

# PROJECT DEVELOPMENT PHASE

## DELIVERY OF SPRINT - 2

Date	05 Nov 2022
Team ID	PNT2022TMID51838
Project Name	Global Sales Data Analytics
Team Leader	N.Nivetha

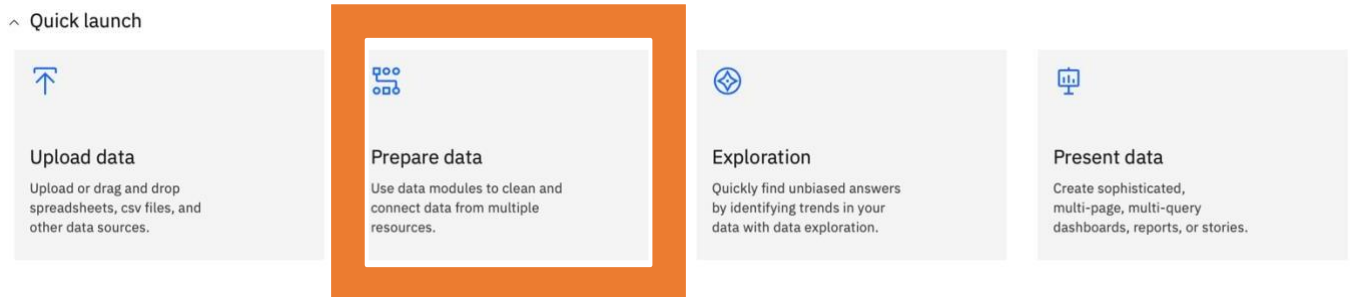
- DATA PREPARATION PHASE

### 1. Open IBM Cognos Dashboard

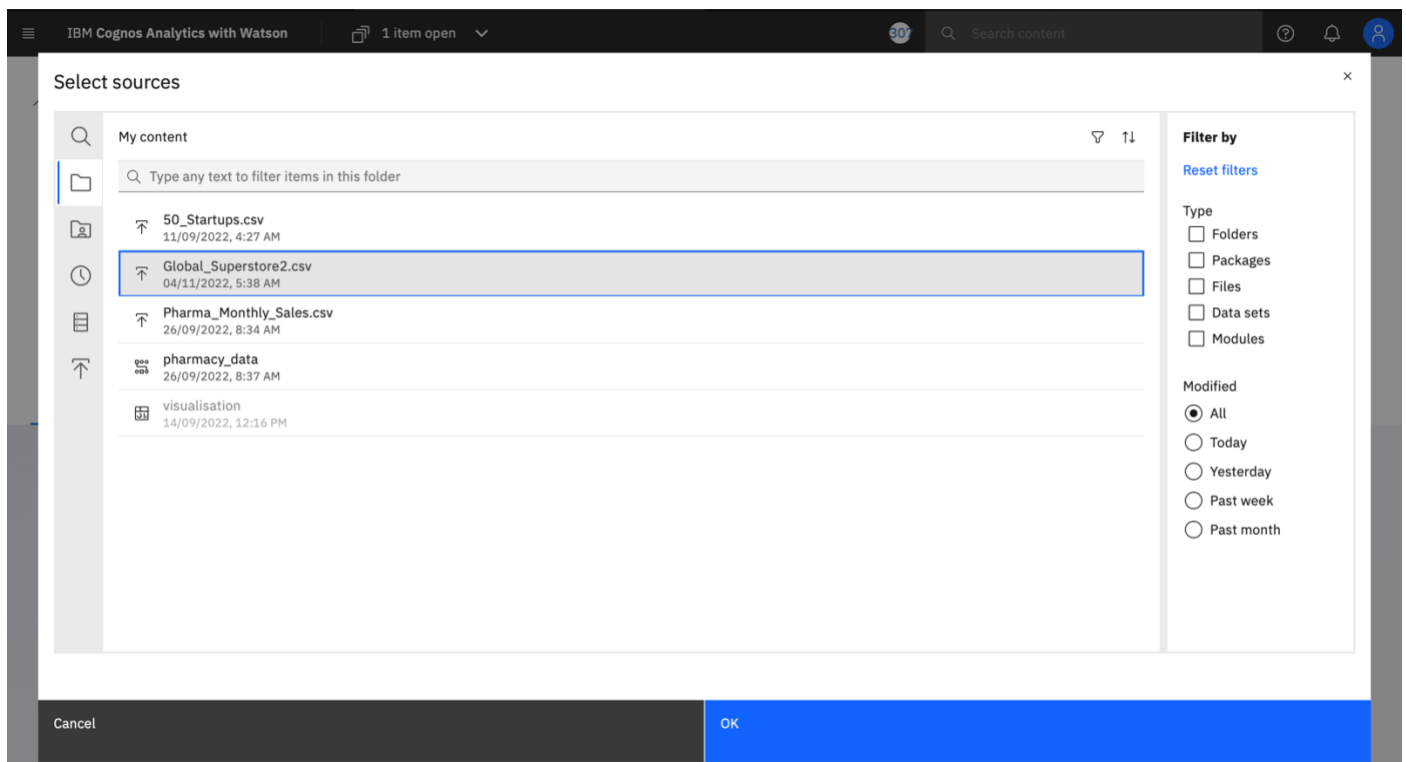
### Preparation phase:

- ✚ Once the Dataset is uploaded into the IBM Cognosdashboard, 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

Grid Relationships Custom tables

Search


New data module

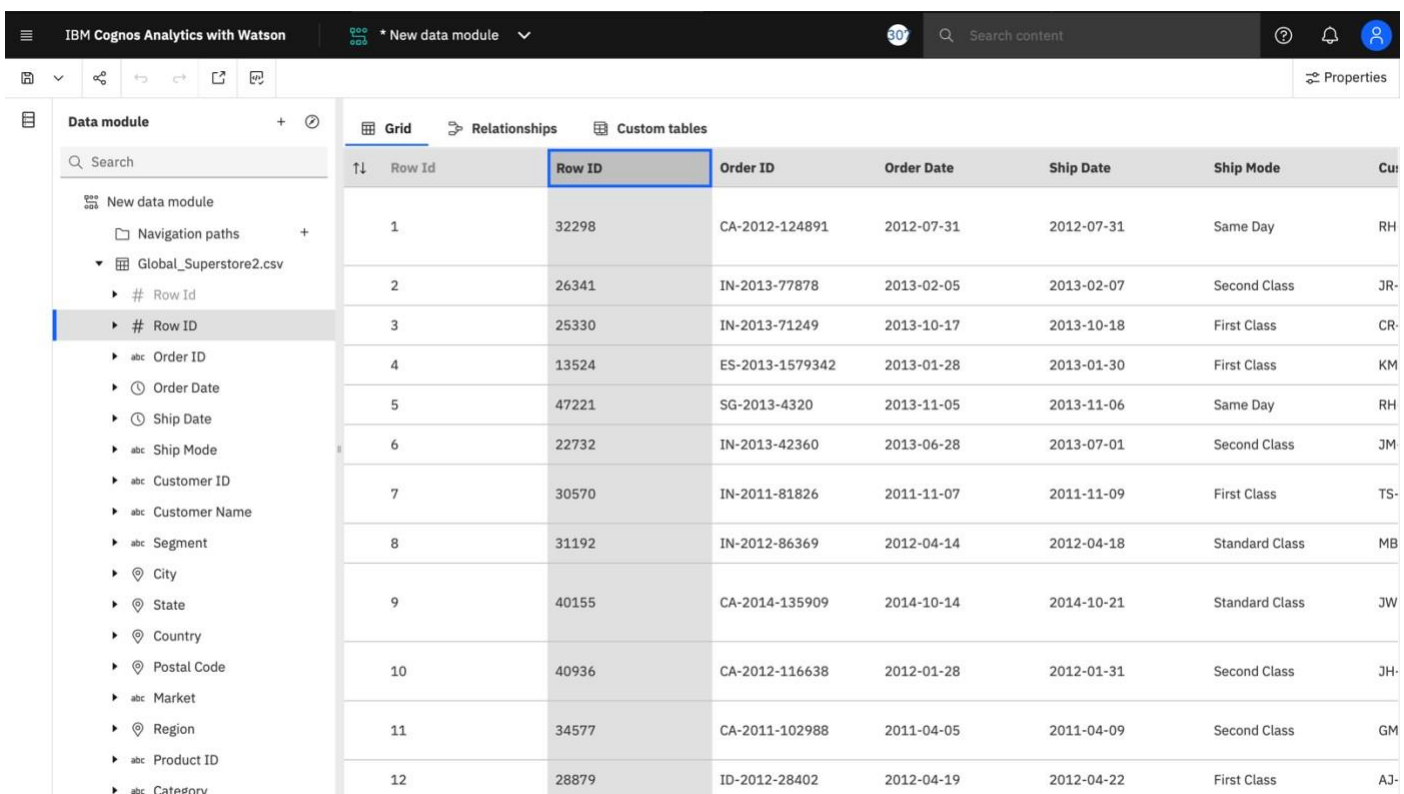
- Navigation paths
- Global\_Superstore2.csv
  - # Row ID
  - # Row ID
  - abc Order ID
  - Order Date
  - Ship Date
  - abc Ship Mode
  - abc Customer ID
  - abc Customer Name
  - abc Segment
  - City
  - State
  - Country
  - Postal Code
  - abc Market
  - Region
  - abc Product ID
  - abc Category

Preview data

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

## 5. Understanding the Data

 Understand the dataset and working on the “IBM COGNOS ANALYTICS WITH WATSON”



IBM Cognos Analytics with Watson

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  - abc Category

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
2	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR
3	IN-2013-71249	2013-10-17	2013-10-18	First Class	CR
4	ES-2013-1579342	2013-01-28	2013-01-30	First Class	KM
5	SG-2013-4320	2013-11-05	2013-11-06	Same Day	RH
6	IN-2013-42360	2013-06-28	2013-07-01	Second Class	JM
7	IN-2011-81826	2011-11-07	2011-11-09	First Class	TS
8	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB
9	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW
10	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH
11	CA-2011-102988	2011-04-05	2011-04-09	Second Class	GM
12	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 'Product Name' field is selected. The main area displays a data grid with columns: Product ID, Category, Sub-Category, Product Name, Sales, and Quantity. A context menu is open over the 'Product Name' column, showing options: 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
TEC-AC-10003033	Technology	Accessories	Plantronics Over-the-ear headset		7
FUR-CH-10003950	Furniture	Chairs	Novimex Leather Chair		9
TEC-PH-10004664	Technology	Phones	Nokia Smartphone with Call		9
TEC-PH-10004583	Technology	Phones	Motorola Cordless Phone		5
TEC-SHA-10000501	Technology	Copiers	Sharp Wireless High-Speed Copier		8
TEC-PH-10000030	Technology	Phones	Samsung Smartphone with Call		5
FUR-CH-10004050	Furniture	Chairs	Novimex Leather Chair		4
FUR-TA-10002958	Furniture	Tables	Chromcraft Conference Table, Fully Assembled	5244.84	6
OFF-BI-10003527	Office Supplies	Binders	Fellowes PB500 Electric Punch Plastic Comb Binding Machine with Manual Bind	5083.96	5
FUR-TA-10000198	Furniture	Tables	Chromcraft Bull-Nose Wood Oval Conference Tables & Bases	4297.644	13
OFF-SU-10002881	Office Supplies	Supplies	Martin Yale Chadless Opener Electric Letter Opener	4164.05	5
FUR-TA-10001889	Furniture	Tables	Bevis Conference Table, Fully Assembled	4626.15	5

Choose the required fields to be filtered

The screenshot shows the IBM Cognos Analytics interface with a 'Filter - Region' dialog box open. The dialog box has a search bar and a list of regions with checkboxes: Africa, Canada, Caribbean, Central, Central Asia, EMEA, East, and North. There are 'Clear all' and 'Invert' buttons at the bottom of the list. The background shows the 'Data module' pane with 'Region' selected under 'Product ID'. The main area displays a data grid with columns: Category, Sub-Category, and Product ID.

Category	Sub-Category
Technology	Accessories
Furniture	Chairs
Technology	Phones
Technology	Phones
Technology	Copiers
Technology	Phones
Furniture	Chairs
Furniture	Tables
Office Supplies	Binders
Furniture	Tables

## 7. Creating Relationships among the data

IBM Cognos Analytics with Watson

\* global sales data cleaned

Search content

Properties

Data module

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
- Product ID
  - FUR-ADV...000002
  - FUR-ADV...000108
  - FUR-ADV...000183

Grid Relationships Custom tables

Global\_Superstore2.csv

New

- Calculation...
- Filter...
- Table...
- Rename
- Show query information...
- Hide from users
- Remove
- Manage filters
- Auto-arrange
- Properties

Diagram settings

- Cardinality
- Focus mode
- Degrees of separation: 1

## 8. Save the dataset after preparing 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
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- abc Customer ID
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- Postal Code
- abc Market
- Region
- Product ID
- Category

Save as

Name

global sales data cleaned

Selected destination: My content

My content Team content

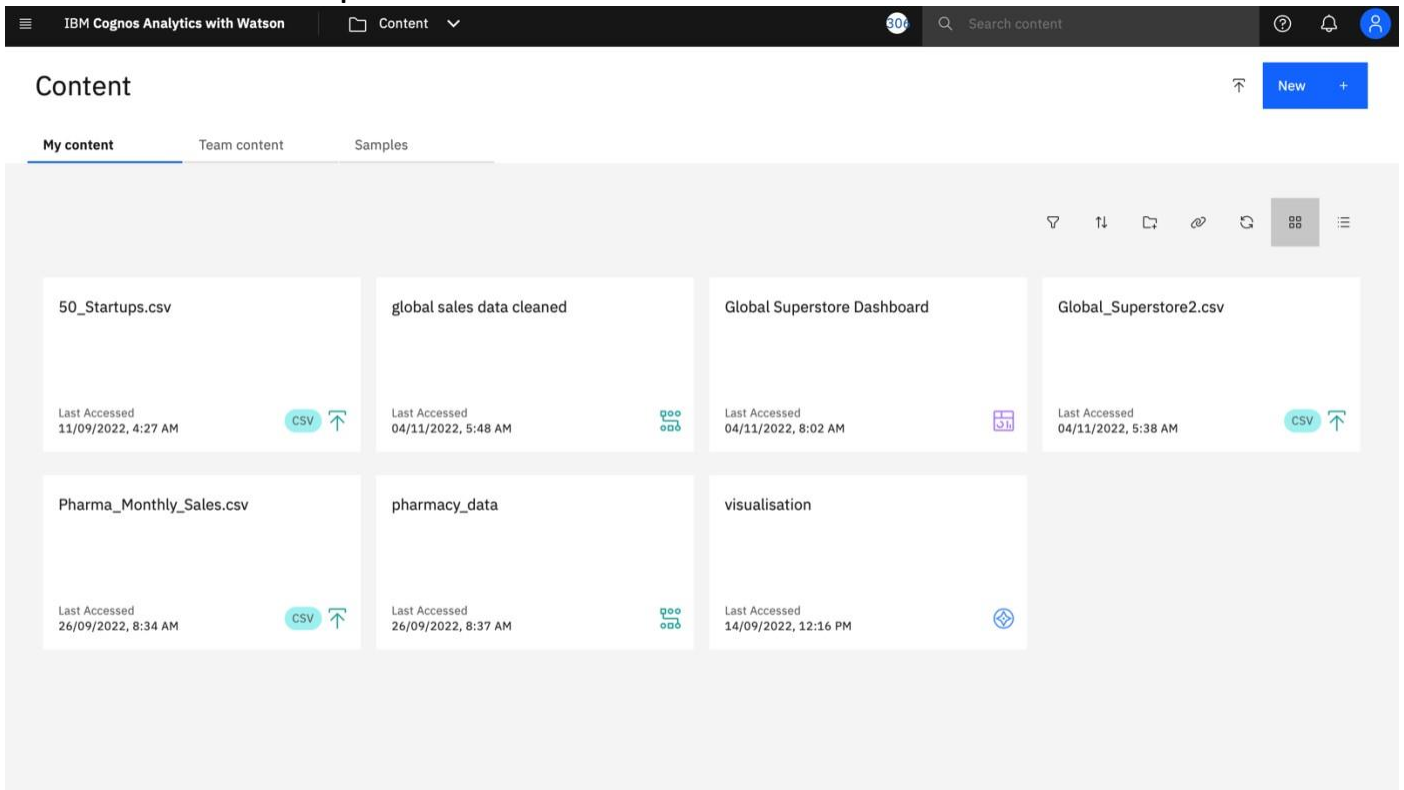
Name	Type	Last Accessed
50_Startups.csv	CSV	Uploaded file 11/09/2022, 4:27 AM
Global_Superstore2.csv	CSV	Uploaded file 04/11/2022, 5:38 AM
Pharma_Monthly_Sales.csv	CSV	Uploaded file 26/09/2022, 8:34 AM
pharmacy_data	Data module	26/09/2022, 8:37 AM
visualisation	Exploration	14/09/2022, 12:16 PM

Cancel Save

Ship Mode	Cur
Same Day	RH
Second Class	JR
First Class	CR
First Class	KM
Same Day	RH
Second Class	JM
First Class	TS
Standard Class	MB
Standard Class	JW
Second Class	JH
Second Class	GM
First Class	AJ

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

 The uploaded and saved data is available here



Content

My content Team content Samples

50\_Startups.csv  
Last Accessed 11/09/2022, 4:27 AM CSV

global sales data cleaned  
Last Accessed 04/11/2022, 5:48 AM

Global Superstore Dashboard  
Last Accessed 04/11/2022, 8:02 AM

Global\_Superstore2.csv  
Last Accessed 04/11/2022, 5:38 AM CSV

Pharma\_Monthly\_Sales.csv  
Last Accessed 26/09/2022, 8:34 AM CSV


pharmacy\_data  
Last Accessed 26/09/2022, 8:37 AM

visualisation  
Last Accessed 14/09/2022, 12:16 PM

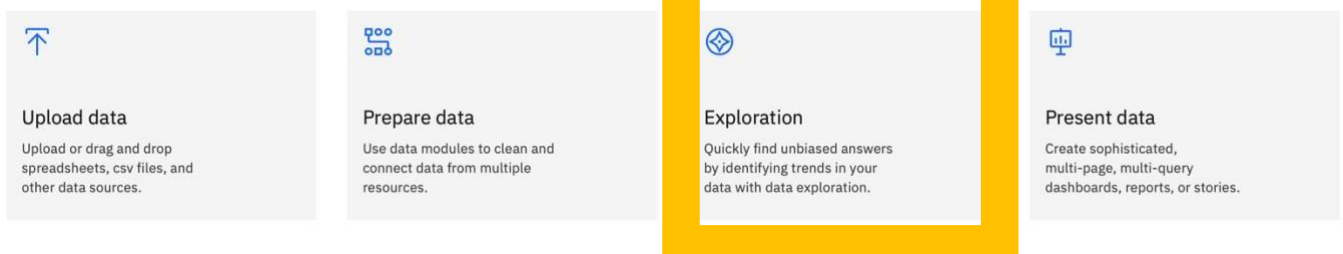
New +

### • DATA EXPLORATION PHASE

## 10. Data Exploration

 Click on the Exploration option to explore the data

Quick launch



Upload data  
Upload or drag and drop spreadsheets, csv files, and other data sources.

Prepare data  
Use data modules to clean and connect data from multiple resources.

Exploration  
Quickly find unbiased answers by identifying trends in your data with data exploration.

Present data  
Create sophisticated, multi-page, multi-query dashboards, reports, or stories.

## 11. Select the Data to be explored

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

The screenshot shows the IBM Cognos Analytics interface. A modal dialog titled "Add a data source to explore" is open. It has two tabs: "My content" (selected) and "Team content". Below the tabs is a table listing data sources:

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

At the bottom of the dialog are "Cancel" and "Add" buttons. The background interface shows a sidebar with "Quick launch", "Upload data", "Get started", "How-to videos", and "Samples".

## 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. The main area displays a relationship diagram for the "global sales data cleaned" data source. The diagram has a central node labeled "Quantity" connected to six other nodes: "Region", "Market", "Profit", "Sales", "Country", and "Shipping Cost".

On the left, there is a "Cards" panel with a "Data relationships" card showing a small version of the diagram. Below it is a "Relationship diagram" section with a zoom slider set to 10%.

On the right, there is a "Select a visualization" panel. It shows two visualization options for "Quantity":

- A card titled "Quantity" showing a large number "178K" with the label "Quantity" below it. Below the card is an "Add +" button.
- A card titled "Quantity" showing a small bar chart with three bars. Below the card is an "Add +" button.

Below these cards is a section titled "Quantity and Sales for Region regions" showing a world map. Below the map is an "Add +" button.

## 13. Save the exploration

The screenshot shows the IBM Cognos Analytics interface with a 'Save as' dialog box open. The dialog has a 'Name' field with 'New exploration' entered. Below it, 'Selected destination: My content' is shown. There are two tabs: 'My content' (selected) and 'Team content'. A table lists existing content items. At the bottom are 'Cancel' and 'Save' buttons.

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