

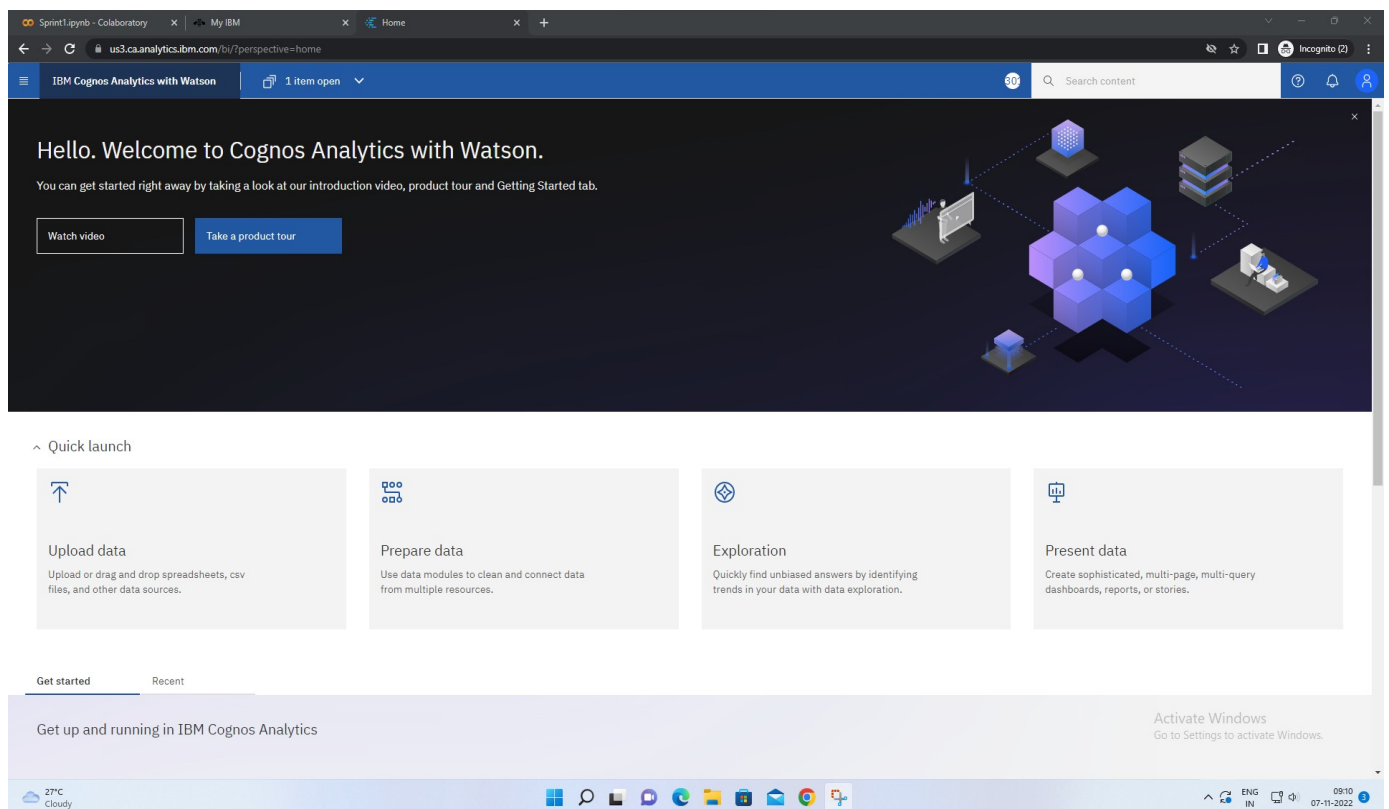
PROJECT DEVELOPMENT PHASE

DELIVERY OF SPRINT - 2

Date	06 November 2022
Team ID	PNT2022TMID40233
Project Name	Global Sales Data Analytics
Team Leader	Elumalai.R

DATA PREPARATION PHASE

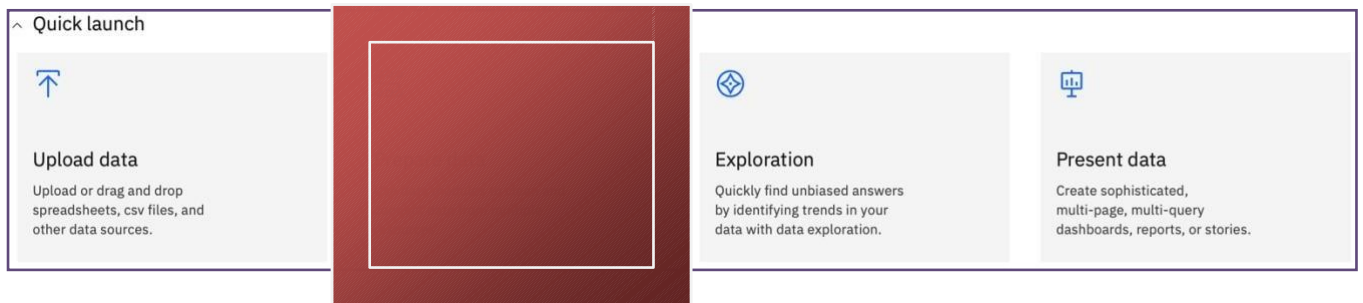
1. Open IBM Cognos Dashboard



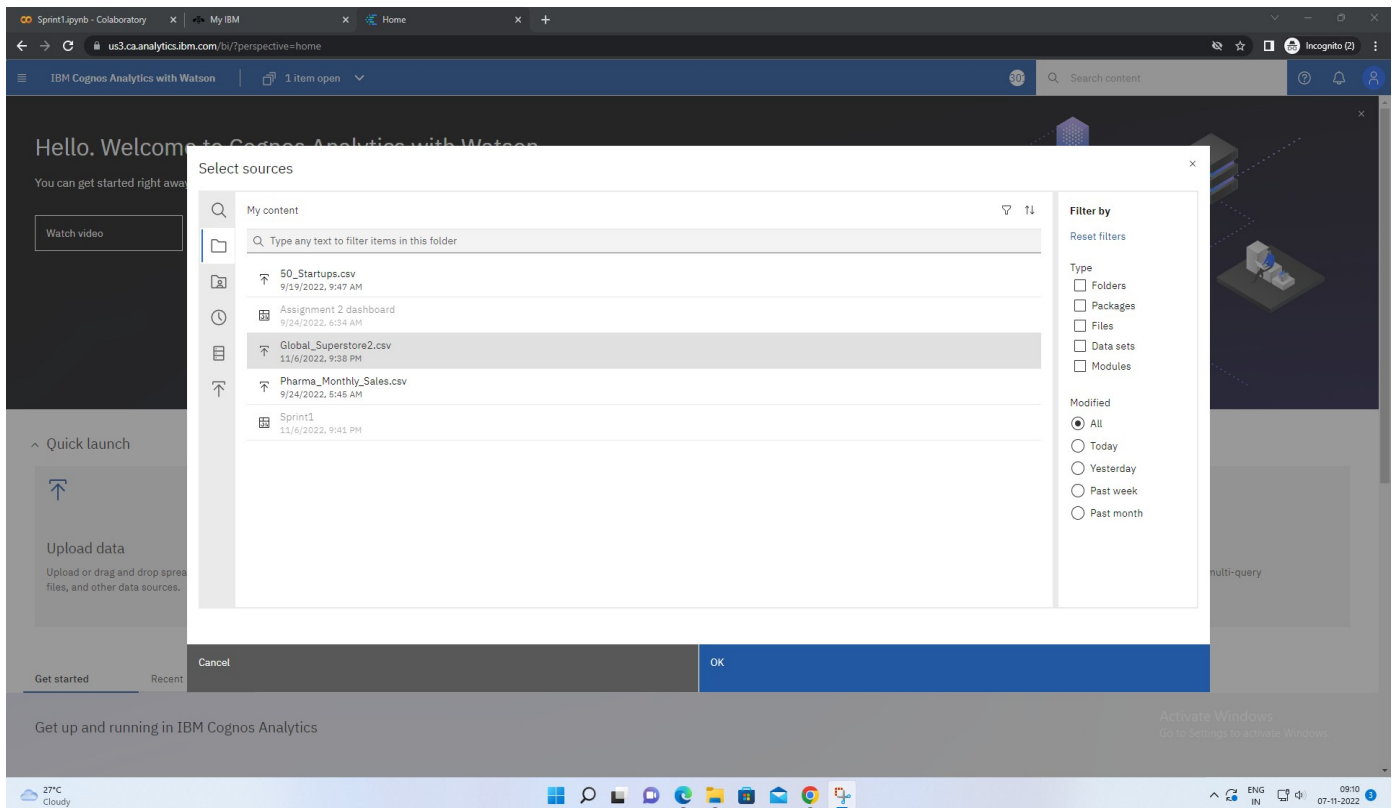
Preparation phase:

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



Select the dataset to be cleaned and prepared now.

4. Exploring the Data modules

IBM Cognos Analytics with Watson | * New data module

Search content

Properties

Data module

Search

New data module

- Navigation paths
- Global_Su...tore2.csv
 - # Row Id
 - # 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
 - Quantity

Preview data

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

Activate Windows
Go to Settings to activate Windows.

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5. Understanding the Data

IBM Cognos Analytics with Watson | * New data module

Search content

Properties

Data module

Search

New data module

- Navigation paths
- Global_Su...tore2.csv
 - # Row Id
 - # Row ID
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10
 - 11
 - 12
 - 13
 - 14
 - 15
 - Load more ...
 - Order ID
 - Order Date
 - Ship Date

Row Id	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment
1	32298	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495	Rick Hansen	Consumer
2	26341	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR-16210	Justin Ritter	Corporate
3	25330	IN-2013-71249	2013-10-17	2013-10-18	First Class	CR-12730	Craig Reiter	Consumer
4	13524	ES-2013-1579342	2013-01-28	2013-01-30	First Class	KM-16375	Katherine Murray	Home Office
5	47221	SG-2013-4320	2013-11-05	2013-11-06	Same Day	RH-9495	Rick Hansen	Consumer
6	22732	IN-2013-42360	2013-06-28	2013-07-01	Second Class	JM-15655	Jim Mitchum	Corporate
7	30570	IN-2011-81826	2011-11-07	2011-11-09	First Class	TS-21340	Toby Swindell	Consumer
8	31192	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB-18085	Mick Brown	Consumer
9	40155	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW-15220	Jane Waco	Corporate
10	40936	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985	Joseph Holt	Consumer
11	34577	CA-2011-102988	2011-04-05	2011-04-09	Second Class	GM-14695	Greg Maxwell	Corporate
12	28879	ID-2012-28402	2012-04-19	2012-04-22	First Class	AJ-10780	Anthony Jacobs	Corporate
13	45794	SA-2011-1830	2011-12-27	2011-12-29	Second Class	MM-7260	Magdelene Morse	Consumer
14	4132	MX-2012-130015	2012-11-13	2012-11-13	Same Day	VF-21715	Vicky Freymann	Home Office
15	27704	IN-2013-73851	2013-06-06	2013-06-08	Second Class	DF-19170	Peter Fuller	Consumer

Activate Windows
Go to Settings to activate Windows.

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6. Filtering the data

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

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists various fields including Order ID, Ship Date, Customer ID, Customer Name, Segment, City, State, Country, Postal Code, Market, Region, Product ID, Category, Sub-Category, Product Name, Sales, Quantity, Discount, Profit, Shipping Cost, and Order Priority. The main area displays a table with columns: category, Sub-Category, Product, Quantity, Discount, Profit, Shipping Cost, and Order Priority. A context menu is open over the 'Product' column, showing options like 'Filter...', 'Create data group...', 'Create navigation path...', 'Split...', 'Hide from users', 'Remove', 'Format data...', 'Clean...', 'Sort descending', 'Sort ascending', and 'Properties'.

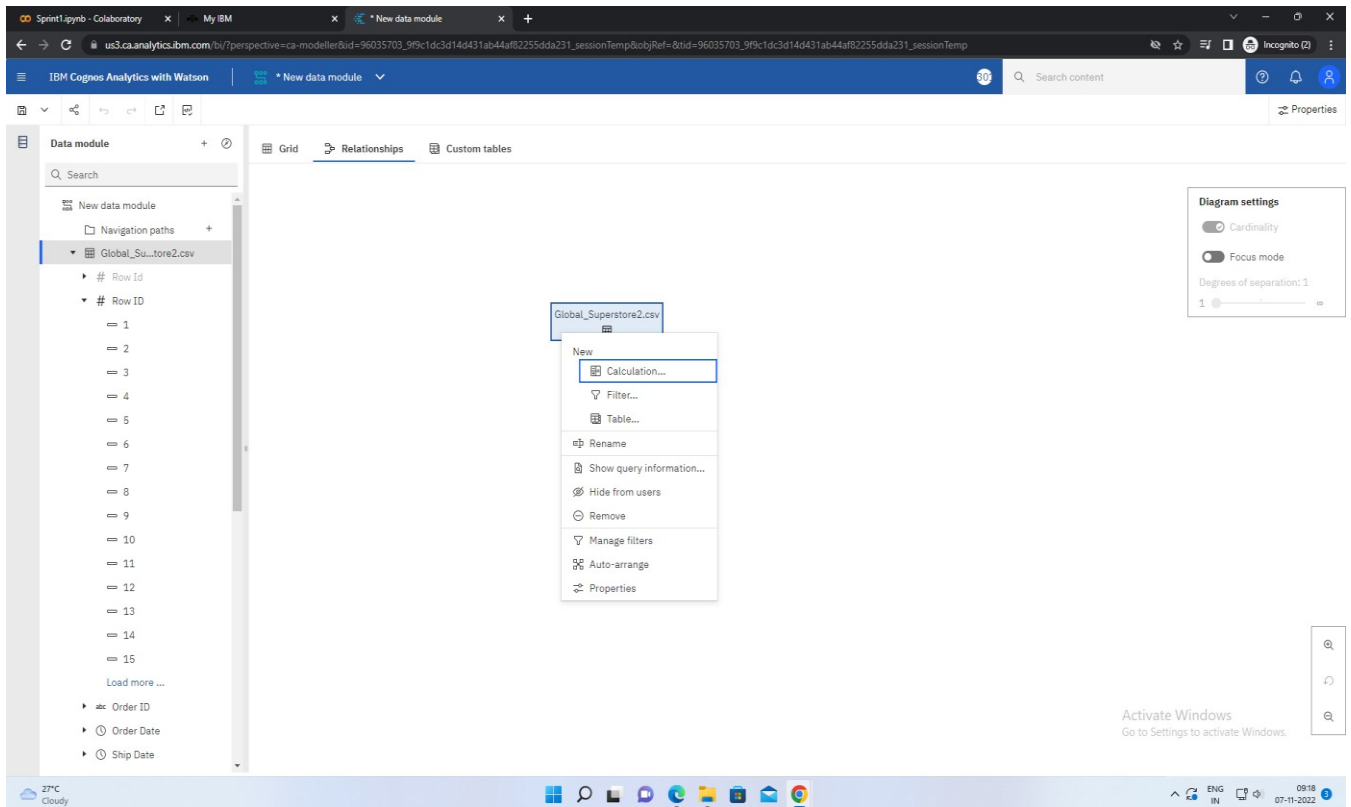
category	Sub-Category	Product	Quantity	Discount	Profit	Shipping Cost	Order Priority
Technology	Accessories	Plantronics Over-the-ear Headset	7	0	762.1845	933.57	Critical
Furniture	Chairs	Novime Leather Chair with Call	9	0.1	-288.765	923.63	Critical
Technology	Phones	Nokia Smartphone	9	0.1	919.971	915.49	Medium
Technology	Phones	Motorola Cordless	5	0.1	-96.54	910.16	Medium
Technology	Copiers	Sharp High-Speed Copier	8	0	311.52	903.04	Critical
Technology	Phones	Samsung Galaxy S21	5	0.1	763.275	897.35	Critical
Furniture	Chairs	Novime Leather Adjustable Chair	4	0	564.84	894.77	Critical
Furniture	Tables	Chromcraft Conference Table, Fully Assembled	6	0	996.48	878.38	High
Office Supplies	Binders	Fellowes PB500 Electric Punch Plastic Comb Binding Machine with Manual Bind	5	0.2	1906.485	867.69	Low
Furniture	Tables	Chromcraft Bull-Nose Wood Oval Conference Tables & Bases	13	0.4	-1862.3124	865.74	Critical
Office Supplies	Supplies	Martin Yale Chadless Opener Electric Letter Opener	5	0	83.281	846.54	High
Furniture	Tables	Bevis Conference Table, Fully Assembled	5	0	647.55	835.57	High
Technology	Phones	Cisco Smart Phone, with Caller ID	4	0	1151.4	832.41	Critical
Furniture	Chairs	Harbour Creations Executive Leather Armchair, Adjustable	7	0	622.02	810.25	Critical
Office Supplies	Appliances	KitchenAid Microwave	17	0	1036.08	804.54	Critical

Choose the required fields to be filtered

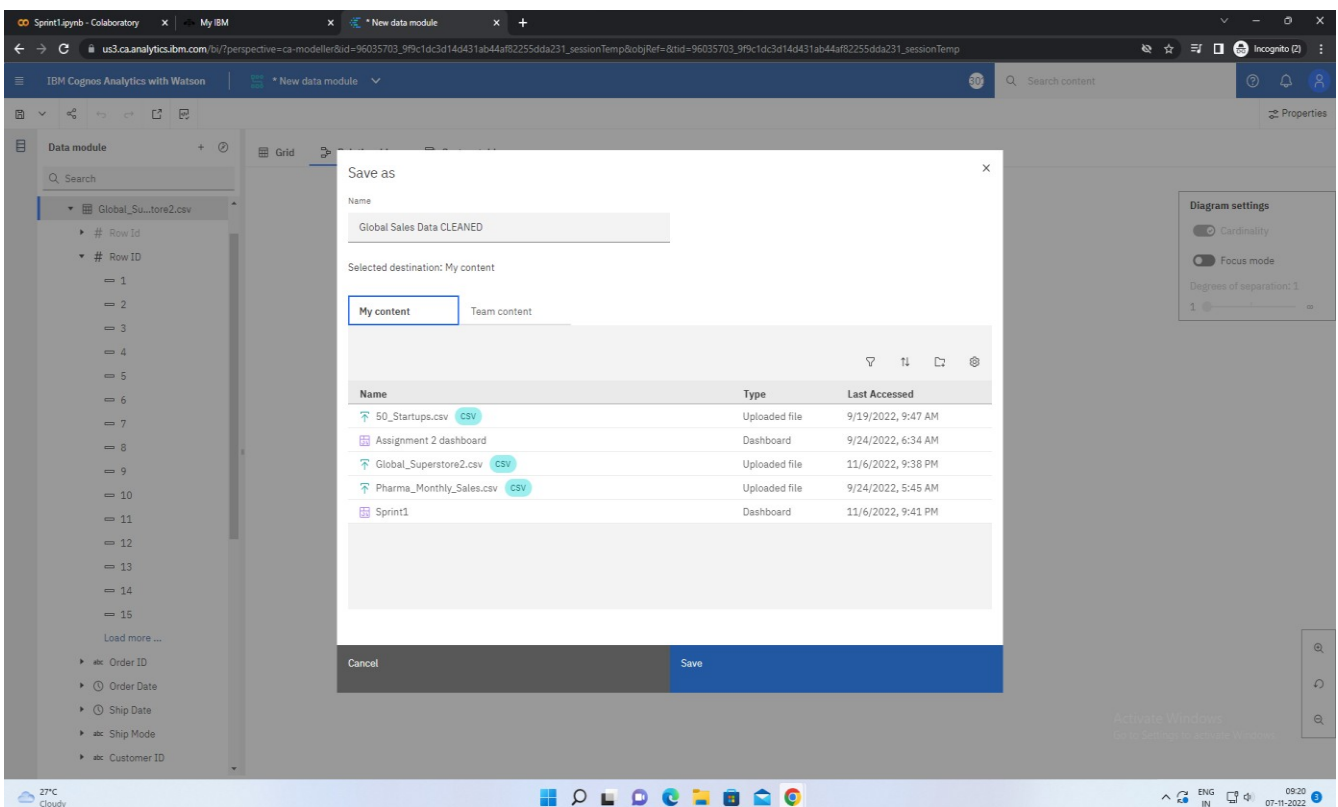
The screenshot shows the same IBM Cognos Analytics interface, but with a 'Filter - Region' dialog box open. The dialog box has a search bar and a list of regions with checkboxes: Africa, Canada (checked), Caribbean, Central, Central Asia, EMEA, East, and North. Below the list, there are 'Clear all' and 'Invert' buttons. At the bottom, there is a message: 'Select "Refresh members" in the data tree to view the effect of the filter on members in the tree.' and 'Cancel' and 'OK' buttons.

Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit
East	TEC-CIS-10001717	Technology	Phones	Plantronics CS510	7	7	0	762.1845
Oceania	FUR-TA-10001889	Furniture	Tables	Bevis Conference Table, Fully Assembled	9	9	0.1	-288.765
Oceania	TEC-CIS-10001717	Technology	Phones	Cisco Smart Phone, with Caller ID	9	9	0.1	919.971
Central	FUR-CH-10002033	Furniture	Chairs	Harbour Creations Executive Leather Armchair, Adjustable	5	5	0.1	-96.54
Africa	TEC-CIS-10001717	Technology	Phones	Cisco Smart Phone, with Caller ID	8	8	0	311.52
Oceania	FUR-TA-10001889	Furniture	Tables	Bevis Conference Table, Fully Assembled	5	5	0.1	763.275
Oceania	TEC-CIS-10001717	Technology	Phones	Cisco Smart Phone, with Caller ID	4	4	0	564.84
Oceania	FUR-CH-10002033	Furniture	Chairs	Harbour Creations Executive Leather Armchair, Adjustable	6	6	0	996.48
West	TEC-CIS-10001717	Technology	Phones	Cisco Smart Phone, with Caller ID	5	5	0.2	1906.485
South	FUR-TA-10001889	Furniture	Tables	Bevis Conference Table, Fully Assembled	13	13	0.4	-1862.3124
South	FUR-CH-10002033	Furniture	Chairs	Harbour Creations Executive Leather Armchair, Adjustable	5	5	0	83.281
North Asia	TEC-CIS-10001717	Technology	Phones	Cisco Smart Phone, with Caller ID	5	5	0	647.55
North Asia	FUR-CH-10002033	Furniture	Chairs	Harbour Creations Executive Leather Armchair, Adjustable	4	4	0	1151.4
North Asia	FUR-TA-10001889	Furniture	Tables	Bevis Conference Table, Fully Assembled	7	7	0	622.02
North Asia	TEC-CIS-10001717	Technology	Phones	Cisco Smart Phone, with Caller ID	17	17	0	1036.08

7. Creating Relationships among the data

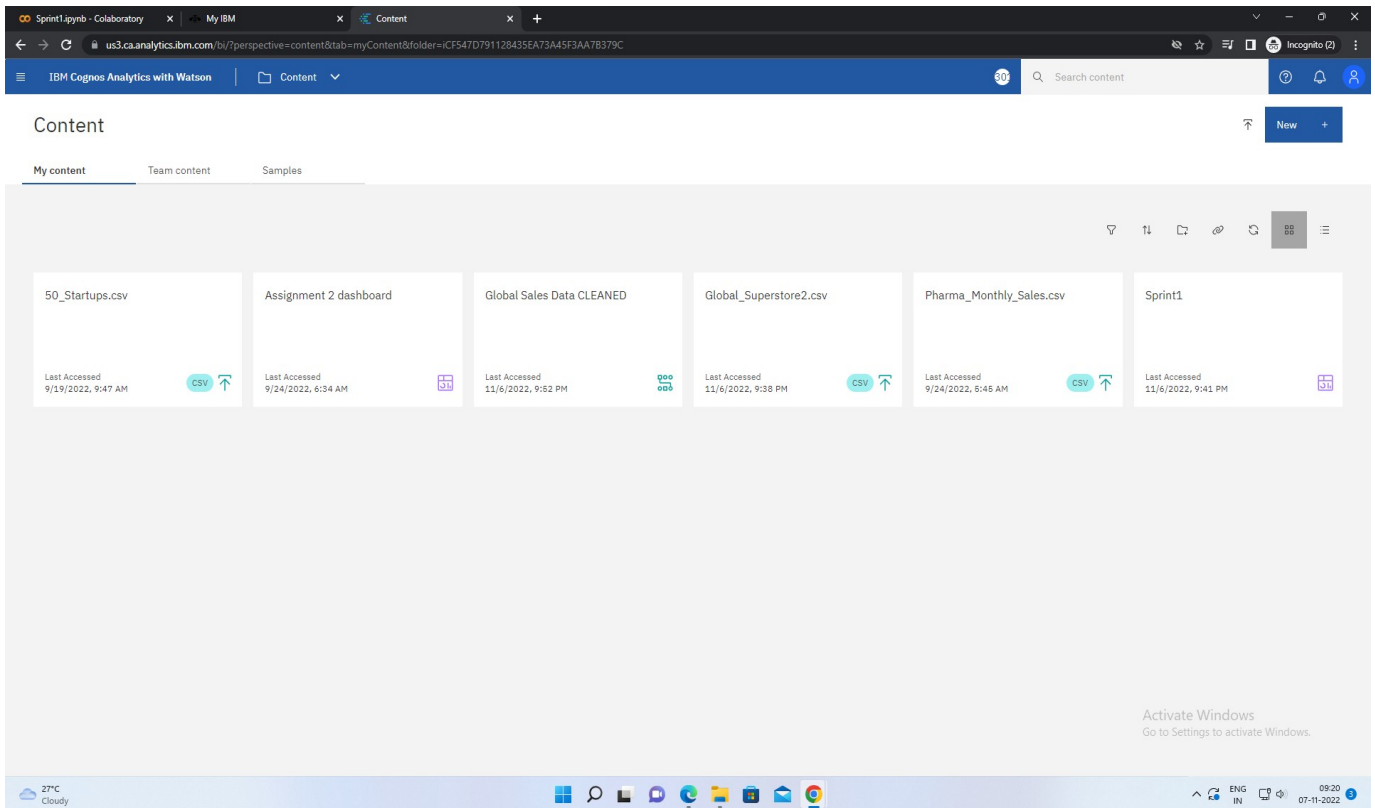


8. Save the dataset after preparing the data



9. Open “Content” from the menu bar

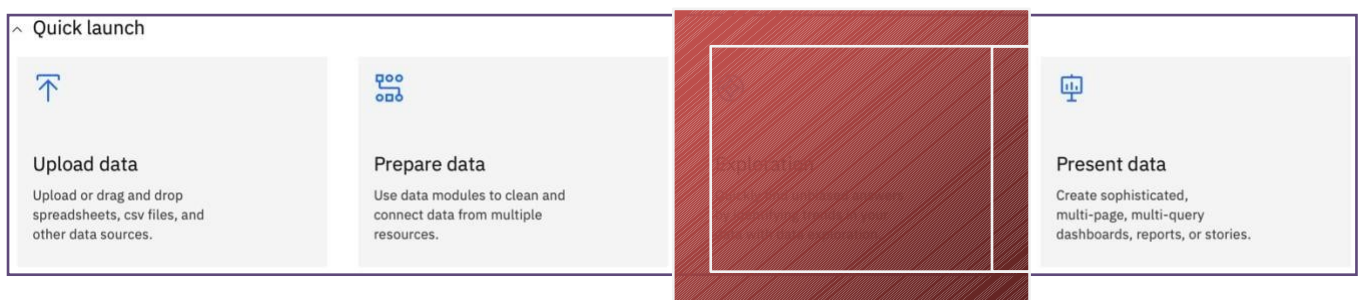
You can access the uploaded and stored data here.



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 web interface. A modal dialog titled "Add a data source to explore" is open, displaying a table of available data sources under the "My content" tab. The table lists several CSV files and a data module, all of which have been cleaned.

Name	Type	Last Accessed
50_Startups.csv	Uploaded file	9/19/2022, 9:47 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

The dialog includes "Cancel" and "Add" buttons at the bottom. The background interface shows a sidebar with "Quick launch" and "Upload data" options, and a main area with "Present data" and "Learning resources" sections.

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

The screenshot shows the IBM Cognos Analytics interface with a "New exploration" view. A relationship diagram is displayed, showing the "Global Sales Data CLEANED" data source. The diagram illustrates the relationships between various data fields, with "Quantity" at the center, connected to "Discount", "Region", "Market", "Profit", "Sales", "Country", and "Shipping Cost".

On the right side, a "Select a visualization" panel shows a "Profit" visualization with a value of 1.47M. Below this, there is a "Profit and Sales for Country regions" visualization. The interface also includes a "Cards" sidebar on the left and a "Relationship diagram" section at the bottom.

13. Save the exploration

The screenshot shows the IBM Cognos Analytics interface with a 'Save as' dialog box open. The dialog box has a 'Name' field containing 'Sprint1 exploration' and a 'Selected destination' of 'My content'. Below this is a table listing various data sources and dashboards.

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

The background interface shows a 'Cards' panel on the left with a 'Data relationships' diagram. The main area displays 'Explore data' with a search bar and a 'Relationship diagram' slider. The right panel shows a 'Select a visualization' section with a 'Profit' card displaying '1.47M Profit' and a 'Profit and Sales for Country regions' card with a world map.