

US Startup Investments Data Visualization

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Dashboard 1- Exploratory

US Startup Fund Raising Analysis

User Guide for the dashboard:

1. Select the number of rounds/ amount of funding/ funding per round.
2. Click the play button to go through the market over time. (Animation)
3. Click on the map to discover the startup fund-raising situation in each region.
4. Click the Market in the lollipop chart to go deep into industry trends
5. Select the Funded year in the drop-down menu or click the specific year in the line chart

US Startup Overall Fund Raising Analysis

1. Select the number of rounds or number of fundings.
2. Click the play button to go through the market over time. (Animation)
3. Click on the map to discover the startup fund-raising analysis in each region.
4. Click the Market in the lollipop chart to see the industry trends

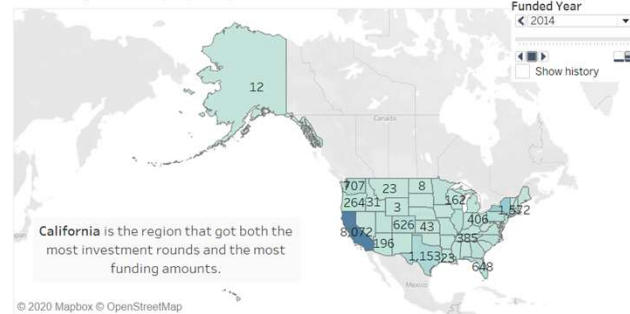
Select
num of rounds

Funded Year
(All)

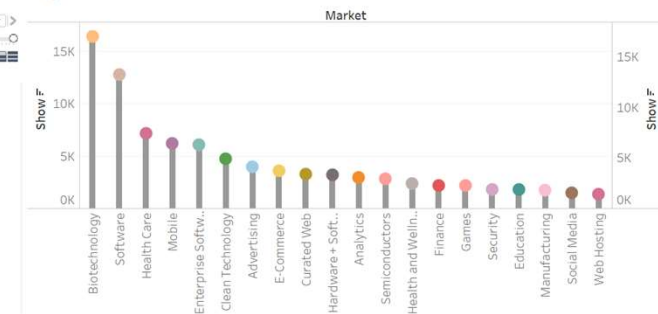
2000-2008, software is the most attractive market to investors. From 2008 to Now, **Biotechnology and Mobile** become the hottest.



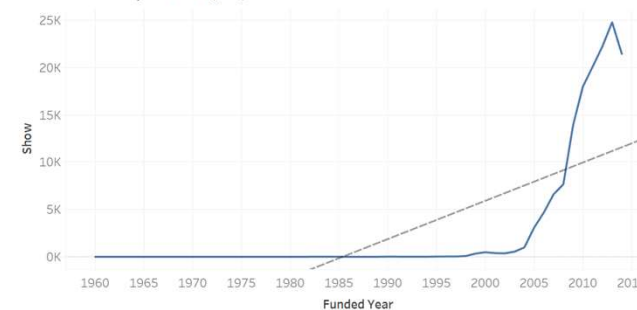
Rounds/Funding by Region - 2014



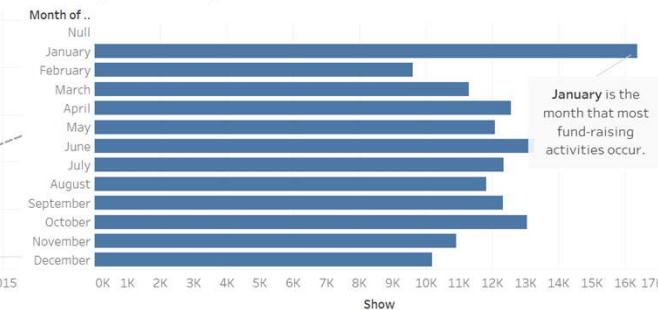
Top 20 Market



Total Rounds/Funding By Year



Funding Seasonality



A. Start-up Time Analysis

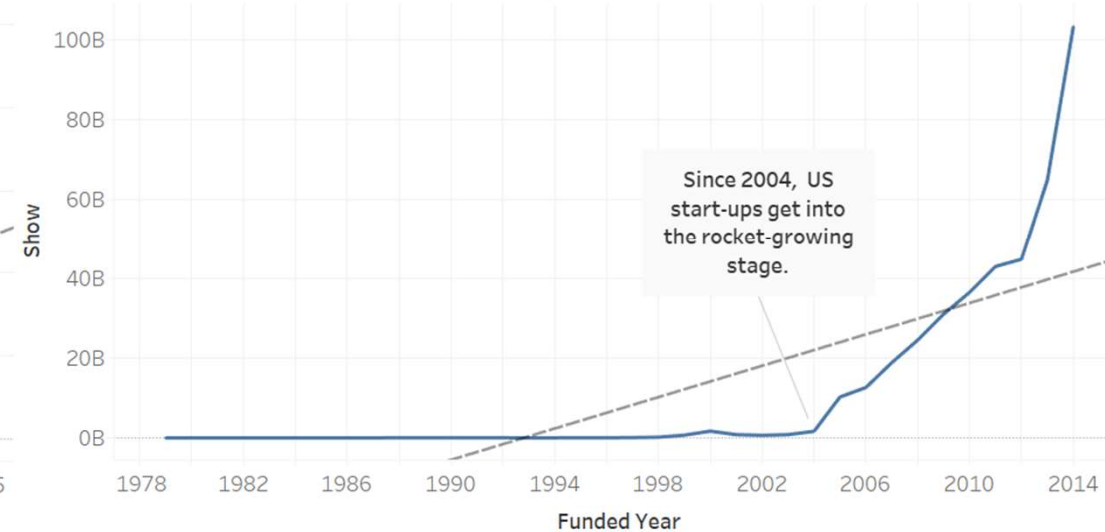
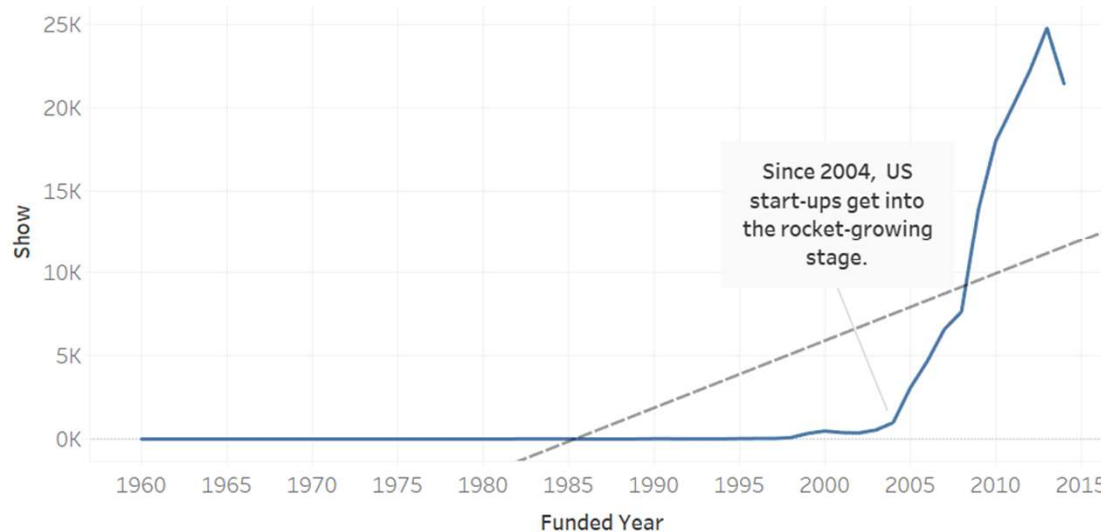
2004 is the Year of Start-up Boom.

Total Rounds over Time

Total Funding over Time

Total Rounds/Funding By Year

Total Rounds/Funding By Year

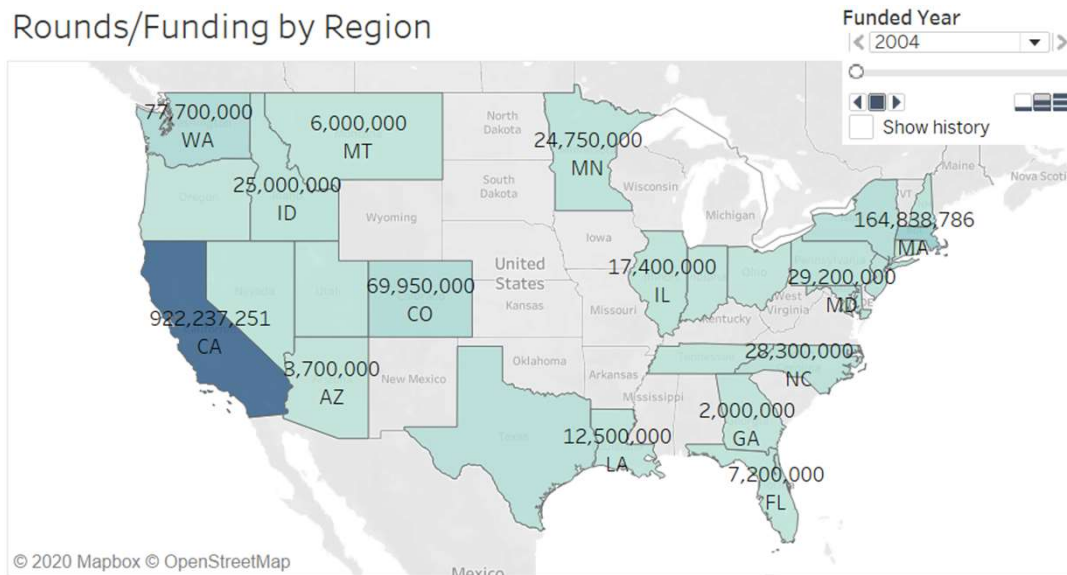


No matter from the number of funding rounds and the funding amounts, 2004 is the inflection point of US startups. Since 2004, millions of start-ups spring up to the market, and it keeps an upward trend till 2014.

B. What happened in 2004?

Let's dive into the year 2004, to see what drove the start-up boom.

Rounds/Funding by Region

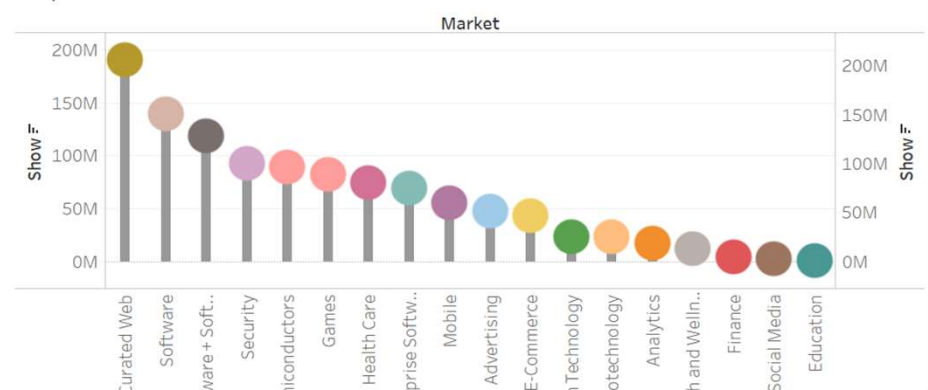


Here's the top 20 market by funding amount and rounds at 2004. From the map and lollipop charts, we can conclude:

- In 2004, most start-ups was established in California.
- The start-up boom was probably driven by the uprising **Curated Web and Software** market.

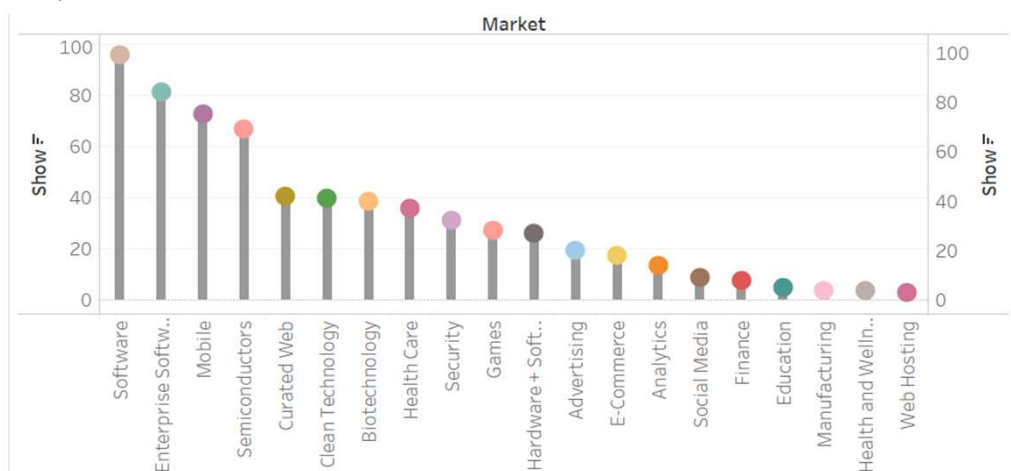
Funding Amount

Top 20 Market



Funding Rounds

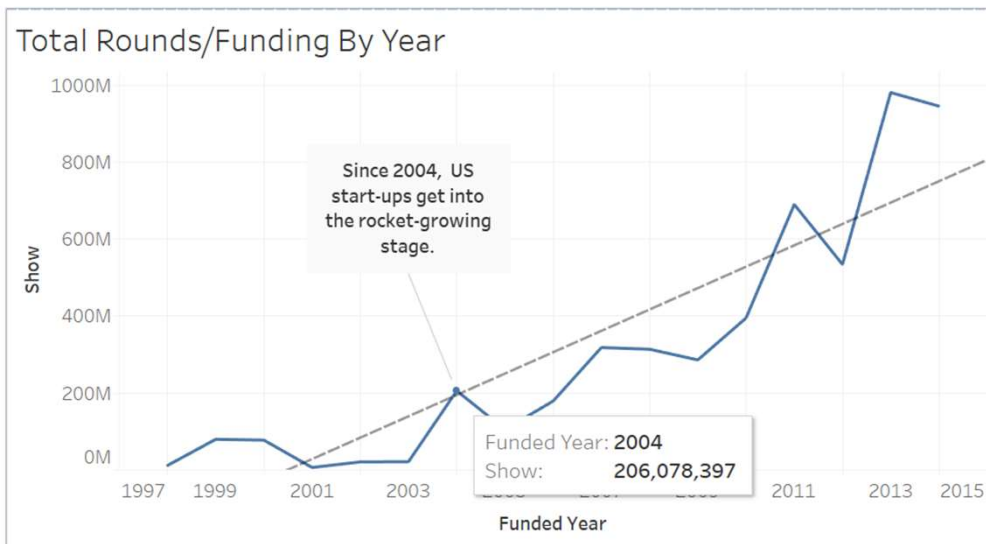
Top 20 Market



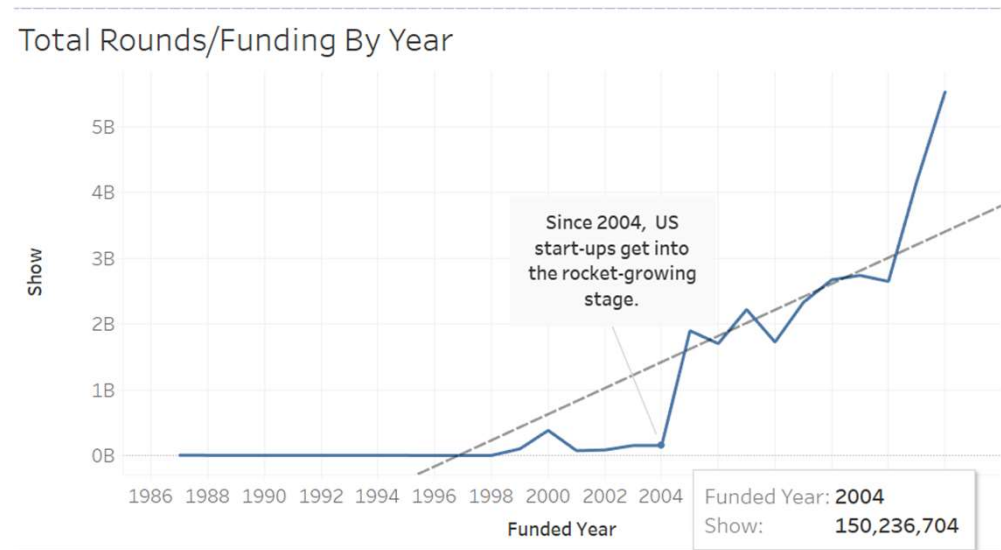
C. What market lead the start-up boom?

- The 2004 start-up boom was mainly contributed to the growth of **Software Market**.

Curated Web Market Trend



Software Market Trend



Comparing these two market:

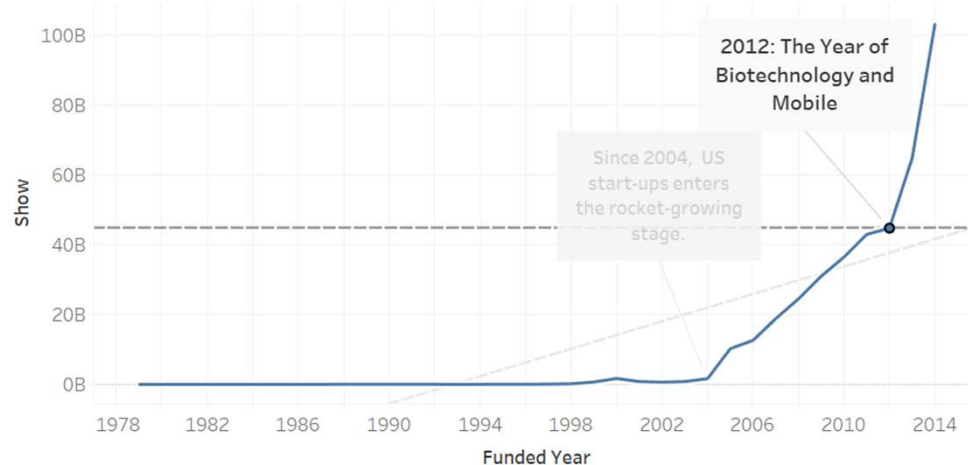
- When we only compare the funding in 2004, Curated Web seems to be the dominant one.
- But in a long term, the ceiling of Software Market is much higher than the Curated Web Market. The funding in software market was increased by 10 times from 2004 to 2005, and reached 1.8 billion at 2005. Therefore, it was the software market that led to the rapid growth of start-ups.

D. 2012- the second break point of Start-up Market

The development of Biotechnology and Mobile market brought the second break point in 2012.

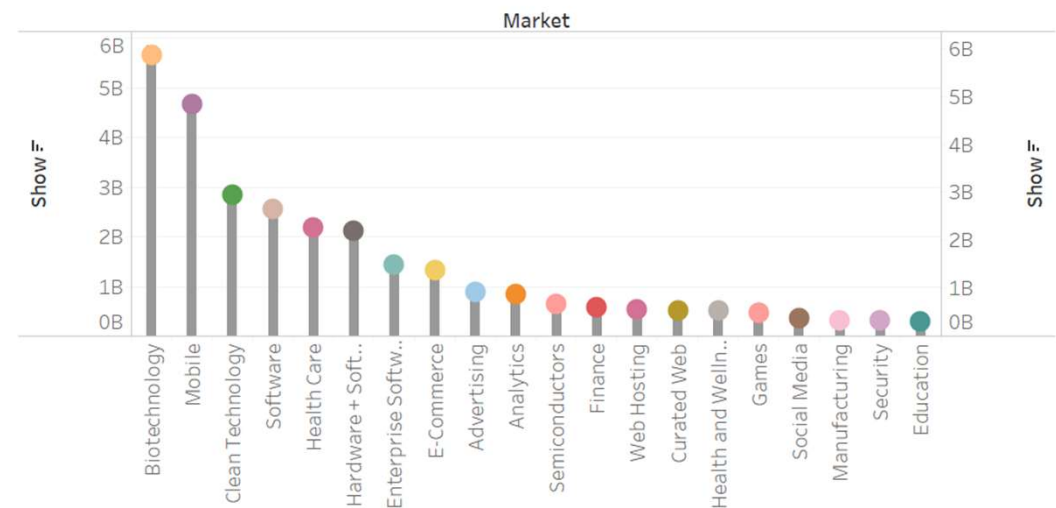
Total Funding over Time

Total Rounds/Funding By Year



Top 20 Market in 2012

Top 20 Market



With the same analysis, we can conclude that:

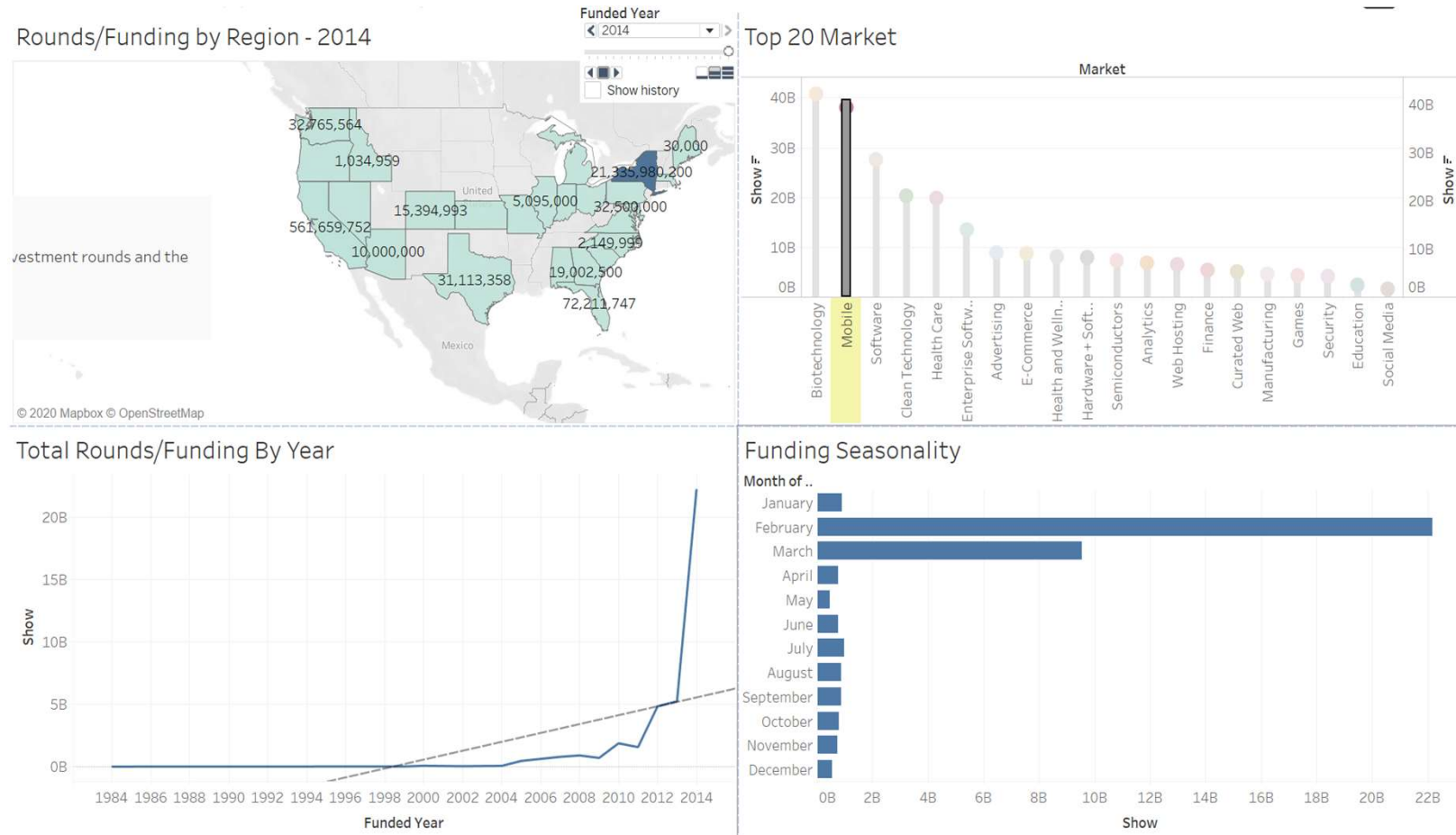
Biotechnology and Mobile lead the second breakout of US startup market in 2012.

E. Market Trend Analysis- Mobile

We could explore the market trend by clicking the targeted market in the lollipop chart.

Here I take the current hottest market, Mobile market, as an example. From the dashboard, we can tell that:

- NY state is the most active region in the mobile market, which highly stands out from other regions.
- Mobile Market is at its booming stage. From 2011- now, it keeps a rapid growth rate, and have a huge market potential.
- The fund-raising activities of Mobile startups have an obvious seasonality. Most is happened in February and March.



Dashboard 2

- **Find The Most Prospective Industry & Company In CA**
- Company: Intarcia Therapeutics
- Marketing: Biotechnology
- Location: Hayward, SF Bay Area, CA, USA
- Status: Operating
- Founded in : 1997-01-01
- Total Funding: \$534,305,937
- On top of the board is the company logo that links to the company website.

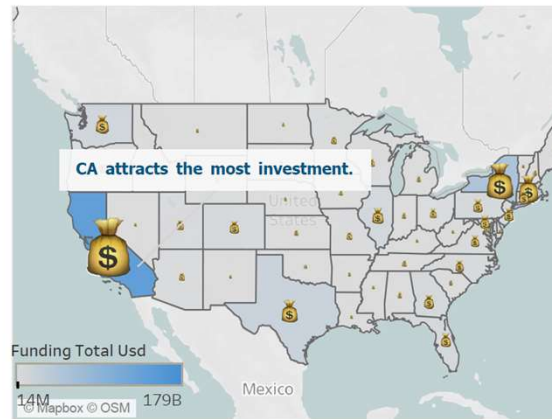
Finding The Most Prospective Company In USA

Company: Intarcia Therapeutics
Marketing: Biotechnology
Location: Hayward, SF Bay Area, CA, USA
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Funding Round Type
debt_financing
private_equity
venture

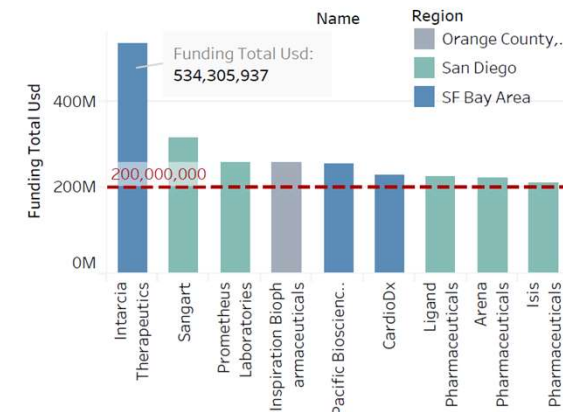
Investment by Region



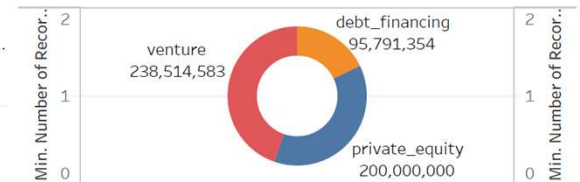
Top 10 Category in CA

Biotechnology # of Companies: 746 Total Funding: 21,114,465,862	Clean Technology # of Companies: 215 Total Funding: 10,351,157,502	Health Care # of Companies: 291 Total Funding: 9,985,632,123
Software # of Companies: 917 Total Funding: 13,306,076,830	Enterprise Software # of Companies: 341	# of
	Mobile # of Companies: 467	

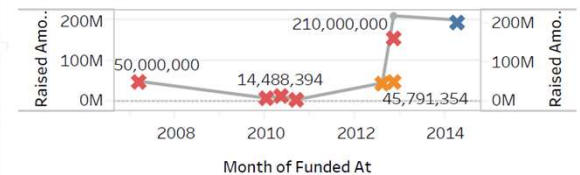
Top 10 Company in Biotech Industry in CA



Investment by Fund Type



Funding Timeline



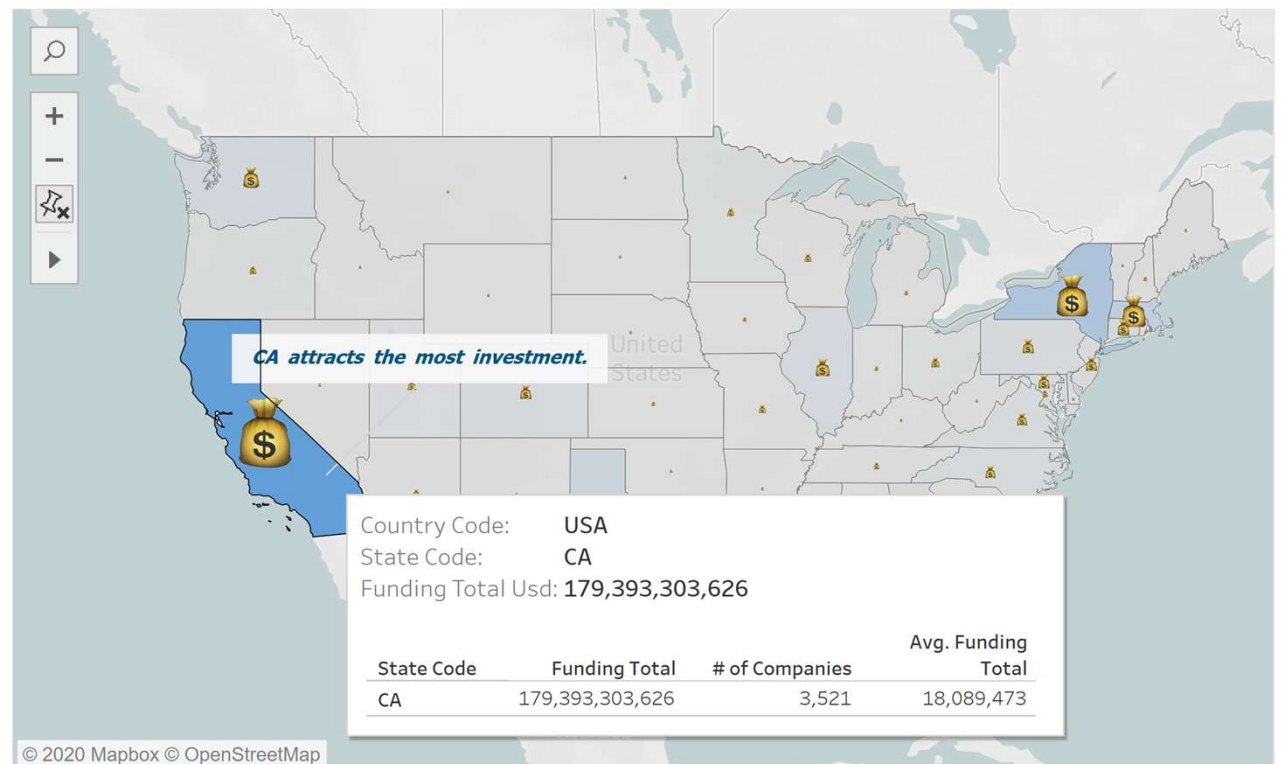
A. Investment by Region

- CA attracts the most investment among all states.
- Add a tooltip to see the total funding , number of companies and average funding of California.

Investment by Region_table

State Code	Funding Total	# of Companies	Avg. Funding To..
CA	179,393,303,626	3,521	18,089,473
NY	67,762,613,271	1,159	23,254,157
MA	38,925,289,419	1,084	19,769,065
TX	26,111,808,625	723	17,811,602
WA	16,856,784,806	577	17,306,761
IL	12,953,264,814	407	15,662,956
GA	9,589,060,390	316	17,724,696
FL	9,294,627,363	436	9,651,742
CT	9,168,809,224	208	29,015,219
CO	8,891,192,078	456	12,297,638

Investment by Region



B. Top 10 Categories in CA

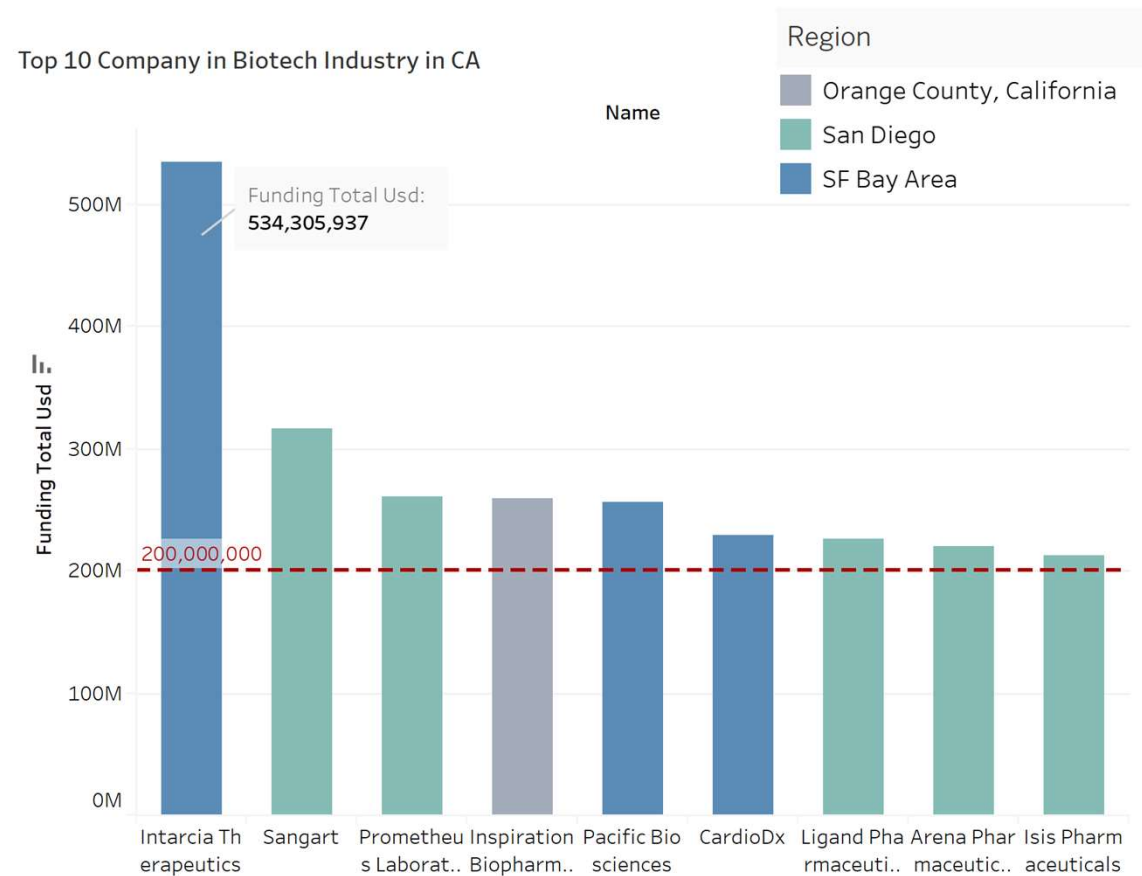
- Find Top 10 Categories in California.
- The Top 1 category is Biotechnology and there are 746 companies in this industry. The total funding is more than \$21B.

Top 10 Category in CA

Biotechnology # of Companies: 746 Total Funding: 21,114,465,862	Clean Technology # of Companies: 215 Total Funding: 10,351,157,502	Health Care # of Companies: 291 Total Funding: 9,985,632,123	Enterprise Software # of Companies: 341 Total Funding: 6,518,862,768
Software # of Companies: 917 Total Funding: 13,306,076,830	Mobile # of Companies: 467 Total Funding: 5,046,750,116	# of Companies: 407 Total Funding: 3,301,869,149	Health and
	Advertising # of Companies: 245 Total Funding: 3,439,935,666	E-Commerce # of Companies: 246 Total Funding: 3,074,638,350	

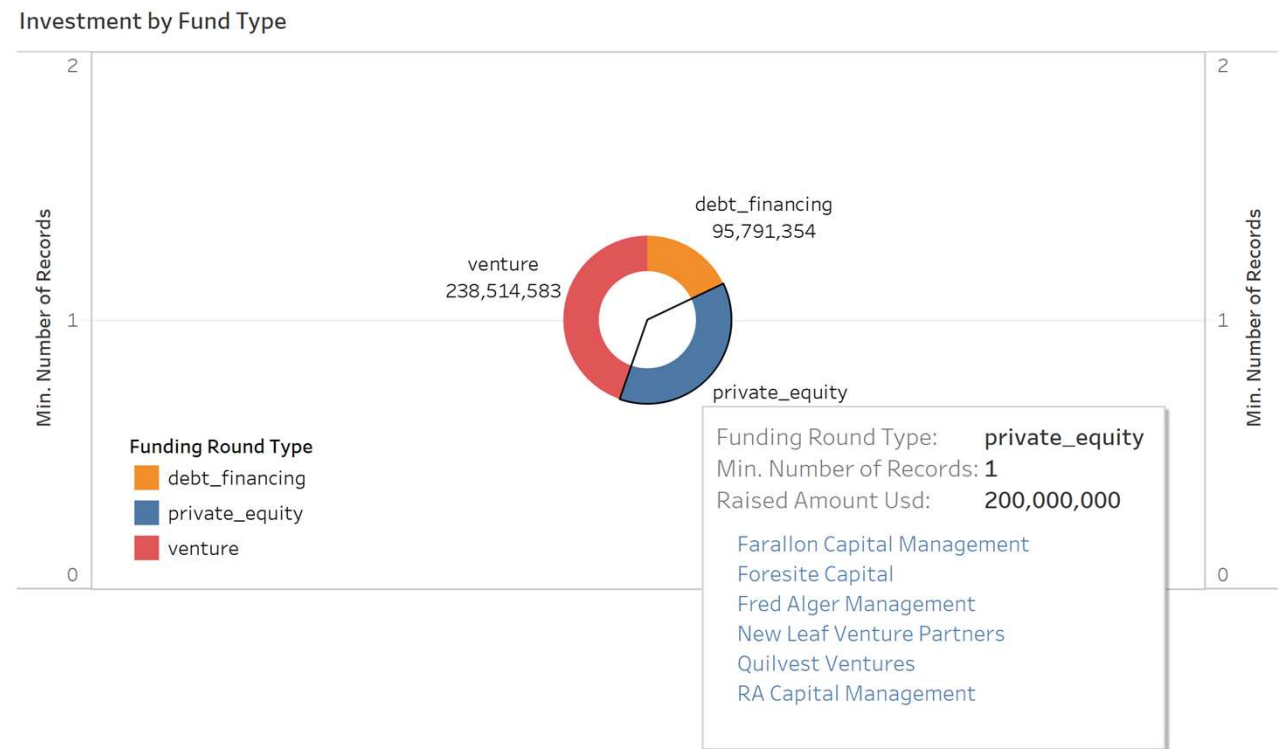
C. Top 10 Companies in BioTech Industry in CA

- Intarcia Therapeutics with a total funding of \$534,305,937 ranks top.
- As expected, it's located in the SF Bay Area.



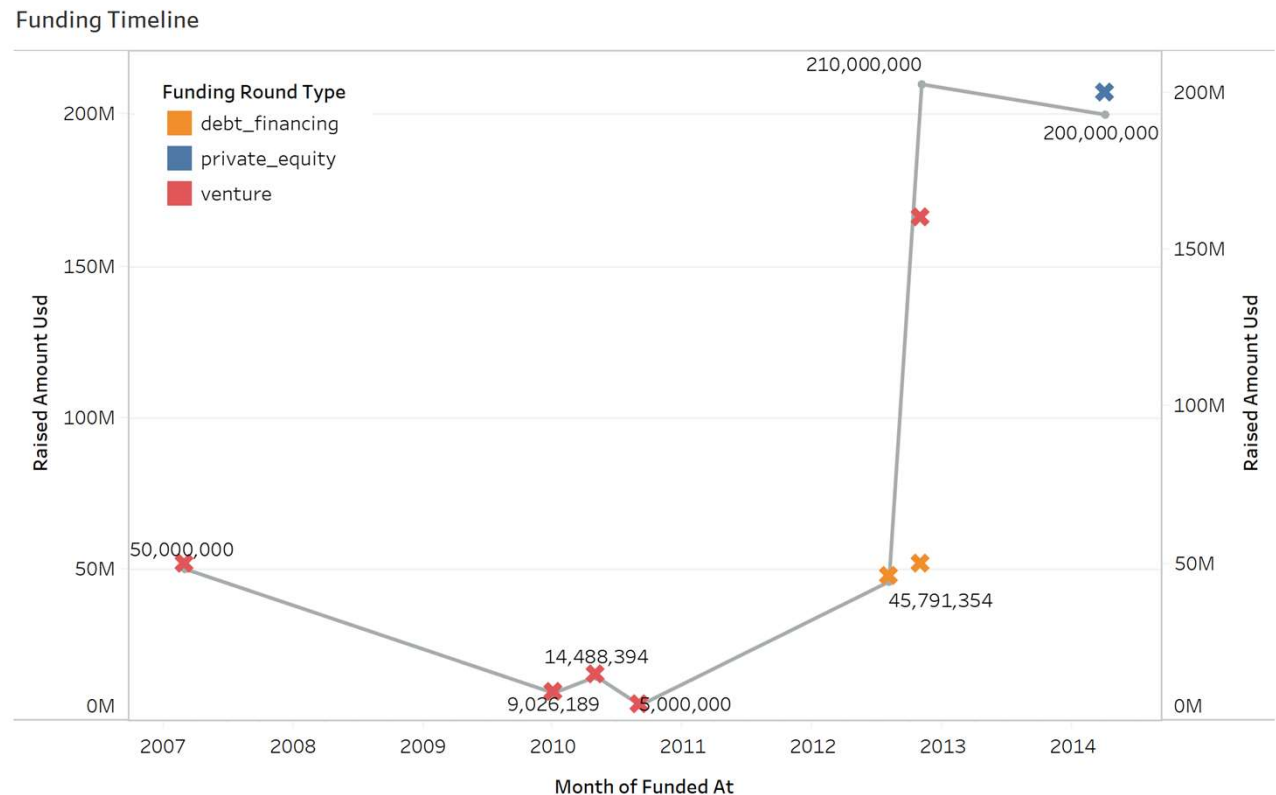
D. Investment for Intarcia Therapeutics by Fund Type

- Find the total funding of each fund type.
- Add a tooltip to see which investors are giving each type of funding.



E. Funding Timeline of Intarcia Therapeutics

- Though the company was founded in 1997, its first funding didn't come until 2007.
- The initial venture B funding is not that much. As time went on, biotechnology is being more and more prospective. Therefore, another round of venture C was given to Intarcia Therapeutics. During the global crisis, the company got two rounds of debt_financing. Finally it came the large private_equity funding in 2014.



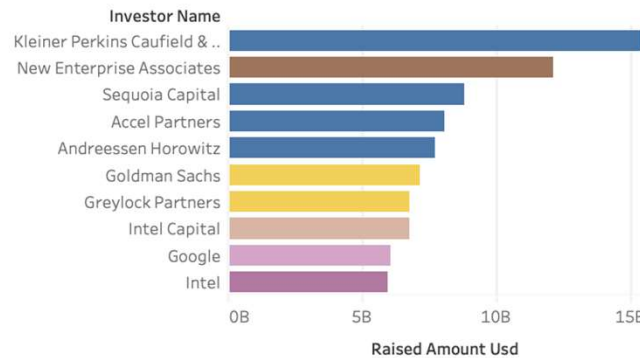
Dashboard 3

- **Analysis The Top 1 Investor**
- Top 1 Investor: Kleiner Perkins Caufield & Byers
- Favorite Market: Clean Technology
- Region: 20 states in the US
- Funding Round: Venture round and Private Equity

Top Investor Analysis

The Top 1 Investor is Kleiner Perkins Caufield & Byers. Its favorite market is Clean Technology market, and it invest in 20 states in the US. It usually invest in Venture round, and its investment reached the peak in 2011.

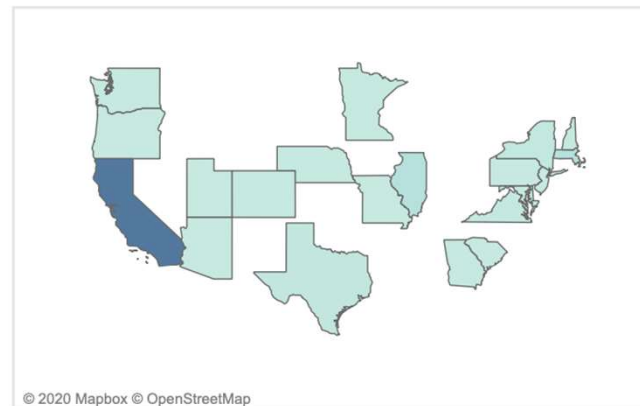
Top 10 Investors



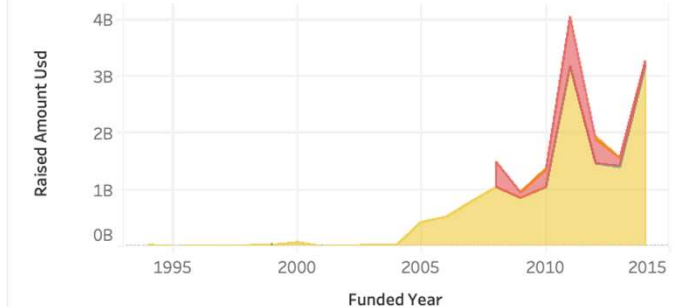
Investor's favorite market



Investment map



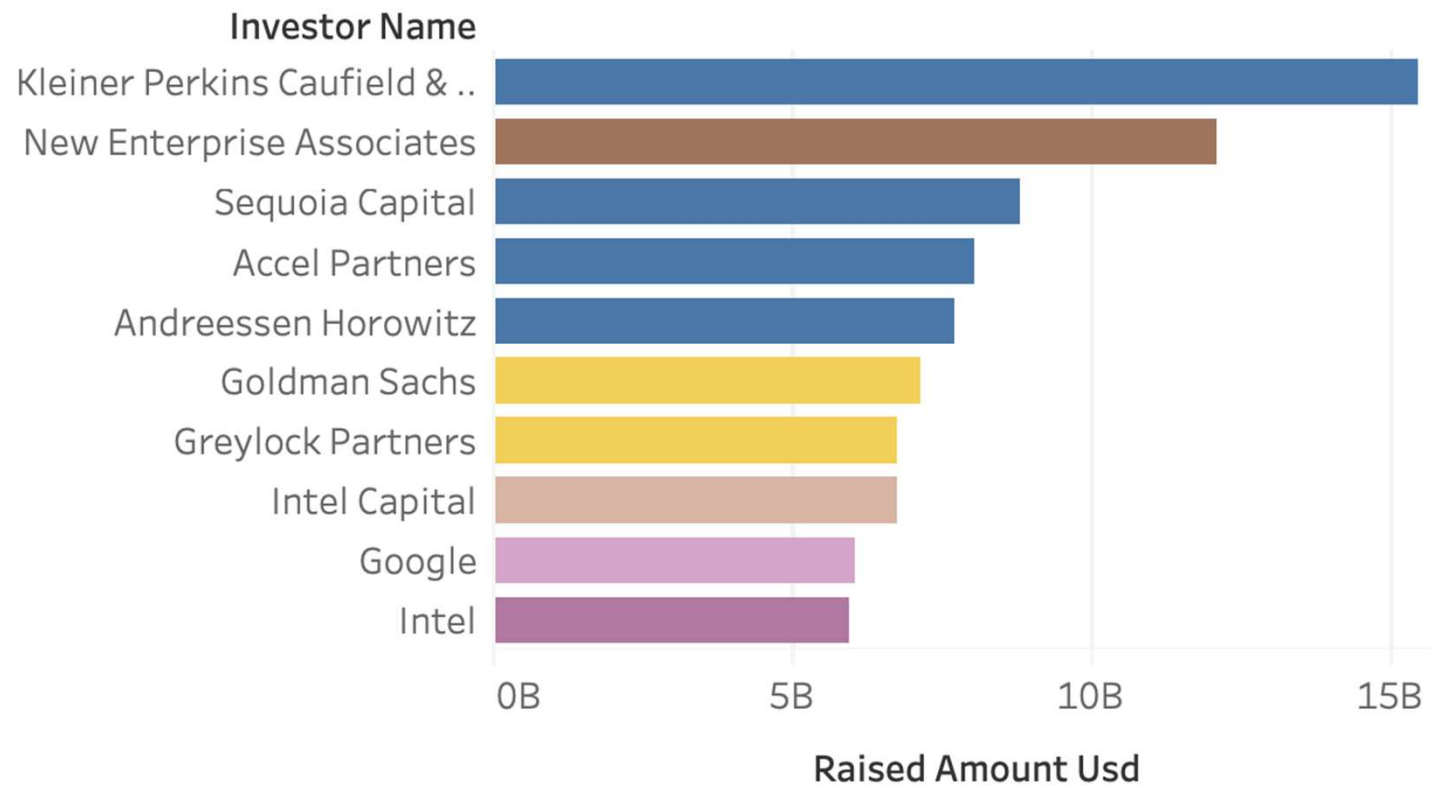
Investment type trend



A. Top 10 Investors

Top 10 Investors

- Find Top 10 Investors
- Kleiner Perkins Caufield & Byers invests most among all investors



B. Market Analysis

- Kleiner Perkins Caufield & Byers invested a lot in Clean Technology market.

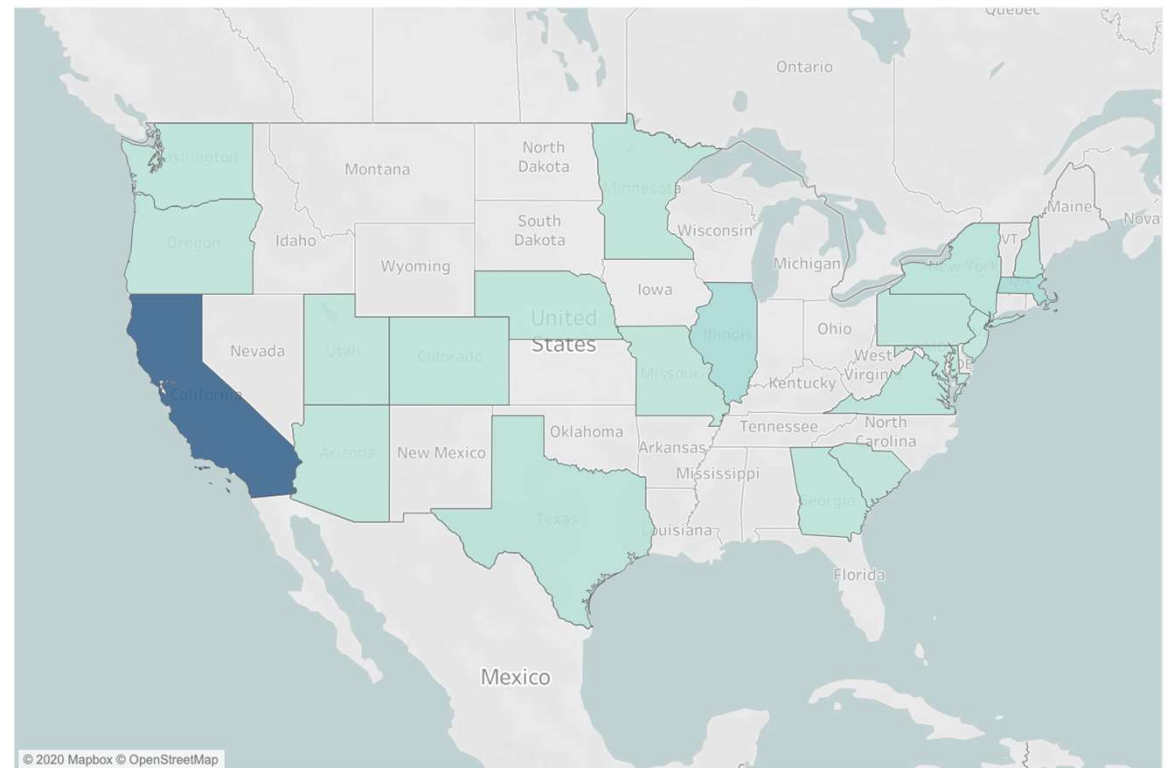
Investor's favorite market



C. Region Analysis

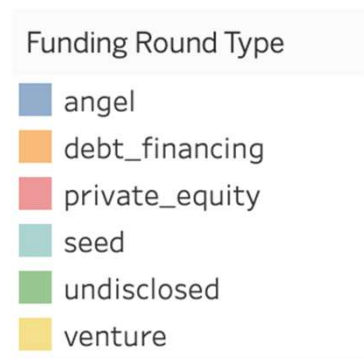
- Kleiner Perkins Caufield & Byers invested lots of start-ups in California, and its capital spreads among 20 states.

Investment map

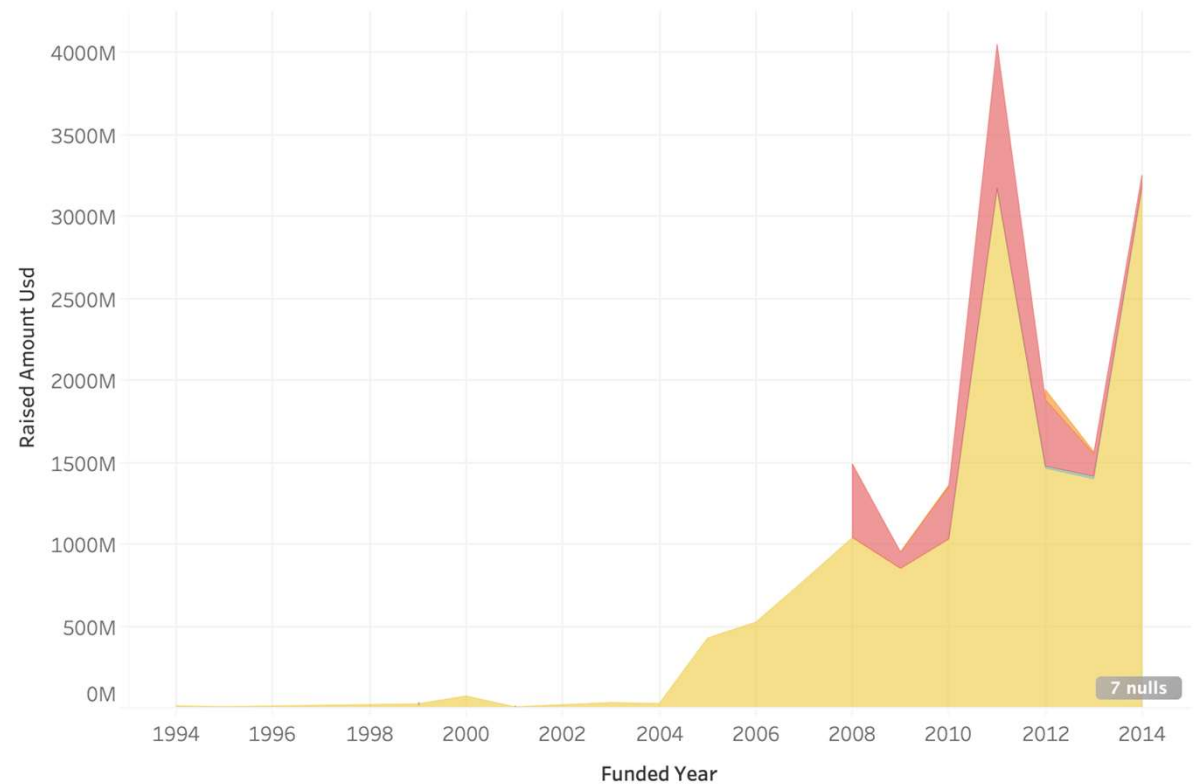


D. Investment Trend Analysis

- The investment amount reached peak in 2011
- Kleiner Perkins Caufield & Byers usually invest in venture round



Investment type trend



Thanks!

Data Source: <https://www.kaggle.com/arindam235/startup-investments-crunchbase>