



INVESTMENT CASE STUDY SUBMISSION

Group Name: United By Chance

- 1. Ashish Gauray
- 2. Chandan Agrawal
- 3. Ayushman Priye
- 4. Gajanand Natwariya





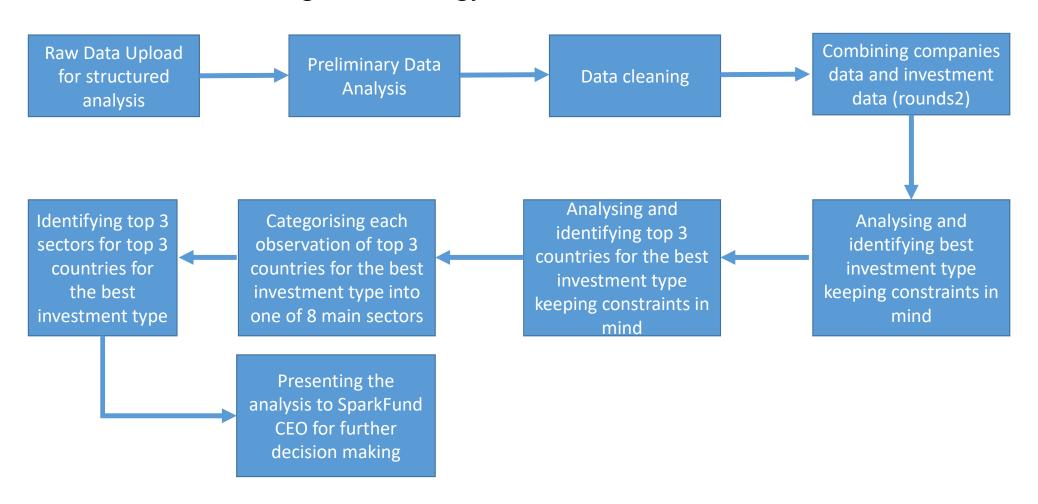
Abstract - Objective and Problem Statement

- Spark Funds wants to make investments in a few companies but after understanding the global trends
- Spark Funds wants to invest where most other investors are investing. This pattern is often observed among early stage startup investors.
- The objective is to identify the best sectors, countries, and a suitable investment type for making 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'.
- Spark Funds has two minor constraints for investments:
 - It wants to invest between 5 to 15 million USD per round of investment
 - It wants to invest only in English-speaking countries because of the ease of communication with the companies it would invest in





Problem solving methodology







Analysis

- Master records available for 66368 unique companies. Information like company name, permalink, category, country etc. is available. Some redundant columns also present. A company can be uniquely identified by permalink column.
- Total 114949 Investment observations available with details like investment type, raised amount, company name, company link etc. However, these 114949 observations pertain for 66368 unique companies only. So, some companies have are there in multiple observations.
- There is no company for which investment record is available but master record is not available.
- There are some observations where raised_amount data is not available. These records can be dropped to sanitize the data for further analysis.
- Out of the investment types eyed by Spark Funds (like venture, seed etc.), 'Venture' accounts for the highest fraction of the total investments. (Refer plot in slide#7). Also the average funding amount of venture type per round is about \$11.74 mn thus fitting in the constraints of the company. Other types are far above/below than this constraint limit.
- So, Venture investment type is best suited for Spark Funds.





Analysis(...contd.)

- The top 9 countries in terms of highest investment for 'Venture' are (Refer plot in slide#8):
 - USA
 - CHN
 - GBR
 - IND
 - CAN
 - FRA
 - ISR
 - DEU
 - JPN
- However as one of the constraints is that investment can be done only in English Speaking countries, so CHN is out.
- Thus top 3 countries for 'Venture' are:
 - USA
 - GBR
 - IND





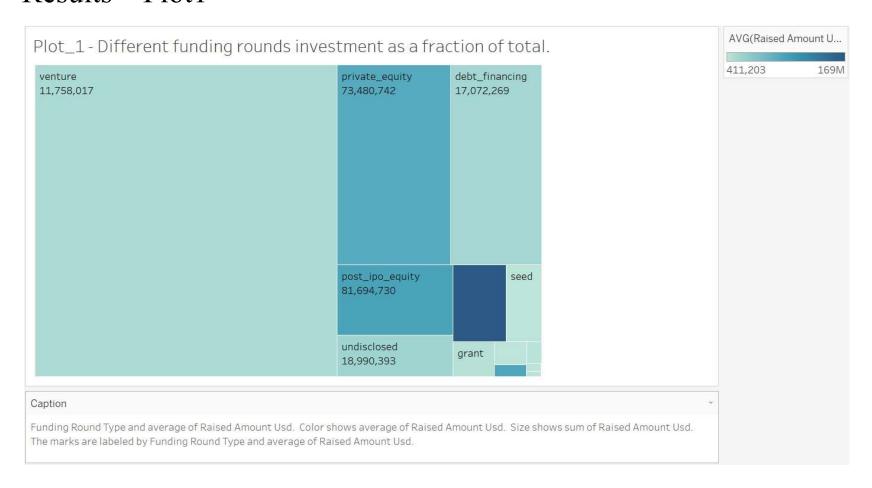
Analysis (...contd.)

- Many companies can be categorised in different sectors as visible in values of 'category' column. But it an be safely taken as Primary Sector of such companies will be the 1st value of 'category' column against their records.
- For further simplification these primary sectors are divided into 8 main sectors: 'Automotive & Sports', 'Cleantech / Semiconductors', 'Entertainment', 'Health', 'Manufacturing', 'News, Search and Messaging', 'Others', 'Social, Finance, Analytics, Advertising'
- Some primary sectors are not falling in any of these 8 mains sectors. We can safely drop such observations from further analysis.
- For USA top 3 sectors in terms of Investment of Venture type are: 'Others', 'Social, Finance, Analytics, Advertising', 'Cleantech / Semiconductors'
- For GBR top 3 sectors in terms of Investment of Venture type are: 'Others', 'Social, Finance, Analytics, Advertising', 'Cleantech / Semiconductors'
- For IND top 3 sectors in terms of Investment of Venture type are: 'Others', 'Social, Finance, Analytics, Advertising', 'News, Search and Messaging'





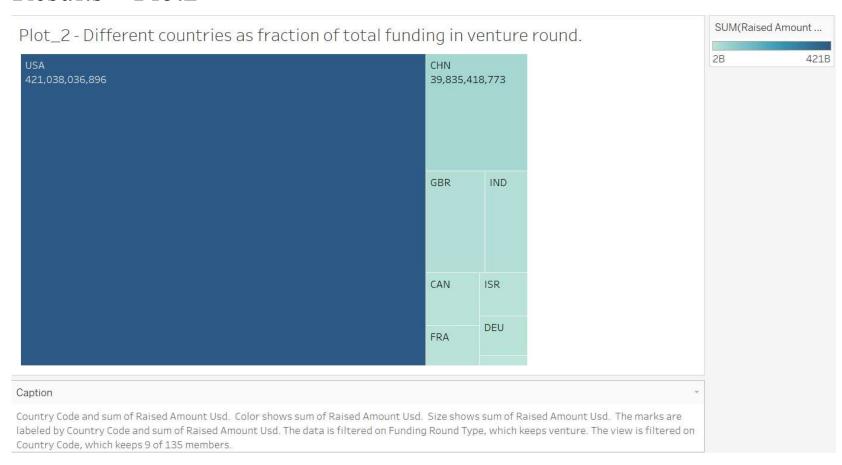
Results – Plot1







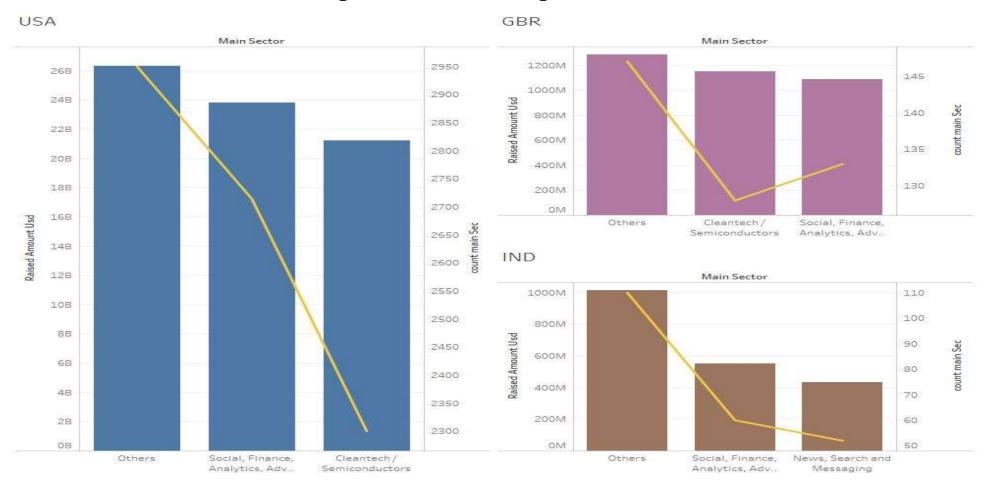
Results – Plot2







Results – Plot3 – Top 3 Sectors in top 3 identified countries







Conclusions

- Keeping the constraints in mind, 'Venture' investment type is best suited for Spark Funds.
- In the 'Venture' investment type, top 3 countries for investment are :
 - USA
 - GBR
 - IND
- For USA top 3 sectors in terms of Investment of Venture type are: 'Others', 'Social, Finance, Analytics, Advertising', 'Cleantech / Semiconductors'
- For GBR top 3 sectors in terms of Investment of Venture type are: 'Others', 'Social, Finance, Analytics, Advertising', 'Cleantech / Semiconductors'
- For IND top 3 sectors in terms of Investment of Venture type are: 'Others', 'Social, Finance, Analytics, Advertising', 'News, Search and Messaging'
- Thus, 'Others' sector is most prominent in all 3 countries. But, it can be further drilled down as 'Others' can be amalgamation of different sectors.
- Sector 'Social, Finance, Analytics, Advertising' can also be considered as it is No.2 in all three countries.