

## Project Description

The **Jingle Market Dashboard** visualizes sales and profit data from 2018 to 2023, providing insights into total profits, customer satisfaction, and trends across various dimensions like weather, product categories, and locations. The dashboard highlights areas of improvement, such as customer satisfaction (2.98), and showcases key profit drivers, including snowy and rainy weather, and toys and decorations as top-performing categories.

The interactive design allows users to filter data by category and satisfaction levels, enabling dynamic exploration of trends and actionable insights to optimize business performance.

## Setup Instructions

### 1. Data Requirements:

1. Dataset with the following columns:
  - Date
  - Total Profit, Total Returns, Average Discount
  - Weather, Customer Satisfaction, Product Category, Location, Shipping method
  - Age Group, Gender, and Sales Channel (Online/In-Store)

### 2. Software Requirements:

1. **Power BI Desktop**
2. Data set in the format CSV.

### 3. Steps to Build the Dashboard:

1. **Import Data:** Load the dataset into Power BI.
2. **Data Cleaning:**
  - a) Removed storeid because of max no of null values
  - b) Date format was converted using locale in en-us
  - c) Shipping method blanks values are replace with NA into new column
  - d) Old shipping method was removed
  - e) Year & Day of week & Day name in new column created from date column
  - f) Replace value false as in-store & True as online
  - g) Return flag was converted into 1 & 0 in new column for calculation
3. **Data Modeling:** Created relationships between tables for dimensions like weather, category, and customer demographics , age , gender , shipping method , location ,online/store
4. **Visualization:**
  - Used **Card Visuals** for KPIs such as Total Profit, Total Return , Average customer satisfaction , Average Discount Amount.

- **Line Charts** for year-over-year trends.
  - **Donut chart** for Weather Profit breakdown.
  - **Clustered Bar Charts** for Weather vs. Category analysis.
  - **Map Visuals** for geographic insights.
  - **Pie chart** for Total profit by Age group .
  - **Bar chart** for Daily -over-Daily trends.
  - **Tree Map** for Productid by gender
  - **Funnel chart** for Total profit by online/store
  - **Matrix** for Total Customers Returned By Shipping Method And Gender
5. **Custom Filters:** Added slicers for category and satisfaction level to allow dynamic filtering and Date filter , Age-group filter and online/store filter .

#### 4. **Design Customization:**

1. Applied a festive red-and-green color theme for branding.
2. Added tooltips to visuals for more detailed information.
3. Included insights on the left panel for quick takeaways.
4. Added page navigation button in the form of Christmas tree