FINAL PROJECT

CAR SALES DASHBOARD

Background: Our company is a car dealership that sells various car models. To effectively track and analyse our sales performance, we need a comprehensive Car Sales Dashboard in Tableau.

Objective: The objective of this project is to design and develop a dynamic and interactive Car Sales Dashboard using Tableau. The dashboard will visualize critical KPIs related to our car sales, helping us understand our sales performance over time and make data-driven decisions.

Problem Statement 1: KPI's Requirement

The dashboard should provide real-time insights into key performance indicators (KPIs) related to our sales data. This will enable us to make informed decisions, monitor our progress, and identify trends and opportunities for growth.

1. **Sales Overview**:
   - Year-to-Date (YTD) Total Sales
   - Year-over-Year (YOY) Growth in Total Sales
2. **Average Price Analysis:**
   - YTD Average Price
   - YOY Growth in Average Price
3. **Cars Sold Metrics:**
   - YTD Cars Sold
   - YOY Growth in Cars Sold

Problem Statement 2: Charts Requirement

1. **YTD Sales Weekly Trend:** Display a line chart illustrating the weekly trend of YTD sales. The X-axis should represent weeks, and the Y-axis should show the total sales amount.

2. **YTD Total Sales by Body Style:** Visualize the distribution of YTD total sales across different car body styles using a Pie chart.

3. **YTD Total Sales by Color:** Present the contribution of various car colors to the YTD total sales through a donut chart.

4. **YTD Cars Sold by Dealer Region:** Showcase the YTD sales data based on different dealer regions using a bar chart to visualize the sales distribution geographically.

5. **Company-Wise Sales Trend in Grid Form:** Provide a tabular grid that displays the sales trend for each company. The grid should showcase the company name along with their YTD sales figures.

Findings from our problem statement 1:

1. **Sales Overview:**
   - Year-to-Date (YTD) Total Sales is $371.16 million" means that from the beginning of the current fiscal year up to the present date, the company has generated a total sales revenue of $371.16 million. This cumulative figure provides an overview of the company's sales performance so far this year.

   - Year-over-Year (YoY) Growth in Total Sales is 23.58%" means that the total sales for the current period have increased by 23.58% compared

to the same period in the previous year. This percentage indicates a significant improvement in sales performance.

2. **Average Price Analysis:**

- YTD Average Price is $27.99K" means that the average price of the cars sold by the company from the beginning of the current fiscal year up to the present date is $27,990. This figure provides insight into the typical selling price of the company's offerings over the year-to-date period.

- Year-over-Year (YoY) Growth in Average Price is -0.79%" means that the average price of the products or services sold by the company has decreased by 0.79% compared to the same period in the previous year. This indicates a slight decline in the average selling price.

3. **Cars Sold Metrics:**

- YTD Cars Sold 13.26K items means that from the beginning of the current fiscal year up to the present date, the company has sold 13,260 cars. This year-to-date figure provides an overview of the total number of cars sold so far this year.

- Year-over-Year (YoY) Growth in Cars Sold is 24.57% means that the number of cars sold during the current period has increased by 24.57% compared to the same period in the previous year. For example, if the company sold 10,000 cars during this period last year, a 24.57% YoY growth would mean that approximately 12,457 cars were sold during the same period this year.

<u>Findings from Problem Statement 2:</u>

<u>YTD Sales Weekly Trend:</u> Overall, our weekly sales are on an upward trend, showing consistent growth over time. This positive trend indicates that, in general, our sales performance is improving, with increasing revenue each week. However, there are specific periods within this trend, notably between weeks 30 to 35 and 40 to 45, where we observe a downward dip in weekly sales.

These fluctuations suggest that, despite the overall upward trajectory, there are intermittent periods of decreased sales. The causes for these downturns could be multifaceted, including factors such as seasonal variations, market conditions, promotional cycles, or operational issues. Identifying and understanding these specific periods of decline is crucial for addressing any underlying problems and ensuring that the overall growth trend is sustained.

<u>YTD Total Sales by Body Style:</u> Based on the information that SUVs are the highest-selling body style with $99.89 million in sales, followed by Hatchbacks ($82.74 million), Sedans ($73.69 million), and Passenger cars ($63.44 million), here are some strategic actions the business can consider:

Focus on High-Selling Categories

- **Increase SUV Production and Availability**: Given the strong sales performance of SUVs, ramping up production and ensuring adequate inventory can help meet high demand and capture a larger market share.
- **Enhance Hatchback Offerings**: With Hatchbacks also performing well, consider expanding the range of hatchback models or improving features to further capitalize on their popularity.

Market Analysis and Targeting

- **Understand Customer Preferences**: Analyze why SUVs and Hatchbacks are more popular to tailor marketing and sales strategies accordingly. This could involve studying consumer preferences, market trends, and competitive positioning.

- **Segment Marketing Strategies**: Develop targeted marketing campaigns that highlight the strengths and features of each body style, focusing on SUVs and Hatchbacks for their higher sales while still promoting Sedans and Passenger cars.

Product Development and Innovation

- **Innovate Within Popular Categories**: Invest in innovation and upgrades for SUVs and Hatchbacks to keep them competitive and appealing. This might include introducing new technologies, improved safety features, or eco-friendly options.

- **Revitalize Sedans and Passenger Cars**: Analyze the sales performance of Sedans and Passenger cars and consider redesigns, updates, or new models to boost their appeal and address any declining trends.

Adjust Pricing and Promotions

Optimize Pricing Strategies: Review and adjust pricing strategies based on sales performance and market demand. Ensure that pricing for SUVs and Hatchbacks is competitive while maintaining profitability.

Promotional Offers: Implement promotions or financing options to drive sales, particularly for higher-performing models like SUVs.

Enhance Customer Experience

Improve After-Sales Service: Provide exceptional after-sales service for all car models to build customer loyalty and satisfaction. This can enhance repeat purchases and positive word-of-mouth.

Leverage Customer Feedback: Gather and utilize customer feedback to refine product offerings and address any issues or preferences that may impact sales.

Optimize Inventory and Supply Chain

Manage Inventory Efficiently: Ensure optimal inventory levels for high-selling models to prevent stock outs and overstock situations. Adjust production schedules based on sales trends.

Streamline Supply Chain: Enhance the supply chain for popular models to ensure timely delivery and minimize disruptions.

Monitor and Adjust Strategies

Track Sales Performance: Continuously monitor sales data for all body styles to identify emerging trends or shifts in consumer preferences.

Adapt to Market Changes: Be prepared to adapt strategies based on market dynamics and competitive actions to maintain or improve sales performance.

By leveraging this information effectively, the business can optimize its product offerings, marketing strategies, and operational processes to drive growth and enhance overall performance.

YTD Total Sales by Colour: Pale White is the highest-selling colour with $174.53 million in sales, indicating a high demand for this colour, here are some strategic actions you can take:

Increase Availability of Pale White Vehicles:

Ensure Adequate Inventory: Increase the stock of vehicles available in Pale White to meet the high demand. Make sure that this color is prominently featured in inventory and showroom displays.

Prioritize Production: Allocate more resources and prioritize production for vehicles in Pale White to align with customer preferences.

Marketing and Promotion:

Highlight Pale White in Advertising: Use Pale White prominently in marketing materials, advertisements, and promotional campaigns. Showcasing this color can attract more customers who prefer it.

Create Color-Specific Campaigns: Develop targeted campaigns that emphasize the aesthetic appeal and popularity of Pale White. This can include social media posts, online ads, and email newsletters.

Customer Experience and Options:

Offer Customization Options: Provide more customization options related to Pale White, such as complementary interior colors or exclusive trims, to enhance the appeal.

Promote Popular Color: Feature Pale White as a premium or popular choice in marketing efforts to attract customers looking for this color.

Optimize Pricing and Sales Strategies:

Consider Premium Pricing: If appropriate, you could explore pricing strategies that position Pale White as a premium or exclusive color option, capitalizing on its high demand.

Promotions and Discounts: Offer special promotions or discounts on vehicles in Pale White to further incentivize purchases and boost sales.

Enhance Inventory Management:

Monitor Sales Trends: Continuously track sales of Pale White vehicles and adjust inventory levels based on demand fluctuations.

Adjust Supply Chain: Work with suppliers to ensure a steady supply of Pale White paint and materials to avoid delays and maintain consistent availability.

Customer Feedback and Insights:

Gather Feedback: Collect customer feedback on why Pale White is preferred and how it influences their purchasing decisions. Use this information to refine your product and marketing strategies.

Analyze Trends: Analyze sales data to identify if the preference for Pale White is growing or if there are any emerging trends in color preferences.

Expand Color Range:

Introduce Variants: Consider introducing different shades or variants of Pale White to cater to diverse tastes while maintaining the core appeal of the color.

Balance with Other Colors: While focusing on Pale White, ensure that other popular colors are also well-represented to cater to customers with different preferences.

By acting on this information, we can better align your product offerings and marketing strategies with customer preferences, ultimately driving increased sales and enhancing overall customer satisfaction.

YTD Cars Sold by Dealer Region: Austin is the highest-selling region, followed by Janesville, Scottsdale, Aurora, Greenville, and Pasco, we can take several strategic actions to capitalize on this information:

Focus on High-Selling Regions:

Austin:

- **Increase Marketing Efforts**: Amplify marketing campaigns in Austin to maintain and grow sales. Consider localized advertising, sponsorships, and community engagement activities.
- **Expand Dealership Presence**: If possible, open new dealerships or expand existing ones in Austin to enhance accessibility and capture more market share.
- **Optimize Inventory**: Ensure that inventory levels for high-demand models are well-stocked in Austin to avoid stockouts and maximize sales.

Jenesille, Scottsdale, Aurora, Greenville, and Pasco:

- **Analyze Sales Trends**: Study the performance in these regions to understand what drives sales and replicate successful strategies in other areas.
- **Adjust Inventory and Supply**: Align inventory and supply chain operations with sales trends in these regions to meet demand more effectively.

Targeted Marketing and Promotions

- **Regional Campaigns**: Develop targeted marketing campaigns tailored to the preferences and behaviors of customers in each high-selling region. Highlight regional success stories and testimonials.
- **Localized Promotions**: Offer region-specific promotions or discounts to attract more customers in high-selling areas and encourage repeat purchases.

Enhance Customer Experience

- **Improve Service Quality**: Ensure excellent customer service in high-selling regions to enhance customer satisfaction and loyalty. This can include better after-sales service, quicker response times, and personalized experiences.
- **Gather Customer Feedback**: Collect feedback from customers in these regions to identify areas for improvement and to understand their needs and preferences better.

Explore Expansion Opportunities

- **Market Expansion**: Use the success in high-selling regions as a model for expanding into new areas. Identify potential markets with similar characteristics and tailor strategies to match local preferences.
- **Partnerships and Collaborations**: Explore partnerships with local businesses or influencers in high-performing regions to increase brand visibility and drive sales.

Optimize Regional Operations

- **Streamline Logistics**: Ensure efficient logistics and supply chain operations to support high sales volumes in these regions. This can involve optimizing distribution routes and managing inventory effectively.
- **Training and Development**: Provide additional training for sales and service teams in high-selling regions to ensure they are equipped to handle increased demand and provide top-notch customer service.

Monitor and Adjust Strategies

- **Track Performance**: Continuously monitor sales data and performance metrics in each region to stay informed about trends and adjust strategies as needed.
- **Adapt to Changes**: Be responsive to any changes in regional market dynamics or customer preferences to maintain or improve sales performance.

By leveraging the insights from high-selling regions, we can tailor your strategies to maximize sales, improve customer satisfaction, and explore opportunities for growth in both existing and new markets.

Conclusion:

The analysis of sales data reveals valuable insights into the performance and preferences across different regions, body styles, colors, and time periods. Here's a summary of the findings and strategic recommendations:

Sales Performance by Region:

> **Austin** is the highest-selling region, indicating a strong market presence and potential for further growth. Other regions like **Jenesille, Scottsdale, Aurora, Greenville**, and **Pasco** also show significant sales, suggesting varied regional preferences and opportunities for targeted strategies.

Body Style Preferences:

> **SUVs** lead in sales with $99.89 million, reflecting high consumer demand for this body style. **Hatchbacks**, **Sedans**, and **Passenger cars** follow, each contributing to the overall sales but at lower levels. This indicates a strong preference for SUVs and highlights the need to focus on this category.

Color Preferences:

> **Pale White** is the most popular color, with $174.53 million in sales. This suggests a strong consumer preference for this color, warranting increased availability and promotion of vehicles in Pale White.

Sales Trends Over Time:

> While there is an overall uptrend in weekly sales, specific periods (weeks 30 to 35 and 40 to 45) show downturns. This highlights the importance of analyzing these fluctuations to understand underlying causes and mitigate potential impacts.

Strategic Recommendations:`

Focus on High-Selling Regions: Enhance marketing efforts, optimize inventory, and consider expanding dealership presence in Austin and other top-performing regions. Analyze and replicate successful strategies in these areas to drive further growth.

Leverage Body Style Preferences: Increase production and marketing of SUVs and Hatchbacks to meet high demand. Consider innovating within these popular categories and reviewing strategies for Sedans and Passenger cars to boost their appeal.

Capitalize on Color Preferences: Ensure a strong inventory of vehicles in Pale White and use this color prominently in marketing efforts. Explore additional color options and balance offerings to cater to diverse customer preferences.

Address Sales Fluctuations: Investigate and address the causes of sales downturns in specific weeks to minimize future disruptions. Continuously monitor sales trends and adapt strategies to maintain the overall upward trajectory.

By aligning strategies with these insights, this company can enhance its market position, better meet customer demands, and drive sustained growth.