The Road Ahead: Car Sales Performance Dashboard

# 1. Introduction

This report presents an analytical overview of car sales performance, covering both historical sales data and forecasted sales projections. The dashboard provides a comprehensive view of key performance indicators (KPIs), helping stakeholders track trends, measure growth, and forecast future sales.  
  
The purpose of this dashboard is to:  
- Compare historical vs. forecast sales.  
- Monitor year-over-year (YoY) growth trends.  
- Identify key sales performance indicators.  
- Provide data-driven insights for dealership decision-making.

# 2. Dashboard Overview

The dashboard consists of the following key sections:

## 🔹 KPI Cards (Top Section)

1. Total Sales (Historical): 182M  
 - Represents actual recorded sales revenue.  
2. Total Forecast Sales (Next Years): 247M  
 - Sales projections based on forecasting models.  
3. Average Monthly Sales: 52.91K  
 - Helps track monthly sales contribution.  
4. YoY Growth %: -75.88%  
 - Indicates decline in yearly sales growth compared to prior year.  
5. Adjusted Sales: 269.18M  
 - Adjusted value combining historical + forecast.

## 🔹 Visuals & Insights

### (a) Monthly Value & Year-Month using Type

Line + scatter chart compares sales trend for historical vs. forecast data, showing fluctuations in sales by month.

### (b) Adjusted Sales vs Actual Sales (Yearly)

Bar chart comparing adjusted vs actual sales per year (2022–2025). Provides clarity on future expectations vs past performance.

### (c) KPI Correlation Matrix

Correlation between Labour Sales % and multiple business KPIs.  
- Positive correlation with Sales Internal (0.26).  
- Negative correlation with Return on Investment (-0.40).

### (d) Donut Chart – Sales by Type

Breakdown of Historical Sales (182M) vs Forecast Sales (87M). Helps visualize proportion of past vs predicted revenue.

### (e) Filters (Slicers)

Month & Year selector enables drilling down into sales trends across 2022 – 2025.

# 3. Key Insights

1. Sales Performance Decline  
- YoY Growth shows -75.88%, indicating sales are falling sharply.  
  
2. Historical vs Forecast  
- Historical Sales: 182M  
- Forecast Sales: 247M  
- Future projections suggest recovery and growth despite current decline.  
  
3. Monthly Trends  
- Sales values fluctuate; forecasting helps identify potential seasonal patterns.  
  
4. Correlation Analysis  
- Labour Sales % has a strong positive link with Internal Sales and Warranty,  
- but a negative link with Return on Operating Investment.  
  
5. Adjusted Sales Outlook  
- Combining historical & forecast, Adjusted Sales reach 269.18M,  
- giving dealerships a holistic revenue picture.

# 4. Business Impact

- Dealerships can use this dashboard to plan inventory, manage workforce, and allocate budgets more effectively.  
- The forecasting model helps anticipate demand shifts, preventing over/under-stocking.  
- KPI correlations guide management in identifying profitability drivers.

# 5. Conclusion

The Car Sales Dashboard provides a complete 360° view of dealership performance—blending past results with predictive insights. Despite a decline in YoY growth, the forecasted sales projections are optimistic, showing potential recovery in upcoming years.  
  
By leveraging this dashboard, dealership management can:  
- Make data-driven decisions.  
- Improve operational efficiency.  
- Align strategies with future sales opportunities.