

# INVESTMENT CASE STUDY

## SUBMISSION

Group Name: PRSV-Pune-2018

1. Pradnya Paithankar
2. Dr. Rajendra Warke
3. Sameer Sinha
4. Vaibhav Palkar

## Abstract

- Objective: Investments analysis for Spark Funds, an asset management company, to facilitate taking investment decisions effectively
- Analysis is done to address the constraints and preferences as follows:
  - Invest in the funding round type that attracts average funding within the range of 5 to 15 million USD
  - Invest only in English-speaking countries that attract maximum number of investments
  - Invest in sectors that attract maximum number of investments
- Outcome would be to recommend the companies best suited for investments based on the above constraints and preferences

# Problem solving methodology

## Understand, Analyze and clean data

- Case matching for the common column in merging
- Clean category list data to remove "0" character and blanks
- Converting wide data format into long data format for mappings

## Select data for the preferred investment type

- Should be one of the types venture, seed/angel, private equity
- Average investment per type within 5 to 15M USD

## Narrow down analysis based on country preference

- Country where maximum total investments are done
- English speaking country

## Apply sector analysis intelligence to the filtered data

- Main sectors with highest number of investments

## Recommend companies aligning to business objectives

- Preferred country
- Preferred investment type
- Preferred sector

## Analysis

- STEP 1- The funding type, among preferred ones where average investment is within 5M to 15M USD is “Venture”

preferred_funding_round	average_investment_amount
angel	958694.5
private_equity	73308593
seed	719818
venture	11748949

## <Analysis>

- STEP2 - Top 4 countries with maximum total funding in “venture” type are USA, CHN, GBR, IND.
  - Remove china as not a English speaking country

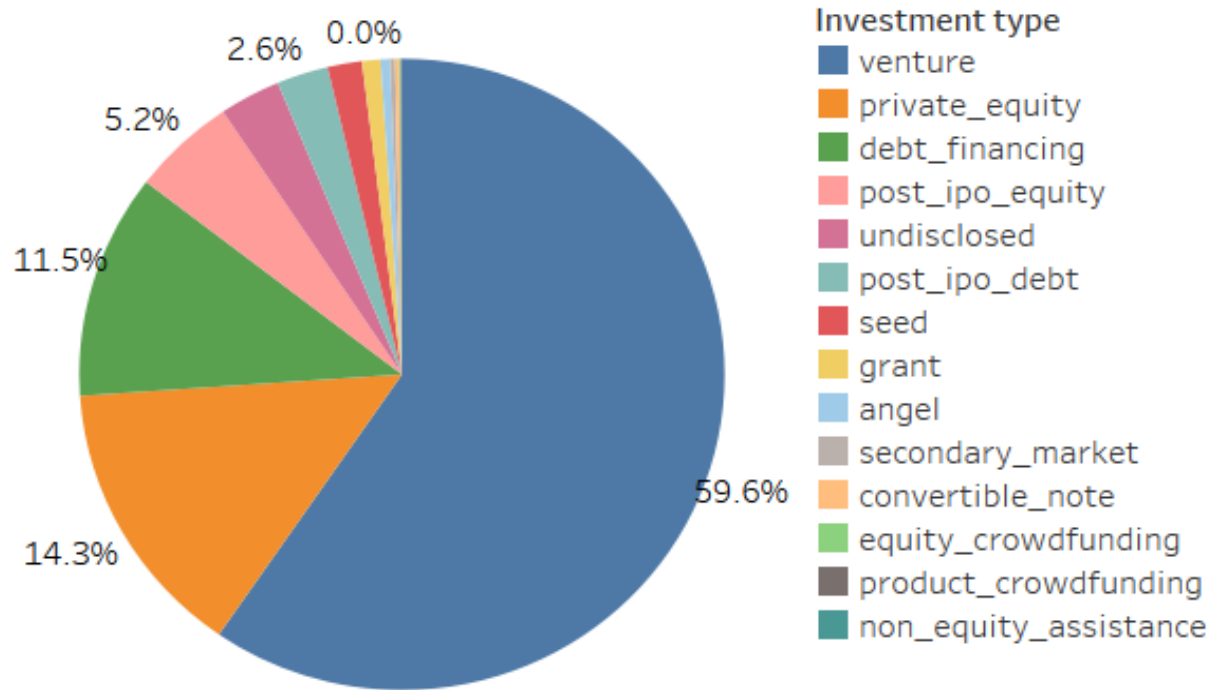
country_code	Total_funding_venture
USA	422510842796
CHN	39835418773
GBR	20245627416
IND	14391858718
CAN	9583332317
FRA	7259536732
ISR	6907514579
DEU	6346959822
JPN	3363676611

## <Analysis>

- STEP3 - Maximum count of investment 5M to 15M in 'Venture' type
  - USA :Count – 12063, Total – 107757097294 USD
  - GBR :Count – 621, Total – 5379078691 USD
  - IND :Count – 328, Total -2949543602 USD
- STEP4 - Top 3 sectors based on count of investment
  - USA – "Others", "Social, Finance, Analytics, Advertising", "Cleantech / Semiconductors"
  - GBR – "Others", "Social, Finance, Analytics, Advertising", "Cleantech / Semiconductors"
  - IND – "Others", "Social, Finance, Analytics, Advertising", "News, Search and Messaging"
- STEP5 - Companies having maximum funding in these sectors are found

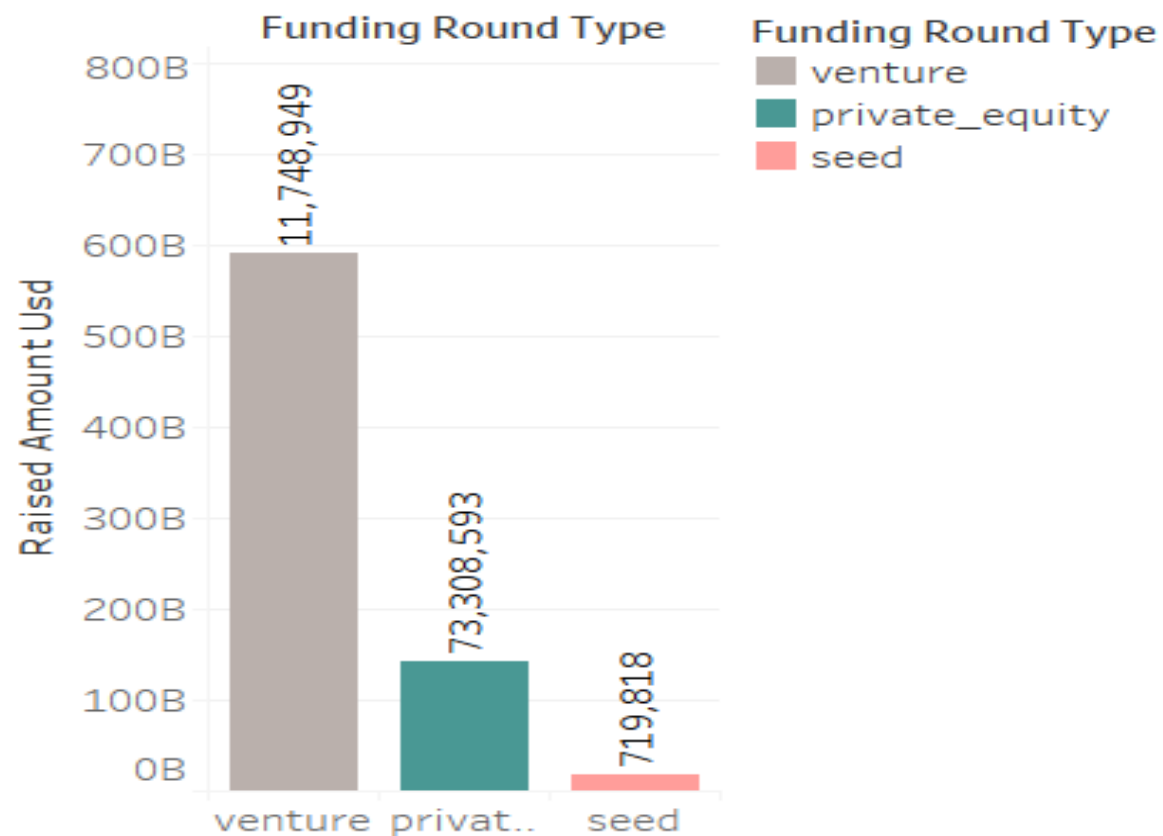
## Results: Plot-1 for Avg. Investment by Funding Type

Fraction of Total investment  
by Investment Funding Type



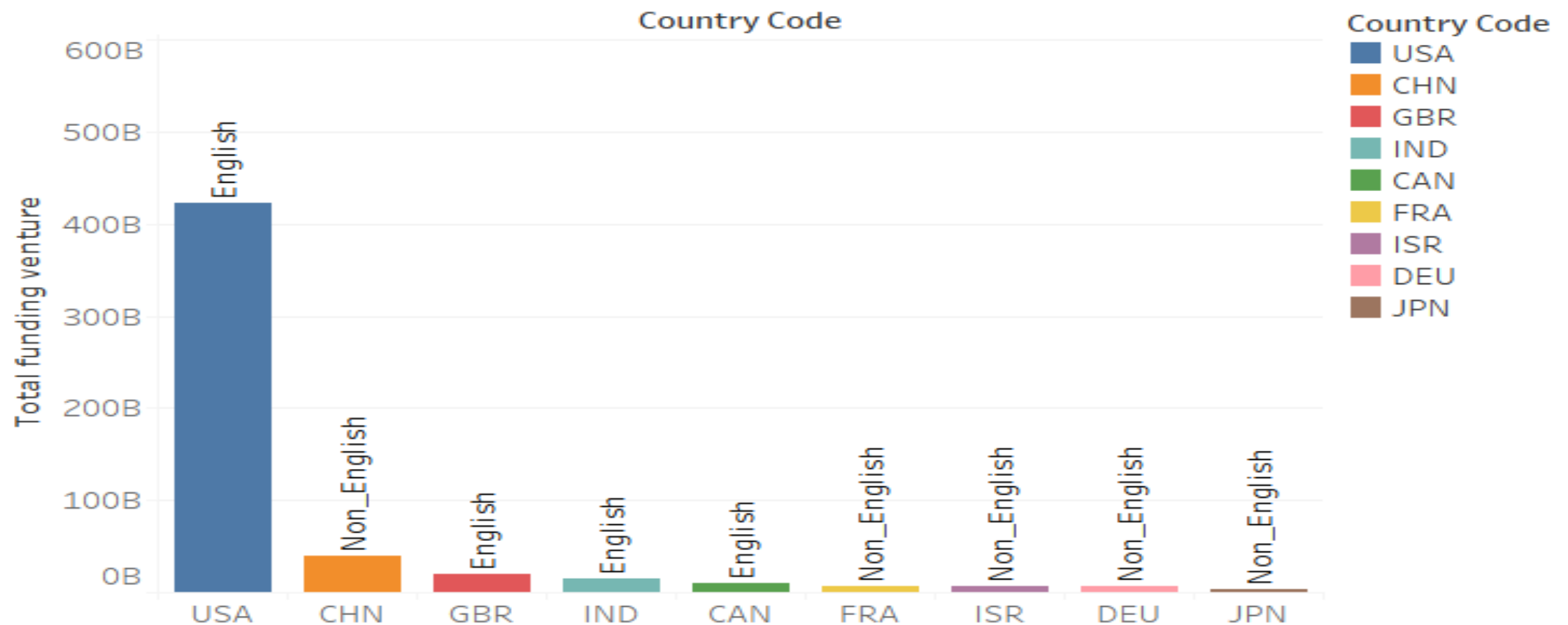
Average Investment by Funding Type

Plot-1



# Results: Top 3 Countries against Investment Type

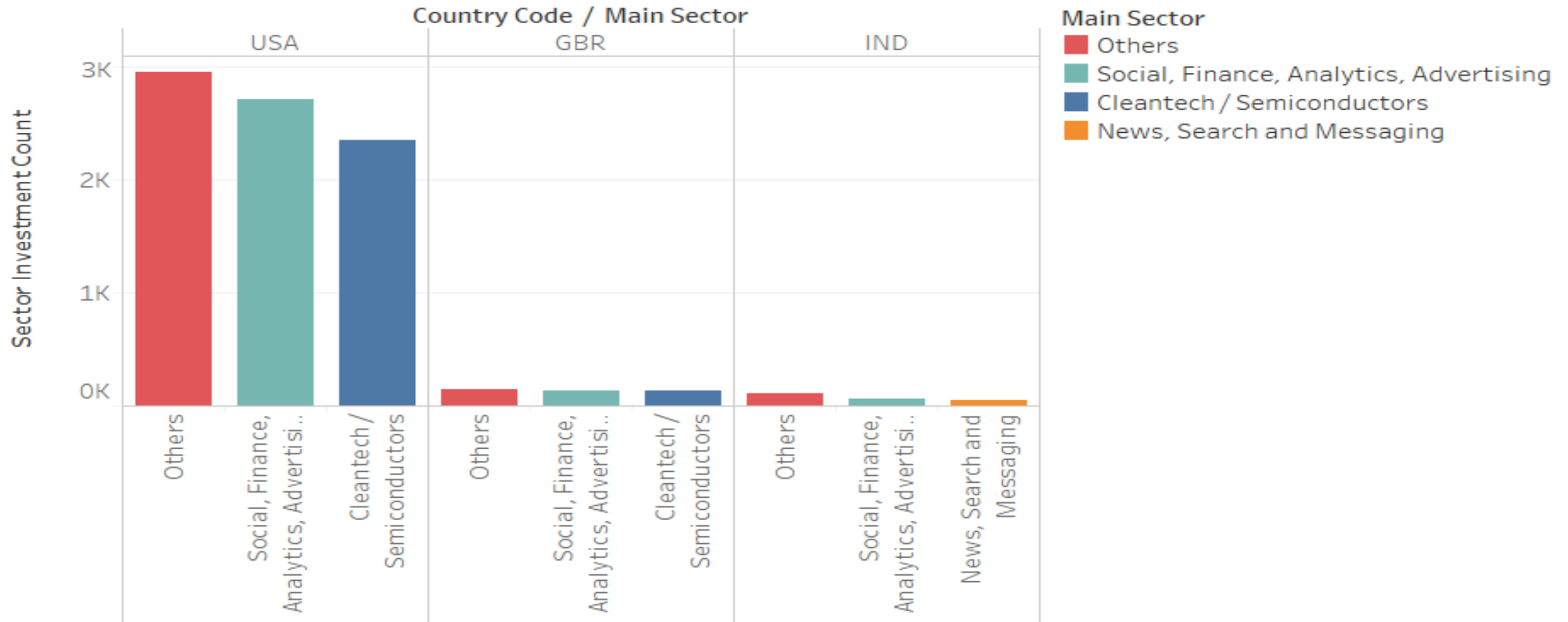
Plot-2





## Results: No. of Investment in top 3 sector of top 3 Countries

Plot-3



## Conclusions

- Outcomes:
  - Preferred investment type : venture
  - Preferred countries: USA, GBR, IND
  - Top 2 preferred sectors across all preferred countries: Others and Social, Finance, Analytics, Advertising
  - Preferred companies

USA	GBR	IND
Virtustream	Electric Cloud	FirstCry.com
SST Inc. (Formerly ShotSpotter)	Celltick Technologies	Manthan Systems