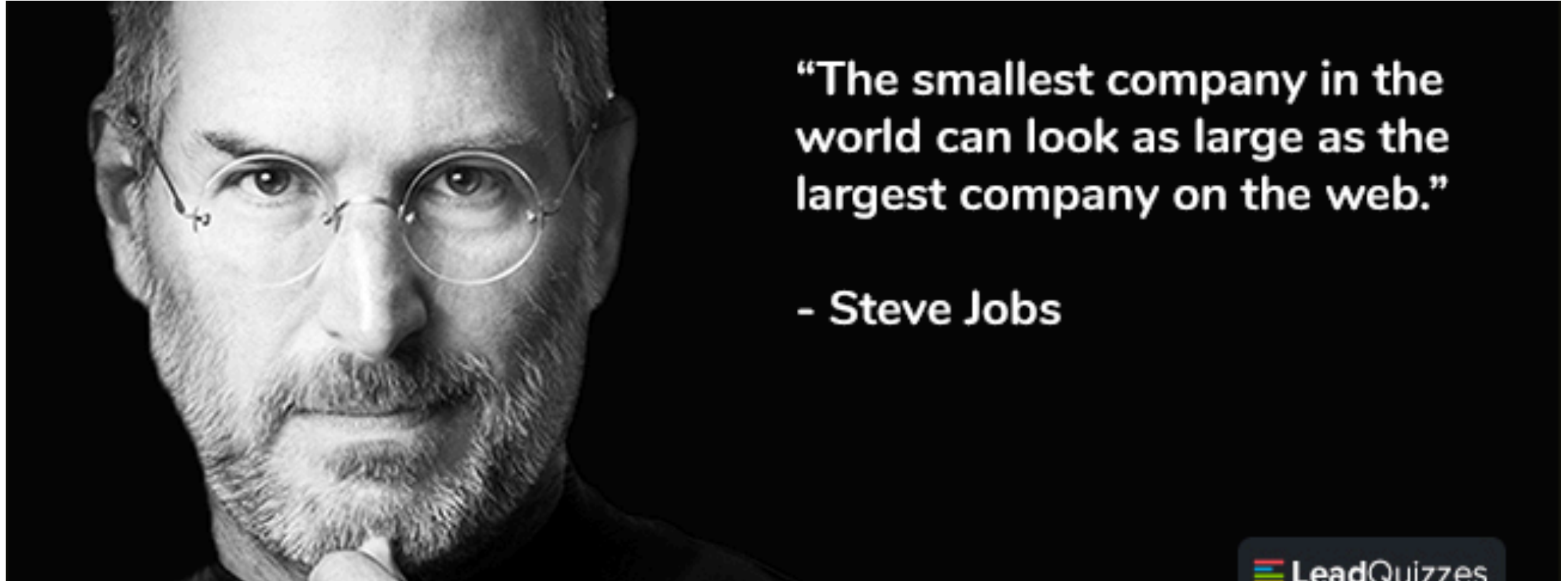# INVESTMENT ASSIGNMENT

SUBMISSION

Name: Arindam Ghosh

"The smallest company in the world can look as large as the largest company on the web."
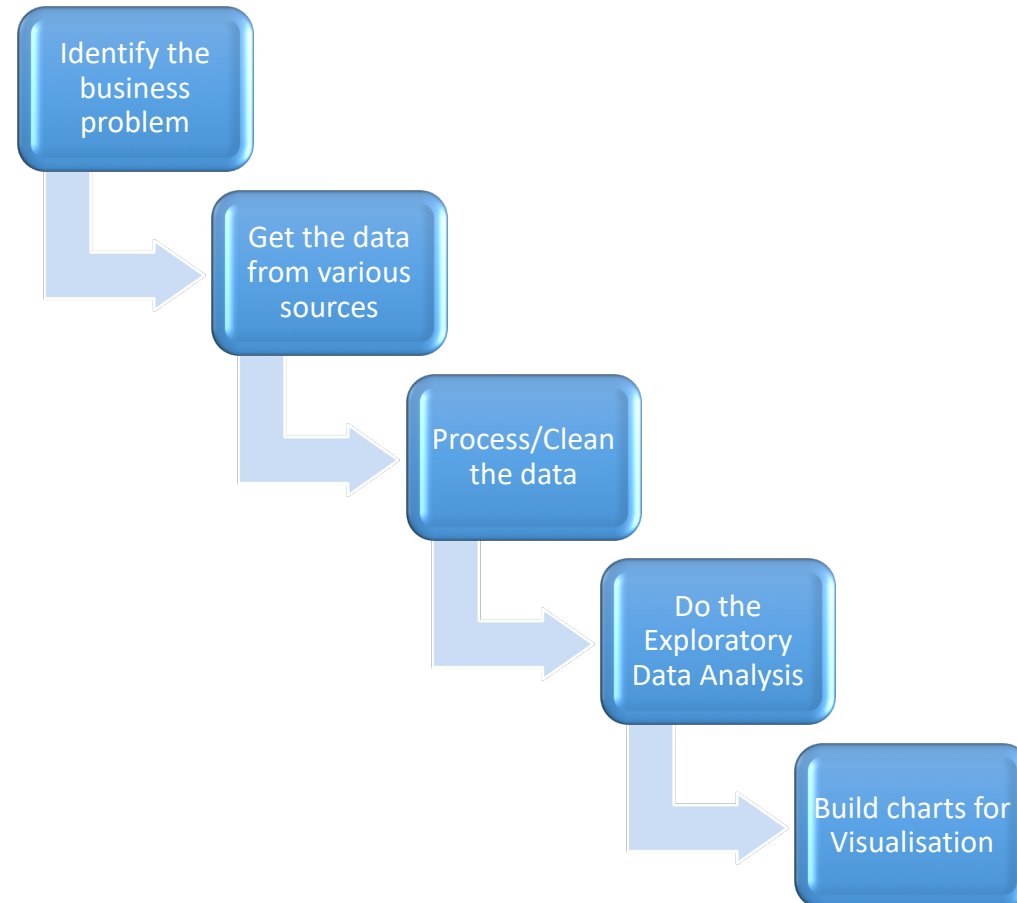
– Steve Jobs

BEST SECTORS AND COUNTRIES TO INVEST

- The Next Biggest Company in the world might be getting built now at a garage in Bangalore. Investing in Startups has unfathomable upsides and returns potential.

- But with so many Startups turning up everyday around the world, and 95 percent among them are destined to fail , So it becomes imperative to do the correct analysis on the kind of sectors and country to invest

PROBLEM SOLVING TECHNIQUE

Identify the business problem

Get the data from various sources

Process/Clean the data

Do the Exploratory Data Analysis

Build charts for Visualisation

FUNDING TYPE ANALYSIS

- Based on our calculations these are the Funding Rounds with the approximated representative value.

- As we can see the **Venture funds** will be the most suitable type of investment as they sit in the sweet spot between **5 to 15 million USD** per investment round

Out[162]:

	funding_round_type	raised_amount_usd
10	secondary_market	32600000.00
8	private_equity	20000000.00
6	post_ipo_debt	19950000.00
7	post_ipo_equity	12262852.00
13	venture	5000000.00
2	debt_financing	1100000.00
12	undisclosed	1018680.00
0	angel	400000.00
11	seed	275000.00
1	convertible_note	272000.00
4	grant	201684.00
9	product_crowdfunding	183915.00
3	equity_crowdfunding	100000.00
5	non_equity_assistance	60000.00

COUNTRY ANALYSIS

These are the top investment attracting countries

100	USA	422510842796.00
16	CHN	39835418773.00
31	GBR	20245627416.00
41	IND	14391858718.00
13	CAN	9583332317.00
30	FRA	7259536732.00
44	ISR	6907514579.00
23	DEU	6346959822.00

On further drilling down the data, we come out with the top 3 English speaking countries where most investments happen. They are **USA , Great Britain(UK) and India. Our recommendation is to invest in one of these three countries**

	country_code	raised_amount_u
100	USA	422510842796
31	GBR	20245627416
41	IND	14391858718

SECTOR ANALYSIS

Out[41]:

	Main Sector	count
5	Others	8693
0	Cleantech / Semiconductors	8113
6	Social, Finance, Analytics, Advertising	5553

Out[48]:

	Main Sector	count
5	Others	571
0	Cleantech / Semiconductors	456
6	Social, Finance, Analytics, Advertising	359

Out[34]:

	Main Sector	count
5	Others	329
4	News,Search and Messaging	154
6	Social, Finance, Analytics, Advertising	104

Now that we have drilled down on the Countries to invest the next analysis will be on figuring out which sector to invest .

For USA , these are the top three sectors where most investment happens

In UK , these are the three most popular sectors
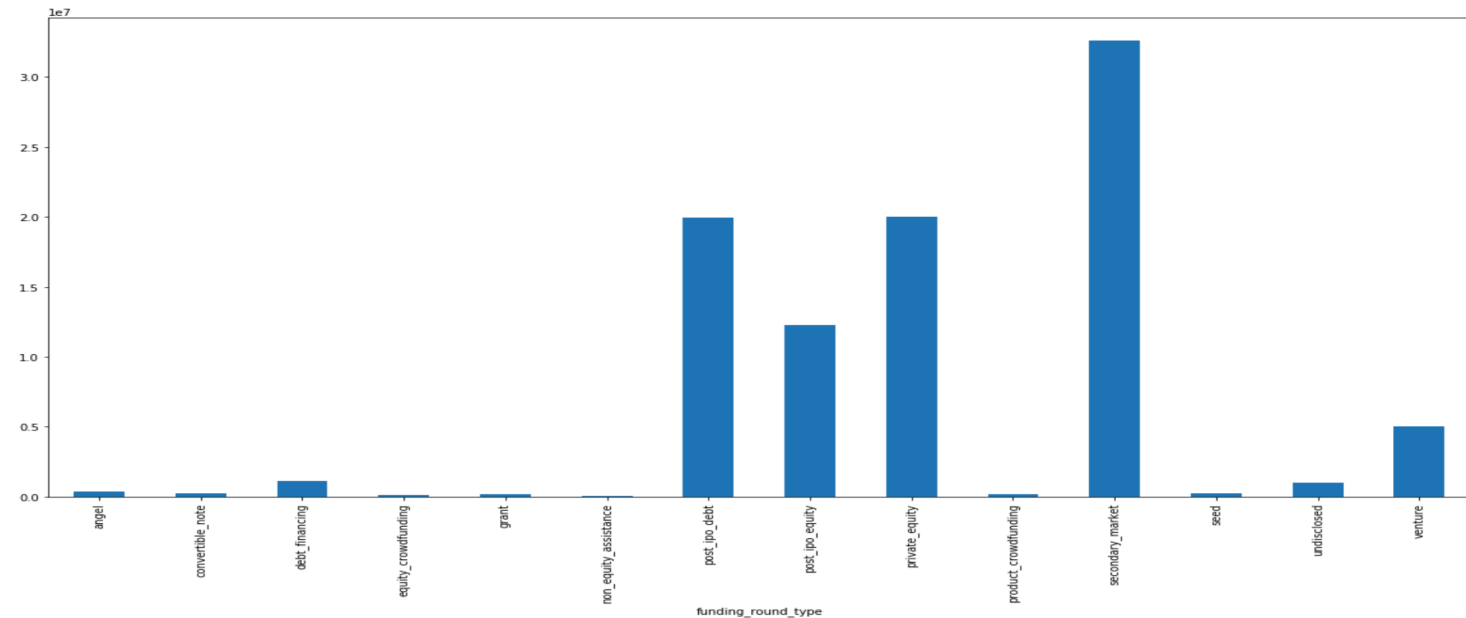
Similarly for India these are the sectors

VISUALISATIONS

We show some of the graphs , which will help us in further understandings

Plot 1: Most Representative value for each funding.

Most Representative value of each investments

```
[54]:  funds_value=round(master_frame.groupby('funding_round_type')['raised_amount_usd'].median())

       funds_value.plot(kind='bar',figsize=(20,10))
```

```
[54]:  <matplotlib.axes._subplots.AxesSubplot at 0x7fc421c12810>
```
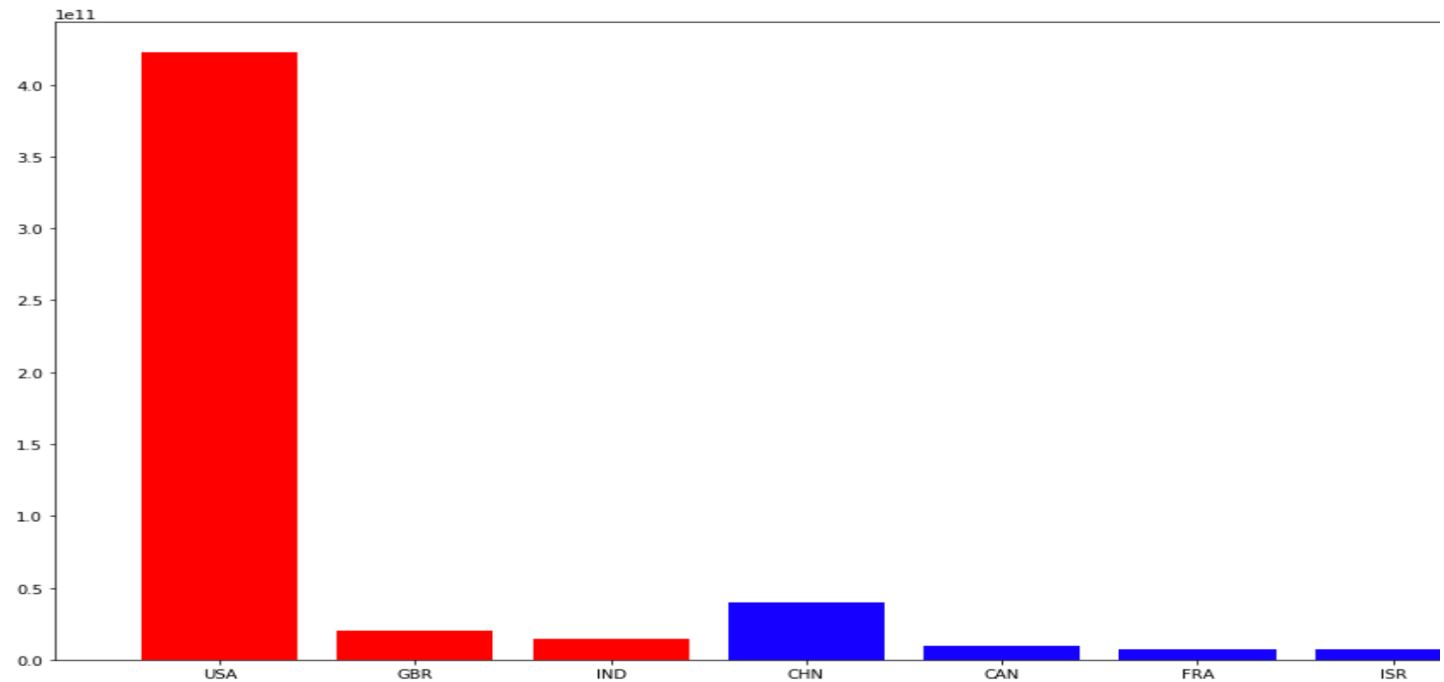
VISUALISATIONS

Plot 2 :

Country wise

Investments patterns.

Red being the English
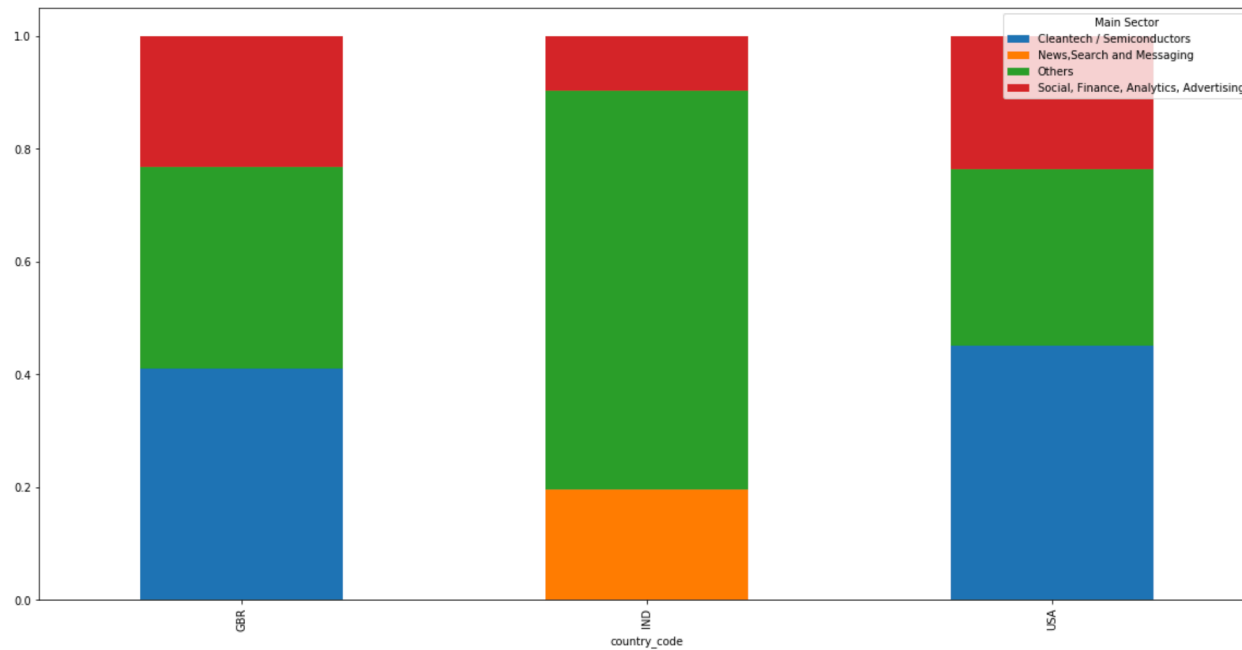
Speaking country

Above Plot shows in red the top 3 English Speaking Countries where Spark funds can invest

VISUALISATIONS

Stacked chart showing top 3 sectors investment for each country

```
df_pivot_perc.plot(kind="bar",stacked="True",figsize=(20,10))
plt.show()
```


Plot 3: number of investments in the top 3 sectors of the top 3 countries

CONCLUSION

Based on our analysis we see that Venture funds will the most appropriate funds for Spark Funds to consider investing. We also found out that its best to invest in either USA, UK or India , since they are the most popular places for investment amongst English Speaking countries. We have identified the most popular sectors among these Countries and our recommendation to Spark Investments will be to invest among these sectors in the mentioned countries.