

# PROJECT DEVELOPMENT PHASE

## DELIVERY OF SPRINT - 2

Date	07 November 2022
Team ID	PNT2022TMID41611
Project Name	Global Sales Data Analytics
Team Leader	GOKULRAJ R

### ☐ 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 icon, and a search bar. 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



### 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

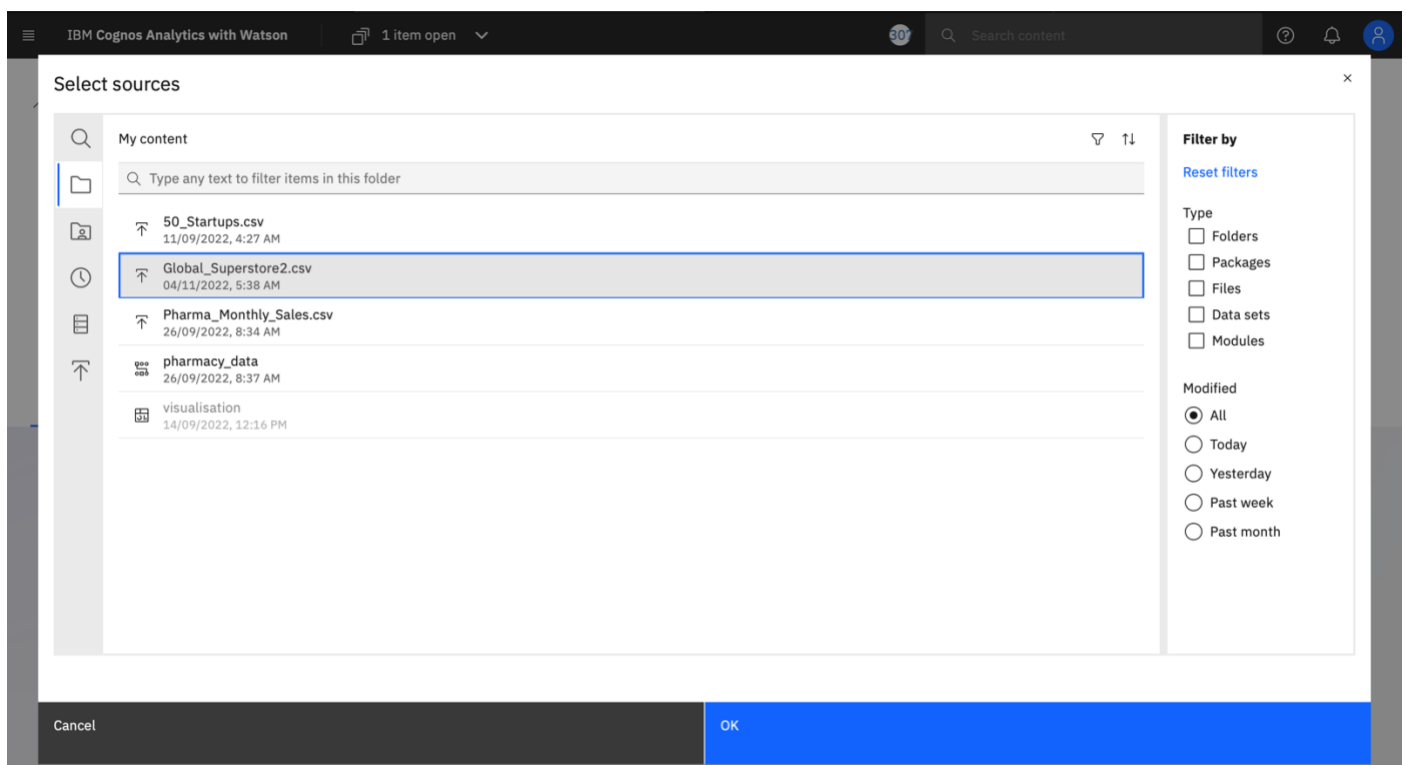
Quickly find unbiased answers by identifying trends in your data with data exploration.



### Present data

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

## 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

?

🔔

👤

🏠

🔍

↶

↷

📄

🔗

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

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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
	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	Plantron 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 the 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
22304	US
Null	APAC

## 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

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

Category

12

28879

ID-2012-28402

2012-04-19

2012-04-22

First Class

AJ-

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

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

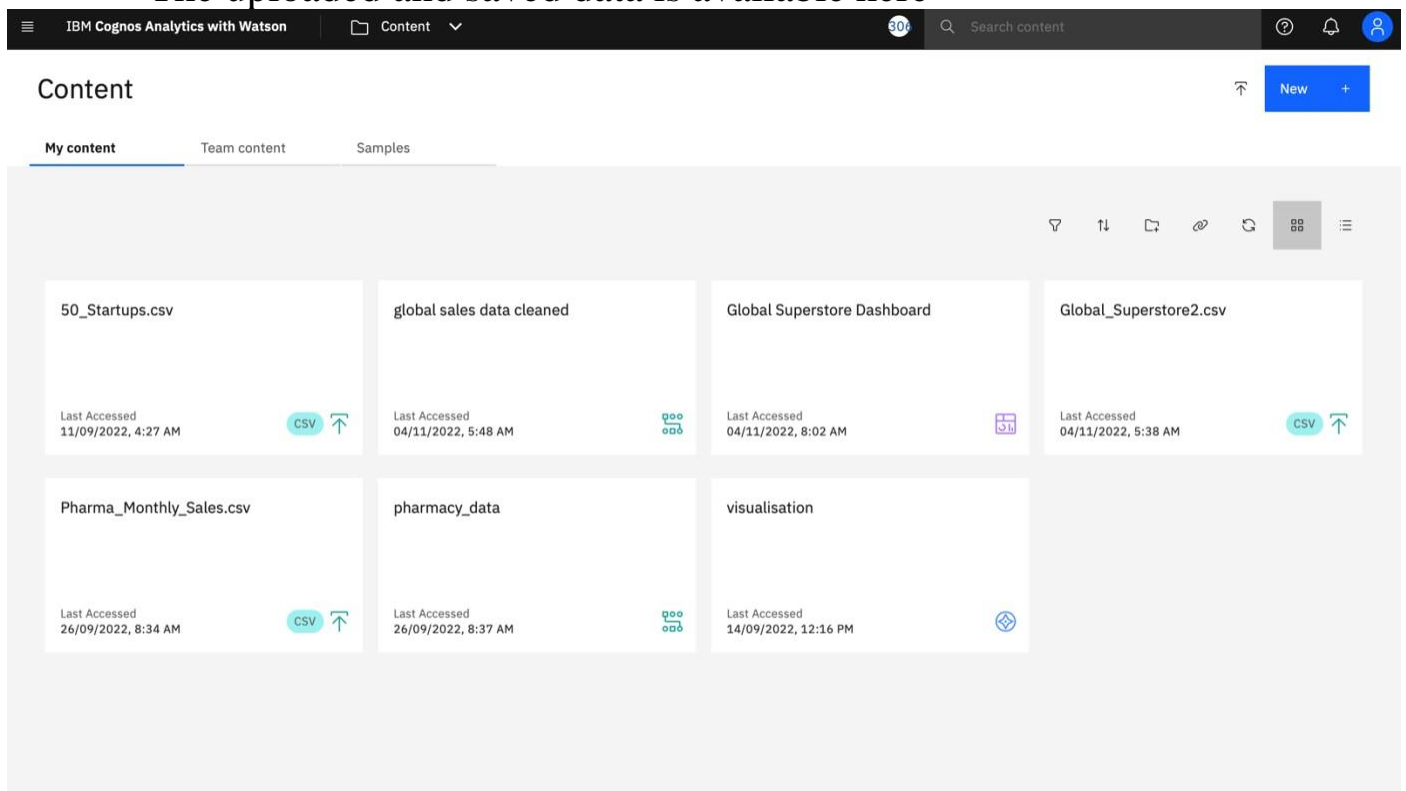
pharmacy\_data Data module 26/09/2022, 8:37 AM

visualisation Exploration 14/09/2022, 12:16 PM

Cancel Save

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

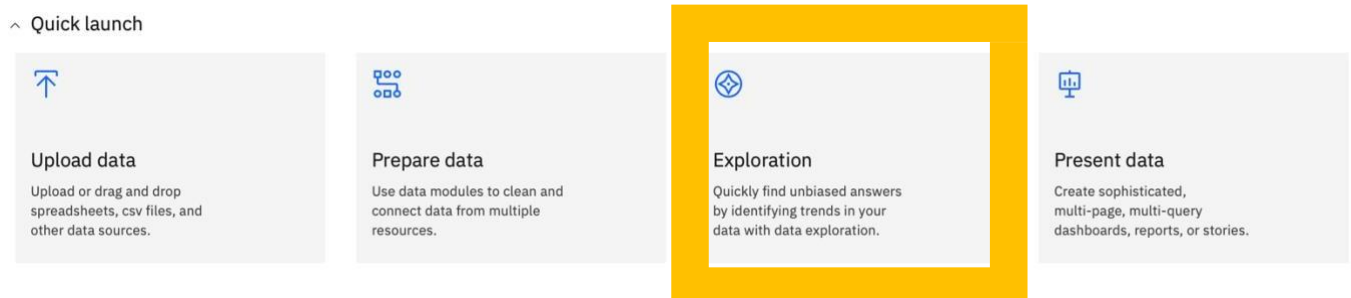
The uploaded and saved data is available here



## ☐ 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 list of data sources under the "My content" tab. The list includes:

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

The dialog box has "Cancel" and "Add" buttons at the bottom. The background interface shows a sidebar with "Quick launch" and "Upload data" options.

## 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 central area displays a relationship diagram for the "global sales data cleaned" dataset, centered on the "Quantity" node. The diagram shows connections to "Region", "Market", "Profit", "Sales", "Country", and "Shipping Cost".

On the right, the "Select a visualization" panel shows a "Quantity" card with a value of "178K". Below it, there is a "Quantity" card with a visualization of a bar chart. At the bottom, there is a "Quantity and Sales for Region regions" card with a world map visualization.

The interface includes a sidebar with "Cards" and "Data relationships" sections, and a top navigation bar with "IBM Cognos Analytics with Watson" and "New exploration" options.

## 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