



INVESTMENT ASSIGNMENT SUBMISSION

Name: Amitkumar Maheshwari





Abstract:

This assignment was to assist 'Spark Funds' to make investments.

For that we've analyzed the data regarding the funds raised for different companies in the past to understand the global trend.

Key criteria to keep in mind,

- The sector attracting more investments is good to invest into
- The countries that speak English is easy to invest in
- The Investment type should be suitable to invest 5-15 million USD per round

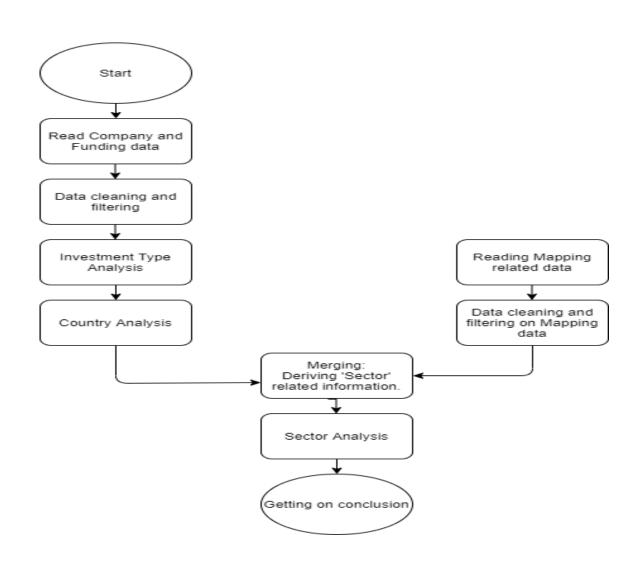
In further slides we will see

- Investment Type Analysis
- Country Analysis
- Sector Analysis





Problem solving methodology







Investment Type Analysis

'Investment Type Vs Raised Amount'

- We could see some records were not having 'Raised amount' values while some records were having very extreme records for it.
- After fixing it by placing median at missing values and removed outliers, Representative Values looked like this,

Representative Values of Investments for Each Investment Types:

	Representative - Raised Amount	
Funding type		
Angel	400000.0	
Private equity	20000000.0	
Seed	275000.0	
Venture	5000000.0	

And here we can see that venture type investment is fitting the criteria of '5-15 million per round' investment *So now we know that further analysis should be carried out for venture type investment only.*





Country Analysis

We know that Spark wants to invest where most others are investing.

Top nine countries which have received the highest total funding in venture type investment

	Raised Amount	
Country code		
USA	2.785505e+11	
CHN	1.633221e+10	
GBR	GBR 1.541446e+10	
CAN	CAN 8.507730e+09	
IND	IND 7.851359e+09	
ISR	ISR 6.644515e+09	
FRA	5.939263e+09	
DEU	5.368129e+09	
СНЕ	2.333605e+09	

We also know that spark wants to invest in English speaking country

Top three English speaking countries with highest total funding

in venture type investment

Raised Amount	
2.785505e+11	
1.541446e+10	
8.507730e+09	





Sector Analysis

- By this time, we knew that 'Spark' will be interested in investing in US, UK, and Canada for venture type investment
- And now we were interested in knowing the sectors which are getting highest number of investments

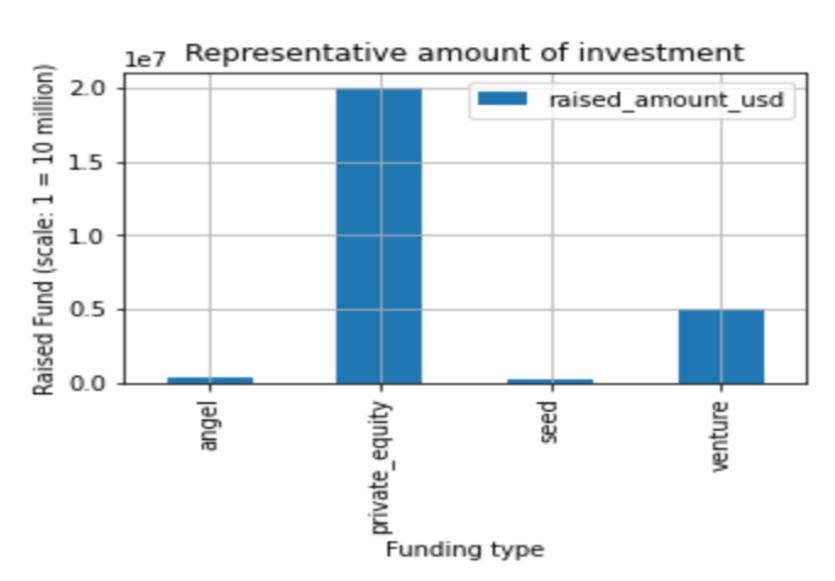
	CANADA	UK	USA
Sector			
Automotive & Sports	17	52	531
Cleantech / Semiconductors	341	443	7649
Entertainment	62	158	1864
Health	65	121	3296
Manufacturing	112	129	2546
News, Search and Messaging	140	261	4445
Others	333	564	8485
Social, Finance, Analytics, Advertising	237	464	7520

From above observation, we can derive top 3 sectors for each countries.





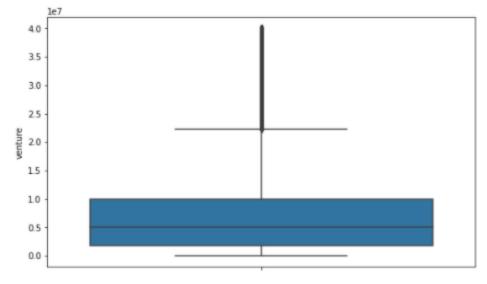
Representative amount of investment

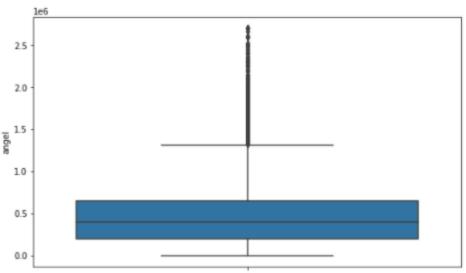


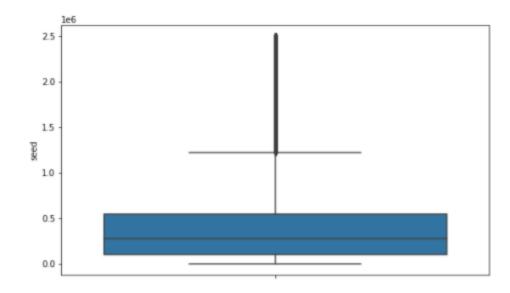


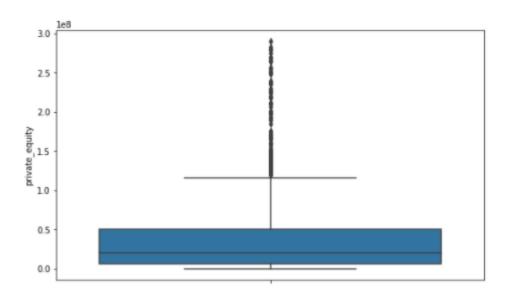


Distribution of amount in investment types for each funding type





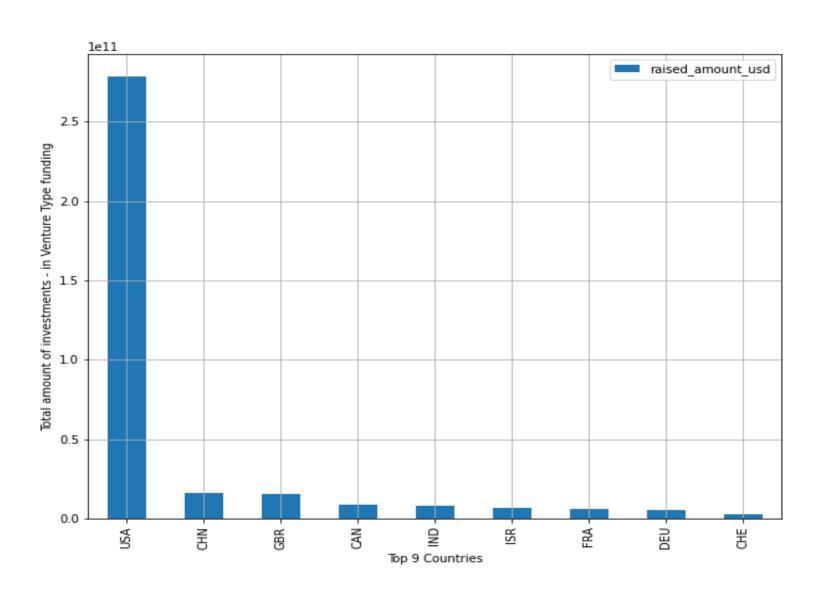






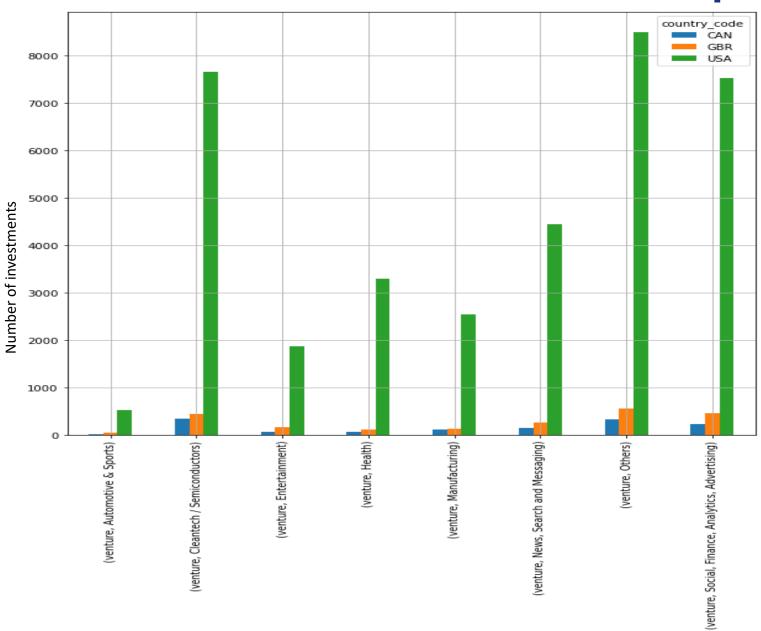


Top 9 countries against the total amount of investments for chosen Funding/Investment Type - Venture





Performance of different sectors







Conclusions

From the given analysis results and plots it is clear that,

- Spark should go with the "**Venture**" Type investment as it is best fit for the range of investment of 5-15 million USD per round
- Spark should consider "US", "UK", and "Canada" (in the exact order) for investment.
- Based on the countries 'Spark' is investing, they should consider following table for sector preference

Preference	USA	UK	CANADA
First	Others	Others	Cleantech / Semiconductors
Second	Cleantech / Semiconductors	Social, Finance, Analytics, Advertising	Others
Third	Social, Finance, Analytics, Advertising	Cleantech / Semiconductors	Social, Finance, Analytics, Advertising

• However, as the highest number of investment is done in "Others" sector in "US", it should be the most preferred strategy.