

Ferns & Petals Sales Analysis Report

Business Problem

Ferns & Petals (FNP) is one of India's leading gifting and flower delivery brands, offering a wide range of products including flowers, cakes, plants, chocolates, and personalized gifts. With a strong online presence and nationwide delivery network, the company experiences high seasonal sales fluctuations driven by festivals and special occasions such as Valentine's Day, Raksha Bandhan, and Anniversaries.

As the company grows, it becomes important to understand how sales perform across different cities, product categories, and occasions. FNP wants to use its sales data to make better business decisions such as identifying what products sell best, when customers spend more, and which cities contribute most to revenue. The goals of this analysis are to:

- Identify top-performing occasions, products, and cities contributing to total revenue.
- Understand customer purchase patterns and average spending behavior.
- Detect seasonal trends that influence sales peaks and dips.
- Provide data-driven recommendations to improve sales strategy and product focus.

Data Overview

Datasets Used:

1. Orders.csv – Contains details of order ID, order date, city, amount, and product ID.
2. Products.csv – Includes product categories, pricing, and product names.
3. Customers.csv – Contains customer demographics and spending information.

Tools Used:

- Microsoft Excel (for data cleaning and preprocessing)
- Power BI (for data modeling and dashboard visualization)

Data Cleaning Summary

Performed in Excel before importing data into Power BI:

- Removed duplicate records and unnecessary blank rows.
- Handled missing values in price and city fields using average or mode imputation.
- Standardized date formats for consistent monthly trend analysis.
- Merged datasets using unique keys (Customer ID, Product ID, Order ID).
- Normalized category names to remove inconsistencies.
- Filtered out invalid entries.

Exploratory Data Analysis Insights

The cleaned data was imported into Power BI to design an interactive sales dashboard, allowing dynamic filtering by Occasion, City and Category.

Key KPIs:

- Total Orders: 1,000
- Total Revenue: ₹4 Million
- Average Customer Spending: ₹3.52K

Visual Insights:

- Revenue by Occasions: Highest sales observed during Anniversary (₹675K), followed by Raksha Bandhan (₹632K) and Holi (₹575K).
- Revenue by Month: Revenue peaked during February and August, showing clear seasonal patterns.
- Top 5 Products by Revenue: Quia Gift, Dolores Gift, and Harum Pack generated the most revenue.
- Top Cities by Order: Imphal, Dhanbad, and Kavali ranked highest in order volume.
- Revenue by Category: Colors (₹900K) and Sweets (₹613K) led in sales, while Plants and Mugs performed lower.
- Hourly Revenue: Most orders were placed between 10 AM and 1 PM.

Research Questions & Key Findings

1. Which occasions contribute most to total sales? → Anniversary, Raksha Bandhan, and Holi drive over 50% of total revenue.
2. Which cities have the highest order volumes? → Imphal and Dhanbad contribute significantly.
3. Which product categories generate maximum revenue? → Colors and Sweets dominate sales.
4. How do customer spending patterns vary by time and season? → Sales peak in February and August.
5. Which products can be promoted for higher sales? → Low-performing yet high-margin items like Plants and Mugs.

Final Recommendations

- Strengthen Occasion-Based Campaigns: Invest in marketing during low-performing occasions.
- Expand in High-Order Cities: Leverage successful regions like Imphal and Dhanbad.
- Optimize Product Portfolio: Promote underperforming but high-margin items with bundles or discounts.
- Enhance Customer Retention Strategies: Introduce loyalty programs and personalized recommendations.
- Leverage Peak Order Hours: Run time-bound discounts during 10 AM–1 PM.
- Focus on Category Diversification: Expand top-performing categories like Colors and Sweets.

Conclusion

The Ferns & Petals Sales Analysis provides insights into sales patterns, customer behavior, and regional performance. By implementing the recommendations, the company can optimize marketing strategies, improve underperforming categories, and drive sustained revenue growth across regions and occasions.