Introduction

Data sets:
a collection of related sets of information that is composed of separate elements but can be manipulated as a unit by a computer.

Data Visualization:
Data visualization is the graphical representation of information and data. By using visual elements like charts, graphs, and maps, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data.

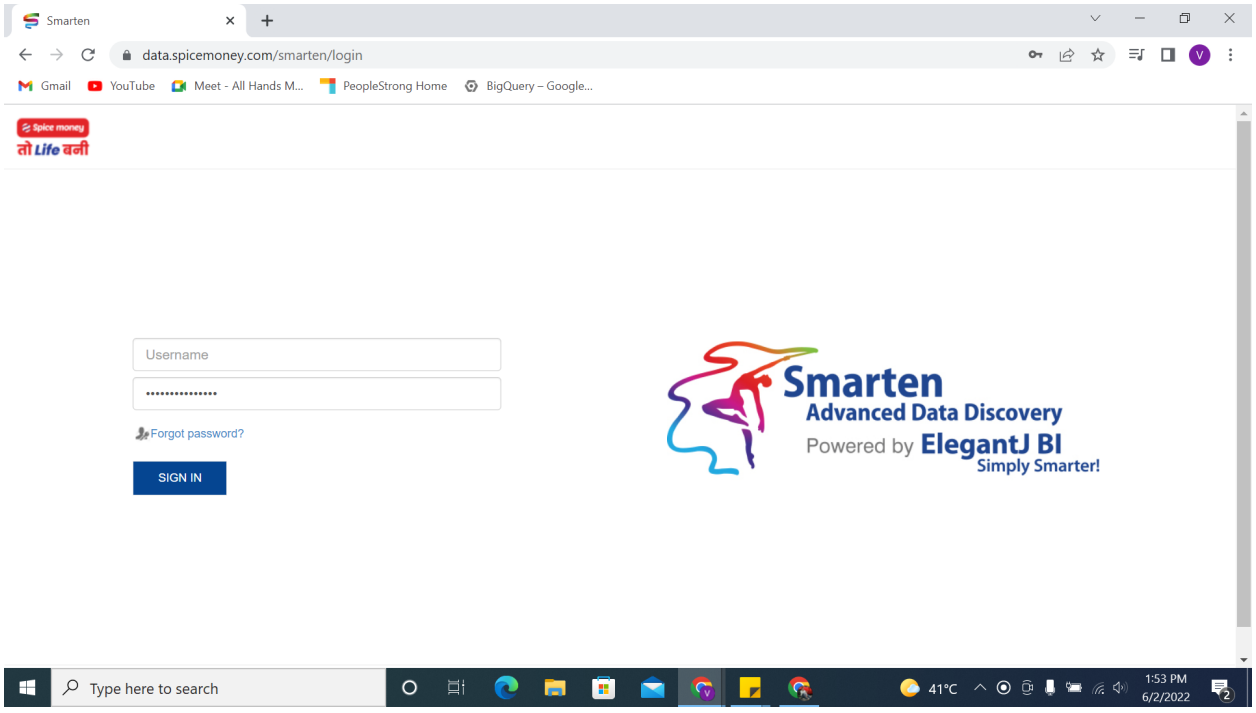
BI Tool:
Business intelligence software is a type of application software designed to retrieve, analyze, transform and report data for business intelligence.

The objective is to show the complex datasets in a layman form so that a person who is not in the same domain of work can also understand these datasets.

Smarten is a BI tool.

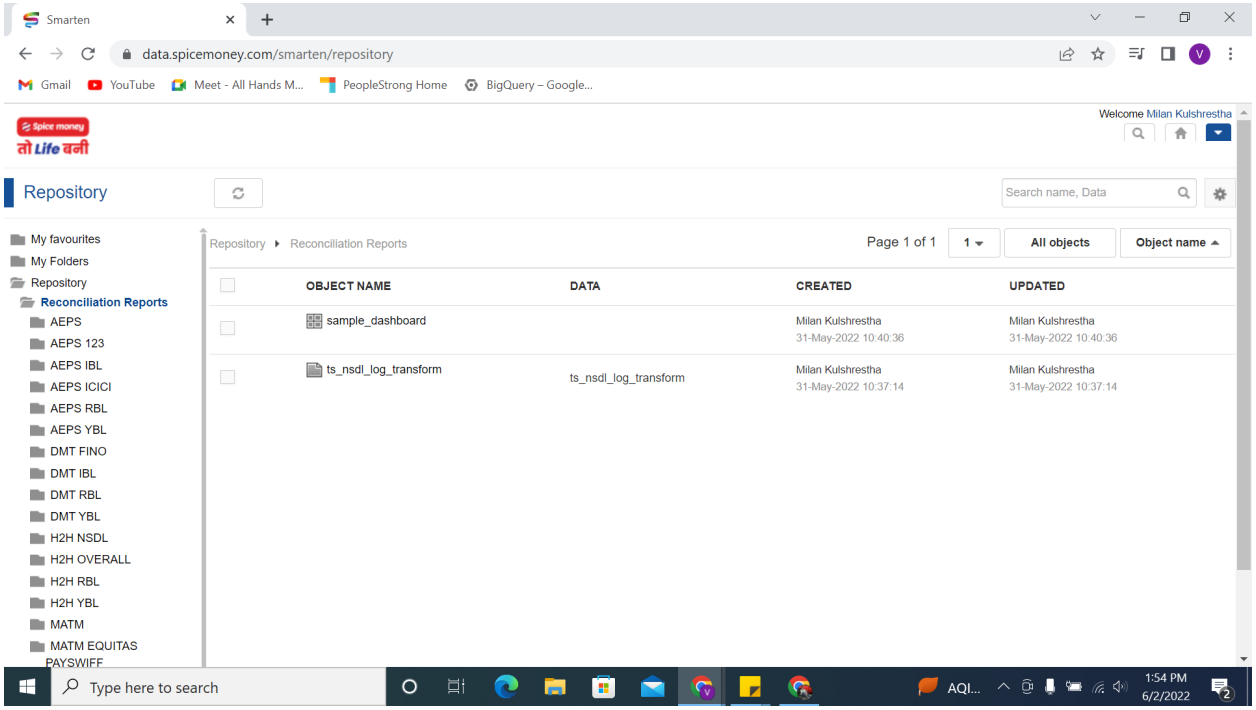
Process of Creating a report:

Step1:
Log in to the Smarten login portal.



Step2:

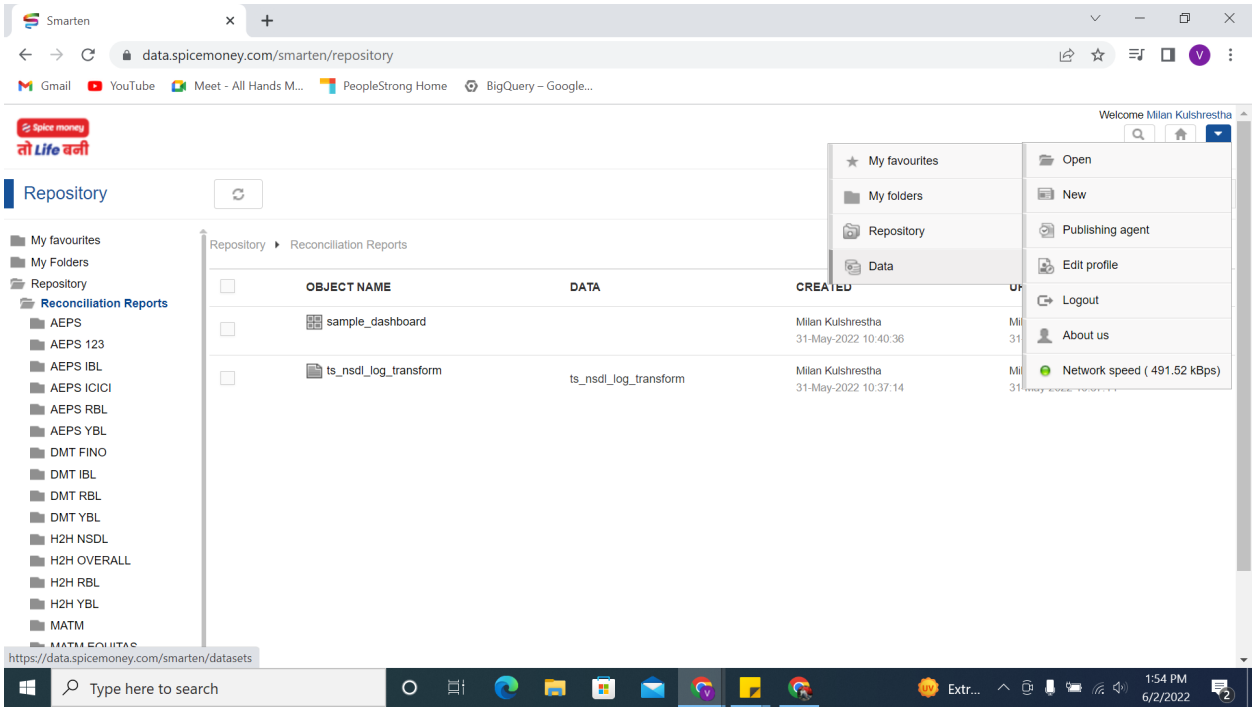
You will receive this type of UI after login.



Step3:

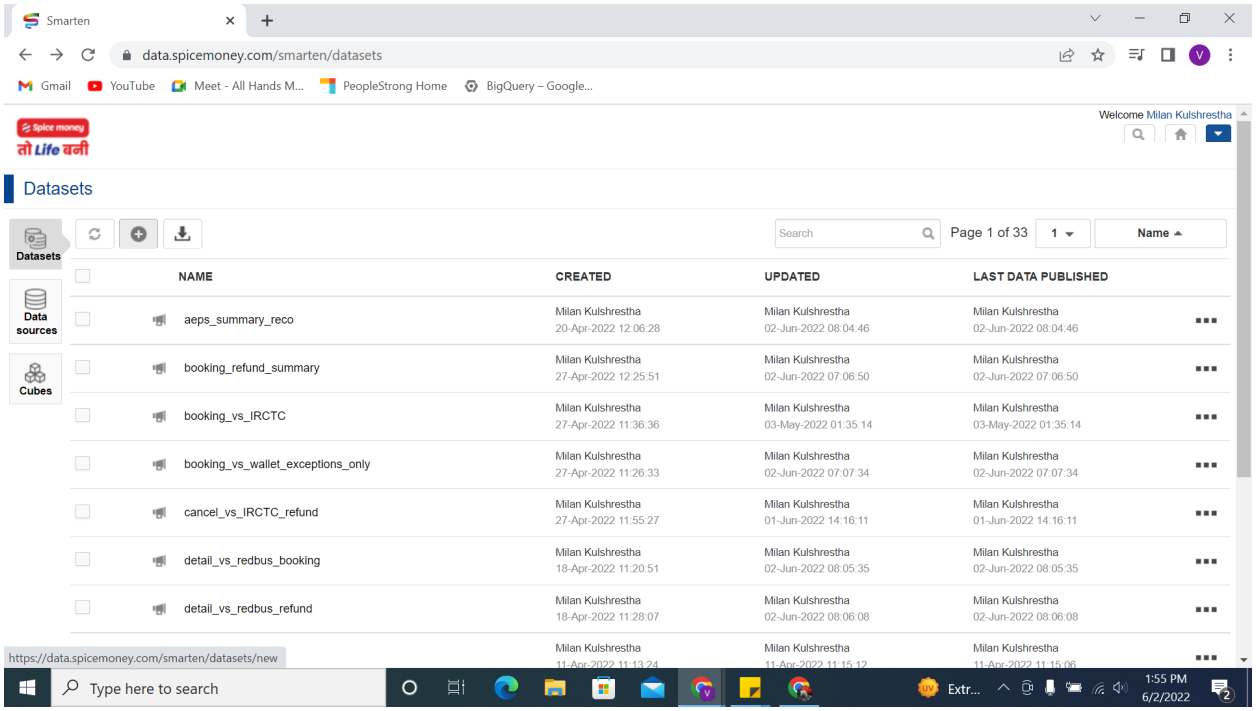
Now, we have to create the data set first. For this,:

Select the dropdown menu on the top right corner and then select the data option.

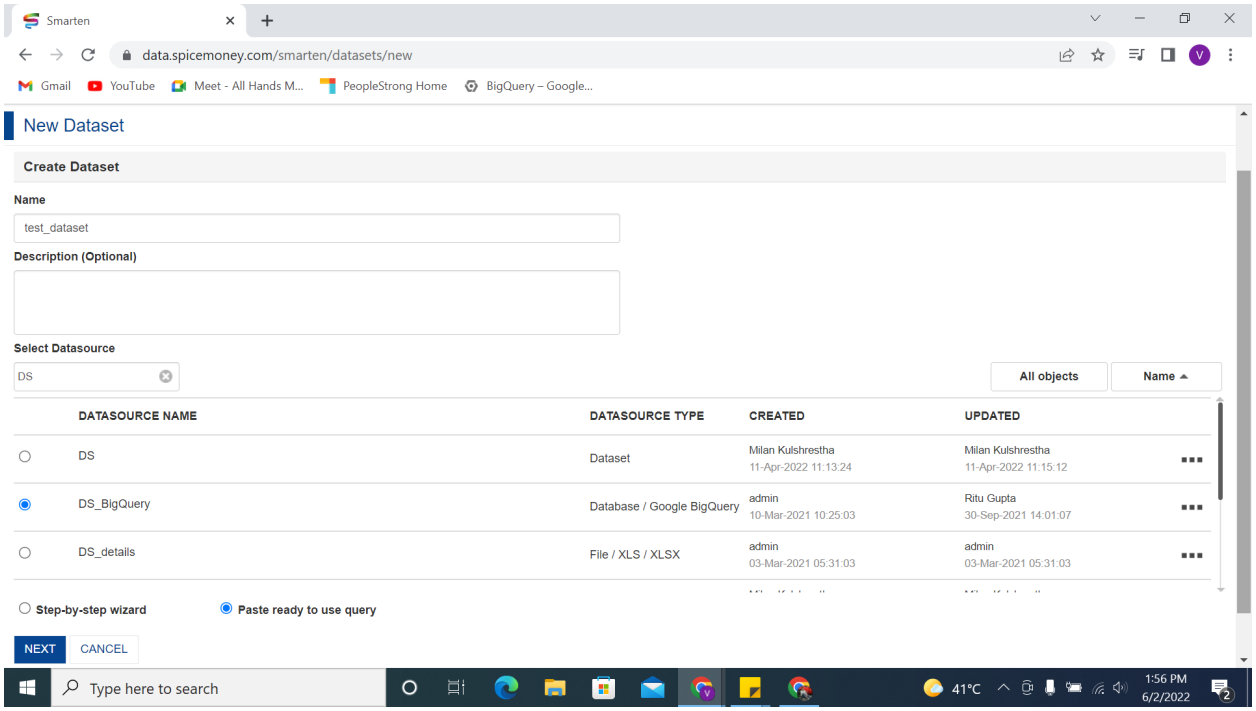


Step4:

Now select the plus or the add icon under the datasets option to add the dataset.

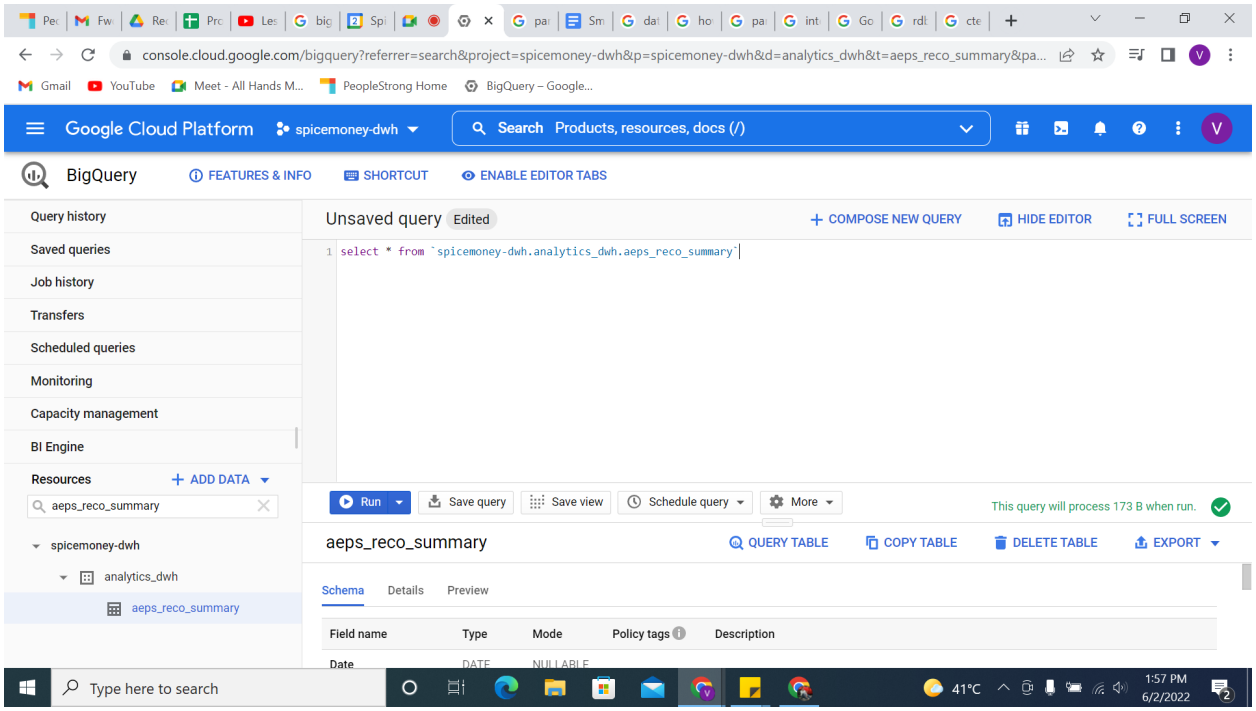


Step5:
First write the name of the dataset.
Description if needed.
Select the datasource. We can search the datasource from search option.
After this, select the step-by-step wizard to manually select the schema and dataset or else select the paste ready to use query to type in the query.



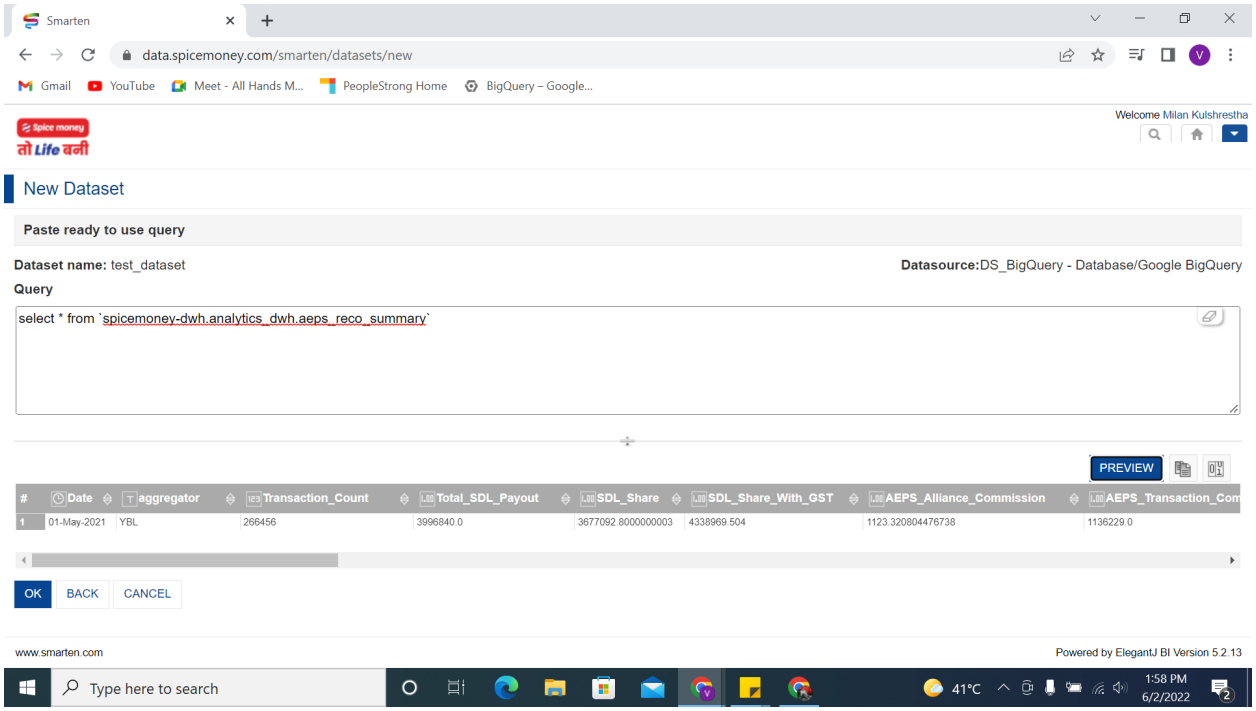
Step6:

*tip: Instead of directly typing the query go to the GCP BigQuery and write the query there. It gives us the suggestions to select the database and tables.



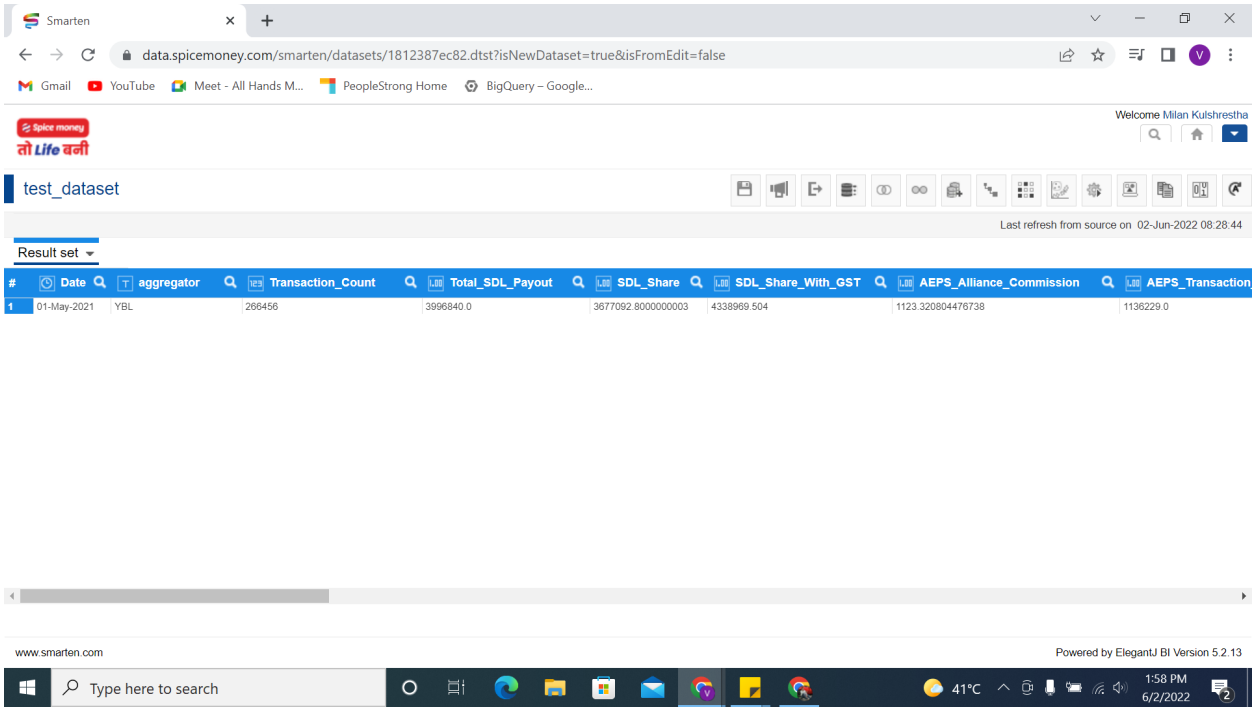
Step7:

Type the same query to the Query section and select the preview option to preview the selected data. And press OK to proceed.



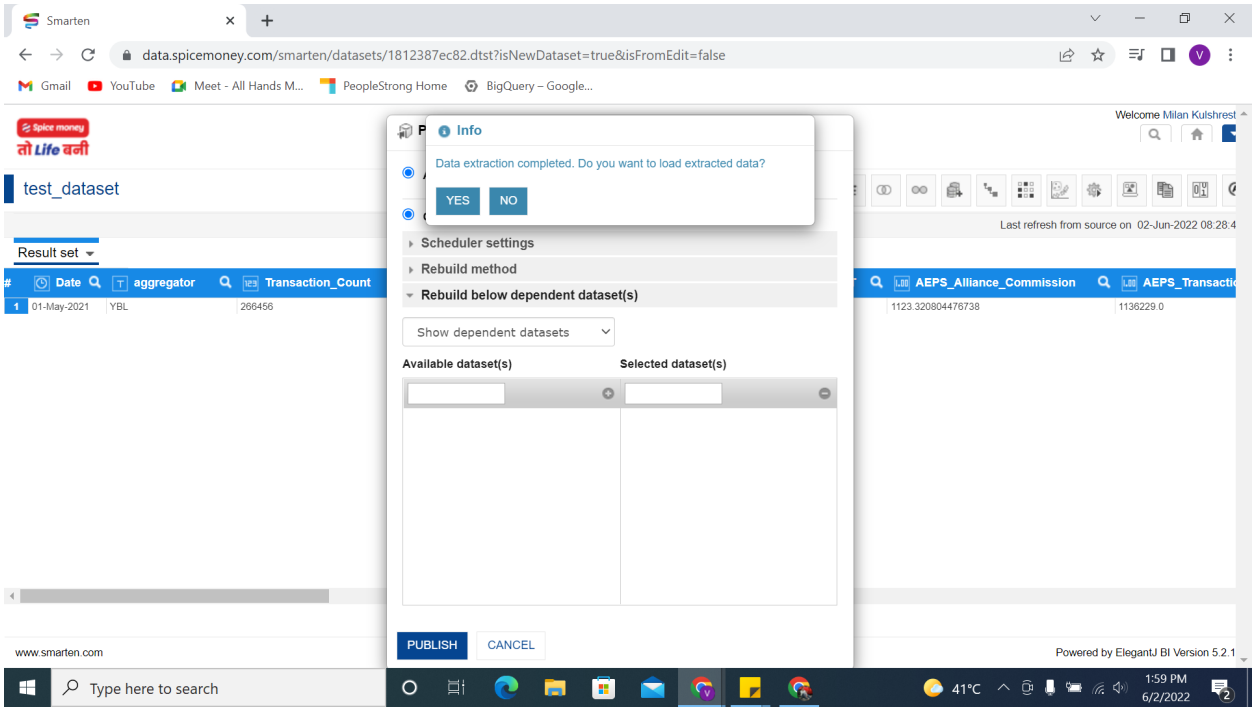
Step8:

Now select the publish option right to the save option to publish the dataset to use it for creating the report later.



Step9:

Now, select yes to load the extracted data. This will reload and extract the data again.



Step10:

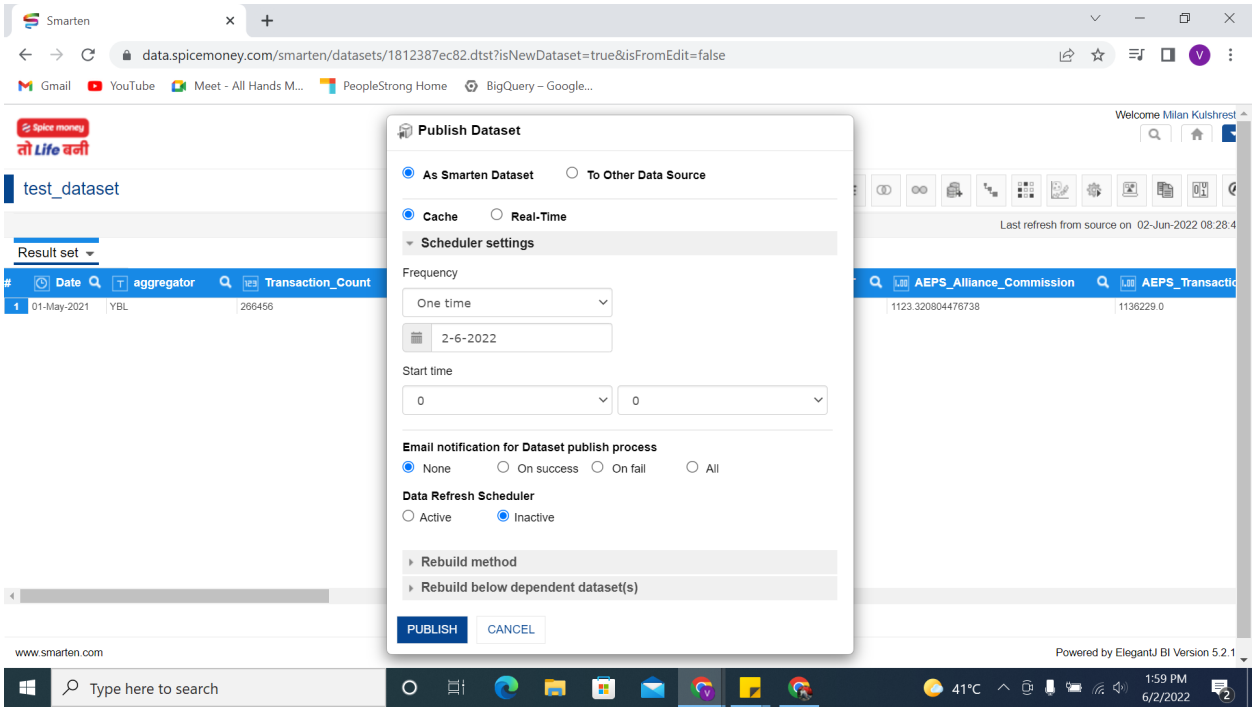
In the following menu, we have the option to publish as the smarten dataset or to publish the dataset to some other data source.

Select the cache.

Now select the frequency of the Scheduler. This will reload the data according to the frequency selected. Ex, after a daily, weekly or monthly, so on.

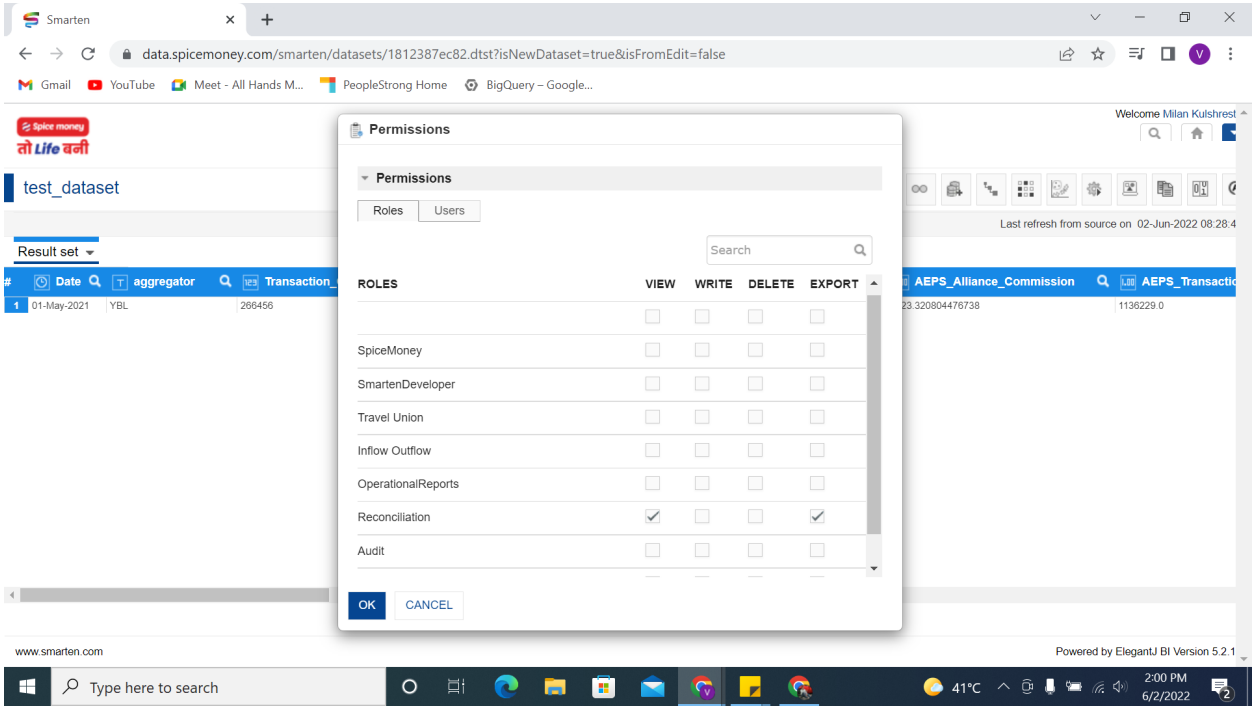
We can get the notification for the publish process whether it is successful or not.

Also, data refresh scheduler can be active or inactive if no refreshment is needed.



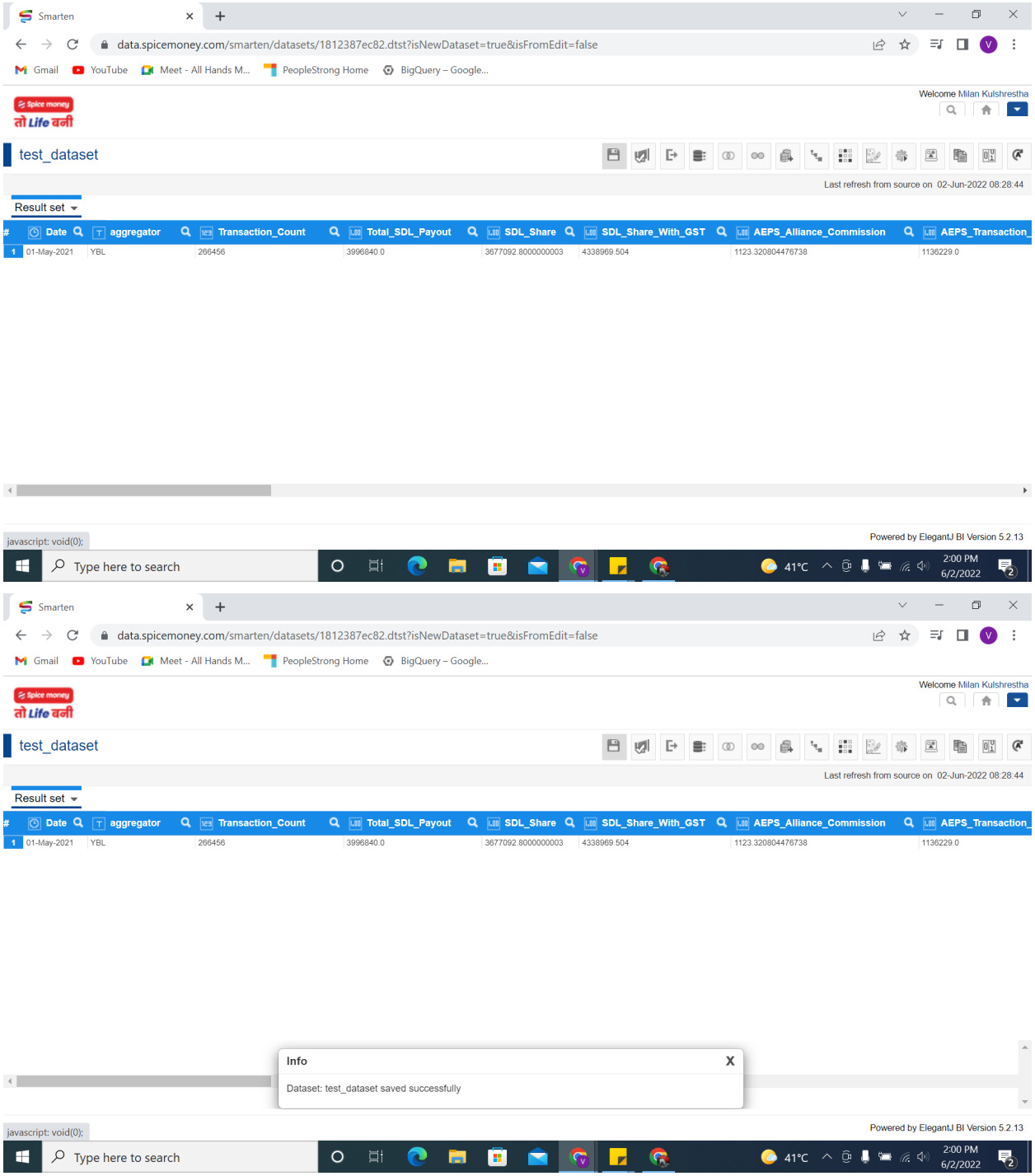
Step11:

Give the permissions now. We can select specific people to have access to the report or select the different departments like the Reconciliation if the report is created for them. Generally we give view and export options so that the person can view as well as export to the comfortable format ex, excel to view.



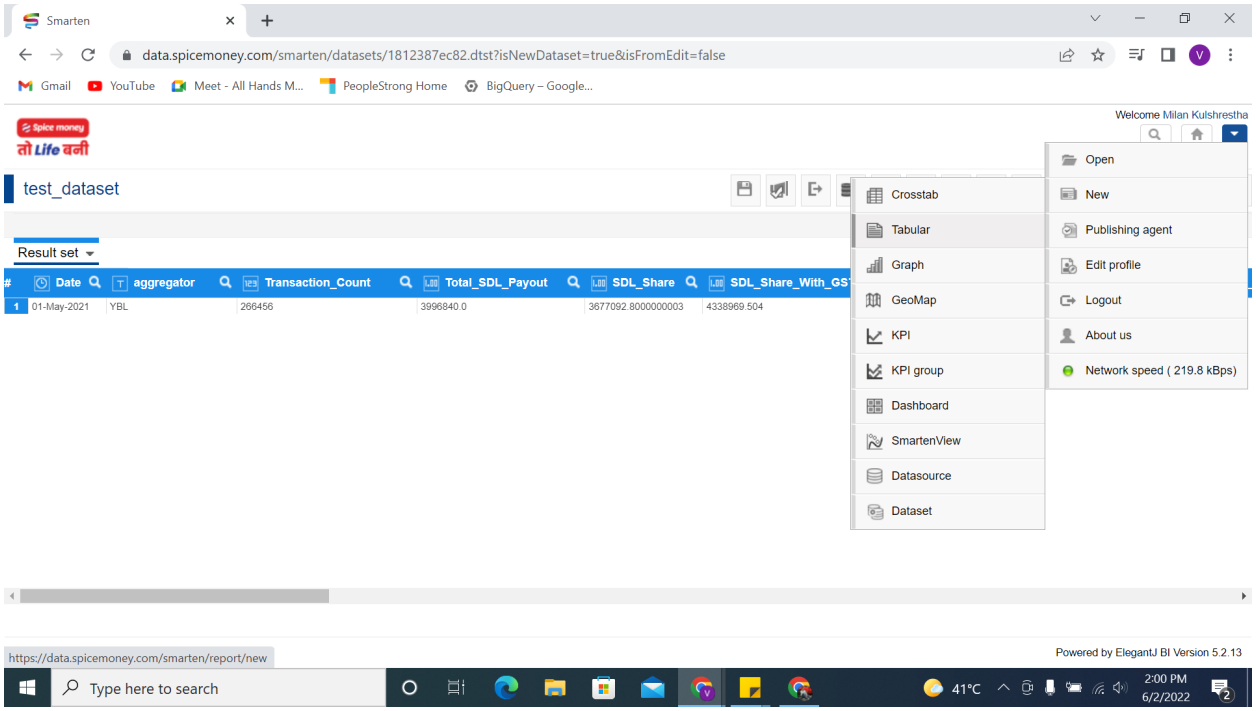
Step12:

Save the report by selecting the save option.



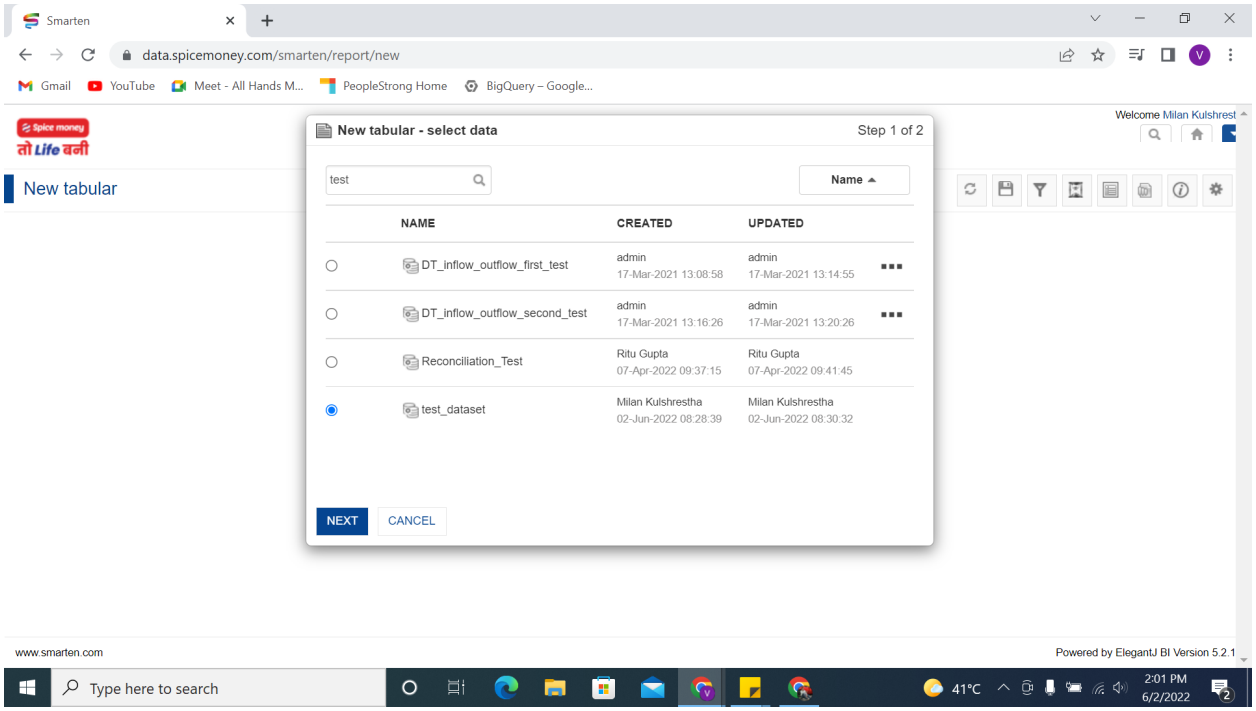
Step13:

Convert the report to a proper format to view the data. Ex, tabular format by selecting the dropdown menu, New, and then tabular format.



Step14:

Search and select the dataset we created to convert into the selected format. We can also see the publisher and last person who updated the dataset.

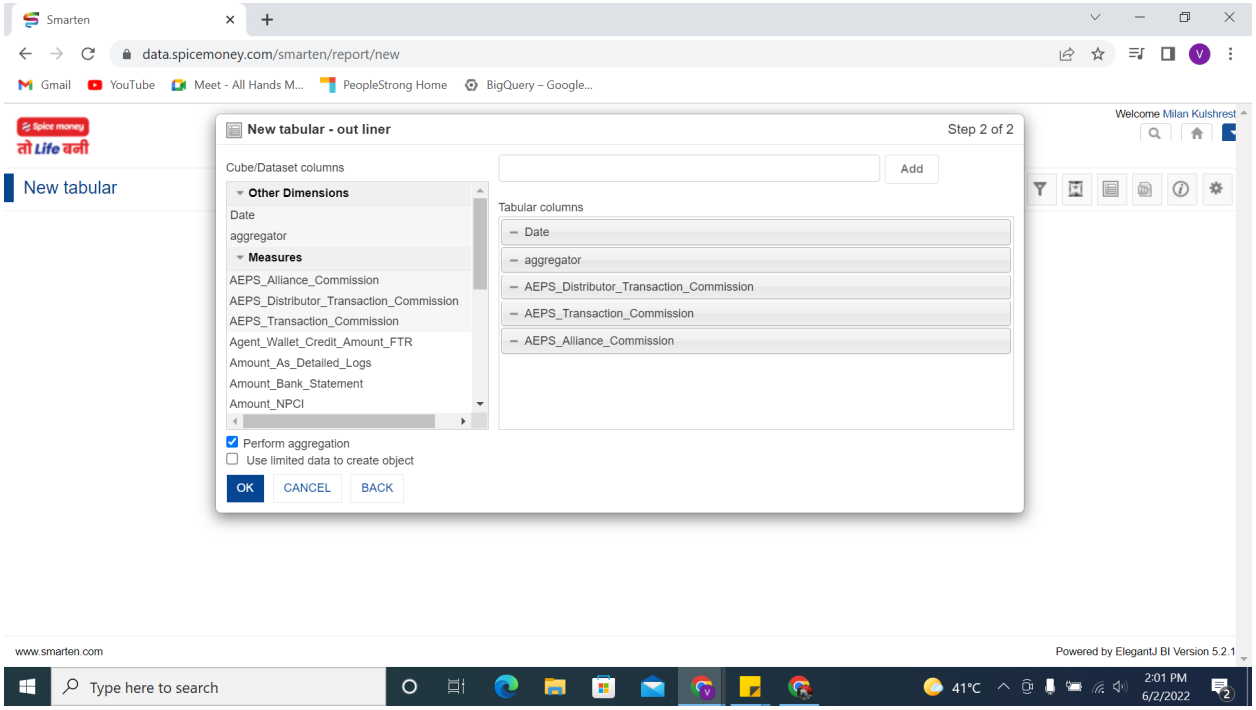


Step15:

After selecting the Next option, we have to select the dimensions and measure here.

Note: Select the Measures in order of which we need our columns to be. In the given example, we have selected AEPS_Alliance_Commission at last as we needed it to be the last column.

Next, we need to select the 'Perform aggregation' option to provide the group by option.



Dimensions:

Dimensions contain qualitative values (such as names, dates, or geographical data). You can use dimensions to categorize, segment, and reveal the details in your data. Dimensions affect the level of detail in the view.

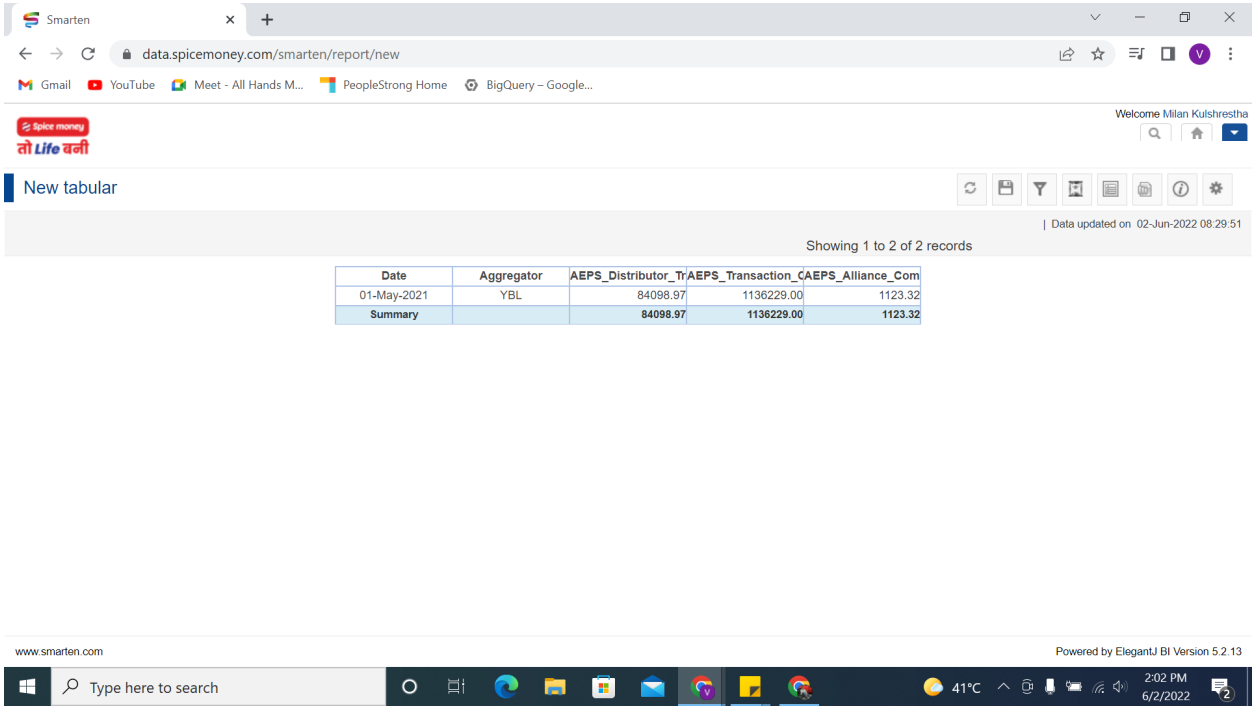
Measures:

Measures contain numeric, quantitative values that you can measure.

A measure is a field that can be aggregated in some way, such as a sum or an average. Think of it as something that can be collected, counted, or combined in some way to return a single value.

Step16:

Select the Ok option and save the final created report.



Step17:

In the save menu, we will mention the name of the report, title of the table if needed and then the folder where we need to save the report.