

## SPRINT – 2

# PREPARING THE DATASET

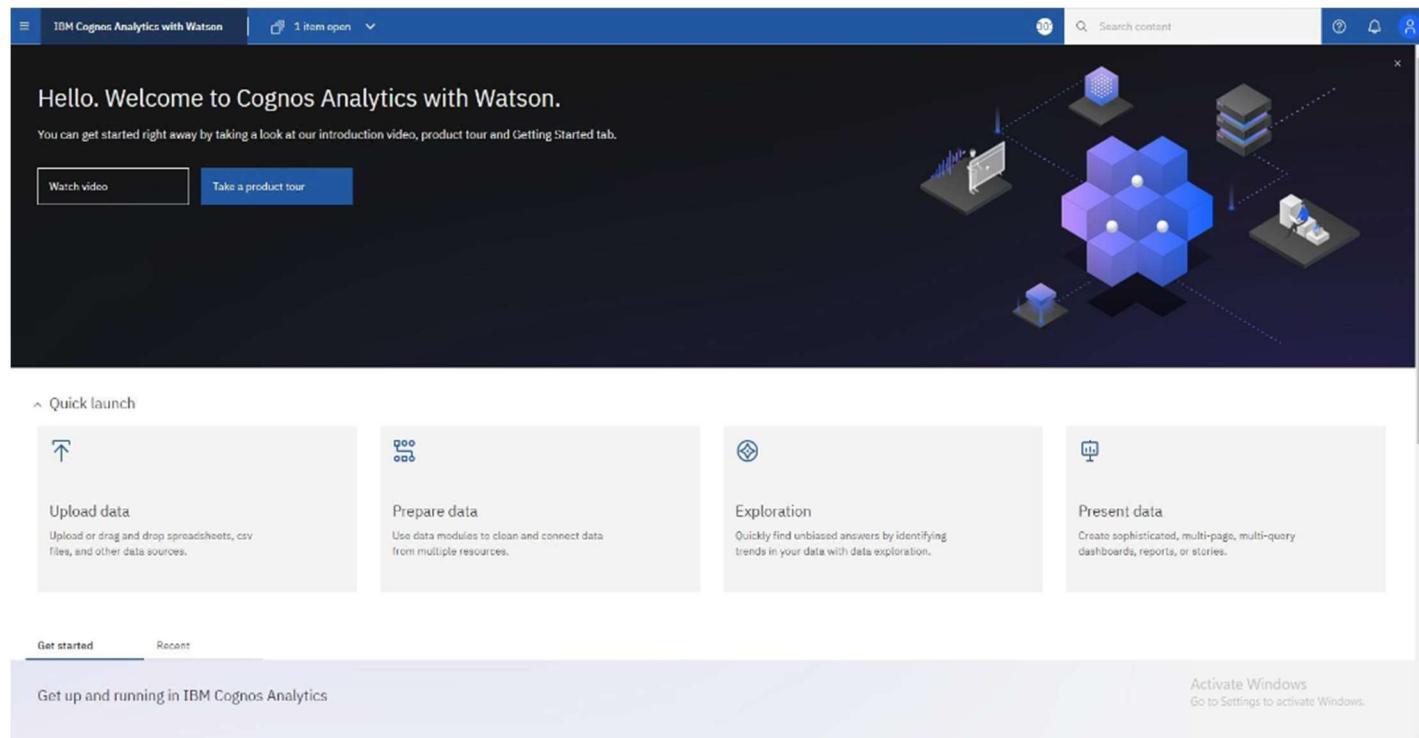
Team ID : PNT2022TMID35428  
Project Name \_ Global Sales Data Analytics

Once you load the data, we need to Prepare the data.

- Prepare Calculations of Year, Month, Day fields and the related Navigation path
- Create a Few more Calculations – Target Sales, Min Sales, Max Sales, Middle Range Sales.

## DATA PREPARATION PHASE

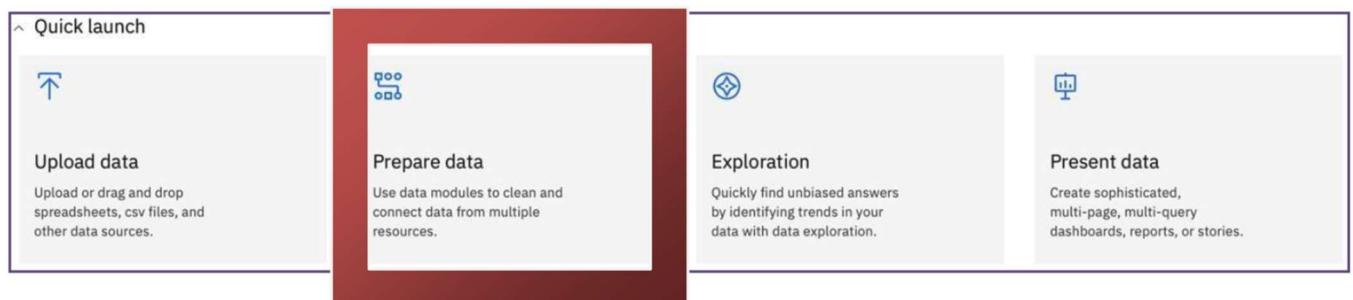
### 1. Open IBM Cognos Dashboard



## **Preparation phase:**

We must prepare the dataset after it has been uploaded to the IBM Cognos dashboard. The process of preparing data involves cleaning it up, eliminating duplicate and null values, and organising it in a way that makes it easy to explore and analyse.

### 2. Click on the Prepare Data option

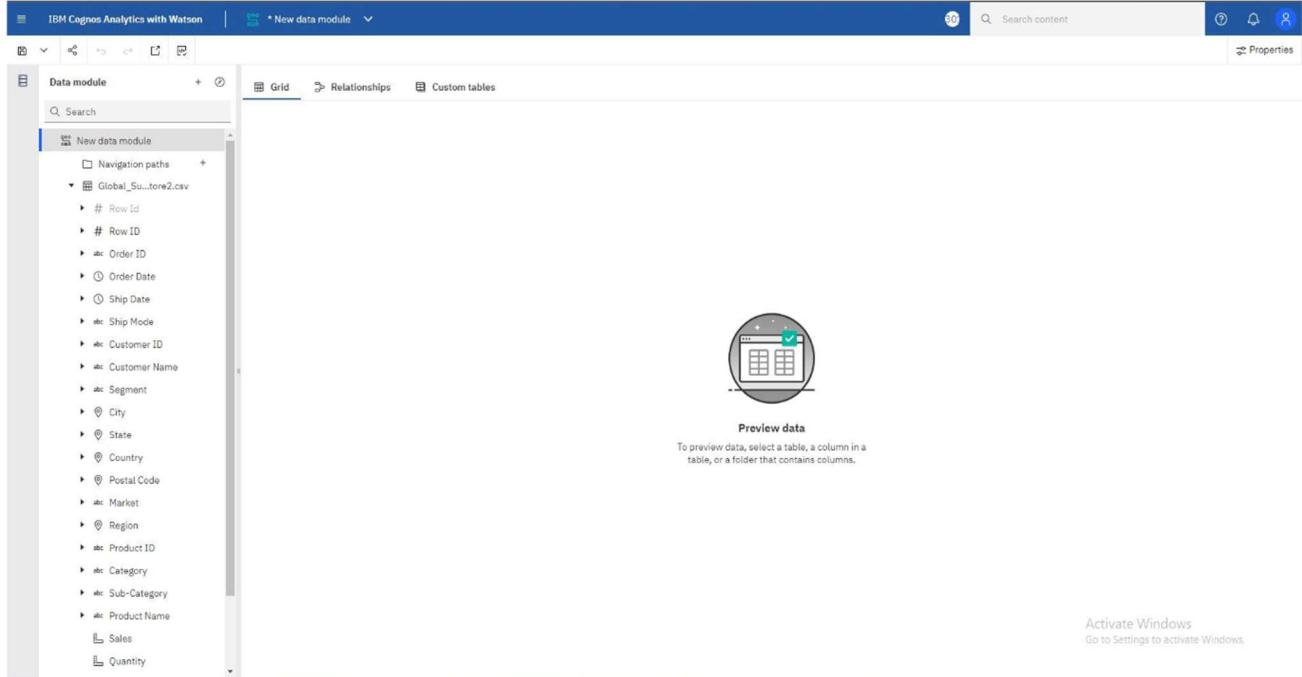


### 3. Now select the uploaded dataset from the menu

A screenshot of the 'Select sources' dialog box in IBM Cognos Analytics with Watson. The dialog shows a list of uploaded datasets: '50\_Startups.csv', 'Assignment 2 dashboard', 'Global\_Superstore2.csv', 'Pharma\_Monthly\_Sales.csv', and 'Sprint1'. A filter sidebar on the right allows users to refine the search by type (Folders, Packages, Files, Data sets, Modules) and modified date (All, Today, Yesterday, Past week, Past month). The 'Global\_Superstore2.csv' file is currently selected.

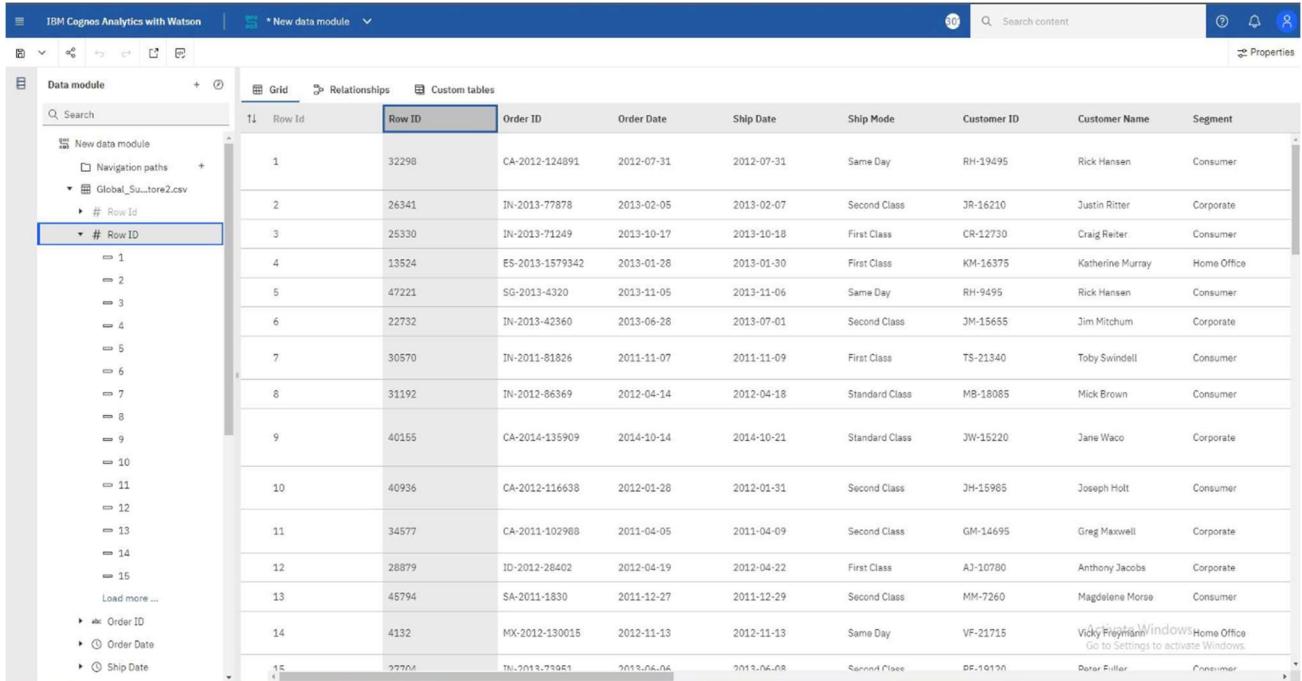
Select the dataset to be cleaned and prepared now.

## 4. Exploring the Data modules



The screenshot shows the IBM Cognos Analytics with Watson interface. The left sidebar is titled "Data module" and lists various navigation paths and tables from a file named "Global\_Superstore2.csv". The tables listed include Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, City, State, Country, Postal Code, Market, Region, Product ID, Category, Sub-Category, Product Name, Sales, and Quantity. The main area is titled "Grid" and displays a preview of data with columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, and Segment. A tooltip for "Preview data" explains that to preview data, one needs to select a table, a column in a table, or a folder that contains columns. There is also a message at the bottom right about activating Windows.

## 5. Understanding the Data



The screenshot shows a detailed view of the "Row ID" table within the Data module. The table has columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, and Segment. The data consists of 15 rows, each containing a unique Row ID, a corresponding Order ID, dates for Order Date and Ship Date, and details for Customer ID, Customer Name, and Segment. The "Row ID" column is currently selected. The left sidebar shows the navigation paths and other tables from the "Global\_Superstore2.csv" file, with "Row ID" expanded to show its sub-components: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, Load more..., Order ID, Order Date, and Ship Date.

## 6. Filtering the data

Sort the data to meet your needs and eliminate any extraneous information.

The screenshot shows a data grid interface. On the left, there is a sidebar with a search bar and a tree view of data fields. The main grid displays various products with columns for Product ID, Category, Sub-Category, Product Name, Sales, Quantity, Discount, Profit, Shipping Cost, and Order Priority. A context menu is open over the first row of the grid, showing options like 'Filter...', 'Create data group...', 'Create navigation path...', 'Split...', 'Hide from users', 'Remove', 'Format data...', 'Clean...', 'Sort descending', 'Sort ascending', and 'Properties'.

Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	Shipping Cost	Order Priority
FUR-TA-10001889	Technology	Accessories	Plantronics CS510 +	762.1845	7	0	933.57	Critical	
FUR-CIS-10001717	Technology	Phones	Bevis Conference Table, Fully Assembled	-288.765	9	0.1	923.63	Critical	
FUR-CH-10002033	Technology	Phones	Cisco Smart Phone, with Caller ID	919.971	9	0.1	915.49	Medium	
FUR-AD-10001500	Technology	Copiers	Motorola Cordless	-96.54	5	0.1	910.16	Medium	
FUR-AD-10001500	Technology	Copiers	Sharp W High-Sp	311.52	8	0	903.04	Critical	
FUR-AD-10001500	Technology	Phones	Samsung with Call	763.275	5	0.1	897.35	Critical	
FUR-AD-10001500	Technology	Copiers	Novime Leather	564.84	4	0	894.77	Critical	
FUR-AD-10001500	Technology	Tables	Leather Adjustable	878.38	6	0	996.48	High	
FUR-AD-10001500	Office Supplies	Binders	Chromcraft Conference Table, Fully Assembled	867.69	5	0.2	1906.485	Low	
FUR-AD-10001500	Office Supplies	Binders	Fellowes PB500 Electric Punch Plastic Comb Binding Machine with Manual Bind	865.74	13	0.4	-1862.3124	Critical	
FUR-AD-10001500	Office Supplies	Binders	Martin Yale Chainless Opener Electric Letter Opener	846.54	5	0	83.281	High	
FUR-AD-10001500	Office Supplies	Binders	Bevis Conference Table, Fully Assembled	835.57	5	0	647.55	High	
FUR-AD-10001500	Technology	Phones	Cisco Smart Phone, with Caller ID	832.41	4	0	1151.4	Critical	
FUR-AD-10001500	Technology	Phones	Harbour Creations Executive Leather Armchair, Adjustable	810.25	7	0	622.02	Critical	
FUR-AD-10001500	Technology	Phones	KitchenAid Microwave, 2701.52	801.54	12	0	1034.08	Critical	

Choose the required fields to be filtered

The screenshot shows a data grid interface with a sidebar and a context menu. A filter dialog is open over the first row of the grid, titled 'Filter - Region'. It contains a search bar and a list of regions with 'Canada' selected. The grid itself shows product data with columns for Region, Product ID, Category, Sub-Category, Product Name, Sales, Quantity, Discount, and Profit.

Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit
East	FUR-TA-10001889	Technology	Tables	Plantronics CS510 +	762.1845	7	0	933.57
Oceania	FUR-CIS-10001717	Technology	Phones	Bevis Conference Table, Fully Assembled	-288.765	9	0.1	923.63
Oceania	FUR-CH-10002033	Technology	Phones	Cisco Smart Phone, with Caller ID	919.971	9	0.1	915.49
Central	FUR-AD-10001500	Technology	Copiers	Motorola Cordless	-96.54	5	0.1	910.16
Africa	FUR-AD-10001500	Technology	Copiers	Sharp W High-Sp	311.52	8	0	903.04
Oceania	FUR-AD-10001500	Technology	Phones	Samsung with Call	763.275	5	0.1	897.35
Oceania	FUR-AD-10001500	Technology	Copiers	Novime Leather	564.84	4	0	894.77
Oceania	FUR-AD-10001500	Technology	Tables	Leather Adjustable	878.38	6	0	996.48
West	FUR-AD-10001500	Office Supplies	Binders	Chromcraft Conference Table, Fully Assembled	867.69	5	0.2	1906.485
South	FUR-AD-10001500	Office Supplies	Binders	Fellowes PB500 Electric Punch Plastic Comb Binding Machine with Manual Bind	865.74	13	0.4	-1862.3124
South	FUR-AD-10001500	Office Supplies	Binders	Martin Yale Chainless Opener Electric Letter Opener	846.54	5	0	83.281
Central Asia	FUR-TA-10001889	Furniture	Tables	Bevis Conference Table, Fully Assembled	835.57	5	0	647.55
EMEA	FUR-CIS-10001717	Technology	Phones	Cisco Smart Phone, with Caller ID	1151.4	4	0	2616.96
South	FUR-CH-10002033	Furniture	Chairs	Harbour Creations Executive Leather Armchair, Adjustable	622.02	7	0	2221.8
North Asia	FUR-AD-10001500	Office Supplies	Binders	KitchenAid Microwave, 2701.52	801.54	12	0	1034.08

## 7. Creating Relationships among the data

The screenshot shows the IBM Cognos Analytics with Watson interface. The left sidebar lists datasets under 'Data module'. The 'Relationships' tab is selected in the top navigation bar. A context menu is open over the 'Global\_Superstore2.csv' dataset, with 'Calculation...' highlighted. The right side of the screen displays 'Diagram settings' and a message to 'Activate Windows'.

## 8. Save the dataset after preparing the data

The screenshot shows the 'Save as' dialog box in the IBM Cognos Analytics with Watson interface. The 'My content' tab is selected. The 'Name' field contains 'Global Sales Data CLEANED'. The 'Selected destination' dropdown shows 'My content'. The 'Save' button is highlighted at the bottom. The background shows the 'Data module' sidebar with various datasets listed.

## 9. Open “Content” from the menu bar

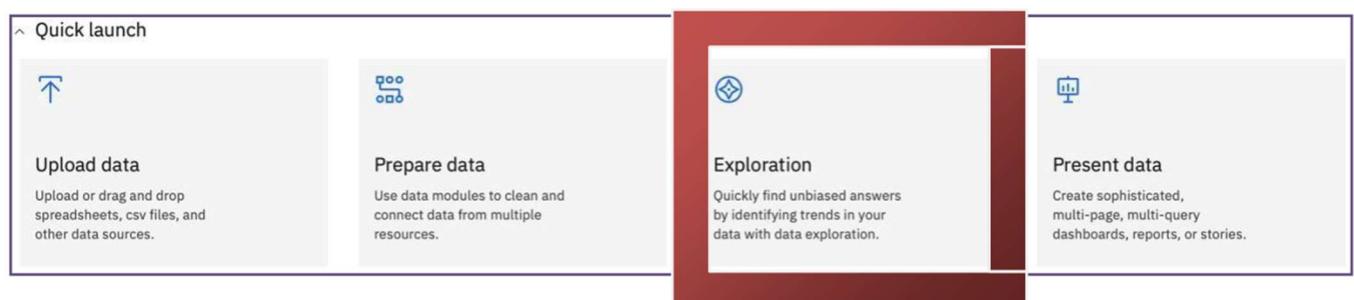
You can access the uploaded and stored data here.

The screenshot shows the 'Content' page of the IBM Cognos Analytics with Watson interface. At the top, there's a navigation bar with 'IBM Cognos Analytics with Watson' and a 'Content' dropdown. A search bar says 'Search content'. Below the navigation is a section titled 'Content' with tabs for 'My content' (which is selected), 'Team content', and 'Samples'. There are six items listed: '50\_Startups.csv', 'Assignment 2 dashboard', 'Global Sales Data CLEANED', 'Global\_Superstore2.csv', 'Pharma\_Monthly\_Sales.csv', and 'Sprint1'. Each item has a small preview thumbnail, a 'Last Accessed' timestamp, and a 'CSV' download icon. At the bottom right, there's a message: 'Activate Windows Go to Settings to activate Windows.'

## DATA EXPLORATION PHASE

### 10. Data Exploration

To analyze the information, select the Exploration option.



## 11. Select the Data to be explored

To begin browsing the cleaned and prepared data, choose "My Content" from the menu.

The screenshot shows the IBM Cognos Analytics with Watson interface. A modal dialog box titled 'Add a data source to explore' is open in the center. It has two tabs: 'My content' (selected) and 'Team content'. Under 'My content', there is a table listing four data sources:

Name	Type	Last Accessed
50_Startups.csv (CSV)	Uploaded file	9/19/2022, 9:47 AM
Global Sales Data CLEANED	Data module	11/6/2022, 9:52 PM
Global_Superstore2.csv (CSV)	Uploaded file	11/6/2022, 9:58 PM
Pharma_Monthly_Sales.csv (CSV)	Uploaded file	9/24/2022, 5:45 AM

Below the table, there are 'Cancel' and 'Add' buttons. To the right of the table, there is a sidebar with sections for 'Present data' (Create sophisticated, multi-page, multi-query dashboards, reports, or stories) and 'Learning resources' (Browse a growing catalog of industry use, best practice guides, custom visualizations, and more). At the bottom right of the sidebar, it says 'Launch the learn pane'.

## 12. Start exploring the data and create relationships among the data.

The screenshot shows the IBM Cognos Analytics with Watson interface. On the left, there is a sidebar with 'Cards' and a 'Data relationships' card featuring a network diagram icon. The main workspace displays a 'Relationship diagram' titled 'Explore data relationships' for 'Global Sales Data CLEANED'. The diagram shows nodes connected by lines: 'Region', 'Country', 'Sales', 'Market', 'Profit', 'Discount', and 'Shipping Cost'. A central node is labeled 'Quantity'. Below the diagram, it says 'Relationship diagram' and shows '10%' and '100%'. To the right of the diagram, there is a 'Select a visualization' section with cards for 'Profit' (showing a value of '1.47M'), 'Profit' (with a chart icon), 'Profit and Sales for Country regions' (with a map icon), and 'See more'.

## 13. Save the exploration

The screenshot shows the IBM Cognos Analytics with Watson interface. A modal dialog box titled "Save as" is open in the center. The "Name" field contains "Sprint1 exploration". Below it, "Selected destination: My content" is selected. A table lists existing items in "My content":

Name	Type	Last Accessed
50_Startups.csv	Uploaded file	9/19/2022, 9:47 AM
Assignment 2 dashboard	Dashboard	9/24/2022, 6:34 AM
Global Sales Data CLEANED	Data module	11/6/2022, 9:52 PM
Global_Superstore2.csv	Uploaded file	11/6/2022, 9:38 PM
Pharma_Monthly_Sales.csv	Uploaded file	9/24/2022, 5:45 AM
Sprint1	Dashboard	11/6/2022, 9:41 PM

At the bottom right of the dialog is a blue "Save" button. The background shows a blurred view of the dashboard, including a "Profit" section with a value of "1.47M" and a "Profit and Sales for Country regions" section.