Car Prices Project Analysis

Executive Summary

The car prices project analyzes vehicle sales data across various dimensions, including best-selling cars, sales by state and time, preferred body types, colors, and transmission types. The insights provide valuable information for car manufacturers, dealerships, and market analysts to understand trends and consumer preferences.

Key Findings

1. Top 10 Best-Selling Cars

- Ford dominates the market with several top-selling models such as F-150, Escape, and Fusion.
- Other notable models include the Nissan Altima and Toyota Camry.

2. Sales by State

- California leads as the best-selling state with $1.15 billion in sales.
- Texas and New Jersey follow with significant contributions.

3. Sales Per Transmission

- **Automatic** transmissions account for 84.72% of total sales.
- **Manual** and **Unknown** transmissions have a minimal share.

4. Sales Per Shift

- The **Afternoon** shift sees the highest sales, with over $6 billion in revenue.
- Sales are lowest **After Midnight** with just $134 million.

5. Body Types

- **Sedan** and **SUV** are the most popular body types, contributing to 40% and 33% of sales, respectively.

6. Favorite Colors

- **Black** and **White** are the most favored vehicle colors, generating $1.72 billion and $1.57 billion in sales, respectively.

7. Best Selling Days and Months

- **Friday** generates the highest daily sales of $2.28 billion.
- **March** is the best-selling month with $2.22 billion in revenue.

8. Best Selling Year

- 2015 outperformed 2014 with 92.01% of total sales.

Recommendations

1. **Focus on Popular Models**: Ford should expand its marketing efforts around F-150, Escape, and Fusion.
2. **Target High-Selling States**: Concentrate sales and promotional activities in California, Texas, and New Jersey.
3. **Increase Inventory of Automatic Vehicles**: Given the high preference for automatic transmissions.
4. **Promote Afternoon Sales**: Optimize marketing campaigns during afternoon hours to capitalize on peak sales times.
5. **Highlight Black and White Vehicles**: Enhance promotions for these colors to match consumer preferences.

Methodology

The analysis was conducted using Excel dashboards to visualize and interpret data from the provided dataset. Key metrics such as revenue, sales volume, and market share were calculated and categorized.

Conclusion

The project highlights critical consumer behavior trends and offers actionable insights to improve decision-making for stakeholders in the automotive industry.