

A NEW HINT TO TRANSPORTATION - ANALYSIS OF THE NYC BIKE SHARE SYSTEM

TASK:

Upload the dataset to Cognos Analytics, Explore and Visualise the 50-startups dataset.

DATASET USED:

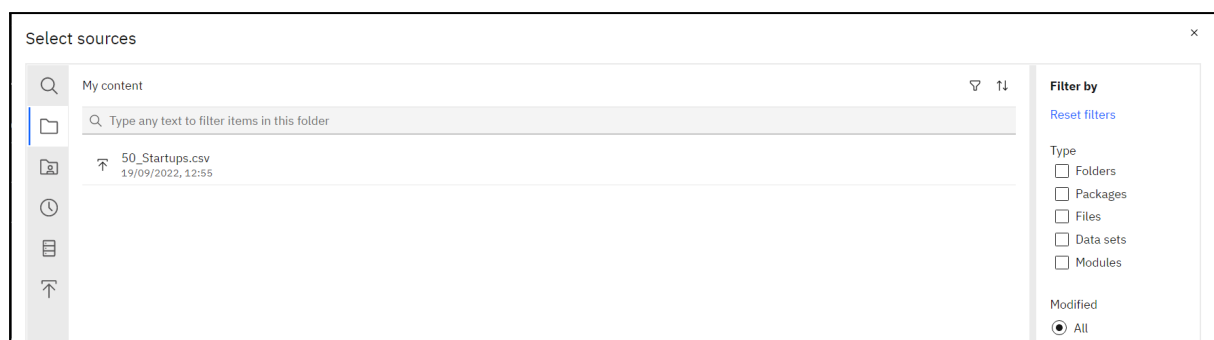
This particular dataset holds data from 50 startups in New York, California, and Florida.

The features in this dataset are R&D spending, Administration Spending, Marketing Spending, and Location features, while the target variable is: Profit.

1. R&D spending: The amount which startups are spending on Research and development.
2. Administration spending: The amount which startups are spending on the Admin panel.
3. Marketing spending: The amount which startups are spending on marketing strategies.
4. State: To which state that particular startup belongs.
5. Profit: How much profit that particular startup is making.

SOLUTION:

UPLOADING THE DATA:



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The screenshot shows the IBM Cognos Analytics with Watson interface. At the top, there's a dark header with the IBM Cognos Analytics with Watson logo on the left and a 'Content' dropdown menu on the right. Below the header, the word 'Content' is prominently displayed. Underneath, there are three tabs: 'My content' (which is selected and underlined), 'Team content', and 'Samples'. The main content area is light gray. A white card is centered, showing the filename '50_Startups.csv'. Below the filename, it says 'Last Accessed 19/09/2022, 12:55'. To the right of this text is a teal pill-shaped button labeled 'CSV' and a teal icon of a document with an upward arrow.

Open menu

Data module

+

Search

New data module

Navigation paths

50_Startups.csv

Row Id

R&D Spend

Administration

Marketing Spend

State

Profit

Grid

Relationships

Custom tables

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

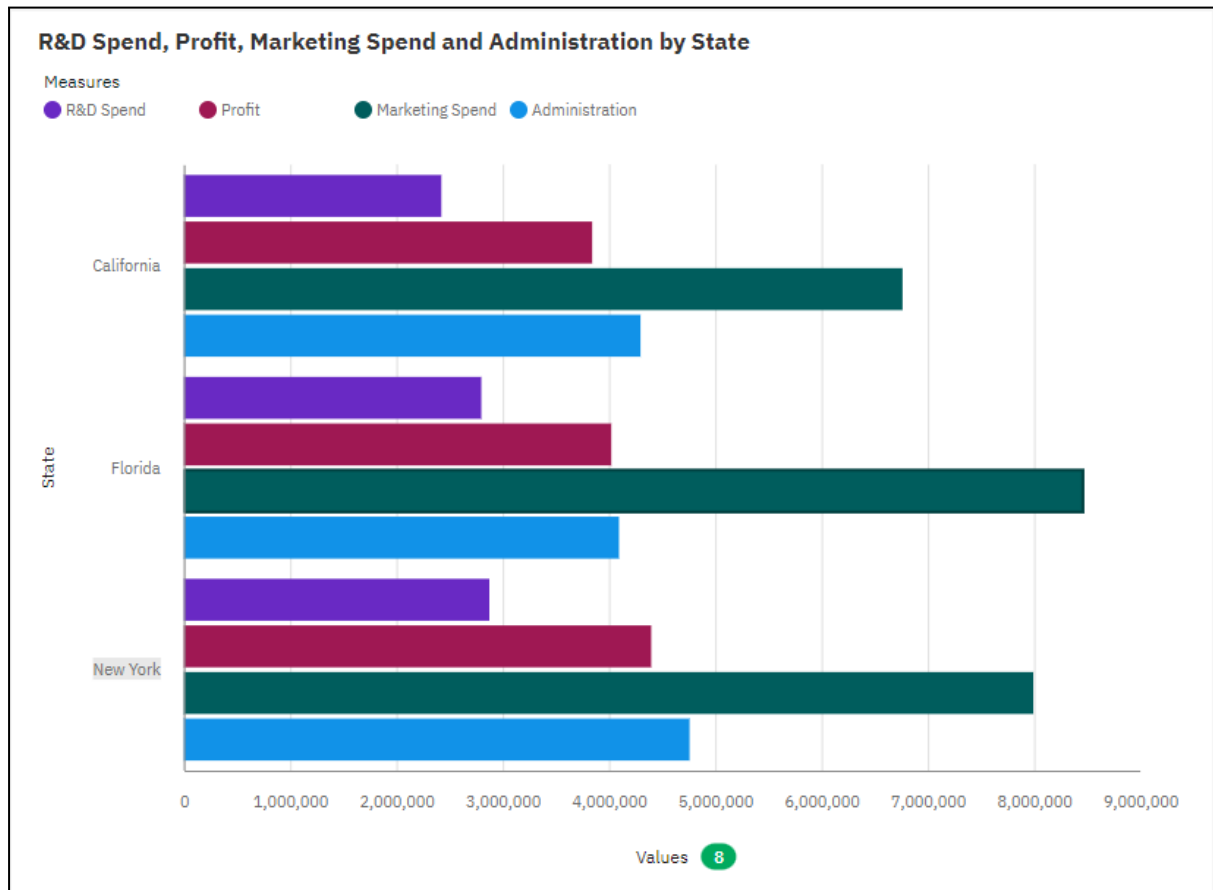
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EXPLORING THE DATA:


The screenshot displays the IBM Cognos Analytics with Watson interface. At the top, a dark header bar contains the text "IBM Cognos Analytics with Watson" and a button labeled "* New exploration" with a dropdown arrow. Below the header is a toolbar with icons for chat, save, share, undo, redo, and a "Create +" button. The main workspace is divided into two panels. The left panel, titled "Cards", contains a "Data relationships" card with a purple network diagram and three empty rectangular boxes. The right panel, titled "Select a starting point", provides instructions: "Every exploration includes a data relationships card." and "Start with any column. You can always change it later." It features a search input field with the placeholder text "Enter data column. Not sure? Try Profit, Marketing Spend". Below this, a section titled "Try starting with one of these..." offers four buttons: "Profit", "Marketing Spend", "Administration", and "R&D Spend".

Visualization #1 (Bar Chart):

Visualizing the marketing spend, R&D spend, Profit and Administration costs for 3 states in the USA. (Helps understand and compare the expenditure of various fields)



Fields

 Bars

⋮ State ⋮

Click or drag data here

Length* Required field

⋮ R&D Spend ⋮

⋮ Profit ⋮

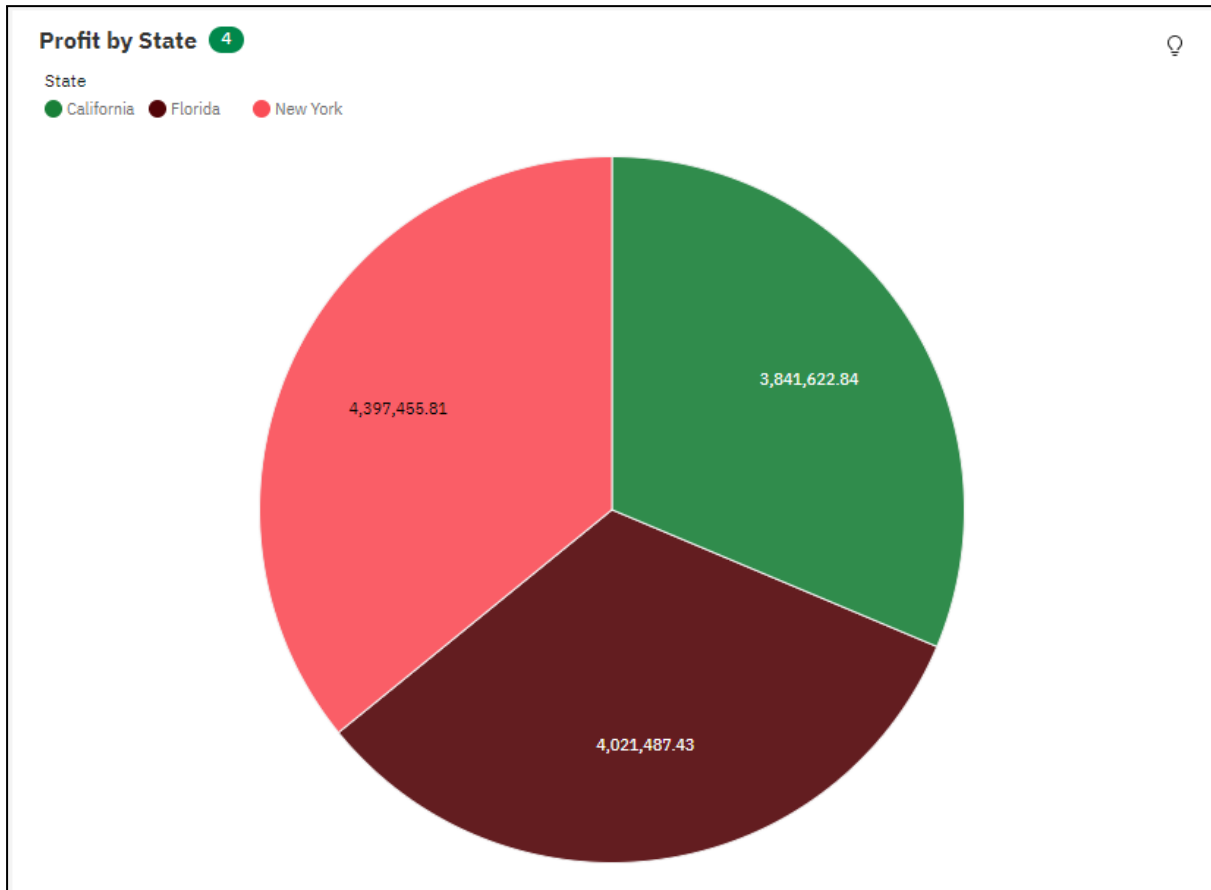
⋮ Marketing Spend ⋮

⋮ Administration ⋮

Click or drag data here

Visualization #2 (Pie Chart):

Represents profits of the states relatively



Fields

Segments* Required field

State

Click or drag data here

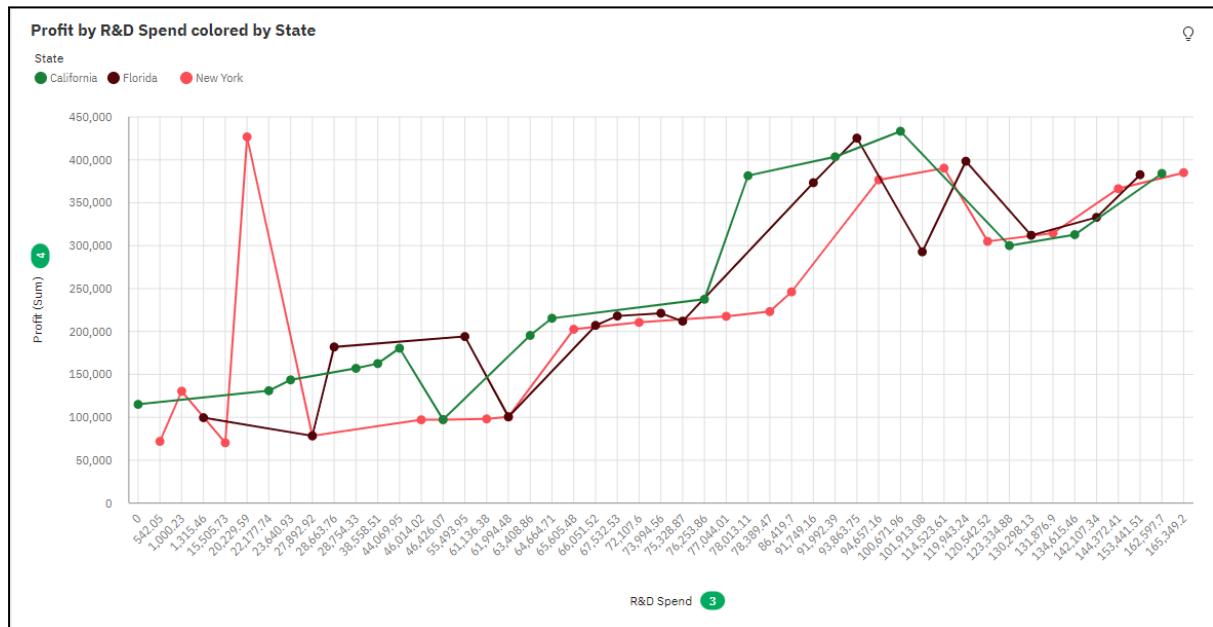
Size* Required field

Profit

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Visualization #3 (Line chart):

This visualization provides insight into the profit made by comparing it with the Marketing Spend - for the startups in all three states as indicated by different colored lines.



Fields

x-axis* Required field

R&D Spend

Click or drag data here

Color

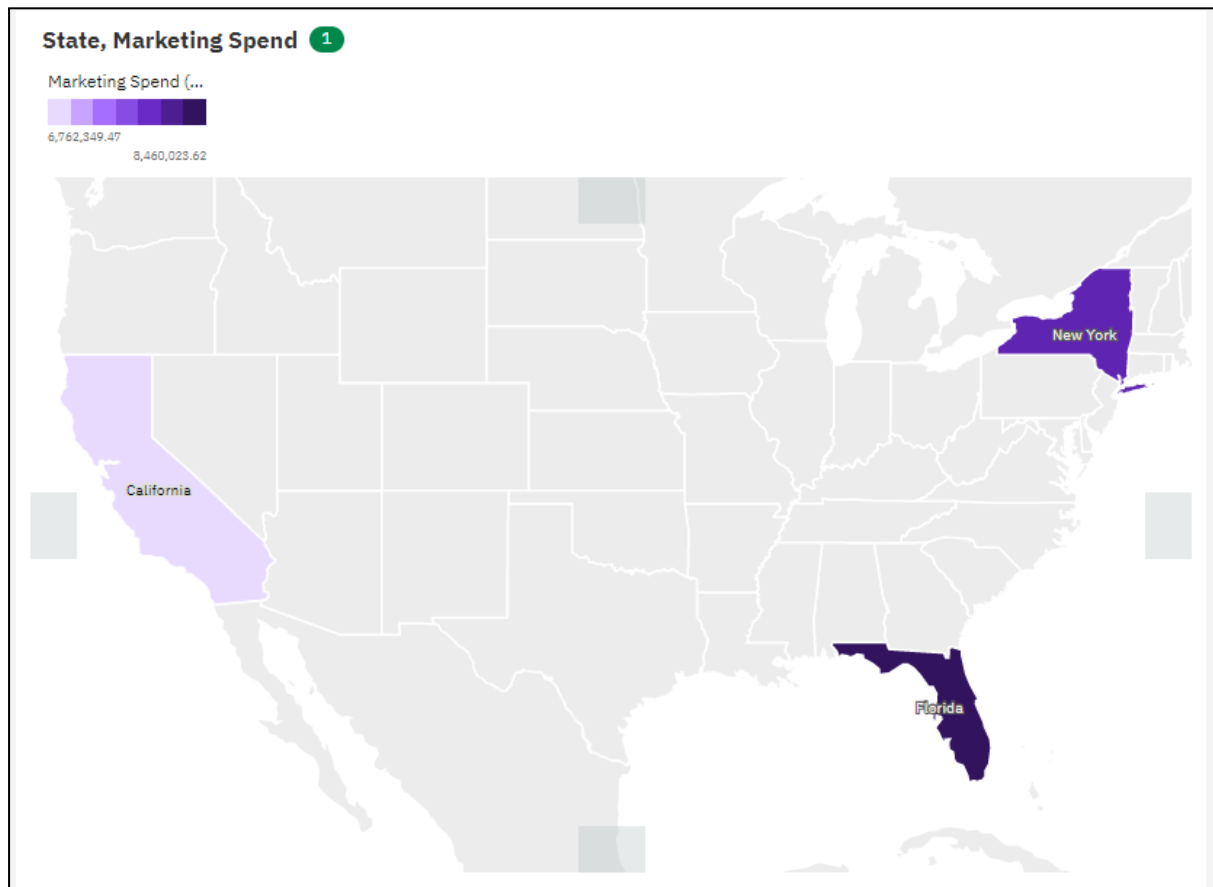
State

Click or drag data here

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Visualization #4 (Geospatial visualization):

Compare the marketing spends of different states using a heatmap



Fields

Regions* Required field

State

Regions heat

Marketing Spend

Size

Click or drag data here

Bubble heat

Click or drag data here

Repeat (column)

Click or drag data here

Repeat (row)

Click or drag data here

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Visualization #5 (Heat map):

This visualization represents a heatmap that bases its gradient color on the profit earned - Statewise with regards to Administration spending of companies in each state.



Fields

Rows

Profit

Click or drag data here

Columns

State

Click or drag data here

Points

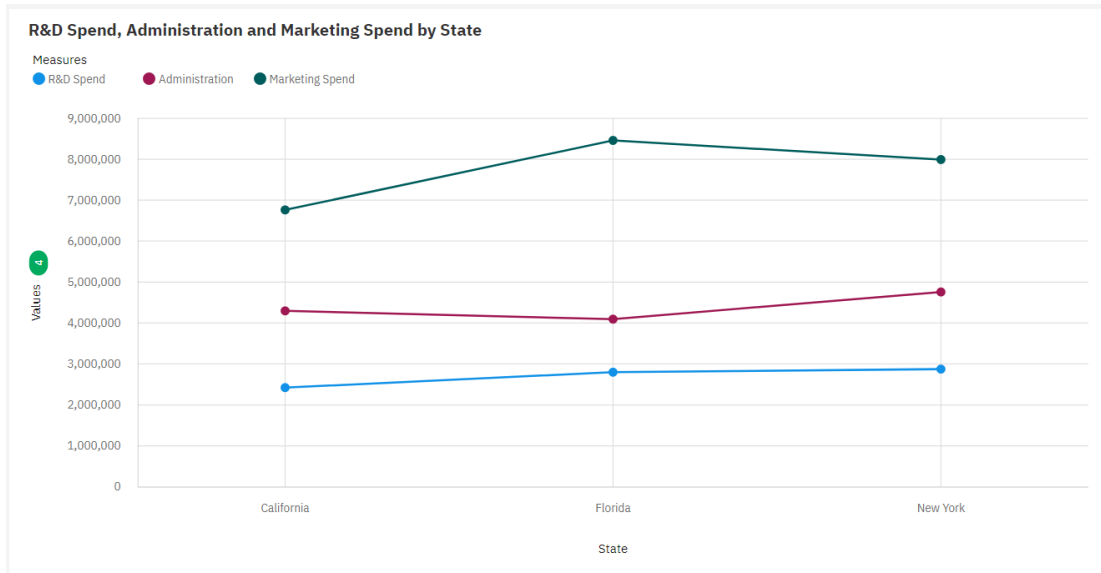
Click or drag data here

Heat* Required field

Administration

Visualization #6 (Line chart):

This visualization represents the average count of each expenditure for a startup - Marketing spend, Administration, and R&D Spend - mapped state-wise.



Fields

x-axis* Required field

State

Click or drag data here

Color

Measures group (4)

Click or drag data here

y-axis* Required field

R&D Spend

Marketing Spend

Profit

Administration

Click or drag data here