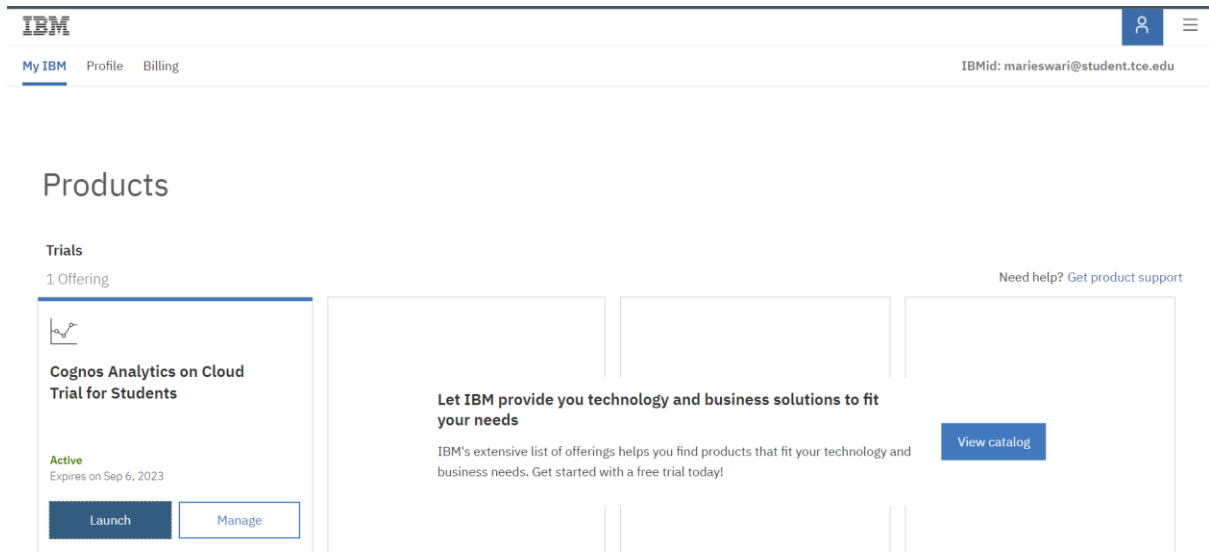


Assignment - 1

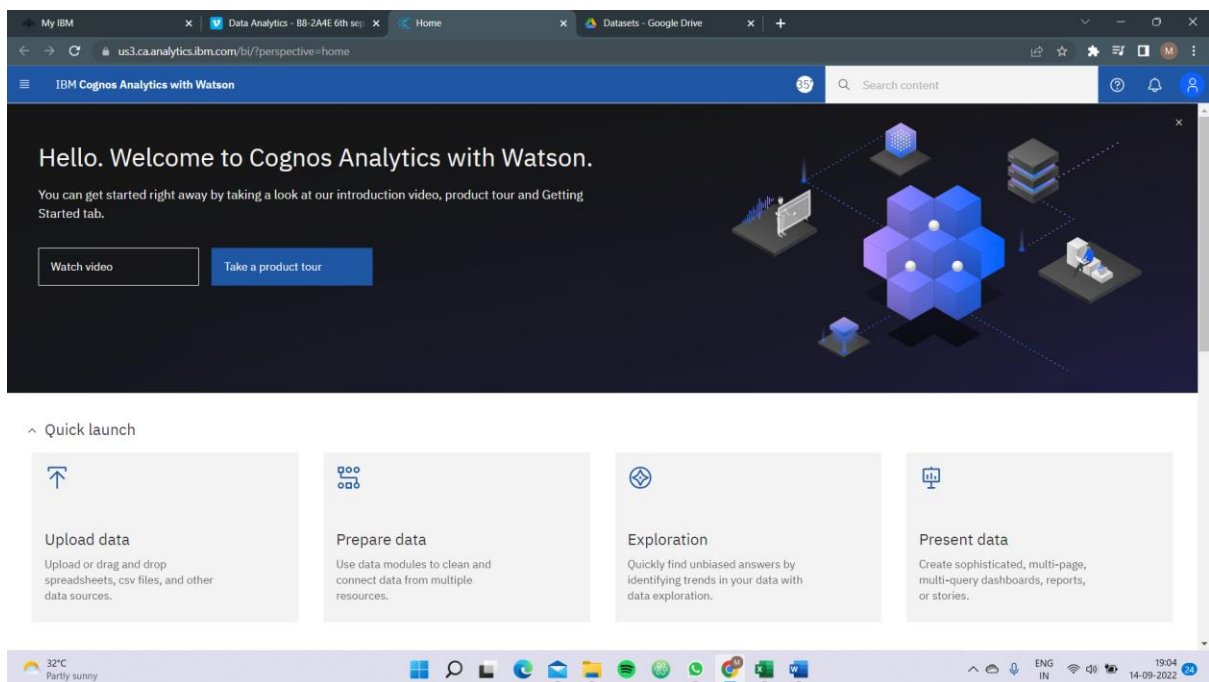
The case of 50 Start-up's

Dataset: [50-Startup-Dataset](#)

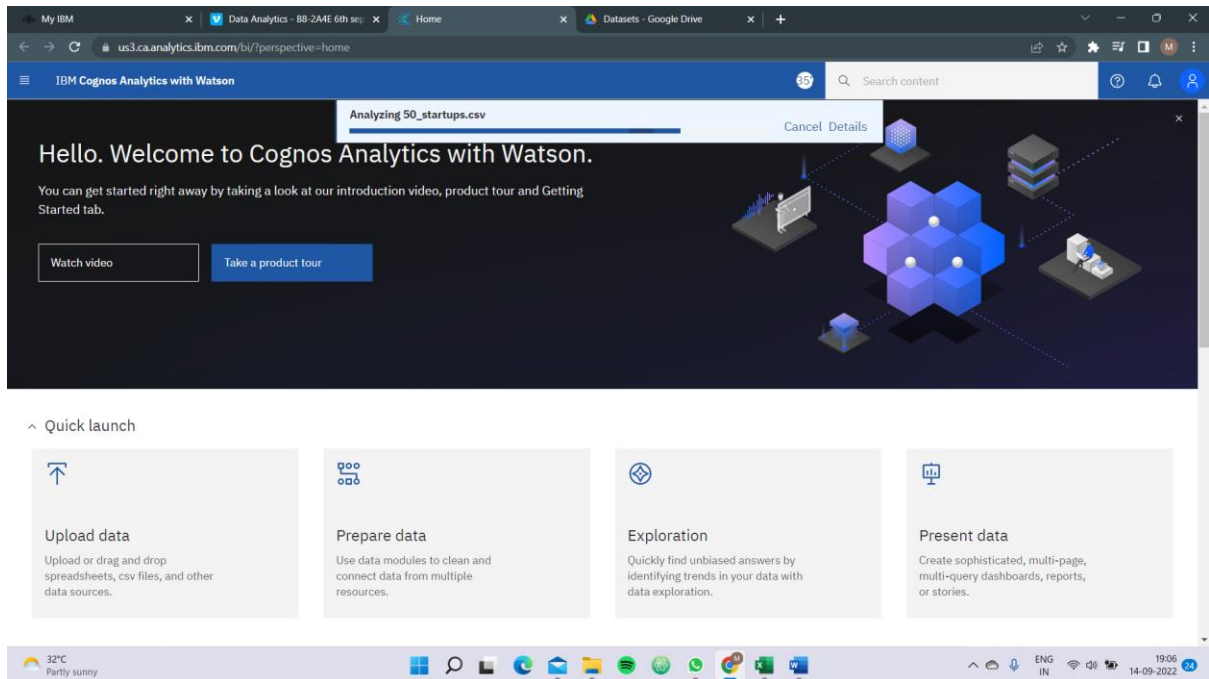
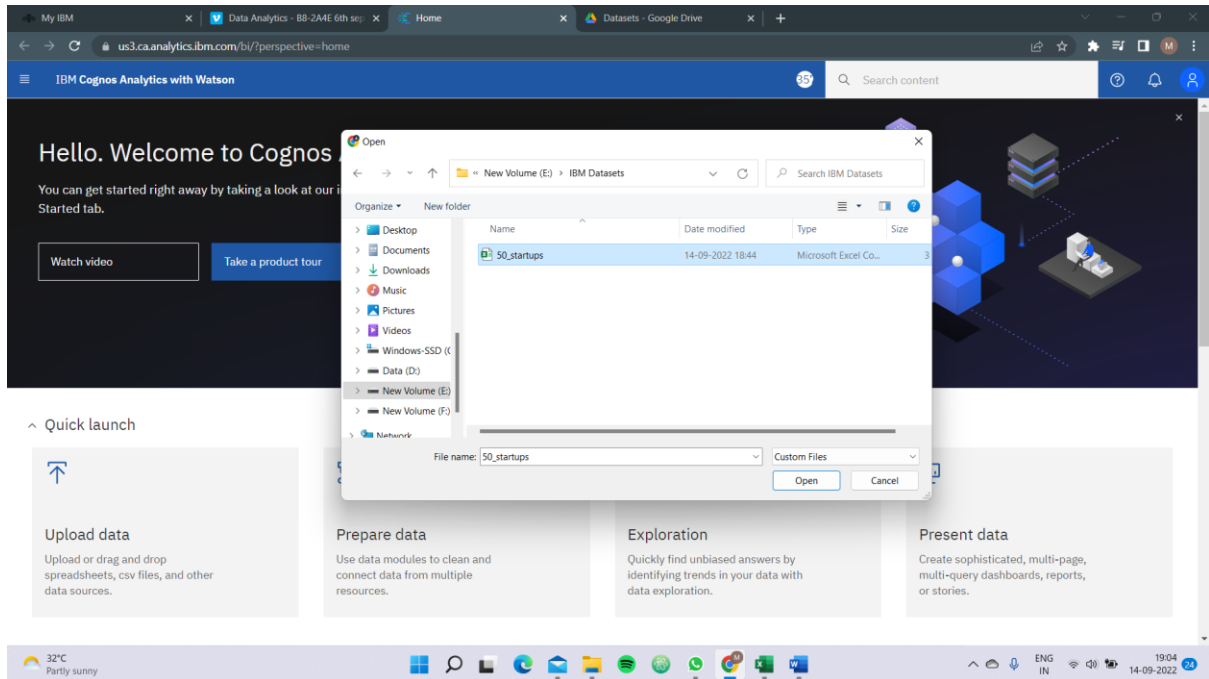
- ➔ Login to the IBM Cognos Analytics
- ➔ Select Launch from the product



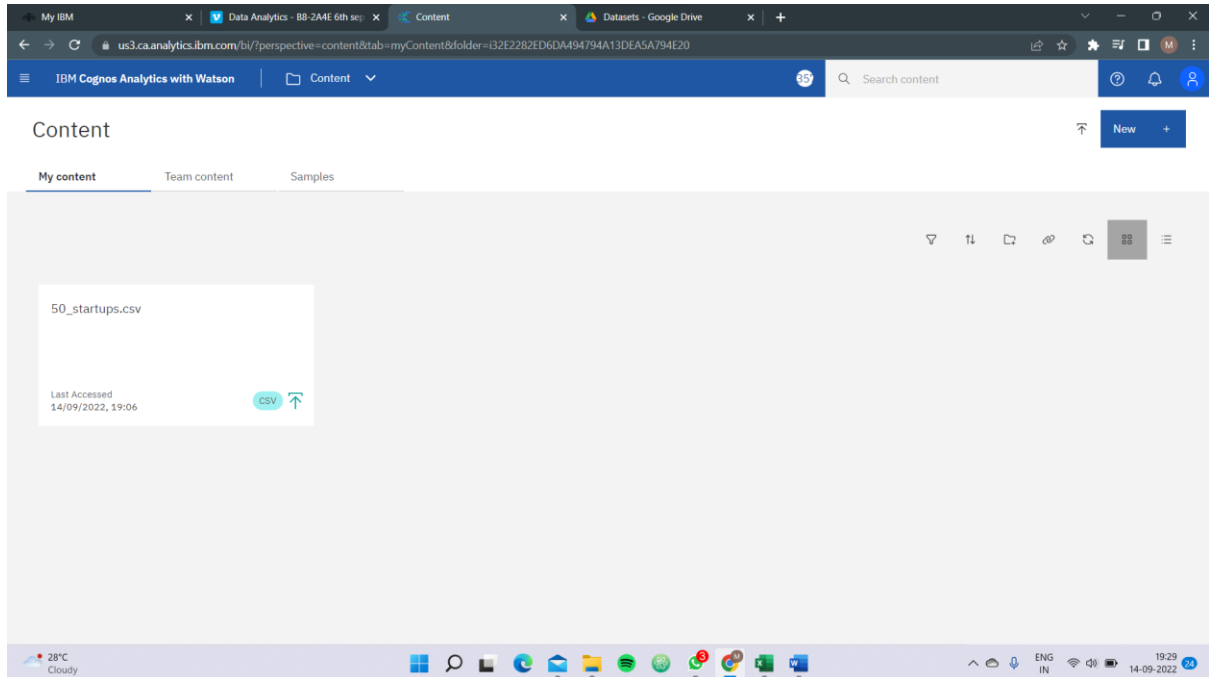
- ➔ Four main operations get displayed



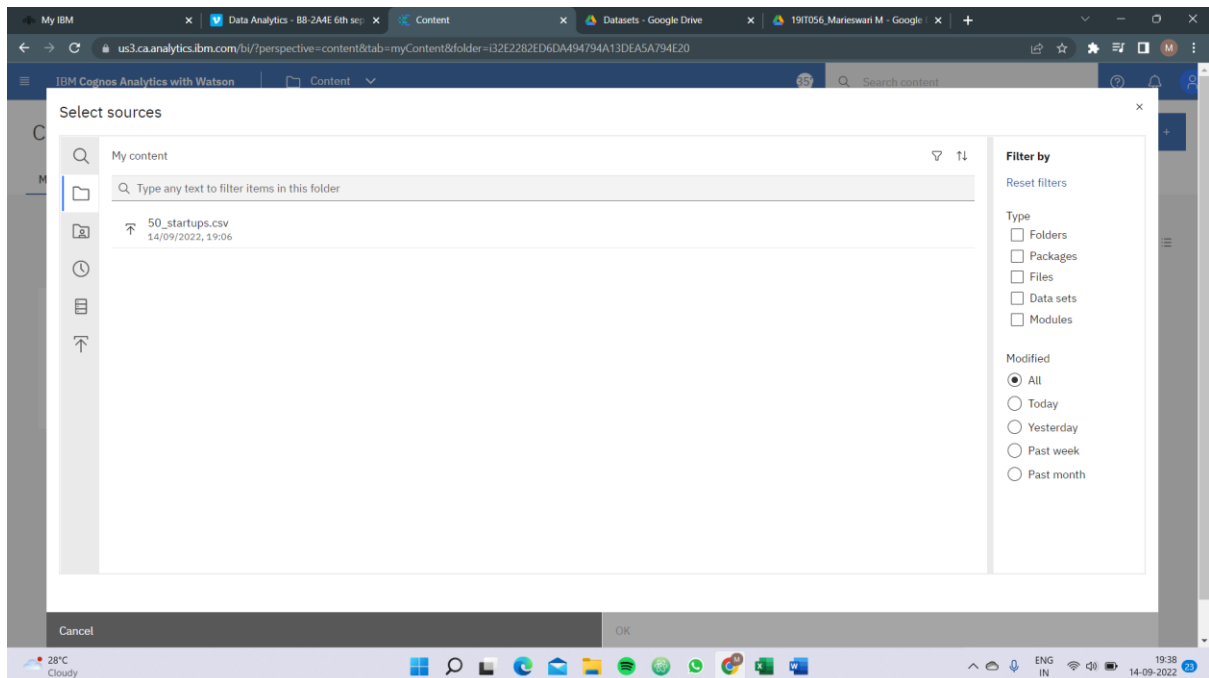
➔ Upload the 50 startup dataset from the local system



- ➔ The uploaded dataset can be viewed in My Content page
- ➔ Or you can also upload the dataset directly in my content page



- ➔ Dataset get displayed with date and time



DATA PREPARATION

#- Unique values

Abc – Text values

Scale- Measure(numerical value)

Map mark – Map value

➔ Click +new – data module – select 50 startup module

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane shows a tree view with '50_startups.csv' selected. The main area displays a grid view of the data. The table has 7 columns: Row Id, R&D Spend, Administration, Marketing Spend, State, and Profit. There are 14 rows of data.

Row Id	R&D Spend	Administration	Marketing Spend	State	Profit
1	165349.2	136897.8	471784.1	New York	192261.83
2	162597.7	151377.59	443898.53	California	191792.06
3	153441.51	101145.55	407934.54	Florida	191050.39
4	144372.41	118671.85	383199.62	New York	182901.99
5	142107.34	91391.77	366168.42	Florida	166187.94
6	131876.9	99814.71	362861.36	New York	156991.12
7	134615.46	147198.87	127716.82	California	156122.51
8	130298.13	145530.06	323876.68	Florida	155752.6
9	120542.52	148718.95	311613.29	New York	152211.77
10	123334.88	108679.17	304981.62	California	149759.96
11	101913.08	110594.11	229160.95	Florida	146121.95
12	100671.96	91790.61	249744.55	California	144259.4
13	93863.75	127320.38	249839.44	Florida	141585.52
14	91992.39	135495.07	252664.93	California	134307.35

➔ Clean the data for attribute state:-

➔ Replace Florida with null value

The screenshot shows the 'Clean - State' dialog box in IBM Cognos Analytics. The dialog has several sections: 'Whitespace' with a checked 'Trim leading and trailing whitespace' option; 'Convert case to' with 'Do not change' selected; 'Return a substring of characters' with 'Start' and 'Length' fields; 'Preview' showing 'This is a preview'; and 'NULL values' with 'Replace this value with NULL' checked and 'Florida' entered in the text box. There are 'Cancel' and 'Clean' buttons at the bottom.

Data module

Grid

R&D Spend	Administration	Marketing Spend	State
165349.2	136897.8	471784.1	New York
162597.7	151377.59	443898.53	California
153441.51	101145.55	407934.54	Null
144372.41	118671.85	383199.62	New York
142107.34	91391.77	366168.42	Null
131876.9	99814.71	362861.36	New York
134615.46	147198.87	127716.82	California
130298.13	145530.06	323876.68	Null
120542.52	148718.95	311613.29	New York
123334.88	108679.17	304981.62	California
101913.08	110594.11	229160.95	Null
100671.96	91790.61	249744.55	California
93863.75	127320.38	249839.44	Null
91097.39	135405.07	252664.93	California

Properties

General

Label: State

Hide from users: ☐

Expression: [View or edit](#)

Usage: Identifier

Aggregate: None

Data type: Text

Represents: Geographic location

City:

Description:

Comments:

➔ Again replacing Null with Los Angeles

Clean - State

Whitespace

☒ Trim leading and trailing whitespace

Convert case to

☐ UPPERCASE ☐ lowercase ☒ Do not change

Return a substring of characters

Start: Length:

Preview: This is a preview

NULL values

☒ Replace this value with NULL:

☒ Replace NULL values with:

Cancel **Clean**

The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane lists '50_startups.csv' with its columns: # Row Id, R&D Spend, Administration, Marketing Spend, State, and Profit. The 'State' column is selected. The main grid displays data for various states, including New York, California, and Los Angeles. The 'Properties' pane on the right shows the 'General' tab for the 'State' column, with fields for Label, Hide from users, Expression, Usage, Aggregate, Data type, Represents, Geographic location, City, and Description.

R&D Spend	Administration	Marketing Spend	State
165349.2	136897.8	471784.1	New York
162597.7	151377.59	443898.53	California
153441.51	101145.55	407934.54	Los Angeles
144372.41	118671.85	383199.62	New York
142107.34	91391.77	366168.42	Los Angeles
131876.9	99814.71	362861.36	New York
134615.46	147198.87	127716.82	California
130298.13	145530.06	323876.68	Los Angeles
120542.52	148718.95	311613.29	New York
123334.88	108679.17	304981.62	California
101913.08	110594.11	229160.95	Los Angeles
100671.96	91790.61	249744.55	California
93863.75	127320.38	249839.44	Los Angeles

➔ To save the module in newly created folder

The screenshot shows the 'Save as' dialog box in IBM Cognos Analytics. The 'Name' field contains '50_Startups data module'. The 'Selected destination' is 'My content'. The dialog box shows a list of folders and files under 'My content', including 'Data Modules' and '50_startups.csv'. A 'Folder added' notification is visible in the top right corner, stating 'Data Modules folder was created in My content.' The 'Save' button is highlighted in blue.

Name	Type	Last Accessed
Data Modules	Folder	14/09/2022, 20:14
50_startups.csv	Uploaded file	14/09/2022, 19:06

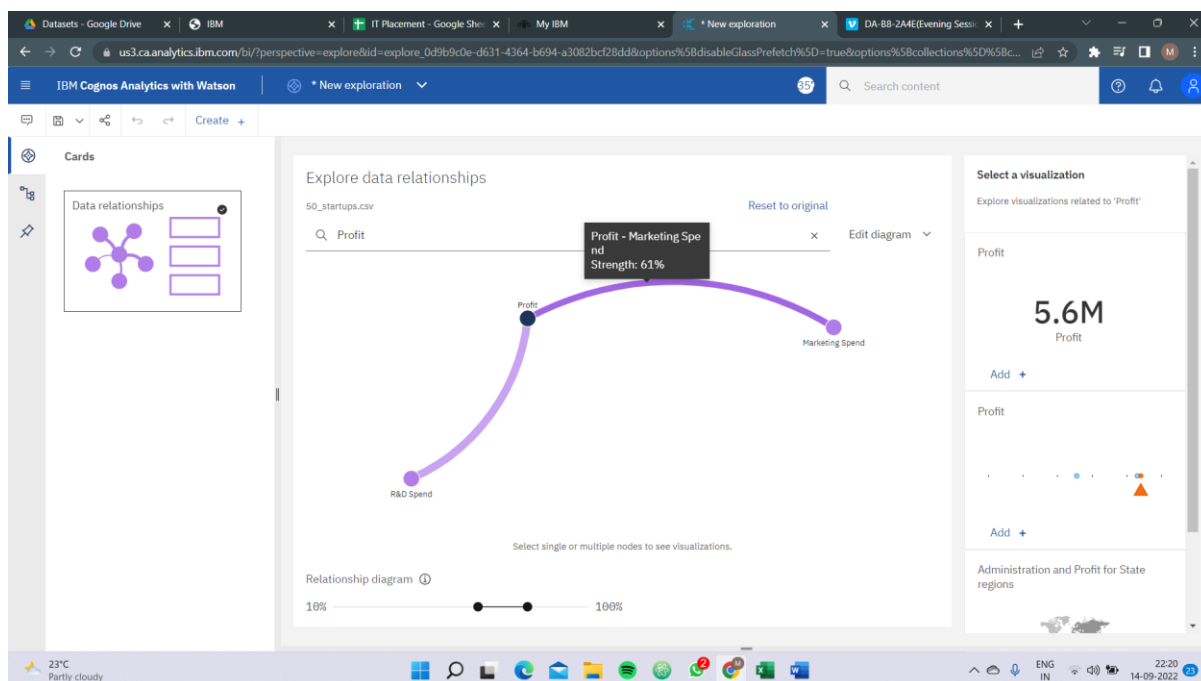
DATA EXPLORATION

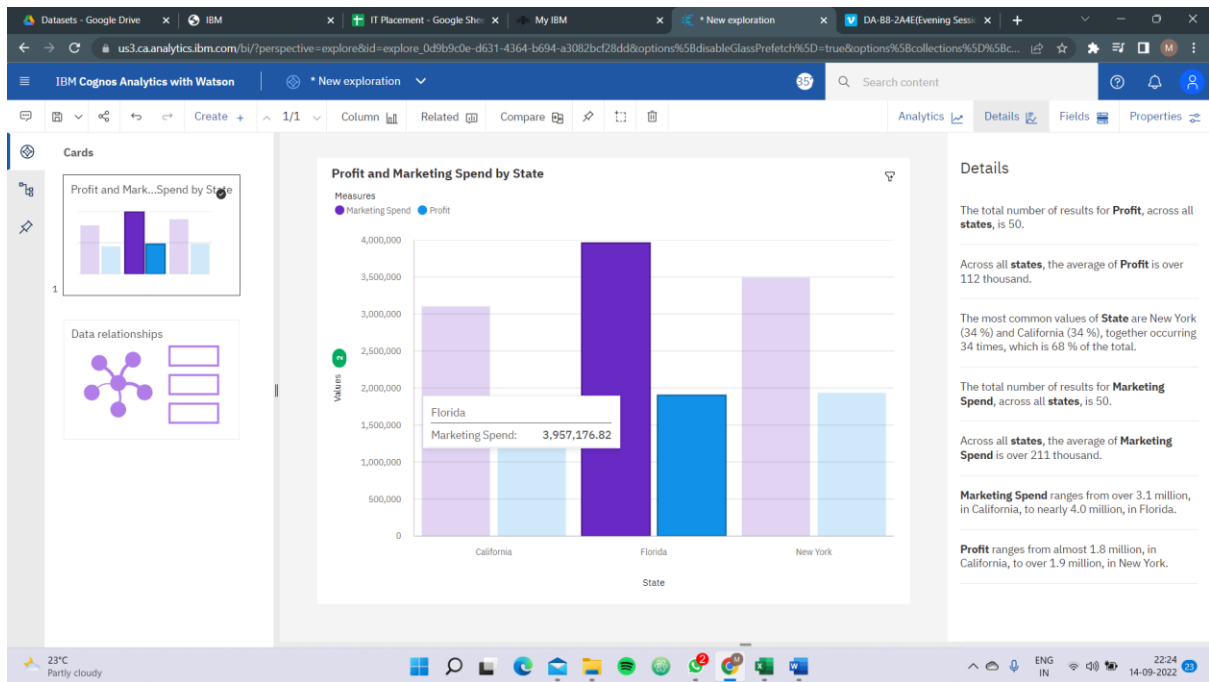
The screenshot shows the IBM Cognos Analytics interface. A modal dialog titled "Add a data source to explore" is open, displaying a table of available data sources. The dialog has two tabs: "My content" (selected) and "Team content". The table lists the following data sources:

Name	Type	Last Accessed
Data Modules	Folder	14/09/2022, 20:14
50_startups.csv	Uploaded file	14/09/2022, 19:06

The "50_startups.csv" file is highlighted with a blue selection bar and a "CSV" label. The background shows the "Content" page with a search bar and a list of data sources. The bottom of the screen shows the Windows taskbar with the date and time as 22:17 on 14-09-2022.

- ➔ Exploring recommended attribute profit

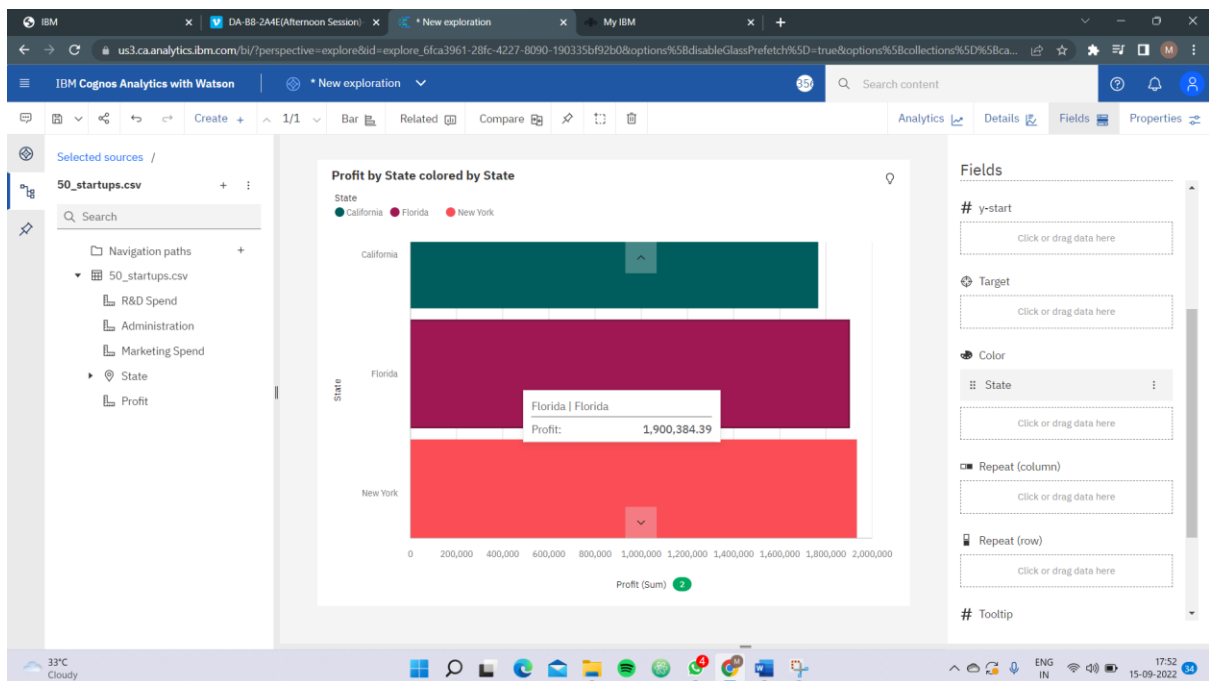




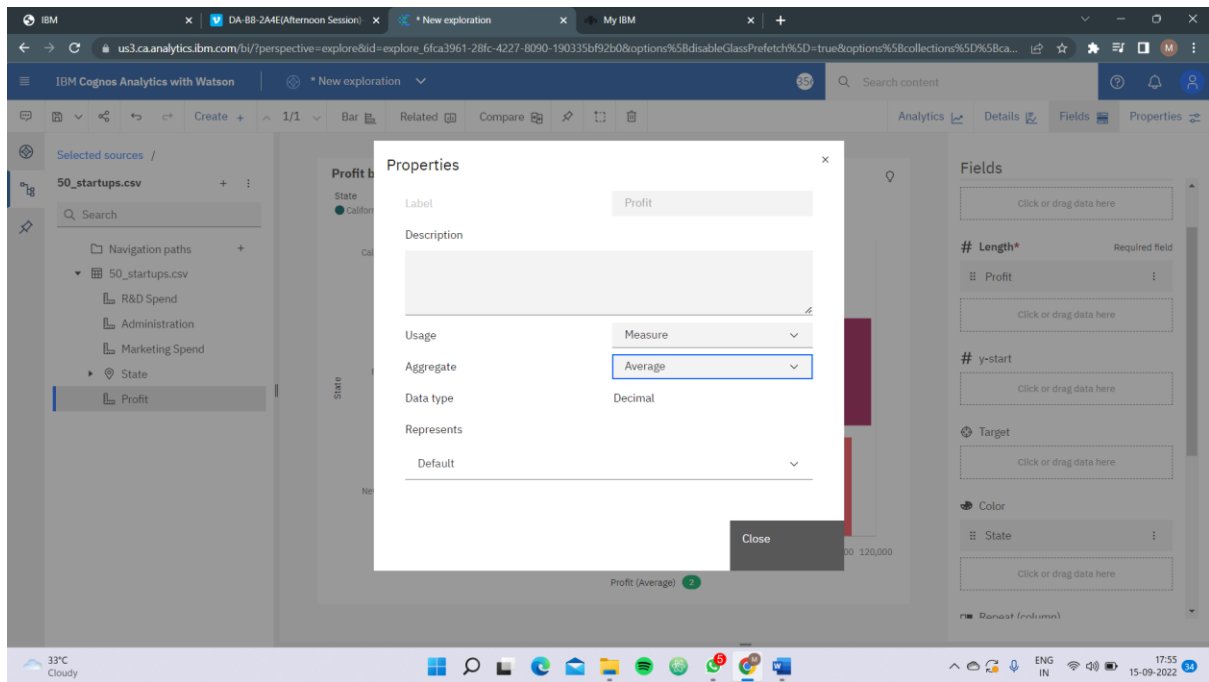
VISUALIZATION

1.Bar Graph

Profit by state



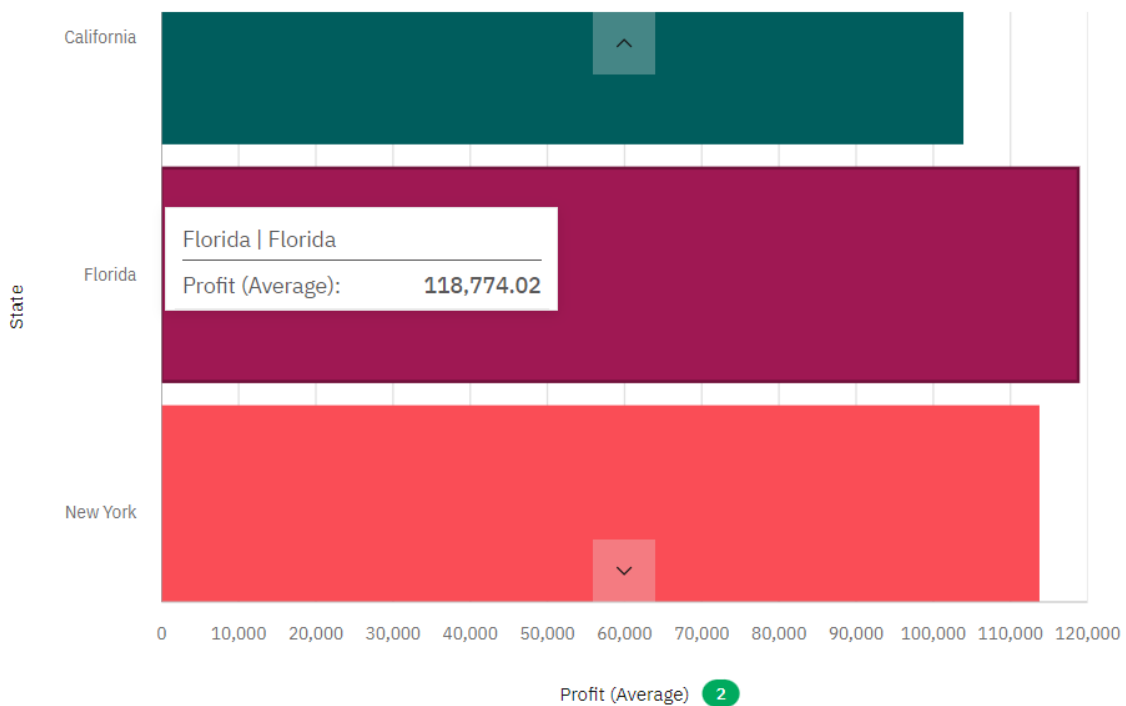
➔ Profit -> properties -> average profit



Profit by State colored by State

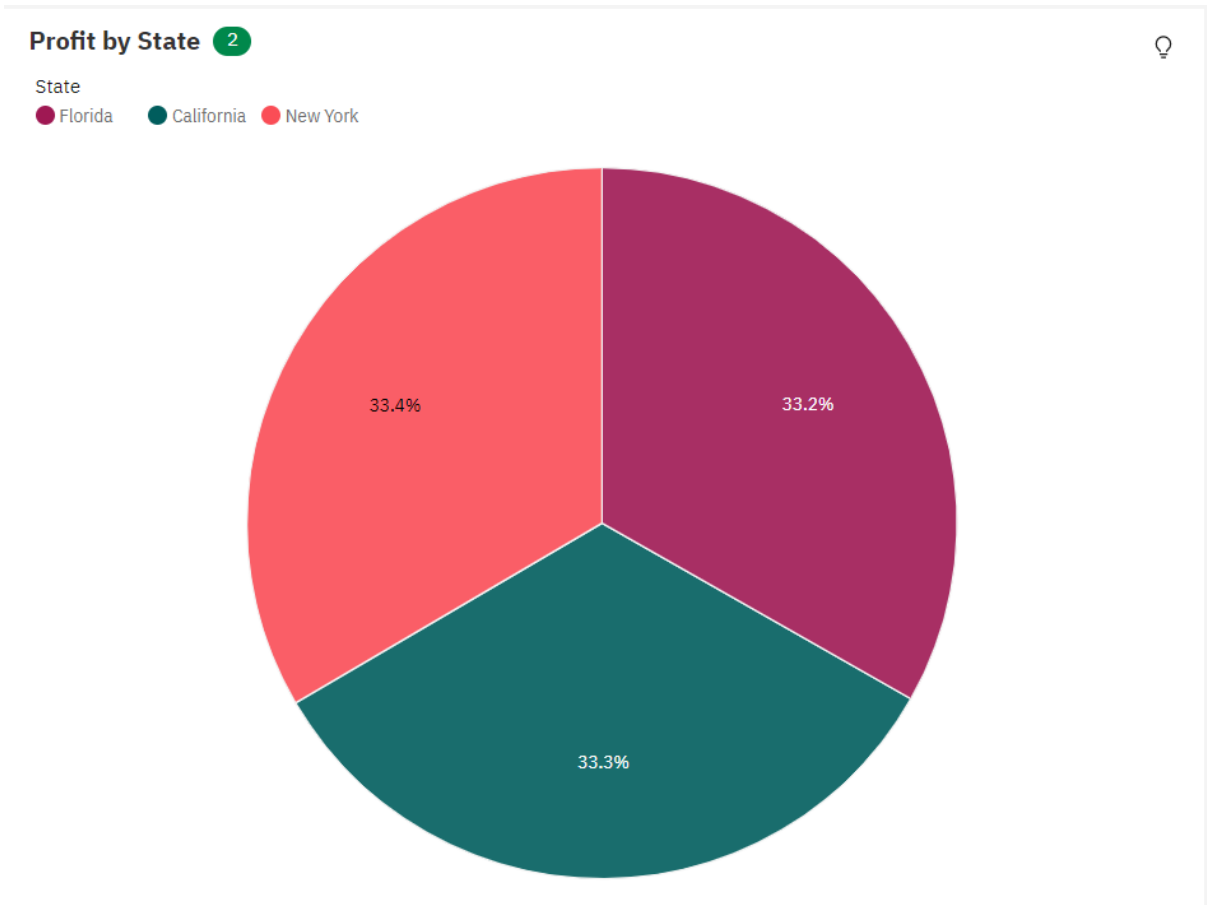
State

● California ● Florida ● New York



2. Pie Chart

Profit by state



IBM Cognos Analytics with Watson | * New exploration

50_startups.csv

Navigation paths

- 50_startups.csv
 - R&D Spend
 - Administration
 - Marketing Spend
 - State
 - Profit

Properties

Label: Profit

Description:

Usage: Measure

Aggregate: Maximum

Data type: Decimal

Represents:

Default:

Close

Fields

Segments*

State

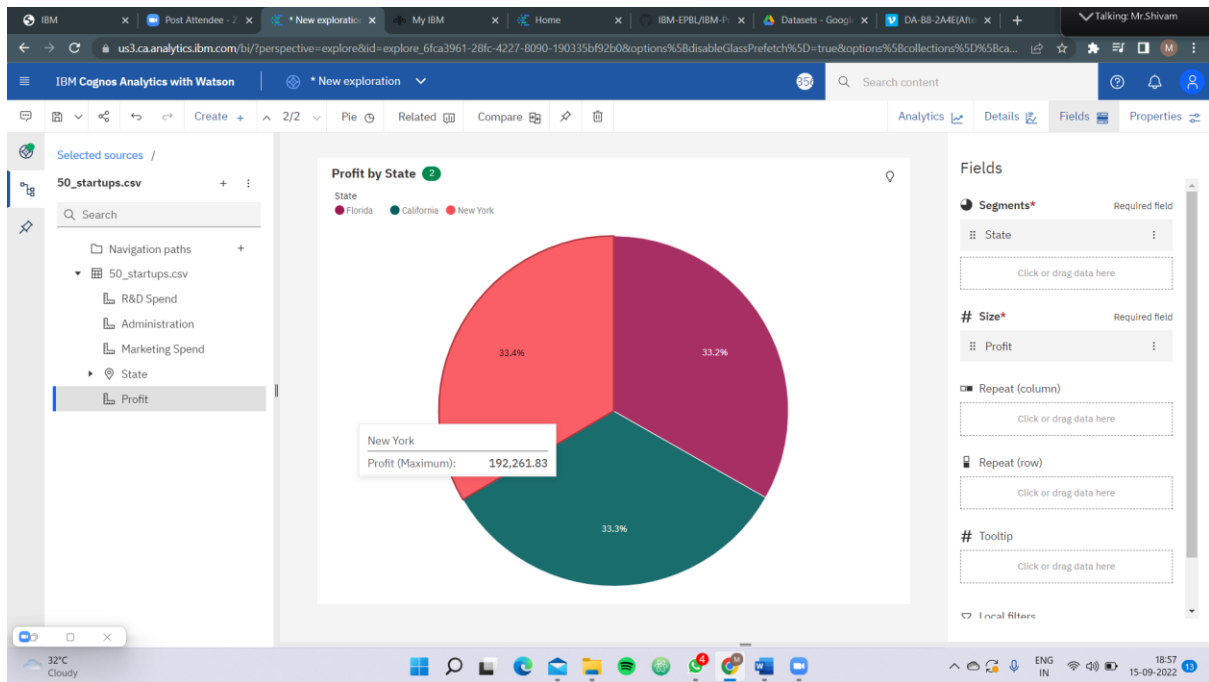
Size*

Profit

Repeat (column)

Repeat (row)

Tooltip

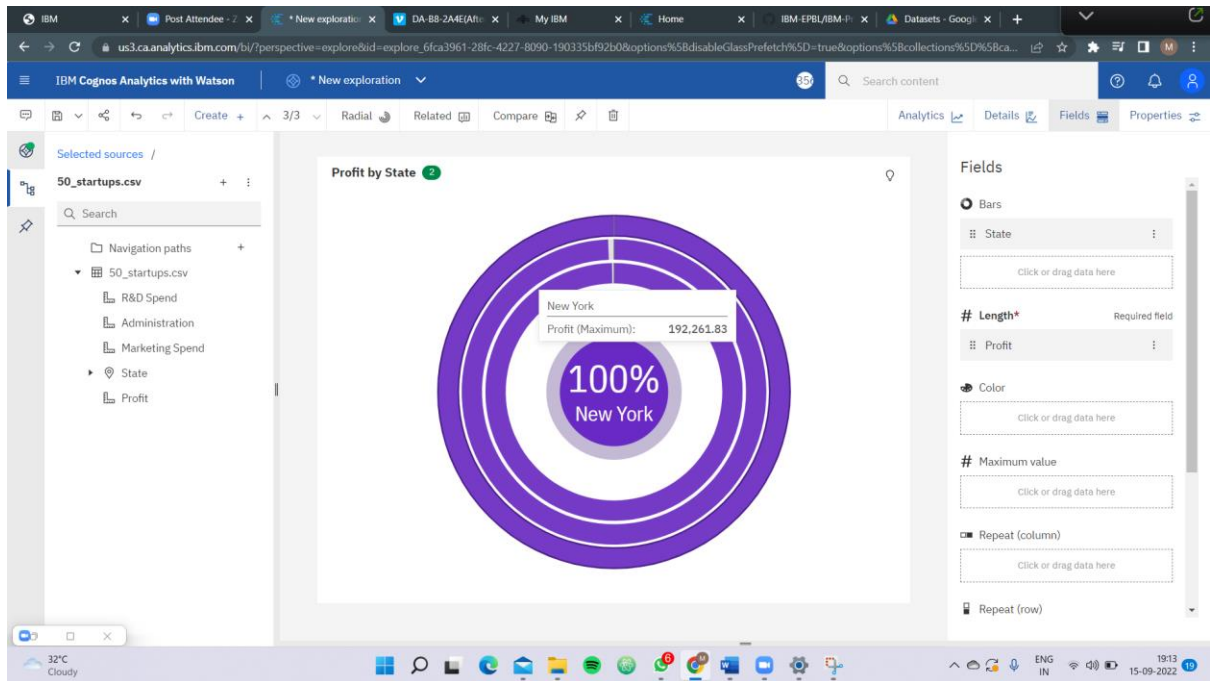


3.Crosstab

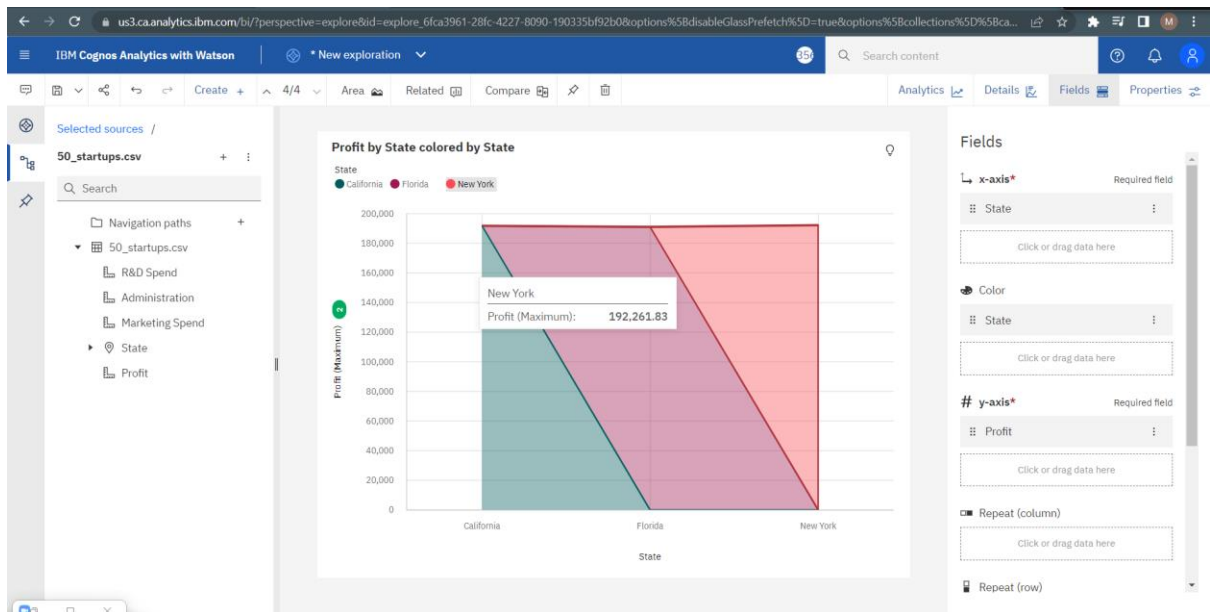
The screenshot shows the IBM Cognos Analytics interface with a crosstab titled 'Profit for State'. The left pane is the same as the previous screenshot. The main view displays a crosstab with 'State' as the row dimension and 'Profit' as the column dimension. The right pane shows the 'Fields' section with 'Columns' (Profit), 'Rows' (State), and 'Values' (Profit). The bottom status bar shows the date 15-09-2022 and time 19:09.

State	Profit
California	191,792.06
Florida	191,050.39
New York	192,261.83
Summary	192,261.83

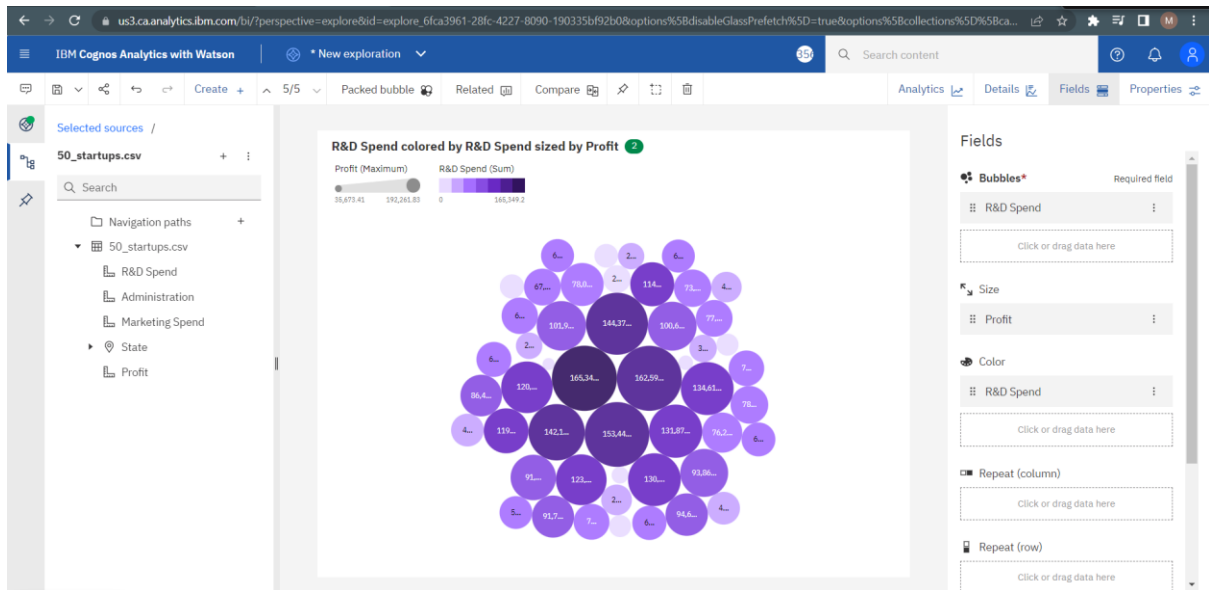
4. Radial



5. Area



6. Packed Bubble



7. Line graph

