

PROJECT DEVELOPMENT PHASE

DELIVERY OF SPRINT-2

| | |
|--------------|-----------------------------|
| Date | 4 NOVEMBER 2022 |
| TEAM ID | PNT2022TMID39035 |
| PROJECT NAME | GLOBAL SALES DATA ANALYTICS |

SPRINT 2 FUNCTIONAL REQUIREMENT

- ☐ UPLOAD DATASET
- ☐ DATAPREPARATION
- ☐ DATA EXPLORATION

UPLOAD DATASET:

DOWNLOAD THE DATASET: <https://www.kaggle.com/datasets/apoorvaappz/global-super-store-dataset>

□ OPEN IBM COGNOS DASHBOARD AND CLICK THE UPLOAD DATA AND UPLOAD THE DATASET FILE

The screenshot shows the IBM Cognos Analytics with Watson dashboard. The top navigation bar includes the IBM Cognos Analytics with Watson logo, a search bar, and user profile icons. The main content area is divided into two sections: 'Quick launch' and 'Get up and running in IBM Cognos Analytics'.

Quick launch

- Upload data**: Upload or drag and drop spreadsheets, csv files, and other data sources. (This option is circled in red in the original image.)
- 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.

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.
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DATA PREPARATION:


STEP 1 : CLICK THE PREPARE DATA

 IBM Cognos Analytics with Watson 90°   


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.

Get started Recent

Get up and running in IBM Cognos Analytics

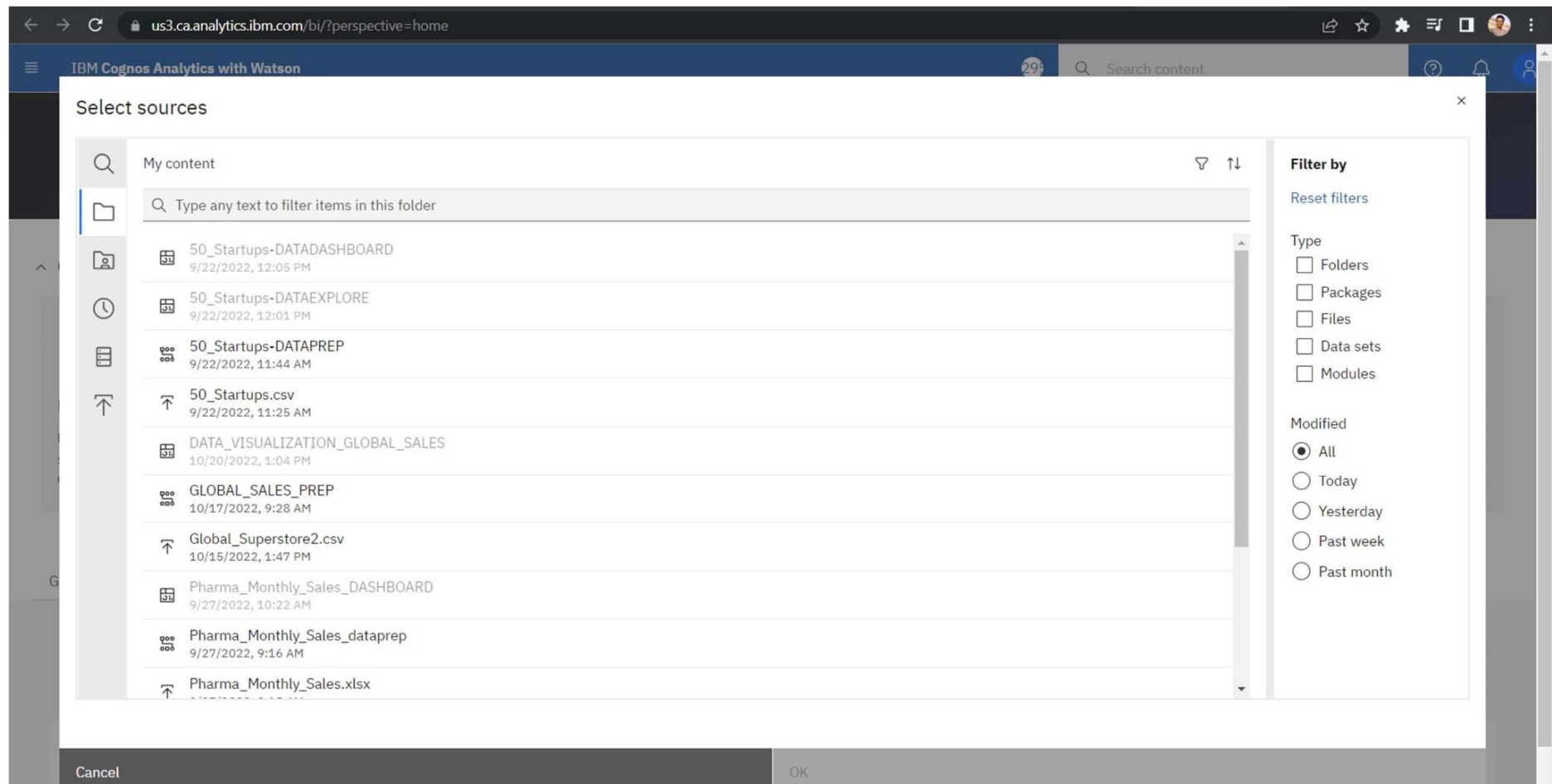
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STEP 2: SELECT THE UPLOAD DATASET FROM THE CONTENT MENU



STEP 3 : PREPARATION OF THE DATA

The screenshot displays the IBM Cognos Analytics with Watson interface. The top navigation bar includes the IBM Cognos Analytics with Watson logo, a dropdown menu for "New data module", a search bar, and user profile icons. The main workspace is divided into a left sidebar and a central area. The sidebar, titled "Data module", contains a search bar and a list of data sources under "New data module". The central area has tabs for "Grid", "Relationships", and "Custom tables". A large circular icon with a checkmark and a grid pattern is centered in the main workspace, with the text "Preview data" and instructions below it.

Data module

Search

New data module

- Navigation paths
- Global_Superstore2.csv
 - Row Id
 - Row ID
 - Order ID
 - Order Date
 - Ship Date
 - Ship Mode
 - Customer ID
 - Customer Name
 - Segment
 - City
 - State
 - Country
 - Postal Code
 - Market
 - Region
 - Product ID
 - Category

Grid Relationships Custom tables

Preview data

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

STEP 4: ONCE YOU LOAD THE DATA, WE NEED TO PREPARE THE DATA.

A. REMOVE THE NULL VALUES

B. PREPARE CALCULATIONS OF YEAR, MONTH, DAY FIELDS AND ALSO THE RELATED NAVIGATION PATH

C. CREATE A FEW MORE CALCULATIONS – TARGET SALES, MIN SALES, MAX SALES, MIDDLE RANGE SALES

The screenshot displays the IBM Cognos Analytics with Watson interface. The top navigation bar includes the IBM logo, the text "IBM Cognos Analytics with Watson", a dropdown menu for "GLOBAL_SALES_PREP", a search bar, and user profile icons. The main workspace is divided into a left sidebar and a central grid view. The sidebar, titled "Data module", contains a search bar and a list of fields: 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 "Postal Code" field is currently selected. The central grid view shows a table with the following columns: Country, Postal Code, Market, Region, Product ID, and Category. The data rows are as follows:

| Country | Postal Code | Market | Region | Product ID | Category |
|------------------------|-------------|--------|---------|------------------|-----------------|
| York United States | 10024 | US | East | TEC-AC-10003033 | Technology |
| South Wales Australia | Null | APAC | Oceania | FUR-CH-10003950 | Furniture |
| nsland Australia | Null | APAC | Oceania | TEC-PH-10004664 | Technology |
| Germany | Null | EU | Central | TEC-PH-10004583 | Technology |
| Senegal | Null | Africa | Africa | TEC-SHA-10000501 | Technology |
| South Wales Australia | Null | APAC | Oceania | TEC-PH-10000030 | Technology |
| ngton New Zealand | Null | APAC | Oceania | FUR-CH-10004050 | Furniture |
| sto New Zealand | Null | APAC | Oceania | FUR-TA-10002958 | Furniture |
| rnia United States | 95823 | US | West | OFF-BI-10003527 | Office Supplies |
| Carolina United States | 28027 | US | South | FUR-TA-10000198 | Furniture |

□ CREATE CALCULATION TO MAKE THE DATA PREPARED

The screenshot displays the IBM Cognos Analytics with Watson interface. The top navigation bar includes the application name, a search bar, and user profile icons. The main workspace is divided into three tabs: 'Grid', 'Relationships', and 'Custom tables'. The 'Grid' tab is active, showing a data module named 'Global_Superstore2.csv'. A context menu is open over this module, with the 'New' section expanded, highlighting the 'Calculation...' option. The left sidebar lists the data module's fields, including 'Row Id', 'Order ID', 'Order Date', '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' and 'Focus mode', and a 'Degrees of separation' slider set to 1. The bottom right corner contains navigation icons for search, refresh, and zoom.

IBM Cognos Analytics with Watson

* global sales data cleaned

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Search content

Properties

Data module

Search

Global_Superstore2.csv

Row Id

Row ID

abc Order ID

Order Date

Ship Date

abc Ship Mode

abc Customer ID

abc Customer Name

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

IBM Cognos Analytics with Watson

* GLOBAL_SALES_PREP

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Search content

?

Edit calculation

Name

day

Components

Expression

Q Search

Global_Sup...tore2.csv

day

month

year

Calcul... name

Row Id

Row ID

abc Order ID

Order Date

Ship Date

abc Ship Mode

1

day(Order_Date)

Validation Results

The expression is valid.

Cancel

OK

STEP 5 : SAVE THE DATASET AFTER PREPARING THE DATA

The screenshot shows the IBM Cognos Analytics interface. The top navigation bar includes the URL `us3.ca.analytics.ibm.com` and the title "IBM Cognos Analytics with Watson". The main content area displays a "Save as" dialog box. The dialog box has a "Name" field containing "GLOBAL_SALES_PREP" and a "Selected destination" of "My content". Below the destination selection, there is a table of existing content.

| Name | Type | Last Accessed |
|---------------------------------|---------------|---------------------|
| 50_Startups-DATADASHBOARD | Dashboard | 9/22/2022, 12:05 PM |
| 50_Startups-DATAEXPLORE | Exploration | 9/22/2022, 12:01 PM |
| 50_Startups-DATAPREP | Data module | 9/22/2022, 11:44 AM |
| 50_Startups.csv | Uploaded file | 9/22/2022, 11:25 AM |
| DATA_VISUALIZATION_GLOBAL_SALES | Dashboard | 10/20/2022, 1:04 PM |
| GLOBAL_SALES_PREP | Data module | 10/17/2022, 9:28 AM |

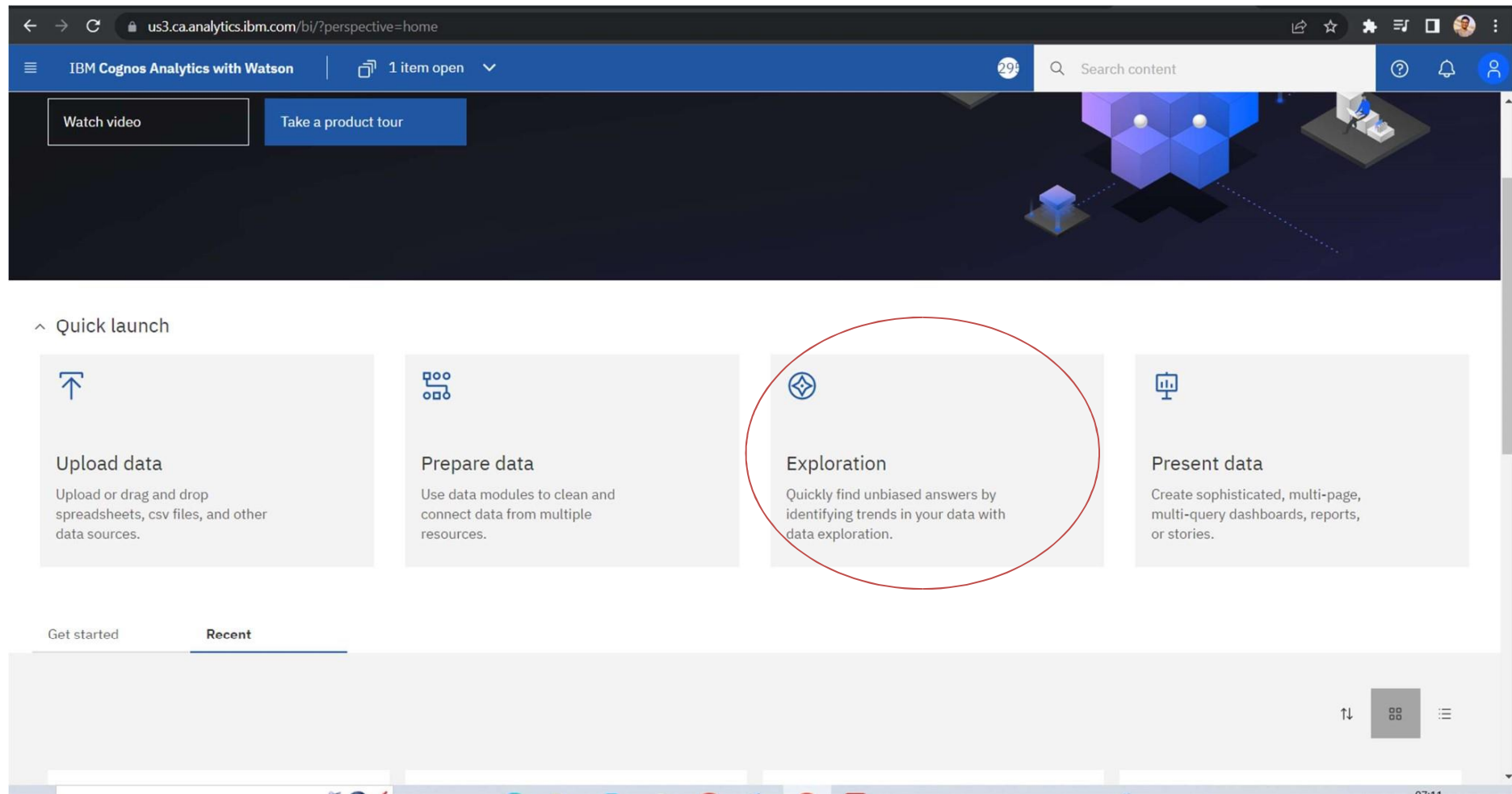
The dialog box also features a "Cancel" button and a "Save" button. In the background, a table with columns "Row ID" and "Order ID" is visible, showing data rows.

LINK FOR THE DATA EXPLORATION:

https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.my_folders%2FGLOBAL_SALES_PREP&id=iB0AF8BAE444C4605AB487916EB3BF3CA&objRef=iB0AF8BAE444C4605AB487916EB3BF3CA&tid=2818311301_106cdc168b8c493f92db250eb684e70d_sessionTemp

DATA EXPLORATION:

STEP 1: CLICK THE EXPLORATION



STEP 2 : ADD A DATA SOURCE TO EXPLORE

The screenshot shows the IBM Cognos Analytics interface with a modal dialog titled "Add a data source to explore". The dialog has two tabs: "My content" (selected) and "Team content". Below the tabs is a table listing various data sources. The table has three columns: "Name", "Type", and "Last Accessed". The data sources listed are:

| Name | Type | Last Accessed |
|-------------------------------|---------------|---------------------|
| 50_Startups-DATAPREP | Data module | 9/22/2022, 11:44 AM |
| 50_Startups.csv | Uploaded file | 9/22/2022, 11:25 AM |
| GLOBAL_SALES_PREP | Data module | 11/12/2022, 7:38 PM |
| Global_Superstore2.csv | Uploaded file | 10/15/2022, 1:47 PM |
| Pharma_Monthly_Sales_dataprep | Data module | 9/27/2022, 9:16 AM |
| Pharma_Monthly_Sales.xlsx | Uploaded file | 9/27/2022, 9:15 AM |
| Sample - Superstore.xls | Uploaded file | 9/19/2022, 11:37 AM |
| samplestore_dataprep | Data module | 9/19/2022, 11:50 AM |

At the bottom of the dialog are two buttons: "Cancel" and "Add". The background interface shows the "Quick launch" section with an "Upload data" button and a "Recent" tab.

STEP 3 : SELECT THE NEEDED METRIC TO BE EXPLORED

The screenshot displays the IBM Cognos Analytics with Watson web application. The browser address bar shows the URL: `us3.ca.analytics.ibm.com/bi/?perspective=explore&id=explore_694abcd8-766b-4bf1-b750-fa6e0a0952e5&options%5BdisableGlassPrefetch%5D=true&options%5Bcollections%5D%5Bca...`. The application header includes the title "IBM Cognos Analytics with Watson", a "New exploration" button, a user profile icon, and a search bar labeled "Search content".

The main interface is divided into two sections. On the left, a sidebar titled "Cards" contains a "Data relationships" icon and a diagram of a central node connected to four peripheral nodes. To the right of the diagram are three empty rectangular boxes. The main content area is titled "Select a starting point" and includes a "Skip" button. Below the title, it states: "Every exploration includes a data relationships card." and "Start with any column. You can always change it later." A search input field prompts the user to "Enter data column. Not sure? Try Profit, Quantity". Below this, a section titled "Try starting with one of these..." offers five buttons: "Profit", "Quantity", "Discount", "Sales", and "Shipping Cost".

STEP 4 : EXPLORE THE DATA RELATIONSHIPS

IBM Cognos Analytics with Watson | *samplestore ... ep_dataexplore 294 Search content

Cards

Sales by Region...ales by Region

Average: 574,300

1

Data relationships

Explore data relationships

samplestore_dataprep

Reset to original

Q Sales x Edit diagram

Category

Sub-Category

Quantity

Discount

Profit

Sales

Relationship diagram ①

10% 100%

Select a visualization

Explore visualizations related to 'Sales'

Sales

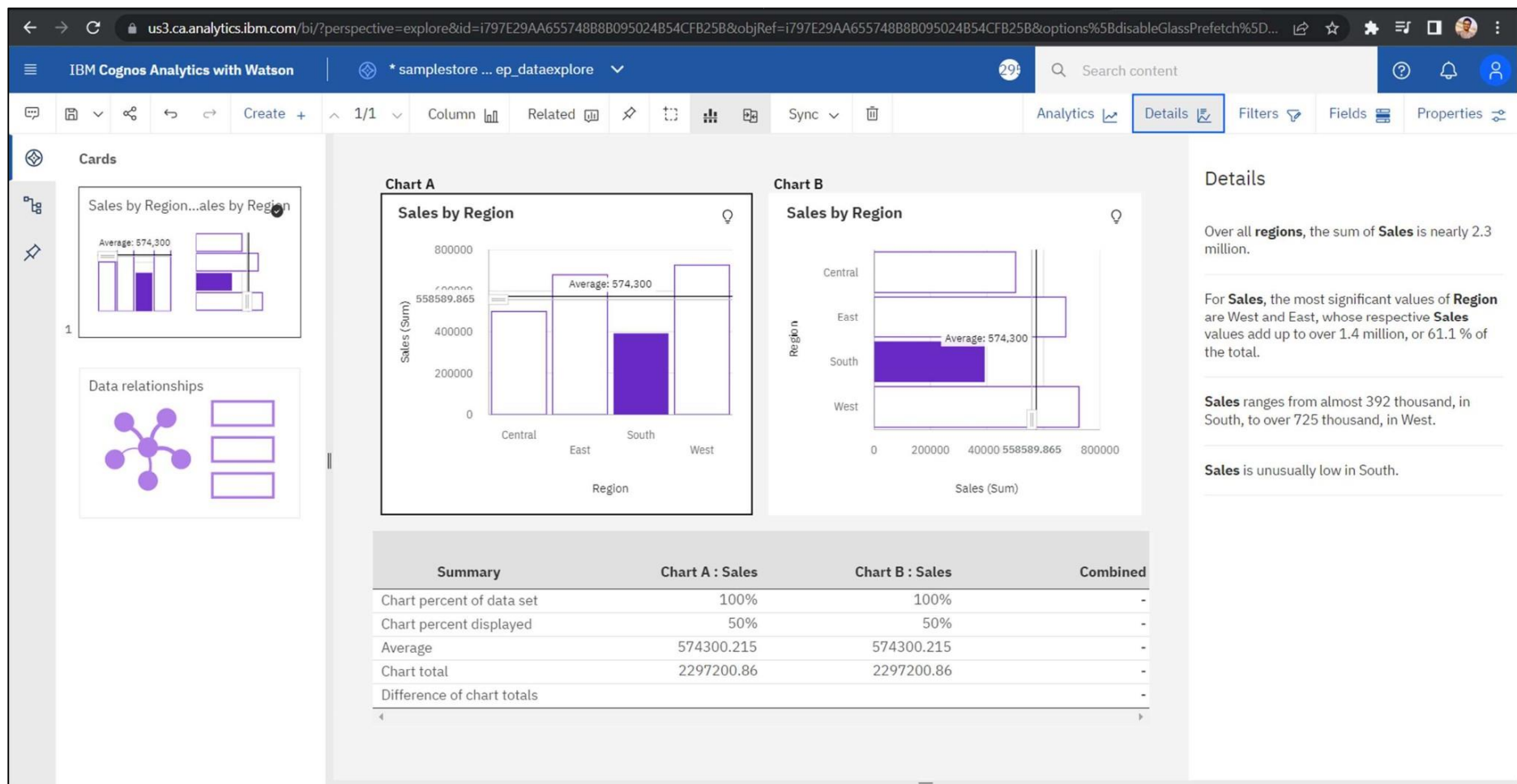
Add +

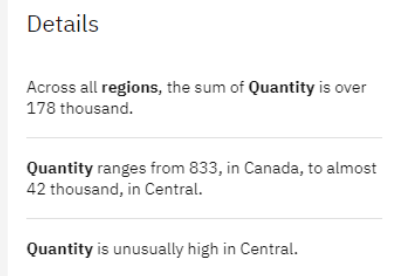
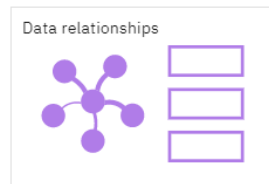
Sales

Add +

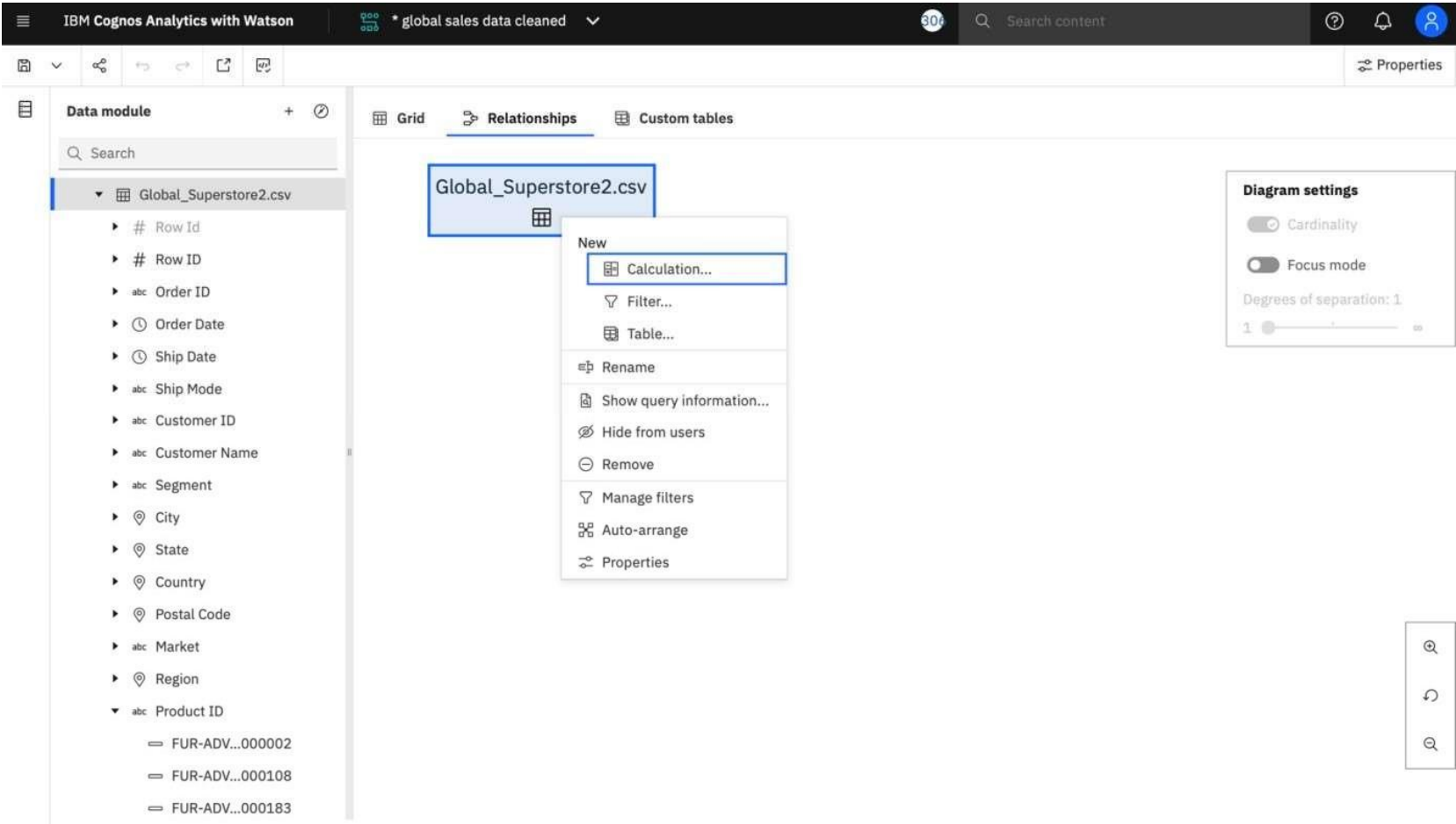
Profit and Sales for State regions

The screenshot displays the IBM Cognos Analytics interface. The top navigation bar includes the IBM Cognos Analytics with Watson logo, a breadcrumb trail for 'samplestore ... ep_dataexplore', a page number '294', and a search bar. Below the navigation bar is a toolbar with icons for chat, save, share, undo, redo, and a 'Create' button. The main content area is divided into three panels. The left panel, titled 'Cards', contains two cards: 'Sales by Region...ales by Region' which shows a bar chart with an average value of 574,300, and 'Data relationships' which shows a hub-and-spoke diagram. The central panel, titled 'Explore data relationships', shows a hub-and-spoke diagram with 'Sales' at the center, connected to 'Category', 'Sub-Category', 'Quantity', 'Discount', and 'Profit'. The right panel, titled 'Select a visualization', lists related visualizations: 'Sales', 'Sales', and 'Profit and Sales for State regions', each with an 'Add +' button. A world map icon is visible at the bottom of the right panel.





STEP 5 :SAVE THE EXPLORATION



LINK FOR THE DATA EXPLORATION:

https://us3.ca.analytics.ibm.com/bi/?perspective=explore&pathRef=.my_folders%2Fsamplestore_dataprep_dataexplore&subView=model000001846eb0ab0d_00000004