

Week 9 July 28, 2021



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Course Schedule

Date	Course Title	Presenters	
July 28	Follow-On Capital Sources – What Early-Stage Investors Want	David Cruikshank, ARCH Venture Partners	
August 2-6	1:1 Meetings With SUNY Venture Advisors		
August 11	Demo Day and Graduation		
	July 28 August 2-6	July 28Follow-On Capital Sources – What Early-Stage Investors WantAugust 2-61:1 Meetings With SUNY Venture Advisors	July 28Follow-On Capital Sources – What Early-Stage Investors WantDavid Cruikshank, ARCH Venture PartnersAugust 2-61:1 Meetings With SUNY Venture Advisors

Today is the last instructional webinar!

Next week, August 2-6

1:1 Pitch Dry Run with Venture Advisors

- If you submitted the Google Signup Form before 7/23, you should have received a calendar invite last week. The rest will come 7/30 and 8/2 when Linh is back in the office.
- This is a 30-minute dry run of your pitch with Venture Advisors. To make the best use of your time with the Venture Advisors, please practice and have your presentation and talking points ready ahead of your meeting.
- Anyone who signs up for a Pitch Dry Run will be invited to Office Hours with the S4 Team on Wednesday, August 4 @ 10:30-11:00 to go over logistics for Demo Day.

Only a Few Spots Left!



Signup Form Deadline is Tomorrow Thursday July 29!

August 11 3:00-5:00 PM Demo Day

- Presenting/pitching during Demo Day is not required for all participants.
- We only have slots for about 15 teams to pitch. Priority will go to those that sign up for 1:1 with Venture Advisors.
- We will announce the winners of the \$10K Technology Accelerator Fund (TAF) Catalyst Investment at the end of the Demo Day celebration on August 11.
- After Demo Day, we will send out the Startup Guide. Stay tuned for this great resource for S4 participants!



Demo Day - Part 2

- 1. Please review the <u>Demo Day Pitch Guidelines</u> for TAF eligibility, recommendations, guidelines, presentation template, and the judging rubric.
- The quick pitches are 4 minutes, followed by 1 minute of Q&A.
 Please practice to ensure you do not go over as we will keep to the allotted timeslots in order allow everyone time to pitch.
- 3. We will be **inviting SUNY ecosystem partners** to attend the Demo Day celebration.
- 4. Even if you are not pitching, we encourage you to attend to **support your classmates** and see some examples of pitches.





Leaderboard is back!

Leaderboard SUMMER SCHOOL Top 20					
	First Name	Last Name	Points		
	David	Liu	14		
-	Janet	Paluh	14		
Ŭ	Michael	Coyle	14		
	Christopher	Badurek	10		
Ŭ	Adam	Graczyk	9		
	Christopher	Williams	9		
	Jill	Lee	9		
8	Michael	Walters	9		
9	Noa	Eshkar	9		
10	Tatyana	Tarasevich	9		
11	Zuby	Onwuta	9		
12	Aaron	Samaroo	8		
13	Brennan	Overhoff	8		
14	Carol	Beckley	8		
15	Douglas	Ling	8		
16	Hai	Lin	8		
17	Lewis	Carpenter	8		
18	Linghong	Li	8		
19	Rong	Zhao	8		

	SL s u	NY STARTUP	•	
1	#	Campus	Points	
	1	Polytechnic Institute	60	
		Albany	50	
	-	Downstate	50	
	4	Buffalo	47	
	5	Binghamton	41	
	6	Stony Brook	40	
	7	Upstate	18	
	8	Cortland	10	
	9	Oswego	10	
	10	Brockport	9	
	11	Buffalo State College	9	
	12	Plattsburgh	9	
	13	Potsdam	8	
	14	Morrisville	6	
	15	Herkimer County Commu	4	
	16	Empire State College	1	
	17	ESF	1	
	18	Farmingdale State Colleg	1	
	19	Fredonia	1	
	20	Cobleskill	0	
	21	New Paltz	0	
	22	Old Westbury	0	

Points up to Session 8 have been tabulated and...

In a dramatic turn of events, Poly is on top with Albany and Downstate tied!

Still to be added:

- Session 9
- > I-Corps
- Demo Day Pitches



Questions about S4?





Email us at S4@rfsuny.org

Let's jump into today's topic!



Follow-On Capital Sources What Early-Stage Investors Want



Meet your presenter!

David Cruikshank

Partner





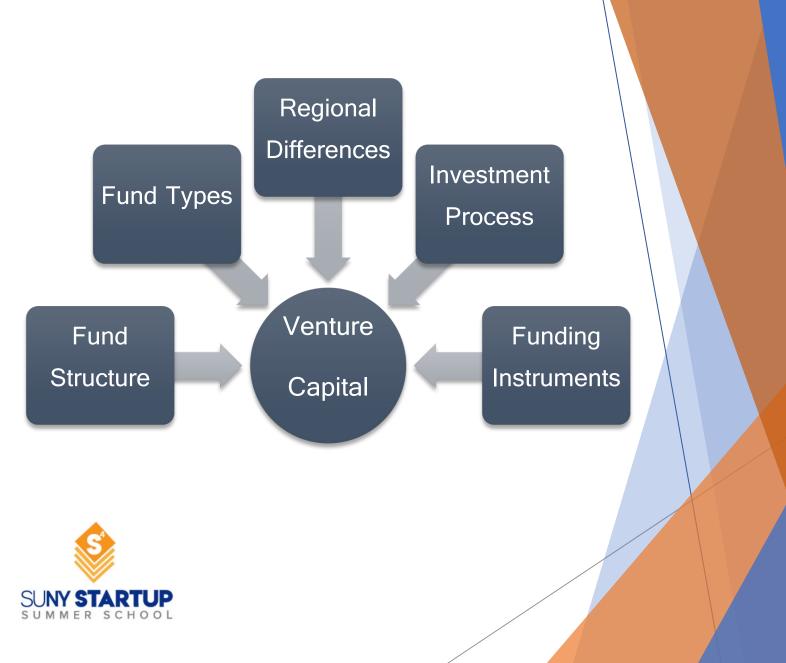


Funding Choices for Startups

- 1. Founders (sweat equity & savings) plus money from their Friends & Family
- 2. Incubators and Accelerators (including hybrids like Plug & Play, 500 Start-ups)
- 3. Grants NYSERDA, ARPA-e, NIH, DARPA, State Funds, SBIRs & many more
- 4. Seed Funds many following model of First Round Capital
 - Organized Angel Groups
- 6. Super Angels wealthy family offices & entrepreneurs who sold their company
- 7. Non-Profits Funds LaunchNY, NYCEED, New Energy Nexus, Prime Coalition
- Corporate Venture Capital and JDAs, research projects, etc. (Shell, Siemens, BP, DuPont, 3M)
- 9. Venture Capital Funds
- Unconventional Crowdfunding, Reg A+ Platforms, Propel(x), X-Prize, TSX Venture Exchange, Pitch Contests, AngelList, royalty finance, customer advances, etc.



5.



Venture Capital

Fund Structure

The Management Company oversees the entire operation providing salaries, benefits, etc. and endures through the entire life of the firm.

General Partners (GPs) work for the General Partnership. They invest, make the investment decisions, earn a small management fee, and receive carried interest on the gains (typically ~20%).

Limited Partners (LPs) are generally institutional investors providing large sums of money for investment. They have little say over investment decisions but make a majority of the gains (typically ~80%).

Management Company LLC Team Employees, leases, expenses, brand, benefits, Venture Partners etc. General Partnership LLC Limited Partnership LLC Investment committee Management fees Capital calls Carried interest ownership New partnership for each New partnership for each fund fund **General Partners** Limited Partners Portfolio Portfolio Company **Company 1** 15

Operational



Fund Types

Type of Fund	Investors	Investment Stage	Check Size	Structural Characteristics
Angel	High net worth individuals or small institutions	Very early, seed or pre- seed rounds	\$5k-\$100k	Easy to start and flexible strategy, limited resources to diligence or govern
Early Stage VC	Sources with high risk tolerance profile	Seed, Series A or B	\$100k-\$5M	Structured investments and firm; significant overhead
Growth Stage VC/PE	Large institutional investors; less risk	Series C to E and beyond	\$1M-\$500M	Highly structured firm with considerable deal and portco support
Corporate VC	Corporation itself	Across all stages, often later stage	Varies	Strategic corporate investments for new tech
Evergreen	Family office or long-term investors	Later stage, less domain expertise	Varies, often smaller	Less structure and higher liquidity, often following
Hedge Fund	Large institutional investors or high net worth individuals	Diverse investments in public and private entities	Often large and diverse	Highly structured; often leveraged; seeking high return, risky investments



Example: ARCH Venture Partners

Fund XI: \$1.85B (early stage & growth stage)

- Sources: Large institutional investors, sovereign wealth funds; corporations, endowments
- Where: Worldwide
- Early stage life science investments
 - Investing in innovative IP at the pre-seed, seed or series A stage; check size \$50k-\$100M
 - Lead investor with a board seat; very involved in building the company

Small confederation of general partners and venture partners with small support team

- Seven general partners make investment decisions and lead investing thesis
- Thirteen venture partners are highly experienced company executives; serve as industry experts and often take leadership roles in company building



Regional Differences in Venture

West Coast

Epicenter of venture capital and risk-taking culture

Domains

Dominated by software, still top in hardware, deeptech and close second in life science

Risk profile

Very aggressive; cutting edge of innovation and ideas

Network

Vast feedback cycle of talent, investors, and entrepreneurs; may only invest locally

East Coast

Rising stars of VC; generally more pragmatic

Domains

Leader in life science (Boston); strong in tech; New York adds software to traditional industries

Risk profile

More pragmatic, heavy technical diligence

Network

Strong LS network in Boston; New York gaining momentum

Midwest

Up and coming; highest ROI region for investors

Domains

Focus on B2B software, deals can be cheaper in the Midwest

Risk profile

More risk-averse than the bay; sometimes more creative than East Coast

Network

Developing feedback cycles in smaller pockets; willing to travel for deals



How to Approach Venture

Be strategic in your outreach

- ARCH sees 8,000-10,000 new technologies for ~25 investments each year
- Find a referral or warm introduction if possible, be succinct and direct with your messaging

Know your product and business

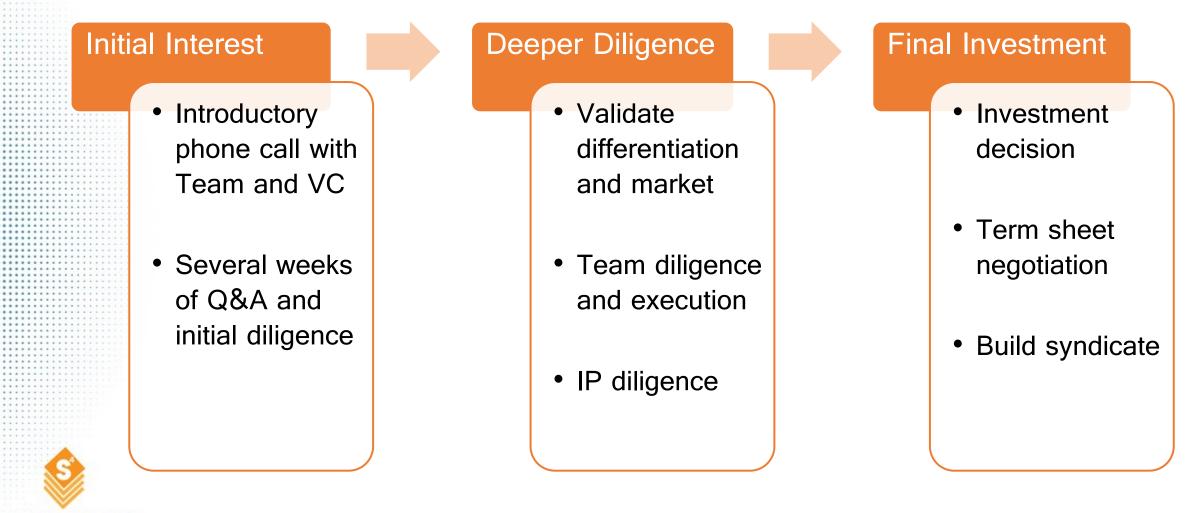
- Have proof that your product works as intended and speak clearly to your differentiation
- Be prepared for difficult questions without hand waving

Know your target market

- Find evidence that there is a market for your idea
- Bring deep knowledge of competitors and innovators in your space



Typical Funding Process





Funding Instruments

Equity

Preferred Stock

- Paid with liquidation preference (investment multiple) or as common stock; whichever is greatest
- Liquidation preference is paid before common stock, after debt

Participating Preferred Stock

- Receives liquidation preference AND common stock returns
- Total returns cap will convert this to common

Debt

Demand Note

- Preset interest and returns
- Senior claim (first to get paid back)
- Used for special situations

Convertible Note

- Debt that can convert to stock
- Typically converts at the next round of funding
 - Discount
 - Cap



Getting \$\$\$ From Angels



Angel Basics

- Angel investing is wide-spread ACA lists 400+ groups with 14,000+ members
 - Estimates vary from \$2 to \$20 billion invested annually, rivaling seedstage VCs
 - High Net Worth (accredited) individuals (20 to 350 per group) who invest their own money
 - Many groups have regional, industry and other specialization/focus (women founders, impact investing, life-sciences, university-affiliation, etc.)
 - Angels are entrepreneurs, retired business & financial professionals, trust funders, etc.
- Angels invest to make profits, diversify their financial portfolio, to stay active and learn about new technologies, as a social and networking activity and to "give back."



Angel Terms

- Usually not the first money invested in the company.
- Funding \$150k to over \$1 million (average deal is \$350k \$650k); average check is \$25k
 - Convertible Notes (with caps) and "Series Seed" Preferred Stock is 90%. SAFEs are West Coast early stage security, but occasionally appear on East Coast. Most groups use standardized documentation. Common stock and uncap notes are almost never done.
- Valuations from \$2 to \$10 million, occasionally higher for more advanced companies
- Angel groups usually seek information rights, pro-rata rights and board representation
- Expect some level of due diligence technology, customers, backgrounds, etc.



Top Angel Groups Active in NYS

- 1. Golden Seeds (women Founders many chapters)
- 2. New York Angels & HBS Alumni Angels of NY
- 3. Social Venture Circle (National with Chapters)
- 4. Astia Angels (women founders)
- 5. Landmark Angels (pay to pitch), strong in healthcare
- 6. Keiretsu Forum (53 chapters, hybrid angel group and a pay-to-pitch platform)
- 7. Rochester Angels, Buffalo Angels, Empire Angels, Eastern NY Angels
- 8. Life Science Angel Network (Mid-Atlantic)
- 9. Launchpad Venture Group



Each Angel Group Has a Process Which Can Take 3-6 Months

- 1. Application and Initial Screening
- 2. Short Pitch Session (10-20 minutes)
- 3. Discovery Meetings (1-2 hours)
- 4. Term Sheet Agreement
- 5. Due Diligence and Legal Documentation
- 6. Funding

Running an angel group is like herding cats



Do's and Don'ts of Angel Groups

Do realize it's a multi-step process – 3-6 months through screening, initial meetings, discovery, term sheet, due diligence, closing

Do apply through the group's portal but try to speak with members or the leader before and just after submitting the application

Do be prepared to not really know where you stand and how much funding will be provided. Groups operate at their own pace.

Do find a champion within the group.

- Don't use a broker (who gets paid) or start with an unrealistic valuation.
- Don't assume because one group has funded, others will join quickly (syndication among angel groups is a mythical concept)



Where to Find Angels

- Start with Local Accelerators and Incubators Upstate Capital, LaunchNY, NYSERDA, SUNY Research Foundation, etc.
- Directory of Angel Groups (https://www.angelcapitalassociation.org/directory/)
- Gust provides access to angel groups. AngelList operates differently.
- Gary's Guide lists weekly events mainly in NYC (www.garysguide.com)
- Join an accelerator or incubator to get better access and visibility.
- Avoid Pay-to-Pitch Events that charge high fees (there are some that are worthwhile, but most aren't)



Incubators & Accelerators

- Incubators/Accelerators can be a springboard providing companies more visibility, introductions, mentoring, sometimes money, but not for every company.
 - Programs designed to support start-ups with mentors, sharedspace, business services, legal advice, programs and some funding.
- Often a source of companies for angel groups
- General Focus TechStars, ERA, General Assembly, Universitysponsored, Plug & Play, etc.
- Industry Specific:
 - Healthcare Blueprint Health, Start-up Health, Dream-it
 - Clean Energy NYSERDA (six locations in NYS)
 - Food, Drones, Security, FinTech, Fashion, Digital Media, Space, etc.



Angel, seed & first financings

Seed activity has been more heavily affected by the pandemic US VC angel & seed deal activity

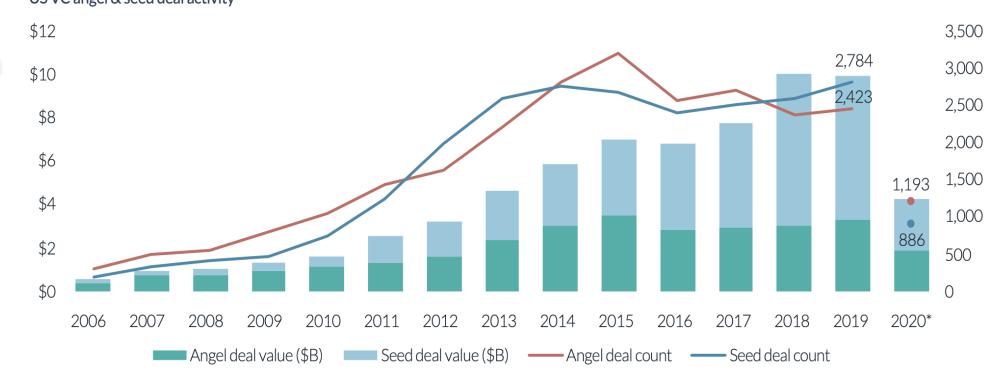
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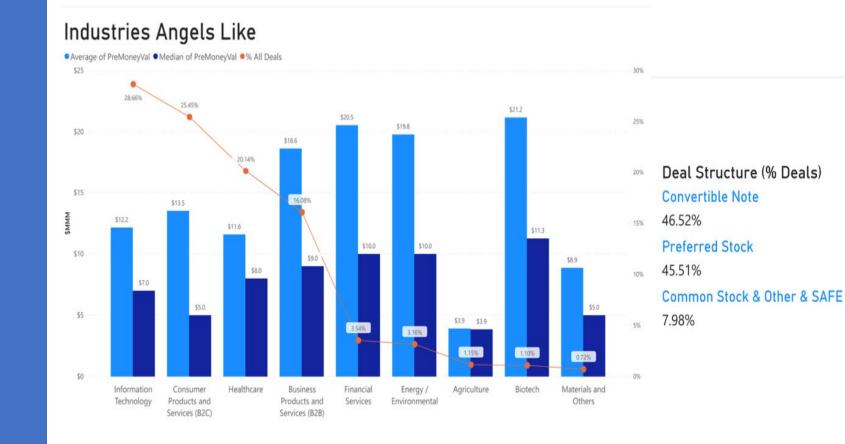
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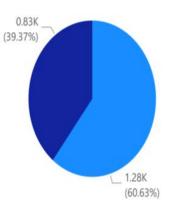


PitchBook-NVCA Venture Monitor *As of June 30, 2020

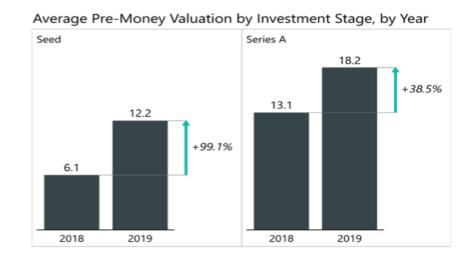




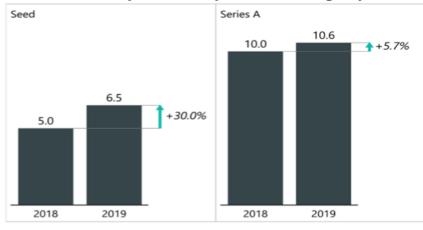
Deals by Investment Stage New Follow-on



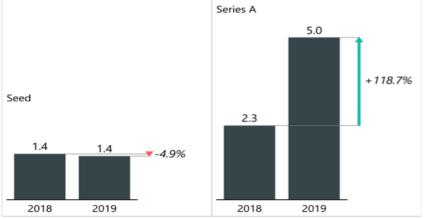




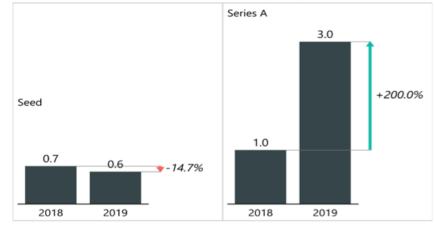
Median Pre-Money Valuation by Investment Stage, by Year



Average Round Size by Investment Stage, by Year

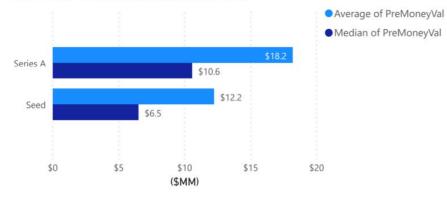


Median Round Size by Investment Stage, by Year

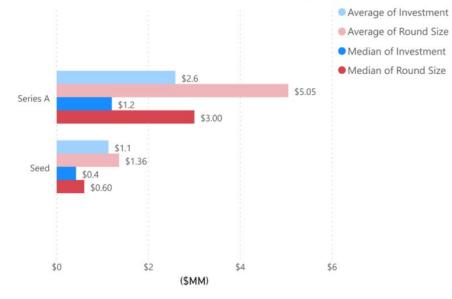


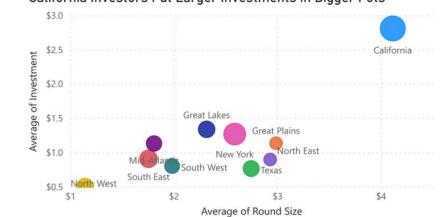
Overall Financial Statistics (2019 Seed & Series A)

Pre-Money Valuation by Investment Stage



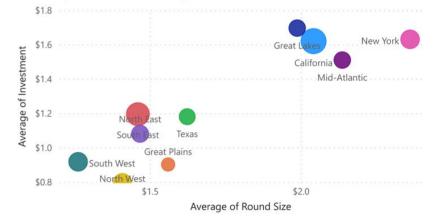
Group Investment & Round Size by Investment Stage





The size of the circle represents total deals by region to indicate relative activity.

NY companies received larger individual and overall investments



California Investors Put Larger Investments in Bigger Pots



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Q1 2021 league tables

Most active investors angel & seed

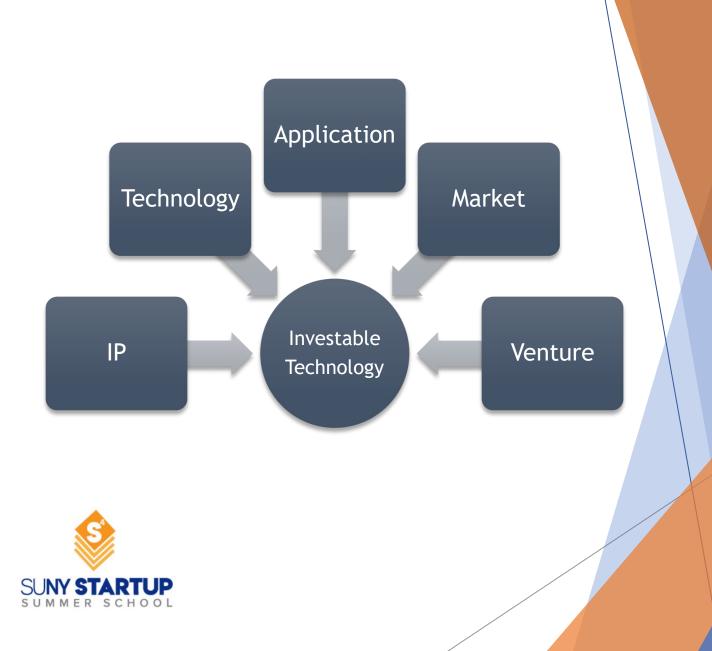
1	Plug and Play Tech Center	27
2	Ulu Ventures	13
2	Connecticut Innovations	13
4	Y Combinator	12
4	SOSV	12
4	Elevate Ventures	12
7	Techstars	10
7	Alumni Ventures Group	10
9	Innovation Works	9
9	BoxGroup	9
11	Gaingels	8
11	Operator Partners	8
13	MaC Venture Capital	7
13	Social Starts	7
13	500 Startups	7
13	Mark Cuban	7
13	NFX	7
13	8VC	7
19	Brighter Capital	6
19	Center for Innovative Technology	6
19	Shrug Capital	6

Most active investors early stage

27	1	Andreessen Horowitz	23
13	2	Gaingels	18
13	3	Keiretsu Forum	17
12	4	Y Combinator	15
12	5	Growth Technology Partners	14
12	6	General Catalyst	13
10	7	Janus Henderson Investors	12
10	8	Sequoia Capital	11
9	8	Greycroft	11
9	8	Alumni Ventures Group	11
8	11	Asymmetry Ventures	10
8	11	RA Capital Management	10
7	11	Slow Ventures	10
7	14	Coinbase Ventures	9
7	14	New Enterprise Associates	9
7	16	F-Prime Capital	8
7	16	Cormorant Asset Management	8
7	16	Logos Capital	8
6	16	SOSV	8
6	16	Accel	8
6	16	Felicis Ventures	8

Most active investors late stage

1	Tiger Global Management	37
2	Keiretsu Forum	25
2	Insight Partners	25
4	Andreessen Horowitz	23
5	Gaingels	20
5	T. Rowe Price	20
7	Salesforce Ventures	17
7	Fidelity Management & Research	17
9	New Enterprise Associates	15
9	Coatue Management	15
11	GV	14
12	Sequoia Capital	13
12	Bessemer Venture Partners	13
14	8VC	12
14	Accel	12
16	D1 Capital Partners	11
16	Khosla Ventures	11
16	Greycroft	11
16	BlackRock	11
16	Alumni Ventures Group	11
21	Index Ventures	10



What Early Stage Capital Wants

Intellectual Property



		2	3	4	5
License	Nonexclusive	Exclusive in a single field of use	Exclusive in limited fields of use	Exclusive	Company owned
Туре	No IP	Trade Secrets	Nonobvious Trade Secrets	Methods or Process Patents	Composition of Matter Patents
Stage	Plans to file patent	Patent drafted	Filed	Issued	Recently Issued
Claims	Narrow, Few	(Broad, Many
Prior Art	Complex and dense prior art	<			Limited prior art
Enforceability	Unenforceable, violations cannot be detected	<			Violations easily detected
Defensibility	Weak	(Strong
Network Effects	None	<			Significant



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Technology

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SUNY STAF



		2	3	4	5
Novelty	Incremental				Breakthrough
Stage	Conceptual	Proof of Concept	Laboratory Scale	Demonstration Scale	Fully Scaled
Remaining Research	Initial or multiple subsequent breakthroughs required	Subsequent breakthroughs required	Parallel breakthroughs required	Engineering remains only	No technical development required
Timeline	>10 years		2-3 years		<1 year
Lab	Unknown PI, small lab, uninvolved		Up and coming PI, medium lab, moderate involvement		Eminent PI and Institution, large lab, highly involved
Demonstration / Proof	None	<			Peer reviewed / third-party validated
Capital Required	Capital intensive	<			Low capital
Margin	High COGS, low margins				Low COGS, high margins
Scalability	High cost/time, custom development				Low cost/time, no extra development

Application

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SUMMER SC



		2	3	4	5
Number	Single	A			Platform
Validation	Applications unknown	Single unvalidated application	Single validated application OR multiple unvalidated applications	One validated application AND multiple unvalidated applications	Multiple validated applications
Value	Easily substituted		Enables advanced products		Enables new industries
Need	Easily substituted		Solves major bottleneck		Solves issue holding back an industry
Impact	Incremental tradeoff	Incremental improvement	10x-100x improvement in 1 key figure of merit	10x-100x improvement in 2 key figures of merit	10x-100x improvement in >2 key figures of merit
Competition	Crowded with strong competitors		Limited extant competition, strong potential entrants		Unchallenged
Regulatory	Disproportionate threat to this technology				Technology is advantaged
Data Value	Low				High
Partners	None but requires partnerships	Dependent on one partner	Independent with moderate partners	Independent with high-value partner	Many high-value partners

Market

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SUMY STAL



		2	3	(4)	5
Number	Few				Many
Size (bottom-up)	Small	<\$100M/year	>\$500M/year	>\$1B/year	>\$10B/year
Growth	Declining	Inflation (e.g. ~3% CAGR)	Steady/Market (e.g. ~10% CAGR)	Significant (e.g. >20% CAGR)	Rapid (e.g. >100% CAGR)
Adoption	Slow adoption, lengthy validation, long sales cycle				Rapid adoption, immediate validation, immediate sales
Fragmentation	Many small buyers				A few large buyers / few leaders and many followers
Supply Chain	Buyers or Sellers have immense negotiating power				Buyers and Sellers have no negotiating power
Volatility	High				Low
Customer Acquisition Costs	High				Low
Switching Costs	High from status quo, low from this technology				Low from status quo, high from this technology

Venture



						1
			2	3	4	5
	Management Team	Inexperienced team Many gaps	Inexperienced team	Experienced team Some gaps	Experienced team Filling gaps	Experienced team No gaps Historical success
	Excitement	Low excitement	Recovering from overhype	Likely at peak interest	Accelerating interest	Technology trigger
	Terms	High-risk terms		Acceptable terms		Low-risk terms
	Premoney Valuation	High premoney valuation		Acceptable premoney valuation		Low premoney valuation
	Syndicate	Other investors unlikely	Inexperienced investors	Experienced investors	Experienced investors with industry familiarity	Experienced investors with industry expertise
	Exit and Return Potential	No comparable exits, no obvious acquirers	Some IPOs or acquisitions, low values	Some IPOs and acquisitions, moderate values	Many high-value IPOs and acquisitions	Uptick in high-value IPOs and acquisitions just starting
,	Milestones	Unclear path forward				Clear path forward, initial milestones attainable with single reasonable funding round

Other Considerations

Why has this not been attempted before?

If it has, why will it succeed now?

What would it look like if this deal works?

• What will make it work?

What do you think will make this deal fail in the next 2-5 years?

- What low-scoring characteristics could sink this company on their own?
 - Can this risk be mitigated? How?

Thank you!

- Please answer the Zoom poll question.
- Recording will be sent tomorrow.
 - Don't forget to connect with us on LinkedIn.
- See you next week for

Week 10: August 2-6

- 1:1 Meetings With SUNY Venture Advisors for pitch dry runs with
 - **Doug Buerkle, LTM Ventures**
 - Felix Litvinsky, Abakama
 - Mark Sperry, Sperry Energy