

PROJECT DEVELOPMENT PHASE

DELIVERY OF SPRINT - 2

Date	14 Nov 2022
Team ID	PNT2022TMID50147
Project Name	Global Sales Data Analytics
Team Leader	Manoj Kumar.M

- **DATA PREPARATION PHASE**

1. Open IBM Cognos Dashboard

The screenshot shows the IBM Cognos Analytics dashboard. At the top is a dark header 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 flow 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 light blue background. It contains three columns: 'How-to videos' (with a 'Watch videos' link), 'Accelerator Catalog' (with a 'Browse catalog' link), and 'Learning resources' (with a 'Launch the learn pane' link). An illustration of people working together is positioned between the 'How-to videos' and 'Accelerator Catalog' columns.

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

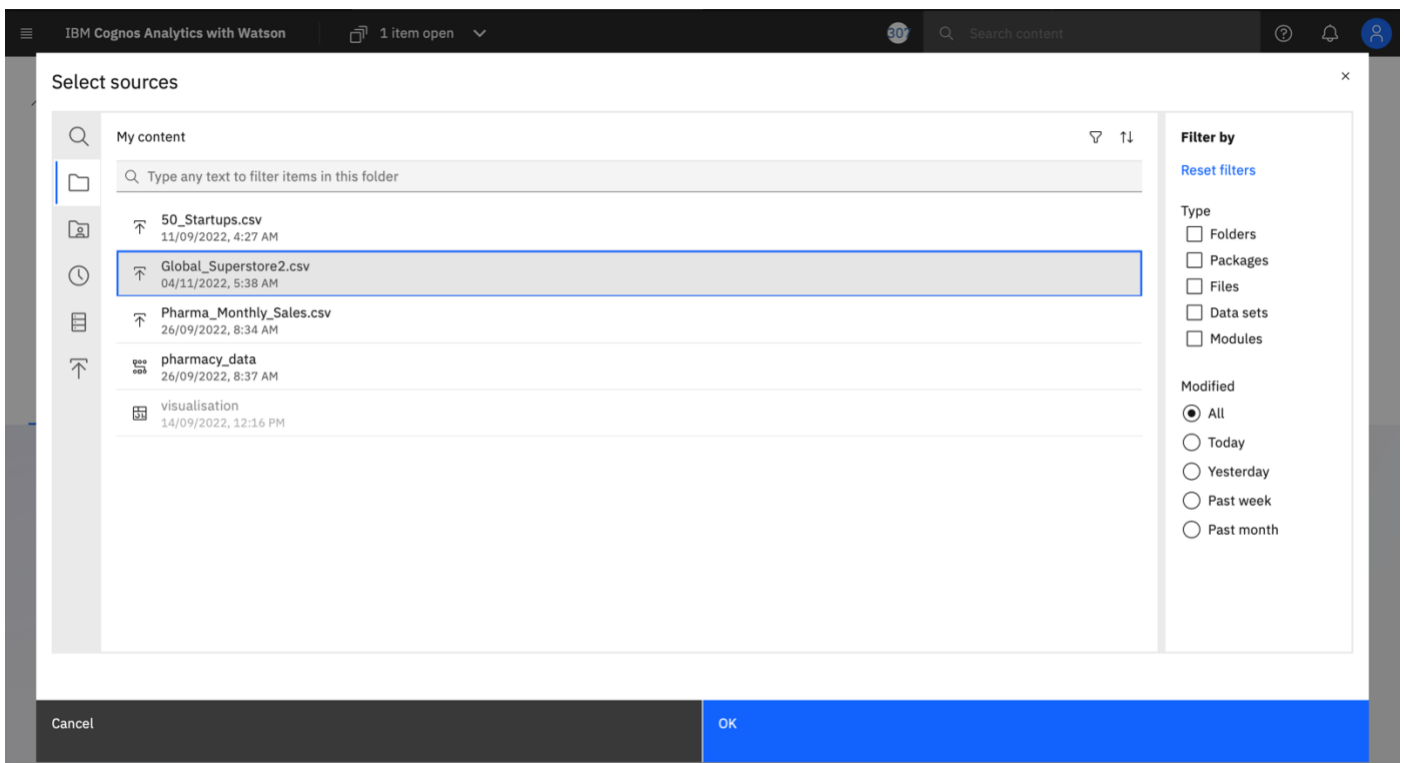
Quickly find unbiased answers by identifying trends in your data with data exploration.



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

?

🔔

👤

🏠

🔍

↩️

➡️

📄

📁

Properties

Data module

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📍 State

📍 Country

📍 Postal Code

abc Market

📍 Region

abc Product ID

abc Category

Grid

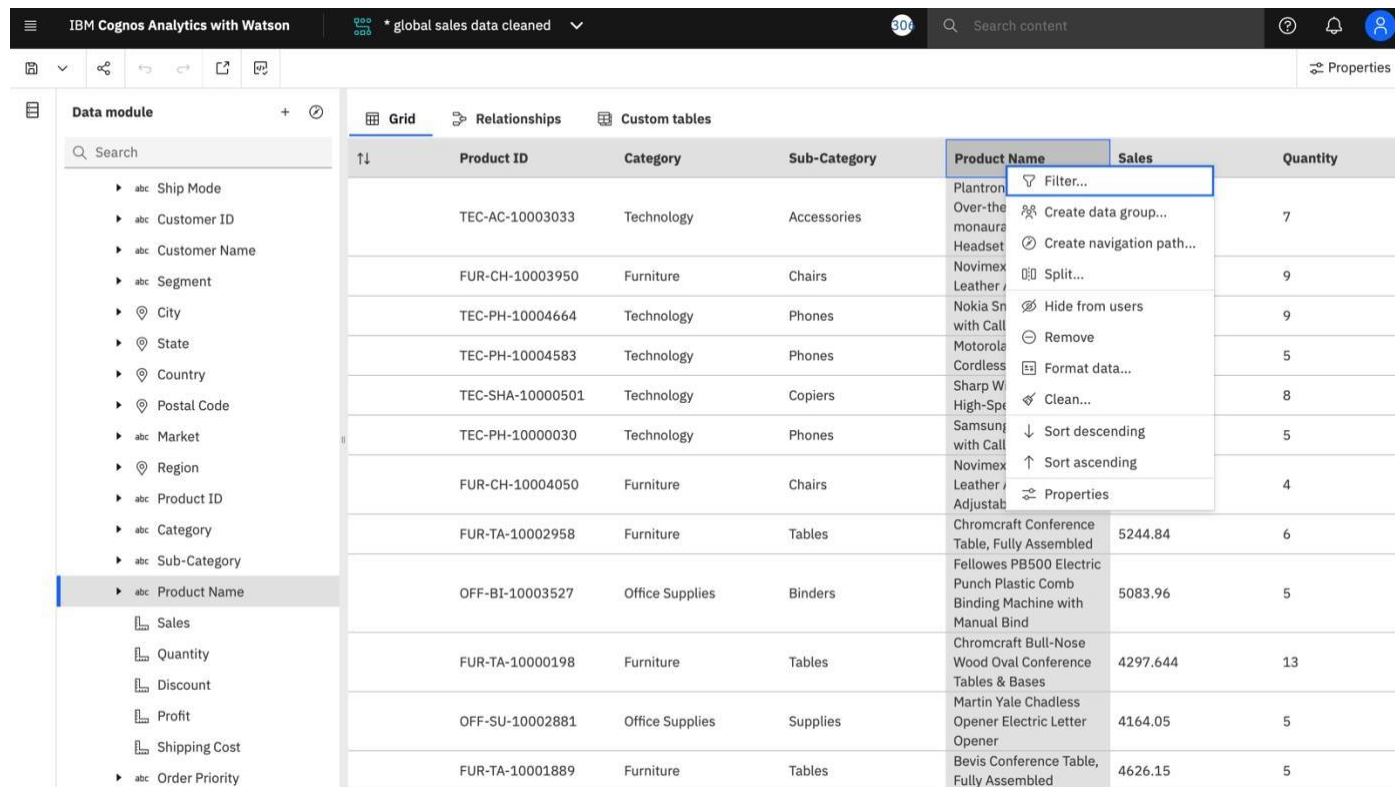
Relationships

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

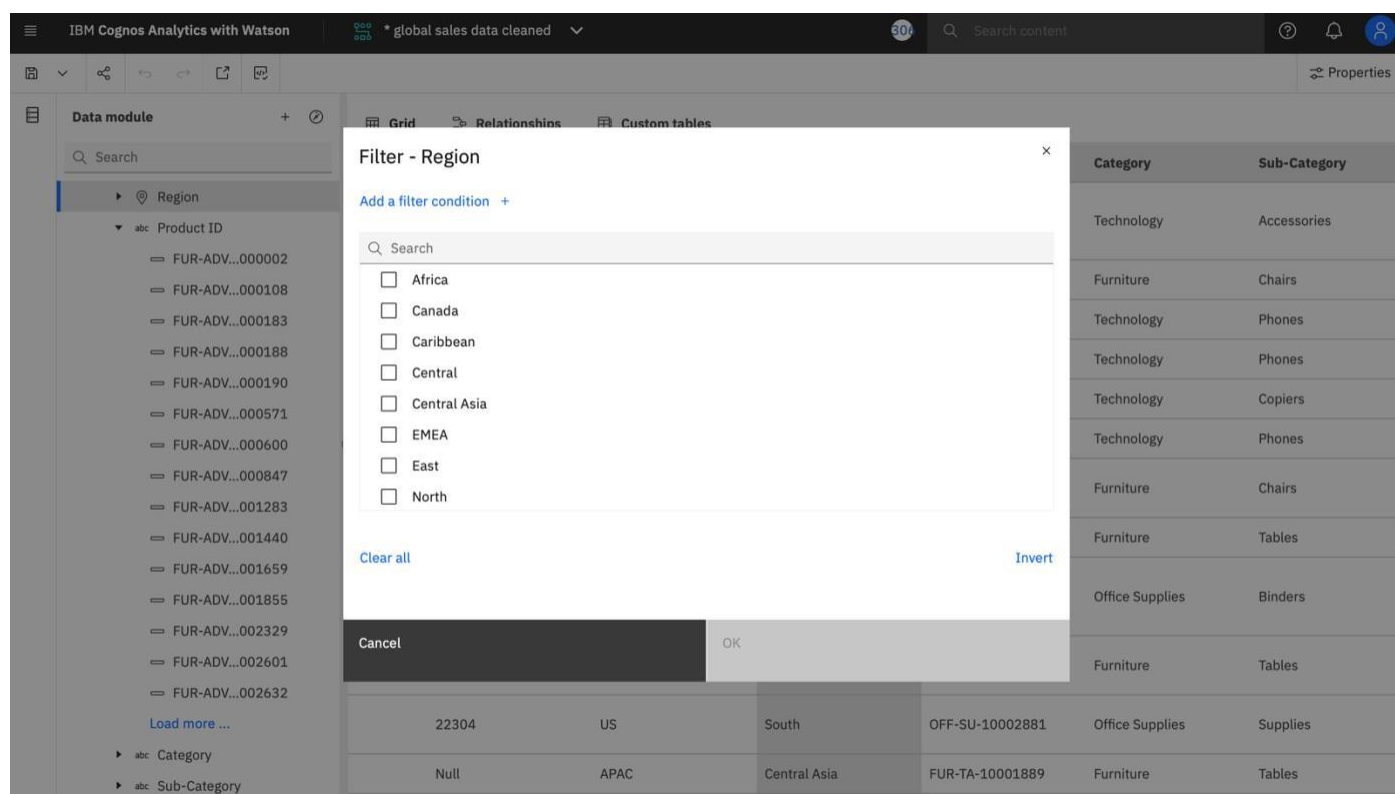
Filter the data according to the requirements and remove the unnecessary data



The screenshot shows the IBM Cognos Analytics with Watson interface. The top bar displays the application name, a dropdown menu for '* global sales data cleaned', a search bar, and user profile icons. The left sidebar contains a 'Data module' section with a search bar and a list of 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 shows a 'Grid' view of the data. A context menu is open over the 'Product Name' column, listing actions: Filter..., Create data group..., Create navigation path..., Split..., Hide from users, Remove, Format data..., Clean..., Sort descending, Sort ascending, and Properties. The data grid contains 15 rows of product information.

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 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 Cordless Phone 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 with Watson interface. The top bar is the same as the previous screenshot. The left sidebar shows the 'Data module' section with a search bar and a list of fields: Region, Product ID, Category, and Sub-Category. The 'Product ID' field is selected. The main area shows a 'Grid' view of the data. A 'Filter - Region' dialog box is open, displaying a list of regions with checkboxes: Africa, Canada, Caribbean, Central, Central Asia, EMEA, East, and North. The 'Clear all' button is visible. The dialog box also has 'Cancel' and 'OK' buttons. The data grid contains 15 rows of product information.

Product ID	Category	Sub-Category
TEC-AC-10003033	Technology	Accessories
FUR-CH-10003950	Furniture	Chairs
TEC-PH-10004664	Technology	Phones
TEC-PH-10004583	Technology	Phones
TEC-SHA-10000501	Technology	Copiers
TEC-PH-10000030	Technology	Phones
FUR-CH-10004050	Furniture	Chairs
FUR-TA-10002958	Furniture	Tables
OFF-BI-10003527	Office Supplies	Binders
FUR-TA-10000198	Furniture	Tables
OFF-SU-10002881	Office Supplies	Supplies
FUR-TA-10001889	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

1 100

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

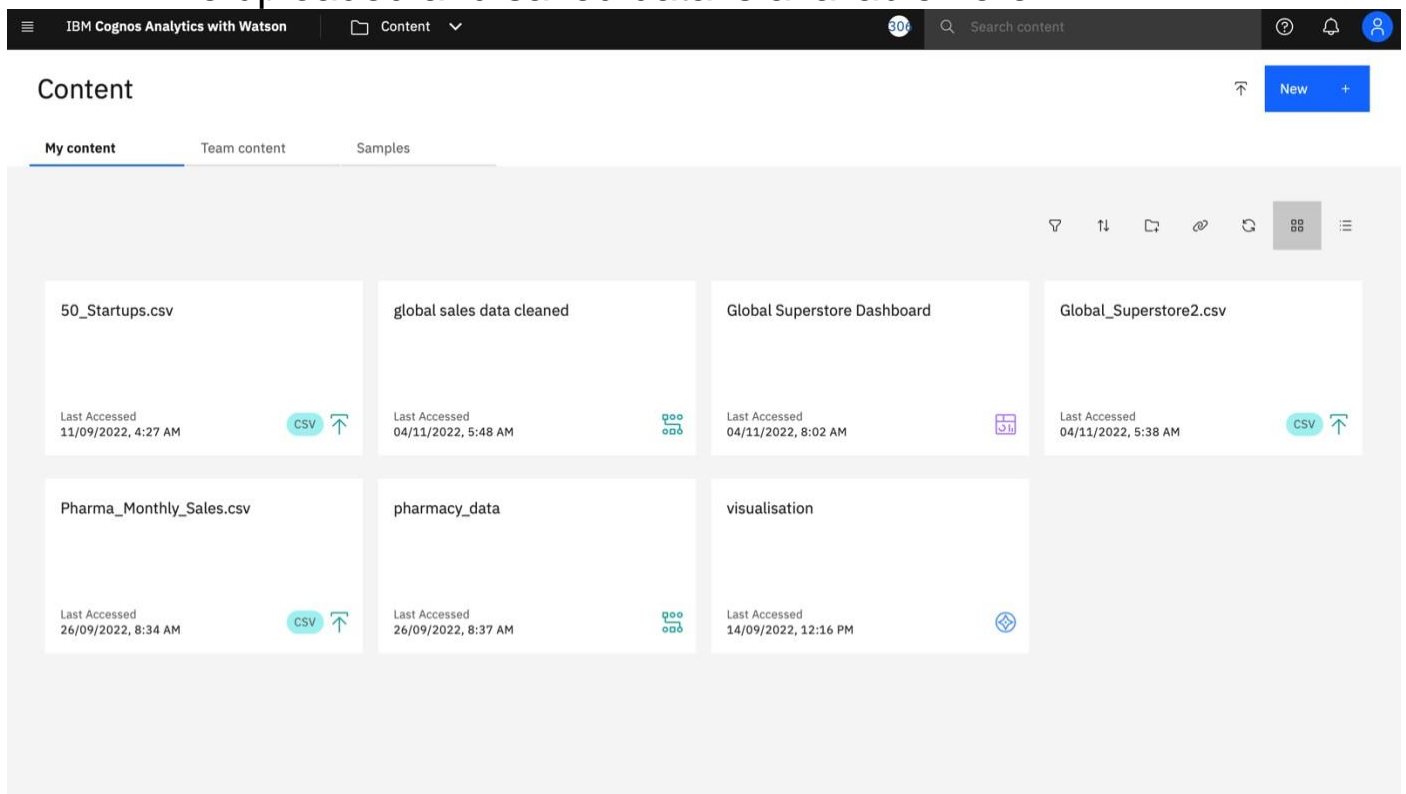
pharmacy_data Data module 26/09/2022, 8:37 AM

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

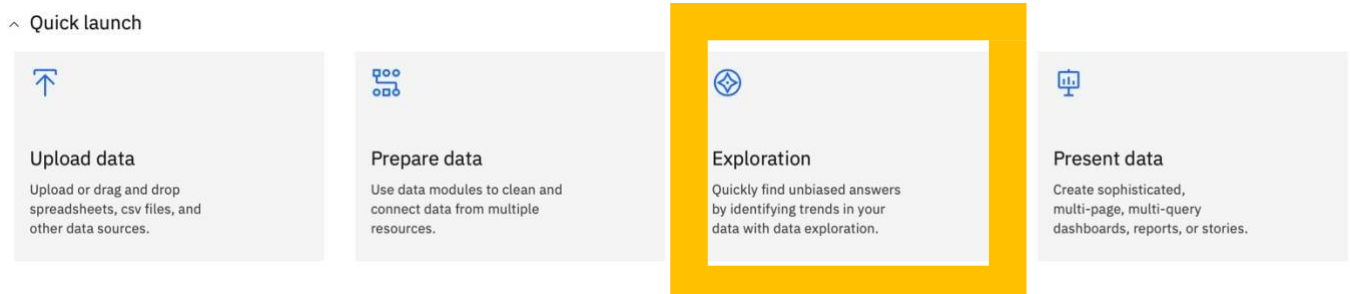


The screenshot shows the IBM Cognos Analytics interface. At the top, the header bar includes the IBM Cognos Analytics with Watson logo, a 'Content' dropdown menu, a search bar with the text 'Search content', and user profile icons. Below the header, the 'Content' page is displayed with tabs for 'My content', 'Team content', and 'Samples'. The 'My content' tab is active, showing a grid of content items. Each item card displays the name, last accessed date, and a file type icon (CSV or dashboard). The items are: '50_Startups.csv' (Last Accessed: 11/09/2022, 4:27 AM), '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), 'Pharma_Monthly_Sales.csv' (Last Accessed: 26/09/2022, 8:34 AM), 'pharmacy_data' (Last Accessed: 26/09/2022, 8:37 AM), and 'visualisation' (Last Accessed: 14/09/2022, 12:16 PM). A 'New' button is visible in the top right corner of the content area.

- DATA EXPLORATION PHASE

10. Data Exploration

Click on the Exploration option to explore the data



The screenshot shows the 'Quick launch' menu with four options: 'Upload data', 'Prepare data', 'Exploration', and 'Present data'. The 'Exploration' option is highlighted with a yellow border. Each option includes an icon, a title, and a brief description. The 'Exploration' description reads: 'Quickly find unbiased answers by identifying trends in your data with data exploration.'

Option	Icon	Description
Upload data	Upload icon	Upload or drag and drop spreadsheets, csv files, and other data sources.
Prepare data	Prepare icon	Use data modules to clean and connect data from multiple resources.
Exploration	Exploration icon	Quickly find unbiased answers by identifying trends in your data with data exploration.
Present data	Present icon	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, 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	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

Cancel | Add

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

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

Explore data relationships

global sales data cleaned | Reset to original

Quantity

Relationship diagram

10% | 100%

Select single or multiple nodes to see visualizations.

Select a visualization

Explore visualizations related to 'Quantity'

Quantity

178K

Quantity

Quantity and Sales for Region regions

13. Save the exploration

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

IBM Cognos Analytics with Watson

* New exploration

304 Search content

Cards

Data relationships

Save as

Name

New exploration

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 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

Skip