

Access to the U.S. Market through Silicon

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San Jose State University



- Founded in 1857
- The first public higher institution in western United States
- In 1882, opened a branch in Los Angeles, then became UCLA in 1927
- 226,000 network of alumni
- 35,869 students in Fall 2022
- **#1** provider of engineering, science and business graduates to Silicon Valley



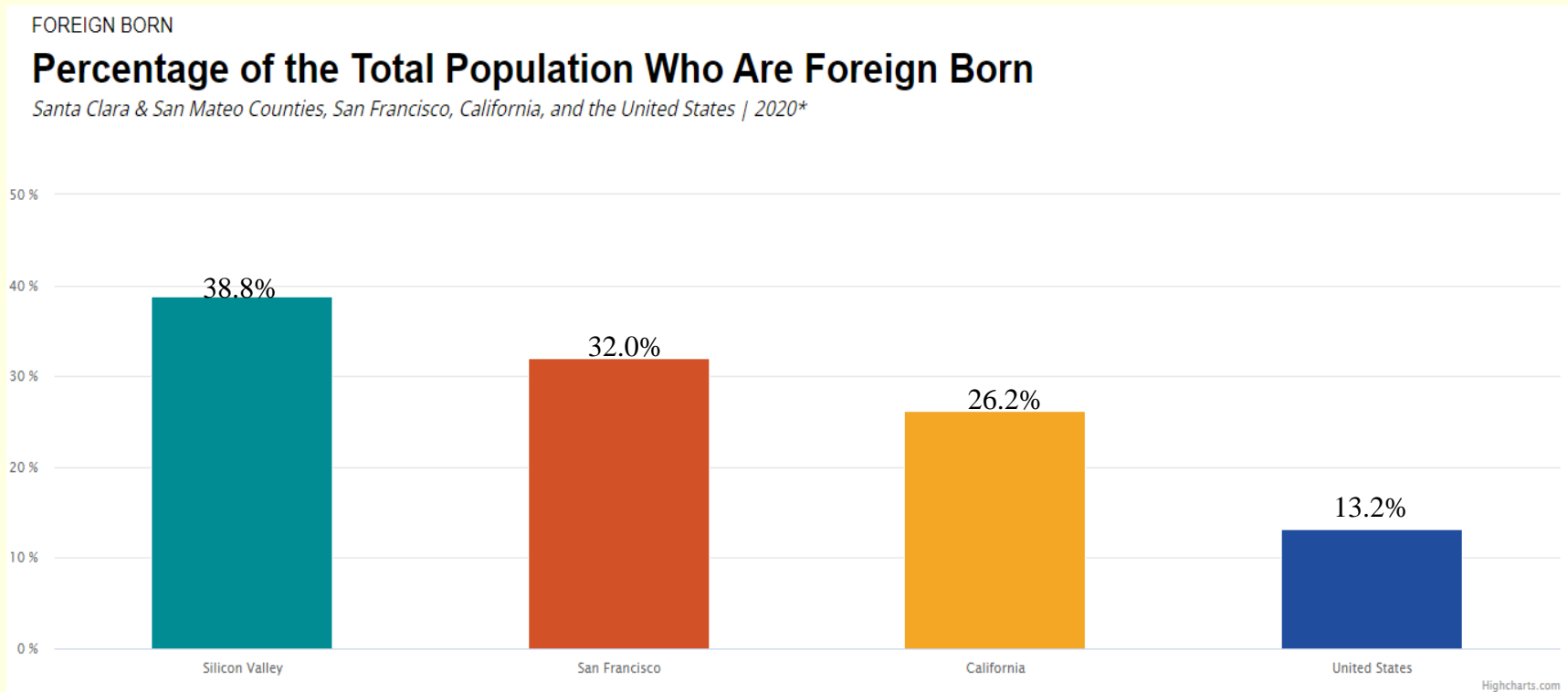
Top 65 Unicorn Startups in Silicon Valley (2022)

- | | | | |
|--------------------------|------------------|---------------------|------------------------|
| 1) Nuro (\$8.6B) | 18) Course Hero | 35) Druva | 52) Ivalua |
| 2) Lacework (\$8.3B) | 19) PsiQuantum | 36) Redis Labs | 53) People.ai |
| 3) Netskope (\$7.5B) | 20) Illumio | 37) H2O.ai | 54) TangoMe |
| 4) TripActions (\$7.25B) | 21) Clari | 38) Reltio | 55) Turing |
| 5) Gong (\$7.25B) | 22) Plume | 39) Athelas | 56) Branch |
| 6) Automation Anywhere | 23) Uniphore | 40) MOLOCO | 57) Groq |
| 7) Workato | 24) Carbon | 41) Coda | 58) Globality |
| 8) SambaNova Systems | 25) Zume | 42) Salt Security | 59) Minio |
| 9) ThoughtSpot | 26) Addepar | 43) At-Bay | 60) News Break |
| 10) Impossible Foods | 27) Eightfold.ai | 44) Signifyd | 61) Noname Security |
| 11) Cerebras Systems | 28) Medable | 45) Flipboard | 62) Orca Bio |
| 12) Rubrik | 29) Moveworks | 46) HeartFlow | 63) Snorkel AI |
| 13) Houzz | 30) SoundHound | 47) YugaByte | 64) Skydio (\$1.0B) |
| 14) Next Insurance | 31) Aviatrix | 48) Alation | 65) Splashtop (\$1.0B) |
| 15) Zapier | 32) Cloudfinary | 49) BigPanda | |
| 16) Cohesity | 33) Quora | 50) Vectra Networks | |
| 17) Applied Intuition | 34) Dremio | 51) CloudBees | |

Silicon Valley Numbers

- 3.07 million people
 - ~40% foreign born
- 400K high-tech jobs
- Average annual income
 - \$144,800
- 40% of US venture funding

Silicon Valley's Percentage of Foreign-born Residents in 2019



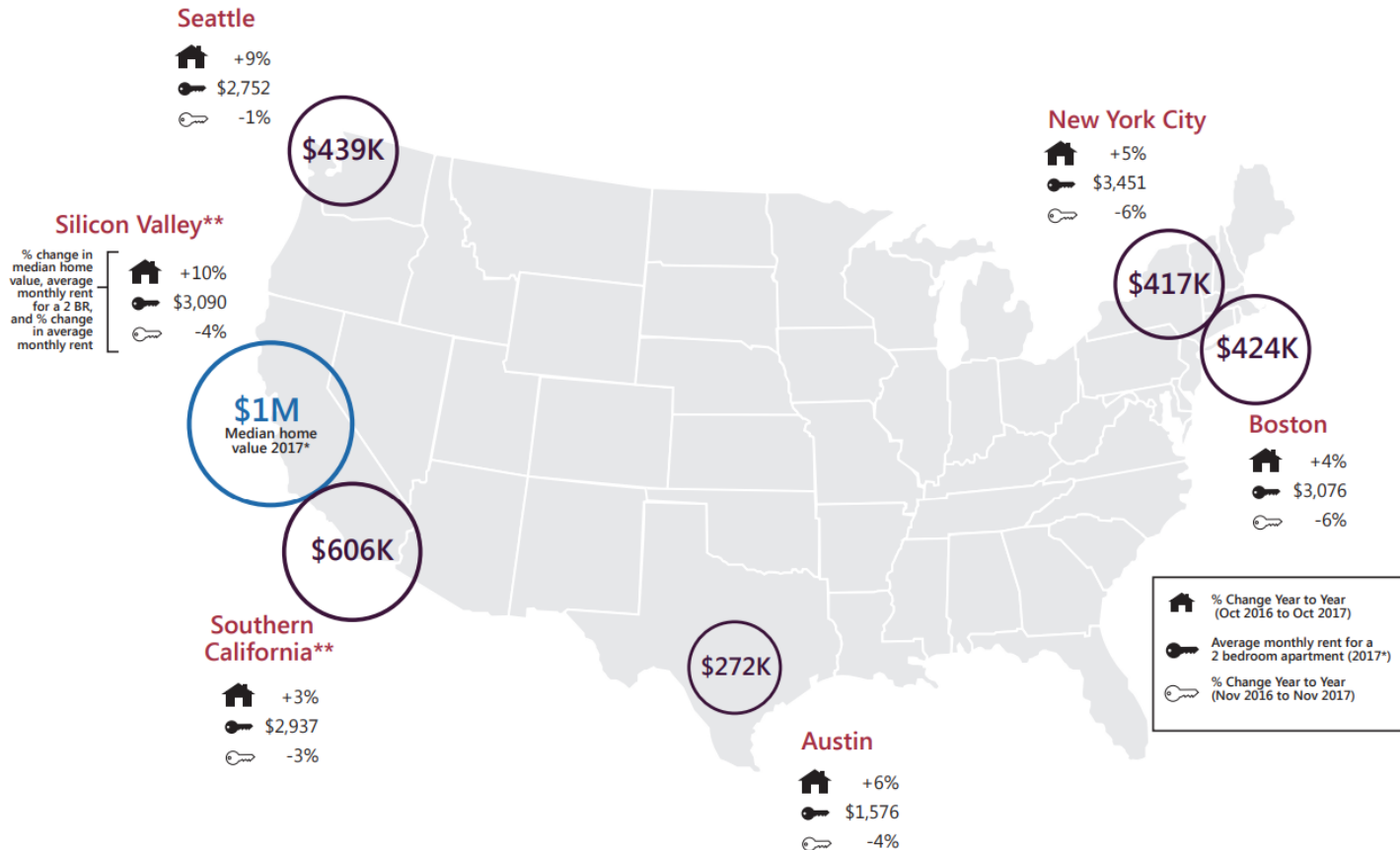
Data Source:
[United States Census Bureau, American Community Survey](#)

Quality of Life

Housing Costs in Innovation Regions

Housing Costs in Innovation Regions

Median Home Values and Average Monthly Rent, 2017*



*Average for 2017, through November

**Traditional Silicon Valley proxied by San José Metro Region, Southern California by Los Angeles Metro Region, New York City is New York Metro Region

Data Source: Zillow, Rent Jungle

Analysis: Collaborative Economics

House Prices of the Bay Area counties for August 2022

State/Region/County	Aug. 2022
San Francisco Bay Area	\$1,250,000
Alameda	\$1,230,000
Contra Costa	\$870,000
Marin	\$1,626,000
Napa	\$1,162,500
San Francisco	\$1,635,000
San Mateo	\$1,950,000
Santa Clara	\$1,650,000
Solano	\$610,000
Sonoma	\$840,000

Silicon Valley's Technology Innovations

Stanford Industrial Park



■ 1st Generation of Innovations

- **Defense system-based technology:** radio transmitter, microwave, etc. -
> HP, Varian Associates

■ 2nd Generation of Innovations

- **IC technology** - Shockley Semiconductor Laboratory, Fairchild Semiconductor, Intel, national Semiconductor, etc. (naming “Silicon Valley”)



■ 3rd Generation of Innovations

- **Computer technology** – Apple, HP, Silicon Graphics, Sun microsystems, Cisco



■ 4th Generation of Innovations

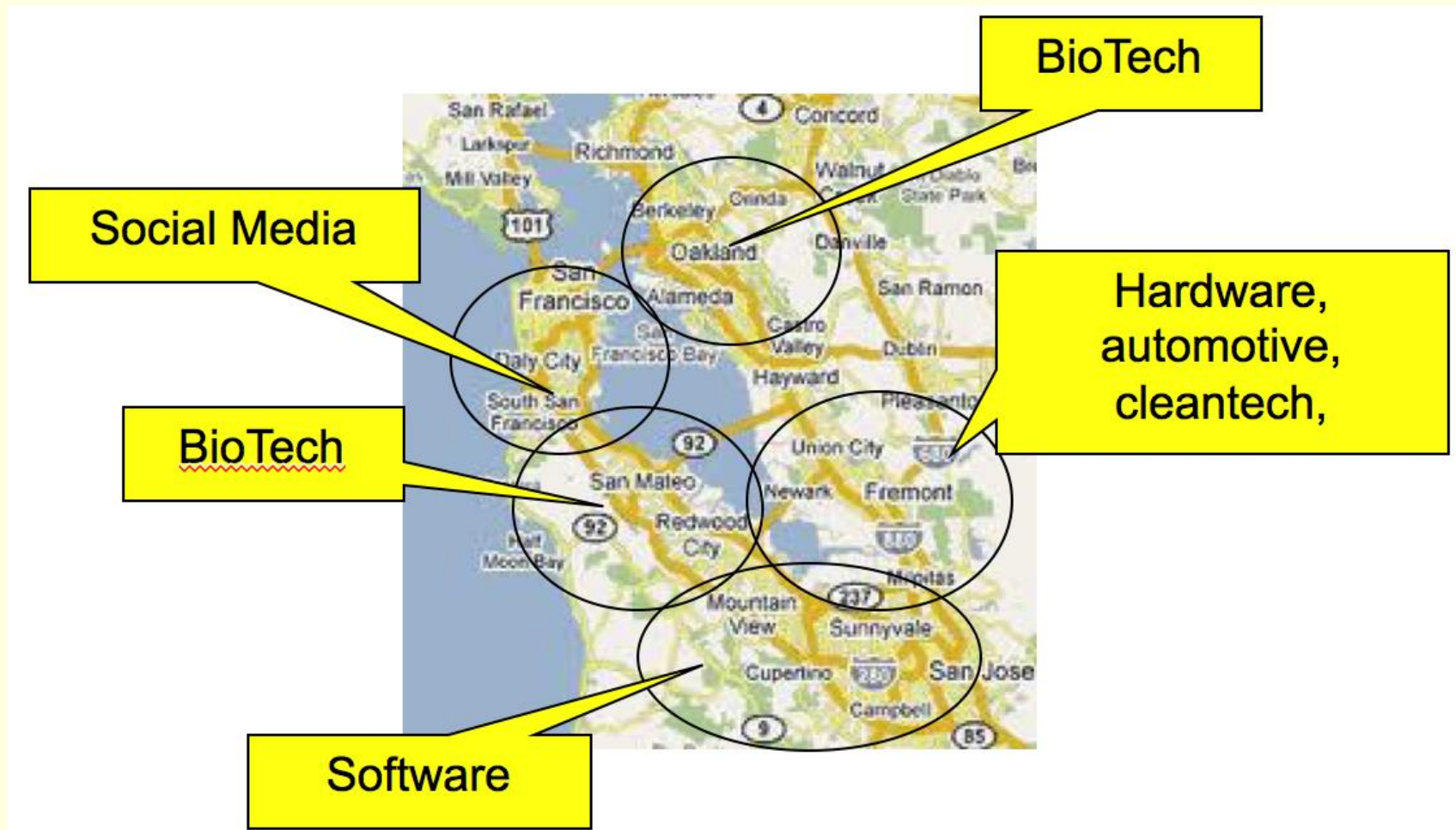
- **Internet & Communication Technology** – Yahoo, Netscape, Google

■ 5th Generation of Innovations

- **Mobile/Ubiquitous/Cloud computing Technology** – Apple, Google, Intel, HP, Oracle

Technology Clustering in Silicon Valley/Bay Area...helps reinforce culture

- From hardware to software to hard-software convergence



Silicon Valley Industries In 2022

(Michal Rejman at Ideamotive)

■ Blockchain

■ Fintech

■ AI & Machine Learning

■ Big Data

■ Medtech

■ Biotech

■ Cybersecurity

■ Internet of Things

■ Drone Technology

■ FoodTech

■ VR/AR

■ HealthTech

The Silicon Valley Habitat

■ Silicon Valley has

- the people – Network and Collaboration
 - Creative and entrepreneurial engineers and businessmen
 - Young engineers and entrepreneurs
- the venture capital
 - VC's in Palo Alto
- the infrastructure
 - Educational institutes, research centers/labs, Collaboration among companies, universities, and research centers
- the creative energy
 - Entrepreneurship, risk-taking mind.
- the living environment

Unique Silicon Valley Culture

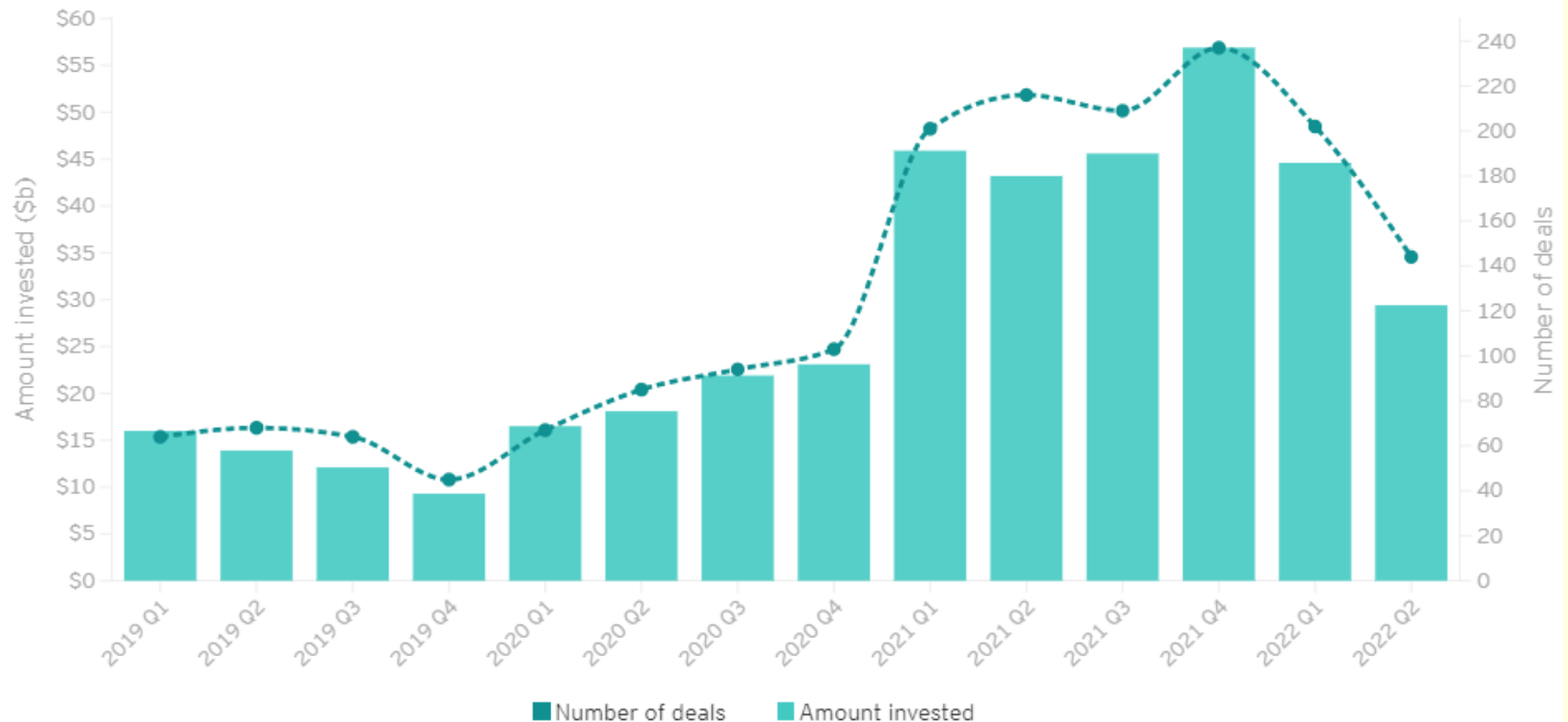
- by Chris Burry, USMAC

- Diversity – 50+% of CEOs are not U.S. born
- O.K. to fail – you learn from your mistake
- O.K. to talk to competition
- Culture of sharing, giving back and networking
- Risk-taking culture
 - 20,000+ tech startups
 - 45% will last more than 2 years
 - # of jobs held by the average engineer at age 37: 14
 - Avg. investment amount among angel investors: \$500,000

US Venture Capital

US venture capital mega-rounds

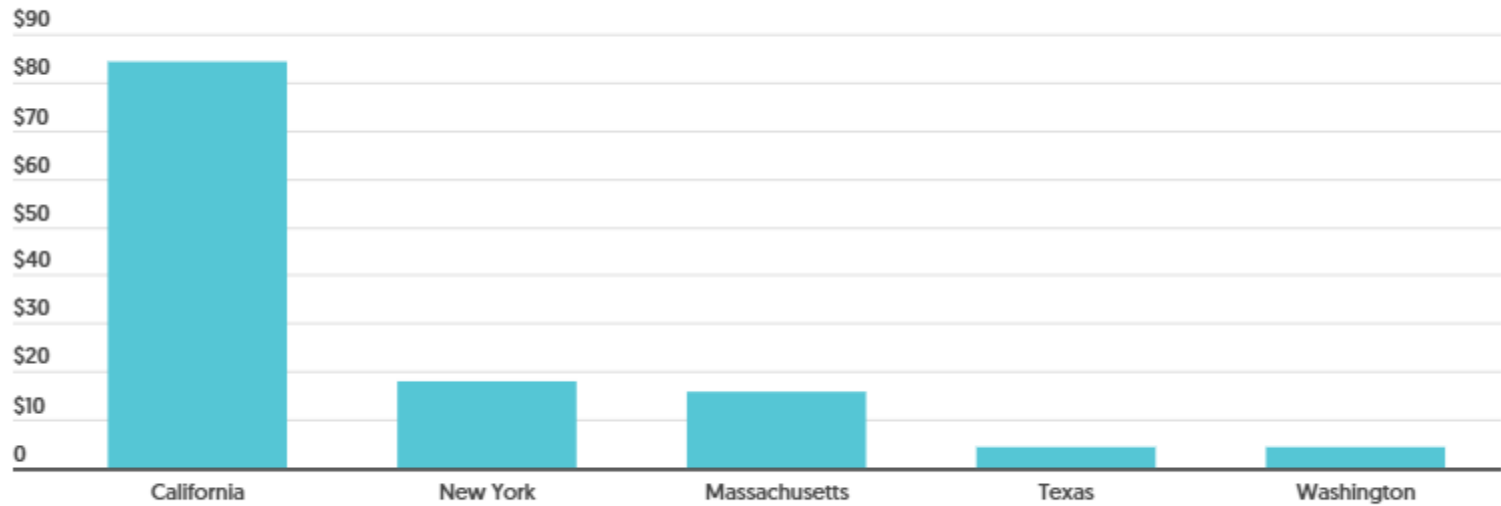
Investments totaling \$100m+, Q2 2022



Source: [Crunchbase](#) as of July 8, 2022, Ernst & Young LLP. We include equity financings into VC-backed companies headquartered in the US. Sources of cash investments include, but are not limited to, VC firms, corporate investors, other private equity firms and individuals.

Top states for US venture investment

Top 5 U.S. states for venture investment in 2020, per Crunchbase data

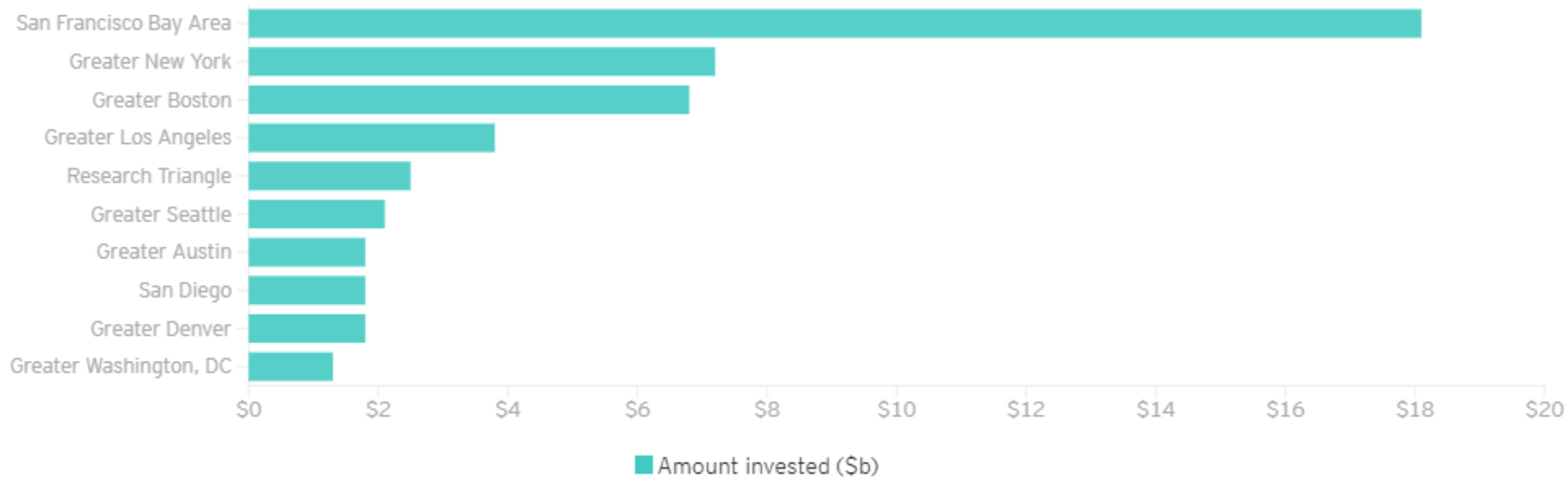


crunchbase

US Venture Capital by Region

US venture capital investment by region

Top 10 markets (US\$b), Q2 2022



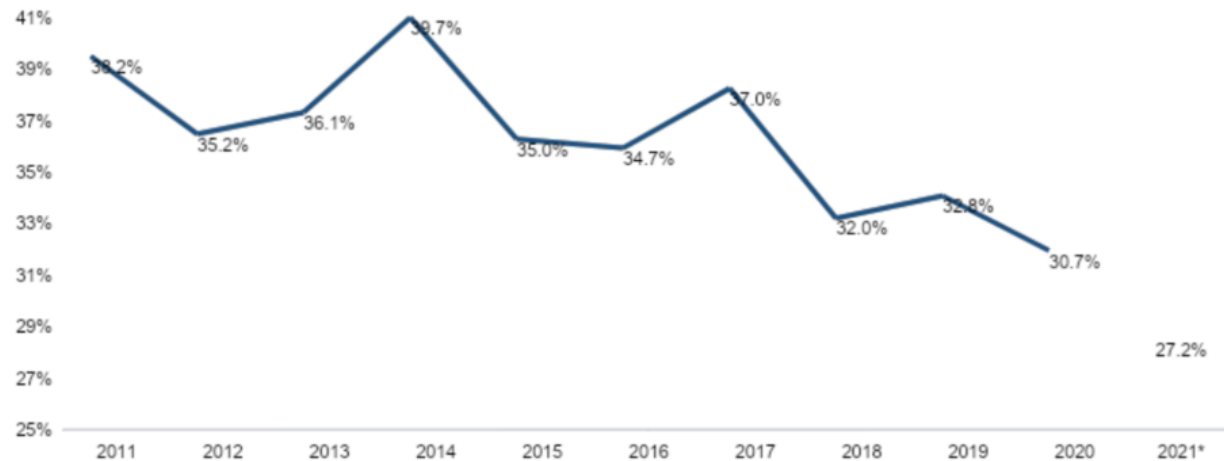
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Silicon Valley's share of US VC funding falls to lowest level in more than a decade

Bay Area seed & early stage VC deal flow as % of all US seed & early stage VC (2011-YTD) - company HQ

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*
Deal value (\$B)	38.2%	35.2%	36.1%	39.7%	35.0%	34.7%	37.0%	32.0%	32.8%	30.7%	27.2%

*As of 9/1/2021

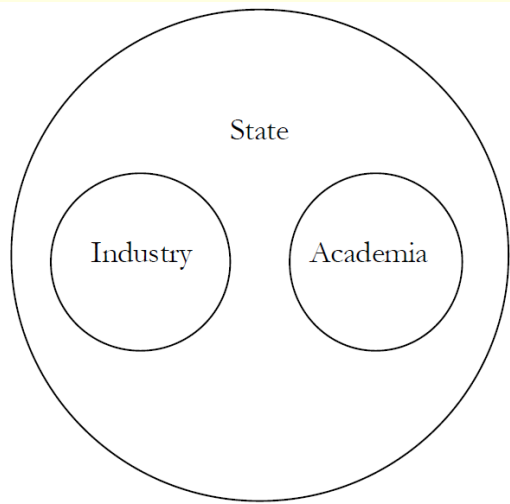


A Triple Helix of University, Industry and Government

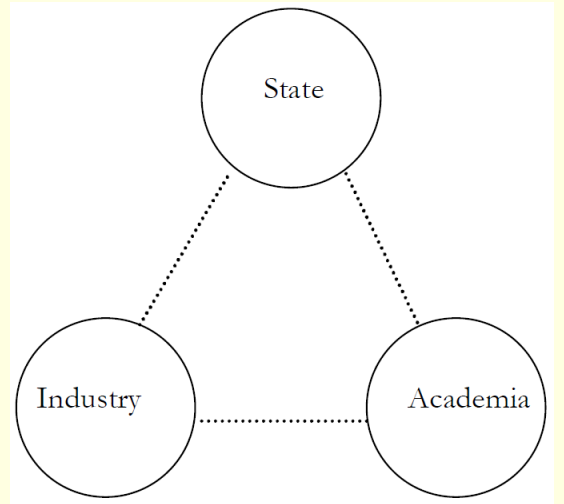
- Henry Etzkowitz & Loet Leydesdorff

- The triple helix denotes the university-industry-government relationship as one of relatively equal, yet interdependent, institutional spheres which overlap and take the role of the other.

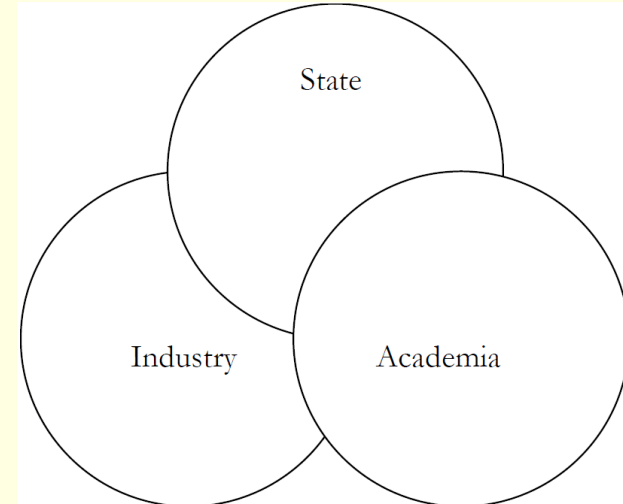
Type I



Type II



Type III



Types of University-Industry Cooperation

- Co-work on research
- Technology transfer: Commercialization
 - Licensing
- Funding university research
- Hiring university graduates
- Providing the industry with more skilled employees



DAEJEON TECHNO PARK
SILICON VALLEY ACCESS PROGRAM

2014

**SILICON VALLEY CENTER FOR OPERATIONS AND
ENGINEERING MANAGEMENT**



SAN JOSE STATE UNIVERSITY



9:15-9:30					
9:30-10:00	Presentation and Public Speech	Business Law Concerning International Companies	Patent and IP	Immigration Law	SME Banking, US Financial Loans & Credit Systems
10:00-10:30				Coffee Break	
10:30-11:00					
11:00-11:30	Break	Transportation (Mountain View)	Transportation (Kotra)	Taxation and Accounting	Presentation Practice
11:30-12:00	Presentation Assignment		Lunch Break		
12:00-12:30			(Pabi's Pizza Restaurant next to KOTRA)	Lunch Break (Gordon Biersch Restaurant)	Lunch Break (K zang Korean Restaurant)
12:30-1:00	Lunch Break (Gordon Biersch Restaurant)	Lunch Break (Mountain View)			
1:00-1:30			Meeting with Korean Companies		
1:30-2:00		Google (Mountain View)		Silicon Valley Company Visit / General	One-on-One Mentoring (Business Tower)
2:00-2:30	One-on-One Mentoring (Business Tower)				
2:30-3:00					
3:00-3:30			KOTRA Daejeon TechnoPark		
3:30-4:00					

Daejeon SVAP Program



San Jose State University

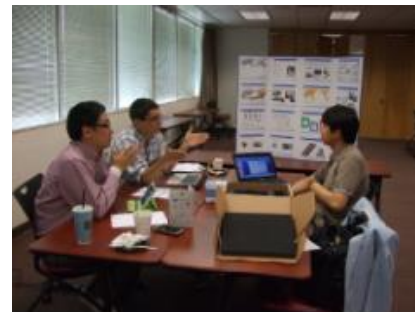



DAEJEON TECHNO PARK
SILICON VALLEY ACCESS PROGRAM

MAY 12 - 23, 2014

SILICON VALLEY CENTER FOR OPERATIONS AND ENGINEERING MANAGEMENT
 **SAN JOSE STATE UNIVERSITY**

Meet-Up & Business Presentation



Strength of Daejeon SVAP

#1. Intensive Customized Mentoring

#2. Sustainable Support – up to 3 years

#3. Well-organized, Effective Teamwork

#4. Multi-cultural Mentors & Network Pool

#5. Global Support Link with a Korean Partner, IKS

#6. Sustainable, Cost Efficient Program

Startup Failure

- Up to 75% of startups fail. Why?
 - can't raise enough initial angel/VC funding
 - wasting too much money at early stages
 - company doesn't begin with the best people
 - doesn't produce something people want
 - hires too many people too quickly
 - hires the wrong people, or people with the wrong skills
 - doesn't produce a working product in a timely manner
 - not able to successfully monetize the idea
 - beaten out by a competitor

Benefits of using business incubators

- Office and manufacturing space at below-market rates
- Advice and much-needed expertise in developing business and marketing plans
- Great contacts
- Client referrals
- Teamwork
- Mentors

SJSU's Office of Innovation

■ The Office of Innovation

- is focused on growing industry collaboration, creating meaningful impact from SJSU innovation, and growing the number and quality of SJSU-affiliated startup companies. We work closely with the SJSU Research Foundation who provides administrative and business support to the innovation enterprise.

■ SpartUp

- is a focal point for SJSU startup and entrepreneurship activity that leverages resources in Silicon Valley and beyond to create a unique entrepreneurial experience and an engine for economic growth. SpartUp seeks to bridge the gap between SJSU-affiliated companies and the resources they need to start and build successful companies

Silicon Valley Center for Operations & Technology Management

- Silicon Valley Center for Operations & Technology Management (SVCOTM) is to offer the latest and the most relevant information to students, faculty members, and business partners.
- The SVCOTM is a bridge between academic capacities and industrial resources within the Bay Area and around the world. By partnering with business firms and industrial practitioners, the Center will offer more academic and industrial experiences to partnering companies, and catalyst a higher level of operational and technological performance for them.



Program Highlights



Approach to US Market through Collaboration Among KAIST, KAIST Alumni Founded Startups/Companies, and SVCOTM at SJSU

Continuing 1:1 Mentoring

- Pre-Training at KAIST
- Selection of Participating Companies

- 1st Boot Camp in SV
- Training for Business Plan and Pitching
 - Market Analysis
 - Business Opportunity
 - Networking

Refining & Making Business Strategies and Plans in Korea

- 2nd Boot Camp
- Meeting with VCs and marketing partners
 - Setting up SV local office or partners

Continuing Support and mentoring

Another Way Collaborating among KAIST, KAIST Alumni Startups / Company, and SVCOTM

- Collaboration among KAIST, KAIST Alumni Startups/companies, and SVCOTM
 - KAIST students sponsored by KAIST and KAIST Alumni Startups/Companies
 - KAIST Alumni Startups/Companies
 - SVCOTM
- Location: SJSU Incubation place
- SV Global Access Program
 - Hosted by SVCOTM and SVGAP.ORG
 - 1-2 weeks program at SJSU
 - Participants: 15-20 KAIST students & 5-6 KAIST Alumni Startups/companies with 3-4 students and a KAIST Alumni Startup/Company composed of a team
 - After the SV Global Access Program
 - SVCOTM will arrange an incubation space at SJSU for KAIST Alumni Startups/Companies to continue to work on accessing to the U.S. market
 - SVCOTM and SVGAP.ORG will continue to work with KAIST Alumni Startups/Companies and KAIST students.
 - KAIST students can have internship with with KAIST Alumni Startups/Companies

Q & A
