Project Development Phase
Sprint - I

Team ID	PNT2022TMID21488
Project Name	Retail Store Stock Inventory Analytics

Dataset:

Link: https://drive.google.com/drive/folders/1kiL-5CHJmQvbk9VyFsuUs-myAupBZGNy


This dataset contains a lot of historical sales data of a Brazilian top retailer. Basic Questions of every retailer: How much inventory should I carry? Too much inventory means working capital costs, operational costs and a complex operation whereas lack of inventory leads to lost sales, unhappy customers and a damaged brand. This is why short-term forecasting is so important in the retail and consumer goods industry.

The dataset is in Portuguese language. Here, data means **date**, venda means **sales**, estoque means **stock** and preco means **price**. The dataset contains 938 rows. The dataset consists of historical sales data ranging from 01-01-2014 to 31-07-2016.
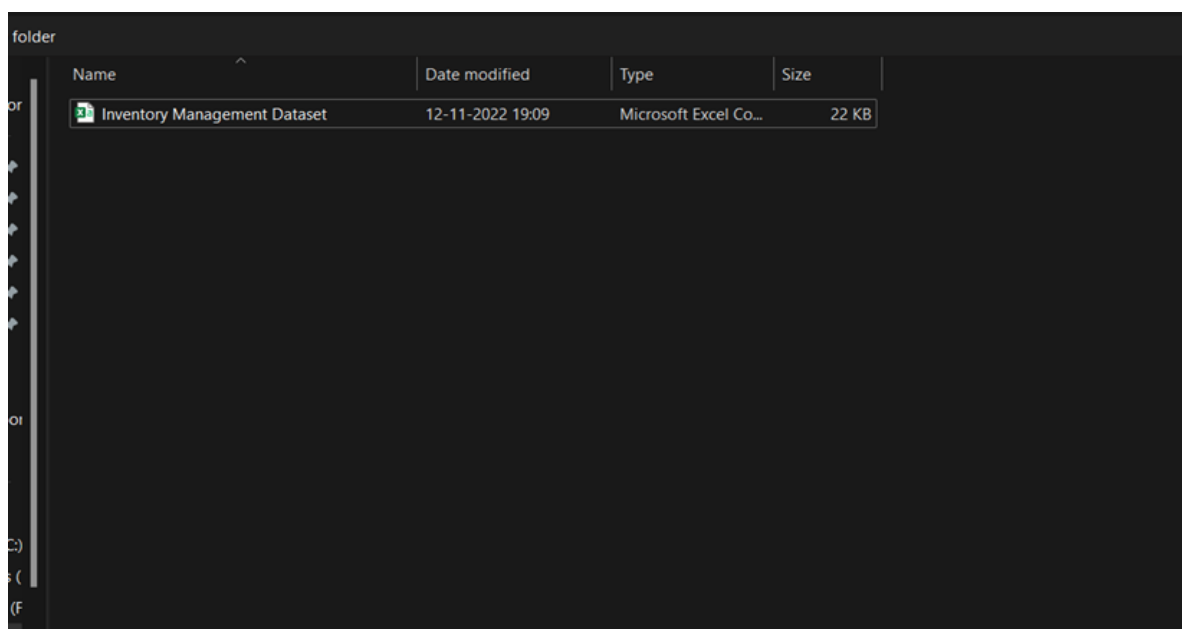
Loading the Dataset:

The dataset is downloaded from the given link and uploaded to IBM Cognos Analytics by using the Upload Data option. The file is selected from the File Explorer and it gets uploaded to IBM Cognos Analytics successfully. Now, the dataset can be used for Preparation, Exploration and Presentation purposes.
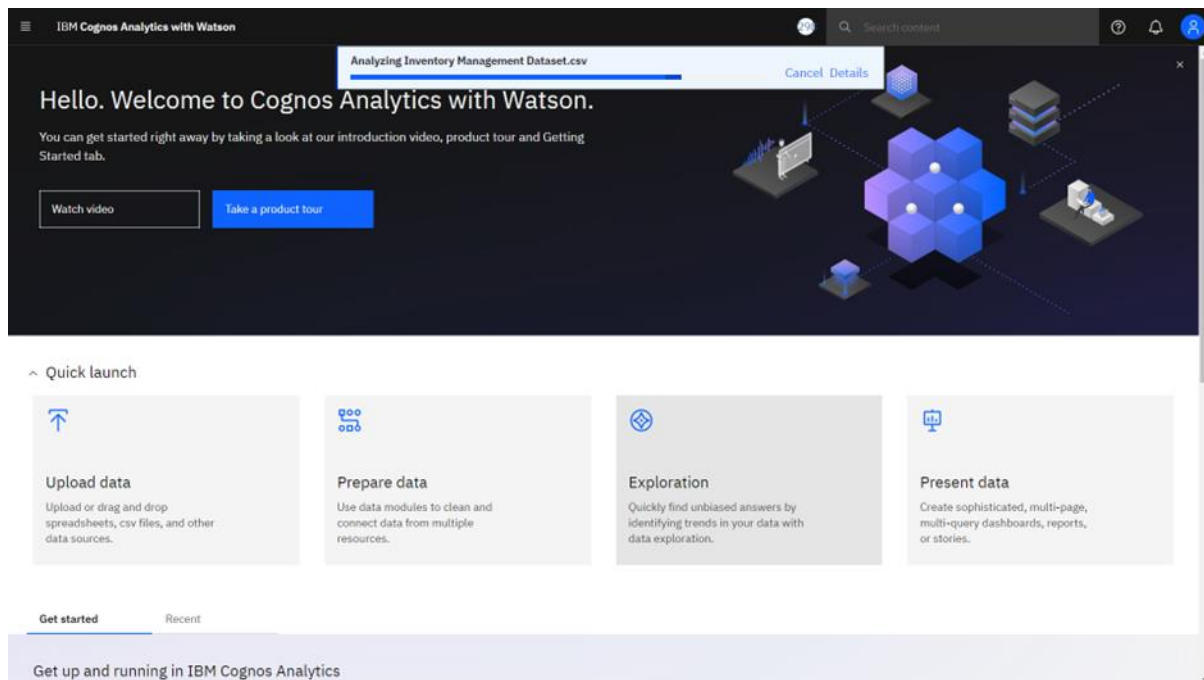
Step 1: Click on Upload Data option.
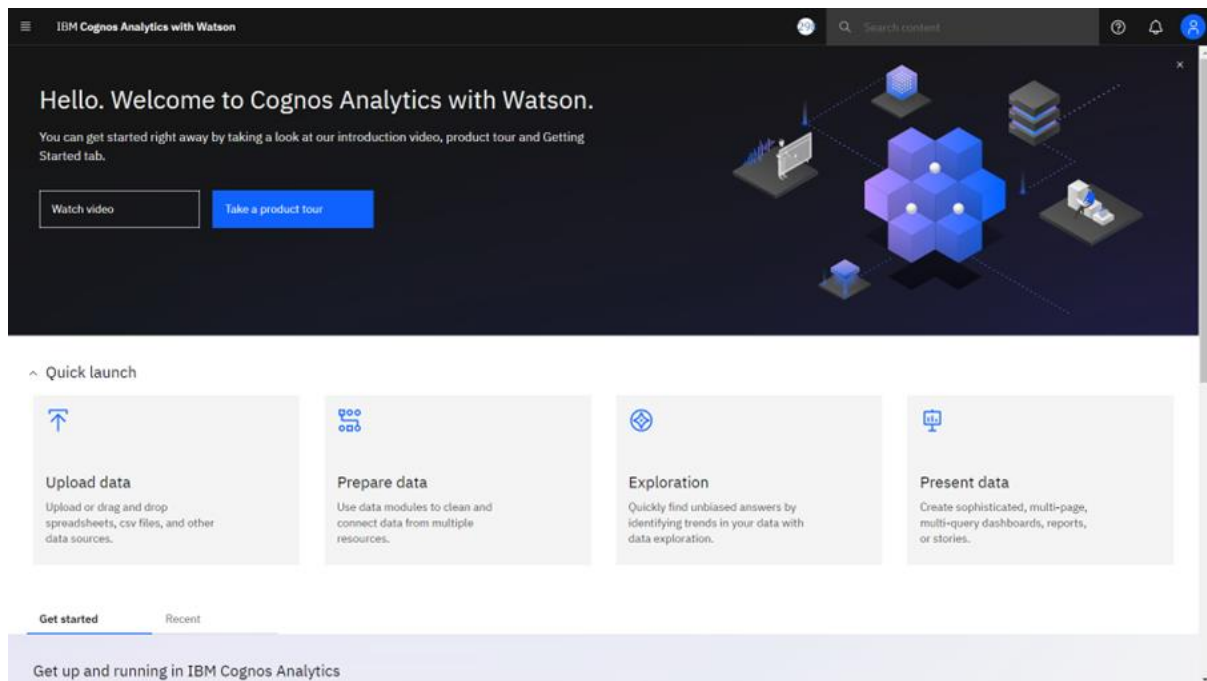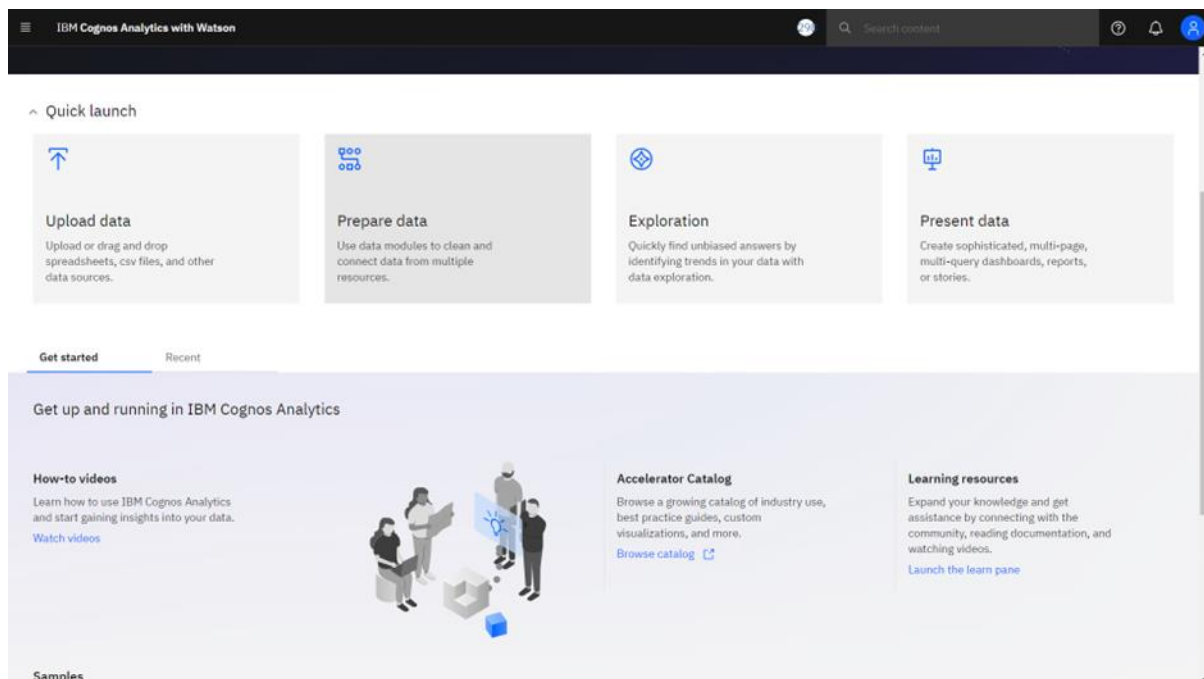

Step 2: Select the file from File Explorer.
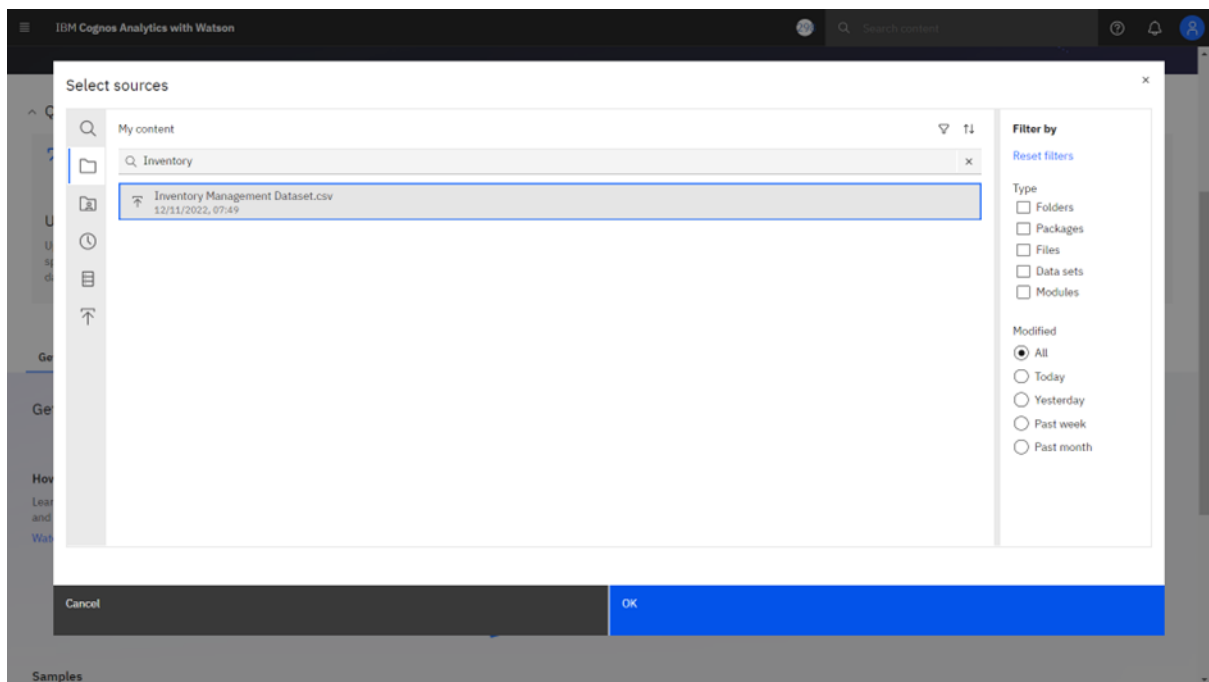
Step 3: Upload it to IBM Cognos Analytics.

Preparing the Data:

Before the dataset is used for visualization, it must be cleaned, formatted and processed. This step is called preparing the dataset.

1) Click on the **Prepare data** option.

2) Select the Dataset from the Sources.

3) Create calculation **M_Data = month(data_)** and validate the expression before creating the calculation.
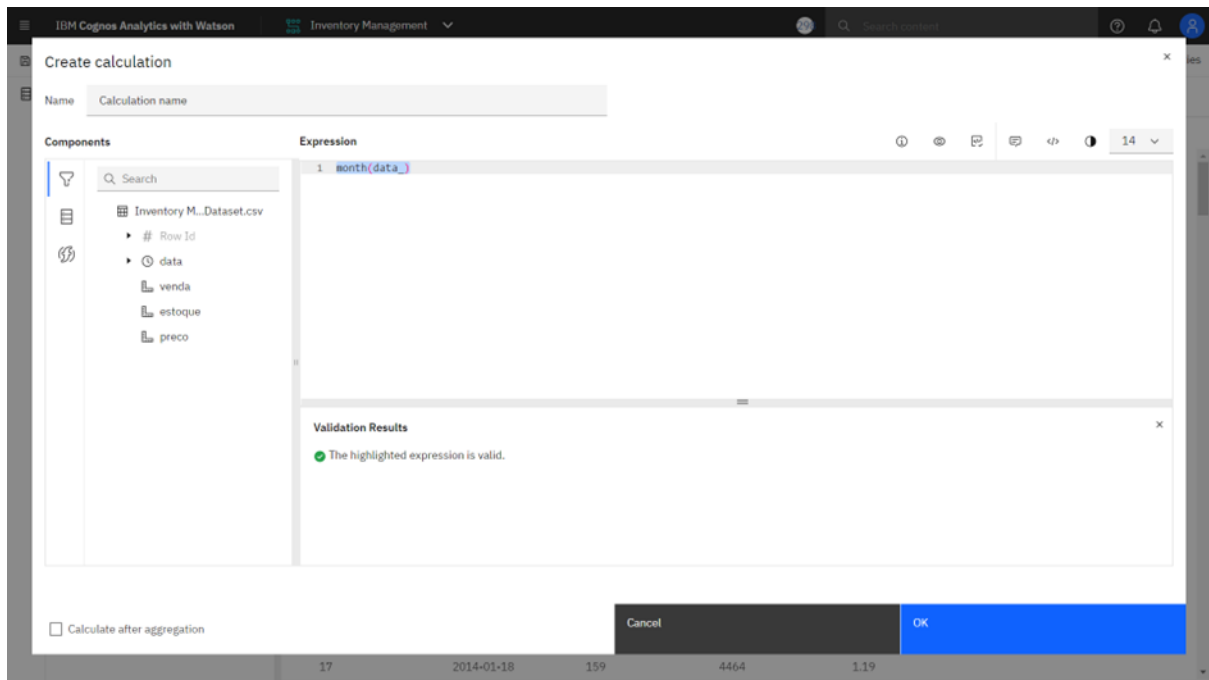
4) Calculate **Revenue = venda*preco** and validate the expression before clicking on OK.
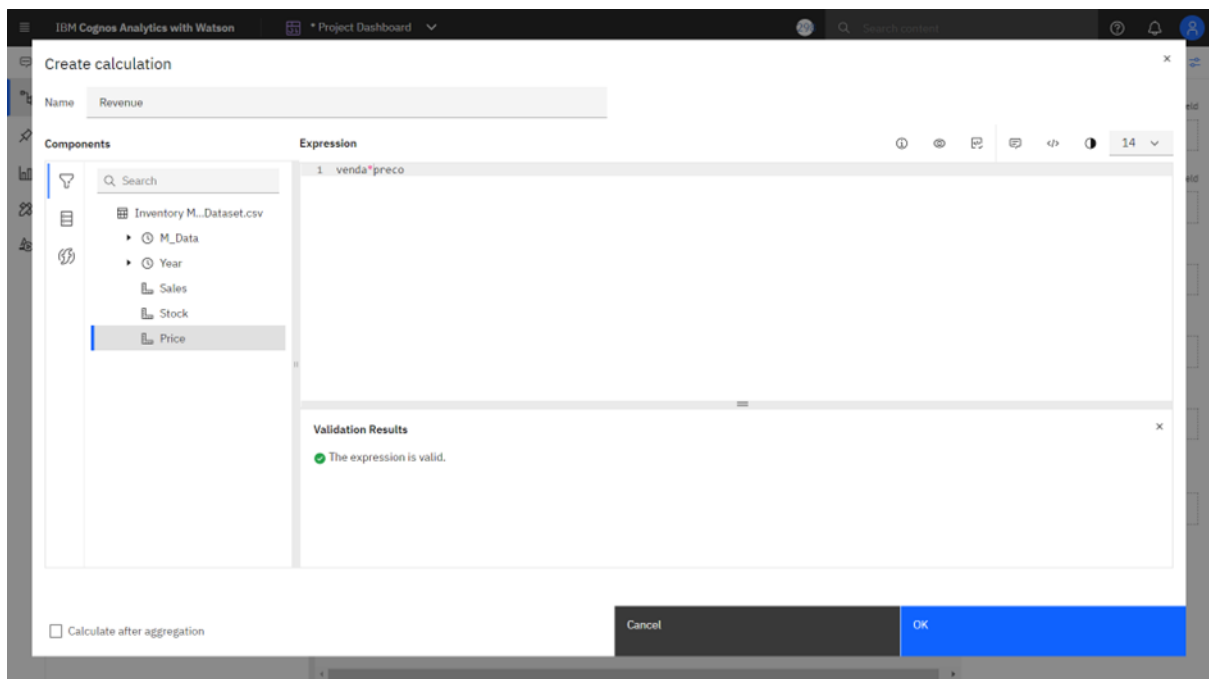
5) For M_Data and data(date), set Usage to Attribute and Aggregate to Count Distinct.

6) For venda, estoque and preco, set Usage to Measure and Aggregate to Total.

7) Rename and format all the attributes. Rename data to Year, venda to Sales, estoque to Stock and preco to Price.

Formatting of Data:

a) M_Data

b) Year

c) Sales

d) Stock

e) Price

f) Revenue

8) Save it as a Data Module so it can be imported for Visualization.
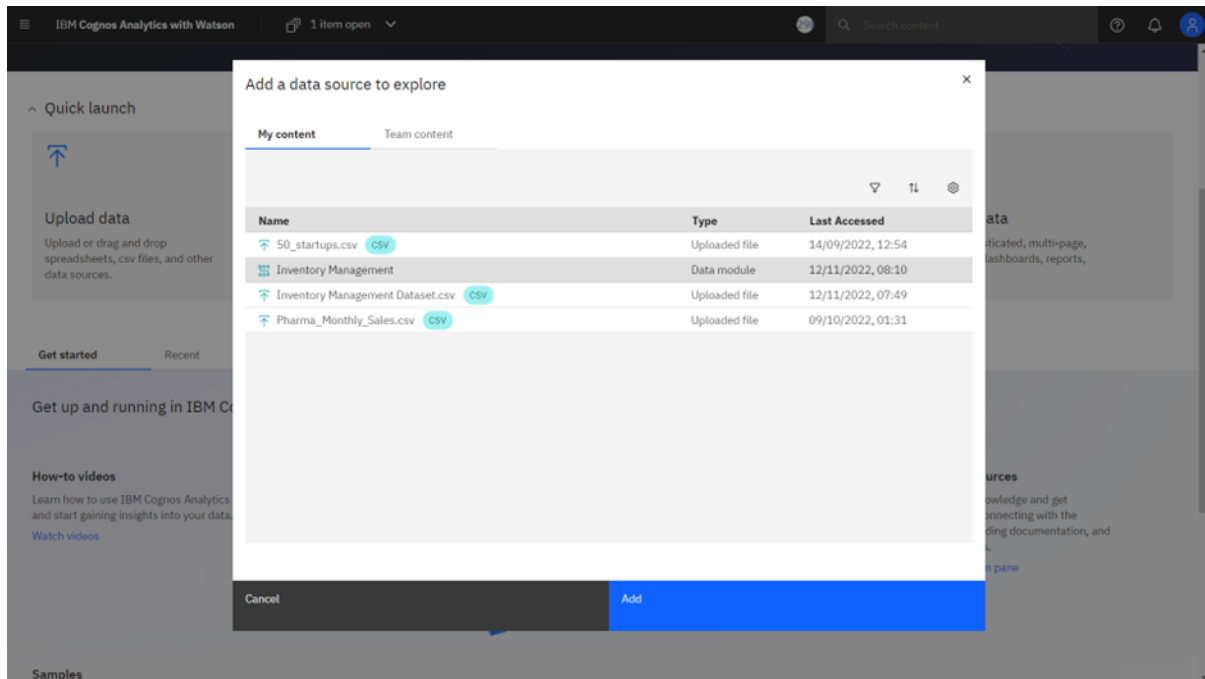
Conclusion:

Thus, in Sprint 1, the dataset has been downloaded, understood, pre-processed and saved as a Data Module in IBM Cognos Analytics.