

PROJECT DEVELOPMENT PHASE

Delivery of Sprint - 2

Team ID	PNT2022TMID13158
Project Name	Global Sales Data Analytics
Team Leader	HARI HARAN J

• DATA PREPARATION PHASE

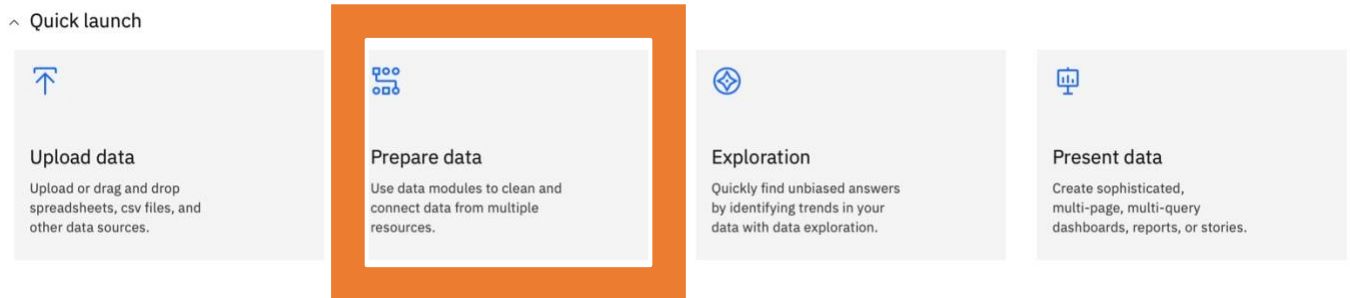
1. Open IBM Cognos Dashboard

The screenshot shows the IBM Cognos Analytics dashboard. At the top is a dark header bar with the text "IBM Cognos Analytics with Watson", a search bar, and user icons. Below the header is a "Quick launch" section with four cards: "Upload data" (with an upload icon), "Prepare data" (with a data icon), "Exploration" (with a magnifying glass icon), and "Present data" (with a bar chart icon). Each card has a brief description of its function. Below this is a "Get started" section with tabs for "Get started" and "Recent". The "Get started" tab is active, showing a large banner with the text "Get up and running in IBM Cognos Analytics" and an illustration of people working. Below the banner are three columns: "How-to videos" (with a link to "Watch videos"), "Accelerator Catalog" (with a link to "Browse catalog"), and "Learning resources" (with a link to "Launch the learn pane").

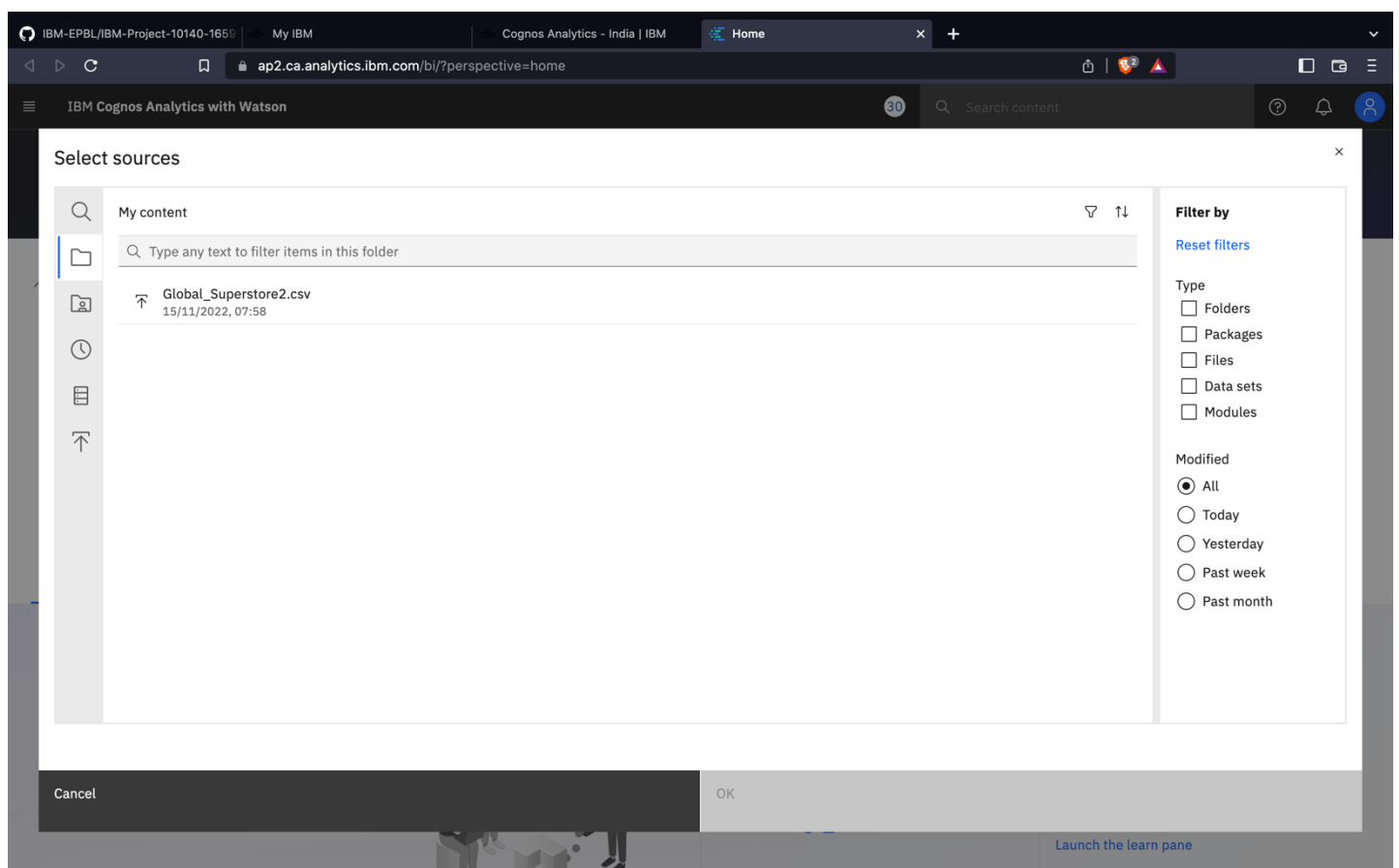
Preparation phase:

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

307

Search content

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📄

🔗

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

307

Search content

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🔗

Properties

Data module

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Global_Superstore2.csv

Row Id

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📍 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
	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 data table 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	Ne
2013-02-07	Second Class	Justin Ritter	Corporate	Wollongong	Ne
2013-10-18	First Class	Craig Reiter	Consumer	Brisbane	Que
2013-01-30	First Class	Katherine Murray	Home Office	Berlin	Ger
2013-11-06	Same Day	Rick Hansen	Consumer	Dakar	Dal
2013-07-01	Second Class	Jim Mitchum	Corporate	Sydney	Ne
2011-11-09	First Class	Toby Swindell	Consumer	Porirua	We
2012-04-18	Standard Class	Mick Brown	Consumer	Hamilton	Wa
2014-10-21	Standard Class	Jane Waco	Corporate	Sacramento	Cal
2012-01-31	Second Class	Joseph Holt	Consumer	Concord	No
2011-04-09	Second Class	Greg Maxwell	Corporate	Alexandria	Vir
2012-04-22	First Class	Anthony Jacobs	Corporate	Kabul	Ka

Choose the required fields to be filtered

The screenshot shows the IBM Cognos Analytics interface with the 'Filter - Ship Mode' dialog box open. The dialog box has a search bar and a list of ship modes: First Class, Same Day, Second Class, and Standard Class. The 'Second Class' option is selected. There are 'Clear all' and 'Invert' buttons at the bottom of the dialog. Below the dialog, there are 'Cancel' and 'OK' buttons. A message at the bottom of the dialog states: 'Select 'Refresh members' in the data tree to view the effect of the filter on members in the tree.'

Filter - Ship Mode

Add a filter condition +

Search

☐ First Class

☒ Same Day

☒ Second Class

☐ Standard Class

Clear all Invert

Select 'Refresh members' in the data tree to view the effect of the filter on members in the tree.

Cancel OK

7. Creating Relationships among the data

The screenshot displays the IBM Cognos Analytics with Watson interface. The top navigation bar shows the project name '* global sales data cleaned'. The left sidebar, titled 'Data module', lists the contents of 'Global_Superstore2.csv', including fields like Row ID, Order ID, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, City, State, Country, Postal Code, Market, Region, and Product ID. The central workspace is in the 'Relationships' view, showing a single data module 'Global_Superstore2.csv'. A context menu is open over this module, with the 'Calculation...' option highlighted. The right sidebar contains 'Diagram settings' with options for 'Cardinality' and 'Focus mode', and a 'Degrees of separation' slider set to 1. A vertical toolbar on the far right includes search, refresh, and zoom icons.

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

IBM-EPBL/IBM-Project-10140-1656

My IBM

Cognos Analytics - India | IBM

New data module

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

Customer ID

Customer Name

Segment

City

State

Country

Postal Code

abc Market

Region

abc Product ID

abc Category

Grid

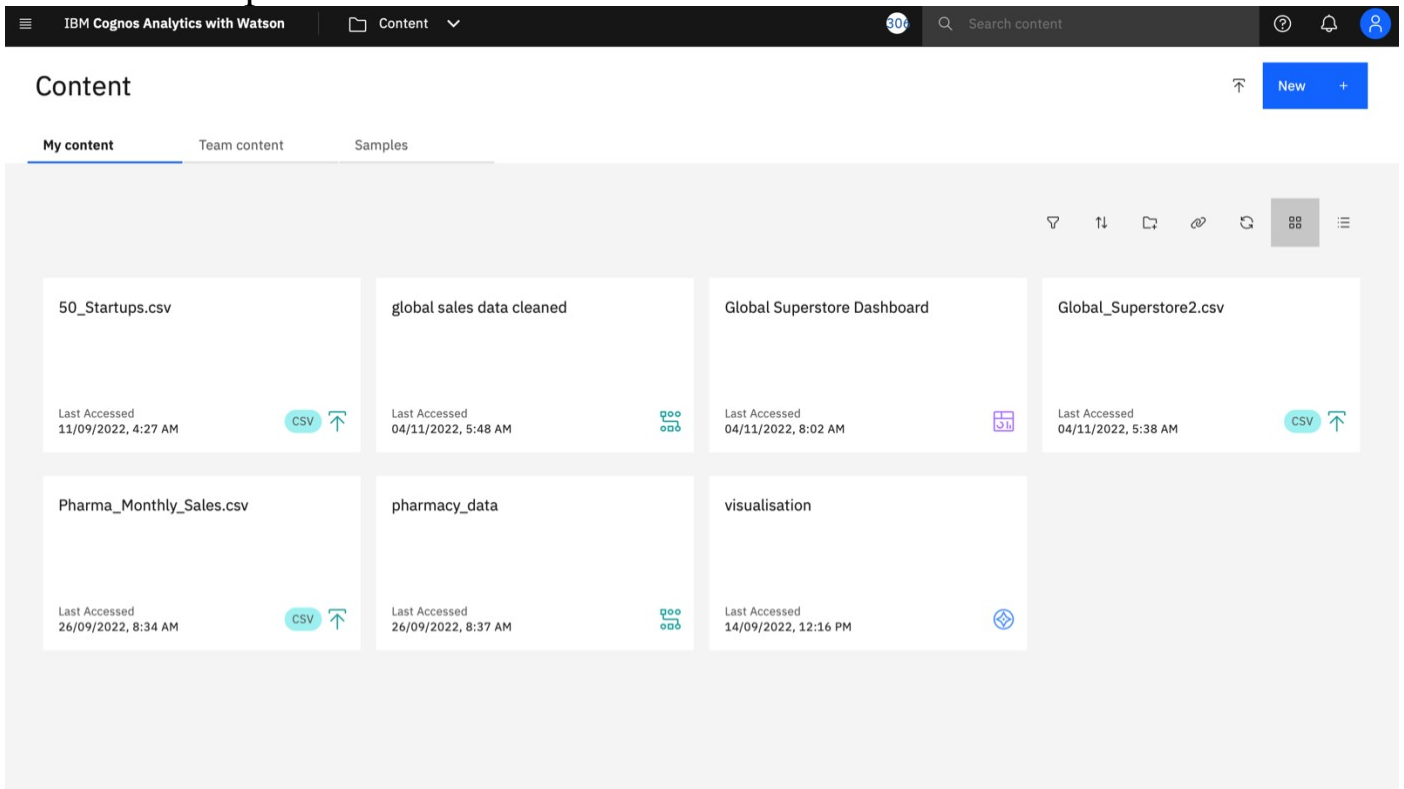
Relationships

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

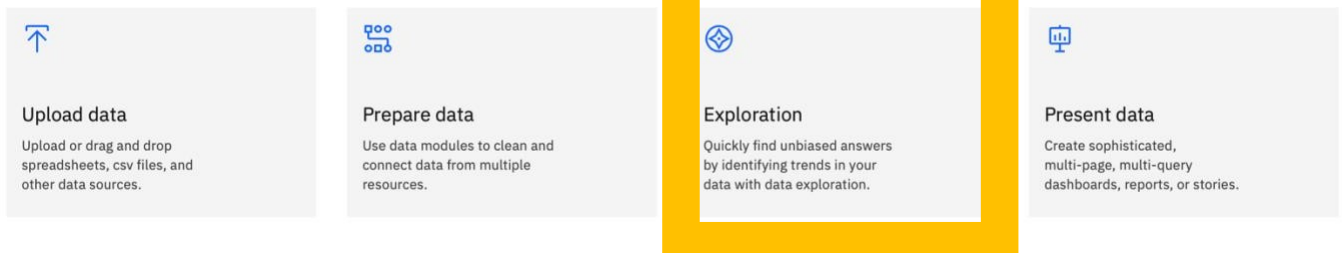


- DATA EXPLORATION PHASE

10. Data Exploration

Click on the Exploration option to explore the data

^ Quick launch



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 data sources, including CSV files and Data modules, with their respective types and last accessed dates.

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 interface includes a search bar for "Quantity", a "Reset to original" button, and a "Select a visualization" panel on the right. The "Select a visualization" panel shows a "Quantity" card with a value of 178K and a "Quantity and Sales for Region regions" card with a world map.

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 <div>CSV</div>	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 <div>CSV</div>	Uploaded file	04/11/2022, 5:38 AM
 Pharma_Monthly_Sales.csv <div>CSV</div>	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