

Power BI Sample Report

Quorum Network Resources Ltd

How-To Documentation

Power BI Report

[Superstore Dataset](https://www.kaggle.com/datasets/vivek468/superstore-dataset-final)

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Table of Contents

[1. OVERVIEW 3](#_Toc125020233)

[1.1. Purpose 3](#_Toc125020234)

[1.2. Dataset Documentation 3](#_Toc125020235)

[2. DATA IMPORT, TRANSFORM AND MODEL 4](#_Toc125020236)

[2.1. Import 4](#_Toc125020237)

[2.2. Power Query Editor 4](#_Toc125020238)

[2.3. New Date Table 6](#_Toc125020239)

[2.4. Modelling 6](#_Toc125020240)

[3. REPORTS 7](#_Toc125020241)

[3.1. Exploratory (More Fun One) 7](#_Toc125020242)

[3.2. Financial 7](#_Toc125020243)

[4. 7](#_Toc125020244)

[4.1. FAQS 7](#_Toc125020245)

[4.2. Links 7](#_Toc125020246)

# OVERVIEW

## Purpose

The purpose of this document is to accompany the Power BI “Sample Report” in explaining the steps or to recreate as a demonstration. This can be used as a full guide or individual set sections, i.e., how to create a star schema from a flat table, create financial report etc.

## Dataset Documentation

This dataset is available on Kaggle: [Superstore Dataset](https://www.kaggle.com/datasets/vivek468/superstore-dataset-final) and is a free simulated business dataset to imitate e-commerce sales. It was originally created as the “Tableau Sample Dataset.”

|  |  |
| --- | --- |
| Row ID | Unique ID for each row. |
| Order ID | Unique Order ID for each Customer |
| Order Date | Order Date of the product |
| Ship Date\* | Shipping Date of the Product |
| Ship Mode\* | Shipping Mode specified by the Customer |
| Customer ID | Unique ID to identify each Customer |
| Customer Name | Name of the Customer |
| Segment | The segment where the Customer belongs |
| Country | Country of residence of the Customer |
| Region | Region where the Customer belong |
| State | State of residence of the Customer |
| City | City of residence of the Customer |
| Postal Code | Postal Code of every Customer |
| Category | Category of the product ordered |
| Sub-Category | Sub-Category of the product ordered |
| Product Name | Name of the Product |
| Product ID | Unique ID of the Product |
| Sales | Sales of the Product |
| Quantity | Quantity of the Product |
| Discount | Discount provided |
| Profit | Profit/Loss incurred |

\*will probably ignore these for now.

# DATA IMPORT, TRANSFORM AND MODEL

## Import

Graphical user interface, text, application, Word

Description automatically generatedGraphical user interface, text, application, table

Description automatically generated

**Load** the Superstore dataset into PBI (**csv**)

Click **Transform** **Data**

## Power Query Editor

Graphical user interface, application, table, Excel

Description automatically generatedTable

Description automatically generated

This dataset is American so change the **Regional Settings** for it to **English** (**United** **States**) so you can change column types to Date without errors.

Now you can change the **Order Date** type to **Date**.

As well as other Dates, change Profit and Sales type to **Fixed** **Decimal** **Number** and Discount type to **Percentage**.

Table

Description automatically generated

Remove **Row ID** as it is not needed.

This dataset has already been cleaned and when checking Column Quality, you can see there’s no Error or Empty rows.

Table

Description automatically generatedTable

Description automatically generated

To create a star-schema from this dataset, first **Duplicate** the table.

First Dimension Table we will create is “Geography”. Select all geographical columns and **Remove Other Columns.**

Table

Description automatically generatedTable

Description automatically generated

Now on the new Geography table, select **Postal Code** which has the highest granularity and **Remove Duplicates**.

If you show **Column Distribution**, you can see that all of the Postal Code values are now all distinct and unique.

Repeat these steps for **Product** and **Customer** table with Category, Sub-Category, Product Name and Product ID for **Product** and Segment, Customer Name and Customer ID for **Customer**.

Graphical user interface, table

Description automatically generated

The next table to create from Duplicating is the “Orders” table.

Keeping columns: **Order ID**, **Order Date**, Ship Date, Ship Mode, **Customer ID**, **Postal** **Code**, **Product ID**, Sales, Quantity, Discount, Profit. The columns in **bold** we will use to create relationships with our other tables. Hide the **Ship Date** and **Ship Mode** columns as they are not needed for the reports.

You can either delete your original table, but I’m just hiding mine as we don’t need it anymore.

Close and Apply.

## New Date Table

Table

Description automatically generated

Date =

VAR MinYear =

    YEAR ( MIN ( Orders[Order Date] ) )

VAR MaxYear =

    YEAR ( MAX ( Orders[Order Date] ) )

RETURN

    ADDCOLUMNS (

        FILTER (

            CALENDARAUTO (),

            AND ( YEAR ( [Date] ) >= MinYear, YEAR ( [Date] ) <= MaxYear )

        ),

        "Year", YEAR ( [Date] ),

        "Month", FORMAT ( [Date], "mmmm" ),

        "Month Number", MONTH ( [Date] ),

        "Weekday", FORMAT ( [Date], "dddd" ),

        "Weekday number", WEEKDAY ( [Date] ),

        "Quarter",

            "Q"

                & TRUNC ( ( MONTH ( [Date] ) - 1 ) / 3 ) + 1,

        "Day", DAY ( [Date] )

    )

Format using [DAX Formatter by SQLBI](https://www.daxformatter.com/).

Mark as Date Table.

## Modelling

On the Model tab, delete any automatic relationships between the tables.

Graphical user interface, application, Word

Description automatically generated

# REPORTS

## Exploratory (More Fun One)

## Financial

# 

## FAQS

## Links

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