# Functional Requirement Document (FRD)

## 1.project title

Pharmaceutical Sales Analysis of Sun Pharmaceutical Industries Ltd in India 2017–2020

## 2. Dashboard Sections

The dashboard will be divided into three main sections

- ➢ Sales Summary Page: Displays KPIs such as Total Sales, Average Sales, Top Product Class, Top Product Name, Top Sales City.
- ➢ Sales Team Performance: Visualizes the performance of each sales representative and their managers according to their sales team.
- ➢ Distributor and Customer Analysis: Shows the detailed sales by distributors, product, customer and cities.

## 3.Data Requirements

Key data fields required include:

- Distributor_ID – Unique identifier for each distributor
- Customer_ID – Unique identifier for each customer
- City – Various cities in India for regional analysis
- Channel – There are two major channels for the sales which are Hospital and Pharmacy.
- Sub – channel – The channels are divided into further parts.
- Product Class – The pharmaceutical products are classified into different classes.
- Quantity – Total quantity of each product
- Price – Price of each product
- Year / Month – Used for sales trends analysis
- Sales team – Mainly 4 team coordinating the sales.
- Manager – Each sales team has one manager.
- Sales Rep – There are few sales representatives who work under each manager.

## 4. Filters / Slicers

The Following filters/slicers will be available:

- Year
- Month
- City
- Distributors
- Customers
- Top 3 Products

## 5. Visuals and Charts

- Cards & Multi-row Card: KPIs like Total Sales, Average Sales, Total Distributors, Total Customers, Top Product Class, Top Product Name
- Bar Chart: Top Sales Distributors, Top Sales Customers
- Column Chart: Sales by Month, Sales by Sales Representative Sales by Year & Channel
- Line Chart & Area Chart: Sales Trend by Year, Top 3 Product Name
- Donut Chart: total Sales by Sub Channel
- Map: Sum of Sales by City
- Decomposition Tree: Average Sales of each Manager and Sales Representatives
- Table & Matrix: Sales by Sales Team and product, Total Sales of Each Distributors

## 6. Interactivity

- Drill Through: Click on product class to view the detailed products in each class
- Cross-filtering: Selecting one visual it will filters others
- Tooltip pages: Show average sales trend over the months on hover the sales of year

## 7. Calculations / measure

- **Total Sales=
  SUMX(Fact_sales,Fact_sales[Quantity]*Fact_sales[Price])**
- **Average Sales =
  AVERAGE (Fact_sales [Sales])**
- **Total Distributors =
  COUNTROWS(Dim_distributor)**
- **Total customers =
  COUNTROWS(Dim_customer)**
- **Total products =
  DISTINCTCOUNT(Dim_product [Product_ID])**
- **Total Quantity Sold =
  SUM (Fact_sales [Quantity])**
- **Average Selling Price =
  DIVIDE ([Total Sales],[Total Quantity Sold])**

## 8. Export / Reporting Needs

The dashboard can be exported as:

- PDF Report (Overview Page).

- Excel Data Extract (Deal Details).
- Power BI Service Sharing with filters enabled.

## 9. Notes / Special Instructions

- Used navigation buttons.
- Highlight best-performing Sales Manager and Representative.
- Added a drill-through for Product class sales analysis.
- Used Map for better understandings of sales of each representative in each city.