

IBM - Data Analytics

Assignment – 1

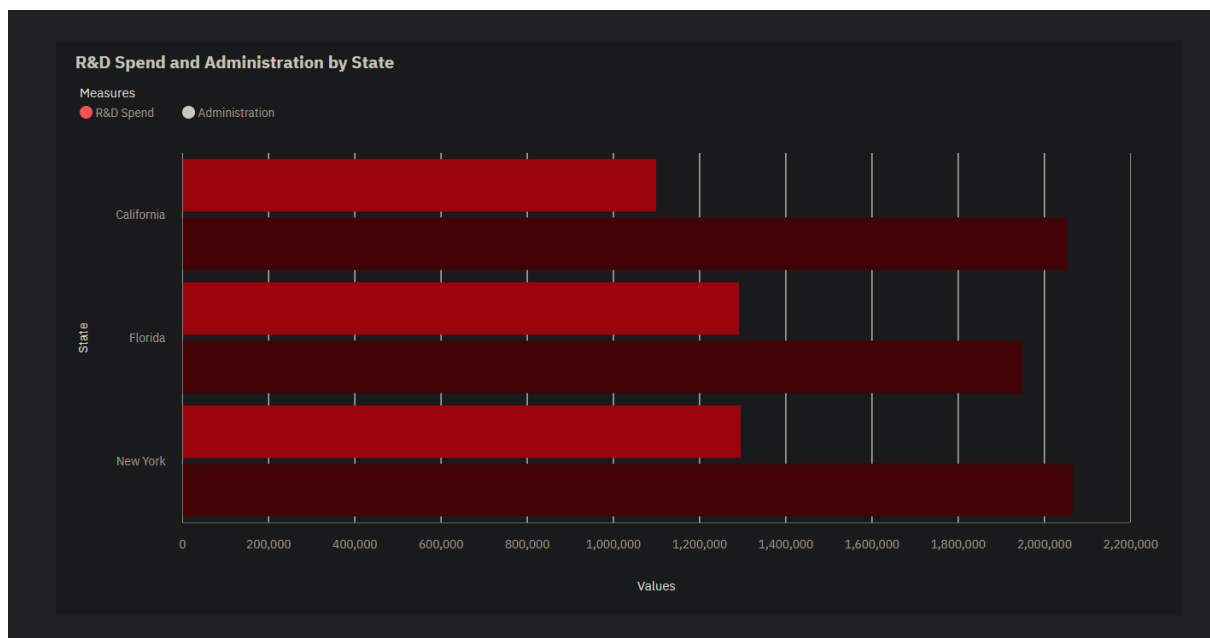
Reg.no: 917719IT101

Name: Sreesh N

Challenge:

Upload the dataset to Cognos Analytics, prepare the data, explore and create interactive dashboard.

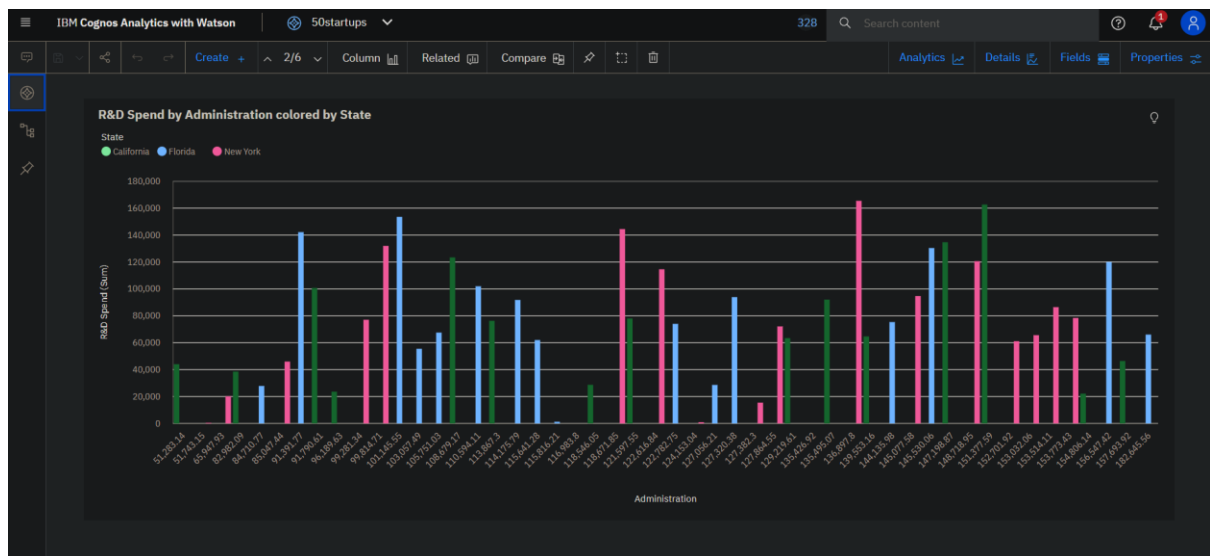
R&D Spend and administration by state:



Inference:

- Over all states, the average of R&D Spend is almost 74 thousand.
- The most common values of State are New York (34 %) and California (34 %), together occurring 34 times, which is 68 % of the total.
- Across all states, the average of Administration is over 121 thousand.
- R&D Spend ranges from nearly 1.1 million, in California, to nearly 1.3 million, in New York.
- Administration ranges from over 1.9 million, in Florida, to almost 2.1 million, in New York.

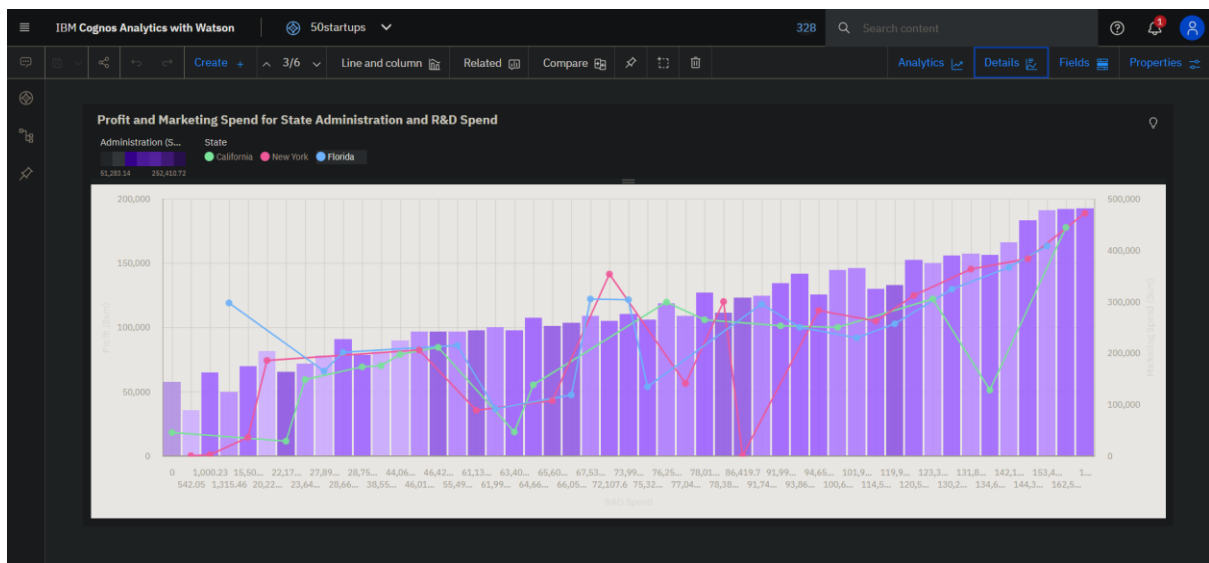
R&D Spend by administration coloured by state:



Inference:

- For R&D Spend, the most significant values of Administration are 136897.8, 151377.59, and 101145.55, whose respective R&D Spend values add up to over 481 thousand, or 13.1 % of the total.
- For R&D Spend, the most significant values of State are New York and Florida, whose respective R&D Spend values add up to almost 2.6 million, or 70.2 % of the total.
- Over all administrations and states, the sum of R&D Spend is almost 3.7 million.
- The summed values of R&D Spend range from 0 to over 165 thousand.

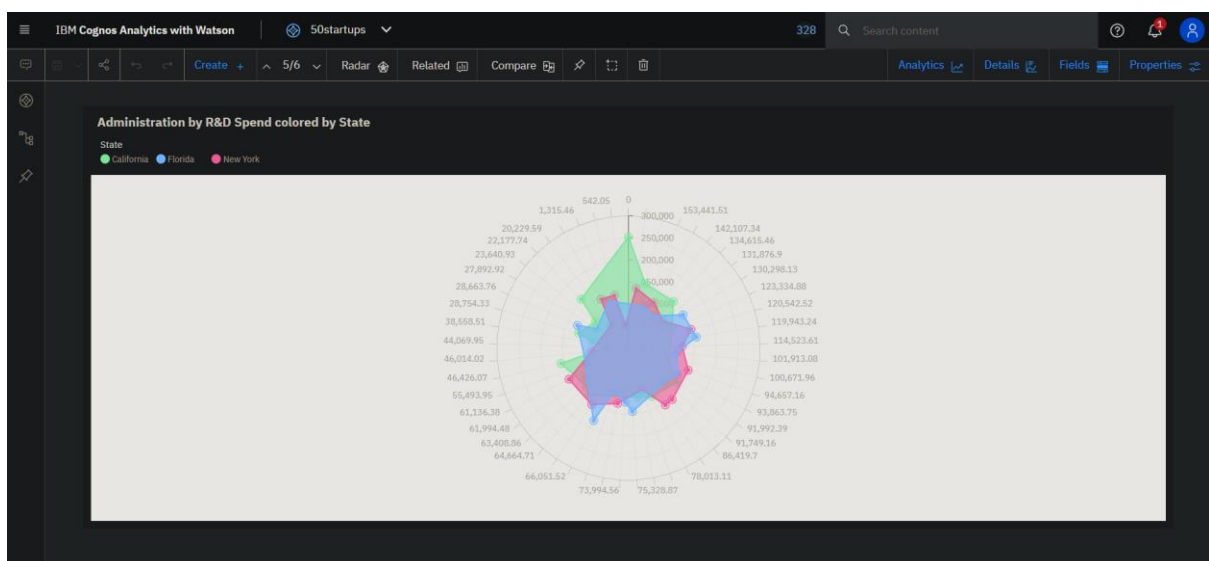
Profit and Marketing Spend for State Administration and R&D Spend:



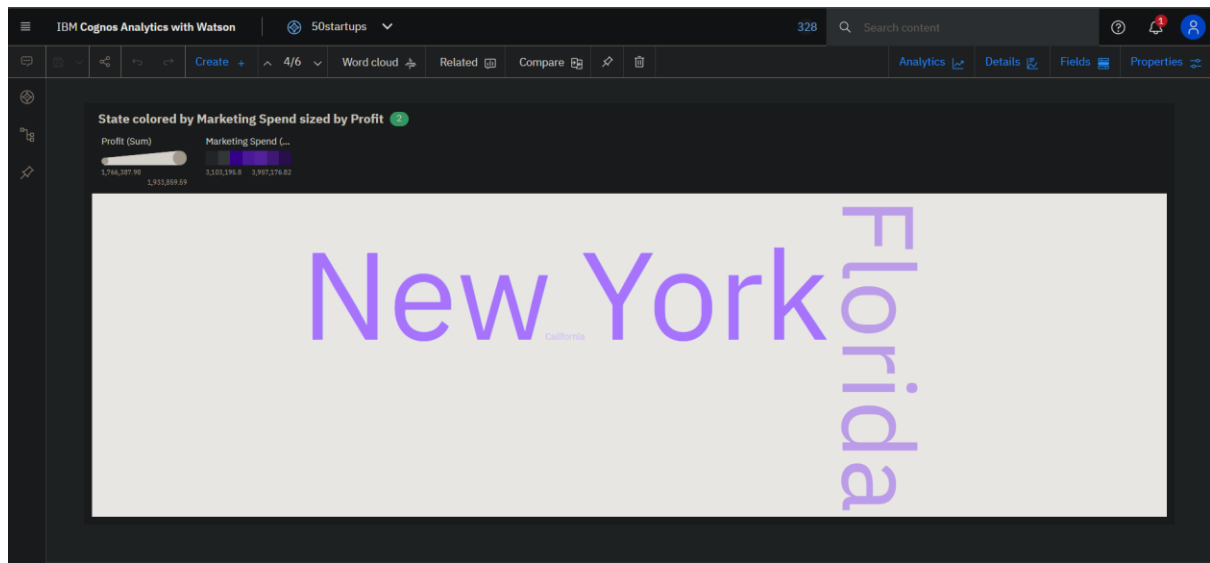
Inference:

- Across all R&D spends, the sum of Profit is over 5.6 million.
- For Profit, the most significant values of R&D Spend are 165349.2, 162597.7, 153441.51, and 144372.41, whose respective Profit values add up to over 758 thousand, or 13.5 % of the total.
- Profit ranges from nearly 36 thousand, when R&D Spend is 542.05, to over 192 thousand, when R&D Spend is 165349.2.
- For Marketing Spend, the most significant value of State is Florida, whose respective Marketing Spend values add up to nearly 4.0 million, or 37.5 % of the total.

Administration by R&D Spend coloured by State:



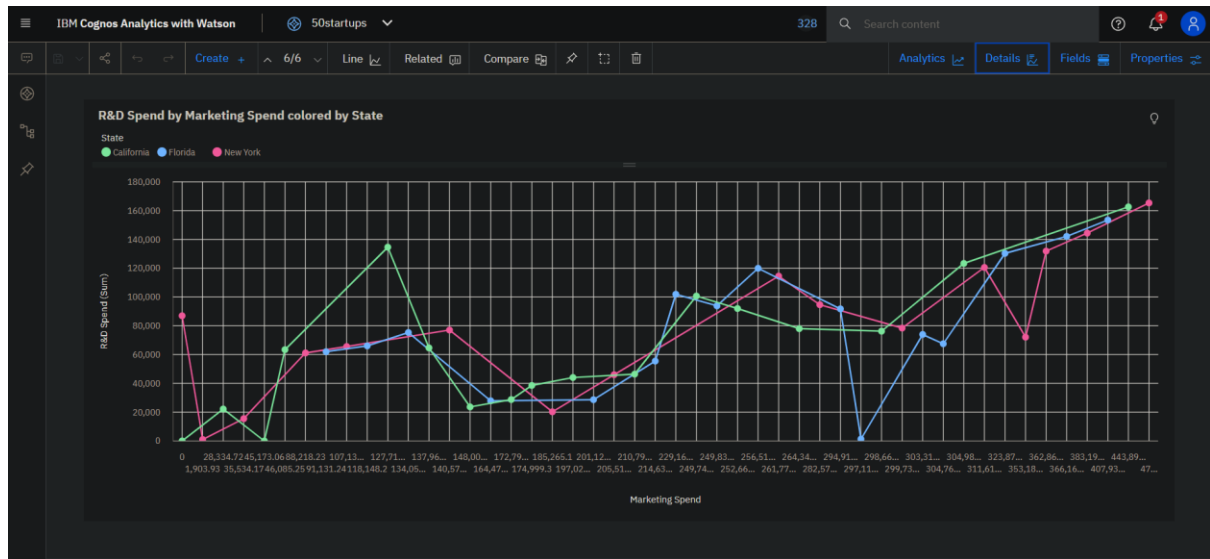
State coloured by Marketing Spend sized by Profit:



Inference:

- Across all states, the sum of Profit is over 5.6 million.
- For Profit, the most significant values of State are New York and Florida, whose respective Profit values add up to over 3.8 million, or 68.5 % of the total.
- Profit ranges from nearly 1.8 million, in California, to over 1.9 million, in New York.

R&D Spend by Marketing Spend coloured by State:



Inference:

- Over all marketing spends and states, the sum of R&D Spend is nearly 3.7 million.
- For R&D Spend, the most significant values of Marketing Spend are 471784.1, 443898.53, and 407934.54, whose respective R&D Spend values add up to over 481 thousand, or 13.1 % of the total.
- For R&D Spend, the most significant values of State are New York and Florida, whose respective R&D Spend values add up to nearly 2.6 million, or 70.2 % of the total.
- The summed values of R&D Spend range from 0 to over 165 thousand.