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# *Indian Startups Funding Analysis*

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***Abstract***

*India is planning an integral direction of startup welcoming policies and a business-friendly or entrepreneur's environment. India is one of the fastest growing countries in terms of entrepreneurship. Entrepreneurship is an essential input for economic development, creating new markets or opportunities. India is now pushing entrepreneurship passionately, but creating jobs through startups is a significant challenging for both the government and the Indian public. Startup India is a flagship initiative of the Indian government aimed at fostering entrepreneurship and innovation. The government intends to empower startup companies through this effort in order to increase entrepreneurship, economic growth, and employment across India. The startup ecosystem in India has become a global topic of discussion. This paper intention at offering an analytical overview of the boom and potentialities of startup systems in India i.e. the progress made by India so far. Therefore, this research can contribute to a better understanding of the Investment and financing strategy of entrepreneurial ventures.*

***Keywords:*** *Startups, Entrepreneurs, Analytical, Business-friendly*

## INTRODUCTION

A startup enterprise is a new business that is in its early phases of operation, is growing, and is often backed by a single person or a small group of people. It's a young, scalable company model based on technology and innovation, in which the founders create a product or service for which they see demand, either by disrupting existing markets or by


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developing wholly new ones. Startups are nothing more than a concept that becomes a commercial venture.

In the Indian marketplace, startups have been the flavour of the year for the past few years. As a result, a number of domesticated unicorns have appeared across the country.

The massive financing that was poured into most of these unicorns between 2007 and 2017 has been one of the key contributors to this development. This is in line with the global trend that has taken over the space.

Even prospective unicorns have had a good run at this time, despite the fact that finding investors is normally a difficult Endeavour. Investment patterns imply that investors prefer to be among the first to invest, even before the company is founded.

This paper will examine data from a variety of startups from January 2015 through the middle of 2017 (August). The "Indian Startup Funding" dataset was obtained from Kaggle.com. It has columns for the date the startup was funded, the city where it is based, the names of the donors, and the amount invested (in USD). This will also aid in understanding how major events, such as the US elections and the demonetization of Indian banknotes, affect the funding of various firms.

**Challenges Faced By Indian Startups**

Given the fact that start-ups are critical to the growth of a country, they confront several problems in maintaining and developing. Start-ups face significant challenges, including a lack of mentorship, infrastructure facilities, the inability to reinvest continuously, inability to obtain long-term resources, and taking longer to execute, among others. However, the following are the main bottlenecks for start-ups that are extremely difficult to overcome.

**Getting funds**

a) Building the right team
b) Lack of mentorship
c) Lack of knowledge about the customer
d) Executing too slowly
e) Regulations

**LITERATURE REVIEW**

According to Narendra Modi, Startup India is a revolutionary plan that was launched to assist people who want to start their own business. Because these people have skills and ideas, the government will help them implement and expand those


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ideas. With the success of this endeavor, India will eventually become a stronger economy and nation. This is seen as the first step toward the future of Indian startups in terms of ease of doing business**.**

The growing ease of conducting business is also attracting investors to previously underserved areas. The Insolvency and Bankruptcy Code (IBC), for example, has prompted asset reconstruction companies from Canada and Encore Capital from the United States to engage in India.

Crowd funding, which entails obtaining small sums of money from a large number of people, is seen as a big disruption in the entrepreneurial financing landscape . This is because investors bear less risk in crowd funding than in other fundraising options with a larger risk element.

## METHODOLOGY OF DATA ANALYSIS

The basic data analysis procedure has only four steps, which are listed below and followed.

### Data Acquisition

The data is from kaggle.com and is titled "Indian Startup Funding." The document is in CSV (Comma Separated Value) format.

### Data Processing

For processing and analysis, data must be cleansed. In order to avoid ambiguity, we removed null values from the dataset.

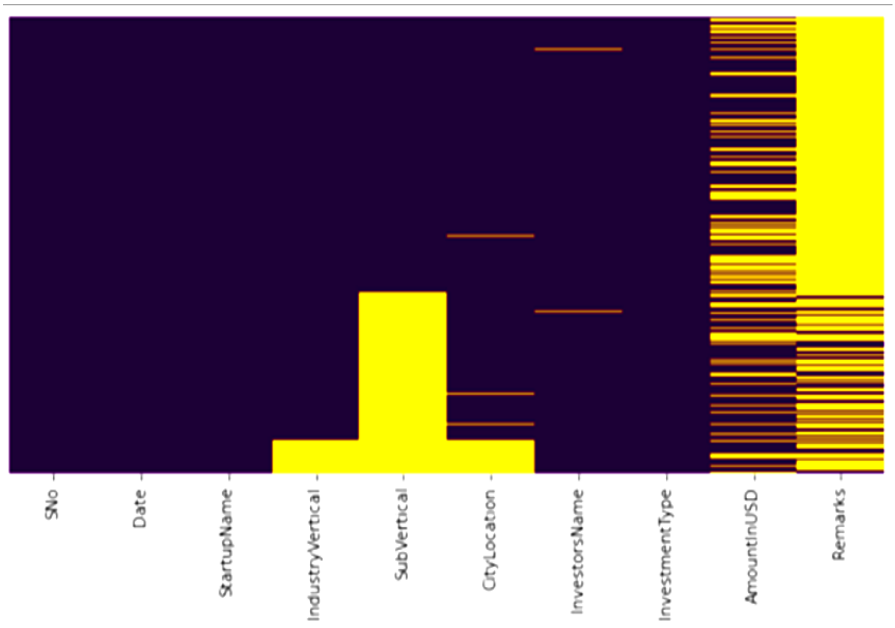



***Figure. 1***


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This bar plot shows the missing data in graphical format. Here the yellow colour represents the missing values of the dataset.

```
Frequency count of missing values

SNo                   0
Date                  0
StartupName           0
IndustryVertical    171
SubVertical         936
CityLocation        179
InvestorsName         8
InvestmentType        1
AmountInUSD         847
Remarks            1953
dtype: int64
```

***Figure. 2***

The frequency count of missing values is displayed in this image. Most of the missing content is in Remarks Column.

**Analysis of Data**

Python packages such as pandas, numpy, matplotlib, Sklearn etc. are used to examine the data. In-depth analysis was possible using these and other packages.

**Result Interpretation**

For a better understanding of what the data indicates, the results are visualised. Python packages such as matplotlib, seaborn, and squarify were used to create this graphic Visualizing graphs and diagrams with bar plots and square plots are two examples. Bar plots are graphs that use rectangular bars to depict categorical data.

These findings will aid us in determining where our startup ecosystem sits and what significant factors influence startup funding.

**RESULT**

**Top 10 startup that had most funding**

| StartupName | AmountInUSD |
|---|---|
| paytm | 2364062000 |
| flipkart | 2259700000 |
| ola | 2001391000 |
| snapdeal | 700000000 |
| oyo | 661062100 |
| quikr | 230000000 |
| delhivery | 215000000 |
| cartrade | 212031100 |
| foodpanda | 210000000 |
| shopclues | 207700000 |

***Figure. 3***

We can see that Paytm, and Flipkart are the two companies which accumulated highest funding's by the investors during the given period. The highest amount of funding is 2364062000 USD which was grabed by paytm similarly other companies are also listed with their name and their funding amount.

**Which Kind of Investment Did the Top 10 Startups Get?**

There are two types of investment as private equity and seed funding where Ola got 16 and 7 investments respectively.


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Followed by Oyo with 6 as Private and 2 as Seed funding only two companies took seed funding investments, ola and Oyo.

| InvestmentType<br>StartupName | privateequity | seedfunding |
|---|---|---|
| ola | 16 | 7 |
| oyo | 6 | 2 |
| paytm | 6 | 0 |
| flipkart | 5 | 0 |
| cartrade | 3 | 0 |
| delhivery | 3 | 0 |
| quikr | 3 | 0 |
| shopclues | 3 | 0 |
| foodpanda | 2 | 0 |
| snapdeal | 2 | 0 |

***Figure. 4***

**Companies with the most number of Investors**

The bar chart shows which companies have the most investors. Ola is the most popular, with 23 enterprises and corporations. The companies most number of investors, the leading company is Ola with 23 investing ventures and firms. Other Companies like Oyo, Swiggy, Paytm, Urbanclub are in the range of 5 – 8 investors.

**Top Investors Favorite Industry or Sector**

This is a graphical representation of top investor's favourite Industries. This graph represents name of different industry sectors on the y-axis and count with the range of 0-1 on the x-axis. Ecommerce and consumer internet are the two sectors which are has the highest investments from top investing firms.

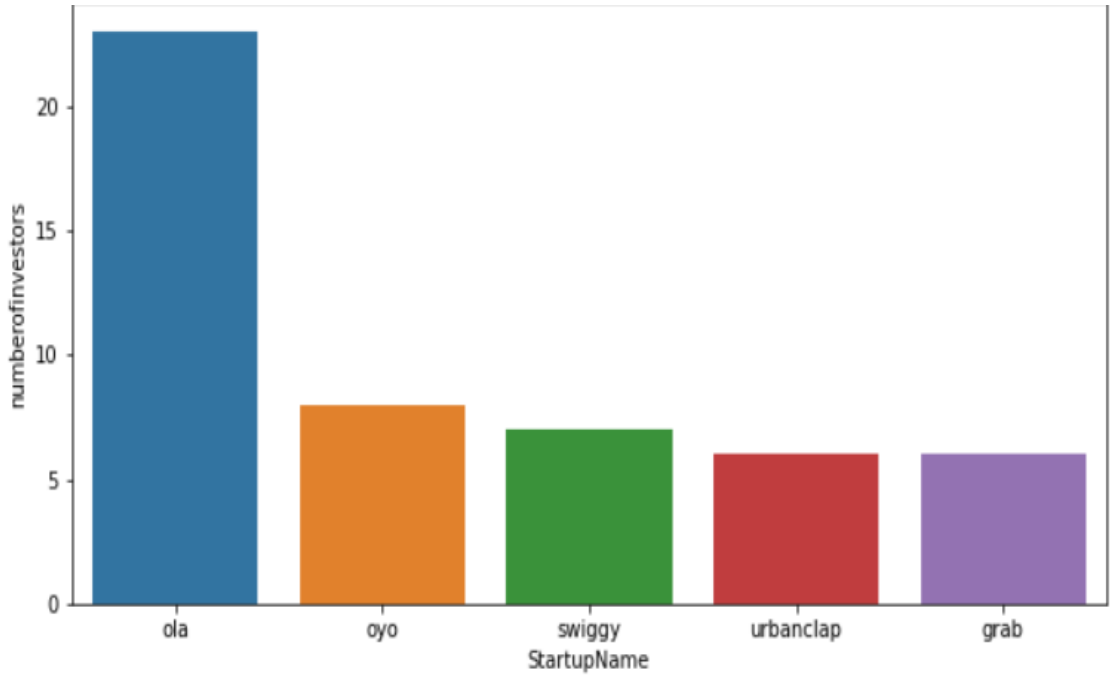



***Figure. 5***


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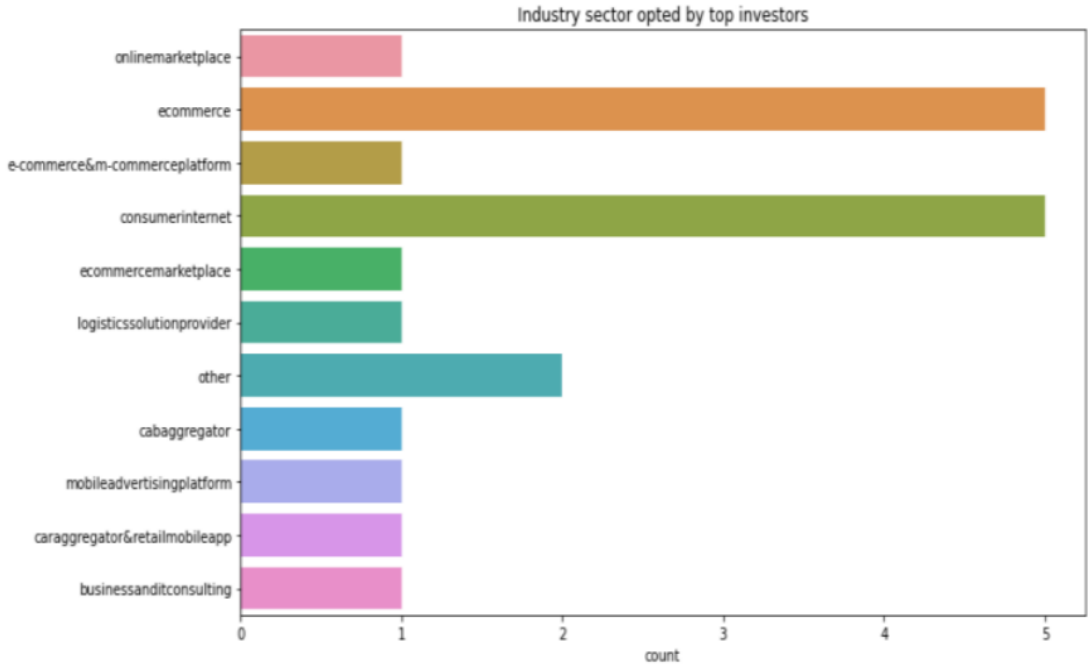



***Figure 6.***

## FREQUENCY OF INDUSTRY VERTICAL

There are industry verticals like consumer internet, technology ecommerce etc where consumer internet has the highest frequency at almost 770 points. Following with technology which is slightly above 300 Most of the industries have low frequency.

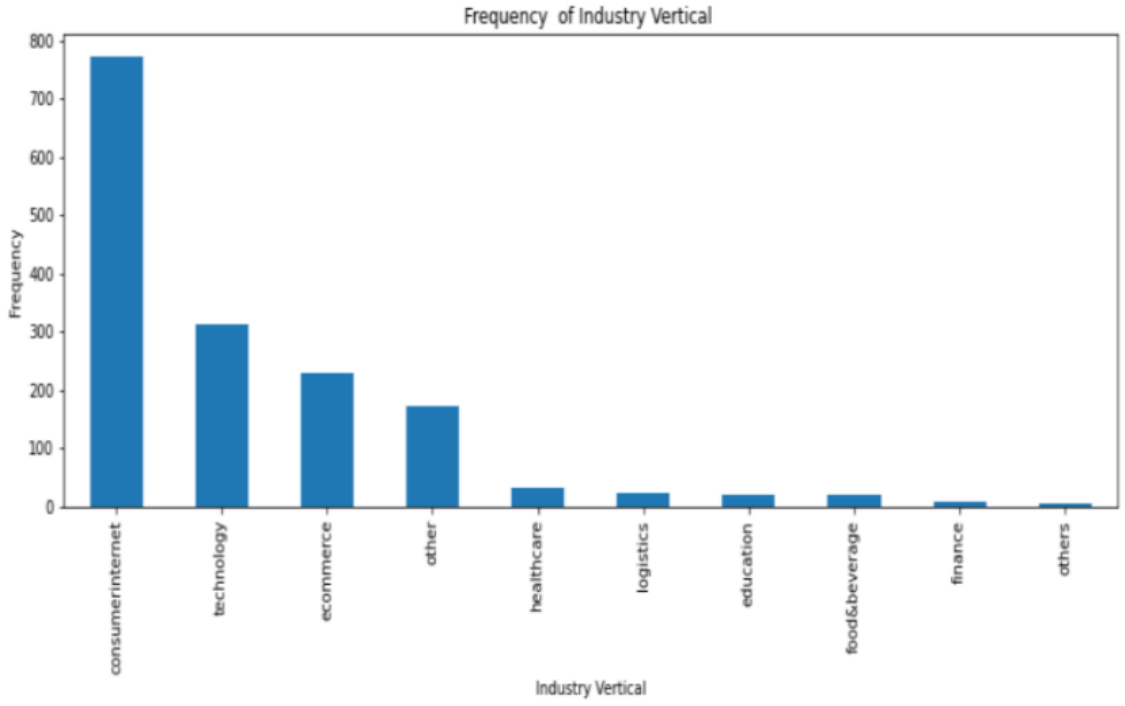



***Figure 7***


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## CONCLUSION

The trends of how events like Digital India, Startup India, Indian money demonetization, and surgical strike affected the financing by investors into startups are the conclusions drawn from the analysis and visualisation of the 'Indian Startup Funding' data. Also, while tier-II and tier-II cities drew some investors, tier-I cities like Bangalore, Mumbai, and Delhi continue to attract the majority of investments.

Unicorns like Flipkart and Paytm keep attracting investors due to their huge market position. Paytm implemented the cashless India policy to raise revenue after being demonised. In the last two years, Ola cabs and Swiggy have garnered most investors, and both are planning to enter the unicorn clubs.

Even though consumer internet continues to draw more investors than any other business vertical, the technology vertical has also attracted a big number of investors due to the advent of AI, Machine Learning, and other technological advancements.

In recent years, India has attracted a slew of foreign investors, including Sequoia Capital, Accel Partners, and others, with Sequoia Capital and Accel Partners leading the pack with the most investments, implying that foreign investors outnumber Indian investors. A fascinating thing to consider is that individuals like Ratan Tata and Rajan Anandan have taken a serious interest in investing in startups, as they have invested more than anyone else.

Maximum total funding was generated in the year 2015 and then it slowly decreased with increase in years. Average funding was most in 2017. In 2015 the period of June -oct was funded most and quarter 3 was funded most. Similarly, In 2016 period of june and september were most funded and quarterly funding decreased with increase in time. Following with year 2017 the period between march- may have received most funding.

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