ASSIGNMENT 1

Team ID : PNT2022TMID21549

Team Leader : Shamin Thres J

Team member : Priyanka S

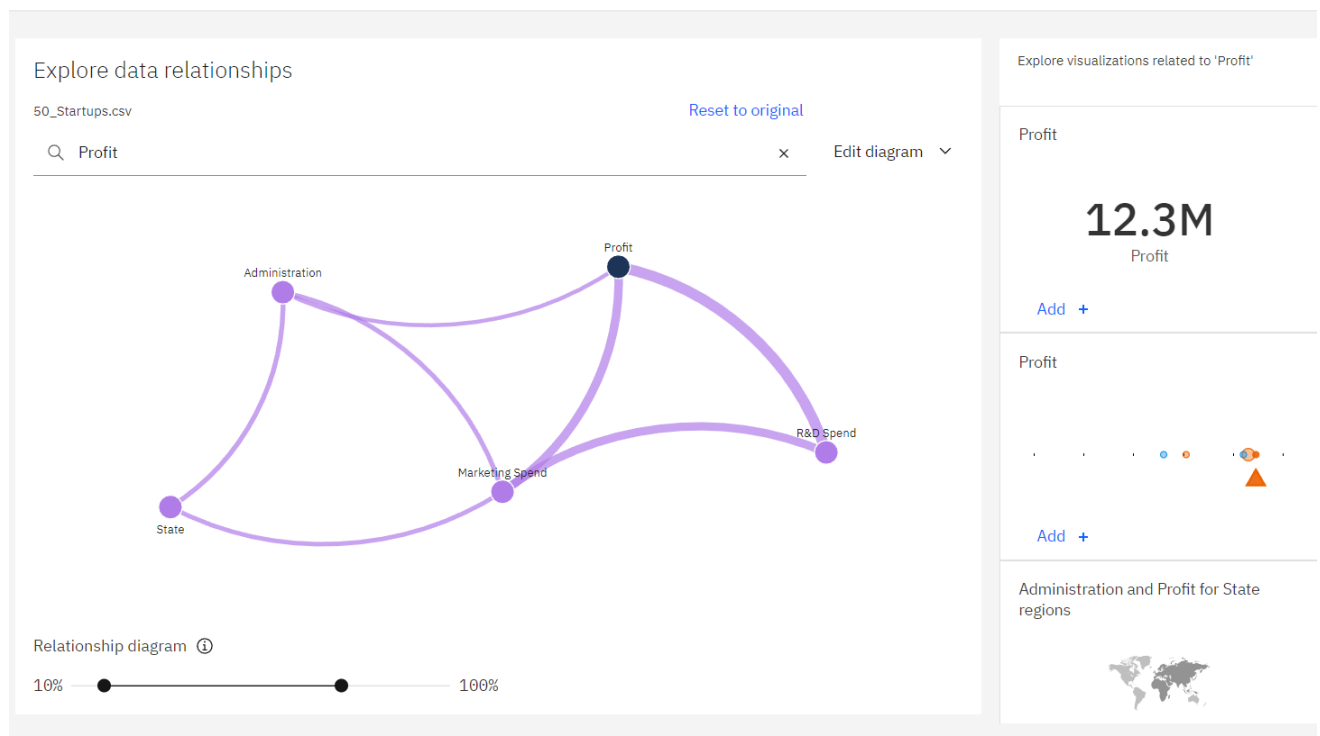**Team member : Sharon Rose A**

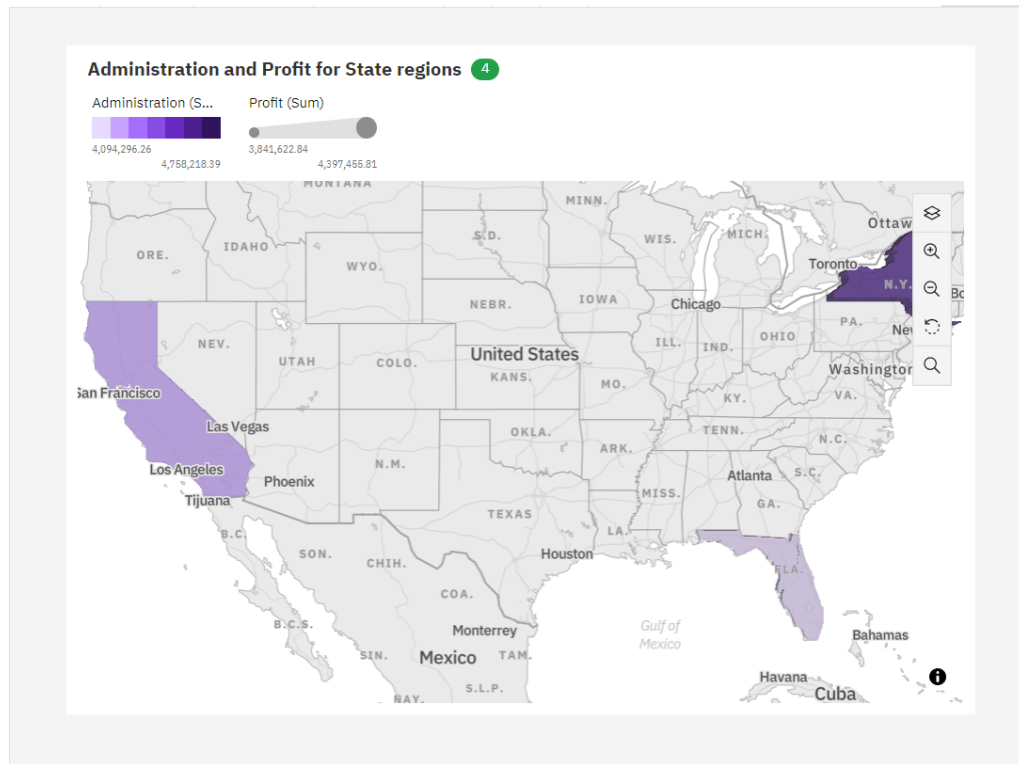**Team member : Shruti R**

Dataset: 50-Startup-Dataset

Challenge:

Upload the dataset to Cognos Analytics, explore and visualize the dataset

1. **DATA RELATIONSHIP:**

Administration and Profit for State regions

Administration and Profit for State regions (4)

Administration (S...   Profit (Sum)

4,094,296.26   3,841,622.84
    4,758,218.39   4,397,455.81

Details

Across all **states**, the sum of **Administration** is over 13 million.
Administration ranges from nearly 4.1 million, in Florida, to nearly 4.8 million, in New York.

Administration and Profit by State

Measures
● Administration ● Profit

Fields

ıl **Bars**

⠿ State ⋮

Click or drag data here

 # Length*   Required field

⠿ Administration ⋮

⠿ Profit ⋮

Click or drag data here

 # y-start

Click or drag data here

⊕ Target

Click or drag data here

◑ Color
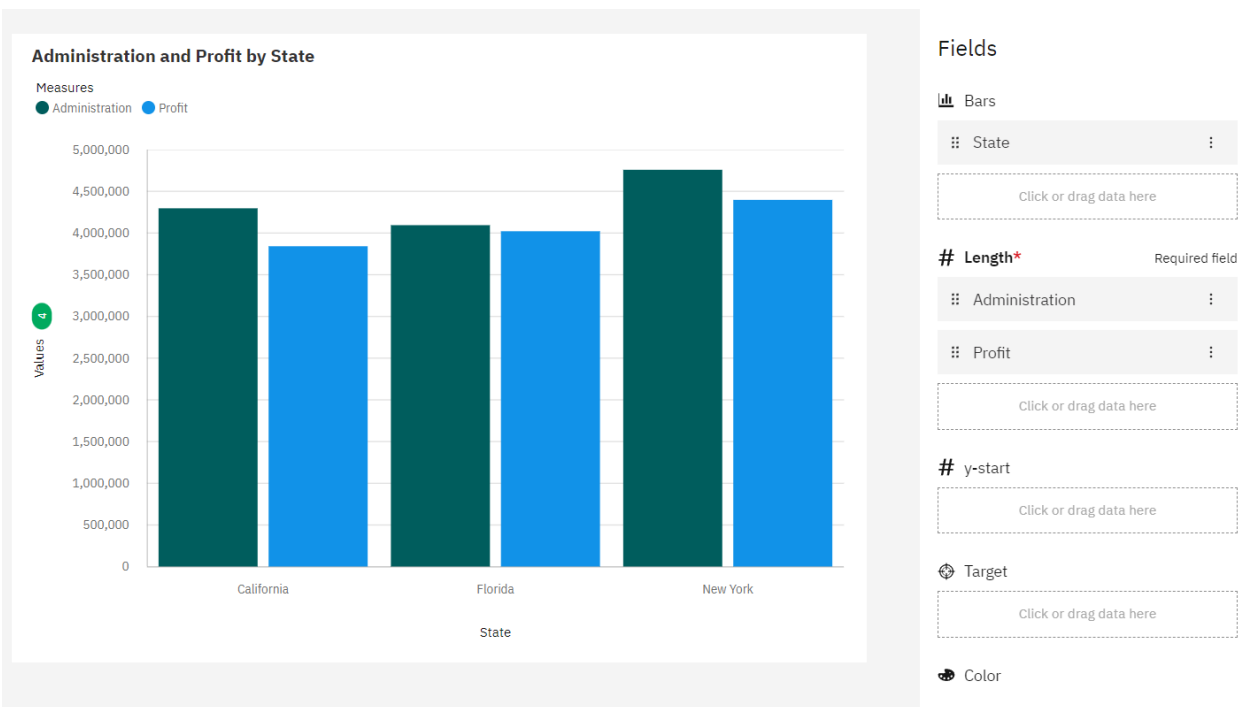
Details

Administration ranges from almost 4.1 million, in Florida, to nearly 4.8 million, in New York.

Profit ranges from over 3.8 million, in California, to almost 4.4 million, in New York.

The total number of results for **Profit**, across all **states**, is 108.
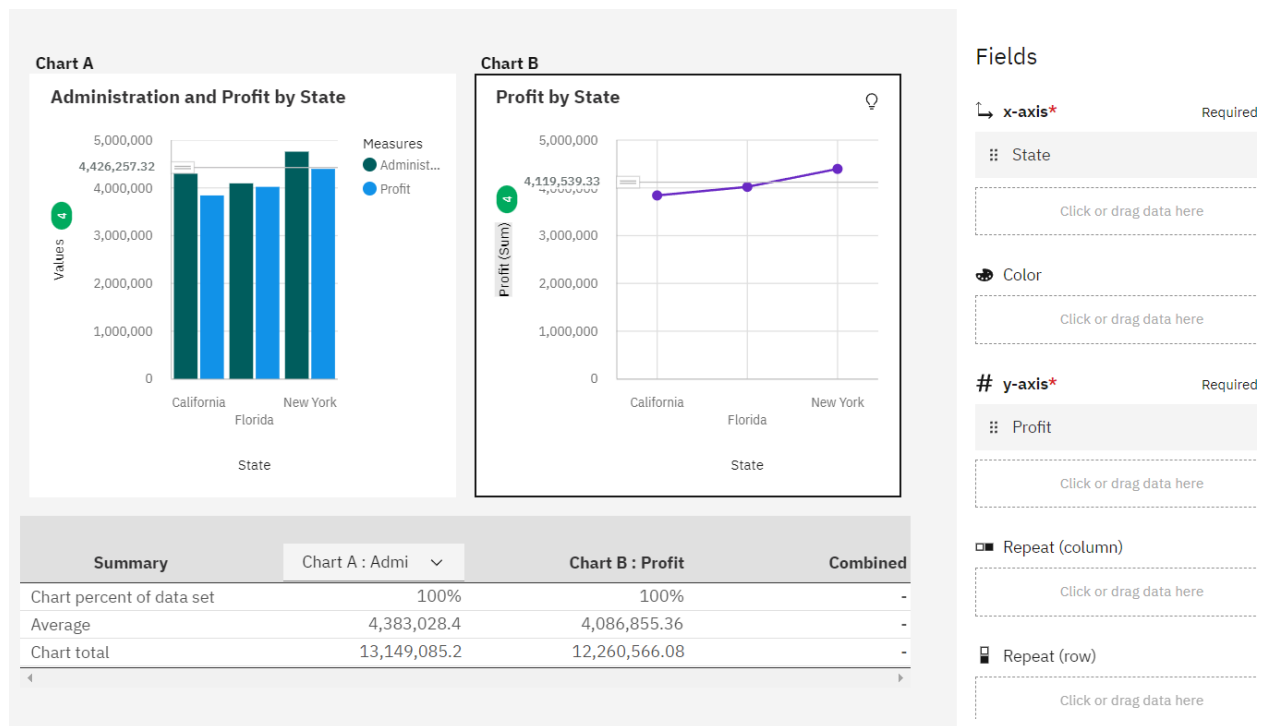
Over all **states**, the average of **Profit** is almost 114 thousand.

The most common values of **State** are New York (36.1 %) and California (33.3 %), together occurring 75 times, which is 69.4 % of the total.

The total number of results for **Administration**, across all **states**, is 108.

Over all **states**, the average of **Administration** is almost 122 thousand.

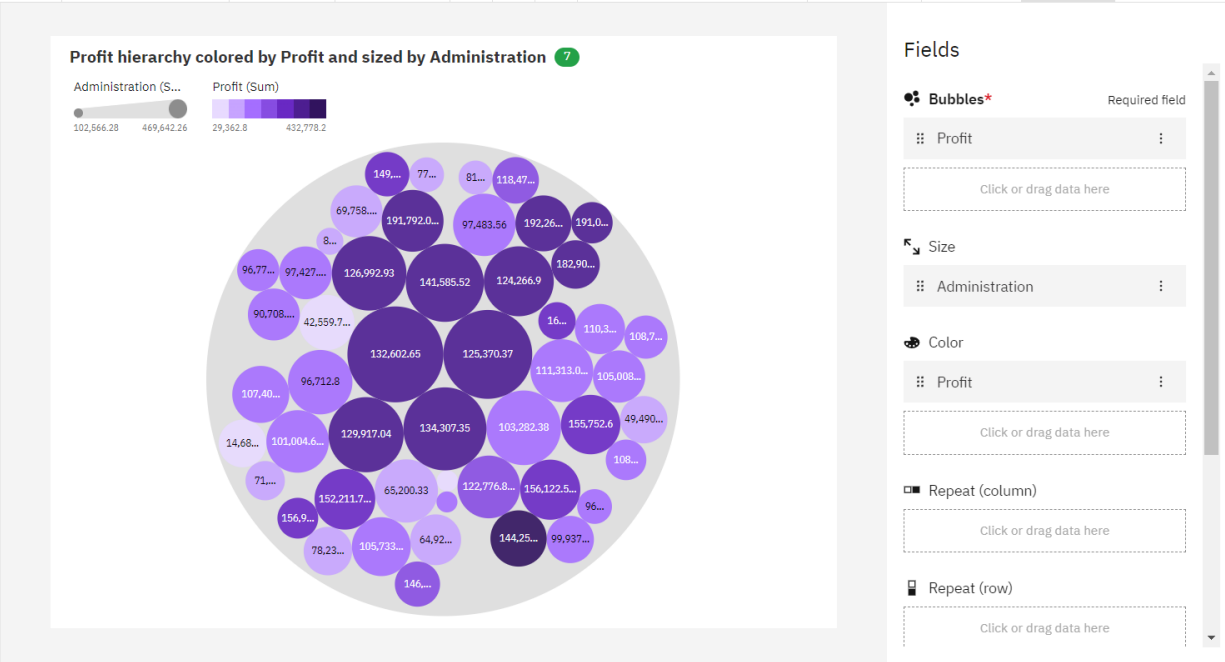comparison between bar graph and line graph:

Chart A

Administration and Profit by State

Measures
- Administ...
- Profit

5,000,000
4,426,257.32
4,000,000
3,000,000
Values
2,000,000
1,000,000
0

California
Florida
New York

State

Chart B

Profit by State

5,000,000
4,119,539.33
4,000,000
3,000,000
Profit (Sum)
2,000,000
1,000,000
0

California
Florida
New York

State

Summary	Chart A : Admi ⌄	Chart B : Profit	Combined
Chart percent of data set	100%	100%	-
Average	4,383,028.4	4,086,855.36	-
Chart total	13,149,085.2	12,260,566.08	-

Fields

↳ **x-axis***   Required

⠿ State

Click or drag data here

🎨 **Color**

Click or drag data here

\# **y-axis***   Required

⠿ Profit

Click or drag data here

▱▪ **Repeat (column)**

Click or drag data here

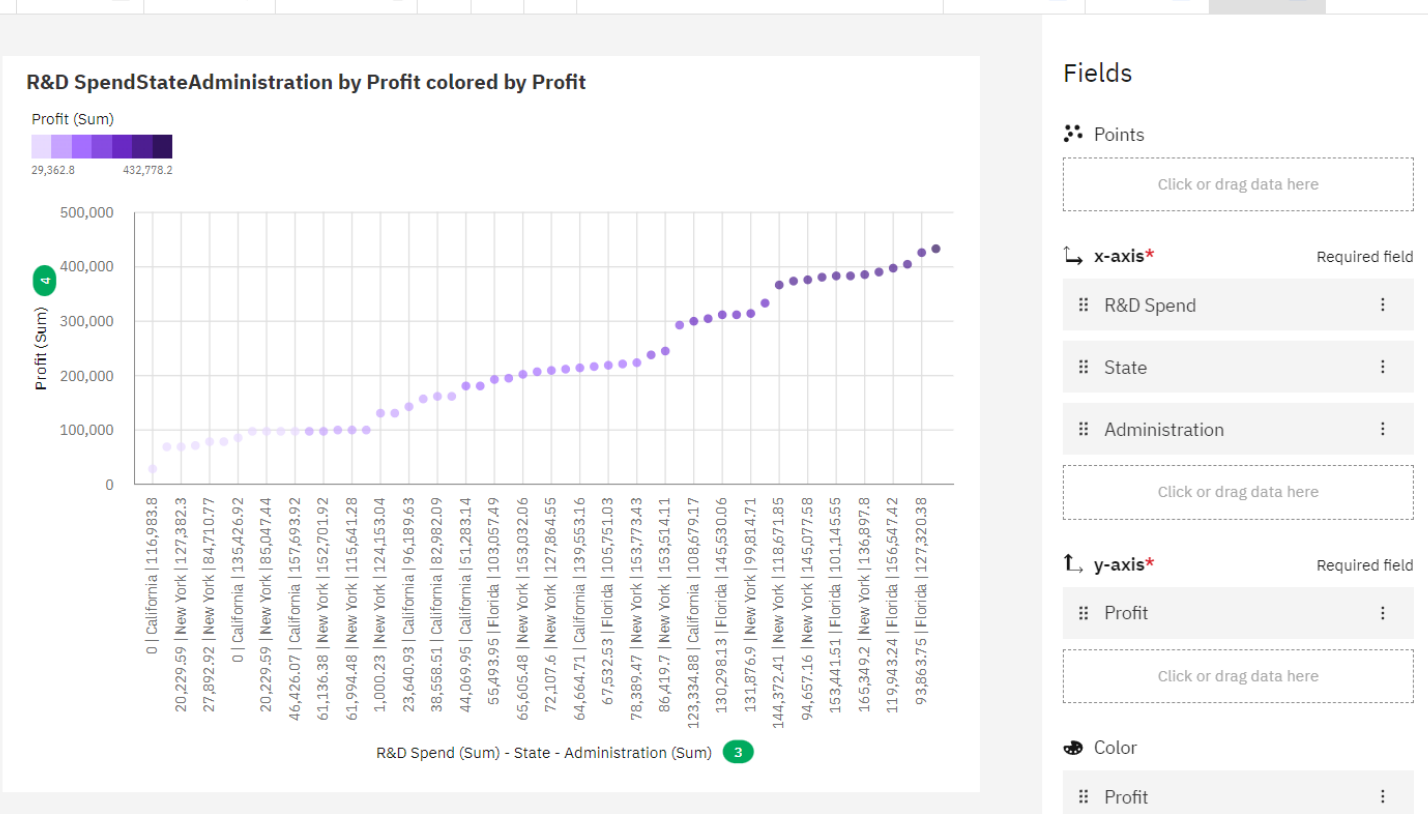▯ **Repeat (row)**

Click or drag data here

Details

Across all **states**, the sum of **Profit** is over 12 million.

Profit ranges from over 3.8 million, in California, to almost 4.4 million, in New York.

hierachy bubble

Profit hierarchy colored by Profit and sized by Administration 7

Fields

Bubbles *   Required field

Profit

Click or drag data here

Size

Administration

Color

Profit

Click or drag data here

Repeat (column)

Click or drag data here

Repeat (row)

Click or drag data here

scatter plot:

R&D SpendStateAdministration by Profit colored by Profit

Fields

Points

Click or drag data here

x-axis *   Required field

R&D Spend

State

Administration

Click or drag data here

y-axis *   Required field

Profit

Click or drag data here

Color

Profit

Details

The total number of results for **R&D Spend**, across all **r&d spend - state - administrations**, is 108.

Over all **r&d spend - state - administrations**, the average of **R&D Spend** is almost 114 thousand.

The most common values of **R&D Spend - State - Administration** are 20229.59|New York|127382.3 (4.6 %) and 0|California|116983.8 (3.7 %), together occurring 9 times, which is 8.3 % of the total.

Profit ranges from 0, when **R&D Spend - State - Administration** is 0|California|116983.8, to 2, when **R&D Spend - State - Administration** is 27892.92|New York|84710.77.

R&D Spend ranges from over 29 thousand, when **R&D Spend - State - Administration** is 0|California|116983.8, to almost 433 thousand, when **R&D Spend - State - Administration** is 153441.51|Florida|101145.55.

The total number of results for **Profit**, across all **r&d spend - state - administrations**, is 108.

Over all **r&d spend - state - administrations**, the average of **Profit** is 0.5093.
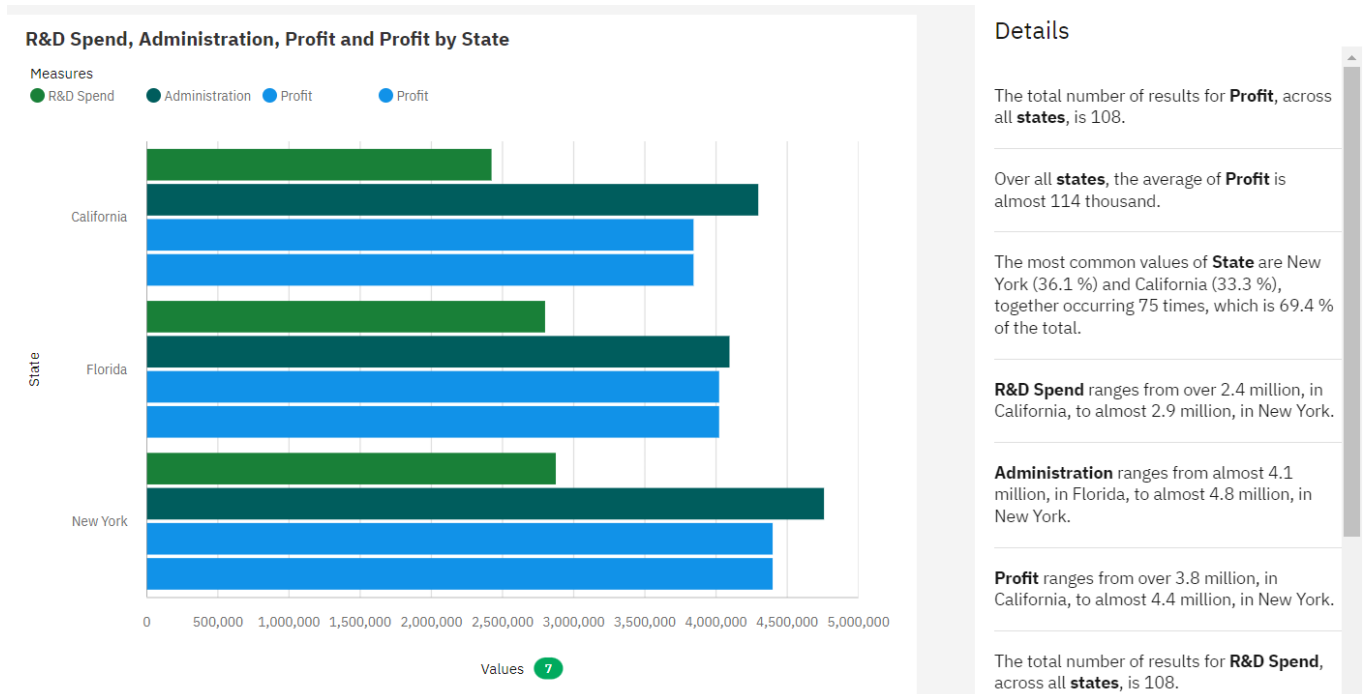
R&D Spend, Administration, Profit and Profit by State

Details

The total number of results for **Profit**, across all **states**, is 108.

Over all **states**, the average of **Profit** is almost 114 thousand.

The most common values of **State** are New York (36.1 %) and California (33.3 %), together occurring 75 times, which is 69.4 % of the total.

R&D Spend ranges from over 2.4 million, in California, to almost 2.9 million, in New York.

Administration ranges from almost 4.1 million, in Florida, to almost 4.8 million, in New York.

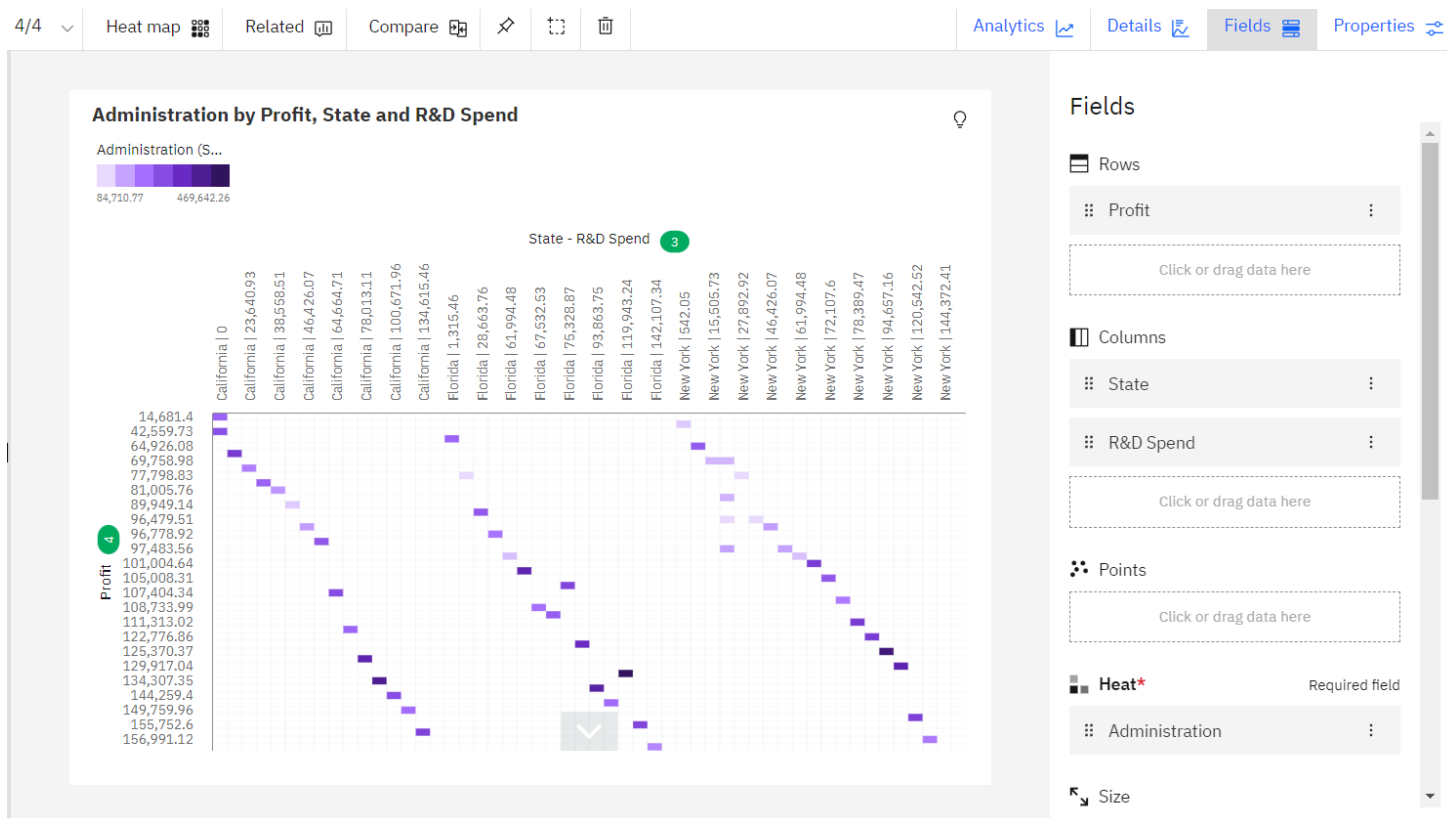**Profit** ranges from over 3.8 million, in California, to almost 4.4 million, in New York.

The total number of results for **R&D Spend**, across all **states**, is 108.

Over all **states**, the average of **R&D Spend** is almost 75 thousand.

The total number of results for **Administration**, across all **states**, is 108.

Over all **states**, the average of **Administration** is almost 122 thousand.

heat map:

Administration by Profit, State and R&D Spend

Administration (S...

84,710.77   469,642.26

State - R&D Spend ③

Fields

🗔 Rows
- ⠿ Profit ⋮
- Click or drag data here

▥ Columns
- ⠿ State ⋮
- ⠿ R&D Spend ⋮
- Click or drag data here

⁛ Points
- Click or drag data here

▰ **Heat***   Required field
- ⠿ Administration ⋮

⬃ Size

Details

For **Administration**, the most significant values of **Profit** are 97483.56, 96479.51, and 69758.98, whose respective **Administration** values add up to 212, or 16 % of the total.

Over all **profits** and **state - r&d spends**, the sum of **Administration** is almost 1500.

For **Administration**, the most significant value of **State - R&D Spend** is California|23640.93, whose respective **Administration** values add up to 828, or 62.5 % of the total.

The summed values of **Administration** range from 0 to 48.

For **Administration**, the most significant value of **State - R&D Spend** is series_CAT2, whose respective **Administration** values add up to 828, or 62.5 % of the total.

Administration is unusually high when **State - R&D Spend** is series_CAT2, series_CAT1 and series_CAT0.