

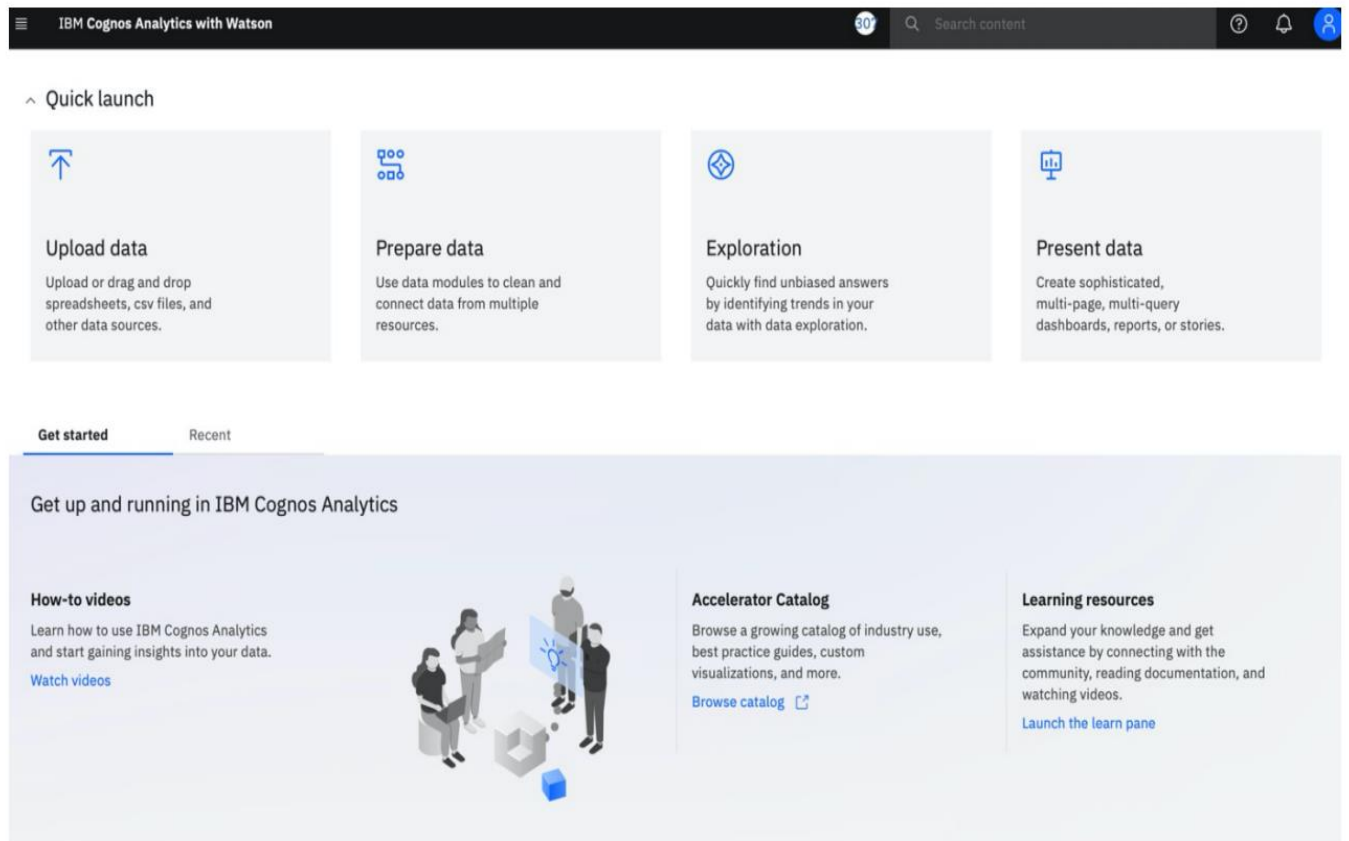
SPRINT-2

TEAM ID : PNT2022TMID2222

PROJECT : GLOBAL SALES DATA ANALYTICS

DATA PREPARATION PHASE

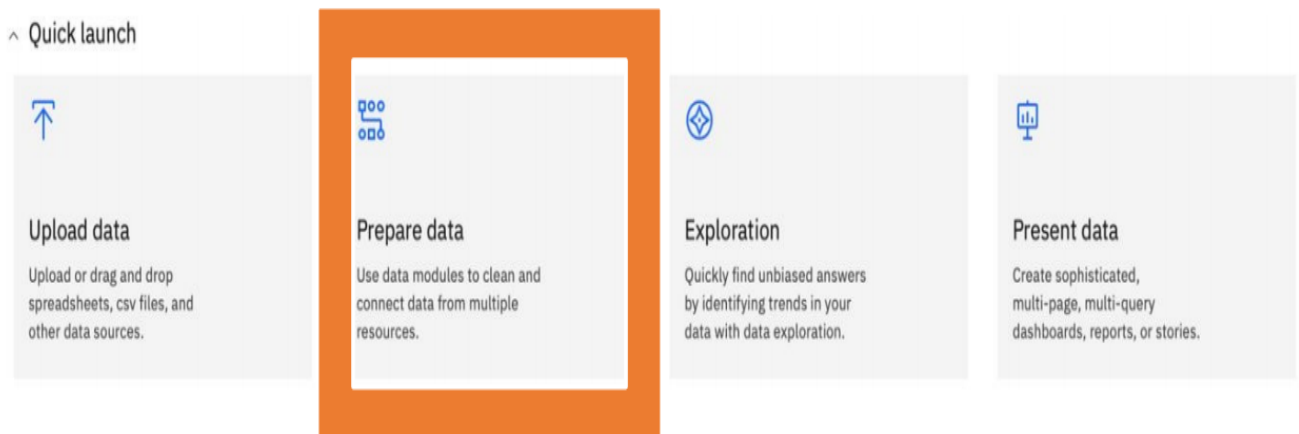
1. Open IBM Cognos Dashboard:



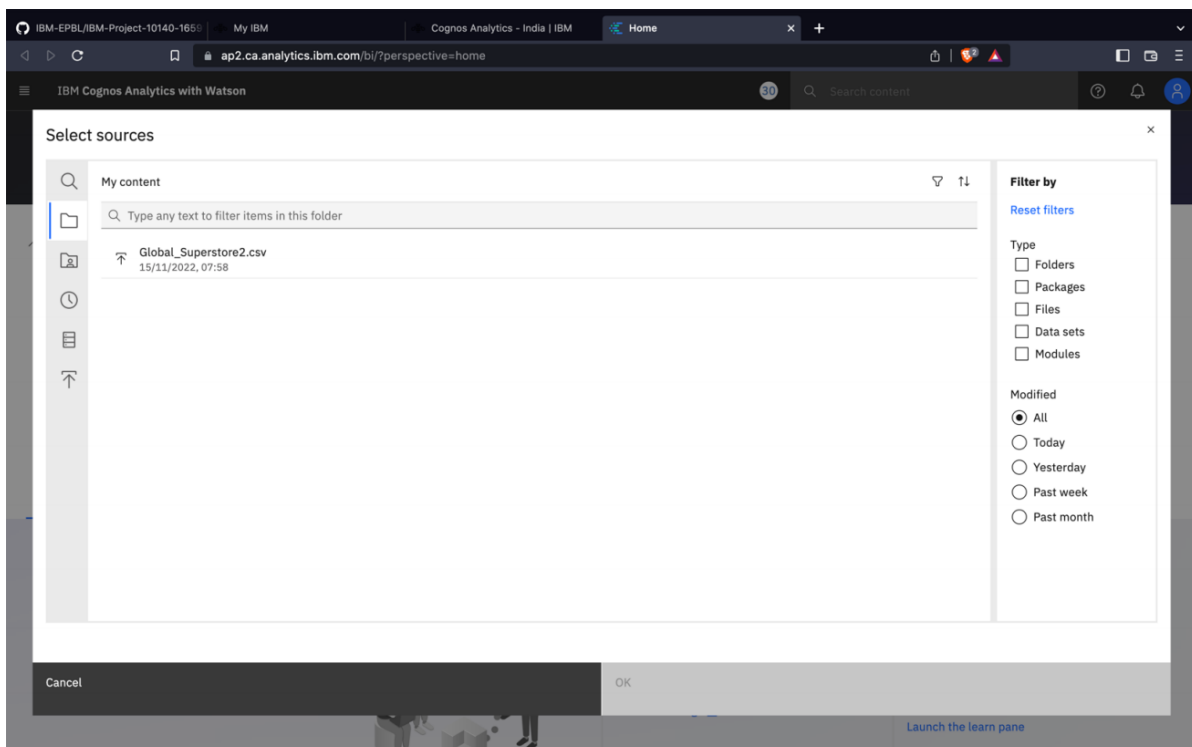
Preparation phase:

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:



3. Now select the uploaded dataset from the menu:



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

Search

New data module

- Navigation paths
- Global_Superstore2.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
 - Postal Code
 - abc Market
 - Region
 - abc Product ID
 - abc Category

Grid Relationships Custom tables

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

Properties

Data module

Search

New data module

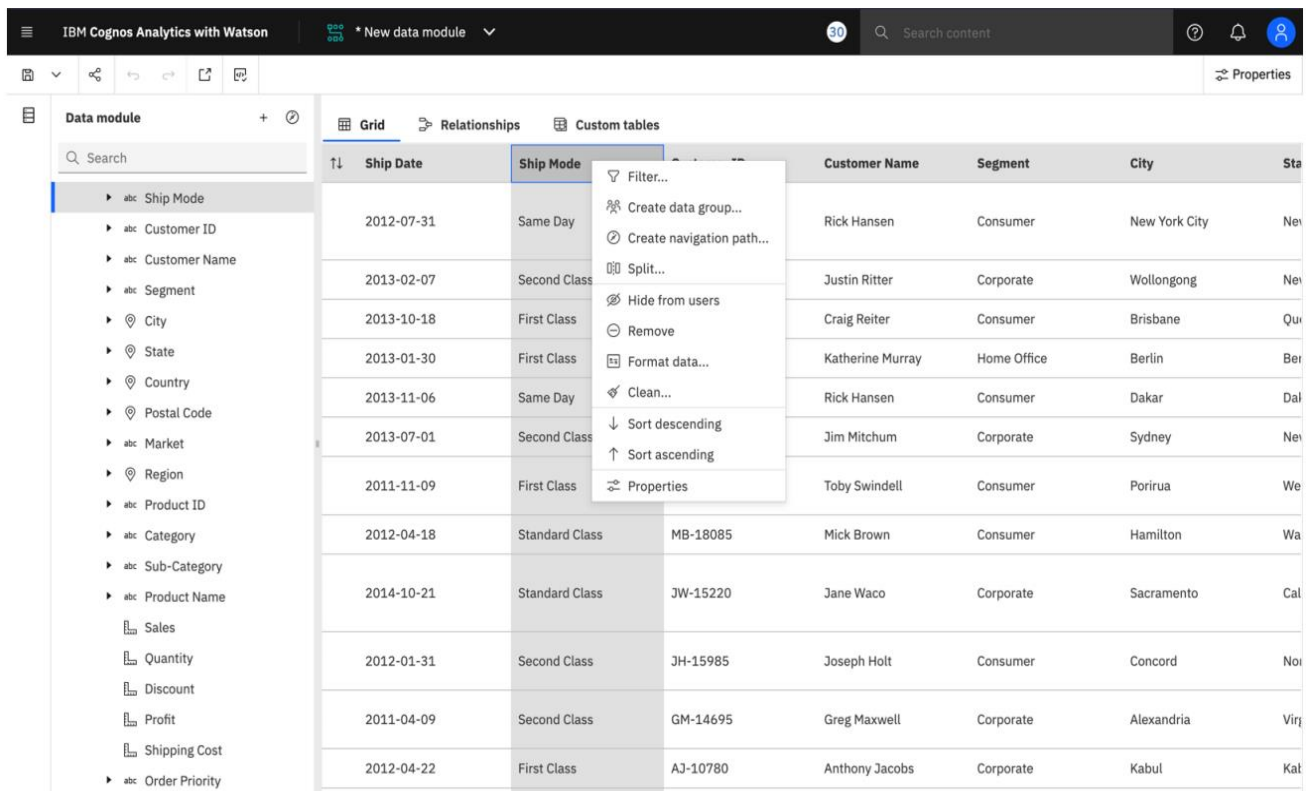
- Navigation paths
- Global_Superstore2.csv
 - # Row Id
 - # Row ID
 - abc Order ID
 - Order Date
 - Ship Date
 - abc Ship Mode
 - abc Customer ID
 - abc Customer Name
 - abc Segment
 - City
 - State
 - Country
 - Postal Code
 - abc Market
 - Region
 - abc Product ID
 - abc Category

Grid Relationships Custom tables

Row Id	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH
2	26341	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR
3	25330	IN-2013-71249	2013-10-17	2013-10-18	First Class	CR
4	13524	ES-2013-1579342	2013-01-28	2013-01-30	First Class	KM
5	47221	SG-2013-4320	2013-11-05	2013-11-06	Same Day	RH
6	22732	IN-2013-42360	2013-06-28	2013-07-01	Second Class	JM
7	30570	IN-2011-81826	2011-11-07	2011-11-09	First Class	TS
8	31192	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB
9	40155	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW
10	40936	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH
11	34577	CA-2011-102988	2011-04-05	2011-04-09	Second Class	GM
12	28879	ID-2012-28402	2012-04-19	2012-04-22	First Class	AJ

6. Filtering the data :

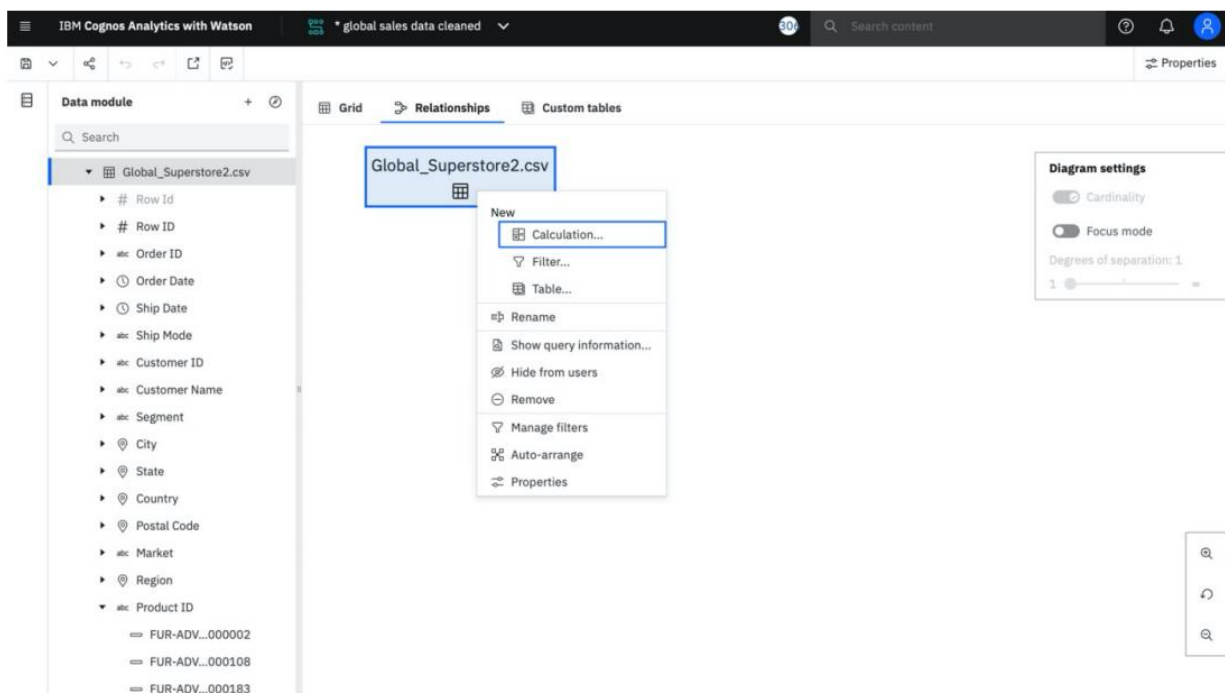
Filter the data according to the requirements and remove the unnecessary data



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

Ship Date	Ship Mode	Customer Name	Segment	City	State
2012-07-31	Same Day	Rick Hansen	Consumer	New York City	New York
2013-02-07	Second Class	Justin Ritter	Corporate	Wollongong	New South Wales
2013-10-18	First Class	Craig Reiter	Consumer	Brisbane	Queensland
2013-01-30	First Class	Katherine Murray	Home Office	Berlin	Berlin
2013-11-06	Same Day	Rick Hansen	Consumer	Dakar	Dakar
2013-07-01	Second Class	Jim Mitchum	Corporate	Sydney	New South Wales
2011-11-09	First Class	Toby Swindell	Consumer	Porirua	Wellington
2012-04-18	Standard Class	Mick Brown	Consumer	Hamilton	Washington
2014-10-21	Standard Class	Jane Waco	Corporate	Sacramento	California
2012-01-31	Second Class	Joseph Holt	Consumer	Concord	North Carolina
2011-04-09	Second Class	Greg Maxwell	Corporate	Alexandria	Virginia
2012-04-22	First Class	Anthony Jacobs	Corporate	Kabul	Kabul

7. Creating Relationships among the data



The screenshot shows the IBM Cognos Analytics interface in the 'Relationships' view. The 'Data module' pane on the left lists fields for 'Global_Superstore2.csv': Row Id, Order ID, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, City, State, Country, Postal Code, Market, Region, Product ID, and three specific product IDs (FUR-ADV...000002, FUR-ADV...000108, FUR-ADV...000183). The main area shows a diagram with a box labeled 'Global_Superstore2.csv'. A context menu is open over this box, showing options: New, Calculation..., Filter..., Table..., Rename, Show query information..., Hide from users, Remove, Manage filters, Auto-arrange, and Properties. On the right, the 'Diagram settings' pane shows 'Cardinality' and 'Focus mode' toggles, and 'Degrees of separation: 1'.

8. Save the dataset after preparing the data:

Save as

Name

global sales data cleaned

Selected destination: My content

My content

Team content

Name	Type	Last Accessed
50_Startups.csv	CSV	Uploaded file 11/09/2022, 4:27 AM
Global_Superstore2.csv	CSV	Uploaded file 04/11/2022, 5:38 AM
Pharma_Monthly_Sales.csv	CSV	Uploaded file 26/09/2022, 8:34 AM
pharmacy_data	Data module	26/09/2022, 8:37 AM
visualisation	Exploration	14/09/2022, 12:16 PM

Cancel

Save

ap2.ca.analytics.ibm.com/bi/?perspective=ca-modeller&id=1724333042_aa91adee224a47f1a4a7a105b85f2ed3_sessionTemp...

IBM Cognos Analytics with Watson

New data module

30

Search content

Properties

Data module

Search

New data module

Navigation paths

Global_Superstore2.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

Postal Code

abc Market

Region

abc Product ID

abc Category

Grid

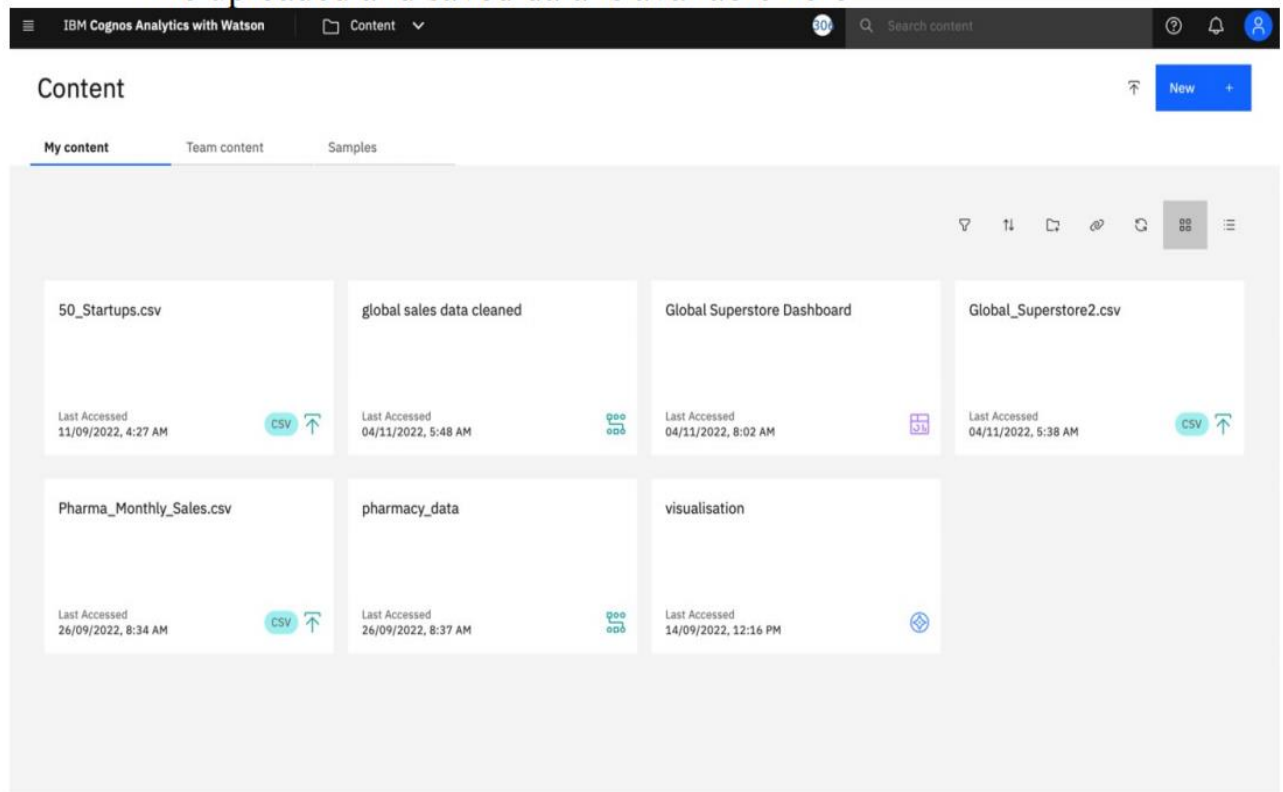
Relationships

Custom tables

Ship Mode	Customer ID	Customer Name	Segment	City	State
Same Day	RH-19495	Rick Hansen	Consumer	New York City	New York
Second Class	JR-16210	Justin Ritter	Corporate	Wollongong	New South Wales
First Class	CR-12730	Craig Reiter	Consumer	Brisbane	Queensland
First Class	KM-16375	Katherine Murray	Home Office	Berlin	Berlin
Same Day	RH-9495	Rick Hansen	Consumer	Dakar	Dakar
Second Class	JM-15655	Jim Mitchum	Corporate	Sydney	New South Wales
First Class	TS-21340	Toby Swindell	Consumer	Porirua	Wellington
Standard Class	MB-18085	Mick Brown	Consumer	Hamilton	Waikato
Standard Class	JW-15220	Jane Waco	Corporate	Sacramento	California
Second Class	JH-15985	Joseph Holt	Consumer	Concord	North Carolina
Second Class	GM-14695	Greg Maxwell	Corporate	Alexandria	Virginia
First Class	AJ-10780	Anthony Jacobs	Corporate	Kabul	Kabul

9. Open “Content” from the menu bar

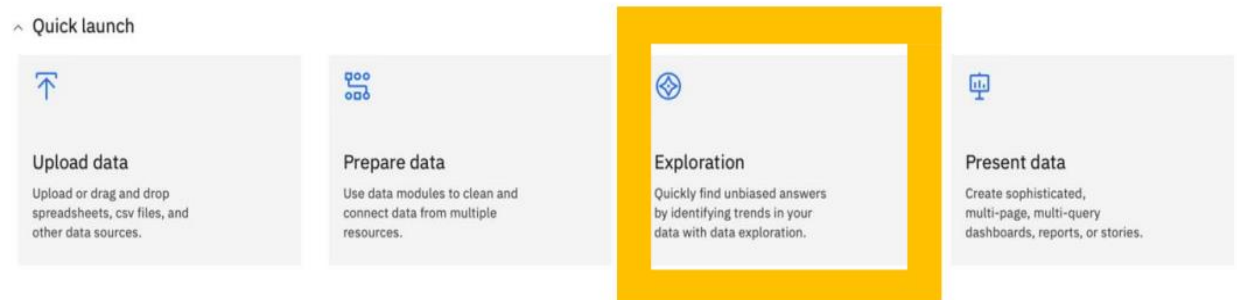
The uploaded and saved data is available here



• 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 interface. A dialog box 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 data modules, including "50_Startups.csv", "global sales data cleaned", "Global_Superstore2.csv", "Pharma_Monthly_Sales.csv", and "pharmacy_data". The "global sales data cleaned" module is highlighted. The background interface shows a sidebar with "Quick launch" options like "Upload data", "Get started", "How-to videos", and "Samples".

Name	Type	Last Accessed
50_Startups.csv	Uploaded file	11/09/2022, 4:27 AM
global sales data cleaned	Data module	04/11/2022, 5:48 AM
Global_Superstore2.csv	Uploaded file	04/11/2022, 5:38 AM
Pharma_Monthly_Sales.csv	Uploaded file	26/09/2022, 8:34 AM
pharmacy_data	Data module	26/09/2022, 8:37 AM

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

The screenshot shows the IBM Cognos Analytics interface with the "Explore data relationships" view. A relationship diagram is displayed, showing "Quantity" as the central node connected to "Region", "Market", "Profit", "Sales", "Country", and "Shipping Cost". The "global sales data cleaned" data source is selected. The right sidebar shows a "Select a visualization" panel with a "Quantity" card displaying "178K" and a "Quantity and Sales for Region regions" card showing a world map. The bottom of the interface includes a "Relationship diagram" section with a zoom slider.

Explore data relationships

global sales data cleaned

Quantity

Region, Market, Profit, Sales, Country, Shipping Cost

Quantity: 178K

Quantity and Sales for Region regions

13. Save the exploration:

Save as

×

Name








New exploration

Selected destination: My content

My content

Team content

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Name	Type	Last Accessed
 50_Startups.csv CSV	Uploaded file	11/09/2022, 4:27 AM
 global sales data cleaned	Data module	04/11/2022, 5:48 AM
 Global Superstore Dashboard	Dashboard	04/11/2022, 8:02 AM
 Global_Superstore2.csv CSV	Uploaded file	04/11/2022, 5:38 AM
 Pharma_Monthly_Sales.csv CSV	Uploaded file	26/09/2022, 8:34 AM
 pharmacy_data	Data module	26/09/2022, 8:37 AM
 visualisation	Exploration	14/09/2022, 12:16 PM

Cancel

Save