# **Supply Chain Management For Cars**

**Business Request**

A request has come in from Emma, the Supply Chain Manager at CargoSmart.

**Hi Prithviraj,**

I hope you’re doing well. We need an advanced reporting solution to streamline our **Supply Chain Management for Cars**. Currently, we rely on static reports to monitor key operations such as **order management, inventory levels, customer performance, and overall sales metrics**.

Our goals include:

1. **Visual dashboards** that summarize critical metrics.
2. Insights into **sales performance**, **customer behavior**, and **order trends**.
3. Ability to filter by **Car Model, Car Maker, Customer Names**, and other parameters.
4. Comparative analysis of **monthly, quarterly, and annual trends** to identify growth opportunities and areas for improvement.
5. Integrating and visualizing data stored in **MySQL** and **Excel**, ensuring real-time updates.

The following KPIs need to be captured:

* Total Sales
* Discount Impact
* Sales by **State, Ship Mode, Month**, and **Customer Feedback**
* Top 15 Car Models, Makers, and Customer Insights

I’ve attached the current data model, database connection, and a high-level Power BI dashboard for reference. Let me know if any additional inputs are required.

Thanks,  
**Emma**  
(Supply Chain Manager, CargoSmart)

**Business Demand Overview and User Stories**

**Reporter**: Emma (Supply Chain Manager)  
**Value of Change**: Interactive dashboards for better insights into supply chain and sales performance.  
**Necessary Systems**: Power BI, MySQL, Python, Excel  
**Other Relevant Info**: All data resides in **MySQL Database** with key operational tables and relationships established.

**User Stories**

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| --- | --- | --- | --- | --- |
| No# | As a (Role) | I want (Request/Demand) | So that I (User Value) | Acceptance Criteria |
| 1 | Supply Chain Manager | A dashboard overview of sales and orders. | Can monitor total sales, discounts, and trends at a glance. | A Power BI dashboard showing KPIs such as **Total Sales, Discounts**, and **Sales by Month**. |
| 2 | Sales Representative | A detailed view of customer orders and car models. | Can analyze top customers and car models for better targeting. | Power BI table visualizing **Top 15 Customers, Car Makers, and Car Models by Sales**. |
| 3 | Operations Manager | Insights into **order ship modes and quarterly sales**. | Can identify cost-efficient shipping methods. | Graphs for **Sum of Sales by Ship Mode** and **Sales by Quarter**. |
| 4 | Customer Analyst | A drill-down view of customer feedback and sales data. | Can analyze satisfaction levels and related sales impact. | Customer drill-down dashboard including **Sales by Feedback Type** and **State-wise Insights**. |
| 5 | Data Analyst | A connected data model integrating all tables. | Can ensure data relationships are accurate and optimized. | A Power BI data model connecting **DateMaster**, **DAX Measures**, and **SupplyChainManagement**. |

**Visual References**

1. **Home Dashboard** – Provides navigation to different modules (Orders, Sales, Customer View).
2. **Orders Detail Summary** – Key stats for car models, makers, and sales by state.
3. **Sales Detail Summary** – Total Sales, Discounts, Ship Modes, and Monthly trends.
4. **Customer Drill-Down View** – Insights into top customers, car makers, and customer feedback.
5. **Data Model** – Shows the integrated relationships between key data tables.
6. **Database Connection** – MySQL connection details for **SupplyChainManagementForCar**.