

PROJECT DEVELOPMENT PHASE

DELIVERY OF SPRINT-2

| | |
|--------------|-----------------------------|
| Date | 4 NOVEMBER 2022 |
| TEAM ID | PNT2022TMID12427 |
| PROJECT NAME | GLOBAL SALES DATA ANALYTICS |

SPRINT 2 FUNCTIONAL REQUIREMENT

☐ UPLOAD DATASET

☐ DATA

PREPARATION ☐

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

UPLOAD DATA:

us1.ca.analytics.ibm.com/bi/?perspective=home

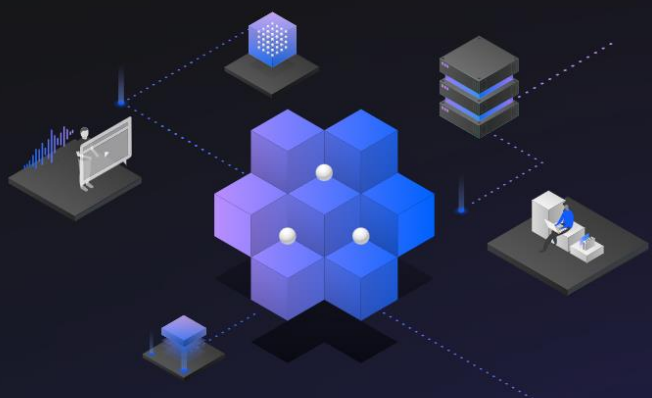
IBM Cognos Analytics with Watson

27 Search content


Hello. Welcome to Cognos Analytics with Watson.

You can get started right away by taking a look at our introduction video, product tour and Getting Started tab.

Watch video Take a product tour




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.

DATA PREPARATION:

← → ↺ 🏠 🔒 us1.ca.analytics.ibm.com/bi/?perspective=home

🔍 Search content

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🔍 Search content

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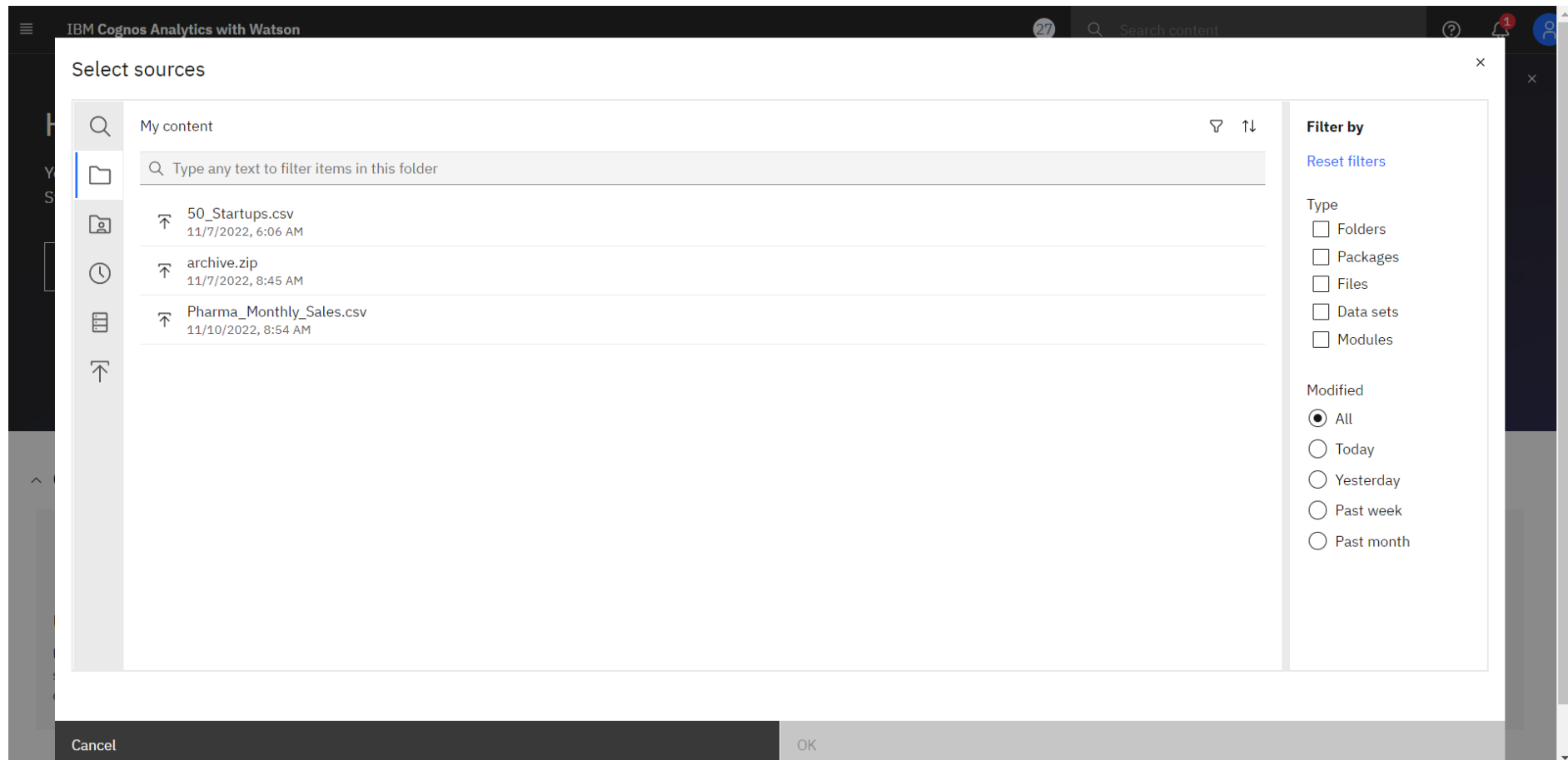
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STEP 2: SELECT THE UPLOAD DATASET FROM THE CONTENT MENU



STEP 3 : PREPARATION OF THE DATA

The screenshot displays the IBM Cognos Analytics with Watson interface. The top navigation bar includes the product name, a dropdown for 'New data module', a search bar, and user profile icons. The left sidebar, titled 'Data module', contains a search bar and a list of items under 'New data module'. The main area shows three tabs: 'Grid', 'Relationships', and 'Custom tables'. A large circular icon with a checkmark and a data table is centered in the main area, with the text 'Preview data' and instructions below it.

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.

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

IBM Cognos Analytics with Watson

GLOBAL_SALES_PREP

29

Search content

?

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📄

📄

Properties

Data module

+

🕒

🔍 Search

▶ abc Customer Name

▶ abc Segment

▶ 📍 City

▶ 📍 State

▶ 📍 Country

▶ 📍 Postal Code

▶ abc Market

▶ 📍 Region

▶ abc Product ID

▶ abc Category

▶ abc Sub-Category

▶ abc Product Name

▶ 📊 Sales

▶ 📊 Quantity

▶ 📊 Discount

▶ 📊 Profit

▶ 📊 Shipping Cost

▶ abc Order Priority

📊 Grid

🔗 Relationships

📄 Custom tables

| ↕ | 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 |
| i | 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 |
| i Carolina | United States | 28027 | US | South | FUR-TA-10000198 | Furniture |

□ CREATE CALCULATION TO MAKE DATEPREPRED

The screenshot displays the IBM Cognos Analytics with Watson interface. The top navigation bar includes the application name, a breadcrumb trail for '* global sales data cleaned', a user profile icon, and a search bar. The main workspace is divided into three tabs: 'Grid', 'Relationships', and 'Custom tables'. The 'Data module' panel on the left lists the fields of the 'Global_Superstore2.csv' dataset, 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 'Global_Superstore2.csv' module is highlighted in the center workspace. A context menu is open over this module, showing options such as 'New' (with sub-options 'Calculation...', 'Filter...', and 'Table...'), 'Rename', 'Show query information...', 'Hide from users', 'Remove', 'Manage filters', 'Auto-arrange', and 'Properties'. The 'Calculation...' option is selected. On the right, the 'Diagram settings' panel shows 'Cardinality' and 'Focus mode' toggles, and a 'Degrees of separation' slider set to 1. A vertical toolbar on the far right contains icons for search, refresh, and zoom.

X

day

▶ abc Ship Mode

✔ The expression is valid.

STEP 5 : SAVE THE DATASET AFTER PREPARING THE DATA

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:Explore

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STEP 2 : ADD A DATA SOURCE TO EXPLORE

The screenshot shows the IBM Cognos Analytics with Watson interface. A modal dialog titled "Add a data source to explore" is open, displaying a list of data sources under the "My content" tab. The list includes data modules and uploaded files. The background interface shows a sidebar with "Quick launch" and "Upload data" sections, and a top navigation bar with "1 item open" and a search bar.

Add a data source to explore

My content | Team content

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

Cancel Add

STEP 3 : SELECT THE NEEDED METRIC TO BE EXPLORED

IBM Cognos Analytics with Watson

* New exploration

27

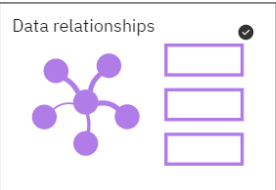
Search content

1

Create +

Cards

Data relationships



Select a starting point

Skip

Every exploration includes a data relationships card.

Start with any column. You can always change it later.

Q

Enter data column. Not sure? Try Discount, Profit

Try starting with one of these...

Discount

Profit

Discount

Sales

Profit

Sales

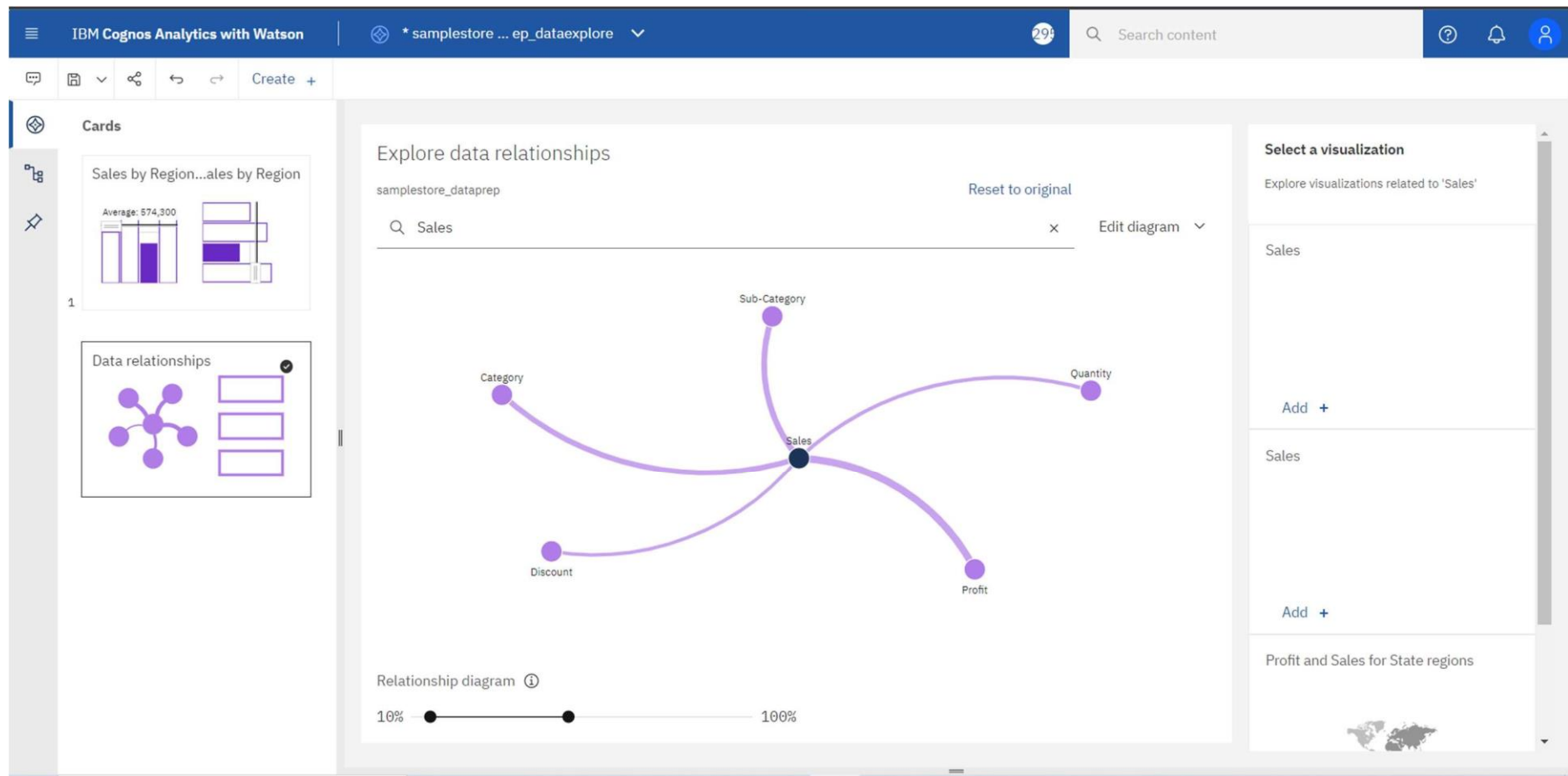
Quantity

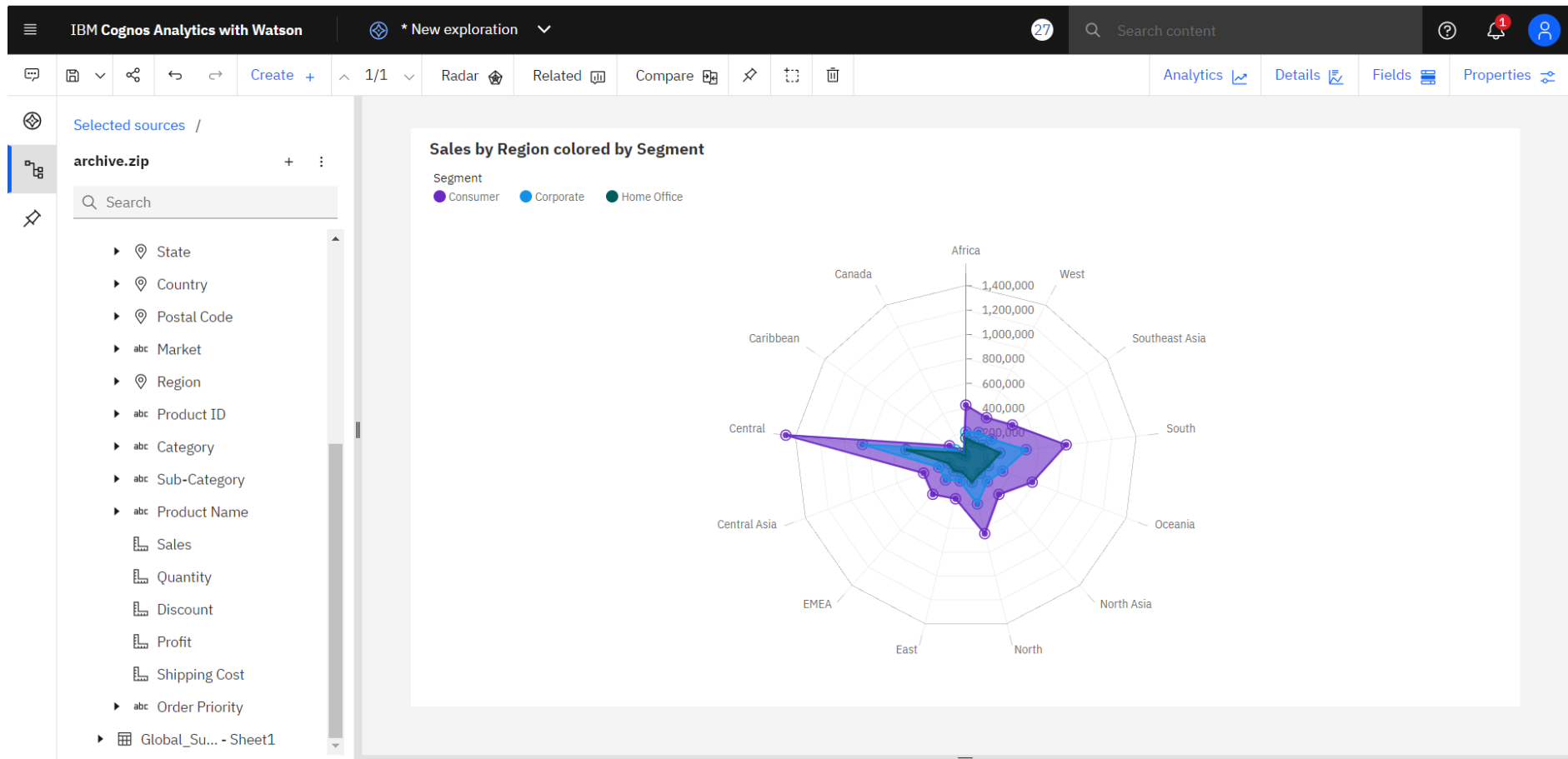
Quantity

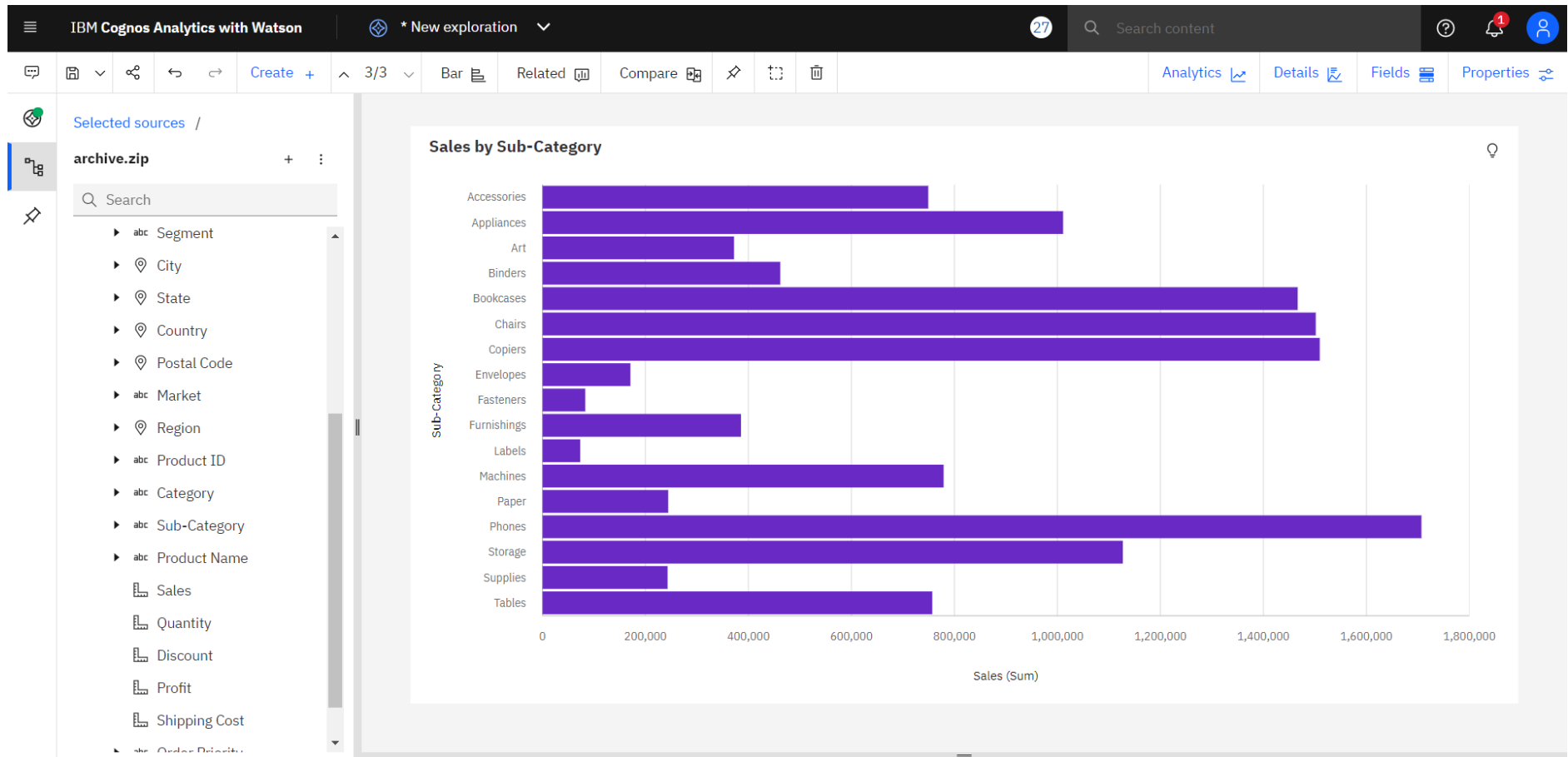
Shipping Cost

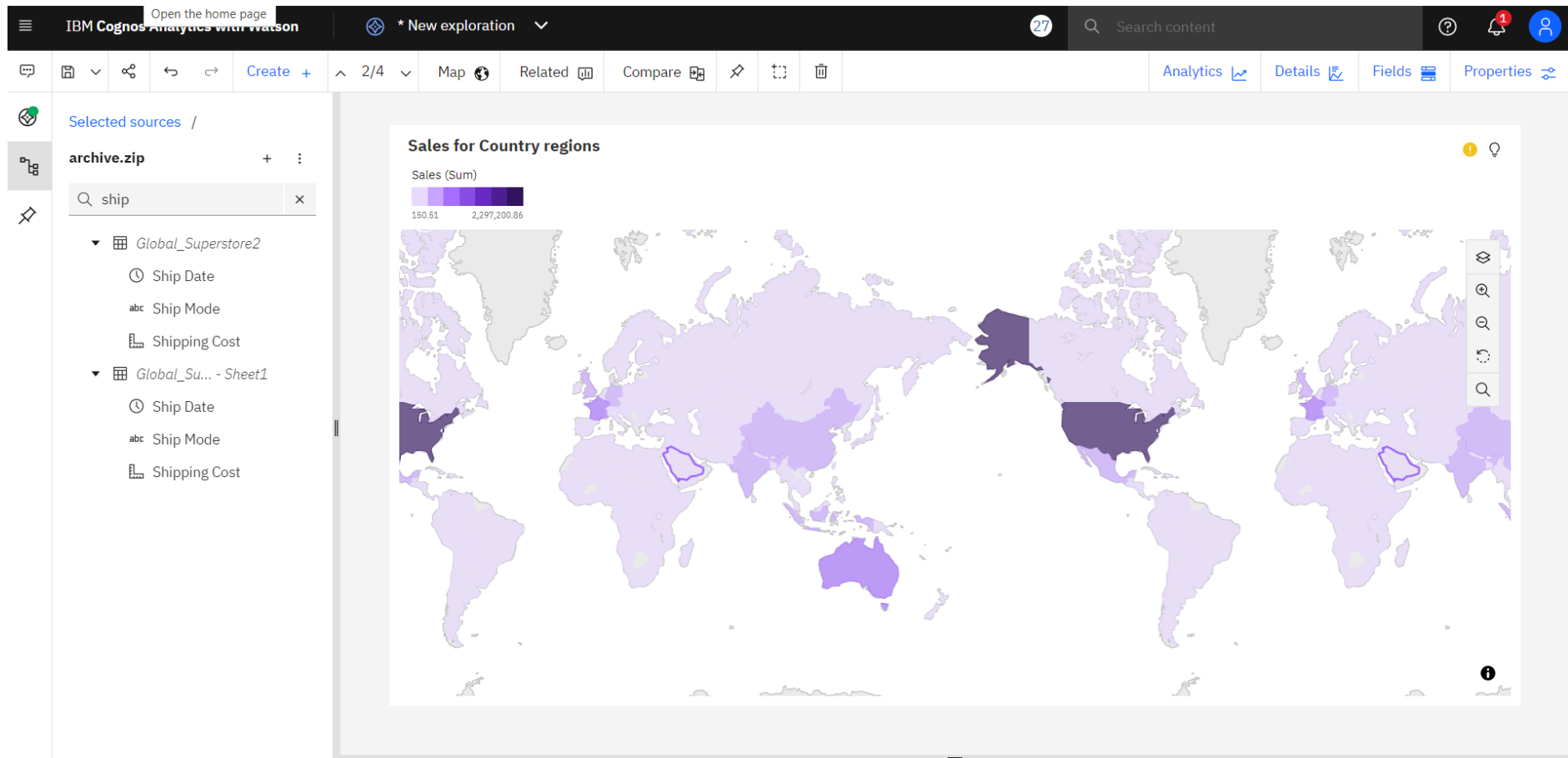
Shipping Cost

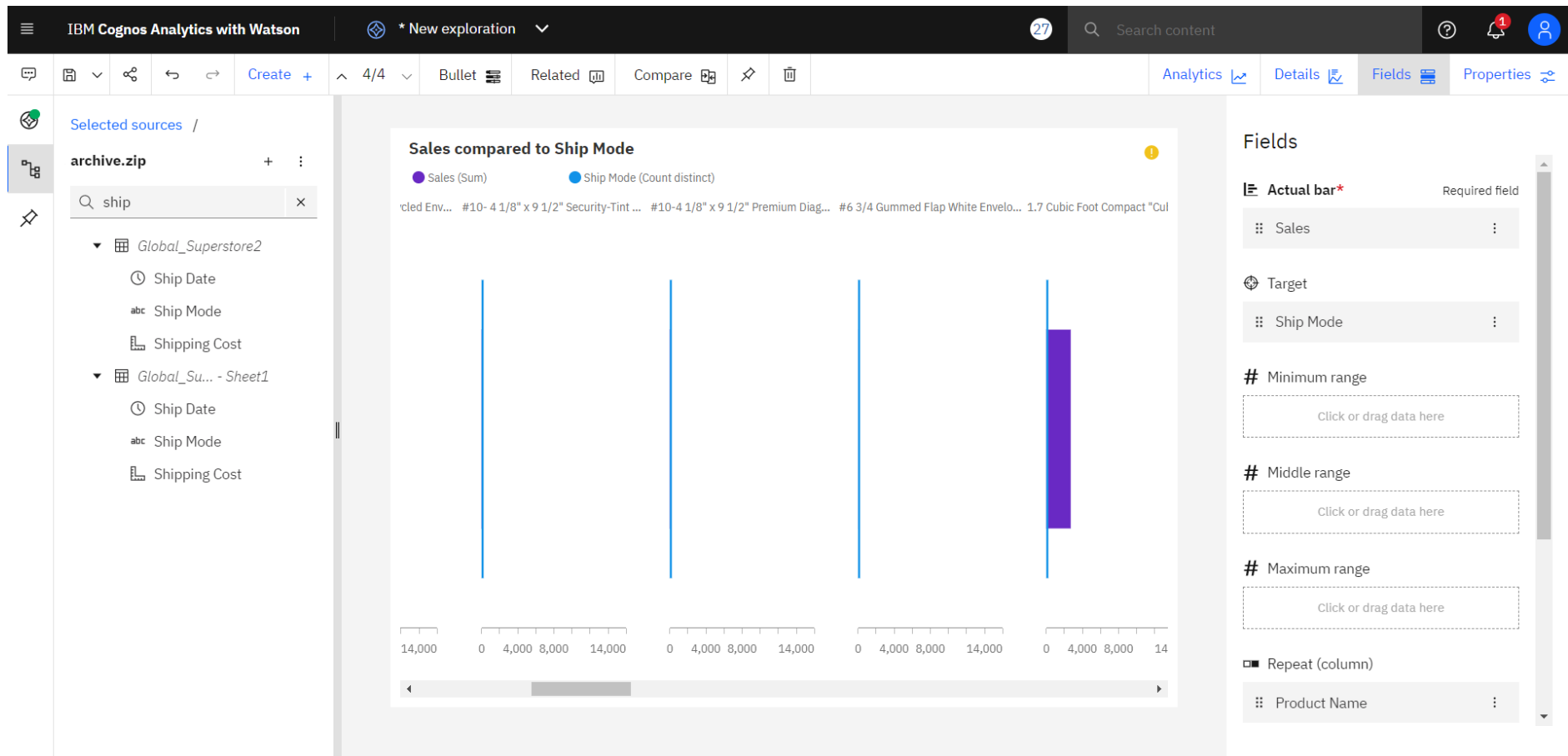
STEP 4 : EXPLORE THE DATA RELATIONSHIPS











Sales compared to Ship Mode

Sales (Sum)

Ship Mode (Count distinct)

Global_Superstore2

Global_Su... - Sheet1

Ship Date

Ship Mode

Shipping Cost

Ship Date

Ship Mode

Shipping Cost

Actual bar*

Sales

Target

Ship Mode

Minimum range

Middle range

Maximum range

Repeat (column)

Product Name

Sales compared to Ship Mode

Sales (Sum)

Ship Mode (Count distinct)

Global_Superstore2

Global_Su... - Sheet1

Ship Date

Ship Mode

Shipping Cost

Ship Date

Ship Mode

Shipping Cost

Actual bar*

Sales

Target

Ship Mode

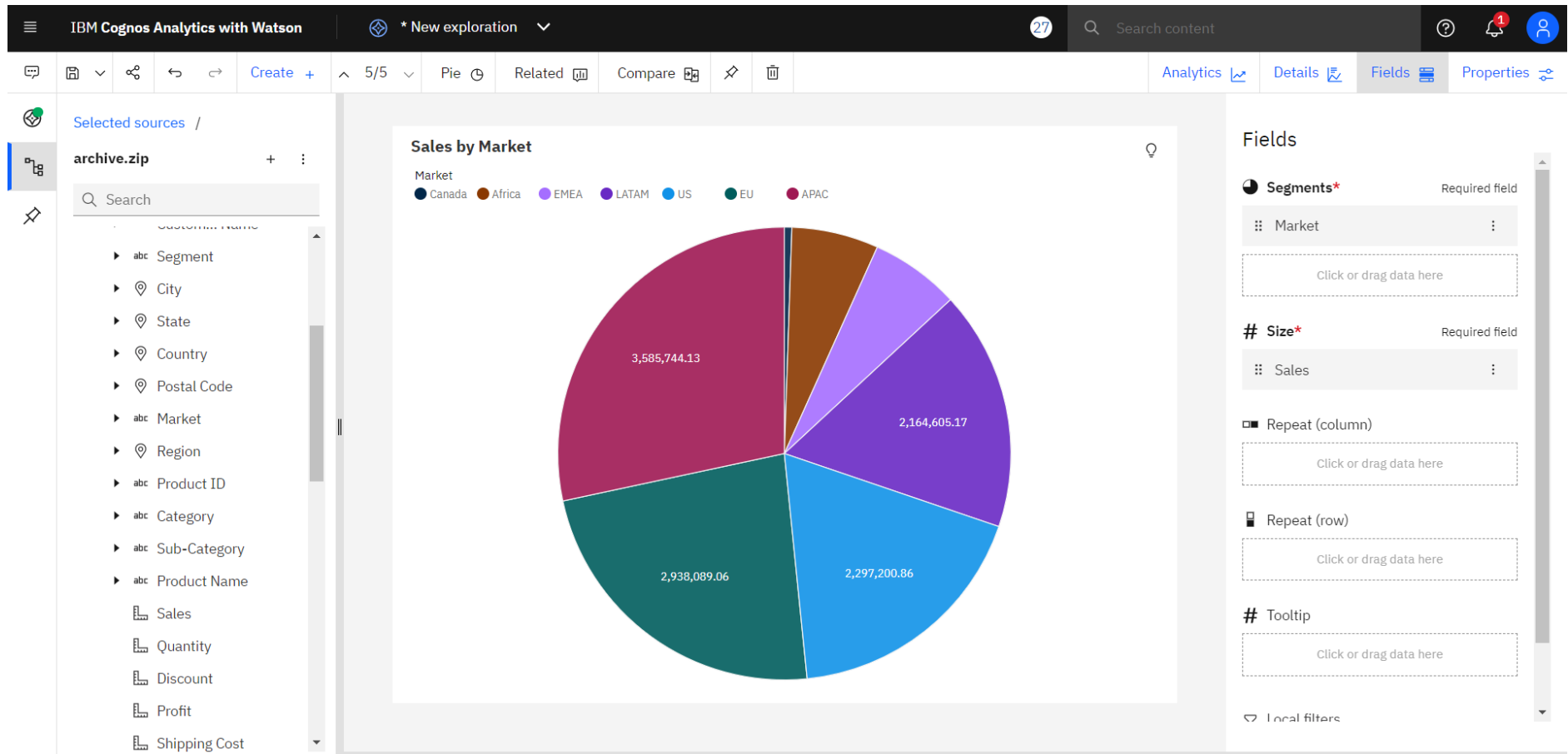
Minimum range

Middle range

Maximum range

Repeat (column)

Product Name



IBM Cognos Analytics with Watson

* New exploration

27

Search content

?

1

Maintenance: Scheduled maintenance completed. Click More Info for details and to subscribe to future eventsDismissMore info

1/1

Create

Analytics

Details

Fields

Properties

Cards

1

Data relationships

Choose visualization type

Bar

Bullet

Column

Heat map

Line and column

Marimekko

Radar

Radial

Stacked bar

Stacked column

Word cloud

Parts to whole

Hierarchy bubble

Packed bubble

Pie

Tree map

Trend

Area

Box plot

Line

Line and column

Point

Radial

Waterfall

Relationships

Bubble

Heat map

Network

Scatter

Tables and summary

Crosstab

List

Summary

Table

Advanced analytics

Decision tree

Driver analysis

Spiral

Sunburst

Geospatial

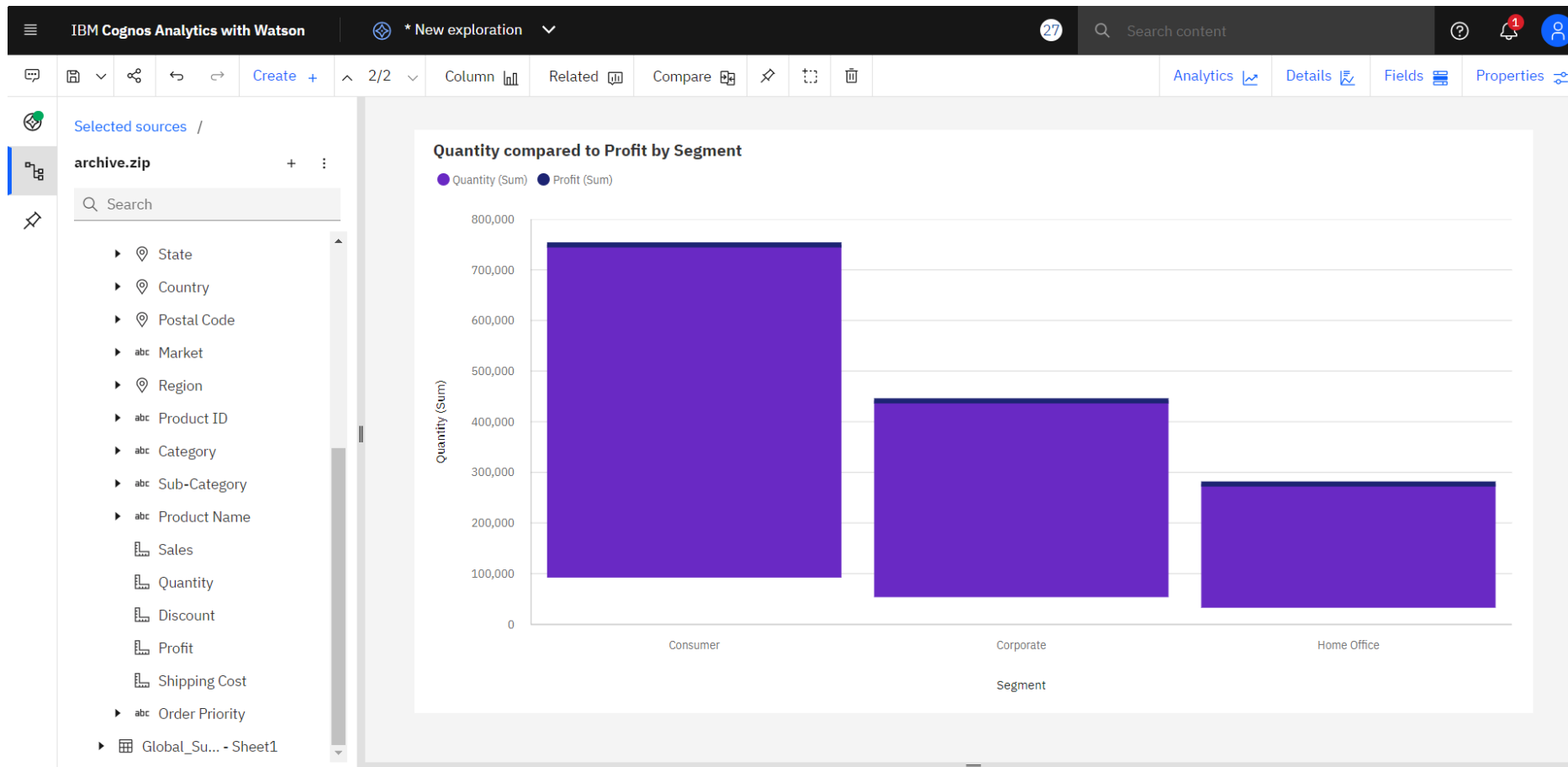
Legacy map

Map

Other

Filter dropdown

KPI



STEP 5 :SAVE THE EXPLORATION

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 search bar with the text "Search content", and a user profile icon. The main workspace is divided into three tabs: "Grid", "Relationships", and "Custom tables". The "Relationships" tab is active, showing a diagram with a node labeled "Global_Superstore2.csv". A context menu is open over this node, listing options: "New", "Calculation...", "Filter...", "Table...", "Rename", "Show query information...", "Hide from users", "Remove", "Manage filters", "Auto-arrange", and "Properties". The "New" option is highlighted. On the left, the "Data module" panel shows a search bar and a list of fields for "Global_Superstore2.csv", 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". On the right, the "Diagram settings" panel is visible, showing options for "Cardinality" and "Focus mode", and a "Degrees of separation" slider set to 1. A vertical toolbar on the far right contains icons for search, undo, and redo.

LINK FOR THE DATA EXPLORATION:

https://us3.ca.analytics.ibm.com/bi/?perspective=explore&pathRef=.my_folders%2Fsamplestore_dataaprep_dataexplore&subView=model0000001846eb0ab0d_000000004