
Week 4 Assignment – Power BI Dashboard Project

Data Analytics Training Program – NeoSkillz DTAA

Introduction

This assignment will test your understanding of the complete Power BI workflow taught in **Week 4**, including:

- ✓ Data Import
- ✓ Data Cleaning & Transformation (Power Query)
- ✓ Data Modeling & Relationships
- ✓ DAX Measures
- ✓ Dashboard Design & Visualization
- ✓ Publishing the Dashboard

You are required to **build a full interactive business dashboard** based on sales data and submit it in the proper format.

Dataset

Use any **Sales Dataset** (from Kaggle / given Excel file) containing the following fields:

Sales_Data.xlsx

Column Description

OrderID Unique order number

CustomerID Customer reference

ProductID Product reference

Sales Amount generated

Profit Profit earned

Order Date Transaction date

Customer_Data.xlsx

Column Description

CustomerID Unique ID

CustomerName Customer Name

Region Location

Column	Description
City	Customer city

Product_Data.xlsx

Column	Description
ProductID	Unique ID
Category	Product category
SubCategory	Detailed category
Price	Selling price

Tasks to Perform

1 Data Import & Cleaning

- Import all datasets into Power BI.
 - Remove duplicates & null values.
 - Correct data types.
 - Rename columns correctly.
 - Save applied steps in Power Query.
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2 Data Modeling (Relationships)

Create relationships between tables:

From Table	To Table Key	Type
Customers	Sales	CustomerID 1:Many
Products	Sales	ProductID 1:Many

✓ Use **Model View** → drag columns to create relationships.

3 Create DAX Measures

Use DAX to create the following measures:

Total Sales = SUM(Sales[Sales])

Total Profit = SUM(Sales[Profit])

Profit Margin (%) = DIVIDE(SUM(Sales[Profit]), SUM(Sales[Sales])) * 100

Total Orders = COUNT(Sales[OrderID])

Average Order Value = DIVIDE([Total Sales], [Total Orders])

4 Dashboard Visualizations

Your dashboard must include:

Visual	Purpose
KPI Cards	Total Sales, Profit, Margin, Orders
Bar Chart	Sales by Region
Donut Chart	Profit by Category
Line Chart	Monthly Sales Trend
Table	Top 10 Customers
Map (optional)	Sales by Region/City
Slicers	Region & Category filters

5 Dashboard Formatting & Layout

- ✓ Use consistent **color palette** (max 3 colors)
 - ✓ Add titles and data labels
 - ✓ Align visuals properly
 - ✓ Add **company logo + your name**
 - ✓ Rename page → **Sales Dashboard**
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6 Publishing the Dashboard

- Save file → Retail_Sales_Dashboard.pbix
 - Publish using **Home → Publish → Power BI Service**
 - Export your dashboard as **PDF**
 - Upload both files to **GitHub**
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