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# Sales Performance Report 2023



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# 1. Executive Summary

In response to the evolving transportation industry and changing customer behavior, Mega Transportation Company (MTC) has experienced a decline in revenue and profitability. To address these challenges, an in-depth analysis was conducted on the sales data for the entire year of 2023. The objective was to provide a comprehensive summary and valuable insights to guide strategic decision-making.

## Key findings:

### Timing of sales:

- The year 2023 witnessed a trend in sales fluctuation.
- November was the month in which we made the highest profits.

### Product Performance:

- The classic cars product generated the highest profit for MTC in 2023.
- The trains generate the lowest revenue among all products.

### Geographical analysis:

- Europe was the continent that brought the highest profit to the company, while the country that brought the highest profit was the USA.
- Asia has been the least profitable market.

### Customer behavior:

- It was identified that the top 5 customers who brought high profits for the company had gained the highest profit from different categories.

### Company's services:

- The delivery condition of the product should be considered to gain insight into the potential reasons for the monthly decline in sales.

## 2. INTRODUCTION

### Overview of Mega Transportation Company (MTC)

Transportation in recent years has grown to be a viable industry with various developing businesses. Mega Transportations Company (MTC) which is one of them was founded in 1975 in USA, from a small local business that quickly grew to an international organization operating on five continents. Vehicles of all kinds, including automobiles, trucks, and even airplanes, are profitable for MTC as a transportation company.



## Problems and Purpose

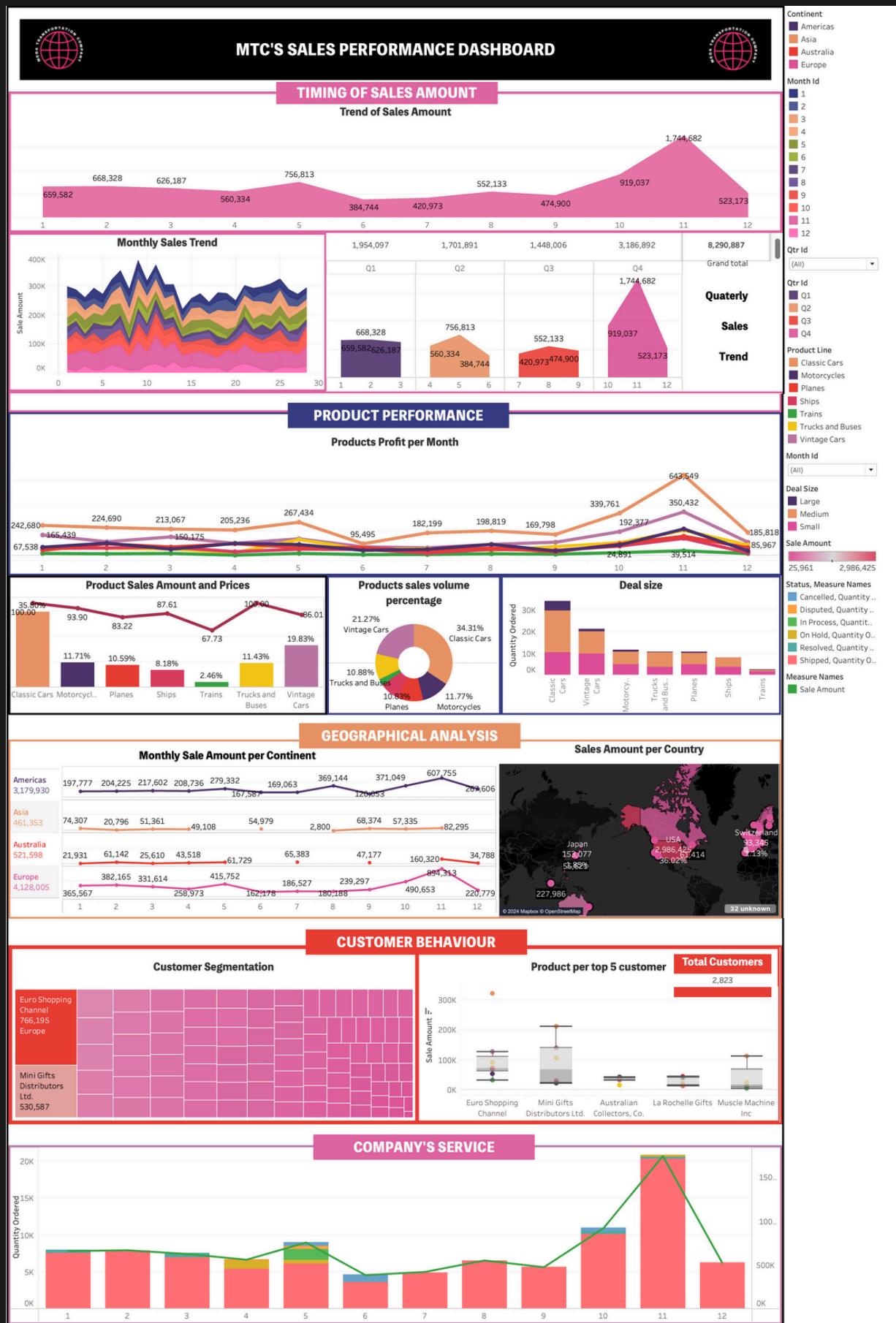
Though MTC has had some success over the past 24 years, it has struggled with declining revenue and profitability due to the growth of several other up-and-coming businesses in the transportation sector as well as changing consumer habits.

The purpose of this report is to furnish the top management of MTC with a comprehensive summary of the sales data for the year 2023, along with significant and noteworthy highlights.

## Methodology

With the emergence of new technologies, rapidly evolving consumer desires, and increased competition, decision-making requires a data-driven approach grounded in thorough analysis and insights. To achieve this, Tableau which is a powerful data visualization tool, is used to examine MTC's sales data for the year 2023 and extract valuable insights that can be utilized.

# 3. DASHBOARD OVERVIEW



## **sales performance analysis**

# **4. SALES PERFORMANCE ANALYSIS**

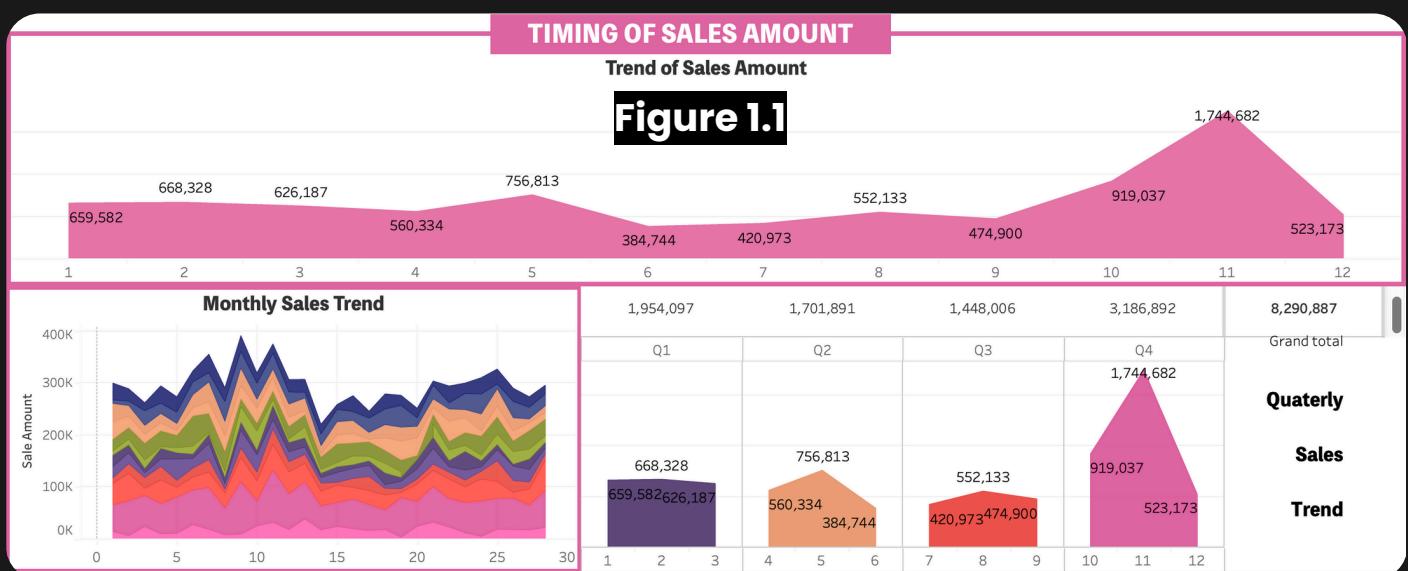


Following what the dashboard reveals above, the four main areas are divided to be analysed which are **Timing of sales amount**, **Product Performance**, **Geographical analysis**, **Customer Behaviour** and **Company's Services**. Through this part, insights of the sales status from each perspective would be shown.

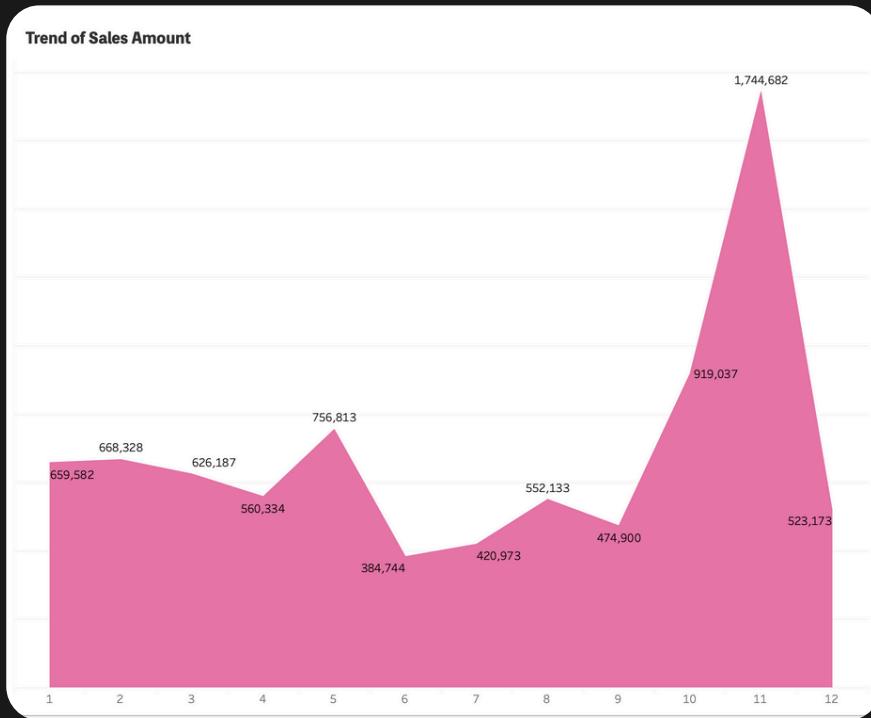


# 4.1 Timing of sales amount

Based on the MTC dataset from 2023, the provided graphs depict the sales trends at monthly, daily, and quarterly intervals, revealing both seasonal sales patterns and the challenges encountered by the company.



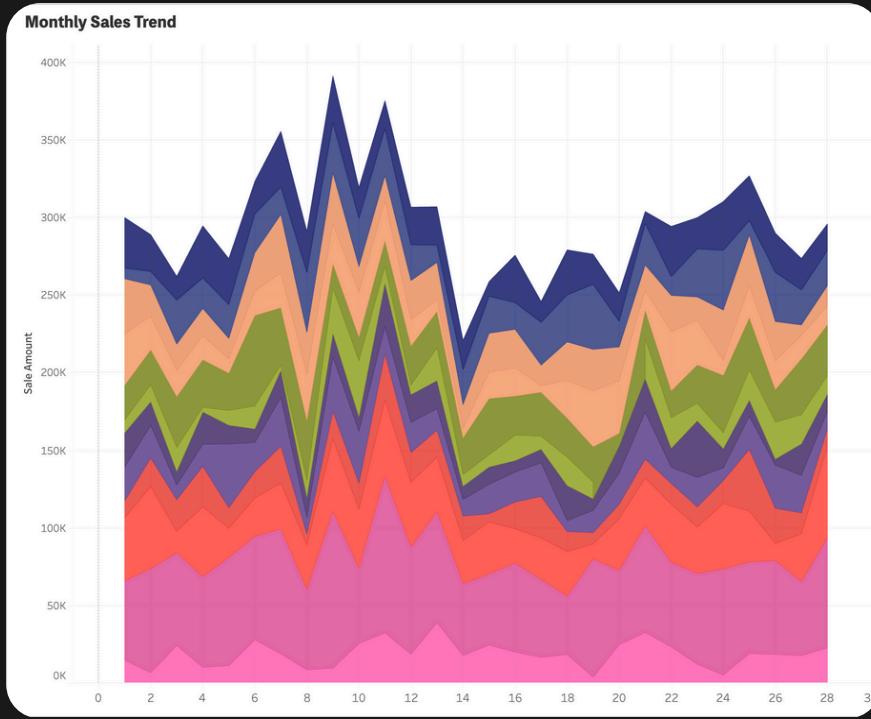
# sales performance analysis



**Figure 1.1**

Figure 1.1 illustrates the trend of sales amount for the entire company over 2023, characterized by fluctuations. Notably, November stands out with a peak sales amount of \$1,744,682. Starting at \$659,582 in the first month, the total sales gradually increase with fluctuations in subsequent months. The lowest point occurs in June at \$384,744, which happened after a recovery from the earlier period. After a decline of \$77,233 in September, the sales amount experiences rapid growth in the following two months, culminating in the highest point of the year. However, in December, the sales amount significantly drops to \$523,173, even lower than the initial period of 2023.

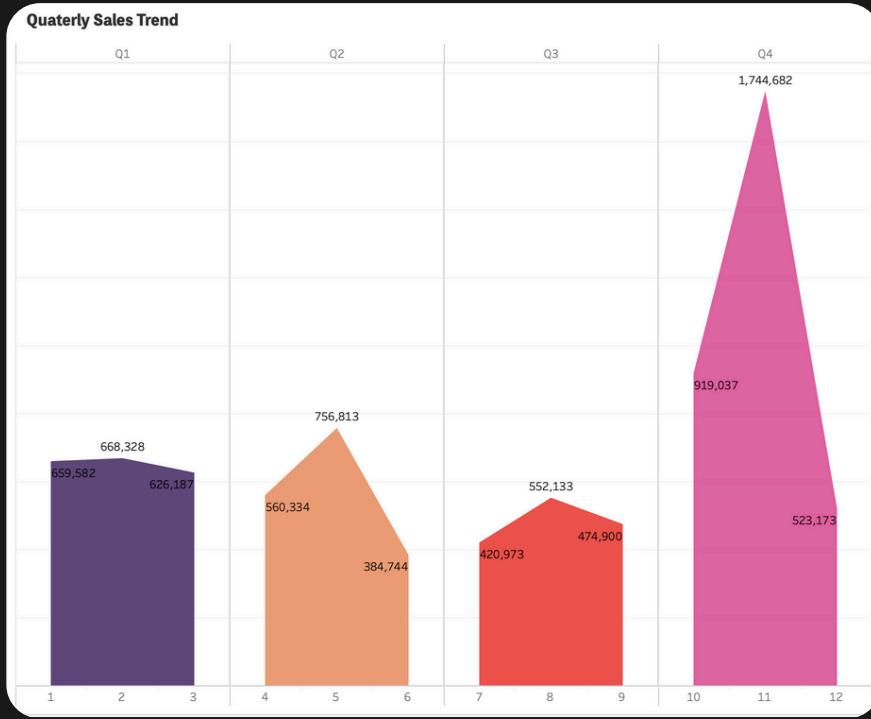
# sales performance analysis



**Figure 1.2**

Figure 1.2 showcases the monthly sales trend, depicting the fluctuations in total sales amounts. Notably, the highest sales amount of \$35,797 occurred on June (lowest-revenue month) 10th, while November (highest-revenue month) 11th recorded the peak sales amount of \$100,835. Throughout 2023, there is a consistent pattern where the initial period of each month is the most common time for customer purchases. This behaviour may be influenced by external factors such as payday or monthly budgets. Moreover, the analysis indicates that sales fluctuations between months are relatively minor, suggesting that customers exhibit similar consumption behaviour on a monthly basis.

# sales performance analysis



**Figure 1.3**

Figure 1.3 displays the quarterly sales trend graphs, revealing consistent patterns characterized by peaks occurring in the middle of each quarter. These findings indicate that the sales trend is subject to lacks stability within each quarter, with rapid increases and decreases in sales. While the first three quarters exhibit similar shapes with modest fluctuations, the final quarter experiences a more substantial decline. By uncovering the underlying reasons behind these fluctuations, the company can optimize its strategies to ensure more consistent sales levels throughout the year.



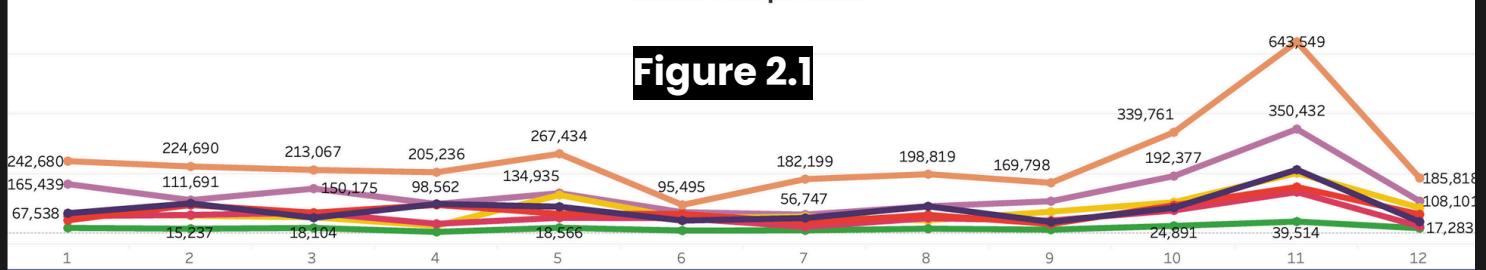
# 4.2 Product Performance

The given graphs from the MTC dataset in 2023 illustrate the sales trends for different product categories throughout the year, the correlation between sales volume and profit, and the impact of price on customers' preferences regarding deal size.

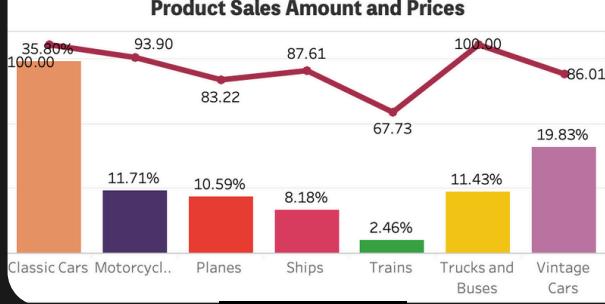
PRODUCT PERFORMANCE

Products Profit per Month

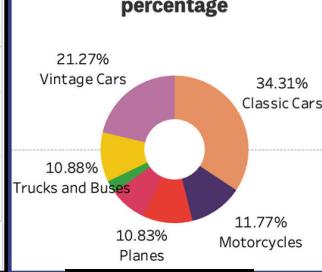
Figure 2.1



Product Sales Amount and Prices



Products sales volume percentage



Deal size

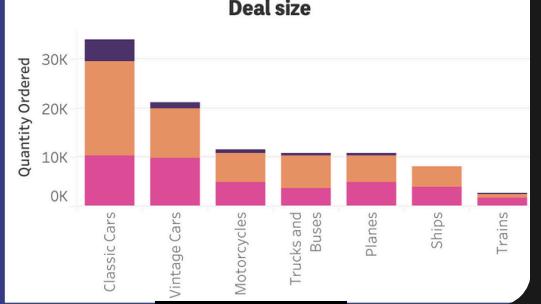
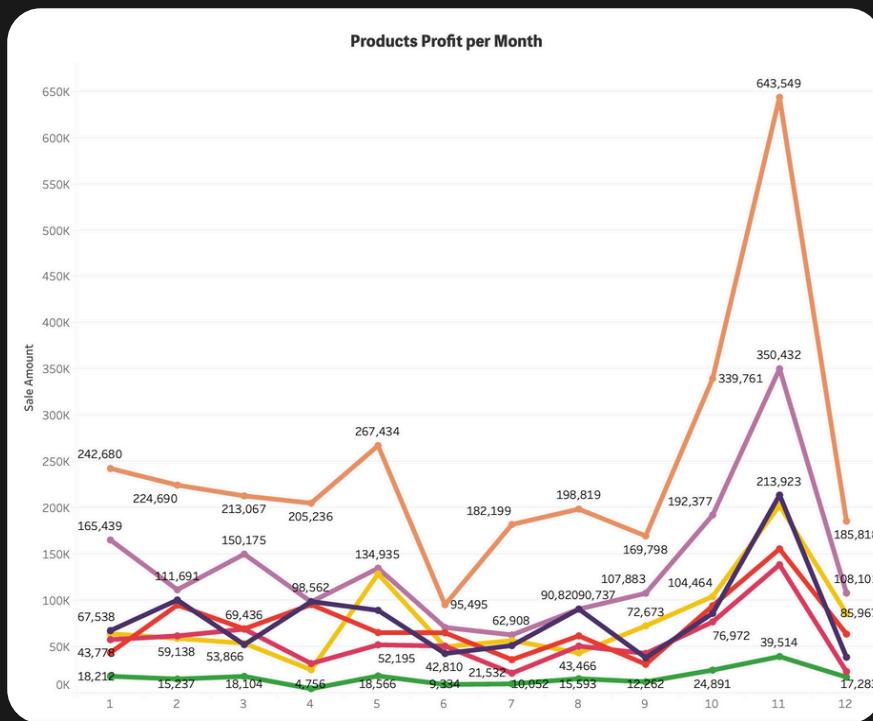


Figure 2.2

Figure 2.3

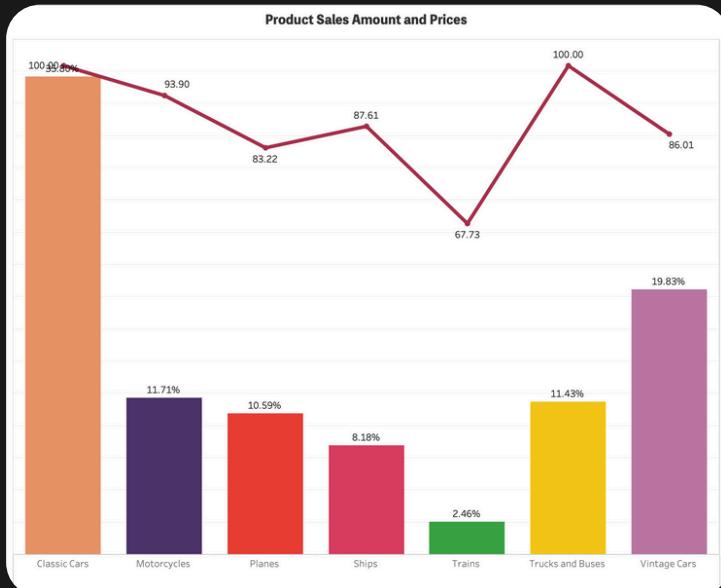
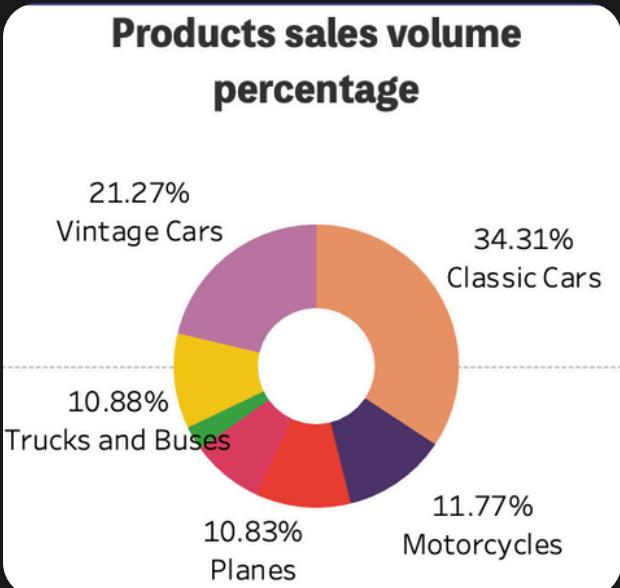
Figure 2.4

# sales performance analysis

**Figure 2.1**

The analysis of sales data in Figure 2.1 indicates that overall, all product categories experienced fluctuations in sales throughout the year, with the highest sales peak occurring in November. Among these categories, classic cars emerged as the most profitable, generating a revenue of \$643,549 in this month. Initially, motorcycles held the position of the third-highest profit product at the beginning of 2023, but they were later surpassed by trucks and buses by the end of the year. In comparison to other products, trains consistently exhibited the lowest revenue and quantity ordered. This suggests that trains may face limited customer demand, which warrants further exploration to understand the underlying factors contributing to their consistent but relatively low sales performance.

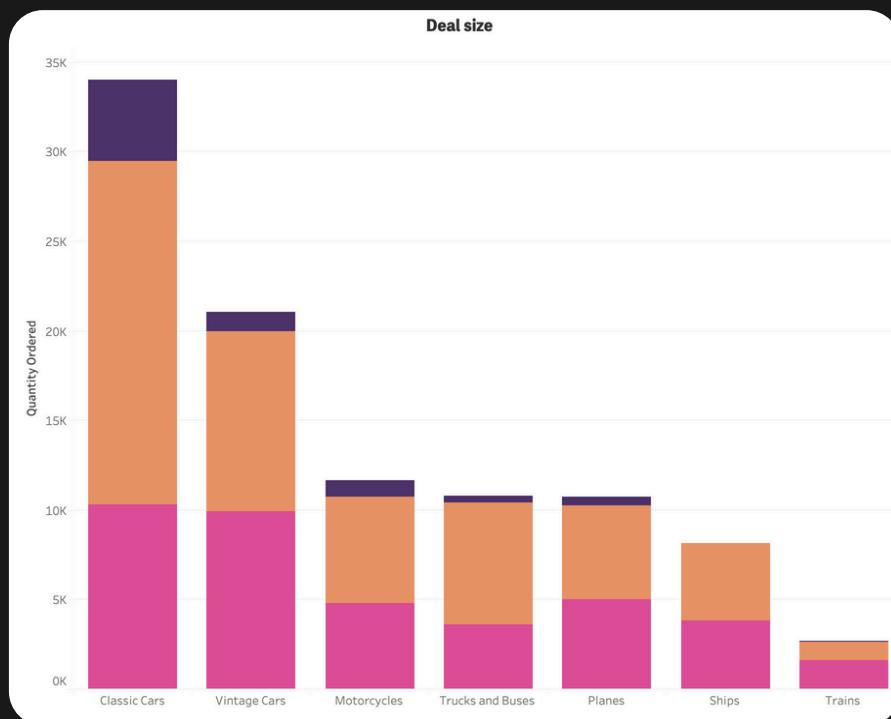
# sales performance analysis

**Figure 2.2****Figure 2.3**

As seen in Figure 2.2, classic cars emerged as the top revenue-generating product for MTC, amassing a total of \$2,968,546. Vintage cars followed closely behind, generating \$1,644,212 in revenue. Trains had the smallest sales volume and generated the least revenue, reaching only \$203,804 throughout the year. Figure 2.3 further highlights the dominance of classic cars in terms of sales volume, representing a significant 35.08% of the total quantity ordered. Conversely, trains had the smallest sales volume, accounting for a mere 2.74% of the total quantity ordered. This analysis reveals a consistent trend where sales volume and total revenue align closely, indicating a strong correlation between the two metrics.

Figure 2.2 highlights that despite classic cars having a higher median price, it did not hinder their position as the best-selling product. On the other hand, trains, with a significantly lower price, approximately \$32 below classic cars, likely contributed to their lower sales volume and revenue. This insight emphasises the crucial role of pricing strategies in driving sales and revenue, and conducting a comprehensive examination of pricing dynamics across different product categories .

# sales performance analysis



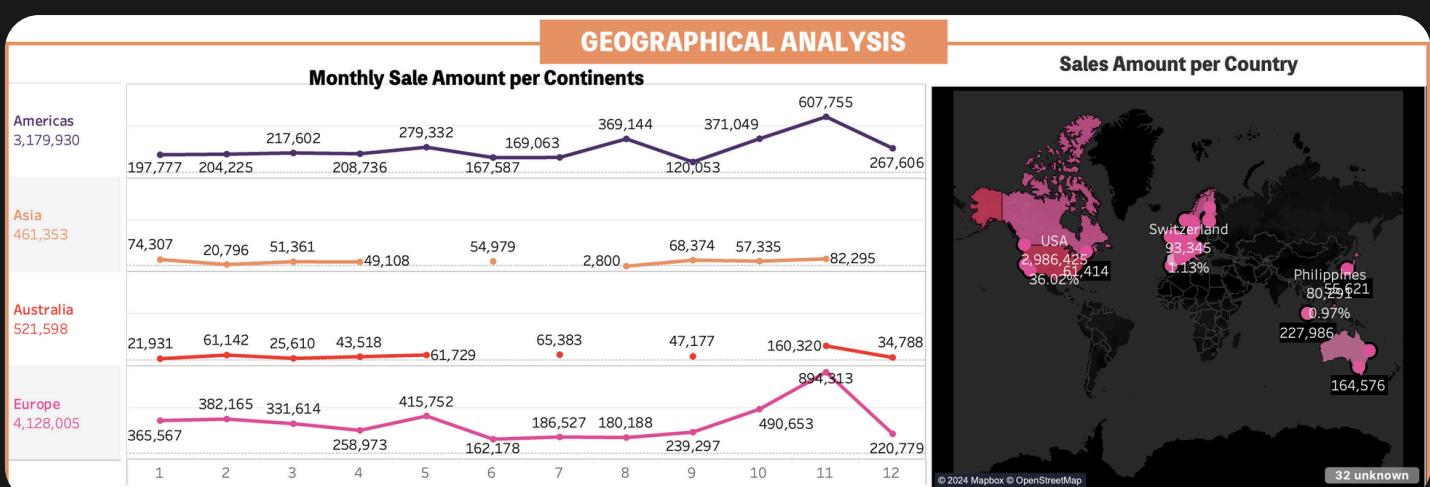
**Figure 2.4**

The analysis of product sizes in Figure 2.4 reveals a clear preference for medium-sized products among customers across all seven product categories. The majority of customers showed a preference for medium and small-sized products, while large-sized products had the lowest order quantity. Remarkably, there were no orders for large-sized ships throughout the entire year of 2023. This insight indicates that customers generally gravitate towards products that are of a manageable size. By aligning inventory and product offerings with customer preferences, businesses can enhance customer satisfaction and optimize their operations.

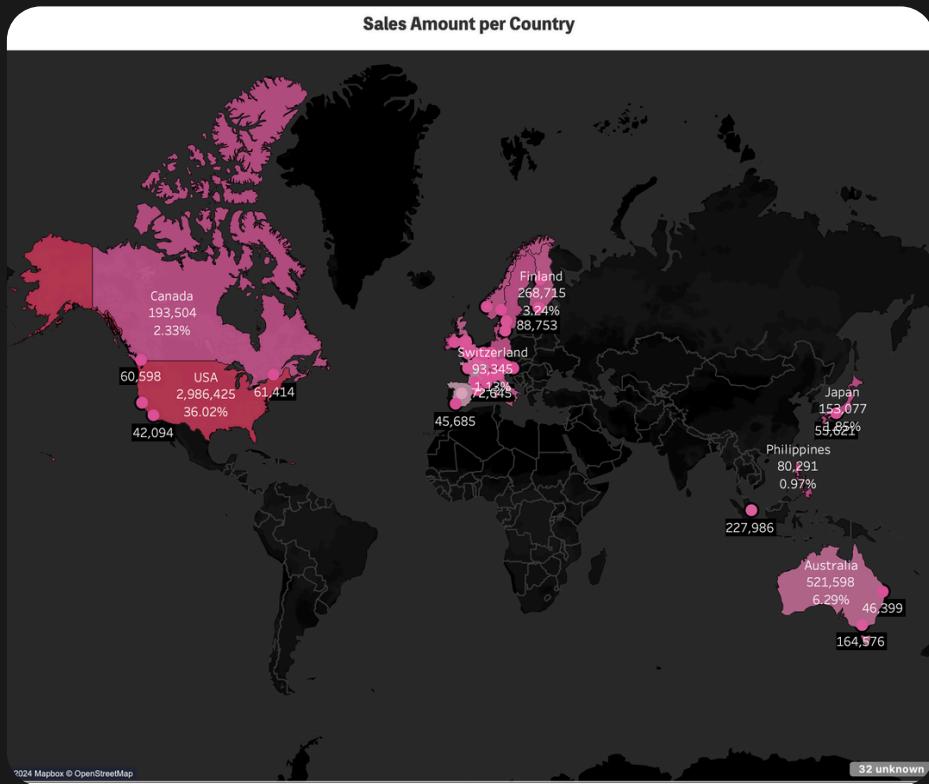


# 4.3 Geographical Analysis

Below are visual representations based on the MTC dataset in 2023, showcasing the revenue breakdown by country and displaying the monthly sales patterns across continents.

**Figure 3.2****Figure 3.1**

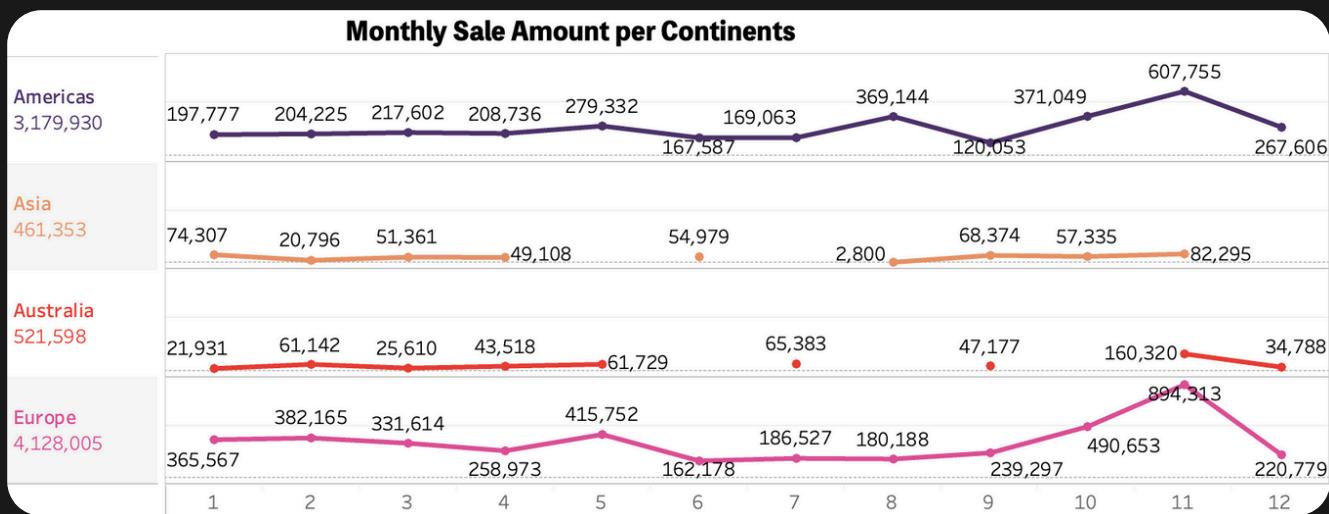
# sales performance analysis



**Figure 3.1**

Based on the information provided in Figure 3.1, the market for MTC was primarily focused on the Americas, Australia, and Europe. In contrast, Asia represented a smaller market. The sales graph (figure3.1) reveals that the USA was the largest market, generating sales amounting to \$2,986,425, which accounted for 36.02% of the total market. Following the USA, Spain in Europe achieved sales of \$1,021,706, representing 12.32% of the market. On the other hand, Ireland had the lowest revenue in MTC, contributing only 0.52% to the overall market with sales totaling \$43,237. Singapore emerged as the top-performing country in the Asian market, with sales of \$227,986. There is potential for growth and expansion in the smaller Asian market.

# sales performance analysis



**Figure 3.2**

Figure 3.2 shows MTC's sales performance in 2023 across continents. Sales in the Americas and Europe were consistently high throughout the year, contributing significantly to the company's revenue. However, sales in Asia and Australia declined from May to August, resulting in minimal revenue. In November, there was a remarkable surge in sales across all countries, with the Americas leading with \$607,755 in sales, followed by Europe with \$894,313, Australia with \$160,320, and Asia with \$82,295 in sales. This indicates a significant increase in customer demand and a favorable market environment during November.

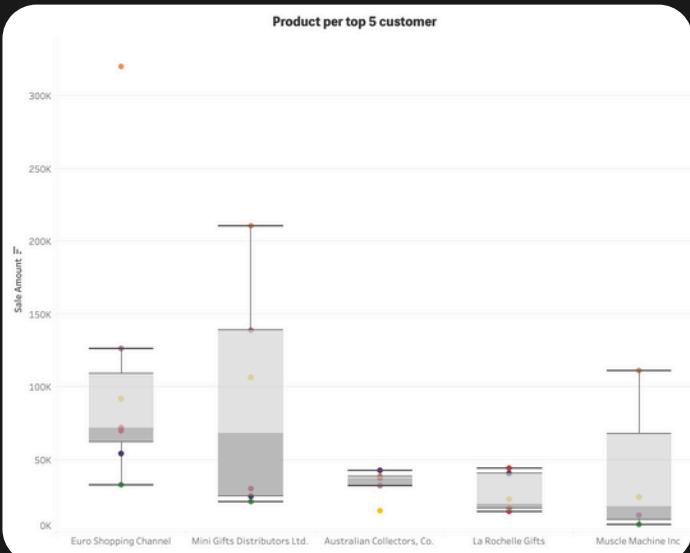


## 4.4 Customer Behaviour

The analysis of the MTC dataset in 2023 reveals intriguing insights into the company's customer base and revenue distribution.

**Figure 4.1****Figure 4.2**

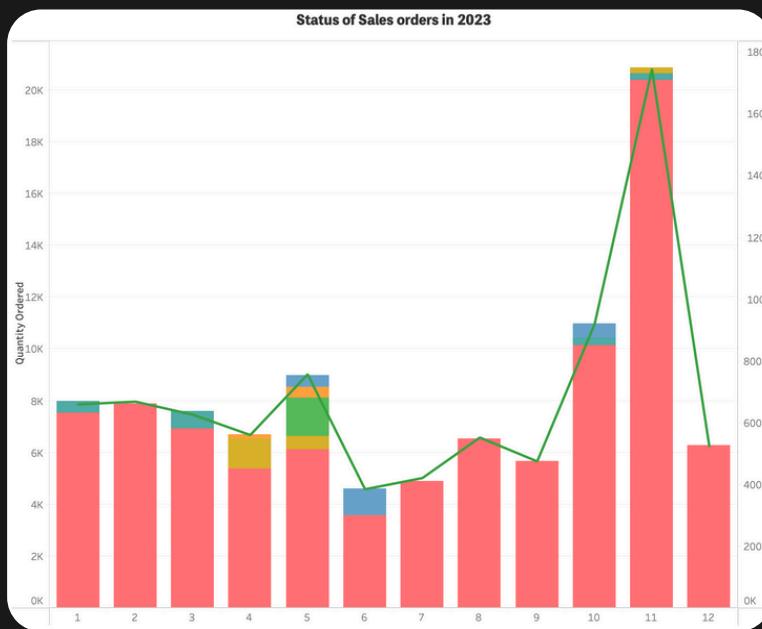
# sales performance analysis

**Figure 4.1****Figure 4.2**

As the visualization of figure 4.1, with a total of 2,823 customers contributing to the company's revenue, Euro Shopping Channel in Spain emerges as the top performer, generating the highest sales amount of \$766,195. On the other end of the spectrum, Boards and Toys Co. stands as the lowest-profit customer, bringing in just \$8,642, accounting for a mere 0.104% of the market. Among the top five customers in figure 4.2, classic cars prove to be a lucrative product category, with Euro Shopping Channel, Mini Gift Distribution Ltd., and Muscle Machine Inc. generating substantial revenue from this category. Australian Collector, Co., and La Rochelle Gifts find their main profit in motorcycles and planes, respectively. Interestingly, Muscle Machine Inc., despite purchasing only four product categories, manages to bring in a significant profit of \$151,782. Even with a limited product selection, focusing on high-demand categories like classic cars can still yield significant profitability.



# 4.5 COMPANY'S SERVICE

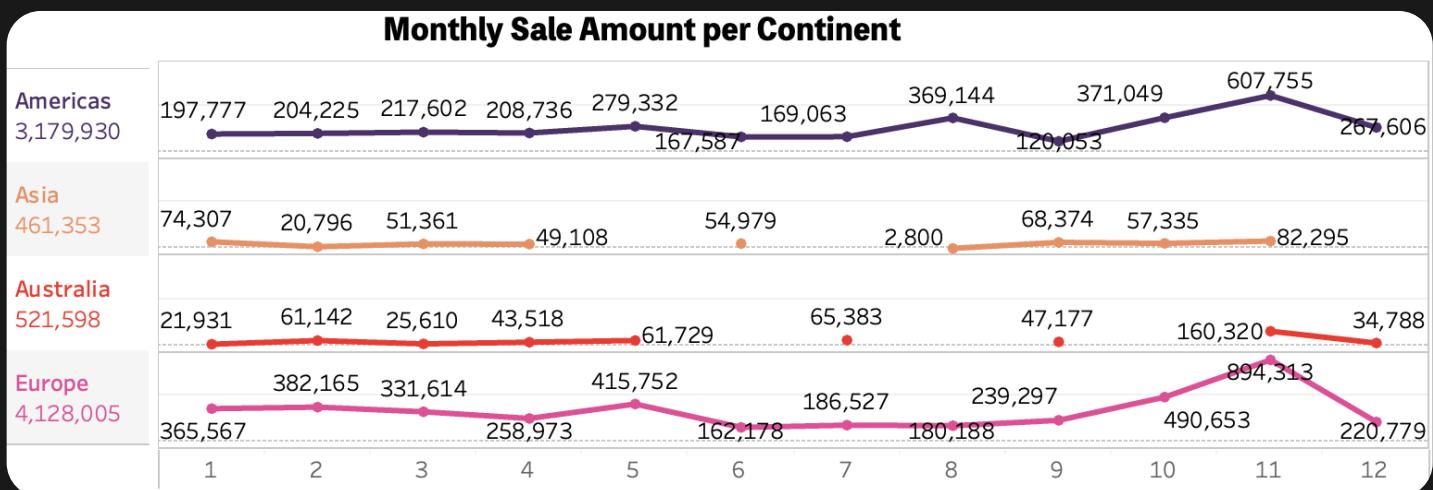


**Figure 5.1**

The analysis of sales order status over a 12-month period reveals some crucial trends. Despite a high rate of fulfillment throughout the year, a significant decrease in the number of ordered products was observed between April and July. June was the least profitable month, with 1,034 product cancellations. After this decline, there was a recovery in subsequent months, which led to an increase in the number of ordered products. However, November's peak sales were accompanied by several negative statuses, indicating challenges in meeting high demand. These insights underscore the need for efficient order management and fulfillment to ensure customer satisfaction and maximize sales revenue.

## 5. INTERESTING GRAPHS AND INSIGHTS

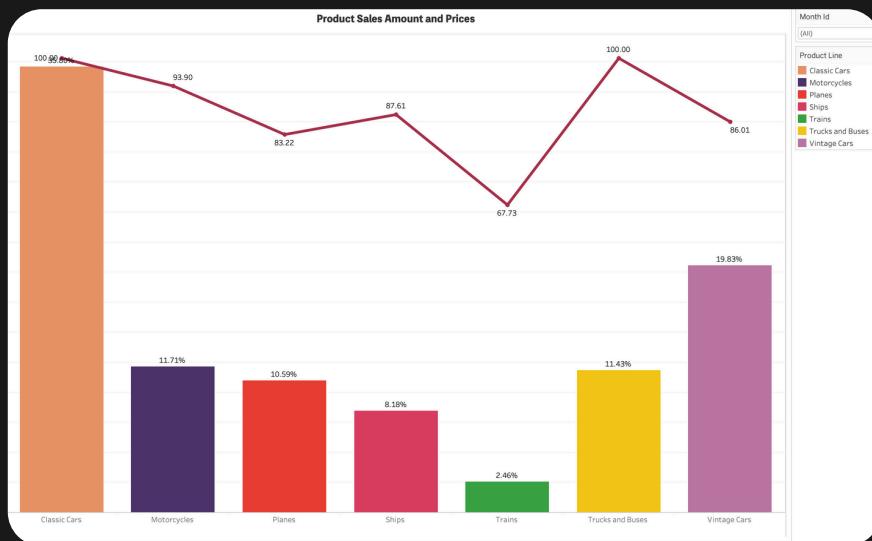
# Interesting graphs



I created area charts to show revenue contribution of four continents for MTC over a 12-month period in 2023. By grouping countries into continents, it's easier to observe trends. The charts highlight the highest revenue-contributing continent and the highest profit month within each. This gives insight into specific periods of success or challenges. The analysis reveals that Europe had the highest sales amount. This helps the manager identify the primary region to focus on and allocate resources.

## 5. INTERESTING GRAPHS AND INSIGHTS

# Interesting graphs



The combination of bar and line charts is an essential tool for analyzing sales amounts, prices, and profitability for each product category. The bar chart clearly indicates the highest and lowest profitable products, providing a quick assessment of their relative contributions. The line chart showcases the prices of individual products, offering valuable information about customer behavior. By integrating both charts, decision-makers can identify the most profitable products and assess pricing strategies. However, it is important to note that further research and analysis are required to establish a conclusive understanding of the relationship between price and profit.

## 5. INTERESTING GRAPHS AND INSIGHTS

# Interesting insights

In terms of timing and sales amounts, the analysis reveals fluctuations throughout the year. Notably, the final period of the year experienced a peak in revenue, followed by a rapid decline in the subsequent month. This observation raises questions about customer behaviour and company service, as these factors could potentially explain the fluctuations. Examining the chart depicting the status of ordered sales provides further clues, suggesting that the quality of company service may have played a role, given the signals observed in previous months.

Furthermore, from a product performance perspective, it becomes apparent that classic cars generated the highest profits for the company in 2023, despite being priced at a premium. Conversely, trains, which had the lowest prices among the products, yielded the lowest revenue. This insight suggests that customer trust in product quality plays a significant role. Classic cars, with their higher prices, are associated with a strong reputation and a long-standing track record dating back to 1975. This reputation likely fosters customer willingness to purchase classic cars in larger quantities. On the other hand, trains, despite their low prices, had the lowest number of orders compared to other products, resulting in the least profit for MTC. These observations highlight the importance of customer perception and trust in influencing purchasing decisions. The reputation of classic cars as high-quality products contributes to their sales success and profitability. Conversely, the lack of trust or perceived value in trains, despite their affordability, hinders their sales performance and revenue generation.

# 6. ANSWERING SPECIFIC QUESTIONS

**Question 1:** How much was the total sales amount in 2023? Per year and quarter.

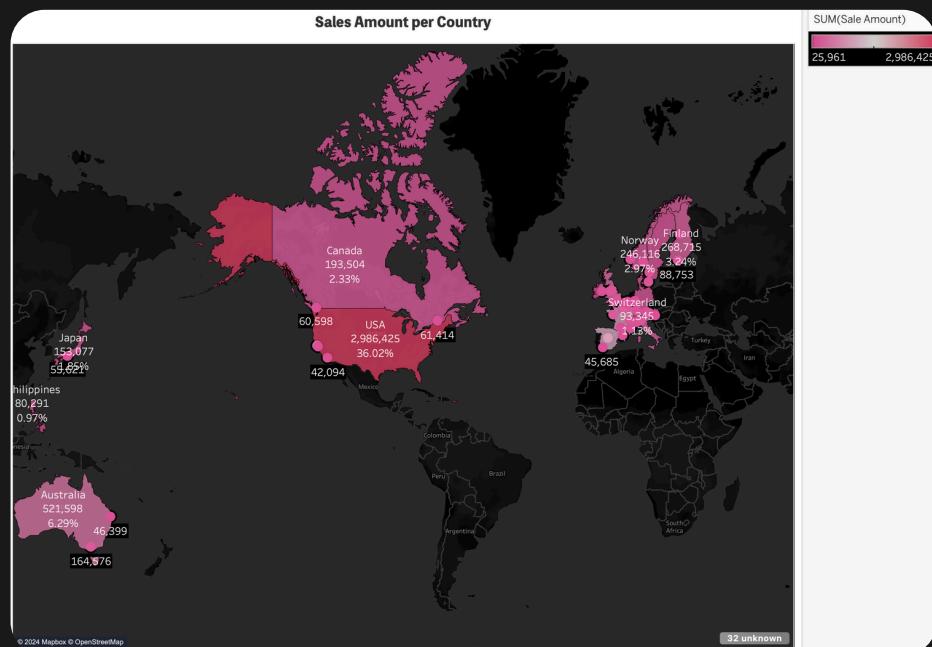
1,954,097	1,701,891	1,448,006	3,186,892	8,290,887
Q1	Q2	Q3	Q4	Grand total

According to the analysis in table above, the total sales amount for MTC in 2023 is estimated to be \$8,290,887.

Furthermore sales figures have been broken down quarterly for the year 2023 as follows: \$1,954,097 in quarter 1, \$1,701,891 in quarter 2, \$1,448,006 in quarter 3, and \$3,186,892 in quarter 4.

# 6. ANSWERING SPECIFIC QUESTIONS

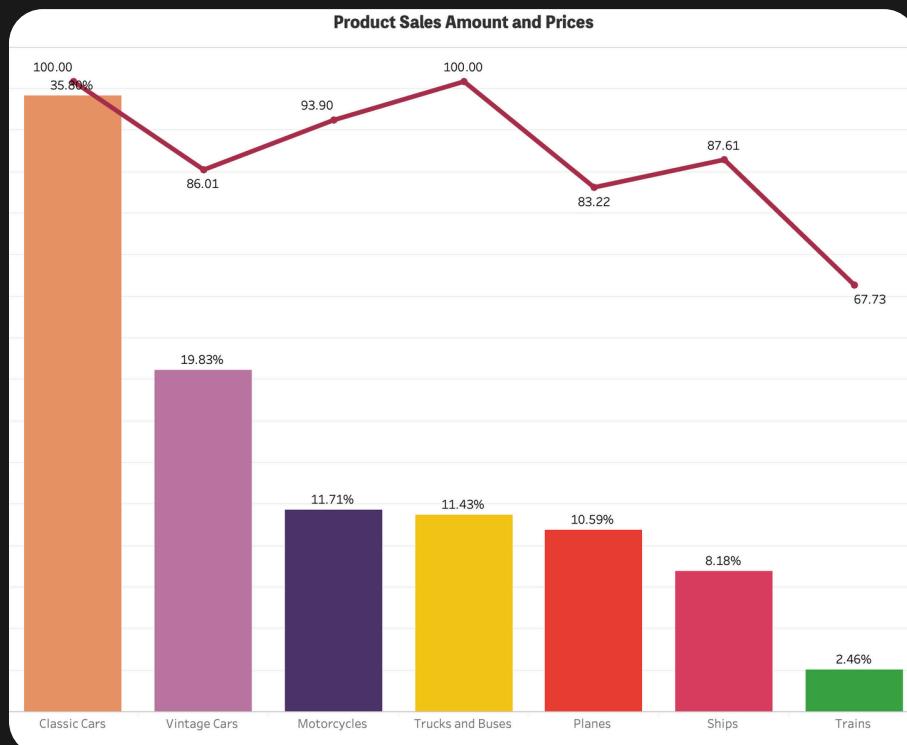
**Question 2:** What was the bestselling country?



According to the data available and the map visualization shows the percentage of sales amount in each country, the United States of America (USA) was the best country with \$2,986,425 in sales amount as a percentage of 36.02%.

# 6. ANSWERING SPECIFIC QUESTIONS

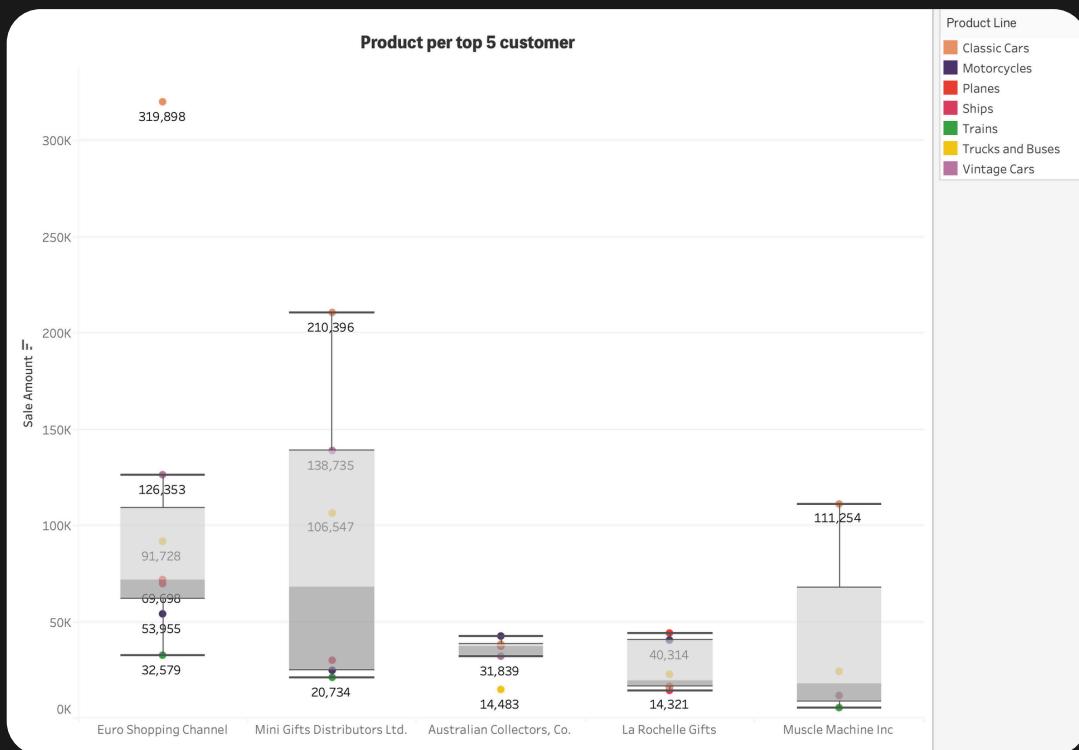
**Question 3:** What was the bestselling product?



The graph indicates that MTC's best -performing product was classic cars. Their total sales amount was \$2,968,546 which comprised 35.80%.

# 6. ANSWERING SPECIFIC QUESTIONS

**Question 4:** What was the bestselling company, and for which product(s)?



The data analysis conducted in Tableau has graphically represented the performance of various companies and products line. Among them, the Euro Shopping Channel has emerged as the top-performing business with a total revenue of \$766,195, which accounts for 9.241% of the total revenue generated. It is noteworthy that the box plot has also revealed that classic cars have been the best-selling product with a total sales amount of \$319,898.

## 7. CONCLUSION

The transportation industry is evolving and MTC can gain valuable insights by analyzing customer behavior and product status. By optimizing opportunities, MTC can improve product quality, satisfy customers, and promote products effectively. However, it's important to keep in mind that the dataset analyzed might not address all challenges and critical insights may be missed. Overall, these insights serve as a roadmap for MTC's future endeavors and help achieve strategic objectives.

# Acknowledgment Statement of Use of GAITs:

- I acknowledge that I have not used GAITs (e.g., ChatGPT) in drafting and proofreading this assignment.
- I acknowledge that I have only used GAITs (e.g., ChatGPT) in drafting and proofreading this assignment, which is permitted in the assignment instructions.