MATHEMATICS FOR ENGINEERS - II
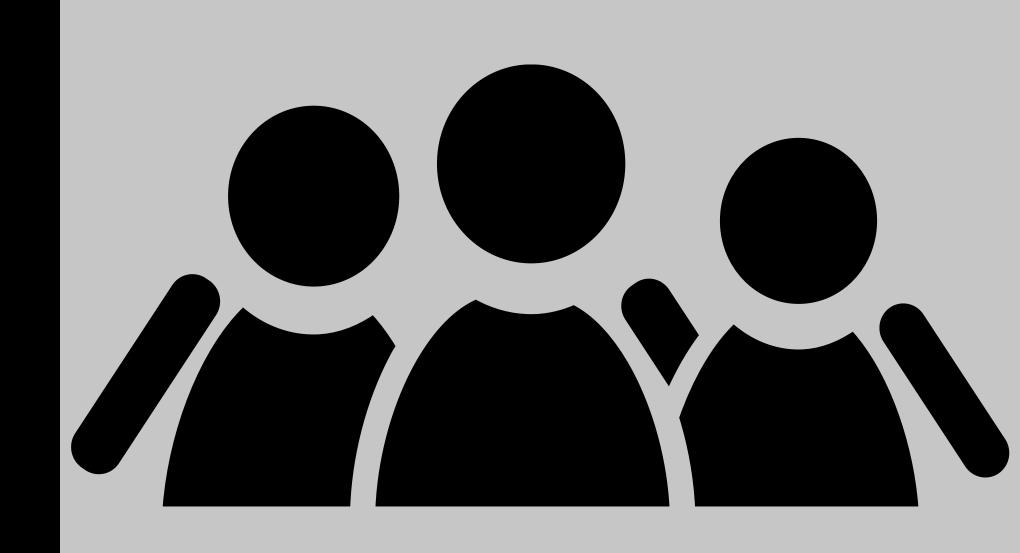
PROJECT PRESENTATION
2022-23

<u>INTRODUCTION</u>

India now features one of the world's fastest-growing startup ecosystems, with creative ideas and a welcoming atmosphere for business owners. The business landscape is changing as a result of a boom in new startup trends across the nation.

The rise of social entrepreneurship, where firms use commercial methods to address social challenges, is one of the most important trends. The increased emphasis on artificial intelligence and machine learning, which is revolutionising sectors including healthcare, education, and finance, is another trend. Additionally, there is a rising demand for startups with a sustainability-related emphasis that work to lower carbon emissions and advance environmentally beneficial behaviours.

TEAM

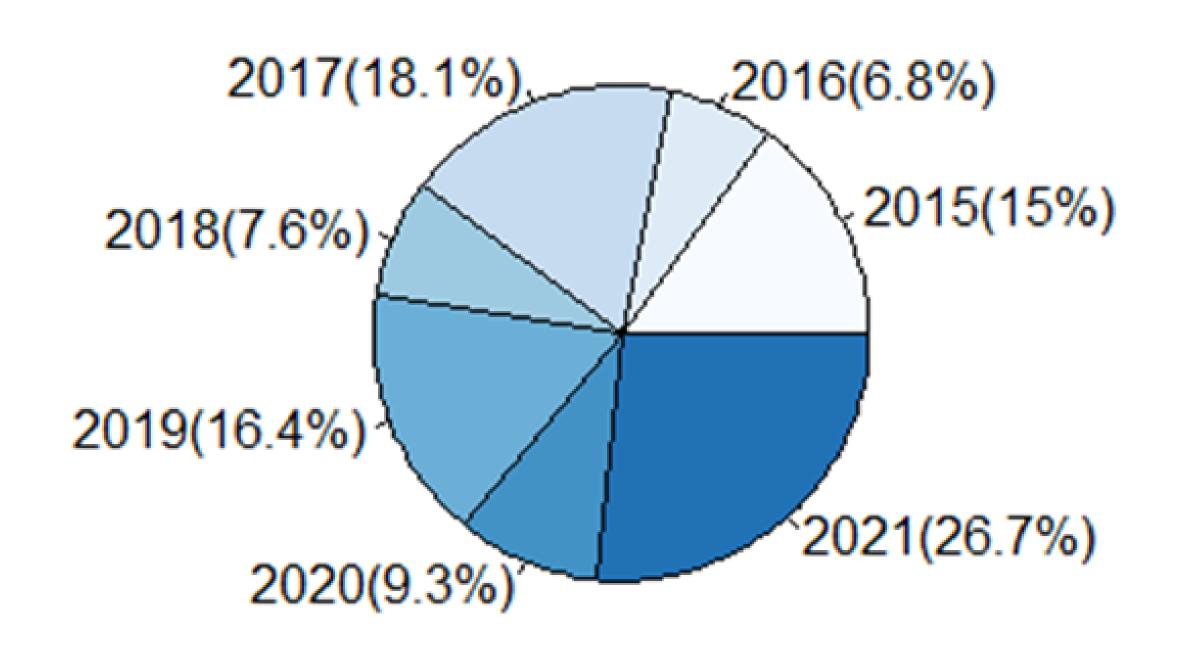GAGAN SINGHAL
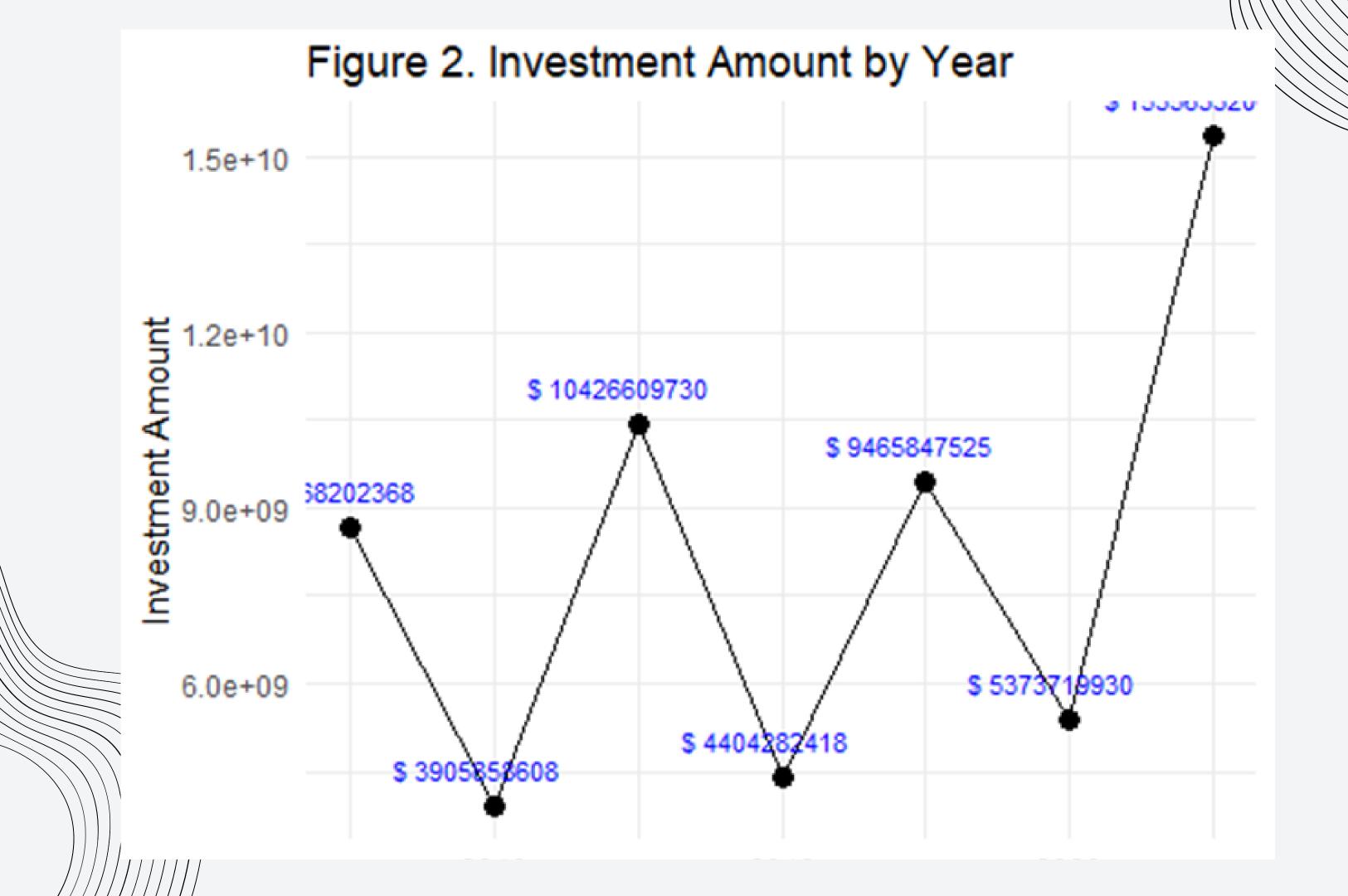ISHIKA KOCHHAR
AYUSHI SINGH
SAKSHAM PANDLA

Agenda

To analyse the trends in investment in the Indian startup ecosystem and assess the concentration of investment.

DATA AT GLANCE

Date	Startup_name	Vertical	City	Investors_Name	Investment_Type	Amount
2015-01-02	LensKart	Eyewear	New Delhi	TPG Growth, TR Capital, IDG Ventures	Private Equity	2150000
2015-01-02	VioletStreet	Fashion & lifestyle	Bangalore	Venkat Vallabhneni, Sudhakar Reddy, Srinivasa Rao Paturi	Seed	315000
2015-01-05	Lookup	Local Services	Bangalore	De Co., Japan & Teruhide Sato (in Addition to MKS Switzerla...	Seed	380000
2015-01-05	#Fame	Entertainment	Mumbai	TO THE NEW Ventures	Private Equity	10000000
2015-01-05	Gympik	Fitness	Bangalore	Tom Clausen, Rohan Ajila, Haldyn Glass	Seed	135000
2015-01-06	Near.in	Local Services	Bangalore	Anupam Mittal, Manish Vij, Prashant Tandon, Gaurav Agarw...	Seed	285000
2015-01-06	Purplle.com	Beauty and Wellness	Mumbai	IvyCap Ventures	Private Equity	NA
2015-01-06	NumberMall	Retail	Bangalore	SRI Capital	Private Equity	10000000
2015-01-06	Tookitaki	AI	Bangalore	Jungle Ventures, Redbright Partners, Blume Ventures	Private Equity	1000000
2015-01-06	Frankly	Social Networking	Bangalore	Matrix Partners	Seed	600000
2015-01-07	Faircent	Finance	Gurgaon	Devesh Sachdev, Ashish Tiwari	Seed	NA
2015-01-07	Nurturey	Parenting and Childcare	Bangalore	Seedrs Crowd funding platform	Crowd funding	125000
2015-01-07	Bewakoof	Fashion & lifestyle	Mumbai	Rohit Bansal, Kul Bahl, Nikhil Vora	Seed	NA
2015-01-07	Stridalyzer	Healthcare	Bangalore	Kickstarter	Crowd Funding	30768
2015-01-07	Commonfloor	Real Estate	Bangalore	Google Capital	Private Equity	5000000
2015-01-09	Sokrati	Marketing	New Delhi	IvyCap Ventures, Inventus Capital	Private Equity	NA
2015-01-09	YepMe	Fashion & lifestyle	Gurgaon	JS Capital, Helion Venture Partners, Capricorn Investment Gr...	Private Equity	13000000

Figure 1. Investment by Year

2017(18.1%), 2016(6.8%)
2018(7.6%)
2015(15%)
2019(16.4%)
2021(26.7%)
2020(9.3%)

Figure 2. Investment Amount by Year

Figure 3. Number of Startups Funded by Year
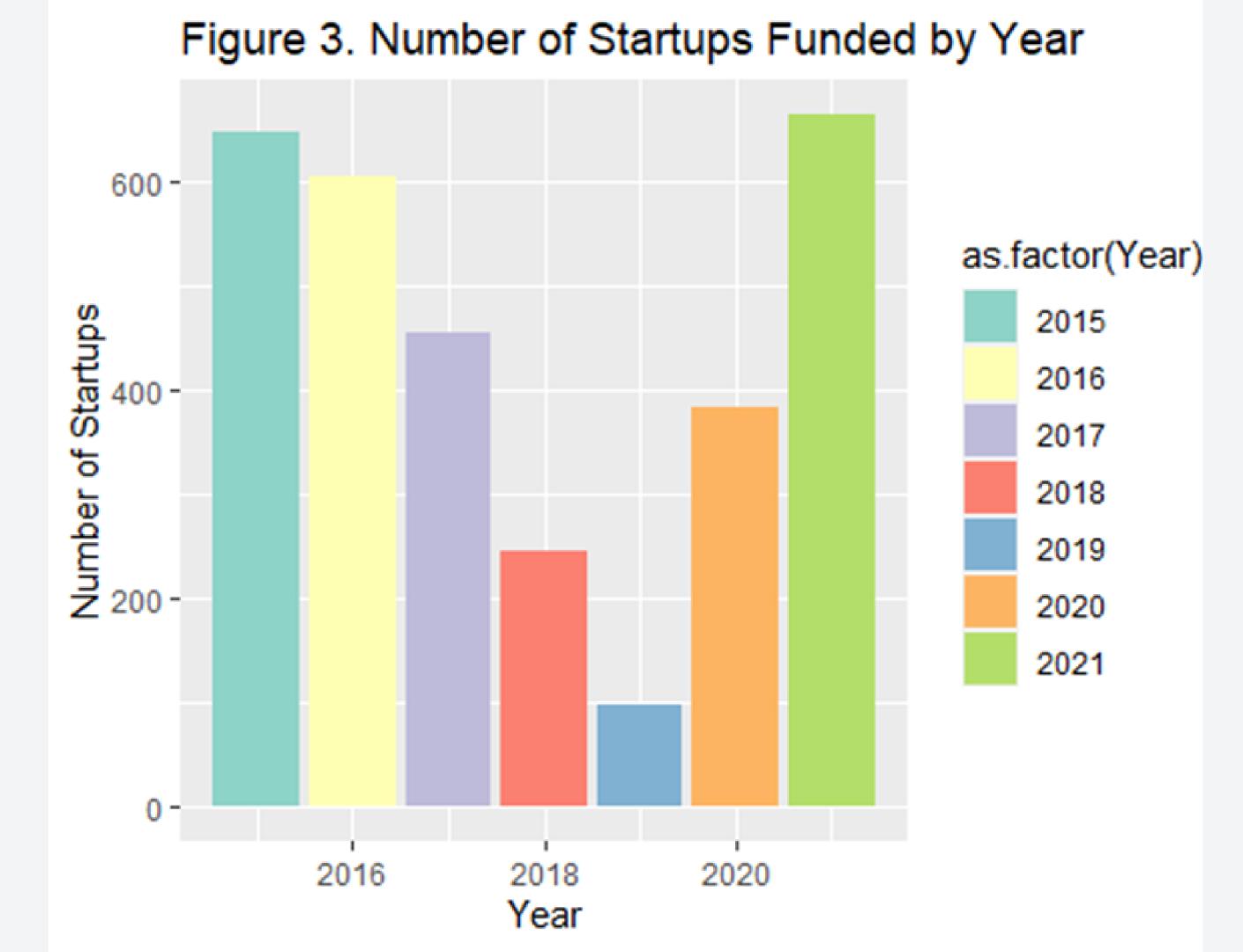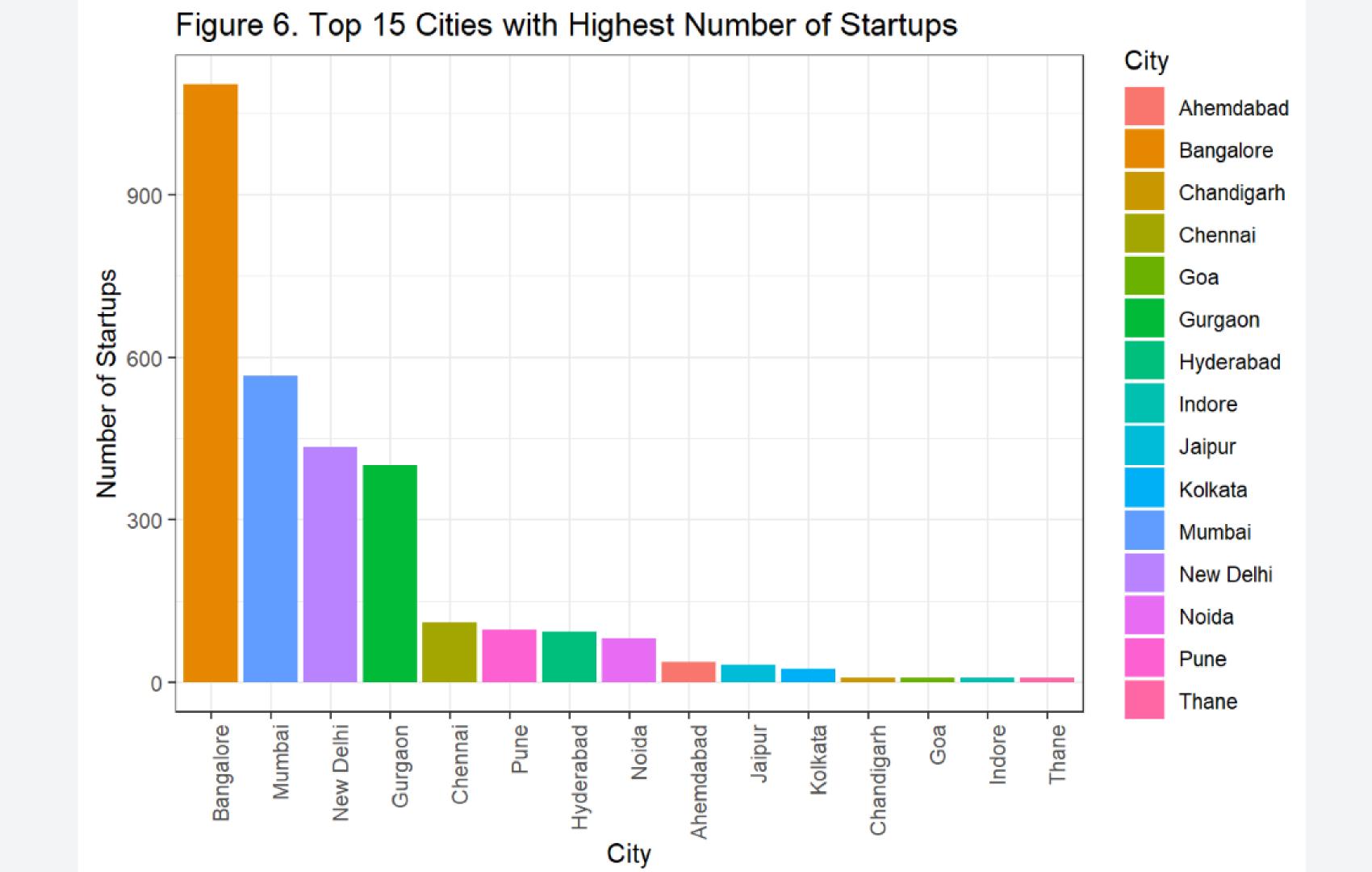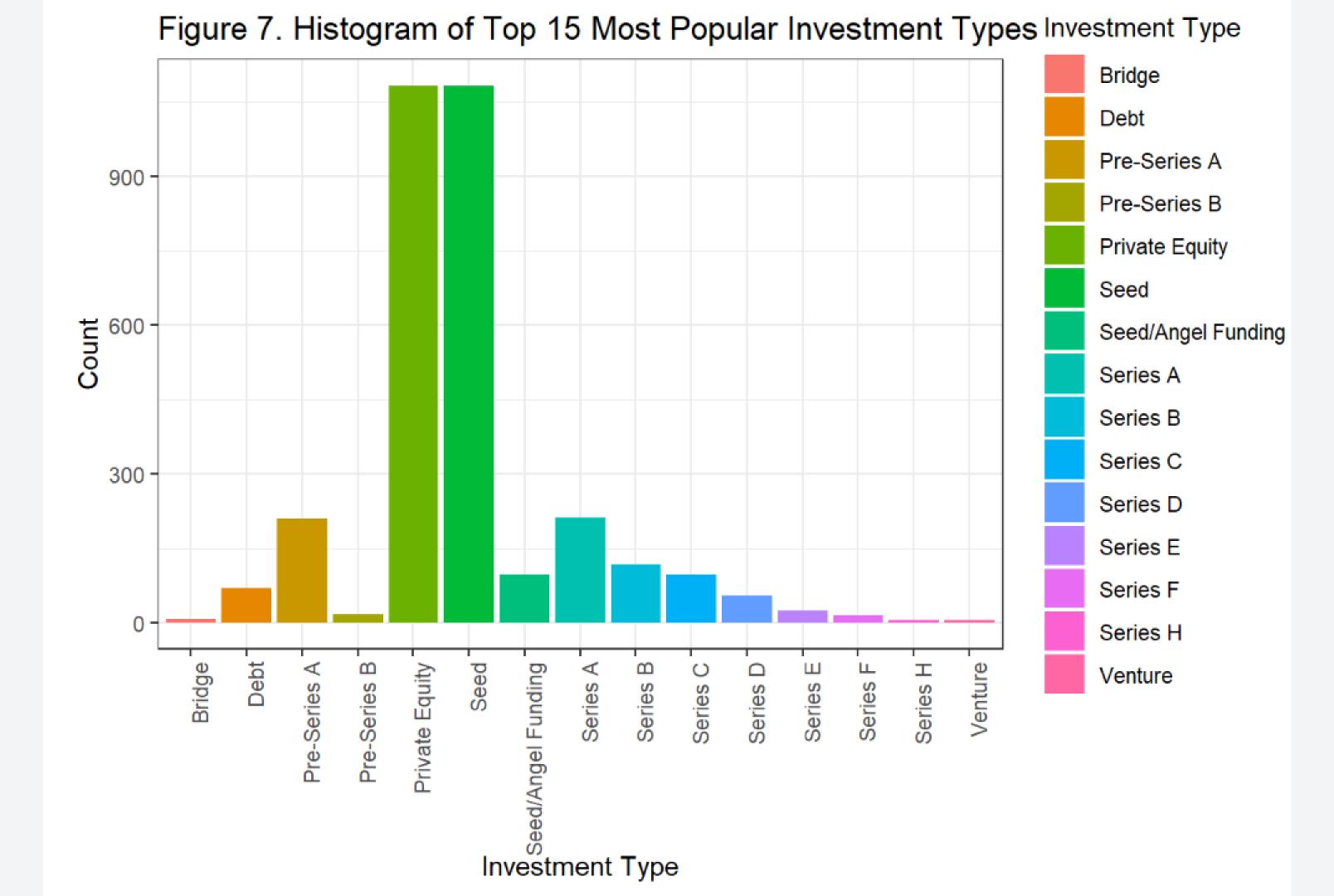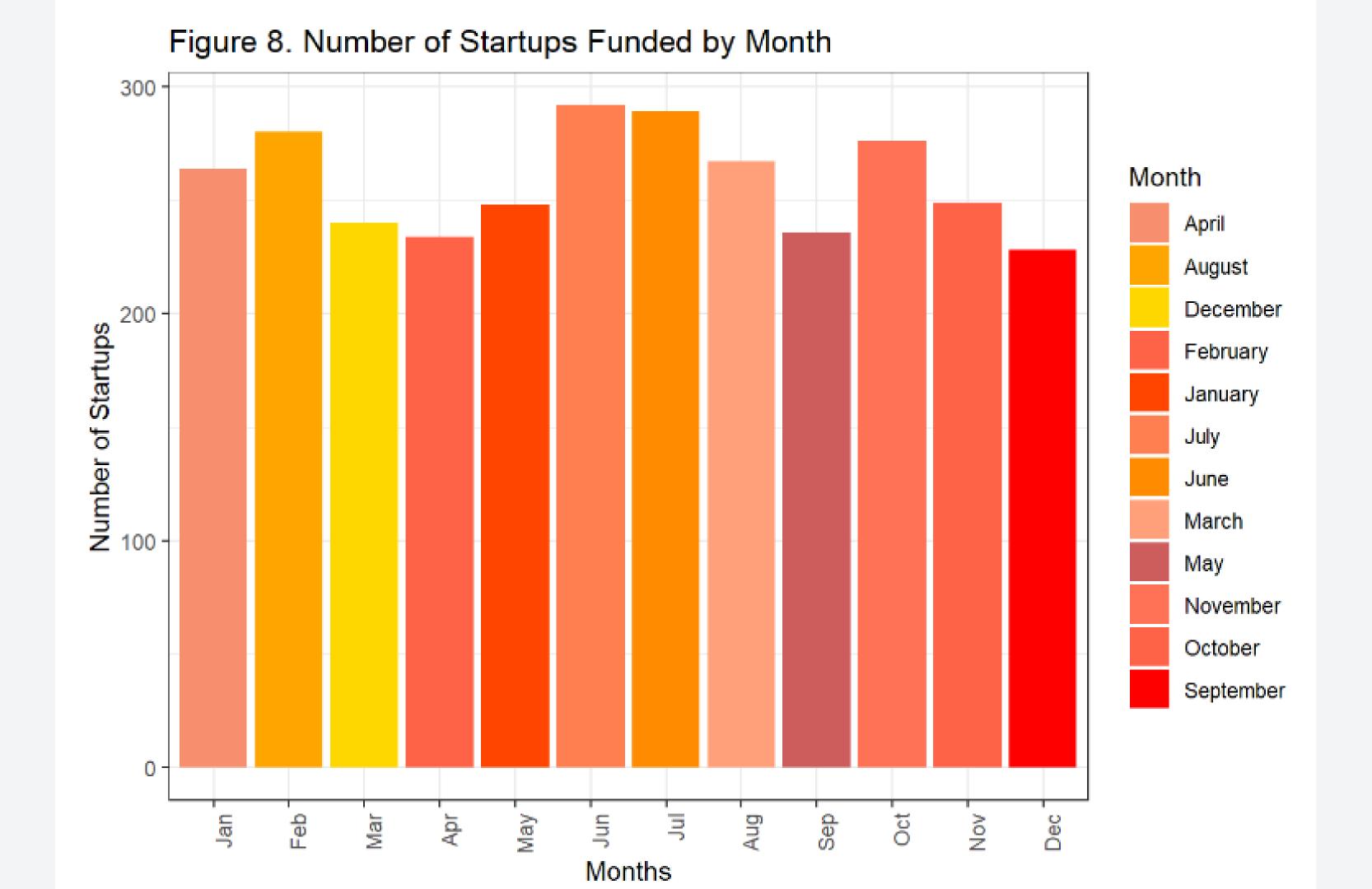
Figure 4. Top 15 Startups with Multiple Funding Rounds

Figure 5. Top 15 Verticals with the Highest Number of Startups

Figure 6. Top 15 Cities with Highest Number of Startups

Figure 7. Histogram of Top 15 Most Popular Investment Types

Figure 8. Number of Startups Funded by Month
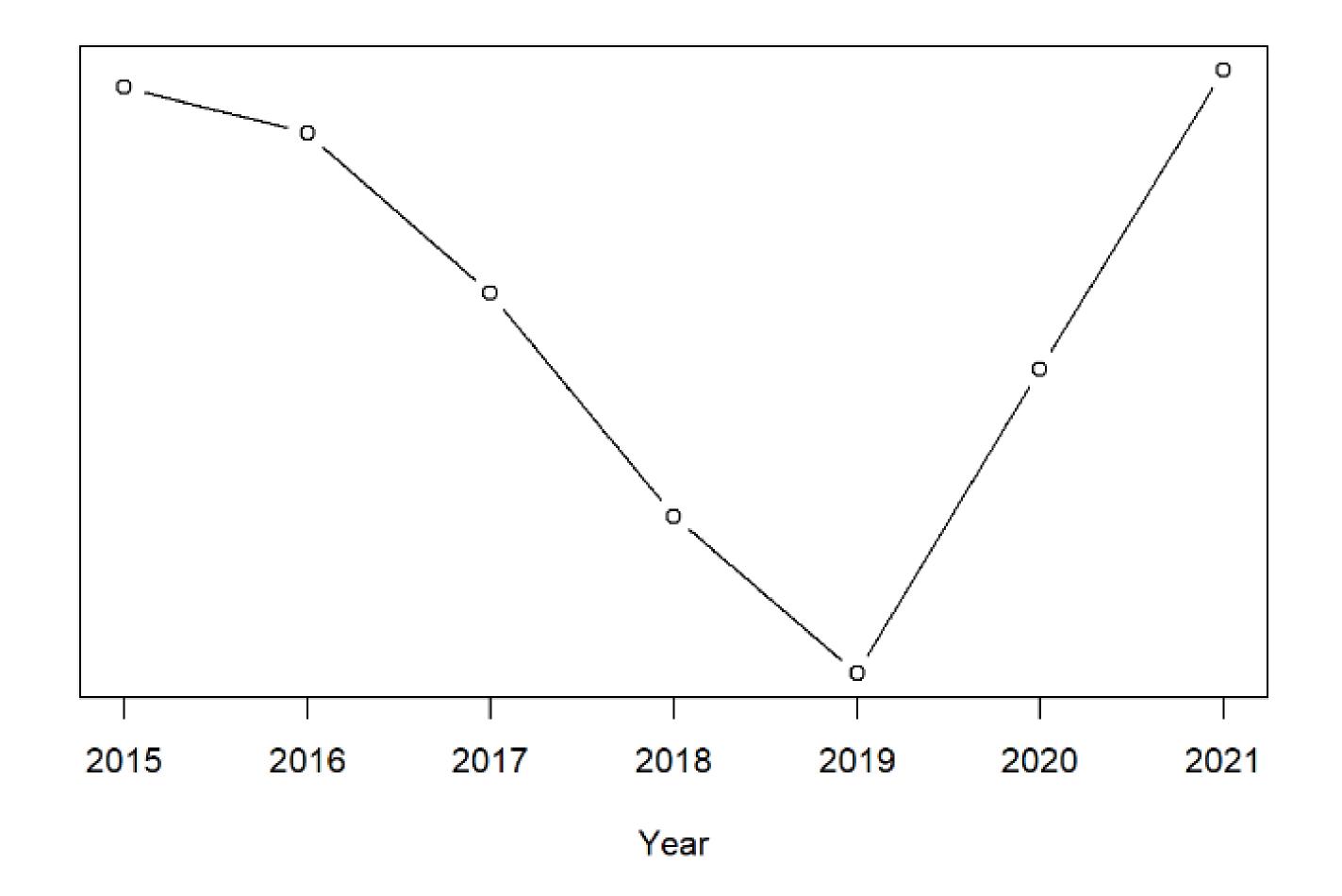
```r
cat("Summary of the Dataset:\n")
```

```
## Summary of the Dataset:
```

```r
cat("Number of Startups:", num_startups, "\n")
```

```
## Number of Startups: 3103
```

```r
cat("Number of Investors:", num_investors, "\n")
```

```
## Number of Investors: 2466
```

```r
cat("Total Investment:", total_investment, "\n")
```

```
## Total Investment: 57600852579
```

```r
cat("Number of Cities:", num_cities, "\n")
```

```
## Number of Cities: 53
```

Figure 9. Number of Investments by Year

```
## Number of outliers in investment amounts: 420
```

```
cat("Outliers in investment amounts:\n")
```

```
## Outliers in investment amounts:
```

```
print(outliers)
```

```
##    [1]    50000000  100000000   56000000   31000000   50000000   26000000
##    [7]    60000000   80000000   40000000   30000000  110000000   50000000
##   [13]    25000000   30000000   75000000  150000000   25000000  400000000
##   [19]    50000000   25000000   35000000   40000000   50000000   28000000
##   [25]   100000000   85000000   35000000  137000000   50000000   40000000
##   [31]    50000000   60000000   30000000  100000000   30000000  100000000
##   [37]    30000000   25000000   60000000  100000000  700000000   50000000
##   [43]   500000000  100000000   30000000   90000000   25000000   30000000
##   [49]    63000000   50000000   25000000   40000000   45000000   40000000
##   [55]    60000000  225000000   75000000   37500000   30000000  680000000
```
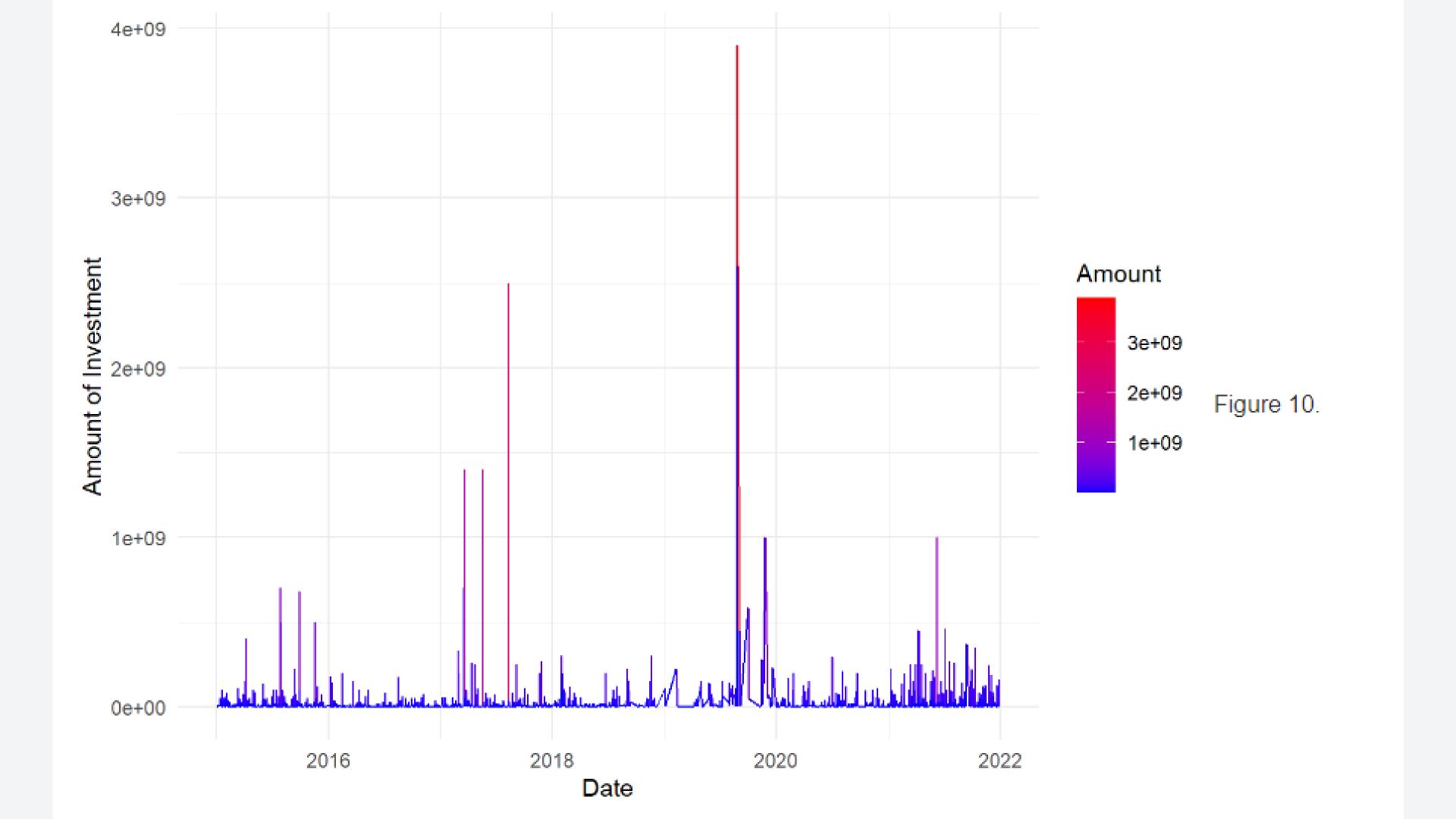
Figure 10.

Figure 11. Number of Investments per Vertical (Top 20)
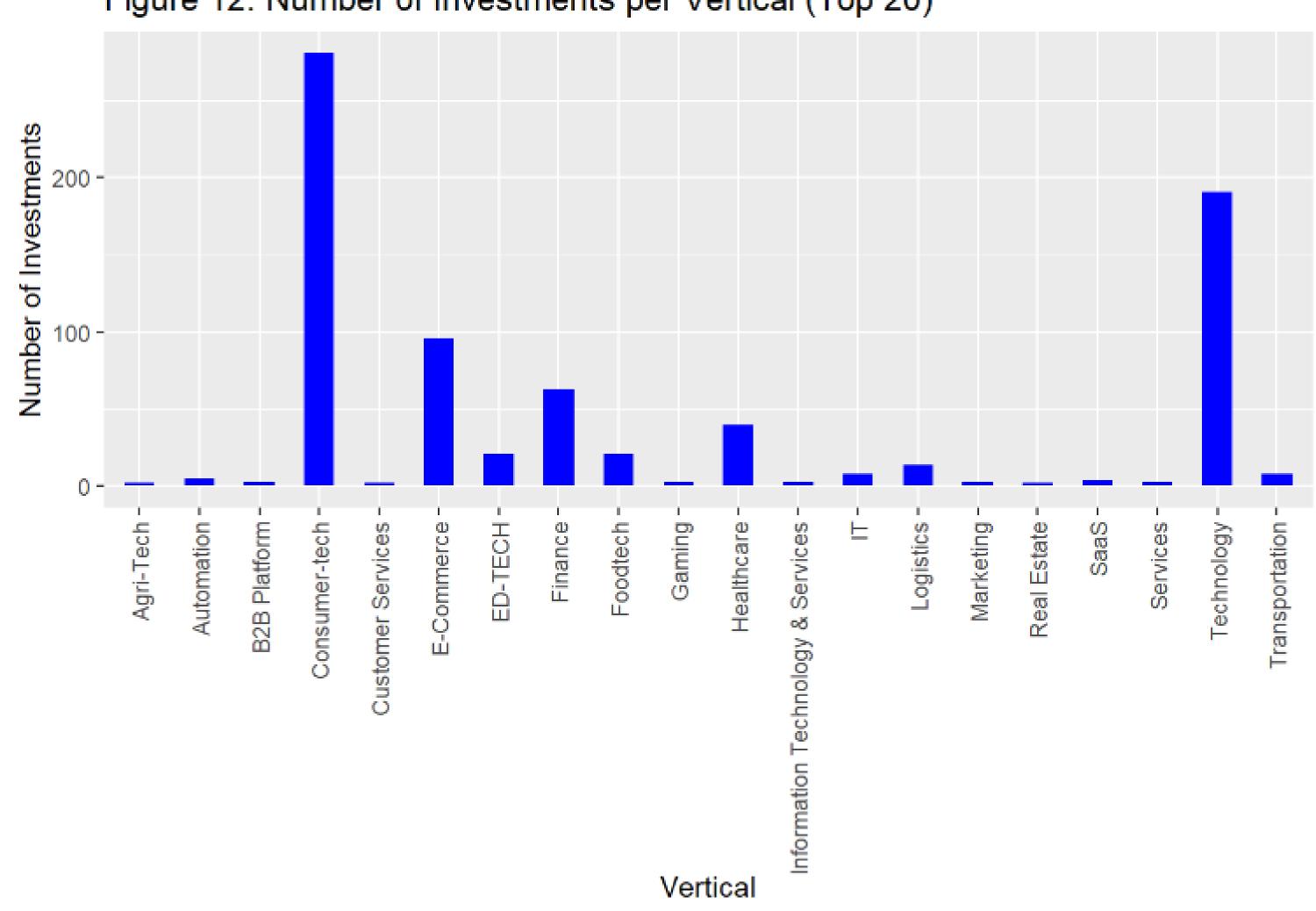
Figure 12. Number of Investments per Vertical (Top 20)

Figure 13. Number of Investments per Vertical (Top 20)