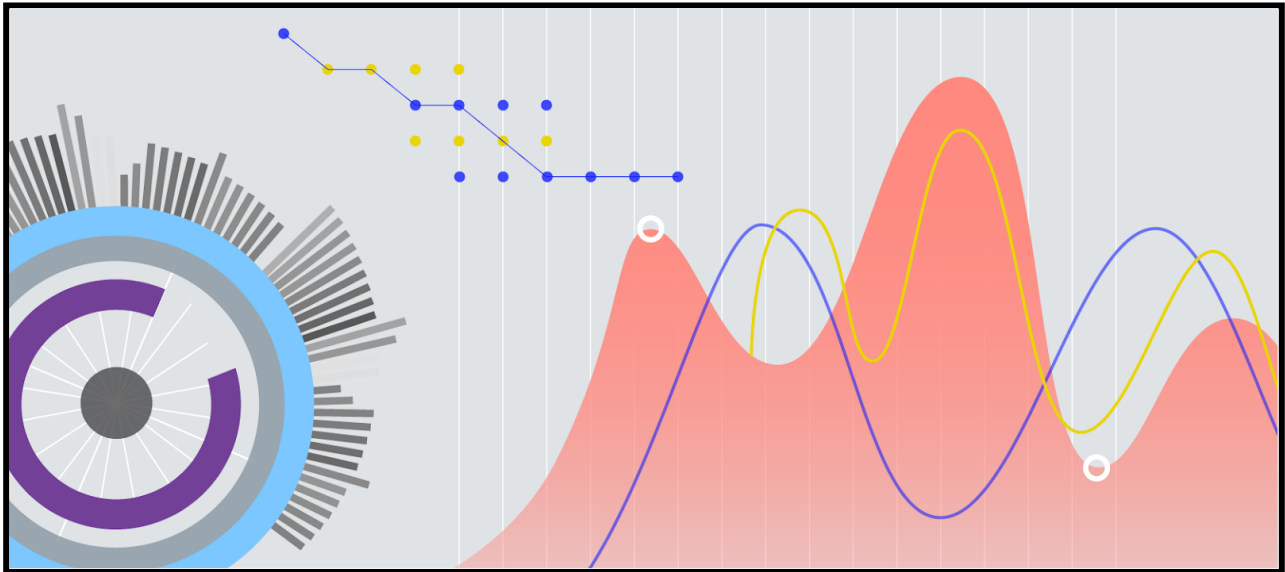


1,000 STARTUP DATA ANALYSIS AND VISUALIZATION



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Github Link to the project:

<https://github.com/Abhijeet-Tiwarii/Projects-Data-Analysis-and-Visualization.git>

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Objective:

To analyse and visualize sample data of 1,000 startup company's revenue, expenses and growth. This analysis would be performed to decide which are the top companies are performing well financially.

Hypothetical scenario:

Suppose I approached by a Venture Capital Fundraiser and the Board of Directors are currently reviewing 1,000 potential interesting startups and deciding on which ones they are going to invest in. The criteria for selection for this fund is a combination of:

- High Revenue (2015)
- Low Expenses (2015)
- Top Growth (2015)

My task would be to assist the Board in identifying which business represent the best investment opportunities.

About Data:

It is an open source data available in internet. It is a Excel sheet with two sheets in it, as follows,

1. Overview

It has the demographic information about the startup companies.

#	Overview	Overview	Overview	#	#	Overview	Overview	Overview
ID	Name	Industry	Description	Year Found...	Employees	State	City	Metro Area
1	Over-Hex	Software	Provides a We...	2006	25	TN	Franklin	Nashville
2	Unimattax	IT Services	Helps law fir...	2009	36	PA	Newtown Squ...	Philadelphia
3	Lexila	Real Estate	Offers invest...	2013	38	IL	Tinley Park	Chicago
4	Greenfax	Retail	A Verizon Wir...	2012	320	SC	Greenville	Newberry, SC
5	Saoace	Energy	An energy effi...	2009	24	WI	New Holstein	Appleton, WI
6	Donplus	Advertising & ...	Offers public ...	2009	26	CA	Los Angeles	Los Angeles
7	Blacklane	IT Services	Provides tech...	2011	66	CA	Orange	Los Angeles
8	Toughtam	Logistics & Tr...	An asset-back...	2011	20	AL	Birmingham	Birmingham-...
9	Zimlane	Human Resou...	Provides staff...	2010	675	MI	Troy	Detroit

Fig: 1,000 Startup: Overview

2. Finance

It has financial information per year (2013-15) including revenue, expenses, and profit% of the startup companies.

#	Abc	#	#	#	#	#	#	#	#
Finan...	Financials	Financials	Financials	Financials	Financials	Financials	Financials	Financials	Financials
ID	Name	2015 Revenue	2015 Expenses	2015 Profit	2015 Growth %	2014 Revenue	2014 Expenses	2014 Profit	2014 Growth %
1	Over-Hex	10,684,526.90	1,130,700.06	9,553,826.84	3.34000	2,463,739	194,747.86	2,268,991.14	4.10000
2	Unimattax	9,016,542.89	804,035.40	8,212,507.49	0.65000	5,448,571	239,226.90	5,209,344.10	0.41000
3	Lexila	12,456,641.64	2,149,297.00	10,307,344.65	5.20000	2,007,778	335,126.93	1,672,651.07	4.23000
4	Greenfax	7,746,272.07	1,044,375.49	6,701,896.58	3.17000	1,857,830	247,048.76	1,610,781.24	0.56000
5	Saoace	10,725,585.46	2,694,644.42	8,030,941.04	3.12000	2,604,017	615,040.85	1,988,976.15	2.39000
6	Donplus	7,798,447.11	3,206,651.60	4,591,795.52	5.60000	1,180,753	497,980.63	682,772.37	3.67000
7	Blacklane	10,359,369.13	4,631,808.13	5,727,561.00	5.64000	1,559,705	771,342.55	788,362.45	6.22000
8	Toughtam	8,501,568.34	371,848.52	8,129,719.82	2.67000	2,319,207	117,792.57	2,201,414.43	0.30000

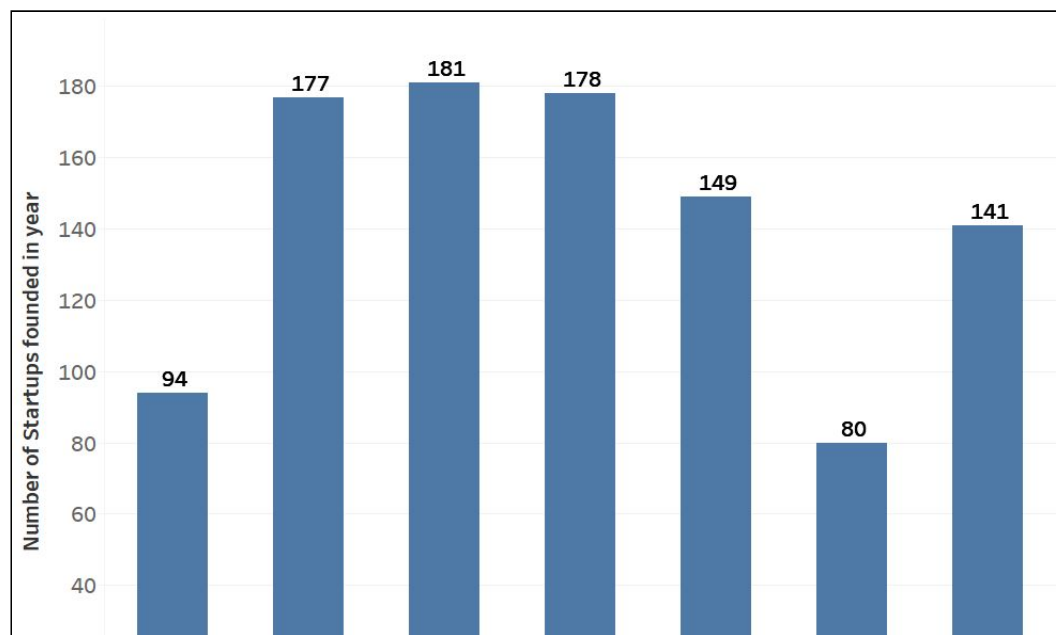
Fig: 1,000 Startup: Financial

Results:

1. Number of startups founder in year

As we can see from the Bar chart below, the majority of startups were founded between 2010 and 2013.

Fig: Number of employees by Year



2. Average number of Employees in the industry

There are more employees working in Food and Beverage, and Energy industry compared to any other industry.

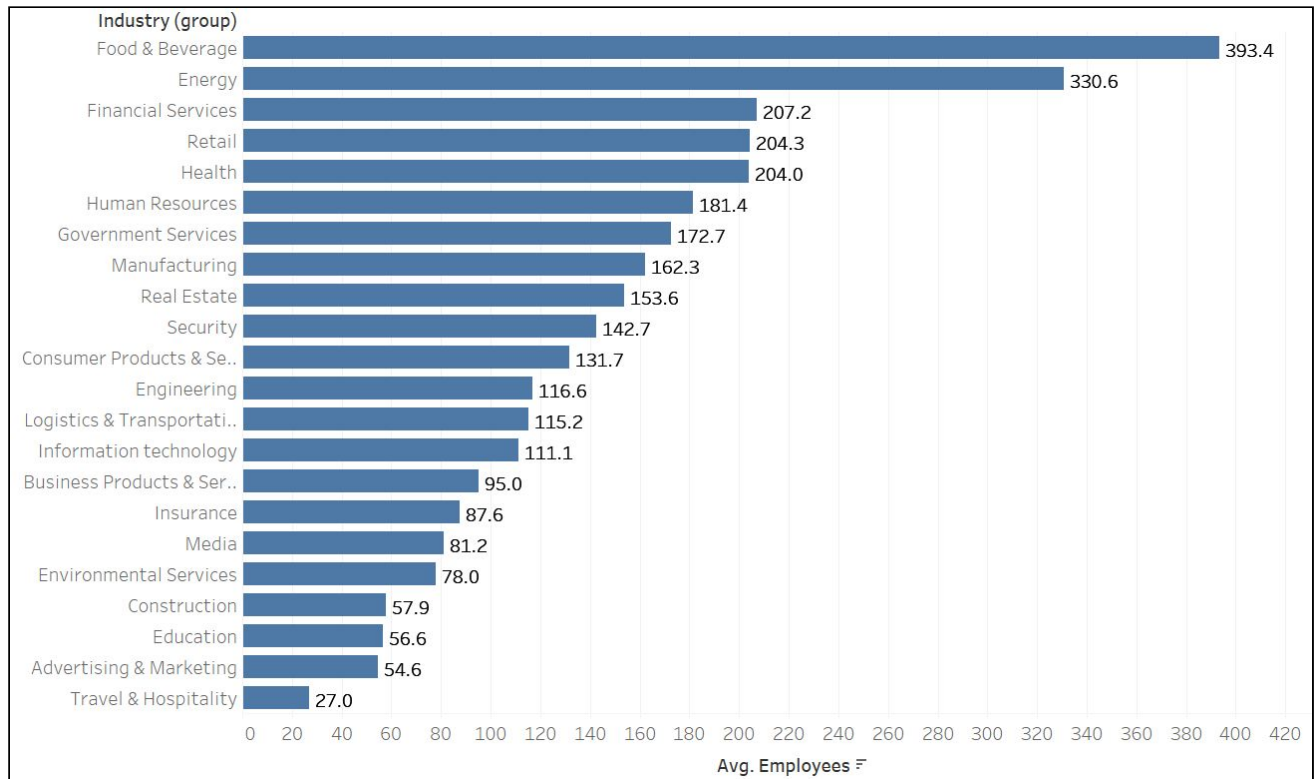


Fig: Industry vs. Average number of Employees

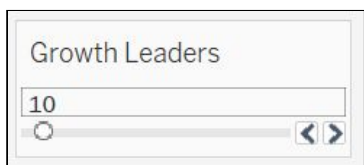
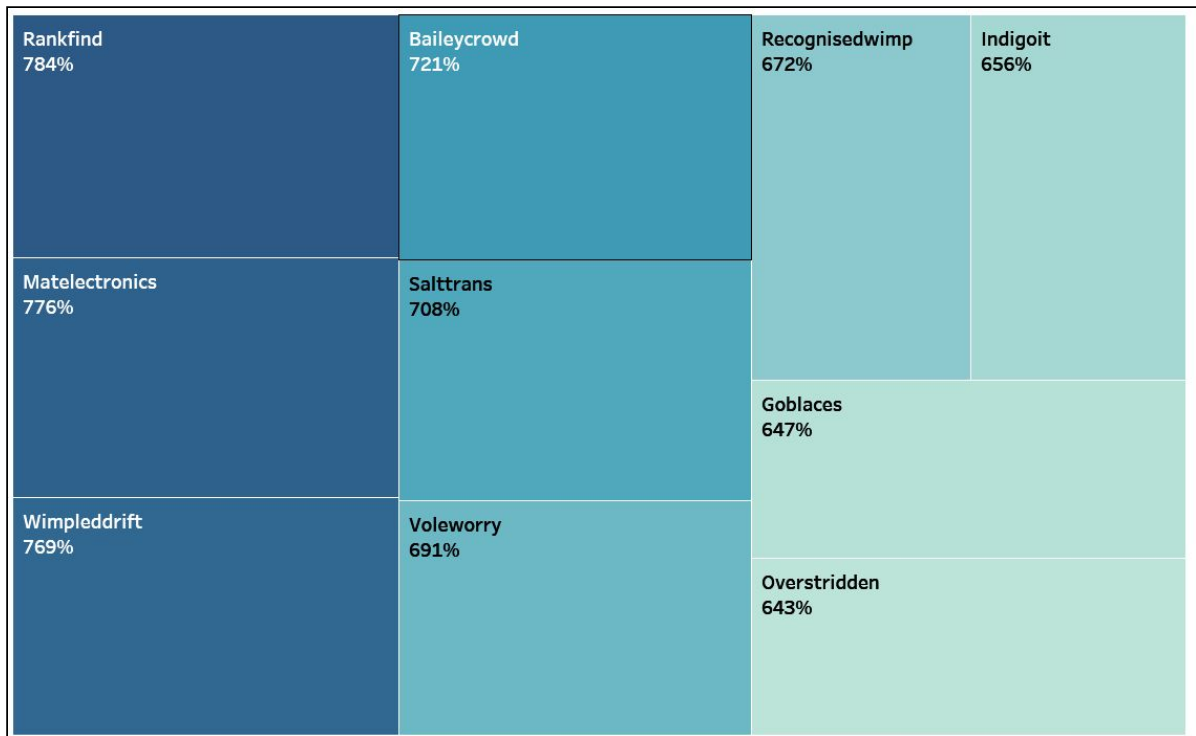
3. Top 20 startup by Growth percentage

Top 20 By Growth	
Startup	%
Rankfind	784%
Matelectronics	776%
Wimpleddrift	769%
Baileycrowd	721%
Salttrans	708%
Voleworry	691%
Recognisedwi..	672%
Indigoit	656%
Goblaces	647%
Overstridden	643%
Oilyrhyolite	641%
Glaciertolerant	640%
Allowuntidy	629%
Messrs	628%
Factsworldcup	626%
Zun-Ex	622%
Quadice	620%
Goldenware	617%
Calmbus	611%
Appaloosamil..	598%

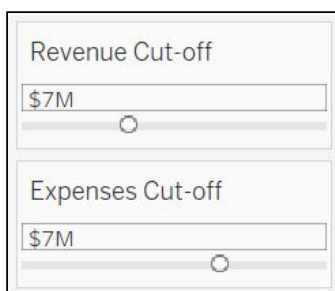
This is showing top 20 startups having highest growth percentage.

4. Treemap of top startups in terms of Growth%

Responsive Treemap of startups showing top startups in terms of Growth%



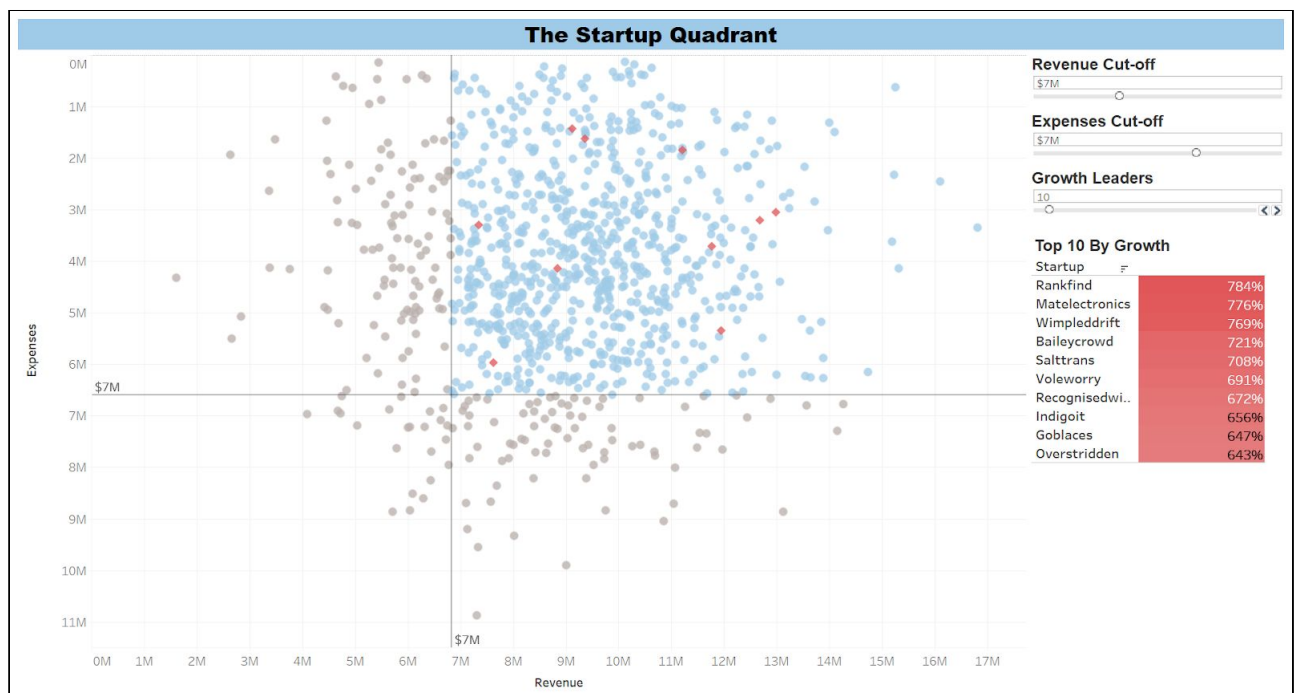
5. Scatter Plot: Revenue vs. Expense



A fully responsive scatter plot with functionality of adjusting favorable Revenue and Expense the see the result on the go.



6. Final Dashboard



Here, is the fully responsive dashboard with proper tooltip to help viewer easily identify the target values by filtering out from the parameters.

Conclusion:

From above analysis and visualization of startup data, it concludes that the top 10 filtered companies performed well in 2015. This conclusion is based on filtering out the startups who generated high revenue with low expenses.