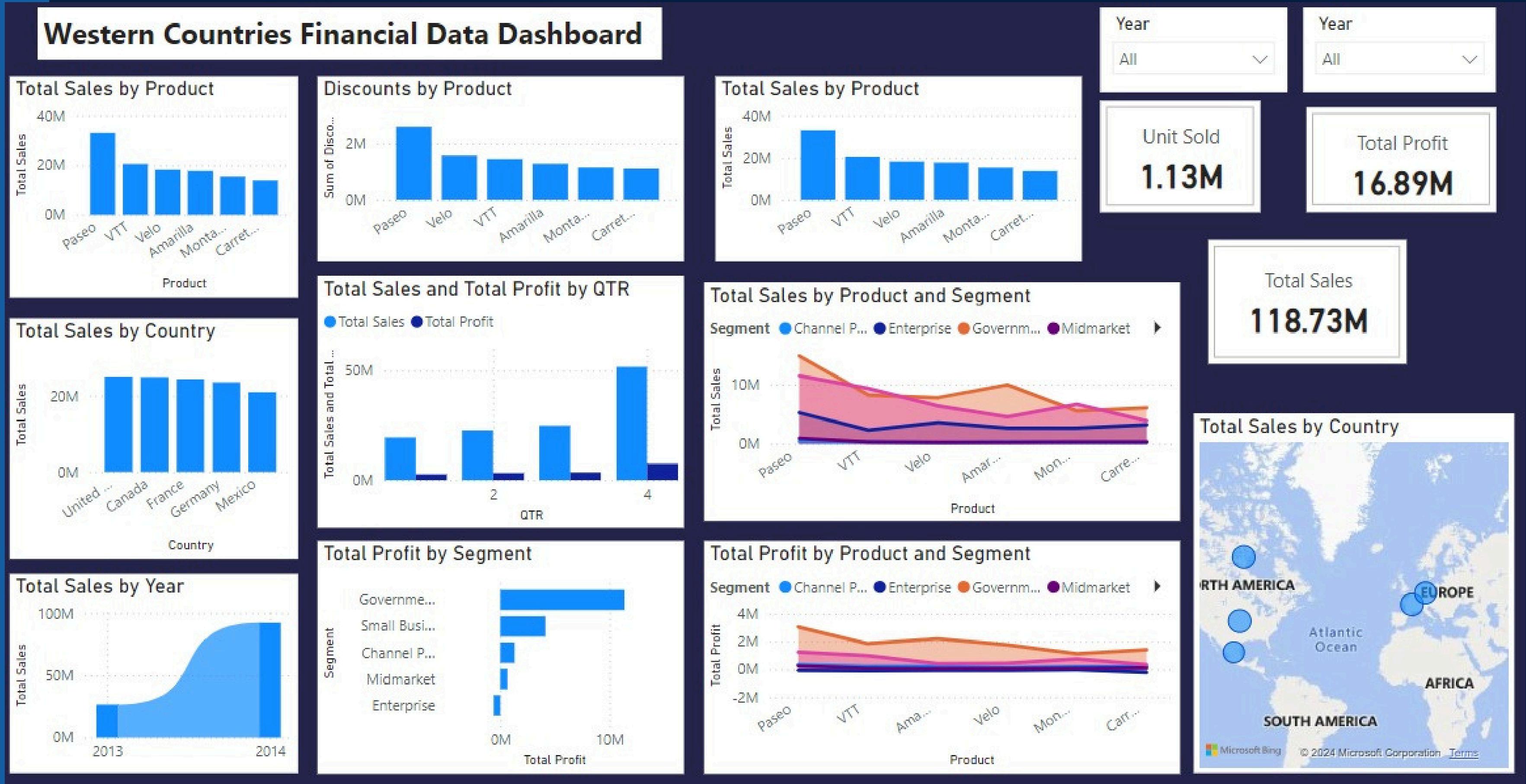
- Open Power BI Desktop.
- Click Home > Get Data > SQL Server.
- Enter the server name and database, then click OK.
- Choose the data tables to import and click Load.
- Data from SQL Server will be imported into Power BI for analysis.



The screenshot illustrates the Power BI desktop environment. At the top, a 'SQL Server database' connection dialog box is open, prompting for a server (set to 'DESKTOP-AUUHR2K\SQLEXPRESS') and a database (left empty). Below this, the 'Table tools' ribbon is selected, showing options for managing relationships and calculations. The main workspace displays a large data grid titled 'western data set' containing 700 rows of financial data. To the right of the grid, a 'Data' pane shows a table named 'financials'. Above the workspace, a 'Navigator' pane lists a project structure with a file named 'mpp_milk' and a table named 'Westrendata'. The 'Westrendata' table is detailed below, showing columns for Segment, Country, Product, Discount Band, Units Sold, Manufacturing Price, Sale Price, Gross Sales, Discounts, Sales, COGS, Profit, Date, and Month. The final part of the interface shows a chart preview on the right side.

| Segment | Country | Product | Discount Band | Units Sold | Manufacturing Price | Sale Price | Gross Sales | Discounts | Sales | COGS | Profit | Date | Month |
|------------|--------------------------|-----------|---------------|------------|---------------------|------------|-------------|-----------|-----------|--------|----------|-------------------|-------|
| Government | Germany | Carretera | None | 1513 | 3 | 350 | 529550 | 0 | 529550 | 393380 | 136170 | 01 December 2014 | |
| Government | Germany | Paseo | None | 1006 | 10 | 350 | 352100 | 0 | 352100 | 261560 | 90540 | 01 June 2014 | |
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| Government | France | VTT | None | 1527 | 250 | 350 | 534450 | 0 | 534450 | 397020 | 137430 | 01 September 2013 | |
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| Government | Mexico | Carretera | Low | 1210 | 3 | 350 | 423500 | 4235 | 419265 | 314600 | 104665 | 01 March 2014 | |
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| Government | Canada | Carretera | Low | 2852 | 3 | 350 | 998200 | 19964 | 978236 | 741520 | 236716 | 01 December 2014 | |
| Government | Canada | Paseo | Low | 2852 | 10 | 350 | 998200 | 19964 | 978236 | 741520 | 236716 | 01 December 2014 | |
| Government | Germany | Velo | Low | 2966 | 120 | 350 | 1038100 | 20762 | 1017338 | 771160 | 246178 | 01 October 2013 | |
| Government | Germany | Velo | Low | 2877 | 120 | 350 | 1006950 | 20139 | 986811 | 748020 | 238791 | 01 October 2014 | |
| Government | Germany | VTT | Low | 2877 | 250 | 350 | 1006950 | 20139 | 986811 | 748020 | 238791 | 01 October 2014 | |
| Government | United States of America | VTT | Low | 266 | 250 | 350 | 93100 | 1862 | 91238 | 69160 | 22078 | 01 December 2013 | |
| Government | Mexico | VTT | Low | 1940 | 250 | 350 | 679000 | 13580 | 665420 | 504400 | 161020 | 01 December 2013 | |
| Government | Germany | Amarilla | Low | 2966 | 260 | 350 | 1038100 | 20762 | 1017338 | 771160 | 246178 | 01 October 2013 | |
| Government | Germany | Montana | Low | 1797 | 5 | 350 | 628950 | 18868.5 | 610081.5 | 467220 | 142861.5 | 01 September 2013 | |
| Government | Mexico | VTT | Low | 1642 | 250 | 350 | 574700 | 17241 | 557459 | 426920 | 130539 | 01 August 2014 | |
| Government | United States of America | Carretera | Low | 274 | 3 | 350 | 95900 | 3836 | 92064 | 71240 | 20824 | 01 December 2014 | |
| Government | United States of America | Paseo | Low | 3450 | 10 | 350 | 1207500 | 48300 | 1159200 | 897000 | 262200 | 01 July 2014 | |
| Government | United States of America | Paseo | Low | 274 | 10 | 350 | 95900 | 3836 | 92064 | 71240 | 20824 | 01 December 2014 | |
| Government | France | Velo | Low | 2177 | 120 | 350 | 761950 | 30478 | 731472 | 566020 | 165452 | 01 October 2014 | |

INTERACTIVE DASHBOARD BY USING VISUALIZATION TOOLS





CONCLUSION AND INFERENCES



- "Western Countries Financial Data analysis By using Excel"
- Total Profit: \$1,68,93,702.26
- Total Sales: \$11,87,26,350.26
- "Western Countries Financial Data Dashboard" By using Power bi
- Total Profit: \$16.89M
- Total Sales: \$118.73M
- Units Sold: 1.13M

The Power BI dashboard provides a comprehensive visualization of financial data for Western countries. It includes bar charts for total sales and discounts by product, as well as sales by country. A combined line and bar chart shows total sales and profit by quarter, while another line chart breaks down sales by product and segment. Additionally, the dashboard features a map illustrating sales distribution across different countries, enhancing the overall data analysis.

ENDNOTES



Project Link- Excel and Power BI file



Thank's For Watching

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