**Title:** Northwind Traders Data Analytics Project

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### **🧠 1. Objective**

The goal of this project is to create a Power BI report that provides key insights into Northwind Traders’ sales, customer behavior, and employee performance.

### **🧰 2. Tools Used**

* Microsoft Excel (for data cleaning)
* MySQL Workbench (for EDA queries)
* Power BI (for dashboards & visualizations)

### **📊 3. Process Summary**

| **Step** | **Description** |
| --- | --- |
| **Excel Cleaning** | Cleaned nulls, checked date validity, fixed missing values. |
| **MySQL EDA** | Ran SQL queries to explore sales, customer, and supplier patterns. |
| **Power BI** | Built EDA visuals & Sales Dashboard (key KPIs, charts, slicers). |

### **4. MECE Breakdown**

### **MECE (Mutually Exclusive, Collectively Exhaustive) Analysis**

| **Category** | **Sub-category** | **Description / Insight** |
| --- | --- | --- |
| Sales | Revenue by Category | Identify top revenue-generating product categories |
|  | Monthly Trends | Track sales volume and revenue across months |
| Customers | Top Customers | Identify repeat and high-value customers |
|  | Customer Segmentation | Analyze customer behavior by region & order count |
| Employees | Performance Analysis | Measure employee productivity and region performance |
|  | Hire Trends | Observe hire date patterns by title |
| Suppliers | Regional Distribution | Study supplier distribution by region |
|  | Category Contribution | Link suppliers to top-selling categories |

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### **💡 5. Key Insights**

* USA and Germany are top-performing countries.
* Beverages and Condiments are the highest-revenue product categories.
* Most orders shipped by “Speedy Express.”
* Peak sales around mid-year (May–August).

### **🎯 6. Future Scope**

Add Customer, Employee, and Supplier dashboards for deeper insights.

### **📎 7. Attachments**

* Northwind\_SalesDashboard.pbix  
  <https://drive.google.com/file/d/1DOlTo8X9c40-VD23e4-cRnPhrPnUqULf/view?usp=drive_link>
* Northwind\_CleanedData.xlsx

<https://docs.google.com/spreadsheets/d/1xeKfez6_mCvLTjkl-I9CZbpWp5FXlgo6/edit?usp=drive_link&ouid=112974060344301258250&rtpof=true&sd=true>

* EDA\_Queries.sql  
  <https://drive.google.com/file/d/1_Hn9NXH2tJne0bfIr9tgvVG2o-fo_taP/view?usp=drive_link>
* PowerPoint Presentation → [Northwind\_Presentation.pptx

<https://docs.google.com/presentation/d/1vnMPUEsqKNL3P5im0I934DydtheAwDK68dlCsxPdl10/edit?usp=sharing>