Model Managerial Process

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## 1 Report Summary

Title: Revenue in Motion — Uncovering the Hidden Pulse of Seasonal Growth

**Period:** 2015–2018

Prepared in: Microsoft Power BI Desktop

**My Objective:** To analyse seasonal patterns in revenue across years, customers, and suppliers, and uncover the hidden drivers of business momentum.

# 2 Part 1: Data Preprocessing and Transformation

#### **Source Files:**

- Excel files for 2015, 2016, 2017
- CSV file for 2018

#### **Key Steps:**

- Unpivoted pivot-format Excel data into a row-based fact structure.
- Extracted and combined headers using Color, Supplier Category, and Supplier Name from first
   3 rows.
- Appended all years into a unified fact table: FactRevenue.
- Created surrogate keys for dimension tables: DimDate, DimColor, DimSupplier,
   DimSupplierCategory, DimCustomerCategory
- Added Season column to DimDate using DAX.
- Generated relationships between dimension tables and fact table to build a star schema.

### 3 Part 2: Data Model Creation

After preparing the unified fact table (FactRevenue) containing revenue data from 2015 to 2018, the following dimension tables were created to establish a proper star schema model: a)

#### DimDate:

- Generated using the CALENDAR DAX function from 2015 to 2018.
- Added a custom column for Season (Spring, Summer, Fall, Winter) based on month.
- Marked as the official date table in Power BI.

#### b) DimColor:

- Extracted unique color names from the fact table.
- Assigned a surrogate key (ColorID).

#### c) DimSupplierCategory:

- Extracted distinct supplier categories (Clothing, Packaging, Toy, Novelty Goods).
- Created a surrogate key (SupplierCategoryID).

#### d) DimSupplier:

- Extracted unique supplier names (Fabrikam, GDI, Phone Co, Litware, Northwind).
- Created a surrogate key (SupplierID).

#### e) DimCustomerCategory:

- Extracted distinct customer categories (Corporate, Gift Store, Supermarket, etc.). - Created a surrogate key (CustomerCategoryID).

**Note:** City was not extracted into a dimension due to the absence of country/state hierarchy and high cardinality.

## 4 Part 3: Measures and Calculations

#### **Created DAX Measures:**

[Total Revenue]

- [YTD Revenue]
- [Prior Year Revenue]
- [Warm Season Revenue]
- [Cold Season Contribution %]
- [Warm Season Contribution %]

These measures were crucial in tracking seasonal influence, momentum, and comparative growth.

# 5 Part 4: Report Design "Revenue in Motion"

### Theme:

"Like tides, revenue rises and falls with the seasons. But behind every spike lies a pattern: customers, suppliers, and time all influence the rhythm. This report reveals the hidden pulse driving business growth."

#### **Visuals Included:**

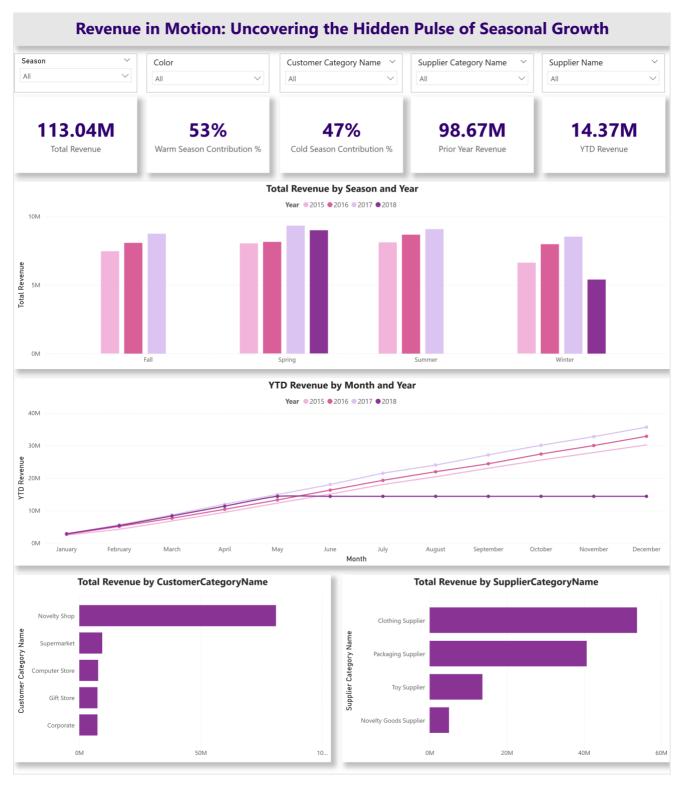
Visual	Description	Insight
KPI Cards	Display key metrics: Total Revenue,	Quick snapshot of business
	Warm/Cold % contribution, YTD &	performance
	Prior Year Revenue	
Clustered Column	Total Revenue by Season and Year	Spring and Summer dominate;
Chart		Winter is consistent
Line Chart	YTD Revenue by Month and Year	2017 saw the fastest early
		revenue accumulation
Bar Chart	Revenue by Customer Category	Corporate and Gift Stores lead,
		especially in Spring and
		Winter

Bar Chart	Revenue by Supplier Category	Packaging and Clothing suppliers dominate warm months
Slicers	Filter by Year, Season, Customer  Category, Supplier Category,  Supplier Name	Enables targeted analysis

### **Key Insights:**

- Warm seasons (Spring & Summer) account for **53%** of total revenue.
- Cold seasons (Fall & Winter) contribute a steady 47%, highlighting their underestimated value.
- YTD revenue growth **peaked** in 2017, with early **spikes** visible in March–May.
- Corporate and Gift Stores showed significant activity during warm seasons, possibly linked to early budget cycles or gift-giving holidays.
- Clothing and Packaging suppliers align their peak revenue with warmer months, suggesting season-specific demand.

### **Report Design:**



## 6 Conclusion

The report successfully unveils the seasonal pulse of revenue, showing that growth isn't uniform; it rhythms through the year, driven by both natural cycles and business behaviour.

By incorporating dimensions like Customer Category and Supplier Category, we've gone beyond tracking totals and started understanding who contributes to what, and when.

# 7 Recommendations

- Strategically align marketing and inventory planning with seasonal demand surges.
- Leverage strong warm-season contributors while not neglecting the consistent performance of colder months.
- Explore further segmentation by city or product type for deeper geographic or SKU-level planning.