**Business / Functional Requirement Document**

1. ﻿**Data Gathering/Requirement**:

Assemble a sales reports with different visuals to best show the Sales Insights in one page Dashboard. Feel free to use your imagination to best represent the data you have available.

1. Sales (folder by year)

2. Categories (Excel)

3. Geography (Excel)

4. Product (CSV/Database)

5. SalesRep (Excel)

6. SubCategories (Excel)

**Task 1.1**:

﻿Create a mechanism to load all the files from the sales folder in a single Sales fact table.The mechanism needs to be resilient as:

-removing a file from the sales folder does not create an error for missing files.

-adding a new yearly sales file will automatically be loaded in the fact query upon refresh.

2. **Data Modeling:**

**Task 2.1:**

Do the respective transformations to the Sales fact table in order to split the Country form the City in field "Location". Make sure you set up the correct Data Type to allow Geo maps.

Do the necessary updates in the Date field to make sure you can setup the Date format.

**Task 2.2:**

Create unique key (GeoKey) in Sales and Geography tables.

**Task 2.3:**

The Dimensional queries SalesRep and Sub category need additional treatment. Some ID columns have the following format:

|  |
| --- |
| SalesRepID |
| ID – 6 |
| ID – 7 |
| ID – 5 |
| ID – 3 |
| ID – 1 |
| ID – 2 |
| ID – 4 |

﻿Create a small function that removes the "ID -" part of these columns that you can invoke and reuse for these two queries to clean the IDs.

**Task 2.4:**

Create the Data Model connecting all tables and using the Calendar table already set up in the I pbix.

**3. DAX calculations**

**Task 3.1:**

Calculate Total Revenue in Sales table, using the Product's Retail Price, and multiplying it by the Units.

**Task 3.2:**

Calculate Total Cost in Sales table, using the Product's Standard Cost, and multiplying it by the Units.

**Task 3.3:**

Calculate Gross Profit in Sales: Total Revenue – Total Cost

**Task 3.4:**

Calculate a **Gross profit %** measure that could be sliced by Country, City and Product.

The % Gross Profit is a calculation **Gross Profit / Total Revenue**

**Hint**: the **Gross profit %** for Germany in 2017 is **68.95%**

**Task 3.5:**

Calculate a measure for **AVG sales per day** – this is the average sum of **Total Revenue** per day based on the Dates of actual Sales.

**Task 3.6:**

Create a **MS%** to show the Sales Market per each country (Country Total Revenue / Total Revenue of all sales)

Hint: Total Revenue of all sales is the Total Revenue of the whole Sales table. Make sure it can be filtered by each year, i.e. the Total Revenue sales for each selected time period is a base of 100 %

**Task 3.7:**

Calculate the following time measures:

* Total Revenue YTD
* Total Revenue YTD LY (Last Year)
* Total Revenue MAT (Moving Annual Total – last 12 months)
* Total Revenue MTD (Month to Date)

4. Use the measure and calculations to assemble a sales reports with different visuals to best show the Sales Insights in one page Dashboard. Feel free to use your imagination to best represent the data you have available.

If you plot Month on x-axis, make sure the months are sorted from Jan-Dec.