Objective of Project.

To investigate what category of companies are receiving the most funding and in what region.

Skills: SQL, data exploration, visualization and interpretation

Datasets: Crunchbase companies table, Crunchbase acquisitions table, Crunchbase investments table.

I began by checking the status of companies. The growth of companies increases over time.

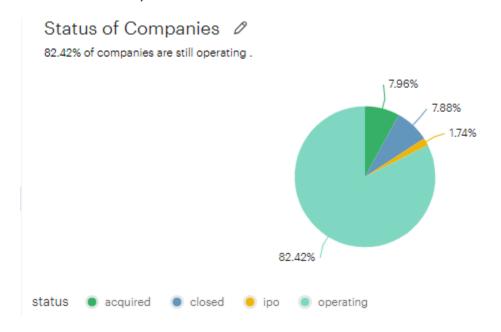
SELECT status,

COUNT(*)AS count_of_companies

FROM tutorial.crunchbase_companies

--WHERE status != 'closed'

GROUP BY status;



After understanding the dataset, I summed the funding amounts for each category from the tutorial. Crunchbase investments table.

SELECT c.category_code,

SUM(i.raised_amount_usd) AS total_funding

FROM tutorial.crunchbase_companies c

JOIN tutorial.crunchbase_investments i ON c.permalink = i.company_permalink

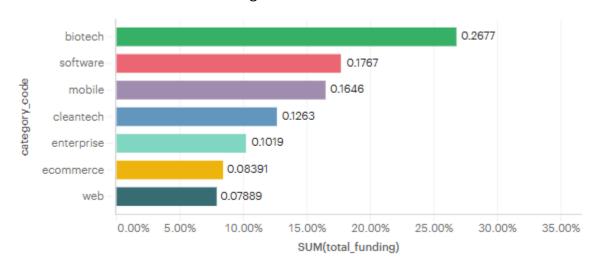
GROUP BY c.category_code

ORDER BY total_funding DESC;

Insights: Biotech Vs Software.

Biotech has a different business model, often depending on long-term research and development investments and regulatory approvals, while software operates on shorter cycles with quicker market feedback. In addition, investors may be overfunding the software sector due to its scalability potential, which could lead to inflation valuation and unsustainable business models.





Next step: I Sum the funding amounts for each region group by each category from the tutorial. Crunchbase investments table to determine how much funding each region is receiving.

SELECT c.region,c.category_code,i.company_name,

concat('\$',ROUND((SUM(i.raised_amount_usd)/1000000)::numeric,1):: text,'m')AS total_funding_per_region

FROM tutorial.crunchbase_companies c

JOIN tutorial.crunchbase_investments i ON c.permalink = i.company_permalink

WHERE i.raised_amount_usd IS NOT NULL

GROUP BY c.region, c.category_code, i.company_name

ORDER BY total_funding_per_region DESC;

Result:

Region Receiving Most Funding and Various Categories. 🗸 T company_name T region T category_code T total_funding_... ↓ = ▼ COUNT DISTINCT: 30 COUNT DISTINCT: 100 COUNT DISTINCT: 44 COUNT DISTINCT: 30 Liquavista Eindhoven hardware \$ 99.8m AccountNow SF Bay finance \$ 99.8m FastBooking Paris \$ 99.6m web NextG Networks SF Bay \$ 99.6m mobile Kirusa New Providence public_relations \$ 99.5m xAd New York advertising \$ 99.3m New York Mojiva mobile \$ 99.3m Harvest Automation Groton \$ 99.3m manufacturing URX SF Bay \$ 99.2m advertising BitSight Technologies Boston analytics \$ 99.1m MakeMyTrip.com \$ 99.0m Gurgaon travel m0.00.2 OpenSpan Atlanta enftware of 1 >>>>> Showing rows 1-100 of 100 Row limit per page: 100

SF Bay and Eindhoven region received most funding from investors for Liquavista (hardware) and AccountNow (finance) company.

Next step: I want to identify the top categories in each region by limiting the results.

```
WITH category_region_funding AS (

SELECT c.category_code, c.region,

SUM(i.raised_amount_usd) AS total_funding

FROM tutorial.crunchbase_companies c

JOIN tutorial.crunchbase_investments i ON c.permalink = i.company_permalink

GROUP BY c.category_code, c.region
)

SELECT category_code, region, total_funding

FROM category_region_funding
```

Result:

Leading Category Code in Each Region 0

ORDER BY region, total_funding DESC;

T region ▼ COUNT DISTINCT: 13	T category_code ↓ ▼ COUNT DISTINCT: 17	# total_funding ↓F ▼ SUM: 104819168 AVG: 4557355.13 MIN: 1405693 MAX: 12935300
Amsterdam	web	12935300
Aachen	games_video	12035610
Aberdeen	local	8485408
Aberdeen	finance	8065398
Amsterdam	education	7812735
Almere	ecommerce	5313960
Albuquerque	other	5157425
Alberta	software	4710000
Akron	software	4649970
Amsterdam	social	4204428

Next step:

I analyzed the distribution of funding rounds by stage to see which stages or funding types are most common.

SELECT i.funding_round_type,

COUNT(*) AS total_rounds,

i.investor_region,i.investor_name

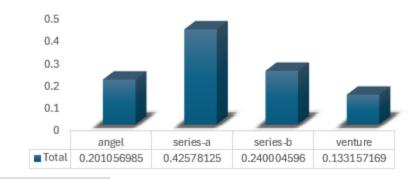
FROM tutorial.crunchbase_investments i

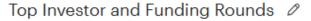
GROUP BY i.funding_round_type,i.investor_region,i.investor_name

ORDER BY total_rounds DESC;

Percentage of Funding Round Type

Funding Round Types







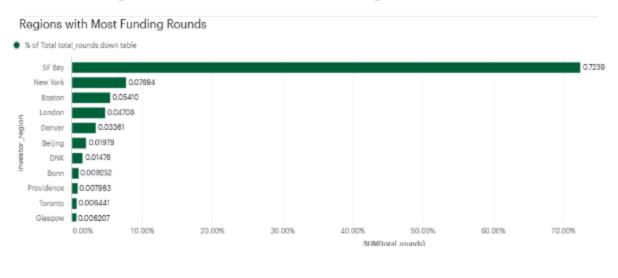


Y Combinator has the highest funding rounds for angel funding type in SF Bay.SV Angel has the second funding round on Angel and series-a funding type and Sequoia Capital is 3rd investing as venture and series-b funding type all of these investment is in SF Bay region.

Insights: From the charts above, startup companies can reach out to Y Contributor for investment since they are focused on funding startups (angel) and SV angel is suitable for long term partnership because the invest in startups and mid stage of growing companies.

Furthermore, the region with the highest funding rounds is SF Bay region and it has the highest acquisition of companies.

Which region is has the most funding rounds?

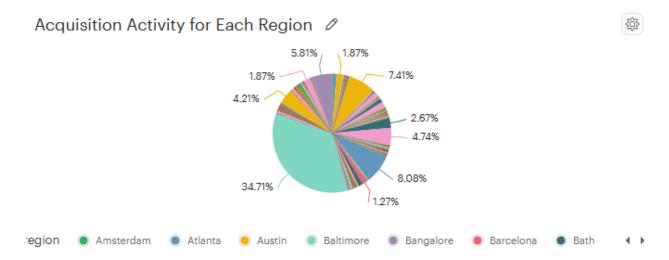


To determine which regions, have the most acquisition activity.

SELECT c.region, COUNT(*) AS total_acquisitions

FROM tutorial.crunchbase_companies c

JOIN tutorial.crunchbase_acquisitions a ON c.permalink = a.company_permalGROUP BY c.regioORDER BY total_acquisitions DESC;



SF Bay region has the highest number with 520 acquisitions (34.71%) in total. New York has 8.08% of total acquisition and third highest is Boston with 7.41% of total acquisition.

How does acquisition vary across industries in different regions?

SELECT COUNT(*) AS number_of_acquisitions,

company_category_code,

acquired_year,

acquirer_region

FROM tutorial.crunchbase_acquisitions

WHERE acquired_year >2000 AND company_category_code IS NOT NULL

GROUP BY company_category_code,acquirer_region,acquired_year

ORDER BY number_of_acquisitions DESC;

Row Labels	Total Number_of_Acquisitions	
web	309	
Boston	8	
Los Angeles	48	
New York	53	
Seattle	7	
SF Bay	193	

software	447
Austin	7
Boston	74
Chicago	8
Los Angeles	25
New York	47
Seattle	9
SF Bay	252
Washington DC	25
semiconductor	25
SF Bay	25
security	12
SF Bay	12
public_relations	12
SF Bay	12
network_hosting	15
SF Bay	15
hardware	9
SF Bay	9
games_video	85
Los Angeles	20
SF Bay	65
enterprise	72
SF Bay	72
ecommerce	23
SF Bay	23
biotech	37
Boston	20
SF Bay	17
analytics	11
SF Bay	11
advertising	36
New York	7
SF Bay	29
Grand Total	1093

Recommendation for Investors.

- Focus on SF Bay Area: With 193 web acquisitions and 252 software acquisitions, SF Bay is the most active hub, offering high growth and investment opportunities.
- Diversify in New York and Boston: These cities show consistent activity across sectors, with New York having 53 web and 47 software acquisitions and Boston ranking second in software acquisitions (74).
- Avoid Low-Activity Markets: Cities like Austin, Chicago, and Seattle show minimal acquisitions in both sectors, suggesting lower potential returns.
- Prioritize Software over the Web: The software sector has significantly higher overall acquisitions (447 vs. 309), indicating a more vibrant market for investors.

To determine the acquirer with most acquisitions.

SELECT c.region, acquirer name, COUNT(*) AS total acquisitions

FROM tutorial.crunchbase companies c

JOIN tutorial.crunchbase_acquisitions a ON c.permalink = a.company_permalink

- --WHERE a.acquirer_name = 'Ycontributor'
- --HAVING a.acquirer name = 'Y Contributor'

GROUP BY c.region, a.acquirer_name

ORDER BY total acquisitions DESC

LIMIT 20;

Recommendations for Investment Based on Acquisitions:

- 1. Focus on Tech Giants Leading Acquisitions:
 Companies like Google (19 acquisitions) and Yahoo (15 acquisitions) are actively acquiring startups and companies. Invest in innovative startups in their areas of interest (e.g., AI, cloud computing, advertising, or data analytics) for potential buyouts.
- 2. Target Established Industries:
 Firms like Apple, Cisco, and Facebook, each with 10 acquisitions, focus on strategic acquisitions to enhance their ecosystem. Investing in sectors like consumer electronics, social media, and networking technology may align with their acquisition strategies.
- 3. Diversify into Emerging and Niche Markets: IBM (10 acquisitions) and Hewlett-Packard (4 acquisitions) suggest opportunities in enterprise software, cloud computing, and hardware. Look for startups offering unique solutions in these domains.

4. Leverage the Acquirer's Regional Strengths:

Many acquisitions occur in innovation hubs like the SF Bay Area. Investing in startups within these regions increases the chance of attracting interest from acquirers actively seeking strategic partnerships or acquisitions.



To determine the trend of companies closing in SF Bay region.

SELECT status, region, name, category_code

FROM tutorial.crunchbase_companies

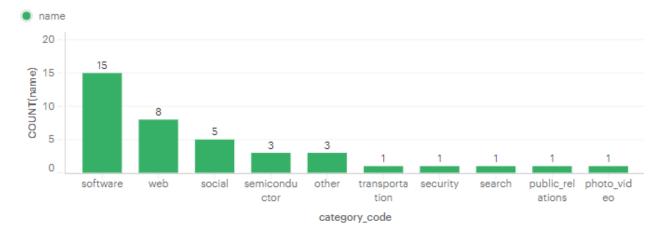
WHERE status = 'closed' AND region ='SF Bay'

GROUP BY status, region, name, category_code;

Trend of Closure in SF Bay Region 0

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Software category has the highest closure rate



354 companies are closed in this region and the category of companies with the highest closure rate is software.

Probably due to market saturation, intense competition with many startups entering similar markets like AI, SaaS or operational inefficiencies. Hence high funding does not guarantee success, especially in the software industry

How often were these closed companies funded?

SELECT DISTINCT c.status,c.category_code,c.funding_rounds,c.region,

COUNT(*)AS count_of_companies

FROM tutorial.crunchbase_companies AS c

JOIN tutorial.crunchbase_investments AS i

ON c.permalink = i.company_permalink

WHERE status = 'closed' AND region = 'SF Bay'

GROUP BY status, category_code, funding_rounds, region;



Investigating specific patterns associated with closures

SELECT c.status,c.category_code,i.funding_round_type,c.region,

COUNT(*)AS count_of_companies

FROM tutorial.crunchbase companies AS c

JOIN tutorial.crunchbase_investments AS i

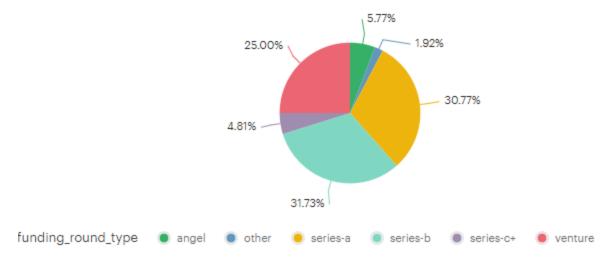
ON c.permalink = i.company_permalink

WHERE status = 'closed' AND region = 'SF Bay' AND category_code ='software'

GROUP BY status, category_code, funding_round_type, region;

Funding Round Type for Closed Companies in SF Bay Region 0

Companies that went for series-b funding type has 33 companies closed and 32 companies closed for series-a



Insights:

- Series a and Series b: These funding rounds account for most closed companies in the SF Bay Area (30.77% for Series A, 31.73% for Series B).
- Venture Funding: 25% of closed companies were in the venture stage, indicating high-risk investments at later funding stages.
- Low Angel and Series c+ Closures: Angel funding (1.92%) and Series C+ (5.77%) show fewer closures, suggesting stronger survival rates at these stages.
- Other funding types: Represent 4.81% of closures, highlighting minor impact compared to major rounds.

Recommendations:

- Focus on post-series b and a Companies: Invest in companies beyond Series b and a to minimize the risk of closure.
- Cautiously approach venture-stage investments: Late-stage funding has higher closure rates, indicating higher risks.
- Support angel and series c+: These stages show lower closure percentages, suggesting better stability or earlier adaptation.
- Conduct due diligence on series a and b: These stages have the most closures, making careful evaluation crucial before investment.

Conclusion

These insights can guide investors in making informed decisions and help entrepreneurs align their strategies with market dynamics.