

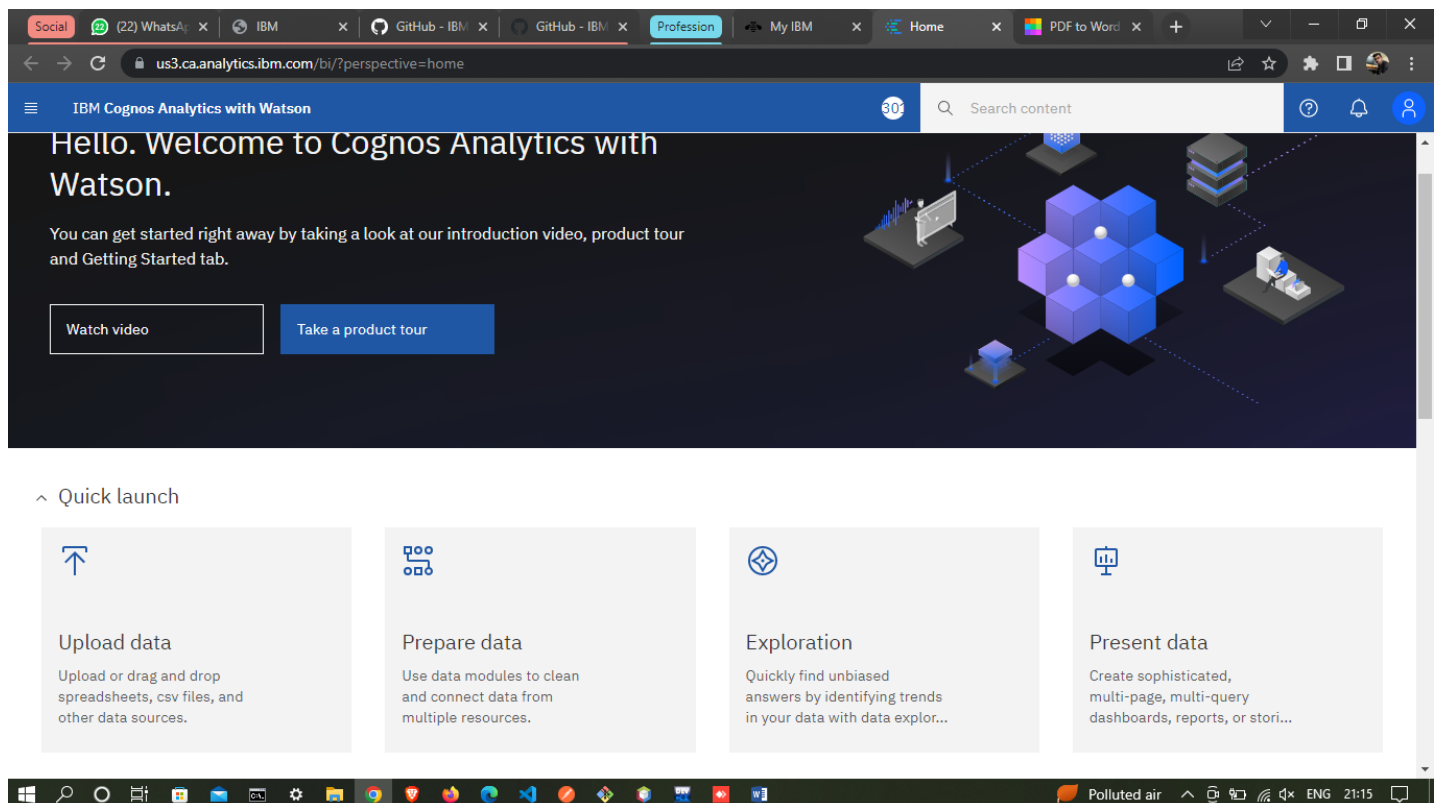
# PROJECT DEVELOPMENT PHASE

## DELIVERY OF SPRINT - 2

Date	17 November 2022
Team ID	PNT2022TMID08890
Project Name	Global Sales Data Analytics
Team Leader	KARTHIKEYAN K

### □ DATA PREPARATION PHASE

#### 1. Open IBM Cognos Dashboard



#### Preparation phase:

Once the Dataset is uploaded into the IBM Cognos dashboard, we need to prepare the dataset. The data preparation includes cleaning up the data, removing the null values, removing the duplicate values, structuring the data so that the data is well understood for exploration and analysis

## 2. Click on the Prepare Data option

The screenshot shows the IBM Cognos Analytics with Watson dashboard. The browser address bar displays `us3.ca.analytics.ibm.com/bi/?perspective=home`. The dashboard header includes the IBM Cognos Analytics with Watson logo, a search bar, and user profile icons. The 'Quick launch' section features four main options: 'Upload data', 'Prepare data', 'Exploration', and 'Present data'. The 'Prepare data' option is highlighted, showing a description: 'Use data modules to clean and connect data from multiple resources.' Below this, there are sections for 'Get started', 'Recent', 'How-to videos', 'Accelerator Catalog', and 'Learning resources'.

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

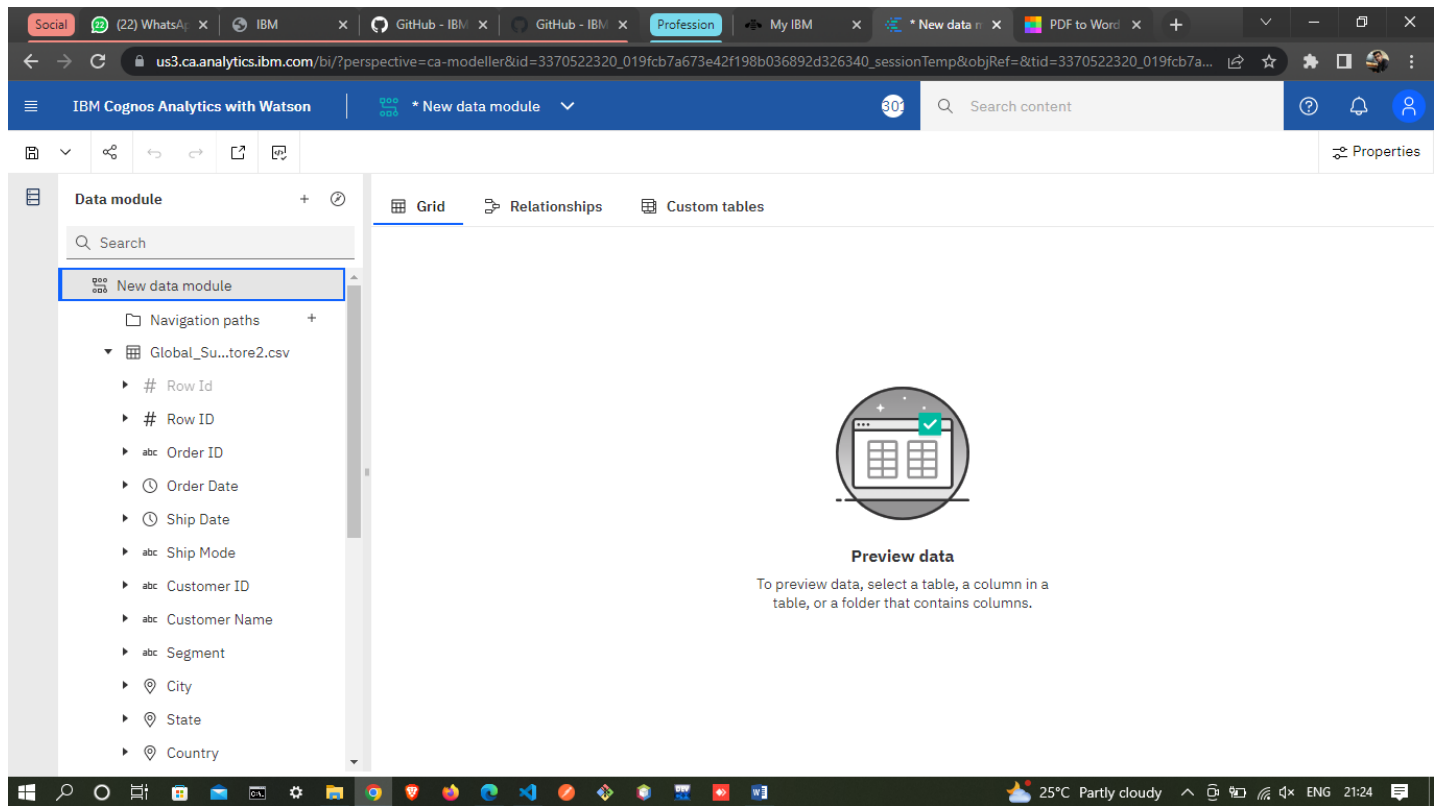
The screenshot shows the 'Select sources' dialog in IBM Cognos Analytics with Watson. The dialog displays a list of datasets under the 'My content' tab. The 'Global\_Superstore2.csv' dataset is selected. The list includes the following datasets:

Dataset Name	Upload Date
bikebuyer.csv	9/14/2022, 9:32 AM
challenger.csv	9/14/2022, 9:31 AM
Combined Cycle Power Plant.csv	9/14/2022, 9:31 AM
diabetes.csv	9/14/2022, 9:39 AM
Global_Superstore2.csv	11/17/2022, 9:52 AM
Olympic Events.xlsx	9/14/2022, 9:39 AM
Olympic Medals.xlsx	9/14/2022, 9:40 AM
Pharma_Monthly_Sales.csv	9/27/2022, 3:47 AM
sales.csv	9/14/2022, 9:31 AM
summer-products-with-ratings-and-performance_2020-08.csv	

The 'Filter by' section on the right allows filtering by Type (Folders, Packages, Files, Data sets, Modules) and Modified (All, Today, Yesterday, Past week, Past month). The 'All' filter is selected under 'Modified'.

Now select the dataset to be prepared and cleaned

## 4. Exploring the Data modules



IBM Cognos Analytics with Watson

\* New data module

Search content

Properties

Data module

Grid Relationships Custom tables

New data module

Navigation paths

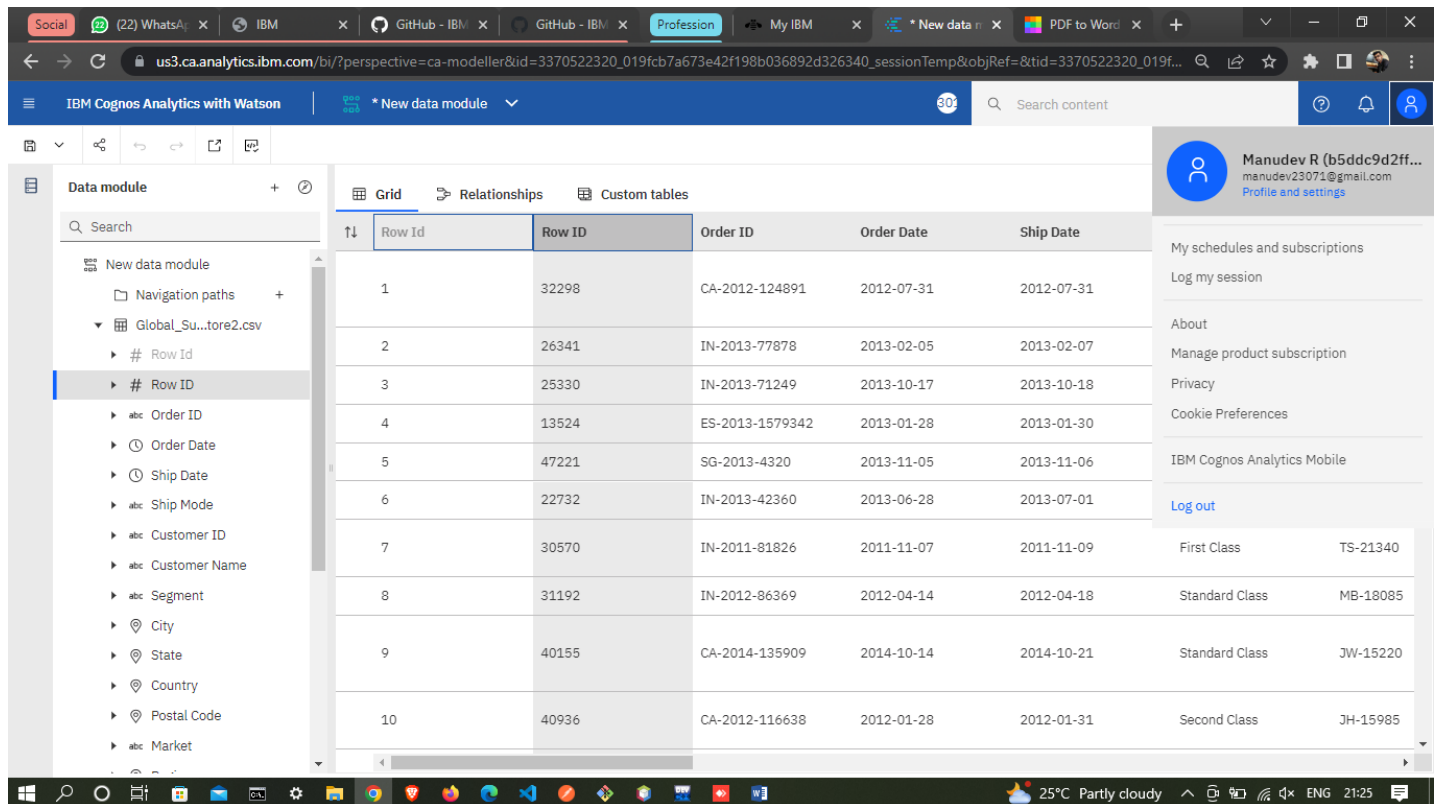
Global\_Su...tore2.csv

- # Row Id
- # Row ID
- abc Order ID
- Order Date
- Ship Date
- abc Ship Mode
- abc Customer ID
- abc Customer Name
- abc Segment
- City
- State
- Country

Preview data

To preview data, select a table, a column in a table, or a folder that contains columns.

## 5. Understanding the Data



IBM Cognos Analytics with Watson

\* New data module

Search content

Manudev R (b5ddc9d2ff...)  
manudev23071@gmail.com  
[Profile and settings](#)

My schedules and subscriptions  
[Log my session](#)

About  
[Manage product subscription](#)  
[Privacy](#)  
[Cookie Preferences](#)

IBM Cognos Analytics Mobile  
[Log out](#)

First Class TS-21340  
Standard Class MB-18085  
Standard Class JW-15220  
Second Class JH-15985

Row Id	Row ID	Order ID	Order Date	Ship Date
1	32298	CA-2012-124891	2012-07-31	2012-07-31
2	26341	IN-2013-77878	2013-02-05	2013-02-07
3	25330	IN-2013-71249	2013-10-17	2013-10-18
4	13524	ES-2013-1579342	2013-01-28	2013-01-30
5	47221	SG-2013-4320	2013-11-05	2013-11-06
6	22732	IN-2013-42360	2013-06-28	2013-07-01
7	30570	IN-2011-81826	2011-11-07	2011-11-09
8	31192	IN-2012-86369	2012-04-14	2012-04-18
9	40155	CA-2014-135909	2014-10-14	2014-10-21
10	40936	CA-2012-116638	2012-01-28	2012-01-31

## 6. Filtering the data

Filter the data according to the requirements and remove the unnecessary data

The screenshot shows the IBM Cognos Analytics interface. On the left, a 'Data module' pane lists various fields: 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 displays a table with columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer ID. A context menu is open over the 'Ship Date' column, showing options: Filter..., Create navigation path..., Split..., Hide from users, Remove, Format data..., Clean..., Sort descending, Sort ascending, and Properties.

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495
2	IN-2013-77878	2013-02-05	2013-02-05	Second Class	JR-16210
3	IN-2013-71249	2013-10-17	2013-10-17	First Class	CR-12730
4	ES-2013-1579342	2013-01-28	2013-01-28	First Class	KM-16375
5	SG-2013-4320	2013-11-05	2013-11-05	Same Day	RH-9495
6	IN-2013-42360	2013-06-28	2013-06-28	Second Class	JM-15655
7	IN-2011-81826	2011-11-07	2011-11-07	First Class	TS-21340
8	IN-2012-86369	2012-04-14	2012-04-14	Standard Class	MB-18085
9	CA-2014-135909	2014-10-14	2014-10-14	Standard Class	JW-15220
10	CA-2012-116638	2012-01-28	2012-01-28	Second Class	JH-15985

Choose the required fields to be filtered

The screenshot shows the 'Filter - Ship Date' dialog box. It has two radio buttons: 'Define a range' (selected) and 'Select individual items'. Under 'Define a range', there is a 'Between' dropdown. Below that, 'From' is set to '2011-01-07' and 'To' is set to '2015-01-15'. There is a checkbox for 'Include null values' which is checked. At the bottom, there are 'Cancel' and 'OK' buttons.

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	
10	40936	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985

## 7. Creating Relationships among the data

The screenshot shows the IBM Cognos Analytics interface. On the left, a 'Data module' pane lists fields from 'Global\_S...ore2.csv', including Row ID, Order ID, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, City, State, Country, Postal Code, Market, Region, and Product ID. The main workspace is in 'Relationships' view, showing a diagram with a node labeled 'Global\_Superstore2.csv'. A context menu is open over this node, offering options: New (with sub-options Calculation..., Filter..., and Table...), Rename, Show query information..., Hide from users, Remove, Manage filters, Auto-arrange, and Properties. On the right, 'Diagram settings' are visible, with 'Cardinality' and 'Focus mode' toggled on, and 'Degrees of separation' set to 1. The browser's address bar shows a URL from 'us3.ca.analytics.ibm.com'.

## 8. Save the dataset after preparing the data

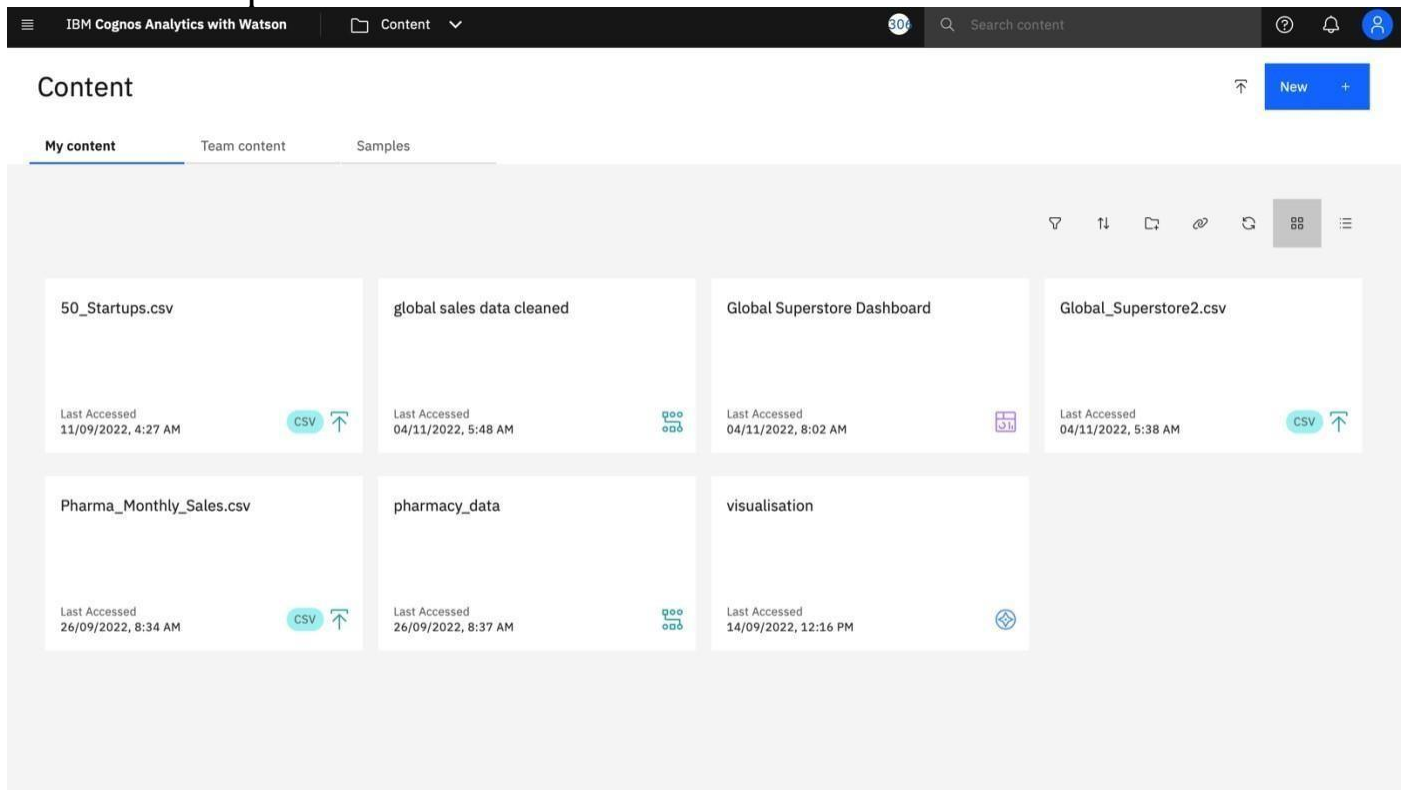
The screenshot shows the 'Save as' dialog box in IBM Cognos Analytics. The 'Name' field contains 'Global Sales Data Analytics'. Below, it indicates 'Selected destination: My content'. There are two tabs: 'My content' (active) and 'Team content'. The 'My content' tab displays a table of existing content items.

Name	Type	Last Accessed
50_startups.csv CSV	Uploaded file	9/14/2022, 9:31 AM
Assignment 2	Dashboard	9/27/2022, 4:22 AM
bank.csv CSV	Uploaded file	9/14/2022, 9:32 AM
bikebuyer.csv CSV	Uploaded file	9/14/2022, 9:32 AM
challenger.csv CSV	Uploaded file	9/14/2022, 9:31 AM

At the bottom of the dialog are 'Cancel' and 'Save' buttons. The background shows the same 'Data module' and 'Relationships' view as in the previous screenshot.

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

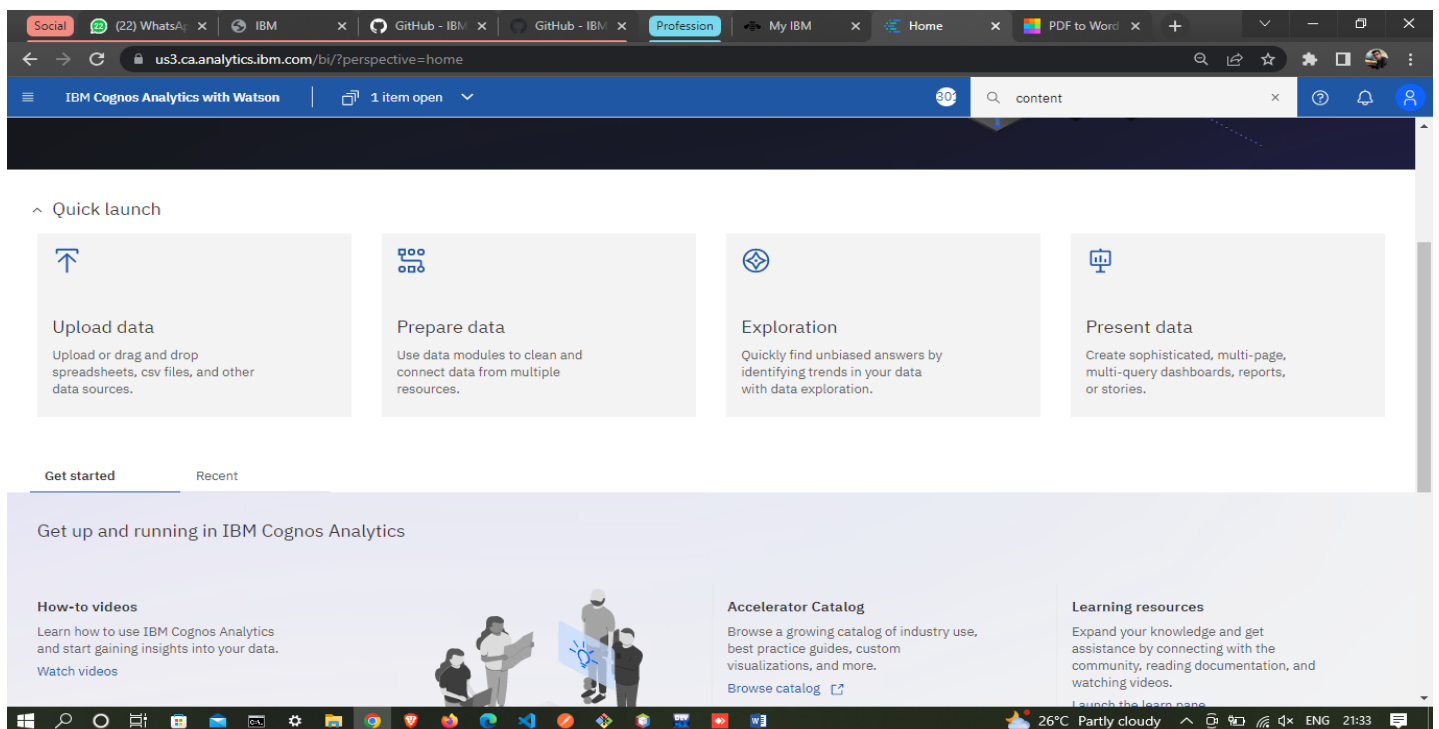
The uploaded and saved data is available here



## □ DATA EXPLORATION PHASE

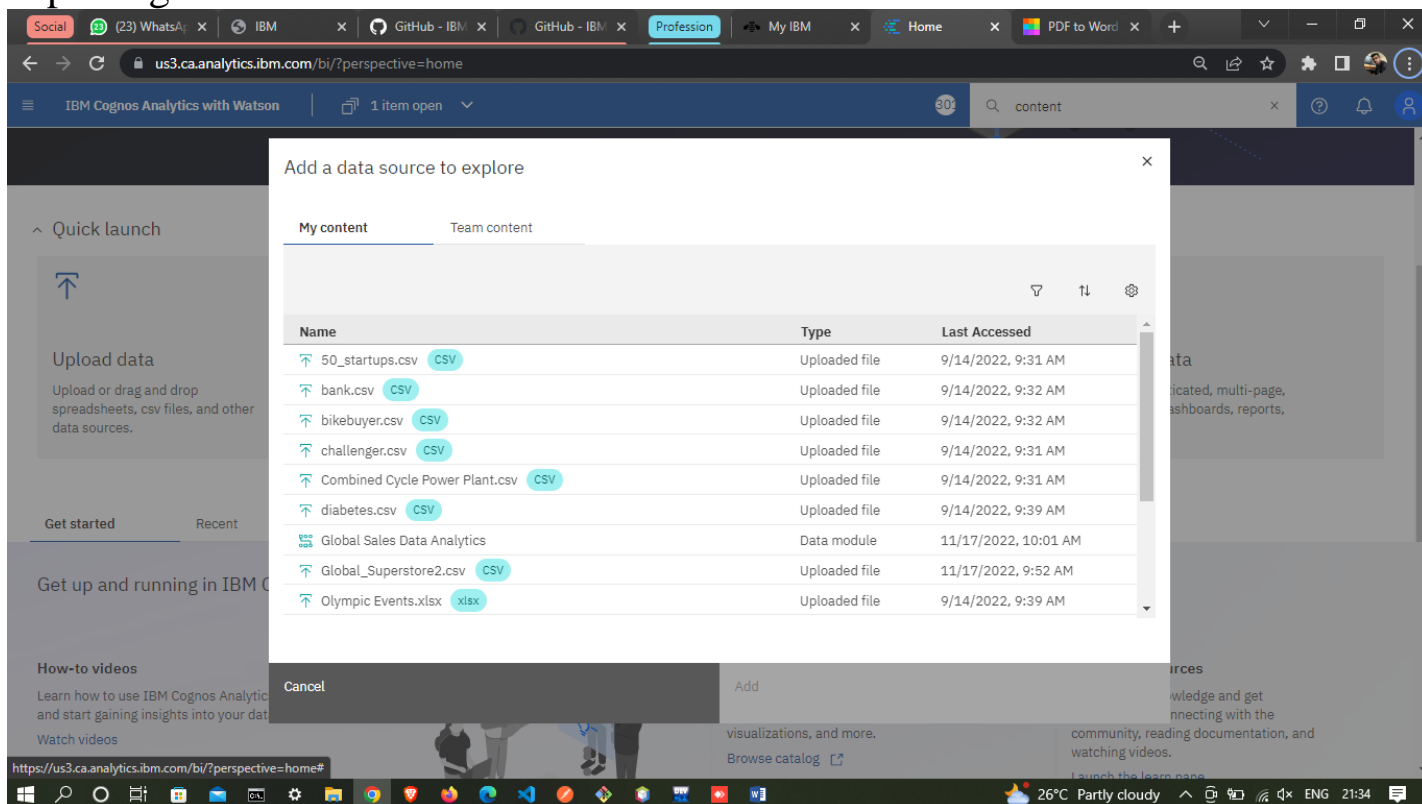
## 10. Data Exploration

Click on the Exploration option to explore the data



## 11. Select the Data to be explored

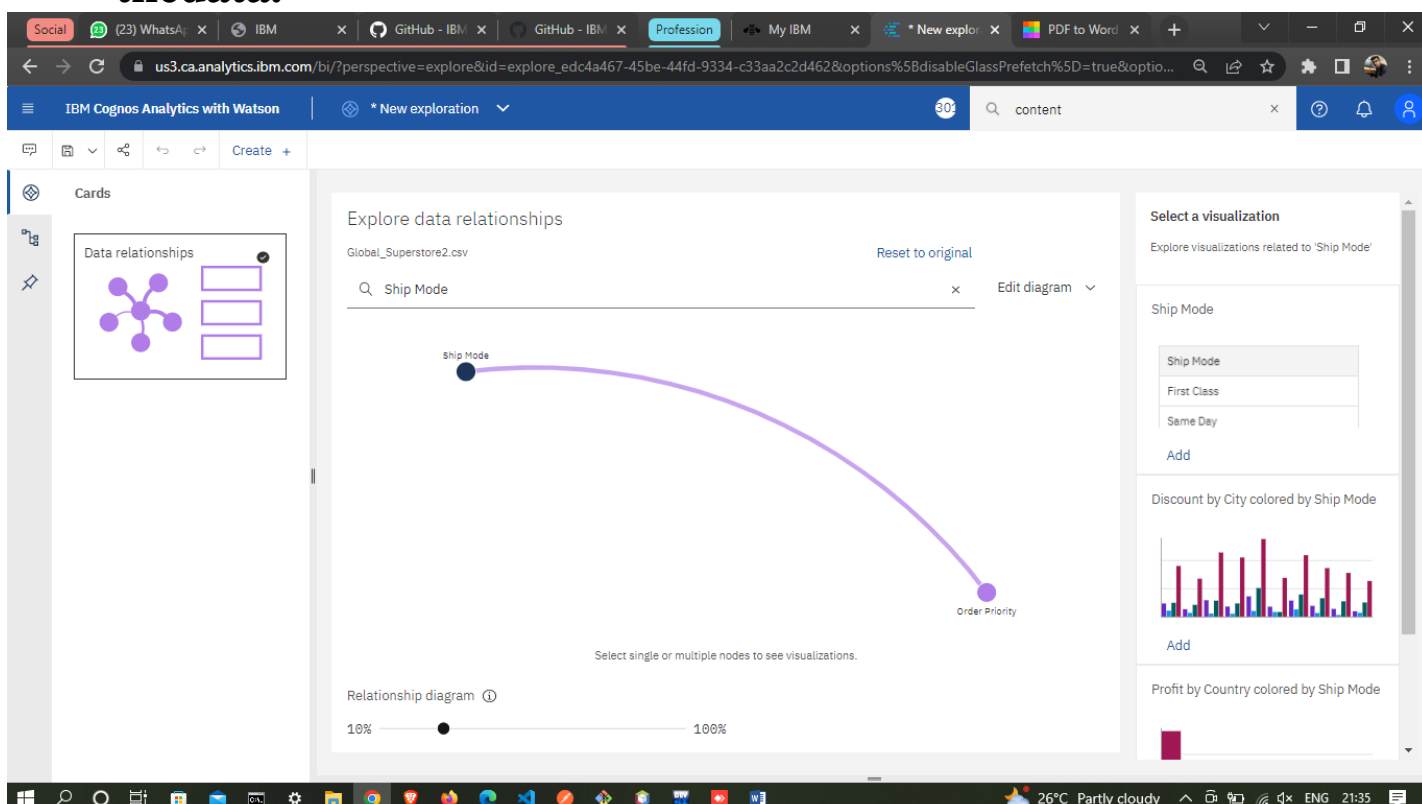
Now select the cleaned and prepared data from the “My Content” Menu, for exploring it



The screenshot shows the IBM Cognos Analytics web interface. A modal dialog titled "Add a data source to explore" is open, displaying a list of data sources under the "My content" tab. The list includes several CSV files and one Data module. The background interface shows a sidebar with "Quick launch" options like "Upload data", "Get started", and "How-to videos".

Name	Type	Last Accessed
50_startups.csv	CSV	9/14/2022, 9:31 AM
bank.csv	CSV	9/14/2022, 9:32 AM
bikebuyer.csv	CSV	9/14/2022, 9:32 AM
challenger.csv	CSV	9/14/2022, 9:31 AM
Combined Cycle Power Plant.csv	CSV	9/14/2022, 9:31 AM
diabetes.csv	CSV	9/14/2022, 9:39 AM
Global Sales Data Analytics	Data module	11/17/2022, 10:01 AM
Global_Superstore2.csv	CSV	11/17/2022, 9:52 AM
Olympic Events.xlsx	xlsx	9/14/2022, 9:39 AM

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



The screenshot shows the IBM Cognos Analytics web interface in the "Explore data relationships" view. A relationship diagram is displayed, showing a connection between "Ship Mode" and "Order Priority" nodes. The interface includes a sidebar with "Cards" and a right panel for selecting visualizations. The background interface shows a top bar with "IBM Cognos Analytics with Watson" and a search bar.

Explore data relationships

Global\_Superstore2.csv

Reset to original

Ship Mode

Order Priority

Select single or multiple nodes to see visualizations.

Relationship diagram ⓘ

10% ——— 100%

Select a visualization

Explore visualizations related to 'Ship Mode'

Ship Mode

Ship Mode

First Class

Same Day

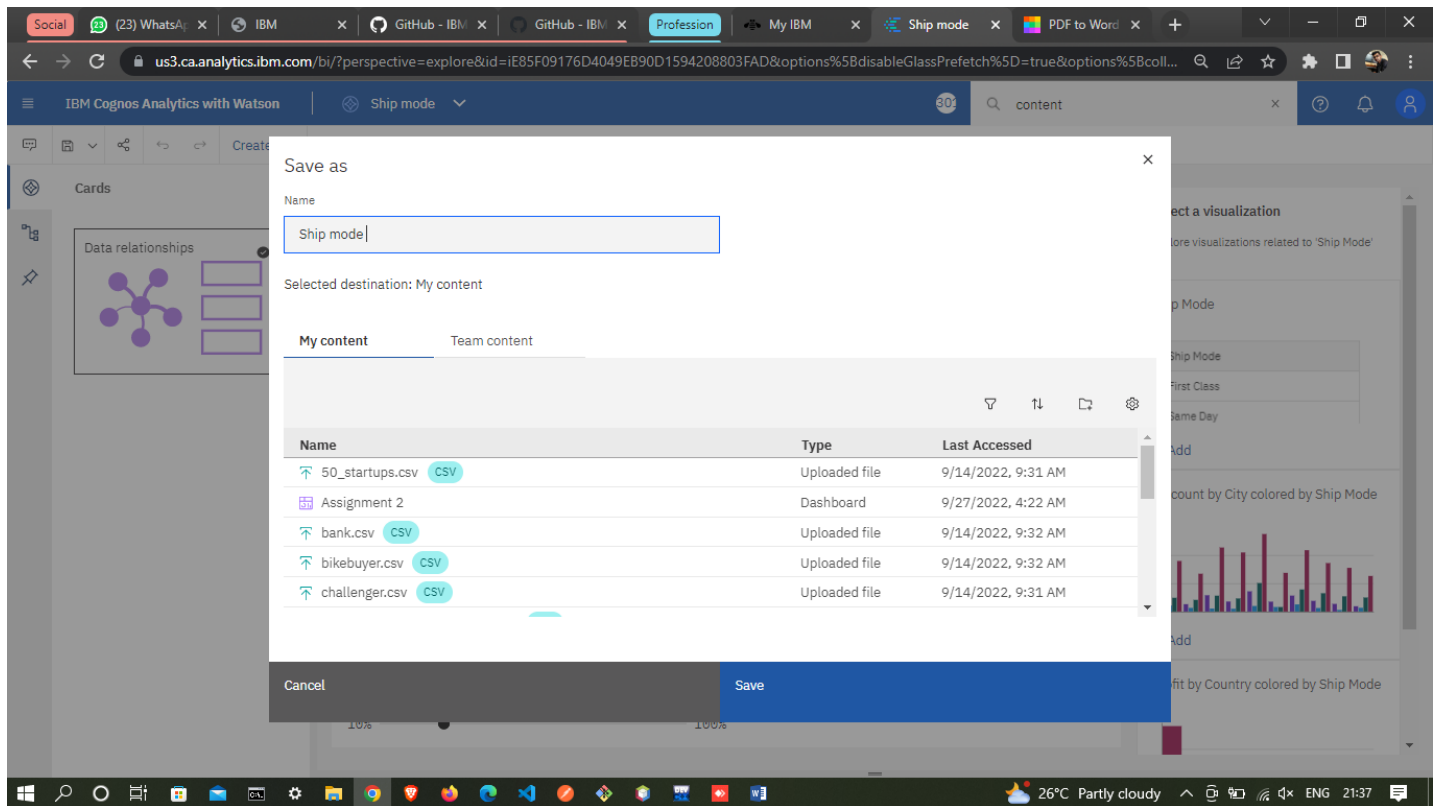
Add

Discount by City colored by Ship Mode

Add

Profit by Country colored by Ship Mode

## 13. Save the exploration



The screenshot shows the IBM Cognos Analytics web interface. A 'Save as' dialog box is open, allowing the user to save the current exploration. The dialog box has a 'Name' field containing 'Ship mode' and a 'Selected destination' of 'My content'. Below this, there are two tabs: 'My content' (selected) and 'Team content'. The 'My content' tab displays a table of existing content items.

Name	Type	Last Accessed
50_startups.csv	Uploaded file	9/14/2022, 9:31 AM
Assignment 2	Dashboard	9/27/2022, 4:22 AM
bank.csv	Uploaded file	9/14/2022, 9:32 AM
bikebuyer.csv	Uploaded file	9/14/2022, 9:32 AM
challenger.csv	Uploaded file	9/14/2022, 9:31 AM

At the bottom of the dialog box, there are 'Cancel' and 'Save' buttons. The background shows the IBM Cognos Analytics interface with a 'Data relationships' diagram and a 'Select a visualization' panel.