**Sales Analysis Dashboard – Ferns and Petals**

**Ferns and Petals – Sales Data Analysis and Dashboard Reporting Using Microsoft Excel**

**Project Description:**

This project aims to conduct a detailed sales performance analysis for *Ferns and Petals* (FNP), a popular gifting company in India, known for delivering flowers, sweets, hampers, and occasion-specific gifts. The analysis is based on a given dataset containing orders, product details, customer demographics, and delivery information.

The outcome is an **interactive dashboard built in Excel**, designed to provide business users with key insights on revenue patterns, product performance, regional customer behavior, and occasion-based trends. The insights support **strategic decision-making** related to marketing, logistics, customer segmentation, and inventory planning.

**Objectives:**

1. Understand the **revenue trends** across different time periods and occasions.
2. Identify **top-performing products** and **categories** that drive the highest sales.
3. Analyze **customer behavior**, including average spending, order timing, and location.
4. Evaluate **logistics performance** via order-to-delivery timing analysis.
5. Enable **dynamic data exploration** for stakeholders using Excel slicers and filters.

**Dataset Overview:**

The dataset includes structured data with the following fields:

* **Order Data**: Order ID, Order Date & Time, Delivery Date
* **Product Information**: Product Name, Category
* **Customer Demographics**: City, Occasion
* **Revenue Data**: Total Order Value

**Summary:**

* **Total Orders Analyzed**: 1000
* **Time Frame**: Year 2023 (Full Calendar Year)
* **Data Size**: Small-sized tabular data (suitable for Excel-based processing)

**Business Questions Addressed:**

1. **Total Revenue**: Identify the overall revenue.
2. **Average Order and Delivery Time**: Evaluate the time taken for orders to be delivered.
3. **Monthly Sales Performance**: Examine how sales fluctuate across the months of 2023.
4. **Top Products by Revenue**: Determine which products are the top revenue generators.
5. **Customer Spending Analysis**: Understand how much customers are spending on average.
6. **Sales Performance by Top 5 Product**: Track the sales performance of top 5 products.
7. **Top 10 Cities by Number of Orders**: Find out which cities are placing the highest number of orders.
8. **Revenue Comparison Between Occasions**: Compare revenue generated across different occasions.
9. **Product Popularity by Occasion**: Identify which products are most popular during specific occasions.

**Key Metrics Used:**

|  |  |
| --- | --- |
| **Metric** | **Value** |
| **Total Orders** | 1000 |
| **Total Revenue** | ₹35,20,984 |
| **Average Delivery Time** | 5.53 Days |
| **Avg. Customer Spending** | ₹3,520.98 |

**Tools & Technologies Used:**

* **Microsoft Excel**
  + Pivot Tables & Pivot Charts
  + Data Bars & Conditional Formatting
  + Timeline Filters & Slicers
  + Dynamic Dashboard Layout
  + Chart Types Used: Bar Charts, Line Graphs, Column Charts, Doughnut Charts

**Dashboard Design Overview:**

**1. Key Performance Indicators (KPIs)**

Displayed as high-level summary cards:

* Total Orders
* Total Revenue
* Average Delivery Time
* Avg. Customer Spending

**2. Monthly Revenue Trend**

A line chart displays how sales evolved month-wise throughout 2023. This helped identify high-volume gifting seasons such as:

* **February** – Valentine’s Day
* **August** – Raksha Bandhan

**3. Revenue by Occasion**

A bar chart shows revenue contributions by major occasions like:

* Diwali
* Valentine’s Day
* Raksha Bandhan
* Anniversaries & Birthdays

**4. Top 5 Products by Revenue**

This visual highlights consistently high-selling products including:

* *Deserunt Box*
* *Quia Gift Magnum Set*

**5. Product Category Performance**

A bar chart shows which categories perform best (e.g., **Colors**, **Sweets**, **Gift Hampers**).

**6. Top 10 Cities by Order Count**

Identifies top locations driving sales. Helps in regional marketing targeting. Notable cities:

* Imphal
* Haridwar
* Kaval

**7. Hourly Order Trends**

A line graph reveals peak order times, most commonly between **11 AM to 8 PM**.

**Deep-Dive Insights:**

* **Seasonal Trends**: Significant sales spikes in February and August. Promotional campaigns and marketing budgets should be increased in these months.
* **Delivery Lag**: Average delivery time is over 5 days. Faster logistics or tiered delivery models can improve customer satisfaction.
* **Occasion Revenue Contribution**: Valentine’s Day and Diwali account for a large share of revenue, confirming the cultural importance of gifting on these dates.
* **Customer Demographics**: Concentrated orders from Tier-2 and Tier-3 cities present a strong opportunity for localized campaigns.
* **Product Recommendations**: Inventory planning can prioritize the top-performing SKUs and categories.

**Strategic Business Recommendations:**

1. **Inventory Planning**: Stock more of top-performing products and categories during peak months.
2. **Targeted Marketing**: Run occasion-based promotions in top-performing cities.
3. **Delivery Optimization**: Explore fast-track delivery for high-value customers to reduce average delivery time.
4. **Time-Based Offers**: Use hourly trend data to push time-limited flash sales in peak hours.
5. **Customer Segmentation**: Develop different buyer personas based on city, occasion, and spending.

**Outcome & Impact:**

The dashboard provided a **visual and data-driven narrative** of Ferns and Petals' sales operations. It enabled:

* Fast and informed decision-making
* Identification of profitable products and peak seasons
* Better understanding of customer behavior and preferences
* Increased operational awareness (delivery time, regional demand, etc.)