

New +

## Samples

sales.csv

CSV 


**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



**Preview data**

To preview data, select a table, a column in a table, or a folder that contains columns.

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

New exploration

← → ↺ https://ap1.ca.analytics.ibm.com/bi/?perspective=explore&id=explore\_8e465501-b91b-4872-8d3b-eb48fee45ee4&options[ ☆

IBM Cognos Analytics with Watson \* New exploration 26 Search content ? 1

Maintenance: The Microsoft SQL Server JDBC driver bundled with IBM Cognos Analytics wi...itional steps might be required to connect to your SQL Server databases. Dismiss More info →

⋮ ⏏ ↻ ↺ ↻ Create +

Assistant 50\_Startups.csv

Count of R&D Spend

108

R&D Spend

Ask a question →

Select a starting point

Every exploration includes a data relationships card.

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

Enter data column. Not sure? Try Profit, Marketing Spend

Try starting with one of these...

Profit Marketing Spend Administration R&D Spend

Skip

Type here to search

ENG 16:56 16-09-2022

**Assistant**

50\_Startups.csv

Count of Administration

# 108

Administration

Show related visualizations

Ask a question

## Select a starting point

Every exploration includes a data relationships card.

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

Enter data column. Not sure? Try Profit, Marketing Spend

Try starting with one of these...

Profit Marketing Spend Administration R&D Spend

### Assistant

50\_Startups.csv

Count of Marketing Spend

# 108

Marketing Spend

[Show related visualizations](#)

[Create dashboard from the chart](#)

Ask a question

## Select a starting point

Every exploration includes a data relationships card.

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

Enter data column. Not sure? Try Profit, Marketing Spend

Try starting with one of these...

- Profit
- Marketing Spend
- Administration
- R&D Spend



1234 5678

# 108

[Show related visualizations](#)

Skip

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

🔍 Enter data column. Not sure? Try Profit, Marketing Spend

Try starting with one of these...

Profit

Marketing Spend

## Administration

R&amp;D Spend

Ask a question

### Assistant

50\_Startups.csv

Number of State

3

State

- help
- show ...
- what impacts ...
- create dashboard

Ask a question

## Select a starting point

Every exploration includes a data relationships card.

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

Enter data column. Not sure? Try Profit, Marketing Spend

Try starting with one of these...

- Profit
- Marketing Spend
- Administration
- R&D Spend



### Assistant


50\_Startups.csv

Here are the visualizations from source 50\_Startups.csv:

Administration and Marketing Spend for State regi... ⓘ

Administration (S... Marketing Spend ...

4,094,296.26 4,758,218.39 6,762,849.47 8,460,025.62



## Select a starting point

Every exploration includes a data relationships card.

Skip

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

Enter data column. Not sure? Try Profit, Marketing Spend

Try starting with one of these...

Profit Marketing Spend Administration R&D Spend

### Assistant

50\_Startups.csv

@Cognos

Here are the visualizations from source 50\_Startups.csv:

Table Icon

Bar Chart Icon

Table Icon

Scatter Plot Icon

#### R&D Spend and Profit

Measures

- Profit
- R&D Spend

Measure	Value
Profit	10,000,000
R&D Spend	8,000,000

Ask a question

## Select a starting point

Every exploration includes a data relationships card.

Skip

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

Enter data column. Not sure? Try Profit, Marketing Spend

Try starting with one of these...

Profit

Marketing Spend

Administration

R&D Spend

## Create calculation

Name: R&D Spend +

### Components



Search



50\_Startups.csv



▶ # Row Id

└ R&D Spend

└ Administration

└ Marketing Spend

▶ State

└ Profit

### Expression



14



```
1 IF( R_D_Spend=0 ) THEN ( average ( R_D_Spend ) ) ELSE ( R_D_Spend )
```

### Validation Results

✓ The expression is valid.

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		471784.1	New York	192261.83
2	162597.7		443898.53	California	191792.06
3	153441.51		407934.54	Florida	191050.39
4	144372.41		383199.62	New York	182901.99
5	142107.34		366168.42	Florida	166187.94
6	131876.9		362861.36	New York	156991.12
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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

## Create calculation

Name Marketing Spend

### Components

### Expression

Info icon (circled in blue) | Eye icon | Copy icon | Comment icon | Code icon | Moon icon | 14 | Dropdown arrow



Search



New data module



50\_Startups.csv

# Row Id

R&D Spend

Administration

Marketing Spend

State

Profit

```
1 IF ( Marketing_Spend = 0 )
2   THEN ( AVERAGE ( Marketing_Spend ) )
3   ELSE ( Marketing_Spend )
```

### Information

**if ( condition ) then ( expression ) else ( expression )**

Works with the then and else constructs. If defines a condition; when the if condition is true, the then expression is used. When the if condition is not true, the else expression is used. This function appears in the Top 10 Retailers for 2005 sample report in the GO Data Warehouse (analysis) package.



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



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
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	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

Data module

Search

New data module

Navigation paths

50\_Startups.csv

# Row Id

R&D Spend

Administration

Marketing Spend

State

Profit

Grid

Relationships

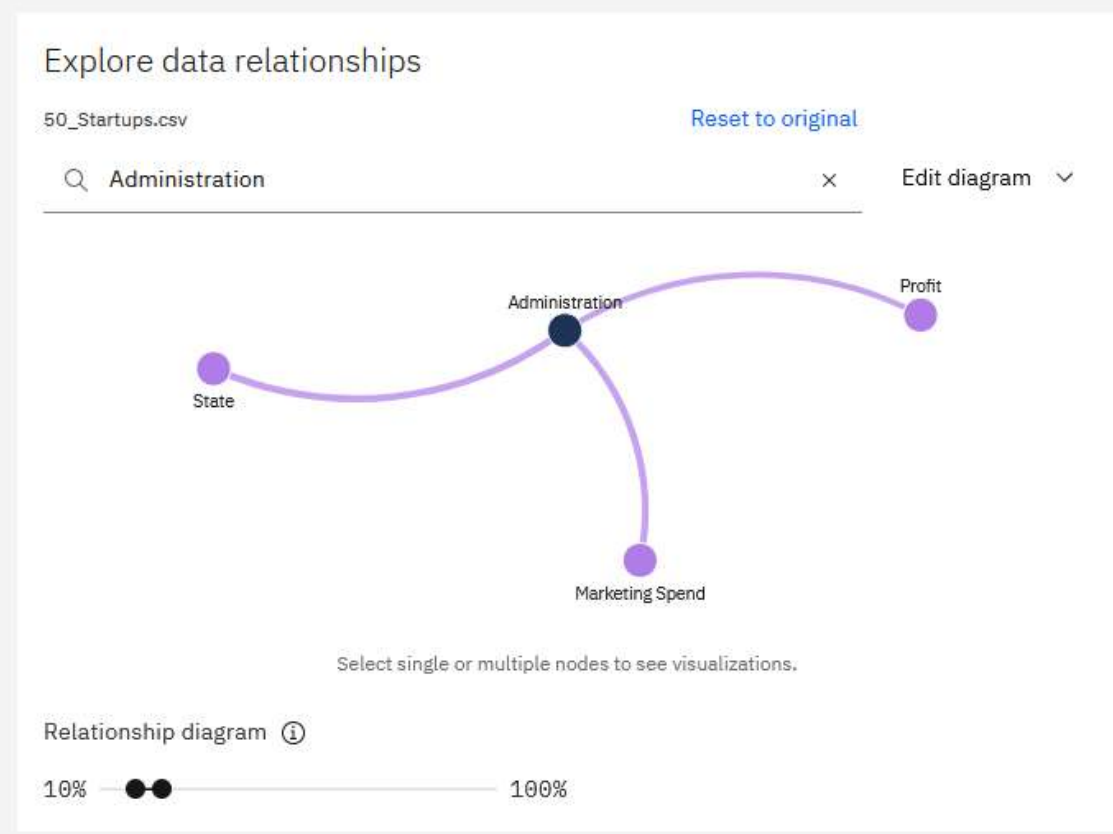
Custom tables

	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
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	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

My pins

All

Search



### Select a visualization

Explore visualizations related to 'Administration'

Administration

13.1M

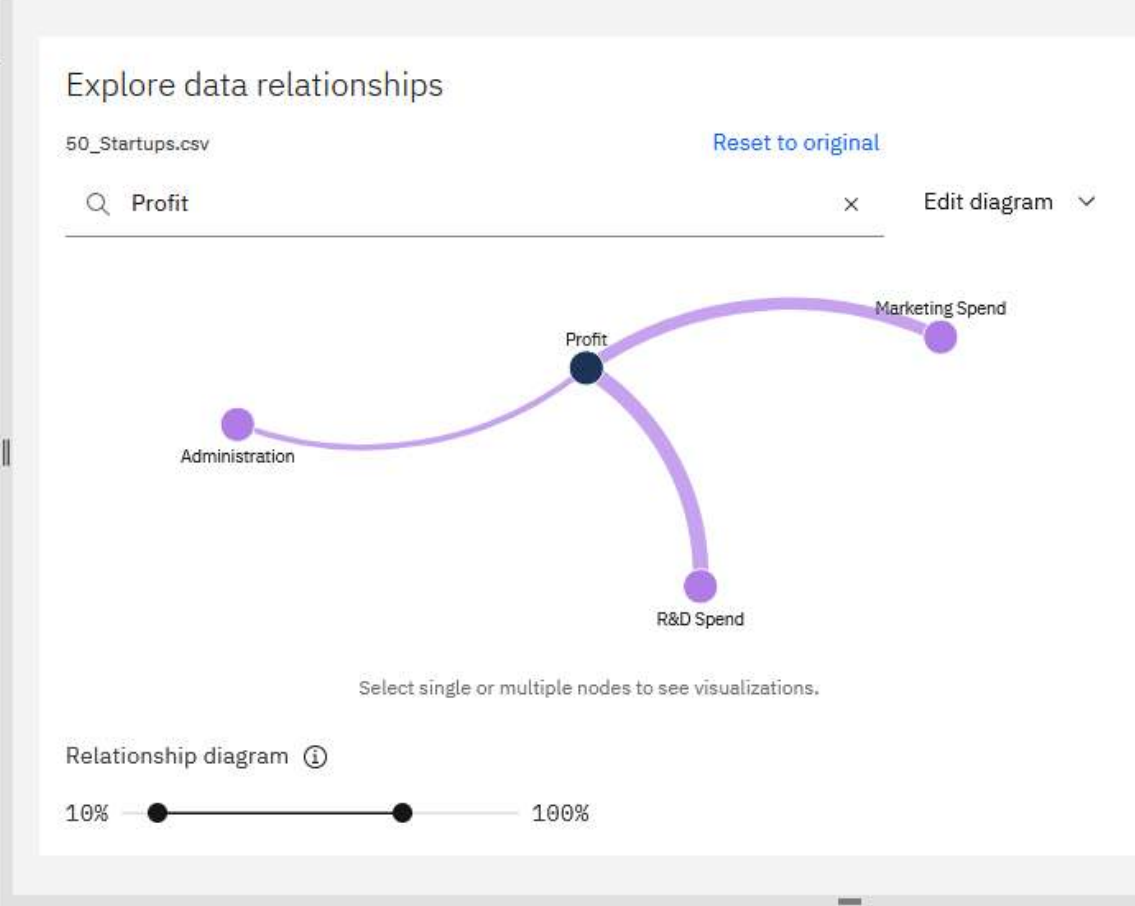
Administration

Add +

Administration

Add +

No pinned visualizations



### Select a visualization

Explore visualizations related to 'Profit'

Profit

**12.3M**

Profit

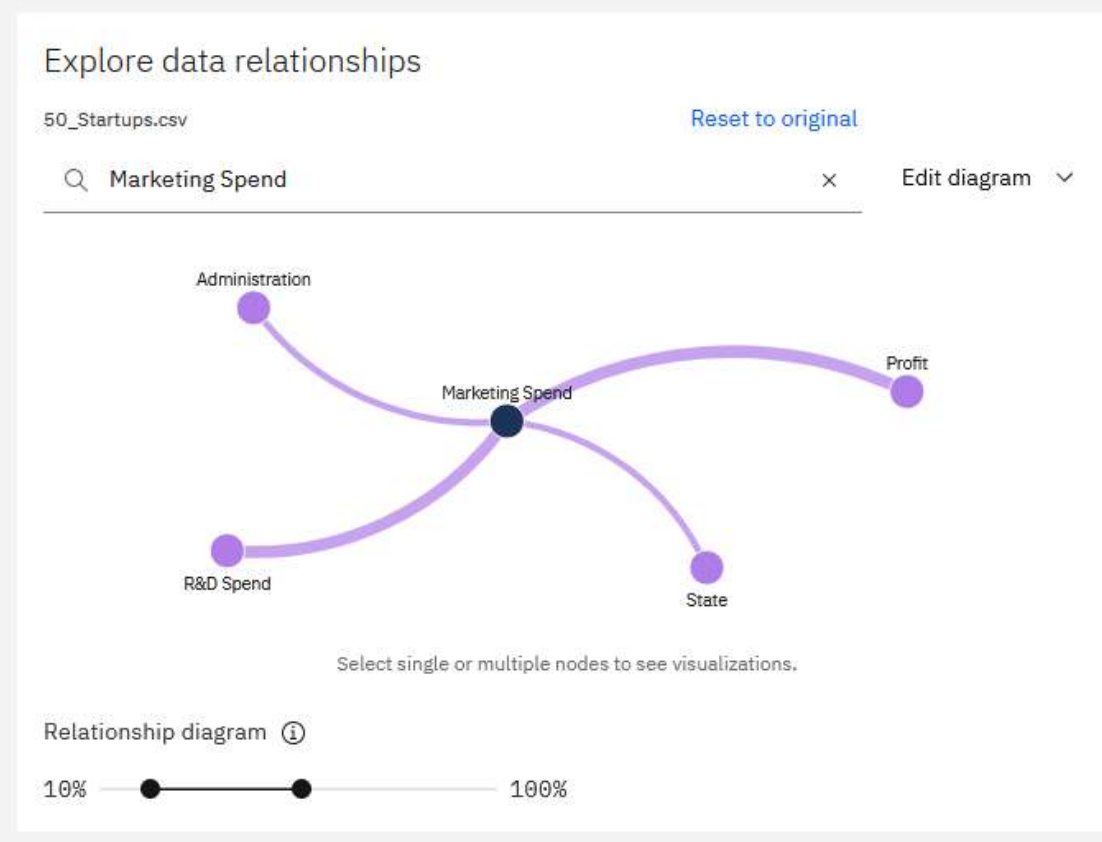
[Add +](#)

Profit

[Add +](#)

My pins All

Search



### Select a visualization

Explore visualizations related to 'Marketing Spend'

Marketing Spend

**23.2M**

Marketing Spend

[Add +](#)

Marketing Spend

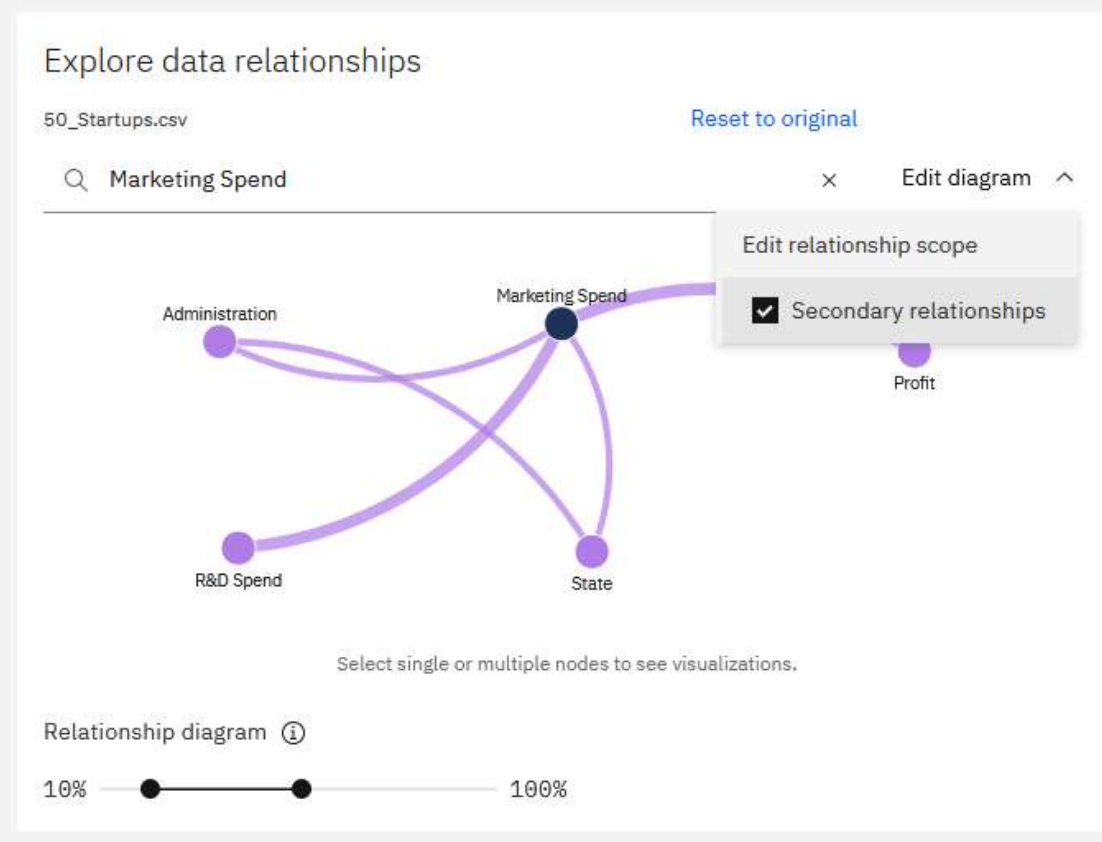
A row of small, colorful icons representing different chart types: bar, line, area, pie, and scatter.

[Add +](#)



My pins All

Search



### Select a visualization

Explore visualizations related to 'Marketing Spend'

Marketing Spend

23.2M

Marketing Spend

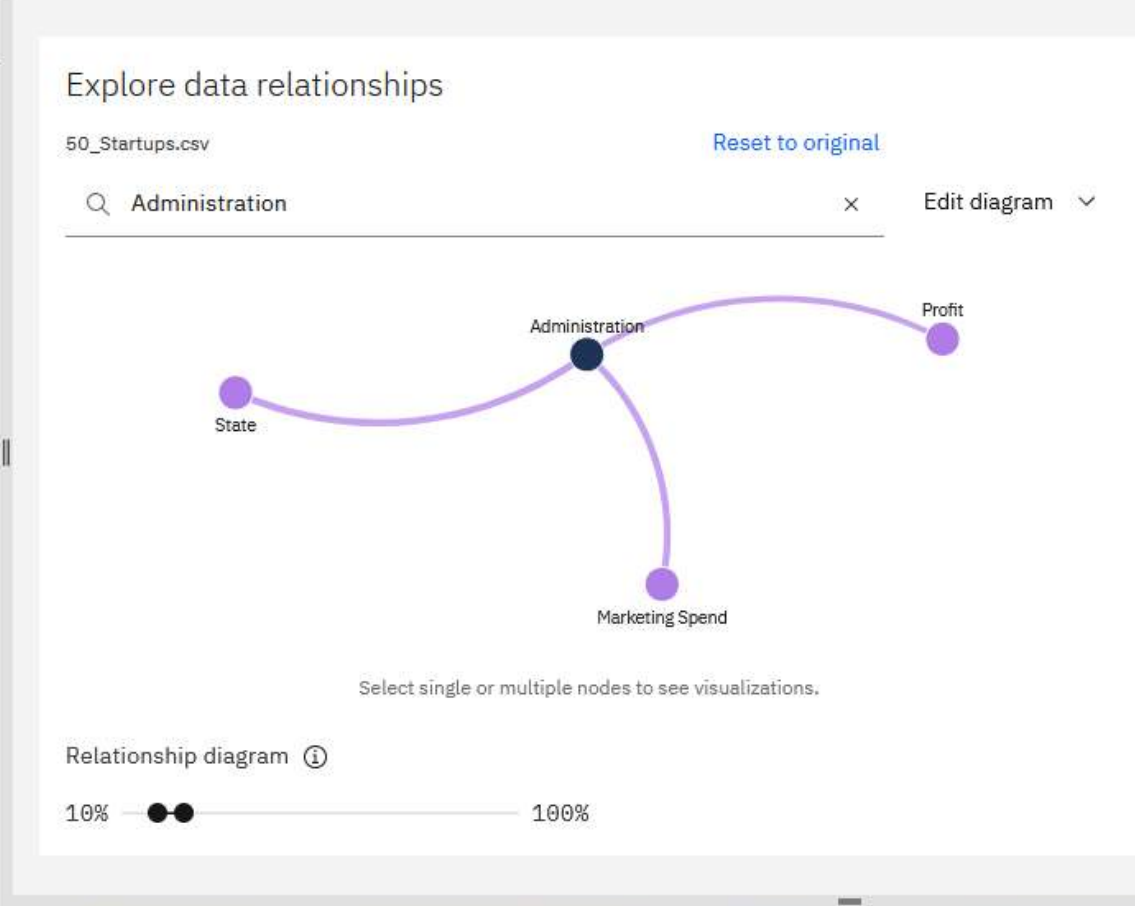
Add +

Marketing Spend

Add +



No pinned visualizations



### Select a visualization

Explore visualizations related to 'Administration'

Administration

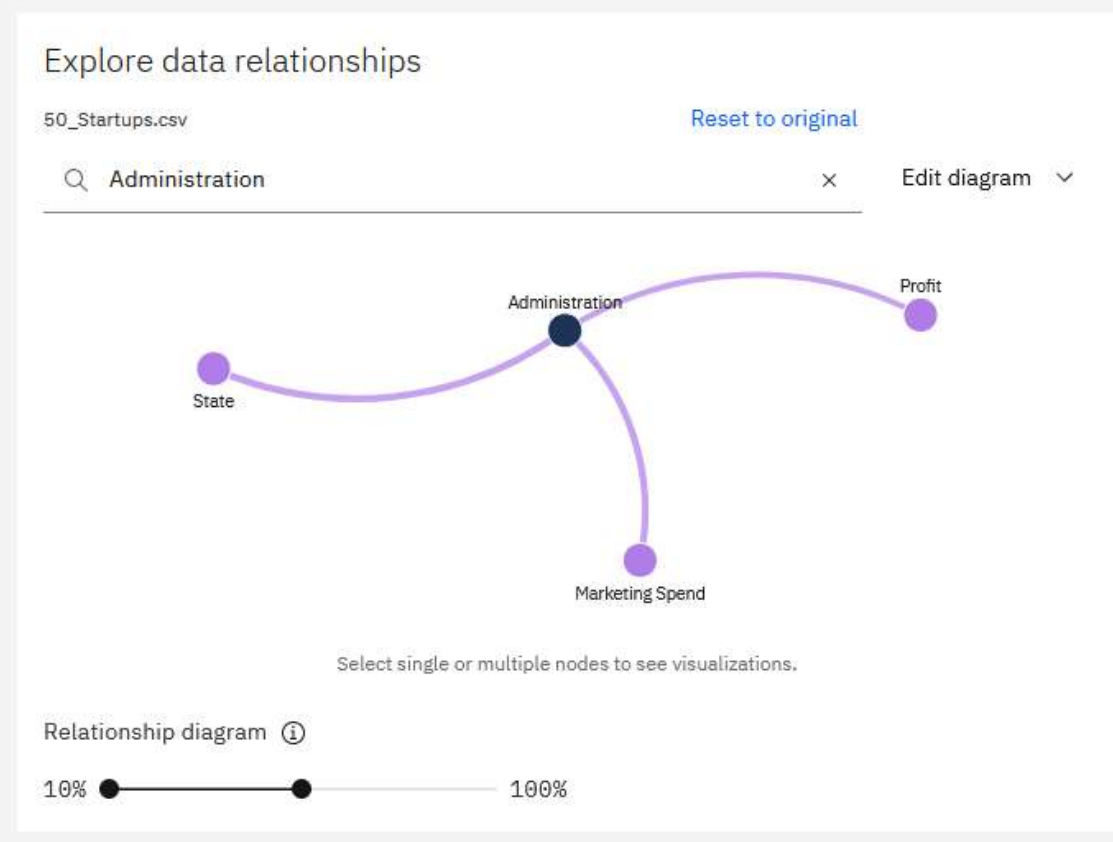
**13.1M**

Administration

Add +

My pins All

Search



### Select a visualization

Explore visualizations related to 'Administration'

Administration

**13.1M**

Administration

Add +

Administration

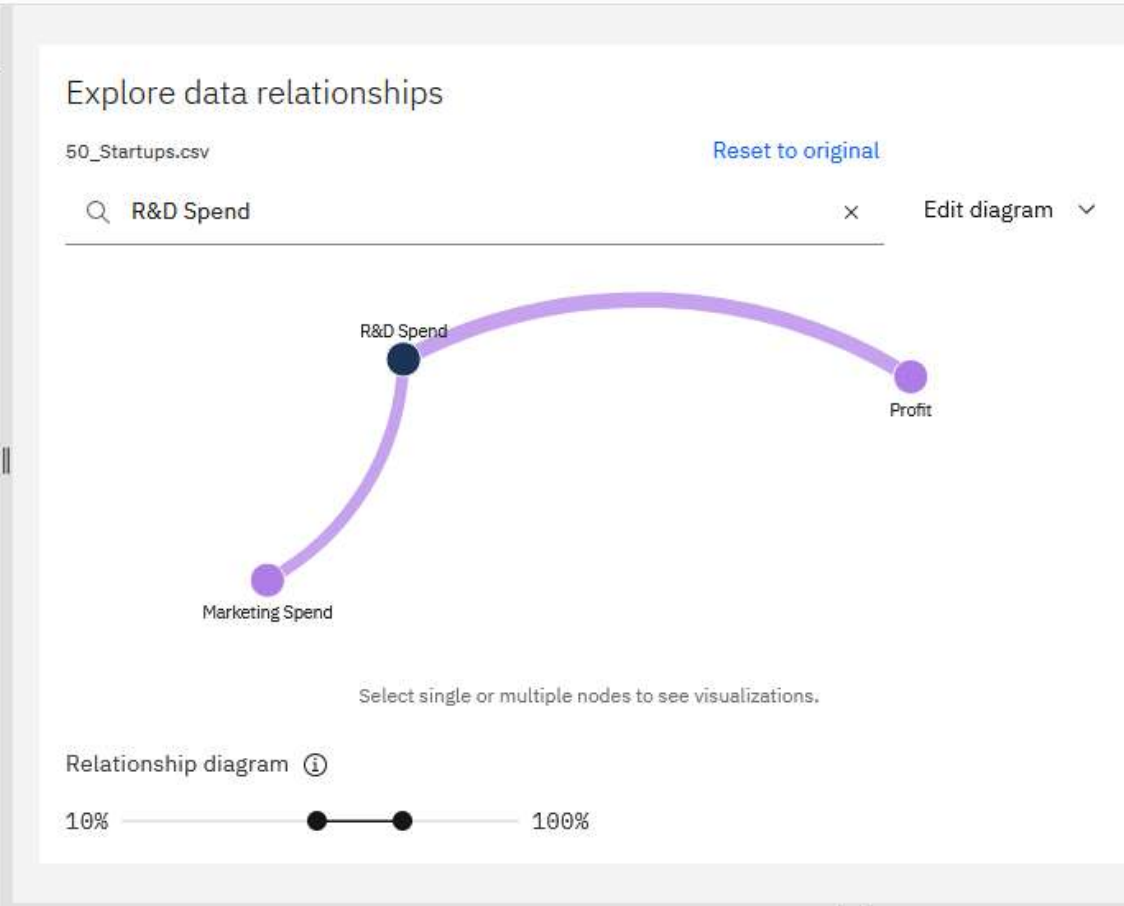
Add +

My pins

All

Search

No pinned visualizations



### Select a visualization

Explore visualizations related to 'R&D Spend'

R&D Spend

8.1M

R&D Spend

Add +

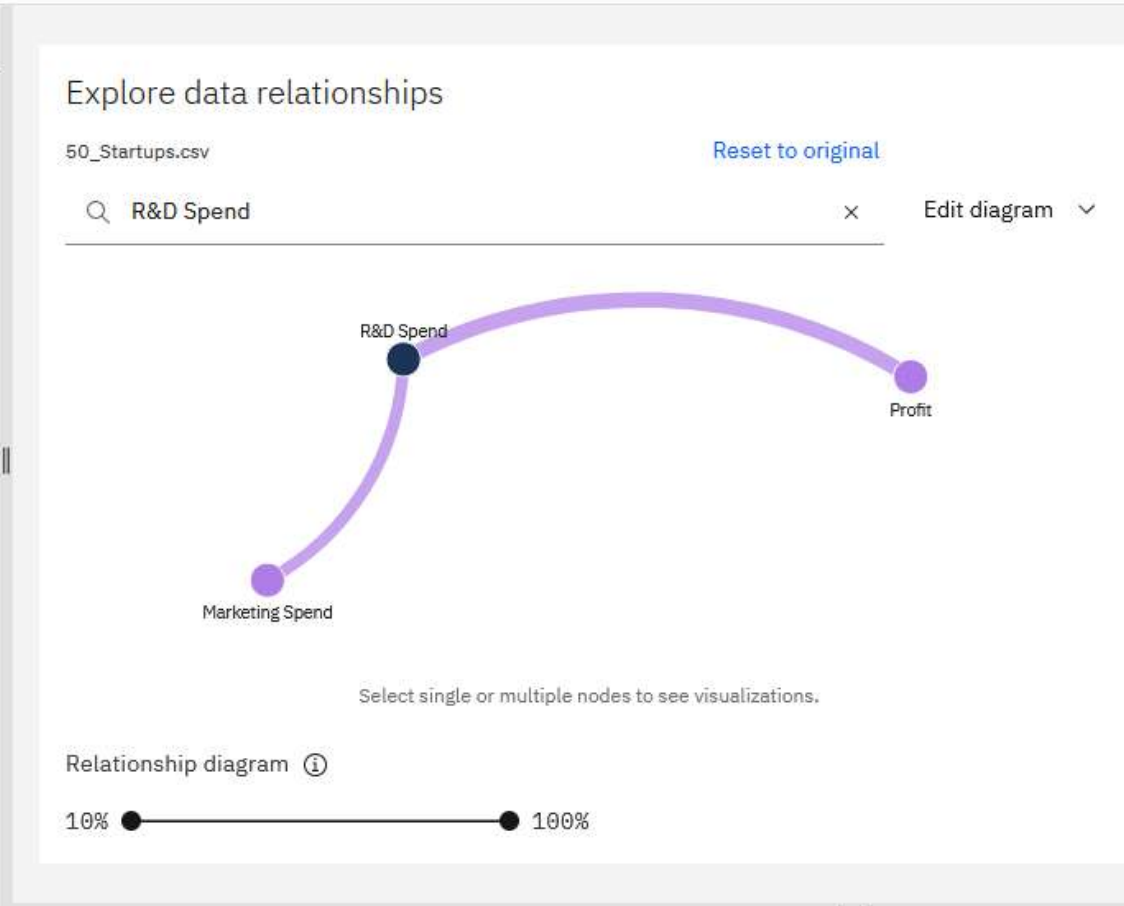
R&D Spend

Add +

My pins All

Search

No pinned visualizations



### Select a visualization

Explore visualizations related to 'R&D Spend'

R&D Spend

8.1M

R&D Spend

Add +

R&D Spend

Add +



### Select a visualization

Explore visualizations related to 'State'

#### State regions

[Add +](#)

#### State

State
California
Florida

[Add +](#)



### Select a visualization

Explore visualizations related to 'State'

#### State regions

[Add +](#)

#### State

State
California
Florida

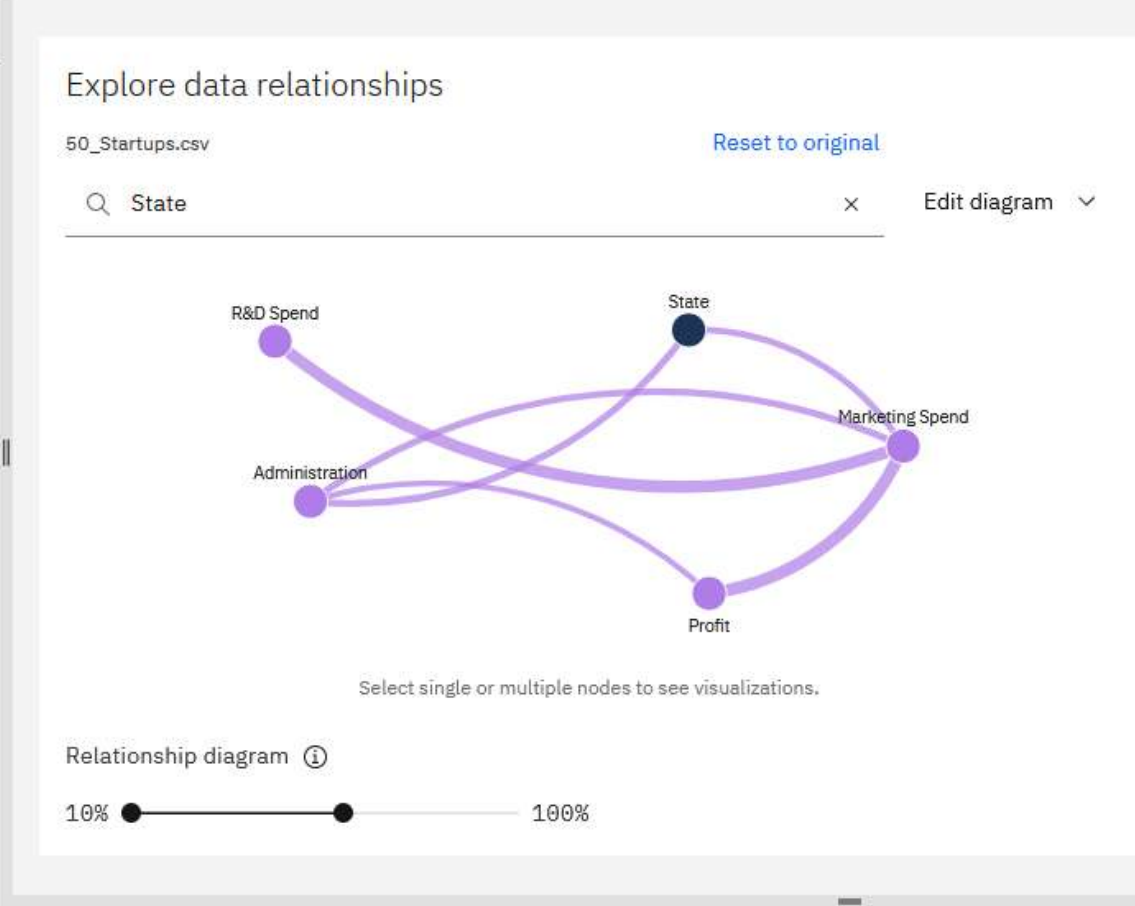
[Add +](#)



My pins All

Search

No pinned visualizations



### Select a visualization

Explore visualizations related to 'State'

State regions

[Add +](#)

State

State
California
Florida

[Add +](#)

New exploration

https://ap1.ca.analytics.ibm.com/bi/?perspective=explore&id=i0972434C6A134DD5B7211E6B6B3B3461&options[disableG

IBM Cognos Analytics with Watson

New exploration

26

Search content

?

1

...

✓

↶

↷

Create +

Assistant

50\_Startups.csv

Here's the number of items in R&D Spend in 50\_Startups.csv:

1234

Count of R&D Spend

108

Ask a question

Explore data relationships

50\_Startups.csv

Reset to original

State

Edit diagram

State

Administration

Marketing Spend

Relationship diagram

10% — 100%

Select a visualization

Explore visualizations related to 'State'

State regions

Add +

State

State
California
Florida

Add +

Type here to search

ENG 00:20 17-09-2022

### Assistant

50\_Startups.csv

Count of Administration

# 108

Administration

Show related visualizations

Ask a question →

### Explore data relationships

50\_Startups.csv Reset to original

State x Edit diagram

```
graph TD; State((State)) --- Administration((Administration)); Administration --- MarketingSpend((Marketing Spend));
```

Relationship diagram ⓘ

10% —●— 100%

### Select a visualization

Explore visualizations related to 'State'

#### State regions

Add +

#### State

State
California
Florida

Add +

**Assistant**

50\_Startups.csv

Number of State

3

State

Ask a question →

**Explore data relationships**

50\_Startups.csv [Reset to original](#)

State x Edit diagram

```
graph TD; State((State)) --- Administration((Administration)); Administration --- MarketingSpend((Marketing Spend));
```

Relationship diagram ⓘ

10% —●— 100%

**Select a visualization**

Explore visualizations related to 'State'

State regions

[Add +](#)

State

State
California
Florida

[Add +](#)

### R&D Spend and Profit

Measures  
● Profit ● R&D Spend



Show related visualizations

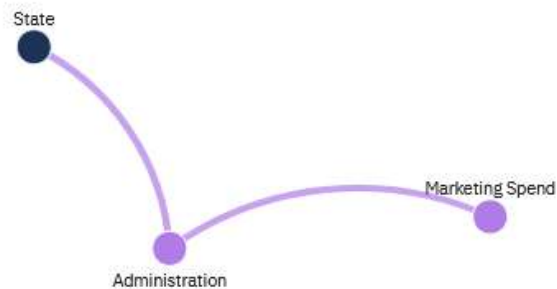
### Explore data relationships

50\_Startups.csv

Reset to original

State

Edit diagram



Relationship diagram ⓘ

10% —●— 100%

### Select a visualization

Explore visualizations related to 'State'

State regions



Add +

State

State

California

Florida

Add +





### Assistant

50\_Startups.csv

Here are the visualizations from source 50\_Startups.csv:

Marketing Spend and R&D Spend

Measures

- R&D Spend
- Marketing Spend

Measures	Values
R&D Spend	5,000,000
Marketing Spend	15,000,000

Ask a question →

### Explore data relationships

50\_Startups.csv Reset to original

State x Edit diagram

```
graph LR; State((State)) --- Administration((Administration)); Administration --- MarketingSpend((Marketing Spend));
```

Relationship diagram ⓘ

10% —●— 100%

### Select a visualization

Explore visualizations related to 'State'

State regions

Add +

State

State
California
Florida

Add +

### Assistant

50\_Startups.csv


@Cognos

Here are the visualizations from source 50\_Startups.csv:

R&D Spend for State regions

R&D Spend (Sum)

2,422,612.31 2,874,159

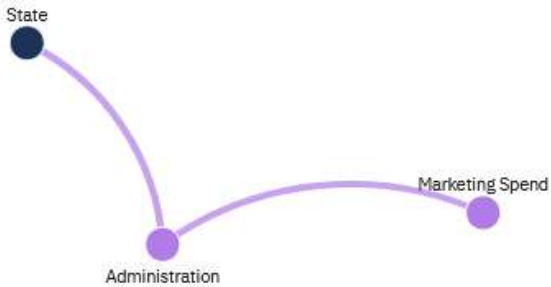


Ask a question →

### Explore data relationships

50\_Startups.csv Reset to original

State x Edit diagram v




Relationship diagram ⓘ

10% —●— 100%

### Select a visualization

Explore visualizations related to 'State'

State regions



Add +

State

State
California
Florida

Add +

New exploration

https://ap1.ca.analytics.ibm.com/bi/?perspective=explore&id=i0972434C6A134DD5B7211E6B6B3B3461&options[disableG

IBM Cognos Analytics with Watson

New exploration

26

Search content

?

1

Create +

Assistant

50\_Startups.csv

R&D Spend

I'm done

Profit and Marketing Spend

@Cognos

Here are the visualizations from source 50\_Startups.csv:

Marketing Spend and Profit

Measures

Profit

Marketing Spend

Profit

Ask a question

Explore data relationships

50\_Startups.csv

Reset to original

State

Edit diagram

State

Administration

Marketing Spend

Relationship diagram

10%

100%

Select a visualization

Explore visualizations related to 'State'

State regions

State

California

Florida

Add +


Type here to search

00:26

17-09-2022

### Assistant

50\_Startups.csv



Measures

Profit

Marketing Spend

Values

0 5,000,000 15,000,000

[Show related visualizations](#)

[Create dashboard from the chart](#)

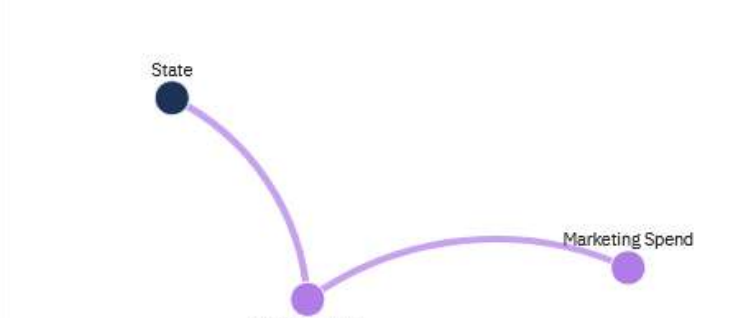
I found potential ambiguities in the following references.  
Select or enter a reference to see a list of alternatives.

Ask a question →

### Explore data relationships

50\_Startups.csv [Reset to original](#)

State x Edit diagram



State

Administration

Marketing Spend


Relationship diagram ⓘ

10% —●— 100%

### Select a visualization

Explore visualizations related to 'State'

State regions



[Add +](#)

State

State
California
Florida

[Add +](#)

### Assistant

50\_Startups.csv

Administration and Profit

Measures

- Profit
- Administration

Values

0 5,000,000 10,000,000

Ask a question →

### Explore data relationships

50\_Startups.csv Reset to original

State x Edit diagram

State

Administration

Marketing Spend

Relationship diagram ⓘ

10% —●— 100%

### Select a visualization

Explore visualizations related to 'State'

State regions

Add +

State

State
California
Florida

Add +



**Assistant**  
50\_Startups.csv

I found potential ambiguous results. Select or enter a reference visualization.

Marketing Spend  
I'm done

@Cognos

Here are the visualizations related to 'State':

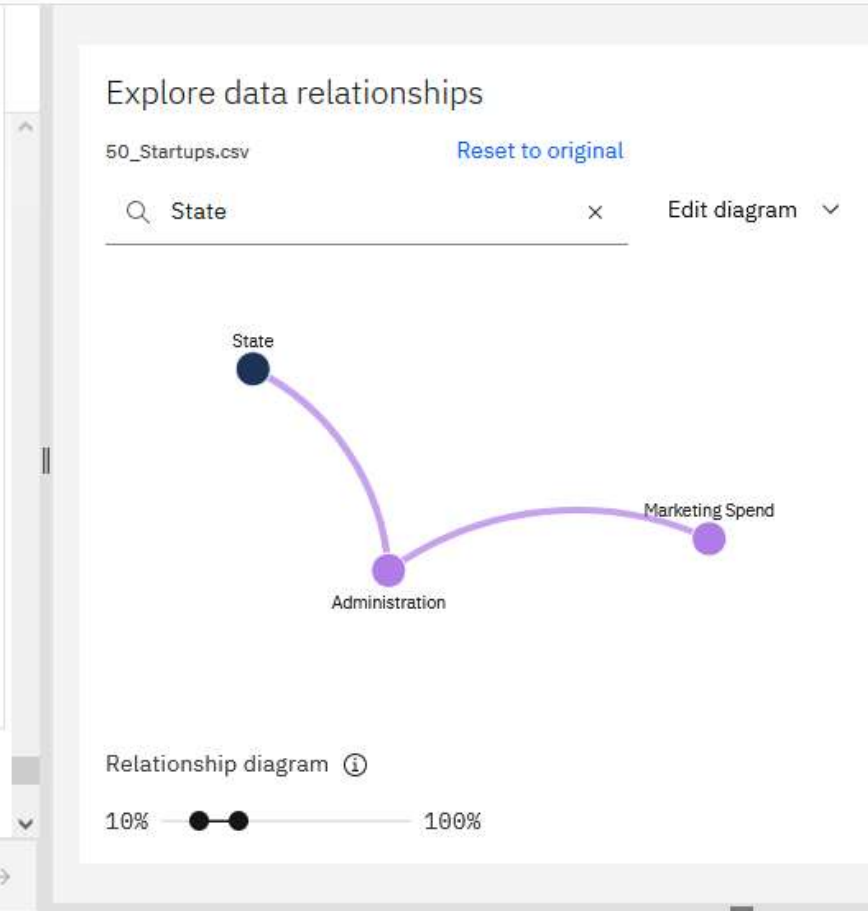
Administration and Profit

Ask a question →

**Select a card**

Single visualization

Compare visualization



**Select a visualization**

Explore visualizations related to 'State'

State regions

[Add +](#)

State

State
California
Florida

[Add +](#)



### Cards

1

State regions

Data relationships

### Choose visualization type

Automatic

State

State
California
Florida
New York

Comparison

Bar

Bullet

Column

Heat map

Line and column

Marimekko

Radar

Radial

Stacked bar

Stacked column

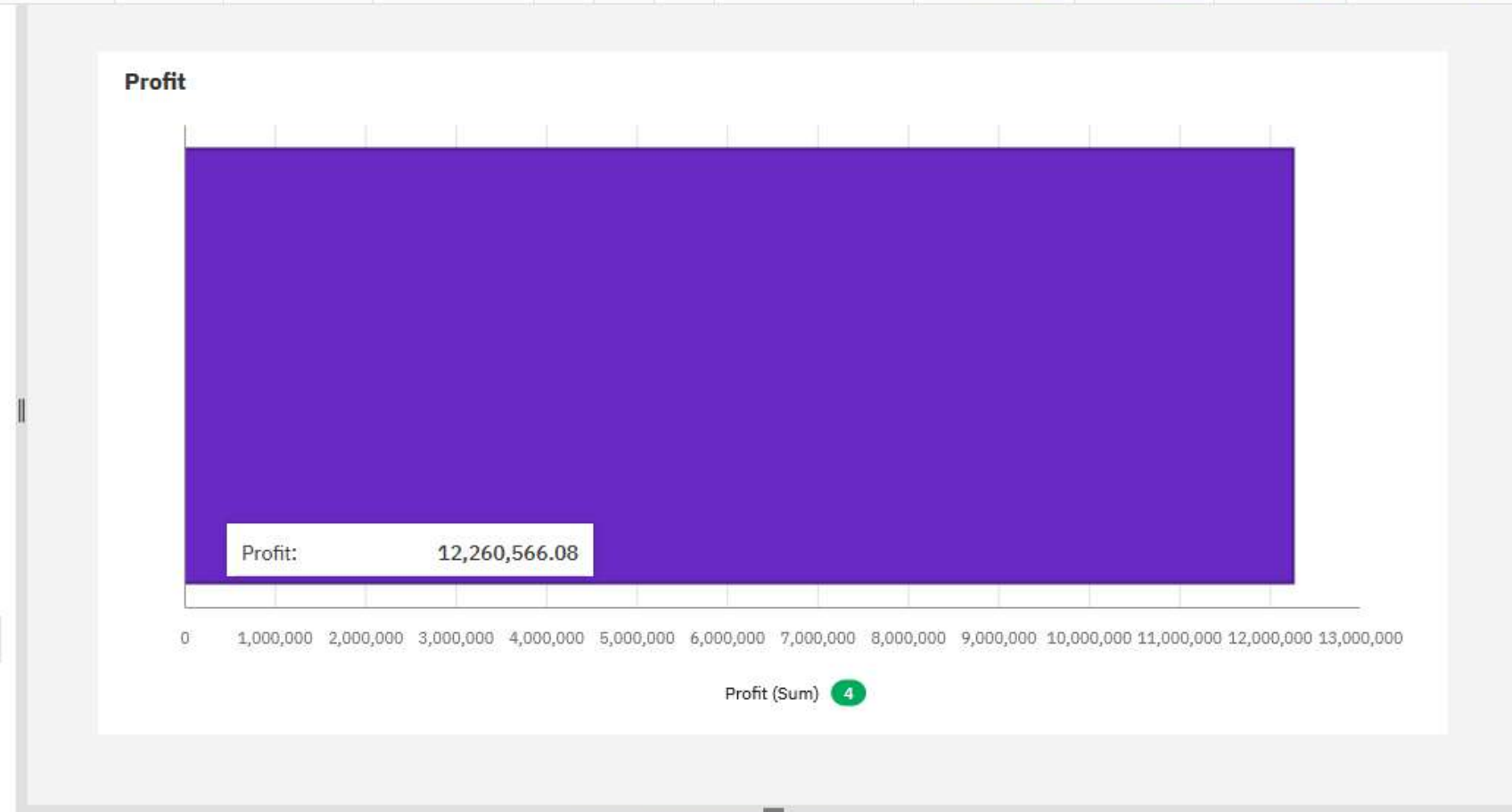
Word cloud

Selected sources /

50\_Startups.csv + :

Search

- Navigation paths +
- 50\_Startups.csv
  - R&D Spend
  - Administration
  - Marketing Spend
- State
  - California
  - Florida
  - New York
- Profit



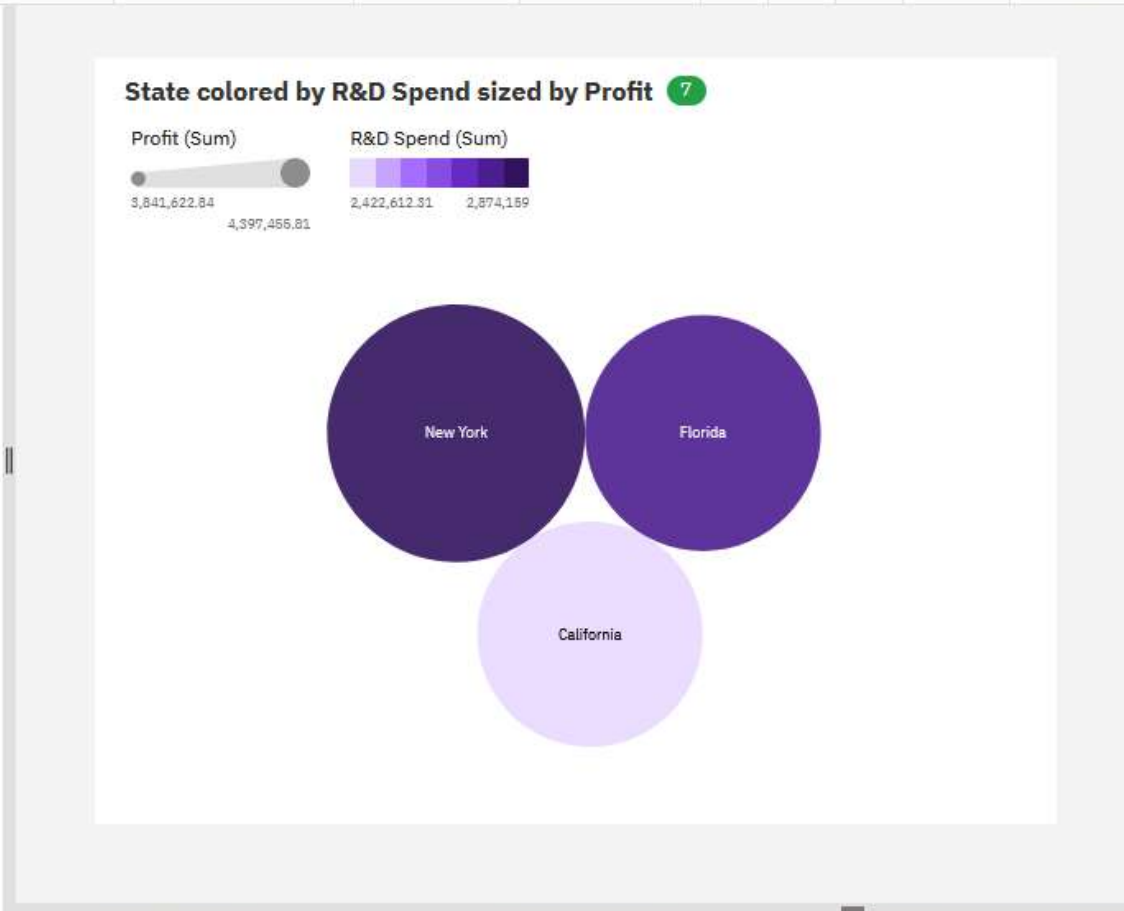
Selected sources /

50\_Startups.csv

Search

Navigation paths

- 50\_Startups.csv
  - R&D Spend
  - Administration
  - Marketing Spend
  - State
    - California
    - Florida
    - New York
  - Profit



Fields

Bubbles\*

Required field

State

Click or drag data here

Size

Profit

Color

R&D Spend

Click or drag data here

Repeat (column)

Click or drag data here

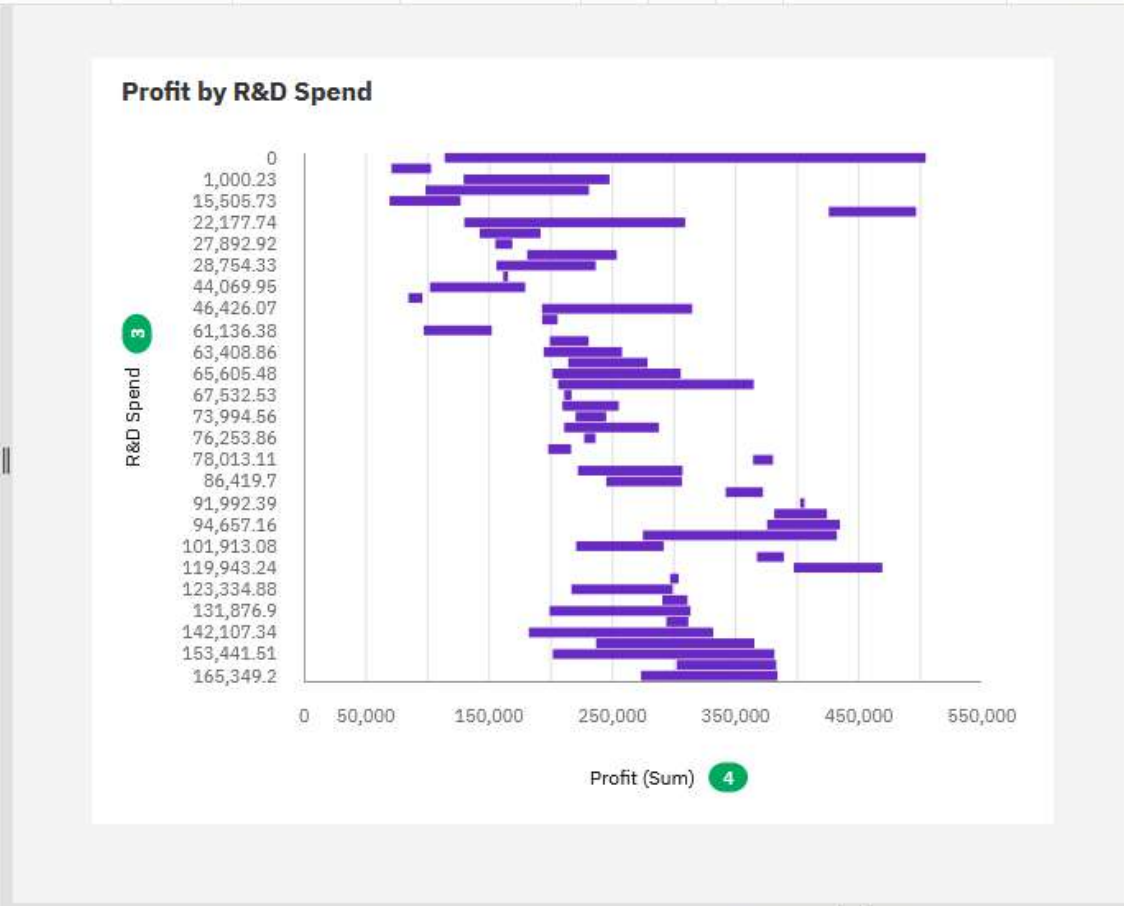
Selected sources /

50\_Startups.csv

Navigation paths

- 50\_Startups.csv
  - R&D Spend
  - Administration
  - Marketing Spend
- State
  - California
  - Florida
  - New York

Profit



### Fields

Bars

- R&D Spend

Click or drag data here

# Length\* Required field

- Profit

Click or drag data here

# y-start

- Administration

Click or drag data here

Target

Click or drag data here

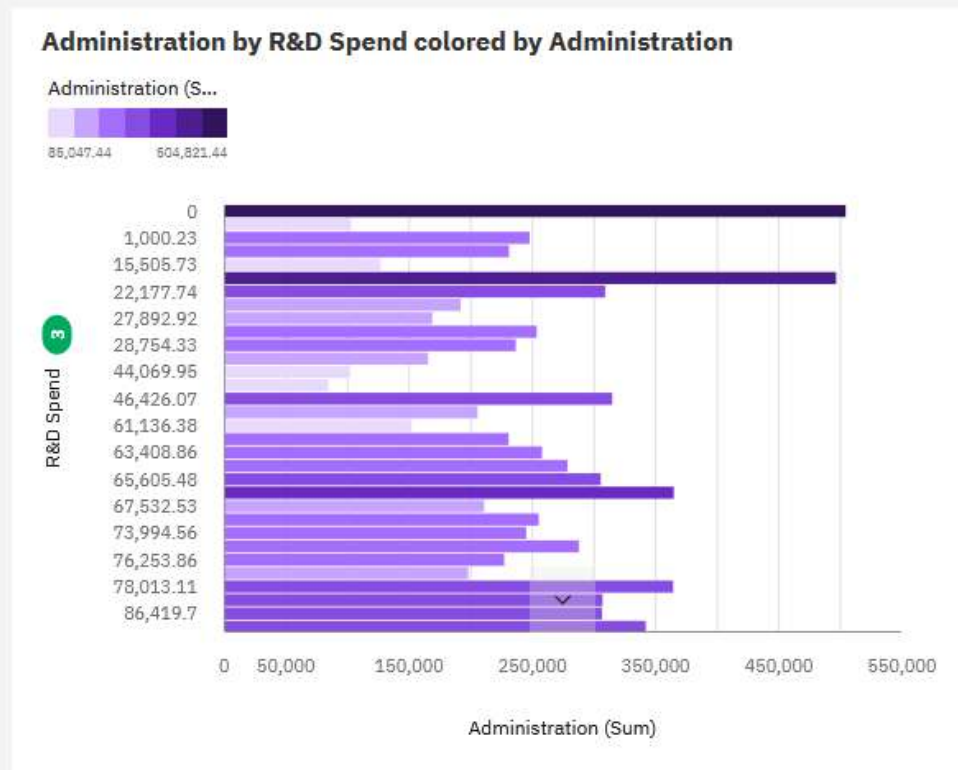
Selected sources /

50\_Startups.csv

Search

Navigation paths

- 50\_Startups.csv
  - R&D Spend
  - Administration
  - Marketing Spend
  - State
    - California
    - Florida
    - New York
  - Profit



### Fields

# y-start

Click or drag data here

Target

Click or drag data here

Color

Administration

Click or drag data here

Repeat (column)

Click or drag data here





### Profit for Administration and Profit 4

Profit	51,283.14	51,743.15	65,947.93	82,982.09	84,710.77	85,047.44	91
14,681.4	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
35,673.41	(no value)	71,346.82	(no value)	(no value)	(no value)	(no value)	
42,559.73	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
49,490.75	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
64,926.08	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
65,200.33	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
69,758.98	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
71,498.49	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
77,798.83	(no value)	(no value)	(no value)	(no value)	155,597.66	(no value)	
78,239.91	(no value)	(no value)	(no value)	(no value)	(no value)	(no value)	
81,005.76							

### Fields

#### Columns

Administration

Click or drag data here

#### Rows

Profit

Click or drag data here

#### # Values\*

Required field

Profit

Click or drag data here





Selected sources /

50\_Startups.csv

Search

- Navigation paths
- 50\_Startups.csv
  - R&D Spend
  - Administration
  - Marketing Spend
  - State
    - California
    - Florida
    - New York
  - Profit



### Fields

Bars

State

Click or drag data here

# Length\* Required field

Profit

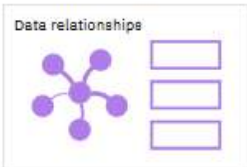
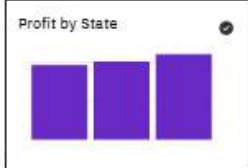
Click or drag data here

# y-start

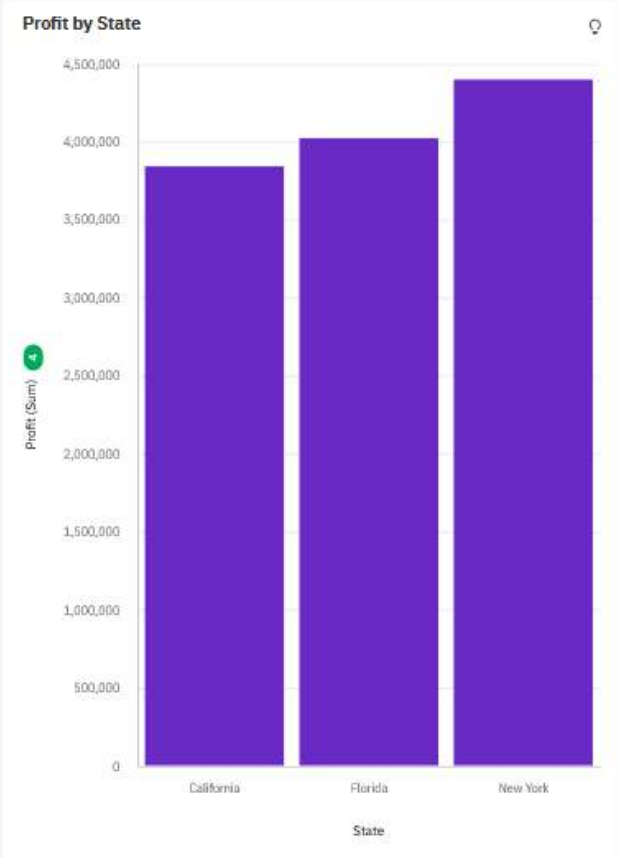
Click or drag data here

Target

Click or drag data here



Data relationships



Details

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

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