📝 Executive Summary:

FNP Sales Analysis Dashboard (Excel Project)

This Excel dashboard provides an in-depth sales and performance analysis for **Ferns and Petals (FNP)**, a leading gifting company catering to major Indian occasions. Using advanced Excel techniques such as **PivotTables, slicers, timelines, and charts**, this project offers a comprehensive view of customer behavior, product performance, and delivery metrics to support data-driven decision-making.

🔍 Project Objective

The aim of this project was to transform raw order, customer, and product data into an interactive and insightful dashboard that allows stakeholders to:

- Track business KPIs
- Sales trends analysis
- Discover top-performing products and regions
- Evaluate delivery efficiency
- Understand consumer trends based on time, location, and occasion

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📈 Key KPIs & Metrics

- **Total Revenue**: ₹3,520,984.00
- **Total Orders**: 1000
- **Average Customer Spend**: ₹3,520.98
- **On-Time Delivery %**: 50.7%
- **Average Delivery Time**: 6 Days
- **Top Customer**: *Samaira Ganesh* (₹75,029)
- **Top Region**: *Imphal* (₹1,25,854)
- **Top Selling Product**: *Magnam Set* (₹121,905)
- **Lowest Selling Product**: *Cum Gift* (₹7,714)

📊 Dashboard Highlights

1. **Monthly Sales Performance**
   Identifies seasonal spikes and slowdowns in sales throughout 2023.
2. **Top Products & Categories by Revenue**
   Highlights the highest revenue-generating products and product categories.
3. **Occasion-Based Sales Analysis**
   Compares revenue across major Indian occasions like Diwali, Holi, and Raksha Bandhan.
4. **Hourly Sales & Order Volume Trends**
   Examines consumer purchase behavior by hour of the day using both raw and cumulative charts.
5. **Top 10 Cities by Order Volume**
   Identifies high-performing cities based on order count.
6. **Delivery Efficiency**
   - On-Time Delivery % tracked as a major operational KPI.
   - A scatter plot (not shown in dashboard) was used to explore correlation between **order quantity** and **delivery time** (result: very weak correlation).
   - Formula used to calculate the correlation:
     - =CORREL(Orders!D:D, Orders!S:S) = 0.00347817 where D:D is Quantity range & S:S is Delivery time range.
     - This number represents the Pearson correlation coefficient.
     - Conclusion: Increasing the quantity of items ordered does not significantly impact delivery time.

💡 Business Insights Uncovered

- Seasonal spikes during **Raksha Bandhan** and **Anniversaries**
- On-Time delivery is at **50.7%**, indicating logistics improvement opportunities
- Top revenue comes from **Soft Toys** and **Colors** categories
- Most active city: ***Imphal***; Highest spending customer: **Samaira Ganesh**

📌 Tools & Techniques Used

- **Power Query Editor (PQE)** – for data extraction, cleaning, and transformation
- **Power Pivot** – for data modeling using relationships and calculated columns
- **Pivot Tables -** used for dynamic data summarization, grouping, and quick insight generation.
- **Slicers & Timelines** - for dynamic filtering
- **Custom KPIs** - for performance tracking
- **Charts**: for dashboard visualizations
- **AI-generated Summary** – for documenting project insights

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⚙ Workflow & Steps Followed

1. Data Extraction & Cleaning (ETL):

- Loaded multiple files via **Power Query Editor** (Get Data → From Folder)
- Removed unnecessary columns, fixed data types, and standardized formats

2. Data Transformation:

- Created new calculated columns:
  - Month Name → Date.ToText([Order_Date], "MMMM")
  - Weekday Name → Date.ToText([Order_Date], "dddd")
  - Total Cost → [Quantity] * [#"Price (INR)"]
  - Delivery Time (Days) → [Delivery_Date] - [Order_Date] → Transformed using Duration → Days
  - Delivery Status → if [Delivery Days] > 5 then "Delayed" else "On-Time"

3. Data Modeling:

- Connected tables using **Power Pivot**
- Managed relationships between Orders, Products, Customers, and Calendar tables

4. Data Analysis:

- Used **Pivot Tables & Measures** to create KPIs like total revenue, avg. delivery time, etc.

5. Dashboard Development:

- Designed a clean, scrollable dashboard layout with:
  - Interactive filters (Timeline, Occasion, City, Gender, Delivery Status)
  - Clear KPI section at the top
  - Data visualizations for trends and deep dives

6. Executive Summary:

- Generated with the help of AI to summarize findings, tools, techniques, and business value

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? Business Value

This dashboard enables FNP's marketing and operations teams to:

- Optimize inventory and product promotions around peak sales months and occasions.
- Improve logistics by focusing on on-time delivery performance.

- Identify high-value customers and target top-performing cities and regions.

🎁 Outcome

This dashboard enables strategic decisions by:

- Highlighting high-performance areas (products, customers, cities)
- Revealing delivery bottlenecks
- Visualizing trends to optimize marketing around key occasions

Conclusion

The FNP Sales Analysis dashboard reveals strong revenue contributions from select product categories and specific cities, with clear peaks in sales around major occasions. However, the on-time delivery percentage stands at 50.7%, indicating a critical area for operational improvement. Targeting logistics efficiency, capitalizing on high-performing products like the Magnum Set, and promoting underperforming products may help enhance both customer satisfaction and revenue growth. This data-driven approach can guide FNP in refining their marketing, fulfillment, and product strategies for improved business outcomes.