



JoyNet Toys – Sales Intelligence Project Script

Project Title: Power BI Sales Analysis Dashboard Development

Assigned to: Muhammad Ather, Data Analytics Intern

Company: JoyNet – Realistic Toy Car & Airplane Models

Duration: 3 Months

### **Company Overview:**

JoyNet is a fast-growing toy manufacturing company that specializes in designing and distributing premium toy replicas of real-world cars and airplanes. Our mission is to bring innovation and realism into the toy industry while capturing the imagination of both children and collectors alike. With our expanding global footprint and evolving product lines, gaining real-time insights into sales performance has become crucial for making informed strategic decisions.

### **Purpose of the Project:**

To support data-driven decision making, JoyNet initiated a sales intelligence project as part of our data modernization strategy. The objective was to develop a comprehensive Power BI dashboard that could help our leadership and regional teams monitor sales performance, identify growth opportunities, and improve operational efficiency. For this purpose, our data analytics intern, Muhammad Ather, was given access to historical sales data for a detailed analysis and dashboard development.

## **Project Scope:**

The scope of the project included:

- Creating a unified view of sales data across products, regions, and timeframes.
- Identifying top-selling categories and models.
- Highlighting underperforming areas.
- Enabling interactive exploration of customer trends and representative performance.

## **Data Utilized:**

The analysis was based on 2 years of sales data, containing the following key fields:

- Invoice Date
- Product Type (Car / Airplane)
- Model Name
- Units Sold
- Sales Amount
- Sales Channel (Retail / Wholesale)
- Region
- Sales Representative

## **Power BI Dashboard Features:**

The Power BI dashboard developed during this project includes the following core pages:

### **1. Overall Sales Overview:**

A high-level summary of total revenue, units sold, average selling price, and monthly sales distribution.

### **2. Product Category Performance:**

Comparison between toy cars and airplanes based on total revenue, quantity sold, and growth over time.

### **3. Regional Analysis:**

A map-based breakdown highlighting the best and worst performing regions.

#### **4. Monthly Sales Trend:**

A time-series visual showing sales growth patterns and seasonal fluctuations.

#### **5. Top Models Analysis:**

A detailed table and chart showcasing the most popular car and airplane models.

#### **6. Customer Type Analysis:**

Comparative performance insights between wholesale and retail customers.

#### **7. Sales Representative Dashboard:**

Individual performance metrics for each salesperson to evaluate contributions and areas of improvement.

### **Post-Analysis Requirements (Set by JoyNet's Sales & Strategy Team):**

After reviewing the dashboard, the management team identified the following business needs and requested enhancements, all directly tied to insights gained from the current dashboard:

#### **1. Advanced Forecasting Module:**

Based on the clear seasonality observed in the monthly trend charts, JoyNet requires a forecasting feature to project sales for the next 6 months and prepare better for peak seasons.

#### **2. Product Line Profitability Analysis:**

The Category Performance page revealed that certain high-selling airplane models are yielding lower returns. The team has requested an integration of cost data to assess per-model profitability and refine product strategy.

#### **3. Customer Loyalty and Repeat Purchase Behavior:**

The difference in patterns between retail and wholesale customers sparked interest in understanding customer retention. A new view is needed to track repeat purchases and identify loyal buyers.

#### **4. Regional Sales Gap Insights:**

The Regional Analysis page identified underperforming zones. The strategy team wants deeper segmentation (urban vs rural) and recommendations to penetrate low-sales areas.

#### **5. Channel Effectiveness Review:**

The Customer Type insights raised questions about whether wholesale or retail brings higher ROI. The team wants to explore channel efficiency, including order volume vs revenue contribution.

#### **6. Sales Rep KPI Tracker:**

The Sales Rep Performance dashboard sparked interest in defining custom KPIs, such as sales target achievement rate, conversion ratios, and territory saturation, to improve team performance monitoring.

Regards

HR Manager,

Mary Daniel