### **Explanation of the dashboard**

The purpose of this documentation is to guide the reader through the interpretation of the data presented in the dashboard, highlighting significant findings and providing actionable insights that can drive strategic decision-making. This analysis aims to help stakeholders understand market dynamics, identify opportunities for growth, and optimize resource allocation to maximize profitability.

This data about sales product in many countries like Germany, France and USA ...

Our target column is the Profit column.

#### So, first chart in our dashboard is (Profit by Country and Product):

#### **Profit by Country and Product:**

- The horizontal bar charts at the top show the profit distribution across five countries (Canada, France, Germany, Mexico, USA) for various products (Amarilla, Carretera, Montana, Paseo, Velo, VTT)
- France and Canada are leading in terms of profit across most products, indicating strong market performance in these regions.
- Velo and Montana are top-performing products across multiple countries, particularly in France and Canada. This suggests that these products are popular and have a higher market demand in these countries.
- In contrast, Germany and Mexico show lower profits for most products, suggesting that these markets may be underperforming or that different strategies might be needed to boost sales.

By visualizing this relationship, you can quickly identify high-performing products and markets, as well as areas that may need strategic adjustment

#### second chart in our dashboard is (profit with country):

- France has the highest average profit, followed closely by Germany and Canada. This indicates that these countries are the most profitable markets overall.
- Mexico and USA have lower average profits, indicating potential for growth or the need to improve profit margins in these regions.
- Country is used to break down the profit data by geographical regions, allowing the analysis of profitability across different markets.
- Profit provides the financial performance of each country, highlighting which markets are driving the most value.

This relationship is essential for comparing the overall profitability of different countries, helping in decisions related to resource allocation, market focus, and strategic planning.

#### third chart in our dashboard is (Profit by Month and Year):

- A scatter plot combined with a line chart shows monthly profit trends over the years 2012 to 2014
- The monthly profit trends show clear seasonal variations, with profits peaking towards the end of each year, particularly in **November** and **December**. This likely reflects higher sales during the **holiday season**.
- The data suggests that marketing efforts could be intensified during these months to capitalize on increased consumer spending.

Date, Month Number, and Year are used to break down the profit data over time, allowing for the identification of seasonal trends and year-over-year performance.

Profit measures the financial outcome over different periods, which is crucial for understanding when the business experiences peaks and troughs in profitability.

# Fourth chart in our dashboard is (Average Sales and Profit for Each Product):

 A bar chart displays the average sales price and average profit for each product. Higher-priced products generally correspond to higher average profits.

- For example, Products with higher average sales prices, such as Velo and Montana, correspond to higher average profits, reinforcing the importance of these products to the overall business performance.
- Products with lower average sales and profit, such as Amarilla and Carretera, may require reevaluation of pricing strategies or promotional efforts to boost profitability.

This relationship helps in understanding the value and profitability of each product, guiding pricing strategies, product development, and inventory management.

## Fifth chart in our dashboard is (Average Sales and Profit for Each Product):

- A bar chart shows the gross sales for each country, with Canada and the USA having the highest gross sales.
- Canada and the USA are leading in gross sales, but when comparing this with the profit data, it's evident that despite high sales, the profit margins in the USA are not as strong as in France or Canada.
- This suggests a need to focus on cost management or pricing strategies in the USA to improve profitability.

Total Sales represents the total revenue generated before any discounts and is an important metric for understanding the market size and revenue potential of each country.

The relationship between total sales and country helps identify the most profitable markets, allowing for strategic focus on high-revenue regions and better market expansion plans.

At the end By creating relationships between these columns and visualizing them through charts, the dashboard provides a clear and actionable overview of a company's financial performance across different dimensions. This enables stakeholders to make decisions, improve operations, and drive business growth

