**📊 MECE Breakdown for Northwind Power BI Report**

**1. Sales Analysis**

Focus: Revenue trends, order patterns, top-performing products.

* **Overall Sales Trends**
  + Sales over time (Year, Quarter, Month).
  + Order volume trend (line chart / stacked bar).
* **Product Performance**
  + Sales by product (bar/treemap).
  + Sales by product category (stacked bar/treemap).
  + Top 10 best-selling products.
* **Sales by Region/Market**
  + Sales by country/region (map).
  + Sales by customer location.
* **Sales by Employee (Sales Rep)**
  + Sales volume by employee.
  + Order fulfillment performance.

**2. Customer Insights & Segmentation**

Focus: Understanding customers & their purchasing patterns.

* **Customer Segmentation**
  + Top customers by revenue.
  + Customers by order frequency.
* **Customer Retention & Loyalty**
  + Repeat vs new customers.
  + Avg. order value per customer.
* **Geographic Distribution of Customers**
  + Customer spread by country/city (map visualization).

**3. Inventory & Product Insights**

Focus: Stock management, product demand, supplier insights.

* **Inventory Status**
  + Units in stock vs units on order.
  + Low-stock alerts (below reorder level).
* **Product Demand & Supply**
  + Demand forecast (based on sales trends).
  + Supplier contribution (sales by supplier).
* **Category-Level Trends**
  + Category demand vs stock availability.

**4. Employee Performance**

Focus: Productivity & organizational structure.

* **Sales by Employee**
  + Orders handled by employee.
  + Revenue generated per employee.
* **Employee Tenure & Performance**
  + Tenure distribution (histogram/box plot).
  + Performance vs tenure (scatter plot).
* **Reporting Structure**
  + Org chart showing "ReportsTo" hierarchy.

**5. Operational & Shipping Insights**

Focus: Delivery efficiency & costs.

* **Order Fulfillment**
  + On-time vs delayed shipments.
  + Avg. order processing time.
* **Shipper Performance**
  + Orders handled by each shipper.
  + Freight cost analysis per shipper.
* **Cost Analysis**
  + Freight cost contribution to total cost.

**6. Key KPIs (Dashboard Summary)**

Always keep **executive-level KPIs** at the top of the dashboard:

* Total Revenue
* Total Orders
* Average Order Value
* Top Category & Top Product
* Top Customer
* Avg. Delivery Time
* Employee with highest sales

**🎯 Final Deliverables in Power BI**

* **Page 1 (Executive Overview):** High-level KPIs, sales trend, customer map, category-wise sales.
* **Page 2 (Sales Deep Dive):** Sales by product, category, region, employee.
* **Page 3 (Customer Insights):** Segmentation, top customers, order frequency.
* **Page 4 (Inventory & Suppliers):** Stock status, supplier contributions, low-stock alerts.
* **Page 5 (Employee Performance):** Sales by employee, tenure insights, org chart.
* **Page 6 (Shipping & Operations):** Shipper performance, freight costs, delivery efficiency.