Title: *Retail Seasonal Sales Dashboard*

1. Introduction

Retail sales often fluctuate due to **seasonal demand**, **festive periods**, and **regional trends**. A well-designed dashboard helps businesses analyze these seasonal patterns, optimize inventory, and improve decision-making.This project focuses on building a **Retail Seasonal Sales Dashboard** that visualizes key sales metrics across time periods, product categories, and regions.

2. Objective

- To analyze seasonal sales trends in the retail sector.

- To identify high-performing months and product categories.

- To support data-driven decisions through interactive visualizations.

- To observe how festivals, holidays, and weather impact retail sales.

3. Tools and Technologies Used

- **Power BI** – For data visualization and dashboard creation

- **MS Excel / CSV** – For handling raw datasets

- **Python (optional)** – For data cleaning and preprocessing (Pandas, NumPy)

- **SQL (optional)** – For querying structured data

4. Dataset Description

- **Source:** [e.g., Kaggle, Company Database]

- **Fields Included:**

  - `Order ID`

  - `Date`

  - `Product Category`

  - `Region`

  - `Sales Amount`

  - `Quantity Sold`

  - `Discount`

  - `Customer Type` (new/returning)

- **Time Period:** 12–24 months of data covering all major seasons

5. Data Preprocessing

- Removed duplicate and null entries

- Converted `Date` to proper datetime format

- Created new columns:

  - `Month`, `Season`, `Quarter`

- Mapped product categories for clarity

- Aggregated monthly and seasonal sales totals

6. Data Visualization

Key visual elements in the dashboard:

- **Season-wise Sales Line Chart** – Trend analysis across Spring, Summer, Fall, Winter

- **Monthly Sales Bar Chart** – Identify peak and low months

- **Category-wise Sales Pie Chart** – Understand product category performance

- **Region-wise Heatmap** – Visualize regional performance

- **Discount vs Sales Scatter Plot** – Analyze impact of discounts

7. Insights and Observations

- **Winter and festive months** (e.g., November-December) show a spike in sales.

- **Electronics and Apparel** are top-performing categories during festive seasons.

- Discounts increase sales but have diminishing returns after a threshold.

- **North and West regions** outperform others in terms of total revenue.

- **Off-season months** like April and August show low sales—ideal for stock clearance.

8.Dashboard Screetshots