

PROJECT DEVELOPMENT PHASE

DELIVERY OF SPRINT - 2

Date	15 November 2022
Team ID	PNT2022TMID01692
Project Name	Global Sales Data Analytics
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□ DATA PREPARATION PHASE

1. Open IBM Cognos Dashboard

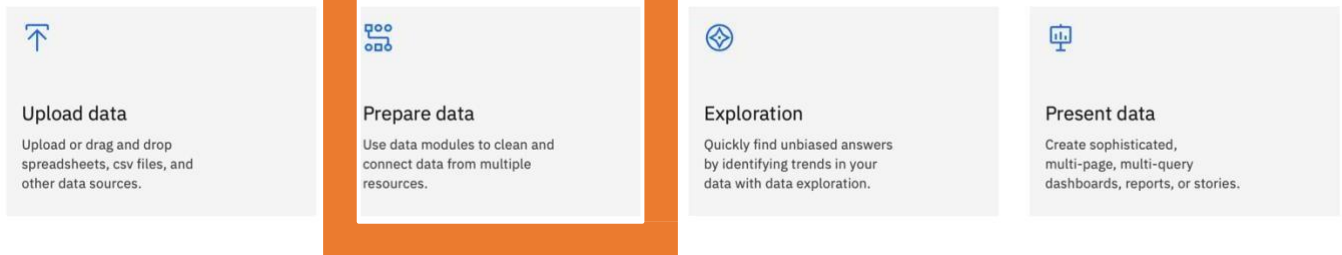
The screenshot shows the IBM Cognos Analytics dashboard. At the top is a dark header bar with the text 'IBM Cognos Analytics with Watson', a search bar, and user profile icons. Below the header is a 'Quick launch' section with four cards: 'Upload data' (with an upload icon), 'Prepare data' (with a data module icon), 'Exploration' (with a magnifying glass icon), and 'Present data' (with a presentation icon). Each card has a brief description of its function. Below this is a 'Get started' section with a 'Recent' tab. It contains three main areas: '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'. An illustration of people working together is also present in the 'How-to videos' section.

Preparation phase:

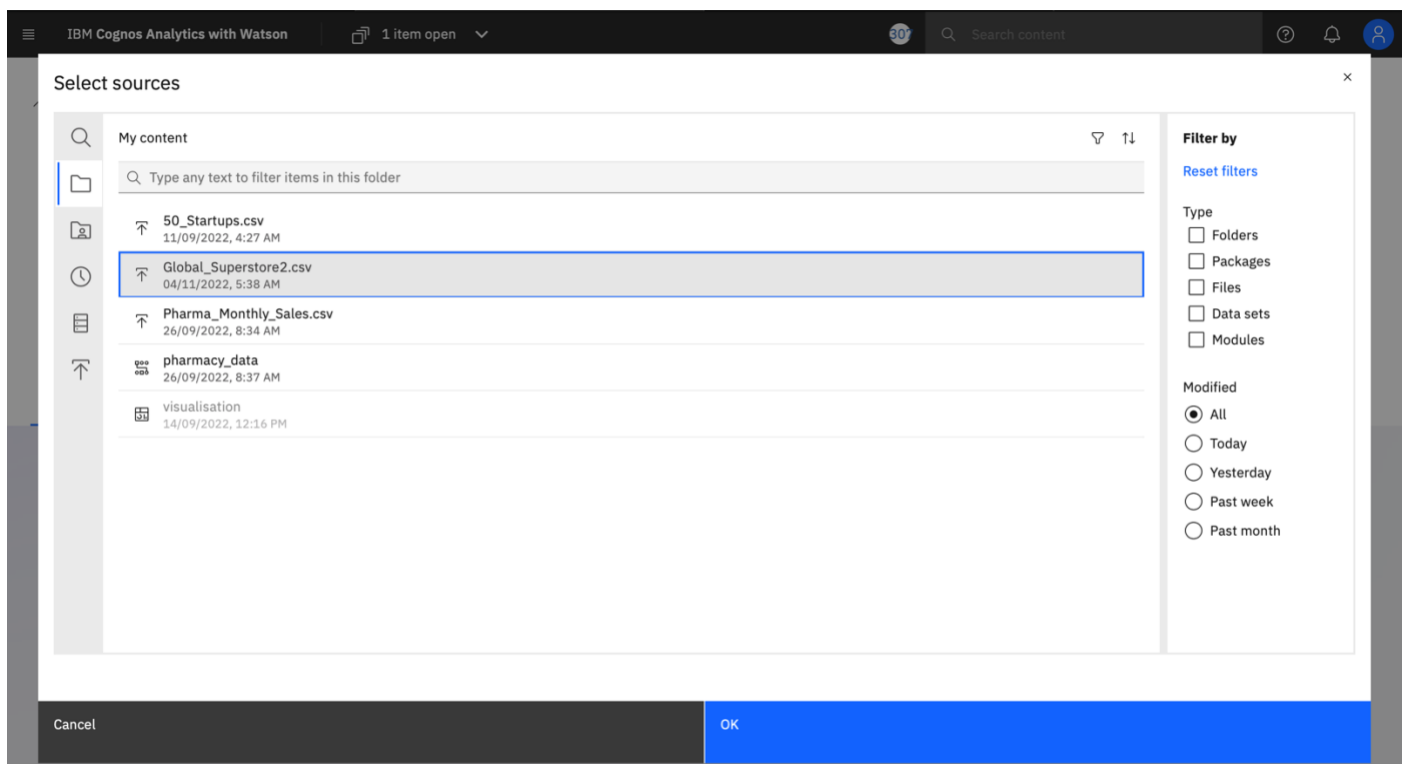
Once the Dataset is uploaded into the IBM Cognos dashboard, we need to prepare the dataset. The data preparation includes cleaning up the data, removing the null values, removing the duplicate values, structuring the data so that the data is well understood for exploration and analysis

2. Click on the Prepare Data option

Quick launch



3. Now select the uploaded dataset from the menu



Now select the dataset to be prepared and cleaned

4. Exploring the Data modules

The screenshot shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes the logo, a search bar, and a user profile icon. The main area is divided into a left sidebar and a central workspace. The sidebar, titled 'Data module', contains a search bar and a list of modules under 'New data module'. The central workspace is currently empty, displaying a 'Preview data' message with a calendar icon and instructions: 'To preview data, select a table, a column in a table, or a folder that contains columns.'

Data module

- 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

The screenshot shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes the logo, a search bar, and a user profile icon. The main area is divided into a left sidebar and a central workspace. The sidebar, titled 'Data module', contains a search bar and a list of modules under 'New data module'. The central workspace displays a data table with the following columns: Row Id, Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer. The table contains 12 rows of data.

Data module

- 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

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 including 'Product Name'. 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 like '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 monaural Headset		7
FUR-CH-10003950	Furniture	Chairs	Novimex Leather Chair		9
TEC-PH-10004664	Technology	Phones	Nokia Smartphone with Camera		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 Camera		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, and 'Cancel' and 'OK' buttons at the bottom. The background shows 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

The screenshot shows the IBM Cognos Analytics interface in the 'Relationships' view. A data module named 'Global_Superstore2.csv' is selected, and a context menu is open over it. The menu options include: New (with sub-options: Calculation..., Filter..., Table...), Rename, Show query information..., Hide from users, Remove, Manage filters, Auto-arrange, and Properties. The left sidebar shows a tree view of the data module's fields, 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 right sidebar shows 'Diagram settings' with options for Cardinality, Focus mode, and Degrees of separation.

IBM Cognos Analytics with Watson | * global sales data cleaned | Search content | Properties

Data module | 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

The screenshot shows the 'Save as' dialog box in IBM Cognos Analytics. The 'Name' field is filled with 'global sales data cleaned'. The 'Selected destination' is 'My content'. The 'My content' tab is active, showing a list of files and data modules. The list includes: 50_Startups.csv (CSV), Global_Superstore2.csv (CSV), Pharma_Monthly_Sales.csv (CSV), pharmacy_data (Data module), and visualisation (Exploration). The 'Save' button is highlighted in blue.

IBM Cognos Analytics with Watson | * New data module | Search content | Properties

Data module | New data module

Navigation paths

- 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
- Category

Save as

Name

global sales data cleaned

Selected destination: My content

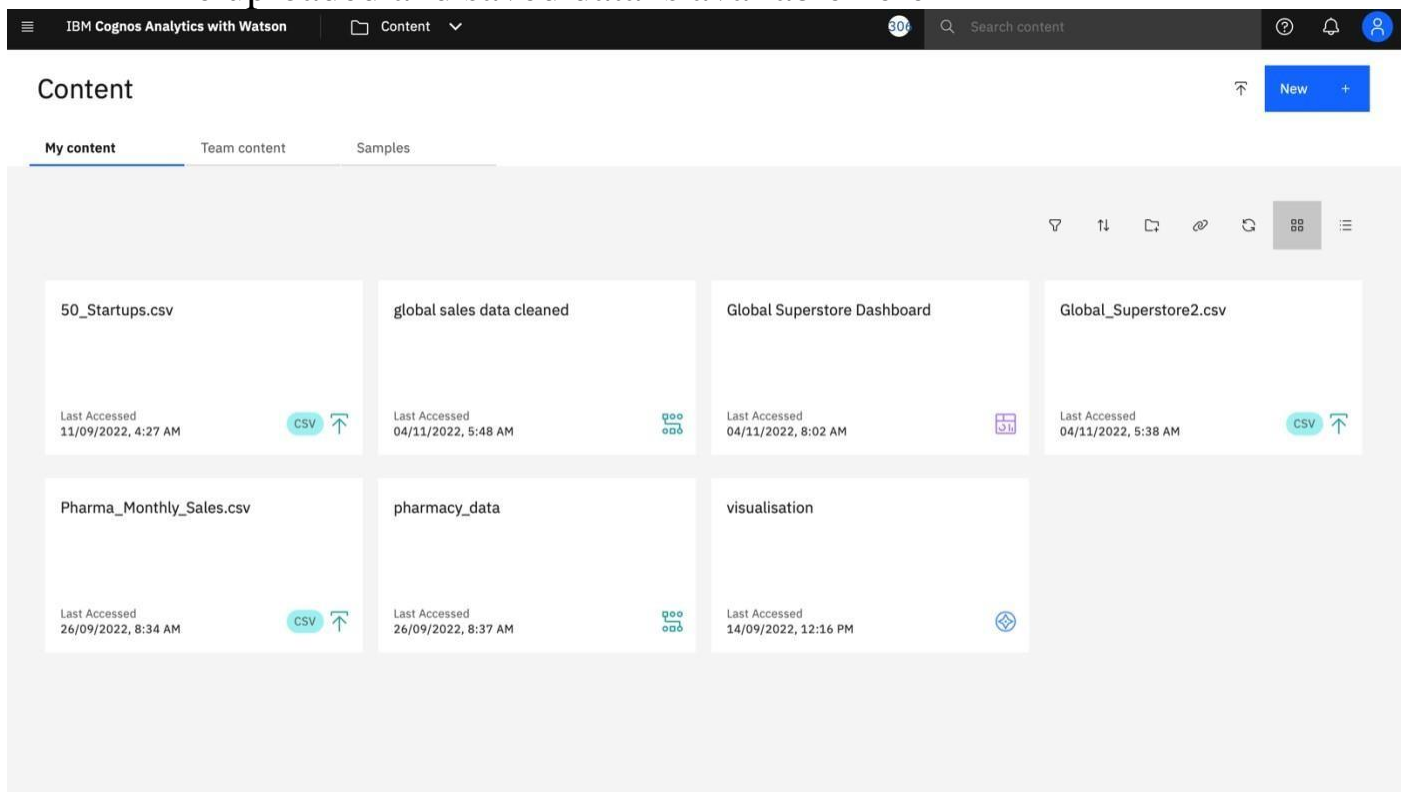
My content | Team content

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

Cancel | Save

9. Open “Content” from the menu bar

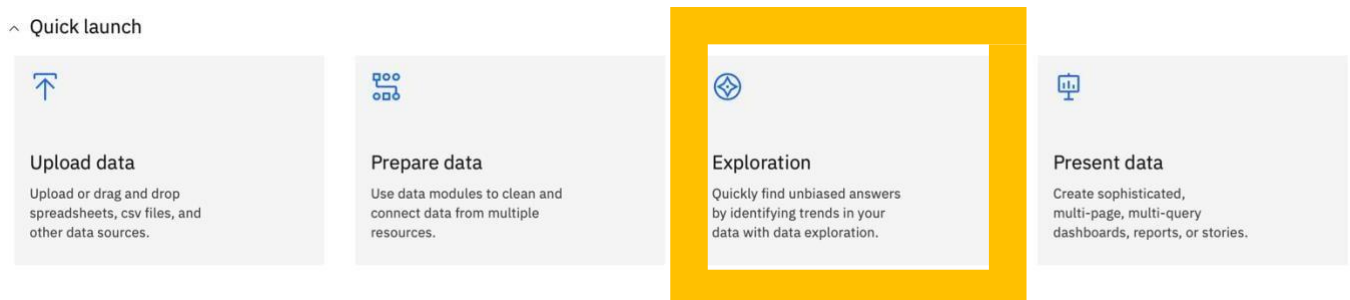
The uploaded and saved data is available here



□ 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

IBM Cognos Analytics with Watson | 1 item open | Search content

Quick launch

Upload data

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

Get started

Get up and running in IBM Cognos Analytics

How-to videos

Learn how to use IBM Cognos Analytics and start gaining insights into your data.

Watch videos

Samples

Add a data source to explore

My content | Team content

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

Cancel Add

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

IBM Cognos Analytics with Watson | * New exploration | Search content

Cards

Data relationships

Explore data relationships

global sales data cleaned

Reset to original

Quantity

Edit diagram

Region

Market

Profit

Sales

Country

Shipping Cost

Select single or multiple nodes to see visualizations.

Relationship diagram

10% 100%

Select a visualization

Explore visualizations related to 'Quantity'

Quantity

178K

Quantity

Add +

Quantity

Add +

Quantity and Sales for Region regions

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