

# INVESTMENT ASSIGNMENT SUBMISSION

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# Abstract

## Business Objective:

The objective is to identify the best sectors, countries, and a suitable investment type for “**Spark Funds**” to make investments. The overall strategy is to invest where others are investing, implying that the 'best' sectors and countries are the ones “where most investors are investing” .

## Goals of Data Analysis:

1. Investment-type Analysis: Choosing the type that is best suited for their strategy.
2. Country Analysis: Identifying the countries which have been the most heavily invested in the past.
3. Sector Analysis: Understanding the distribution of investments across the eight main sectors as provided in the mapping file.

# Problem solving methodology

A step-by-step approach has been followed as shown in the below diagram to find the best Sector for Investment among the Top English speaking Countries

Note: All the constraints of SPARKS FUND has been kept in mind throughout the data analysis,

- Per round of investment range is - **5 to 15 million USD**
- Only **English-speaking countries** preferred.
- Real investment data is taken from **crunchbase.com** .



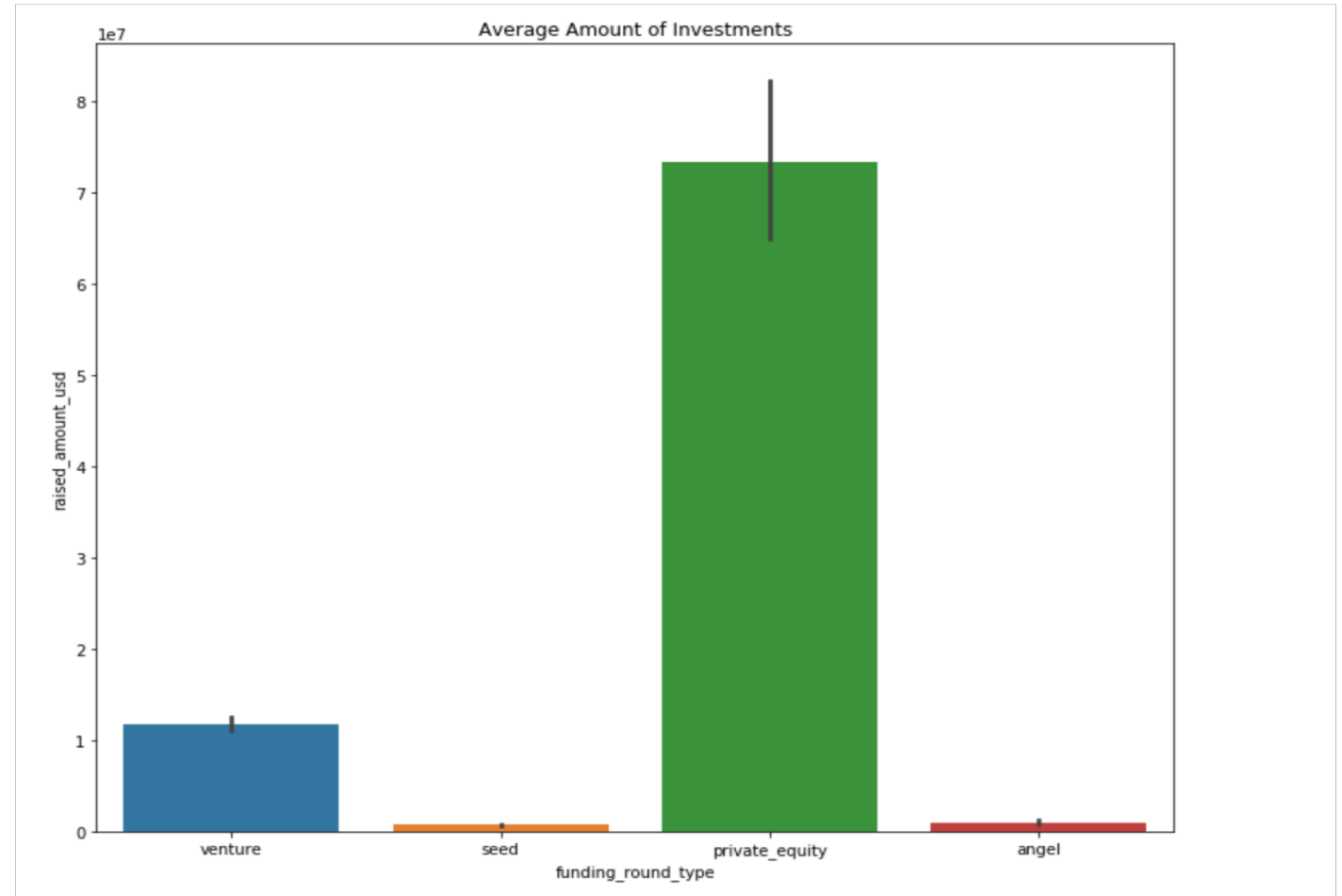
## Funding Type Analysis

- The average amount of investment for ‘**angel**’ & ‘**seed**’ is very less as seen in the table. Hence these investment types are not considered as they fall below ‘5 million USD’ category.
- The average amount of investment for ‘**private equity**’ type investment is very high as seen from the table which is around 73 million USD which is too high for SPARKS FUND to invest.
- As seen from the table the average amount of investment for venture type is around 11 million USD which falls in the between 5 to 15 million USD range.
- Most suitable investment type out of the 4 investment type options for SPARKS FUND - “**venture**”.

FUNDING TYPES	AVERAGE AMOUNT in USD \$
<b>angel</b>	<b>958694</b>
convertible_note	1453439
debt_financing	17043526
equity_crowdfunding	538368
grant	4300576
non_equity_assistance	411203
post_ipo_debt	168704572
post_ipo_equity	82182494
<b>private_equity</b>	<b>73308593</b>
product_crowdfunding	1363131
secondary_market	79649630
<b>seed</b>	<b>719780</b>
undisclosed	19242370
<b>venture</b>	<b>11748949</b>

# Average Investments for Each Funding Type

- **Venture** funding type lies within the range of 5 to 15 million USD.



## Country Analysis

- On the filtered data with chosen investment type as “venture”, the approach is taken to find the top 9 countries which receive the highest funding amount.
- USA** receives the highest funding amount of \$4,22,51,08,00,000.00 USD.
- Although CHN(China) receives the next highest funding amount, but it is not an English Speaking country, so its not considered for investment.
- The 2<sup>nd</sup> and 3<sup>rd</sup> top country for investment is “**GBR**” & “**IND**”.
- Top 3 Countries for Investment are hence:

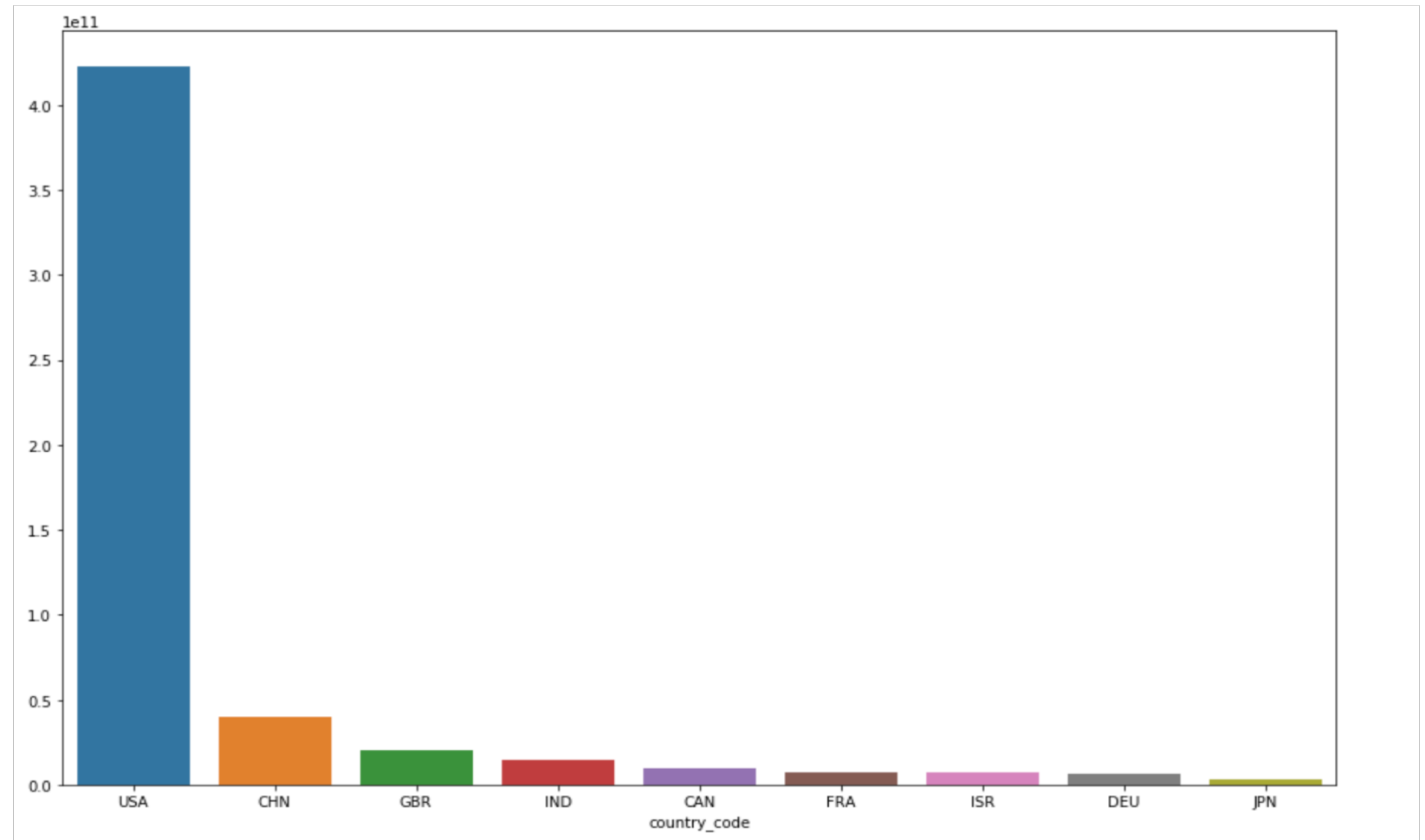
- 1. **USA**
- 2. **GBR**
- 3. **IND**

COUNTRIES	FUNDING RECEIVED IN USD
USA	\$4,22,51,08,00,000.00
CHN	\$39,83,54,20,000.00
GBR	\$20,24,56,30,000.00
IND	\$14,39,18,60,000.00
CAN	\$9,58,33,32,000.00
FRA	\$7,25,95,37,000.00
ISR	\$6,90,75,15,000.00
DEU	\$6,34,69,60,000.00
JPN	\$3,36,36,77,000.00

## Plot of Investments Country Wise

Clearly the top English speaking countries as seen from the plot are :

- 1- USA
- 2- GBR
- 3- IND



# Sector Analysis

The table below shows the top 3 sectors of top 3 countries USA, GBR & IND is shown as below.

TOP COUNTRIES	TOP SECTOR 1	TOP SECTOR 2	TOP SECTOR 3
1- USA	Others	Cleantech / Semiconductors	Social, Finance, Analytics, Advertising
2- GBR	Others	Cleantech / Semiconductors	Social, Finance, Analytics, Advertising
3- IND	Others	News, Search and Messaging	Entertainment



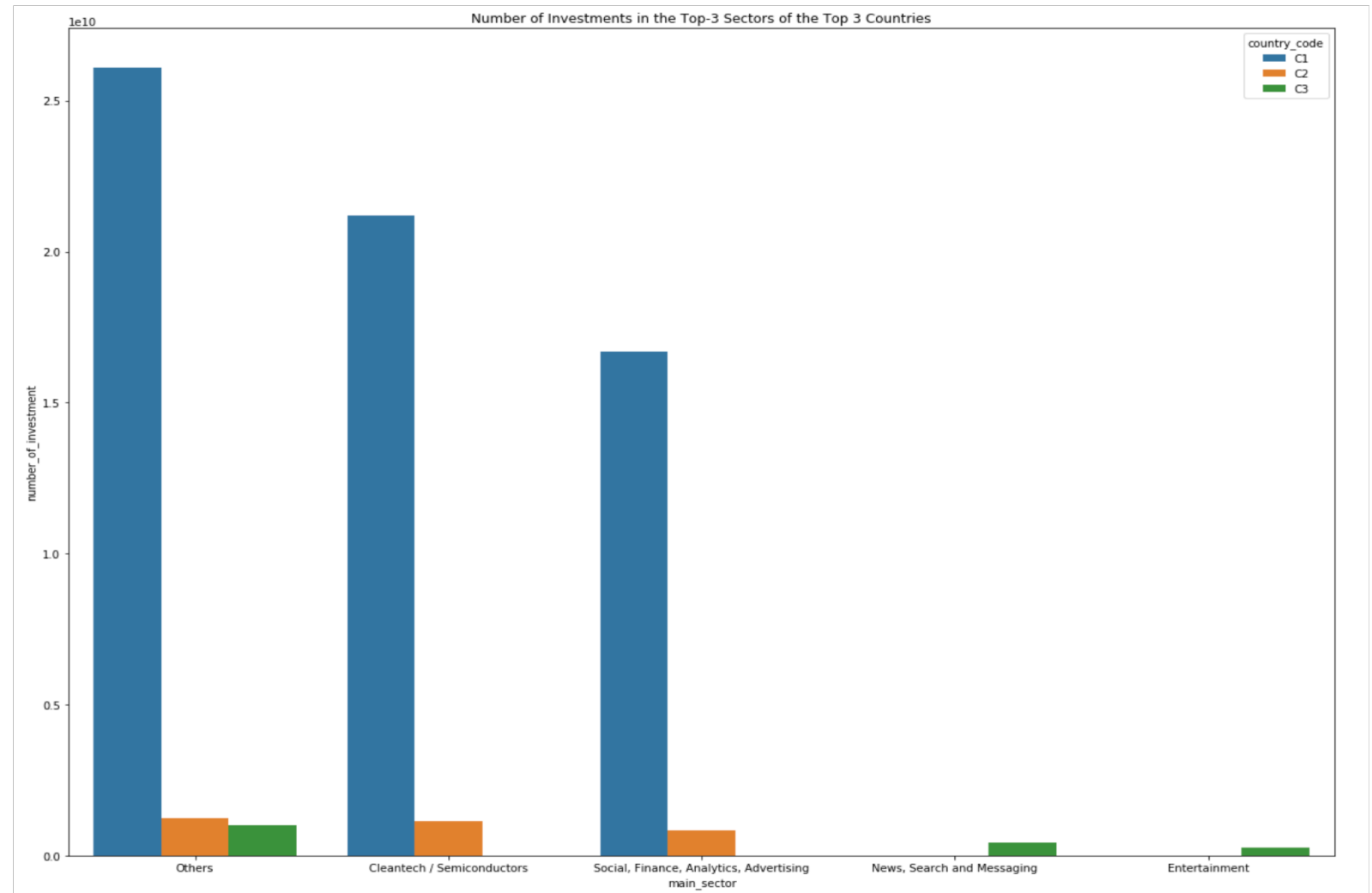
## Plot of number of investments in the top 3 sectors in top 3 countries

Here,

C1 – USA

C2 - GBR

C3 - IND



# Conclusions

Based on the analysis & observations done, the below inferences are drawn:

OBSERVATION TYPE	OBSERVATIONS		
BEST FUNDING TYPE:	Venture		
TOP COUNTRIES	1- USA	2- GBR	3- IND
TOP SECTOR 1	Others	Others	Others
TOP SECTOR 2	Cleantech / Semiconductors	Cleantech / Semiconductors	News, Search and Messaging
TOP SECTOR 3	Social, Finance, Analytics, Advertising	Social, Finance, Analytics, Advertising	Entertainment