Mustafa Ergen

Introduction to Entrepreneurship and Innovation

Lecture notes on high-tech entrepreneurship · revised 2026 edition of the 2011 original, slide for slide

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Entrepreneurship and Innovation

- **About:** a comprehensive guide to high-tech entrepreneurship and innovation.
- These notes cover the foundation, priorities, financing, recruitment, venture capital, business development, board governance, and trends and statistics of a startup.
- They also cover entrepreneurial attributes: leadership, commitment, determination, perseverance, goal-oriented problem solving, team building and more.
- The aim: to give the reader the understanding that has worked so well in Silicon Valley for a long time.

Lecturer Bio

- Co-founder of **WiChorus** (Silicon Valley, 2005; tier-one VC; LTE and WiMAX access gateways), acquired by Tellabs in 2009 for $200M; many awards.
- Then joined **Argela** to build 3G femtocells: within two years a worldwide top-five player, with awards and entry into South Korea.
- Earlier: National Semiconductor Labs (postdoctoral fellowship, wireless networks); co-founding director, Distributed Sensing Lab, UC Berkeley.
- Books: *Mobile Broadband – Including WiMAX and LTE* (Springer, 2009; Chinese edition 2011) and *Multi-Carrier Digital Communications: Theory and Applications of OFDM* (Springer, 2004). 25+ patents.
- Board of trustees, TOBB University of Economics and Technology; eight-time Bülent Kerim Altay Award (METU EE); IEEE ISCC 2003 Best Student Paper; invited paper, IEEE GLOBECOM 2004; frequent speaker.
- MS and PhD in EE, UC Berkeley (2004); MA in International Studies (overseas entrepreneurship); Haas Management of Technology program. BSEE, METU, valedictorian (4.0 GPA), 2000.

2025–2026 UPDATE

Today he is Founder & President of Ambeent and founder of MiSONE (TrustFabric, GPTStone, Borgswat), a professor at Istanbul Technical University since 2017, and author of *Girişimci Kapital* (2015; expanded 2022).



Outline

Part 1

- 1. Entrepreneurship
- 2. Silicon Valley History
- 3. Wireless Revolution
- 4. Internet Technology
- 5. Venture Capital
- 6. Venture Impact
- 7. Pitch
- 8. Financials

Part 2

- 9. Recruit
- 10. Term Sheet
- 11. Board
- 12. Venture Capital Glossary
- 13. Mindset
- 14. Current Venture Trends
- 15. Clean Tech & Life Sciences Ventures
- 16. Appendix: speaker list, VC documents, VC list

01

Introduction to Entrepreneurship and Innovation

What an entrepreneur is, how the idea evolved, and what it takes to start, run and grow a venture.

Entrepreneurship

- There is more than one way to change the world. Some ways require masses of people, others political consensus or ideology, and many vast amounts of capital. Almost all require a good dose of luck.
- Entrepreneurs (and their allies, the venture capitalists) have had the most success changing the world, or at least disrupting an industry, when the ingredients are **large amounts of innovation and vision supported by moderate amounts of capital**.
- Such situations reward "entrepreneurial energy": a focused team has impact through creativity and skill, not brute force.

> Not all great companies have entrepreneurial energy at their core, but almost all great venture capital investments do. The legendary venture-backed companies that dominate the NASDAQ stand as testament to this.

Source: Entrepreneurial Energy, Accel

Entrepreneur

- An entrepreneur is a person who has possession of a new enterprise, venture or idea and is **accountable for the inherent risks and the outcome**.

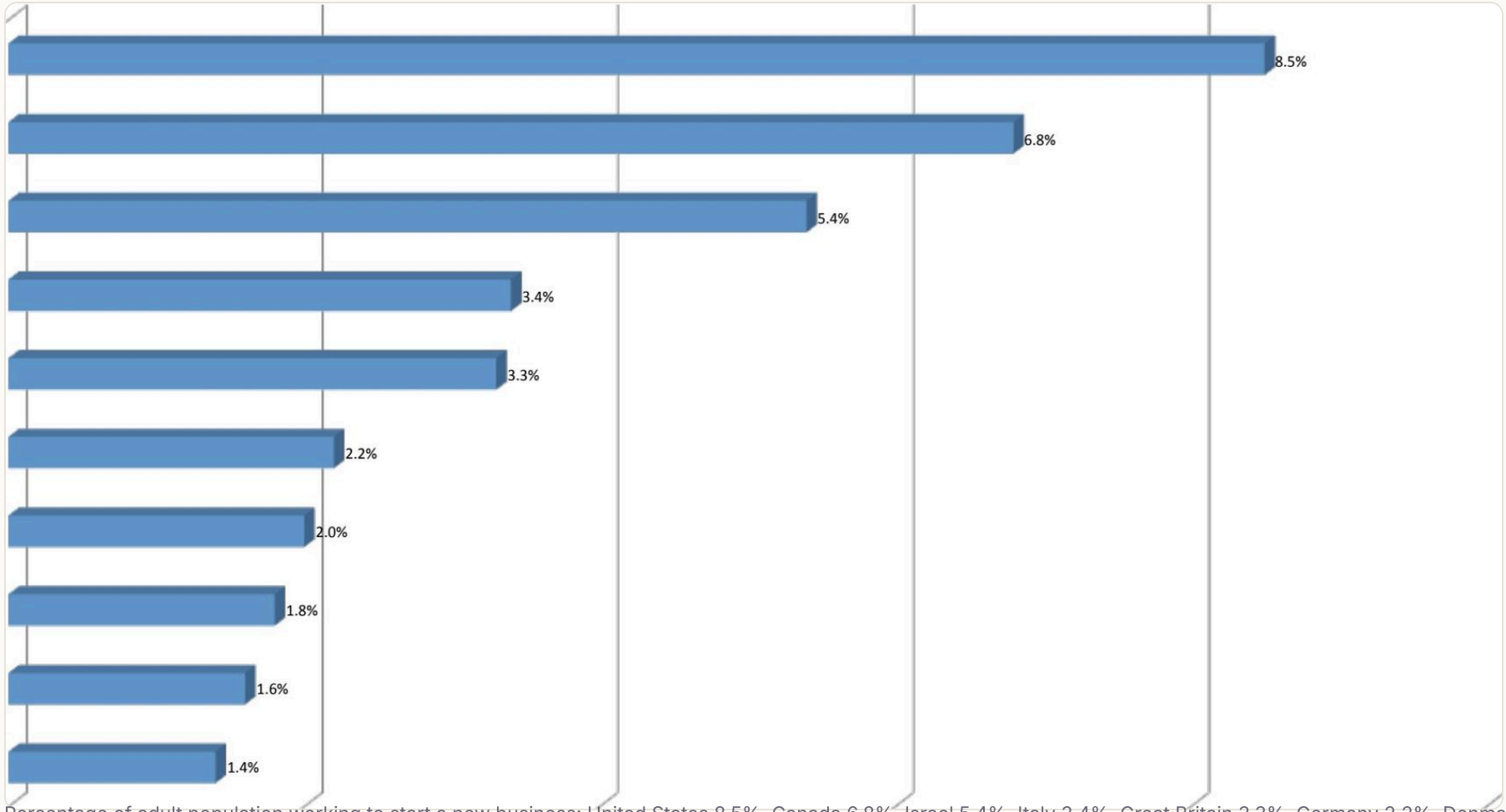
ENTREPRENEURSHIP

The World of the Entrepreneur

- A new business is born every 11 seconds in the United States.
- A study of influential Americans named the defining issue of the 21st century: **entrepreneurship**.
- One in 12 Americans is actively involved in trying to start a new business.

ENTREPRENEURSHIP

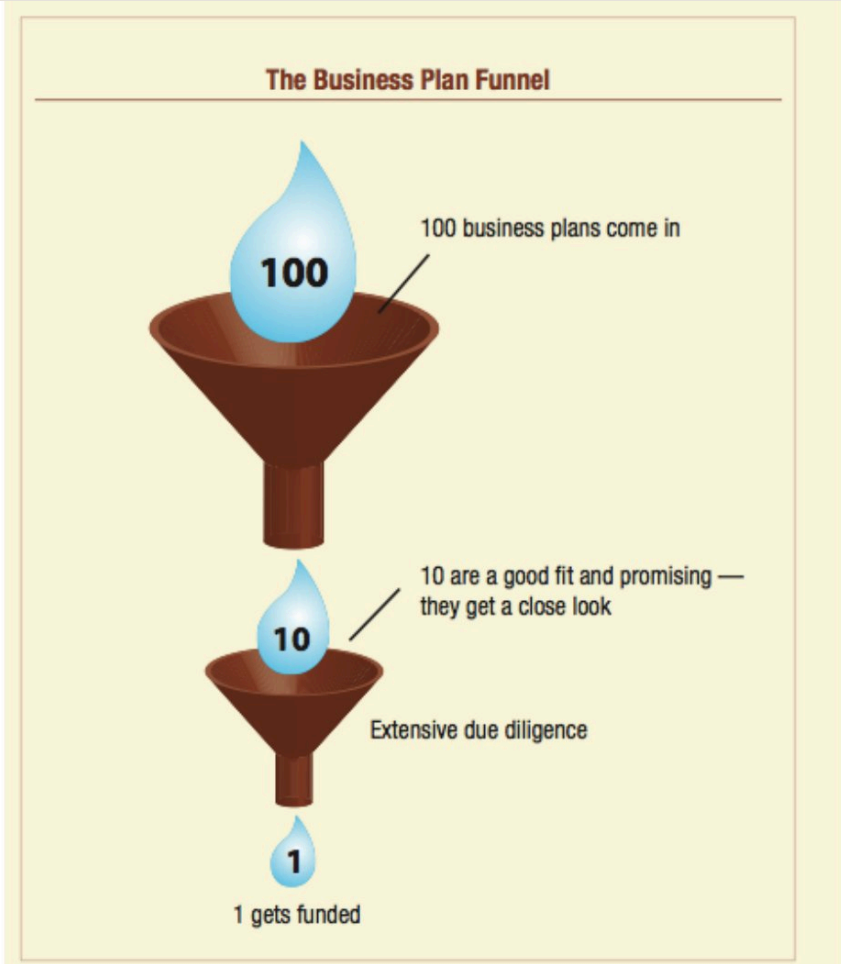
Entrepreneurial Activity



Percentage of adult population working to start a new business: United States 8.5%, Canada 6.8%, Israel 5.4%, Italy 3.4%, Great Britain 3.3%, Germany 2.2%, Denmark 2.0%, France 1.8%, Japan 1.6%, Finland 1.4%.

Funding

- Not every entrepreneur gets funding.
- **The business plan funnel:** 100 business plans come in; 10 are a good fit and promising and get a close look with extensive due diligence; 1 gets funded.



ENTREPRENEURSHIP

Venture Capital Returns

INDEX (%)	1 QTR	YTD	1 YR	3 YR	5 YR	10 YR	15 YR	20 YR	25 YR
U.S. Venture Capital Index®[1]	**3.75**	**4.80**	**8.20**	**(2.06)**	**4.25**	**(4.64)**	**36.90**	**25.61**	**18.74**
Barclays Capital Gov't/Credit Bond	3.28	8.95	8.73	7.46	6.15	6.52	6.44	7.30	7.83
Dow Jones Industrial Average	11.13	5.57	14.12	(5.38)	3.12	2.52	7.90	10.28	11.66
Dow Jones U.S. Small Cap	11.65	9.73	15.23	(2.62)	3.16	5.40	8.46	NA	NA
Dow Jones U.S. TopCap	11.66	4.29	10.68	(6.69)	1.04	(0.37)	6.49	NA	NA
Nasdaq Composite*	12.30	4.38	11.60	(4.29)	1.94	(4.29)	5.62	10.12	8.91
Russell 1000®	11.55	4.41	10.75	(6.79)	0.86	(0.21)	6.64	9.38	10.23
Russell 2000®	11.29	9.12	13.35	(4.29)	1.60	4.00	6.72	10.28	9.10
S&P 500	11.29	3.89	10.16	(7.16)	0.64	(0.43)	6.45	9.05	10.17
Wilshire 5000 Total Market	11.50	5.00	11.08	(6.46)	1.11	0.29	6.58	9.36	10.03

[1] Pooled end-to-end return, net of fees, expenses and carried interest, based on 1,290 US VC funds (incl. fully liquidated partnerships) formed 1981–2010. *Capital change only. Sources: Cambridge Associates, Barclays Capital, Bloomberg, Frank Russell, S&P, Thomson Datastream, WSJ, Wilshire.

Characteristics of Entrepreneurs

- Desire for responsibility
- Preference for moderate risk
- Confidence in their ability to succeed
- Desire for immediate feedback
- High level of energy
- Future orientation
- Skilled at organizing
- Value achievement over money

Themes

At the center: **defining entrepreneurship**. The themes around it:

- The entrepreneur
- Innovation
- Organization creation
- Creating value
- Profit or nonprofit
- Growth
- Uniqueness
- Process

Entrepreneurship Theory: 18th Century

- **Richard Cantillon** coins the term *entrepreneur* ("go-between" or "between-taker").
- The entrepreneur bears risks and plans, supervises, organizes and owns the factors of production.

Entrepreneurship Theory: 19th Century

- **Jean-Baptiste Say** proposed that profits from entrepreneurship were separate from profits of capital ownership.
- A distinction was made between those who supplied funds and earned interest, and those who profited from managerial abilities.

Entrepreneurship Theory: 20th Century

- **Joseph Schumpeter** described the entrepreneur as an innovator, someone who "creatively destructs".
- **Peter Drucker** described the entrepreneur as someone who maximizes opportunity.

ENTREPRENEURSHIP

Ingredients of Entrepreneurship?

- Subjectivity
- Hard work
- Agility
- Team building
- Funding
- Idea
- ...

> You will see how subjective it is throughout these notes and in the guest speakers' stories.

Myths

- 1. Successful entrepreneurship takes only a great idea.
- 2. Entrepreneurship is easy.
- 3. Entrepreneurship is a risky gamble.
- 4. Entrepreneurship is found only in small businesses.
- 5. Entrepreneurial ventures and small businesses are identical.

Process

Explore

- Exploring the entrepreneurial context
- Identifying opportunities and possible competitive advantage

Starting the Venture

- Researching feasibility
- Planning the venture
- Organizing the venture
- Launching the venture

Managing the Venture

- Managing processes
- Managing people
- Managing growth
- Special issues

Reward

- High degree of independence: freedom from constraints
- Get to use a variety of skills and talents
- Freedom to make decisions
- Accountable only to yourself
- Opportunity to tackle challenges
- Feeling of achievement and pride
- Potential for greater financial rewards

Feeding the Entrepreneurial Fire

- Entrepreneurs as heroes
- Entrepreneurial education
- Demographic and economic factors
- Shift to a service economy
- Technological advancements
- Independent lifestyles
- E-commerce and the World Wide Web
- International opportunities

Challenges

- Must be comfortable with change and uncertainty
- Must make a bewildering number of decisions
- May face tough economic choices
- Must be comfortable with taking risks
- Need many different skills and talents
- Must be comfortable with the potential for failure

The Cultural Diversity of Entrepreneurship

- Young entrepreneurs
- Women
- Minority-owned enterprises
- Immigrant entrepreneurs
- Part-time entrepreneurs
- Home-based businesses
- Family businesses
- Copreneurs (couples in business together)
- Corporate castoffs
- Corporate dropouts

ENTREPRENEURSHIP

Nine Deadly Mistakes of Entrepreneurship

- 1. Management incompetence
- 2. Lack of experience
- 3. Poor financial control
- 4. Failure to develop a strategic plan
- 5. Uncontrolled growth
- 6. Poor location
- 7. Improper inventory control
- 8. Incorrect pricing
- 9. Inability to make the "entrepreneurial transition"

Small Business vs Entrepreneurial Ventures

Small Business

- Independently owned, operated and financed
- Fewer than 100 employees
- Doesn't emphasize new or innovative practices
- Little impact on industry

Entrepreneurial Ventures

- Innovative practices
- Goals are profitability and growth
- Seeks out new opportunities
- Willingness to take risks

Benefits of Small Business Ownership

The opportunity to:

- create your own destiny
- make a difference
- reach your full potential
- reap unlimited profits
- contribute to society and be recognized for your efforts
- do what you enjoy and have fun at it

Drawbacks of Small Business Ownership

- Uncertainty of income
- Risk of losing your entire investment
- Long hours and hard work
- Lower quality of life until the business gets established
- High levels of stress
- Complete responsibility
- Discouragement

Small Businesses

- Make up 99% of all businesses in the United States.
- Employ 53% of the nation's private-sector workforce.
- Create more jobs than big businesses.
- Are leaders in offering training and advancement opportunities to workers.
- Produce 51% of the nation's private GDP.
- Account for 47% of business sales.
- Create 4× more innovations per R&D dollar than medium-size firms and 24× as many as large companies.

ENTREPRENEURSHIP

The Small Business Failure Record

- 24% of new businesses fail within two years.
- 51% fail within four years.
- 63% fail within six years.

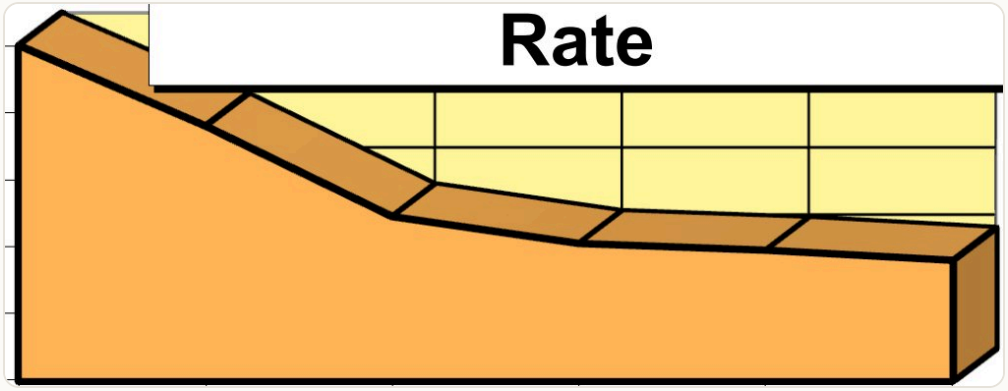


Chart: small business survival rate — % of small firms surviving by number of years in business (new to 10 years).

Avoiding the Pitfalls of Small Business Failure

- Know your business in depth
- Develop a solid business plan
- Manage financial resources
- Understand financial statements
- Learn to manage people effectively
- Keep in tune with yourself

02

Wireless & Internet Revolution

How personal technology is changing the world, and what invention, innovation, venture capital and a local ecosystem each add to a startup.

Links for Ideas

- US Angel Investors
- Y Combinator
- Founders Den
- Dogpatch Labs
- TechCrunch
- Etohum
- NVCA

2025–2026 UPDATE

Y Combinator went on to create the SAFE (2013; post-money SAFE 2018, now the US seed standard) and has invested a standard $500K per company since 2022 (YC).

Is the Wireless Revolution a New Renaissance?

- The Renaissance brought religion and free thinking to ordinary people.
- Electronics is doing the same, personalizing everything for us:
  - Personal computer
  - Pocket phone
  - Handheld devices
  - Internet: ordinary people access information
  - Social networking
  - Etc.

2025–2026 UPDATE

About 6.0 billion people (74% of the world) used the internet in 2025, while ~2.2 billion remain offline (ITU); 5G subscriptions reached ~2.9 billion by end-2025 (Ericsson).

Success

- Invention
- Innovation (invention to market)
- Planning, execution, perseverance (sustaining innovation)
- **Xerox:** invention, no innovation
- **Apple:** innovation, no invention
- **Google:**
  - Invention and innovation from a Stanford grad
  - Execution from a Berkeley grad

Innovation Statistics

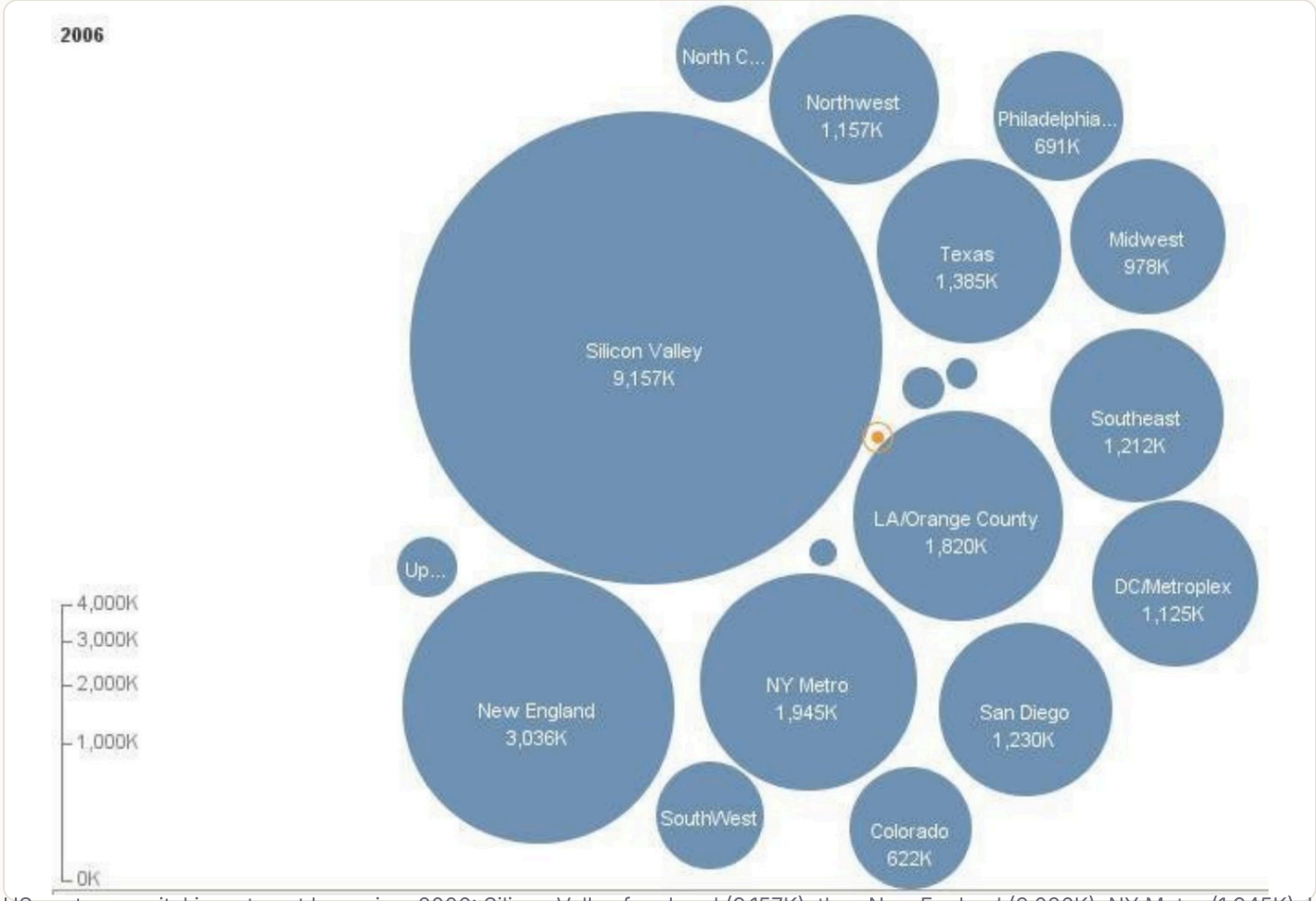
Components:

- Number of research journals
- Number of patents
- Research funding

	Patent applications to the EPO			High technology patent applications to the EPO			Patents granted by the US Patent & Trademark Office		
	(number of patent applications)		(per million inhab.)	(number of patent applications)		(per million inhab.)	(number of patents granted)		(per million inhab.)
	2002	2007	2007	2002	2007	2007	1999	2004	2004
EU-27	50 462	57 725	116.5	10 964	5 684	11.5	31 172	15 775	32.3
Belgium	1 287	1 472	139.0	333	231	21.8	794	395	38.0
Bulgaria	15	29	3.8	2	:	:	10	48	6.2
Czech Republic	88	162	15.8	6	9	0.9	37	49	4.8
Denmark	935	1 057	194.1	230	110	20.2	964	246	45.5
Germany	21 903	23 929	290.7	3 823	2 098	25.5	12 799	6 874	83.3
Estonia	6	23	17.4	1	7	5.2	5	4	2.8
Ireland	224	288	66.8	65	38	8.8	214	156	38.8
Greece	74	109	9.8	18	6	0.6	18	20	1.8
Spain	938	1 451	32.6	148	96	2.2	381	210	5.0
France	7 321	8 421	132.4	1 821	1 128	17.7	4 616	2 344	37.6
Italy	4 168	5 107	86.4	489	253	4.3	1 938	1 049	18.1
Cyprus	7	9	11.5	2	5	6.0	4	1	1.6
Latvia	6	19	8.4	2	2	1.0	2	2	0.9
Lithuania	3	8	2.4	0	2	0.7	7	19	5.5
Luxembourg	61	110	230.2	4	5	9.9	39	38	83.5
Hungary	120	173	17.2	17	19	1.9	76	39	3.9
Malta	4	8	20.5	1	:	:	3	:	:
Netherlands	3 442	3 656	223.5	1 160	348	21.3	1 535	938	57.7
Austria	1 359	1 797	217.0	216	149	18.0	640	366	44.9
Poland	81	146	3.8	12	24	0.6	31	40	1.0
Portugal	41	121	11.4	5	29	2.7	15	14	1.4
Romania	11	21	1.0	3	7	0.3	8	13	0.6
Slovenia	76	103	51.5	12	14	7.0	15	8	4.2
Slovakia	24	42	7.8	7	4	0.7	7	6	1.1
Finland	1 257	1 323	250.8	598	209	39.7	1 169	544	104.3
Sweden	2002	2 719	298.4	463	331	36.4	1 796	509	56.8
United Kingdom	5 900	5 422	88.2	1 527	558	9.2	4 451	1 936	32.4
Iceland	35	28	90.6	10	3	9.8	33	25	85.2
Liechtenstein	26	31	895.4	2	1	28.4	15	13	377.2
Norway	377	515	110.0	81	76	16.5	300	149	32.7
Switzerland	2641	3 224	429.3	404	222	29.6	1 520	762	103.5
Croatia	37	32	7.2	4	2	0.5	9	10	2.3
Turkey	60	220	3.2	:	:	:	16	9	0.1
Japan	20 218	20 657	161.7	7 111	3 615	28.3	39 467	29 149	228.1
United States	31 171	31 908	105.8	10 919	3 686	12.2	103 966	80 322	273.8

Table: patent applications to the EPO, high-technology patent applications to the EPO, and patents granted by the USPTO, by country (EU-27, Japan, United States). Source: Eurostat.

Venture Capital



US venture capital investment by region, 2006: Silicon Valley far ahead (9,157K), then New England (3,036K), NY Metro (1,945K), LA/Orange County (1,820K), Texas (1,385K), San Diego (1,230K), Southeast (1,212K).

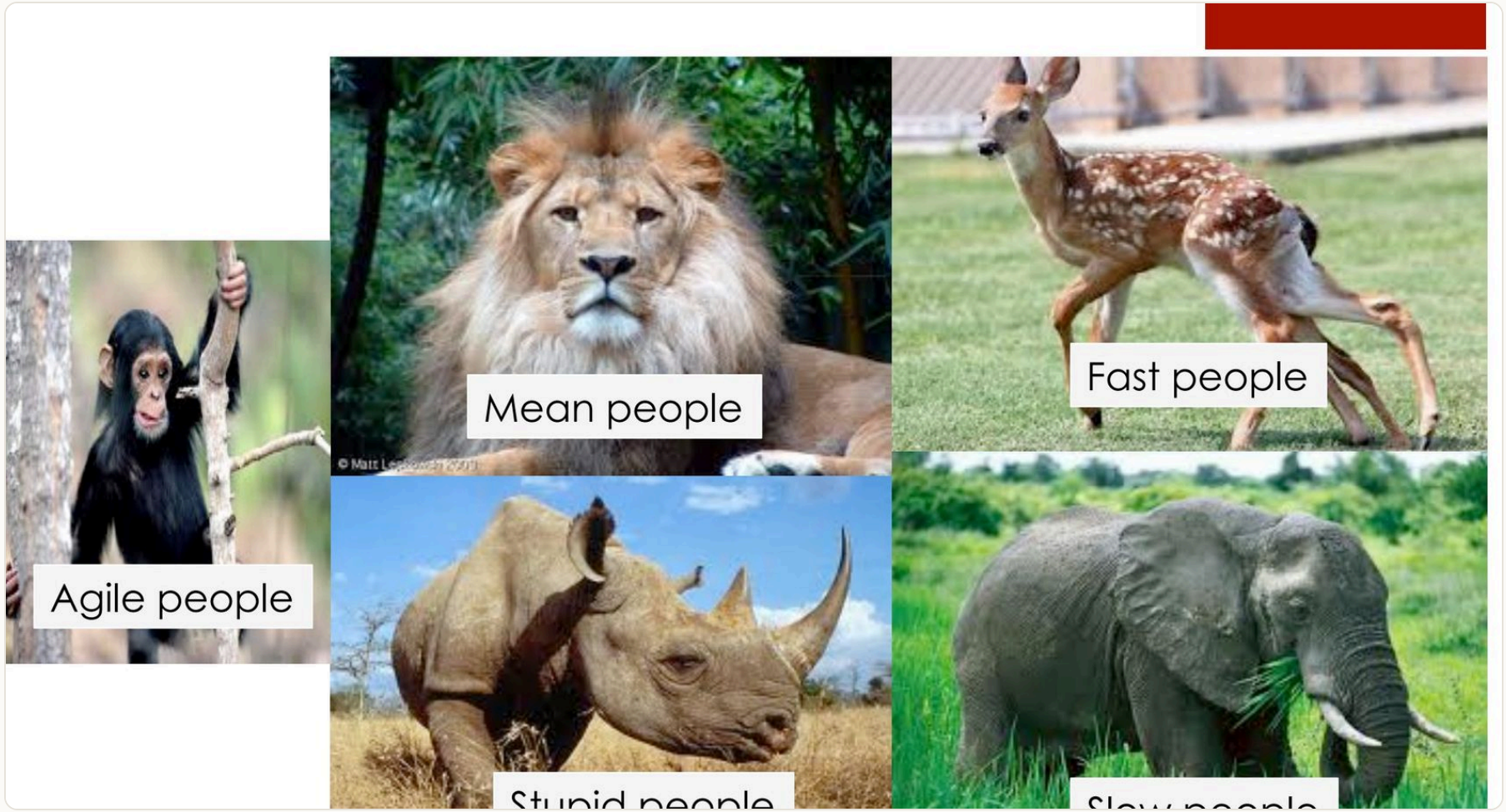
2025–2026 UPDATE

Concentration has grown: the Bay Area and New York took 64.2% of US VC deal value in 2025 (PitchBook-NVCA).

Silicon Valley: What Do They Have?

- Venture capital, with an exit strategy
- Research at local universities: Stanford and Berkeley
- Research funding
- "Wild" free thinkers
- A complex combination of ecosystems

Factors of the Valley



Agile people, mean people, fast people, stupid people, slow people.

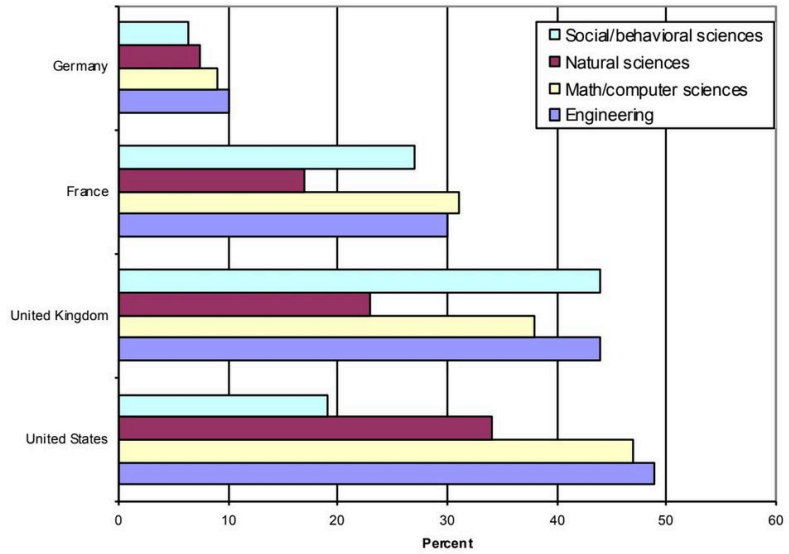
Why the US?

- People and technology
- Scientific and technology education
  - Curricula can be changed by the faculty, without government approval.
- Centers of excellence in research
- Talent pool: the ability to attract the best to the region (compare with Europe)
- People in universities and companies interested in high risk and high reward

Foreign Students

Figure 5.

Percent of doctoral S&E degrees earned by foreign students in selected countries, by field: 1999



NOTE: Natural sciences include physical, biological, earth, atmospheric and ocean sciences. Social sciences

2025–2026 UPDATE

Foreign students still matter: 24% of US unicorns have a founder who first came to the US as an international student (NFAP, 2026).

Percent of doctoral S&E degrees earned by foreign students in the US, UK, France and Germany, by field, 1999. Source: National Science Board, Science and Engineering Indicators 2002.

Economic Model

- Flexibility in the economic model:
  - Silicon Valley: hire and fire at will
  - Europe: hire but no fire (France: hire, never fire)
  - Turkey: hire, ? (fill in the blank)
  - XXXX: hire, no fire, since he fires you by votes

US Universities

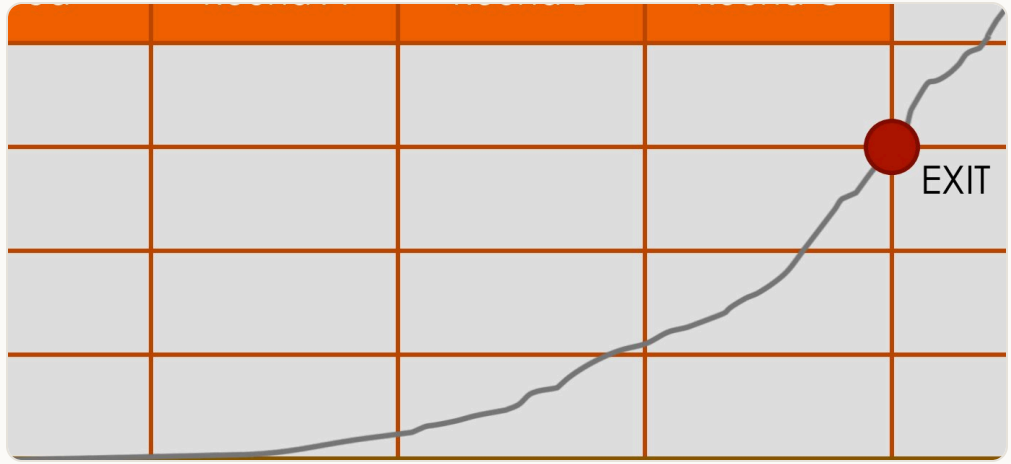
- Essential in the development of the economic model, both directly and indirectly
- Curricula are constantly changed and adapted, with worldwide appeal
- The goal of the US university system is equal impact at home and abroad
- Responses to new economic conditions are immediate

Attributes of a Startup Enterprise

- Do not be a "me too"
- A discrete and defendable market niche
- A differentiated technology with a sustainable competitive advantage
- Adaptable executive teams
- An investment group that brings marketing and operational expertise
  - A bank lends; a VC invests for shares
  - Good VC: doesn't leave, stays with the company to the last point (e.g., Greylock, MDV, Benchmark, Mayfield)
  - Bad VC: closes and starts over (Sequoia, in the original's example)

EAD Startup

- **Exit:** initial public offering or acquisition
- Value grows slowly through seed, Round A, Round B and Round C over about seven years, then climbs steeply to the exit.



2025–2026 UPDATE

Median US round sizes in 2025: pre-seed $0.5M, seed $3.8M, Series A $15M, B $33.8M, C $54M (PitchBook-NVCA).

Return on Investment

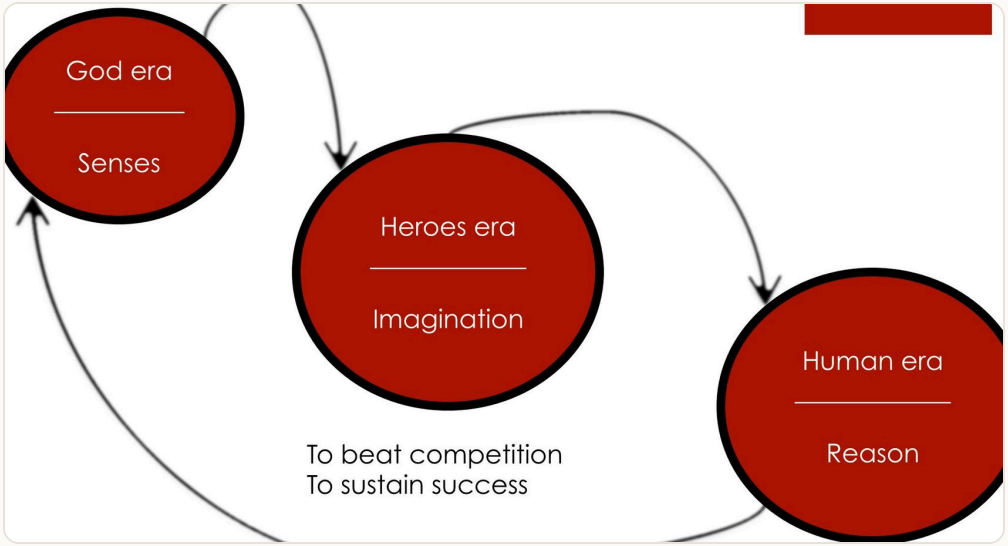
ROUND	COMPANIES	RETURN ON INVESTMENT	EXIT	MARKET VALUE
Seed round	100	Negative	N/A	$0M
Round A	50	3:1	Asset value	$2–10M
Round B	20	10:1	Asset value of company sold	$50–100M
Round C	10	30:1	Company sold	$100–200M
IPO	5	50:1+	Public	$250M+

Local Ecosystem

- I know of no successful region that has not leveraged its local characteristics and culture.
- The "trick" is to change and evolve without destroying identity and roots:
  - Entrepreneurship based on a conservative lifestyle
  - Entrepreneurship based on an entertaining lifestyle
- Rearing the transformation rarely (if ever) succeeds in creating long-lasting value.

Entrepreneurship Through the Eras

- **God era:** senses
- **Heroes era:** imagination
- **Human era:** reason
- The cycle turns on: to beat competition, and to sustain success.



Going Public

- Partnership program
- Success: three quarters
  - IPO
  - Choose the underwriter (Goldman Sachs, Alex. Brown)
  - Road shows
  - Beauty contest
  - Appetite
  - Blackout period
  - Google did not use the bankers' process: it went public with a Dutch auction.

2025–2026 UPDATE

17 unicorns went public in the US in 2025, among them CoreWeave, Circle, Figma, Klarna and Chime; US VC exit value reached $297.6B (PitchBook-NVCA).

Scalability

- Become big
  - Big fish eat small fish
  - If you cannot eat, be eaten.

Startup vs Small Business

- Small business (KOBİ / SME), prevalent in Europe
  - Not small but not big
  - No tendency to become big
- Become BIG — as big as you can:
  - Hire professionals
  - Get more investment
  - Give out your stock
  - Do not become family (*mi familia*) oriented
  - Either invest or buy in
- A SMALL COMPANY is bad for the ecosystem: no growth

Business Plan

- A business plan is like demonstrating a theorem.
- What is your hypothesis?
- What is your theory?
- Execution is the proof of the theory:
  - What is your market?
  - WHAT IS THE SIZE OF YOUR MARKET?
  - Who are your competitors?
  - How do you revolutionize the market?
  - What are your assumptions?

Growth

- Predictability and growth
- Linearity builds value
- Invest and build: the P&L suffers
  - Earnings go down
- Why buy companies?
  - They cannot invest in research themselves
  - It is a way of investing
  - Dilutive deal (their technology is vital): never happens
  - Lucrative deal (your technology): never happens

Profit and Loss Statement (P&L)

- A financial statement that summarizes the revenues, costs and expenses incurred during a specific period, usually a fiscal quarter or year.
- It shows a company's ability to generate profit by increasing revenue and reducing costs.
- The balance sheet, income statement and statement of cash flows are a company's most important financial statements. Each matters on its own, but they are meant to be analyzed together.

Monopolies: Great Research

- Bell Labs
- Xerox
  - 80 percent of innovation came from them
- Why guilt?
  - We have to give back
- IBM, when it was a monopoly

Road to Success

- Simplicity and elegance
- Keep your eye on the ball
  - Implementation deviates from specification
- Build on a solid foundation

Next Generation

- Enzymes
- Proteins
- DNA strands
- Synthetic biology

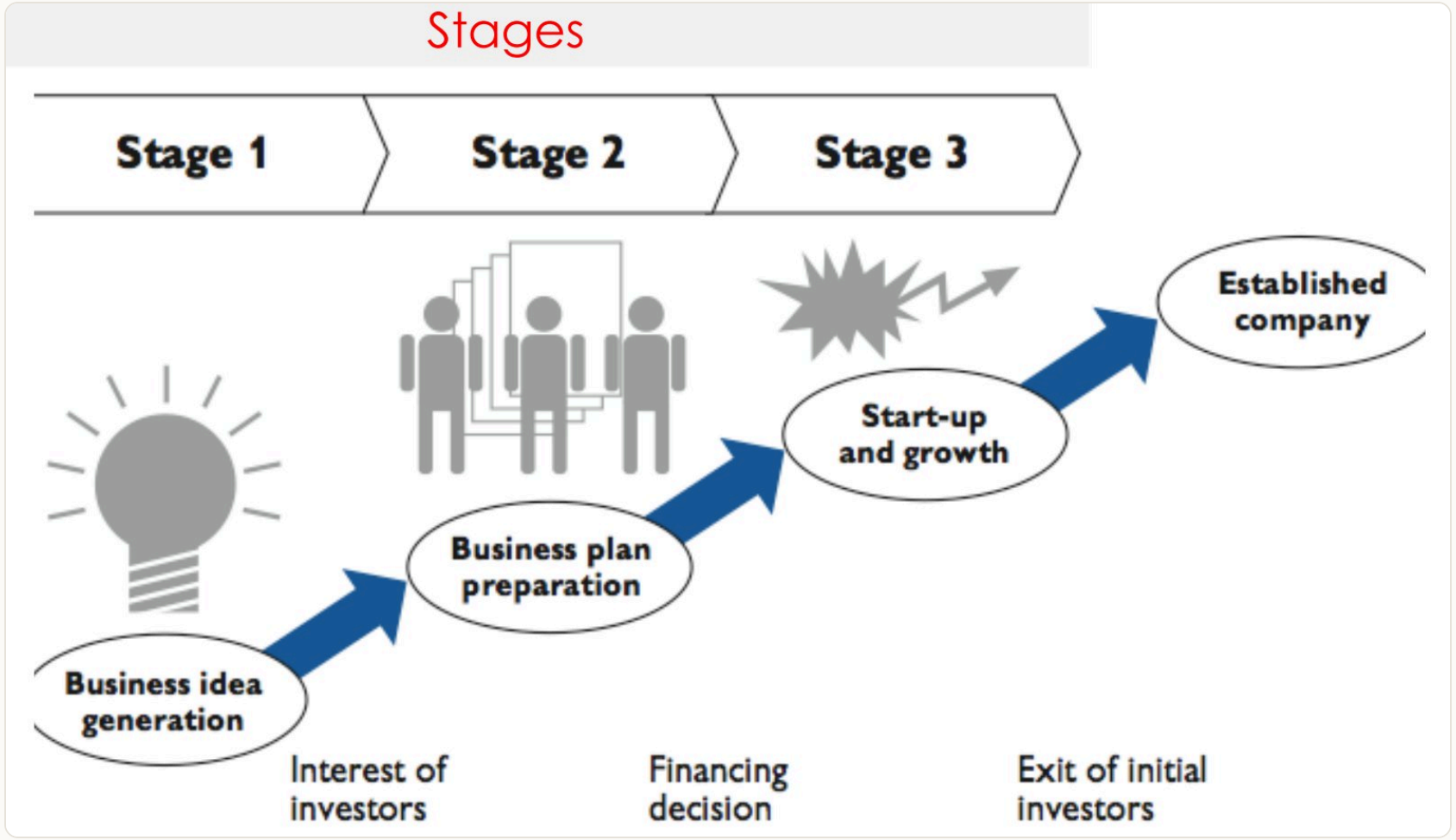
2025–2026 UPDATE

AI-driven biology now draws large rounds: Isomorphic Labs raised $600M in March 2025, while developing a new drug still costs $2B+ and takes 10–15 years.

Venture Capital Is Different From...

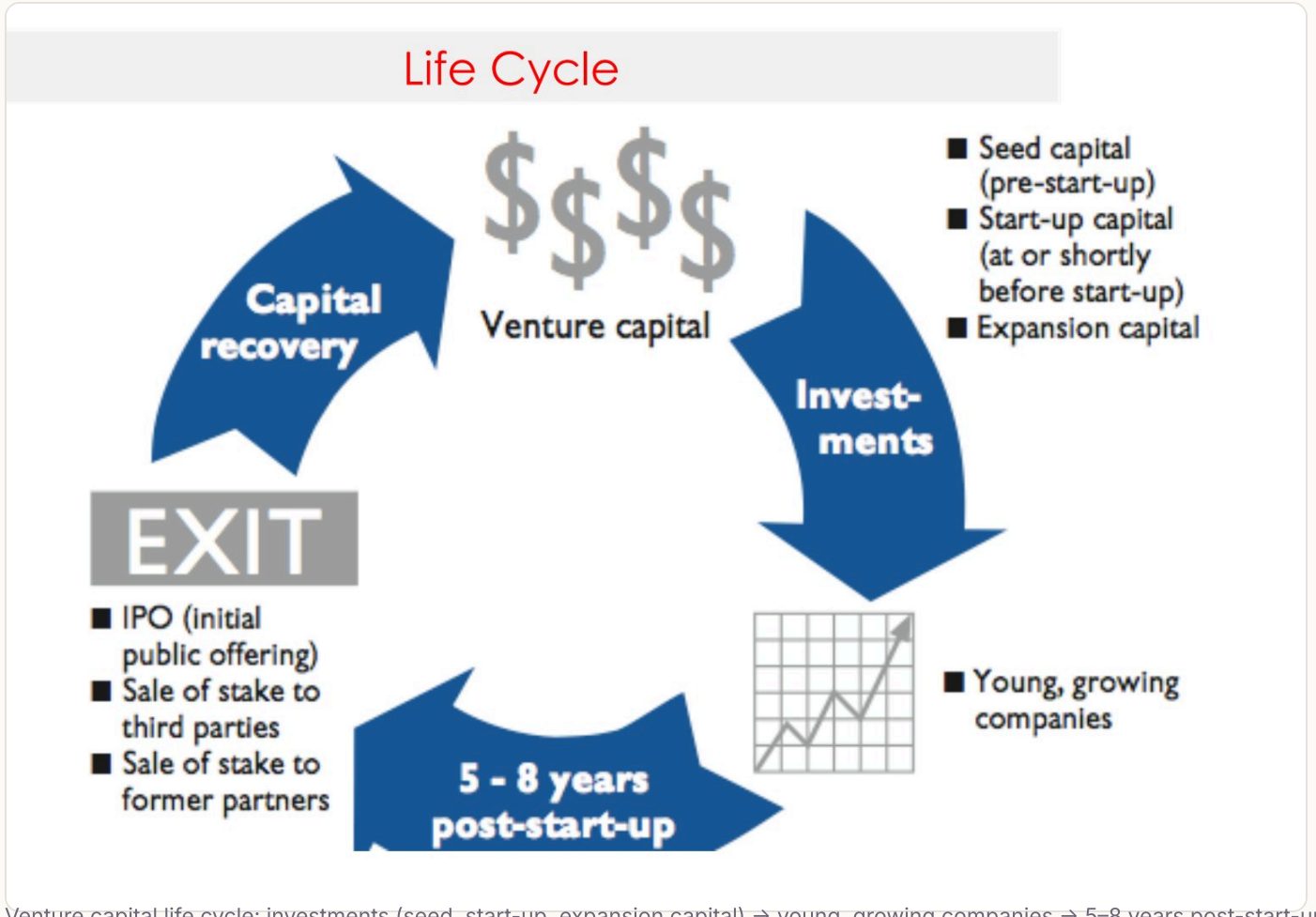
- Hedge funds
- Private equity
  - Good for badly managed companies

Summary: Start



Stages 1–3: business idea generation → business plan preparation → start-up and growth → established company; investors' interest, financing decision, exit of initial investors.

Summary: Exit



Venture capital life cycle: investments (seed, start-up, expansion capital) → young, growing companies → 5–8 years post-start-up → exit (IPO, sale of stake to third parties or former partners) → capital recovery.

Why Can't We, and How Can We?

- Capital is there, but no venture capitalists
- The best managers and programmers are not there
- Risk-taking is not there
- Experienced people
- Family-oriented structure
- Regulations and rules
- Hire and fire at will
- Don't make the mass stay where it is; let's create mass
- Stock options
  - Restricted stock; holding stock before exercise
- Taxation

2025–2026 UPDATE

Türkiye today: ~$589M invested in startups in 2025 across ~306 rounds (startups.watch), 8 Türkiye-founded companies valued at $1B+ (Dealroom), and licensed equity crowdfunding platforms since 2021.

Diversity

- Immigrant entrepreneurs and foreign-born professionals, scientists and engineers make a significant contribution to the US economy.
- Since 1990, immigrants have started 1 in 4 (25%) of US venture-backed public companies.
- This proportion shows the advantage the United States gains from an open legal immigration system.

2025–2026 UPDATE

Today 455 of 775 US unicorns (59%) have an immigrant founder, up from 55% in 2018 and 2022 (NFAP, 2026).

Immigrant-Founded

- The market capitalization of publicly traded, immigrant-founded, venture-backed US companies exceeds **$500 billion**.
- An example of the enormous wealth-creating ability of immigrant entrepreneurs.
- These companies employ about 220,000 people in the US and over 400,000 worldwide.
- Immigrants started over 40% of the venture-backed US public companies in technology manufacturing.

2025–2026 UPDATE

Immigrant-founded US unicorns are now worth $5.0T combined; 66% of US unicorns were founded by immigrants or children of immigrants (NFAP, 2026).

Immigrant-Founded Public Companies by Year

YEAR FOUNDED	IMMIGRANT-FOUNDED	NATIVE-FOUNDED	TOTAL	IMMIGRANT-FOUNDED %
Prior to 1980	8	115	123	7%
1980–1989	48	198	246	20%
1990–2005	88	268	356	25%

Percentage of immigrant-founded venture-backed public companies by year established. Source: analysis of publicly traded companies from the Thomson Financial database.

Examples

COMPANY	IMMIGRANT-BORN FOUNDER OR CO-FOUNDER	COUNTRY OF BIRTH	EMPLOYEES (FY 2005)	INDUSTRY
Intel Corporation	Andy Grove	Hungary	99,900	Semiconductor and Related Device Manufacturing
Solectron Corporation	Winston Chen	Taiwan	53,000	Bare Printed Circuit Board Manufacturing
Sanmina-SCI Corporation	Jure Sola Milan Mandaric	Bosnia Croatia	48,621	Bare Printed Circuit Board Manufacturing
Sun Microsystems, Inc.	Andreas Bechtolsheim Vinod Khosla	Germany India	31,000	Electronic Computer Manufacturing
eBay Inc.	Pierre Omidyar	France	12,600	Electronic Auctions
Yahoo! Inc.	Jerry Yang	Taiwan	9,800	Web Search Portals
Life Time Fitness, Inc.	Bahram Akradi	Iran	9,500	Fitness and Recreational Sports Centers
Tetra Tech, Inc.	Henri Hodara	France	7,200	Engineering Services
UTStarcom, Inc.	Ying Wu	China	6,300	Telephone Apparatus Manufacturing
Google Inc.	Sergey Brin	Russia	5,680	Web Search Portals
Kanbay International, Inc.	Raymond J. Spencer Dileep Nath John Patterson	Australia India Canada	5,242	Computer Systems Design Services
Cadence Design Systems, Inc.	Alberto Sangiovanni-Vincentelli	Italy	5,000	Software Publishers
Juniper Networks, Inc.	Pradeep Sindhu	India	4,145	Telephone Apparatus Manufacturing
Watson Pharmaceuticals, Inc.	Allen Chao	Taiwan	3,844	Pharmaceutical Preparation Manufacturing
Parametric Technology Corporation	Samuel Geisberg	Russia	3,751	Software Publishers
Pediatrix Medical Group, Inc.	Roger Medel	Cuba	3,013	Offices of Physicians (except Mental Health Specialists)
NVIDIA Corporation	Jen-Hsun Huang	Taiwan	2,737	Semiconductor and Related Device Manufacturing
Salton, Inc.	Lewis Salton	Poland	2,466	Electric Housewares and Household Fan Manufacturing
Lam Research Corporation	David Lam	China	2,200	Semiconductor Machinery Manufacturing
WebEx Communications, Inc.	Subrah S. Iyar	India	2,091	Software Publishers

Employment reflects 2005 worldwide total
Sources: Company 10-K filings and Hoover's

2025–2026 UPDATE

Since then: Sun was acquired by Oracle (2010), Yahoo's core business was sold to Verizon (2017), Google became Alphabet (2015), and NVIDIA became the first company worth $4T (July 2025), then $5T (October 2025).

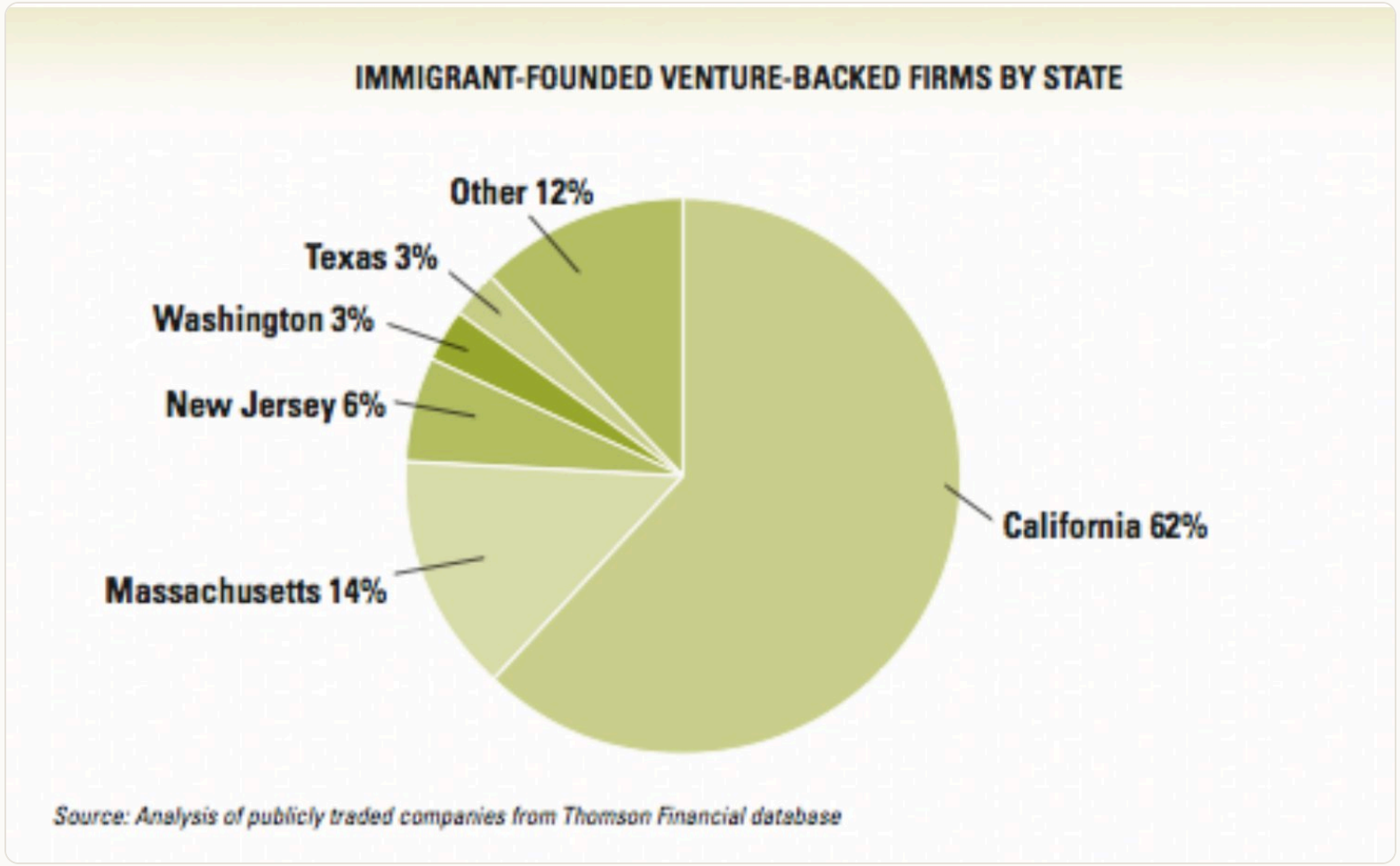
Immigrant-founded venture-backed public companies, e.g. Intel (Andy Grove), eBay (Pierre Omidyar), Yahoo (Jerry Yang), Google (Sergey Brin), NVIDIA (Jen-Hsun Huang), with country of birth, employees (2005) and industry. Sources: company 10-K filings, Hoover's.

Immigrant-Founded Companies by Industry

INDUSTRY	COMPANIES	EMPLOYMENT	% OF IMMIGRANT-FOUNDED FIRMS
High-tech manufacturing	60	282,442	42%
Information technology	34	48,794	24%
Life sciences	30	18,660	21%
Professional, scientific and technical services	6	17,317	4%
Other services	5	14,919	3%
Other manufacturing	5	13,177	3%
Finance and insurance	2	8,872	1%
E-commerce	2	234	1%
Total	144	404,415	100%

Employment reflects 2005 worldwide total. Sources: company 10-K filings and Hoover's.

By State



Immigrant-founded venture-backed firms by state: California 62%, Massachusetts 14%, New Jersey 6%, Washington 3%, Texas 3%, other 12%. Source: Thomson Financial database.

References

- Notes of A. L. Sangiovanni-Vincentelli
- *American Made*, by Stuart Anderson and Michaela Platzer

03

Silicon Valley History

From radio and vacuum tubes to HP, Shockley and Fairchild: how the Valley was born.

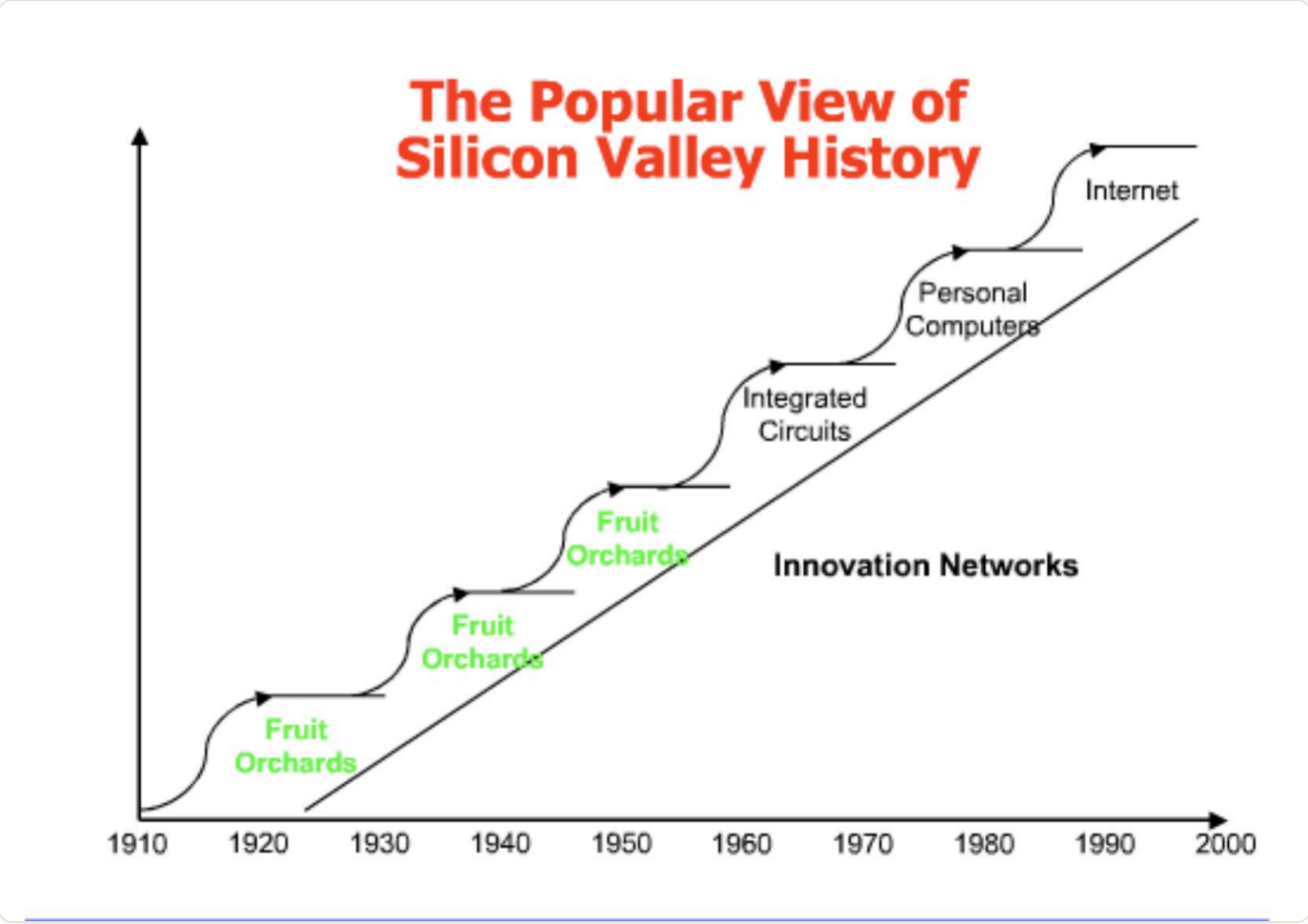
Silicon Valley History

- Gold rush, movies and electronics
- Academic excellence and garages
  - De Forest: vacuum tubes (1906)
  - Hewlett-Packard: HP (1939)
  - SRI: Stanford Research Institute
  - Fairchild
  - Intel
  - Google

> In 1971, trade press reporter Don Hoefler used "Silicon Valley" for the chip-making firms on the Peninsula, and the name stuck. Almost from the start it stood for more than chip making.



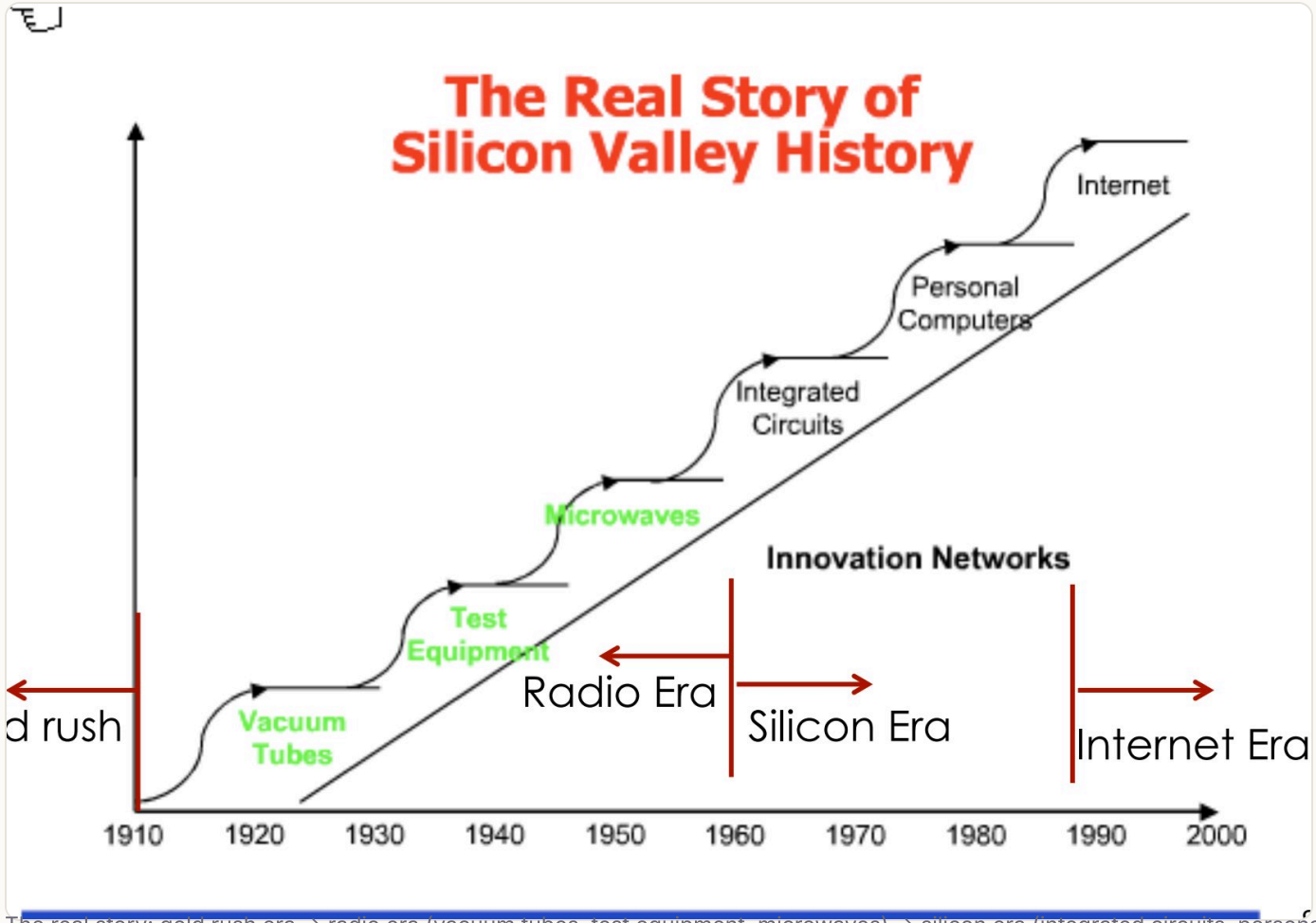
Timeline: The Popular View



The popular view of Silicon Valley history: fruit orchards until integrated circuits, personal computers and the internet. Source: Steve Blank, The Secret History of Silicon Valley.

SILICON VALLEY HISTORY

Timeline: The Real Story



The real story: gold rush era → radio era (vacuum tubes, test equipment, microwaves) → silicon era (integrated circuits, personal computers) → internet era. Source: Steve Blank, The Secret History of Silicon Valley.

Radio Era

The Valley's first chapter: hobbyist radio engineers, Federal Telegraph and the vacuum tube.

SILICON VALLEY HISTORY

Silicon or Radio?

- The Valley's culture formed around **radio in the 1900s**: engineers in hobby clubs who brainstormed, borrowed equipment, spun new companies out of old ones, and built a meritocracy of those who made electronics cheaper, faster and better.
- In 1909 Stanford graduate Cyril Elwell acquired radio patents and persuaded Stanford officials, including President David Starr Jordan, to finance **Federal Telegraph Co.** in Palo Alto.
- The same year in San Jose, Charles Herrold started a school for radio engineers and began broadcasting: "Broadcasting's Forgotten Father" (PBS, 1994). The region then had none of its cachet relative to New York, New Jersey and Boston.
- Impressed US naval officials gave Federal Telegraph huge contracts in World War I: the first, but not the last, time war fueled the region's tech firms.

SILICON VALLEY HISTORY

Radio

- Around 1910, Peter Jensen and Edwin Pridham left Federal Telegraph to start an R&D firm in a garage in Napa to improve loudspeakers. In 1917 they formed **Magnavox**, which built public address systems for WWI warships.
- The war's end took the wind out of the region's sails. Eastern radio powers, notably RCA, dominated the 1920s and 1930s. The entrepreneurial fire cooled but did not die.
- The next chapter is the familiar tale of Hewlett and Packard hatching the region's first technology giant in a Palo Alto garage.
- Fuller versions of the story also credit their mentor, Stanford engineering professor **Frederick Terman**.

Source: San Francisco Chronicle (SFGate), 29 Sep 2007

Vacuum Tubes

- In 1912 Lee de Forest and two Federal Telegraph colleagues heard a housefly's footsteps amplified 120 times: the first time a vacuum tube amplified a signal, the birth of electronics.
- He sold the Audion to the telephone company as an amplifier for transcontinental calls ($50,000); by 1916 it worked as a radiotelephone oscillator and transmitter.
- His work was partly financed by Stanford officials and faculty.

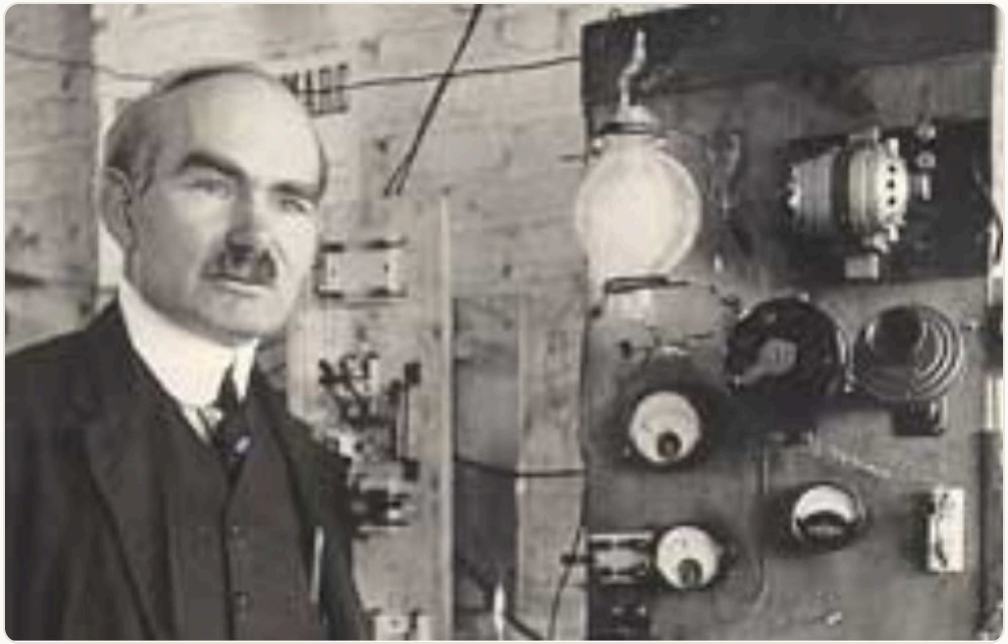


Photo: Lee de Forest, Palo Alto, 1915. Sources: Rogers and Larsen, cited in Carolyn Tajnai, Links Between Stanford University and Industry (1995); de Forest biography.

SILICON VALLEY HISTORY

Hewlett-Packard (HP) Garage

- The garage: **birthplace of Silicon Valley**.
- Bill Hewlett and Dave Packard started HP in 1939.
- Former Stanford provost Frederick Terman inspired the two graduate students to start an electronics company. They honored their mentor by funding the Terman Engineering Building, dedicated in 1952.





Photo: Bill Hewlett (center) with David Packard (left) and Frederick Terman.

HP History

- Hewlett and Packard tossed a coin to decide between "Hewlett-Packard" and "Packard-Hewlett".
- From the 1940s into the 1990s HP made electronic test equipment (signal generators, voltmeters, oscilloscopes, frequency counters and more), often more sensitive and precise than rivals.
- First hit: the **HP200A** audio oscillator. A small light bulb used as a temperature-dependent resistor let them sell it for $54.40 when rivals charged over $200. The 200 series ran until at least 1972: 33 years.
- An early customer, Walt Disney, bought eight 200B oscillators ($71.50 each) to certify Fantasound systems for *Fantasia*.

> HP is the symbolic founder of Silicon Valley, though it began semiconductor work (HP Associates, c. 1960) only after the "Traitorous Eight" left Shockley to create Fairchild in 1957.

Silicon Era

William Shockley, the "Traitorous Eight" and the founding of Fairchild Semiconductor.

SILICON VALLEY HISTORY

Silicon Valley's Roots

- Fifty years ago (1957), when most employees expected to stay with one company for life and the region was an agricultural paradise known for prunes and apricots, eight young men who disliked their Nobel Prize-winning boss, **William Shockley**, made a radical move: **they decided to quit their jobs**.
- Launching their own company "will be looked on as a shameful act".
- Shockley (1910–1989), Nobel winner but bad manager, co-invented the transistor with John Bardeen and Walter Brattain (1956 Nobel Prize in Physics).



This dollar bill was one of 10 that were signed as a symbolic contract among the eight men who would start Fairchild Semiconductor, the first successful semiconductor company in Silicon Valley, and their financial backers. Photo courtesy of Special Collections, Stanford University Libraries



The dollar bill signed by the eight founders and their financial backers. Source: San Francisco Chronicle (SFGate), 30 Sep 2007; photo: Stanford University Libraries.

SILICON VALLEY HISTORY

Fairchild Semiconductor Company

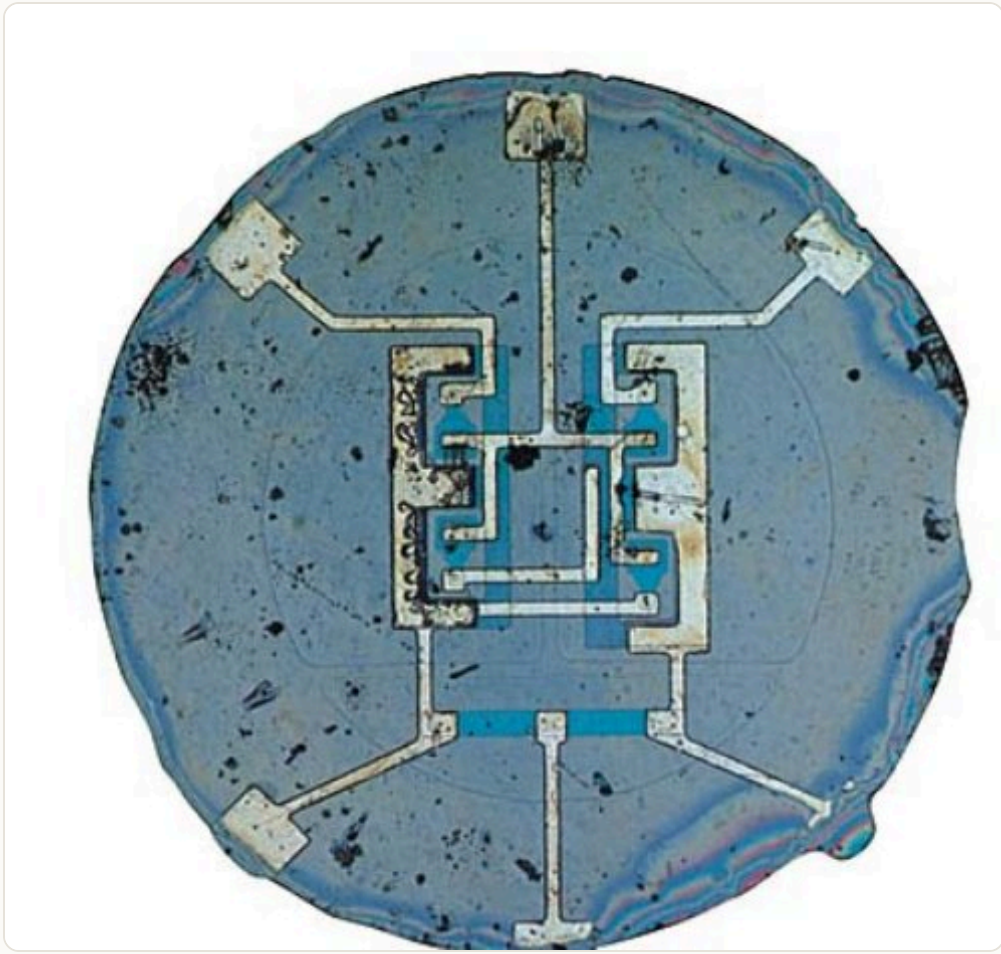
- Fairchild Semiconductor is established.
  - Six of the eight had doctorates and only one was over 30. With backgrounds in physics, electronics, engineering, metallurgy or chemistry, they shared two goals: build silicon transistors, on their own terms.
  - Julius Blank, Victor Grinich, Jean Hoerni, Eugene Kleiner, Jay Last, Gordon Moore, Robert Noyce and Sheldon Roberts
  - New York investment bankers: Arthur Rock, Bud Coyle
  - Sherman Fairchild's Fairchild Camera and Instrument lent $1.38M over 18 months, with an **option to buy for $3M**.

> The founding fathers of Silicon Valley. Who is Moore? Who is Kleiner?

Read more: San Francisco Chronicle (SFGate), 30 Sep 2007

Fairchild Semiconductor Philosophy

- Fairchild's eight founders gave the company a culture that today might be called "quintessential Silicon Valley": open communication, laissez-faire management, flat organizational structures and autonomous research groups.
- The founding team also pushed for a generous distribution of stock options, but the lead shareholder of Fairchild's parent company called the practice "creeping socialism."



Source: San Francisco Chronicle (SFGate), 30 September 2007.

The Fairchildren

- Fairchild was one of the first companies to use offshore labor to assemble and test its microchips.
- Fairchild employees formed dozens of startups (dubbed the "Fairchildren"), several of which are still at the heart of the $228 billion global semiconductor industry.
  - Andy Grove of Intel, Jerry Sanders of AMD, and Charlie Sporck and Floyd Kvamme of National Semiconductor all worked at Fairchild.
- Fairchild's founders and employees went on to create no fewer than 65 technology companies.

Source: San Francisco Chronicle (SFGate), 30 September 2007.

Transistor History

- William Shockley left Bell Labs in 1954 to start his own company in Palo Alto, California — the seed of Silicon Valley.
- Young engineers such as Gordon E. Moore and Robert N. Noyce joined the Shockley company.
- In 1957 Moore, Noyce and their colleagues — the "traitorous" ones, as Shockley came to call them — set up Fairchild.
- 1959: Fairchild introduced the new planar technology.
- Jack Kilby (Texas Instruments) and Robert Noyce (Fairchild) each conceived the integrated circuit in 1959.
- Texas Instruments called it "the most significant development by Texas Instruments since ... the commercial silicon transistor."

SILICON ERA

Intel

- Intel became the largest of the Fairchildren, and Moore the best known of the eight. But the gang leader was his charismatic colleague Robert Noyce.
- A technical innovator — in this meritocracy he had to be — Noyce designed in 1961 the first chip that let two transistors work together on a single slice of silicon.
- Called the "integrated circuit," it is the ancestor of today's billion-transistor chips.



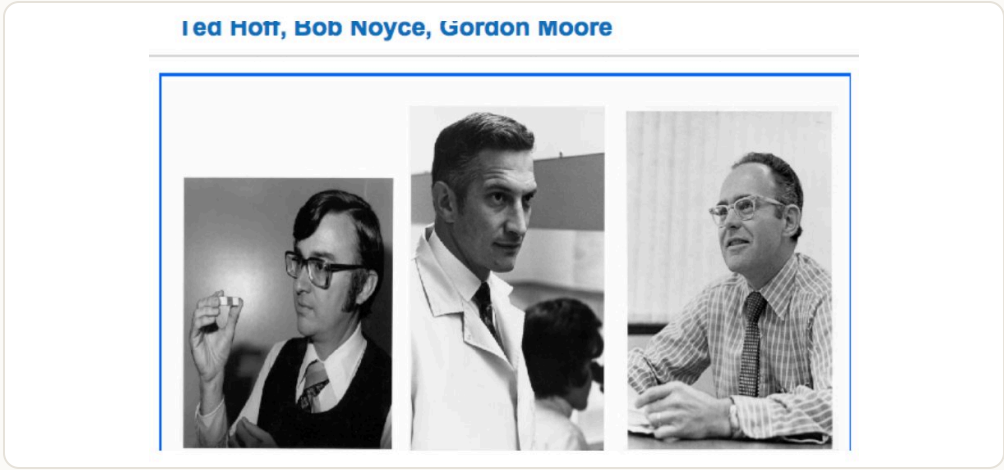
2025–2026 UPDATE

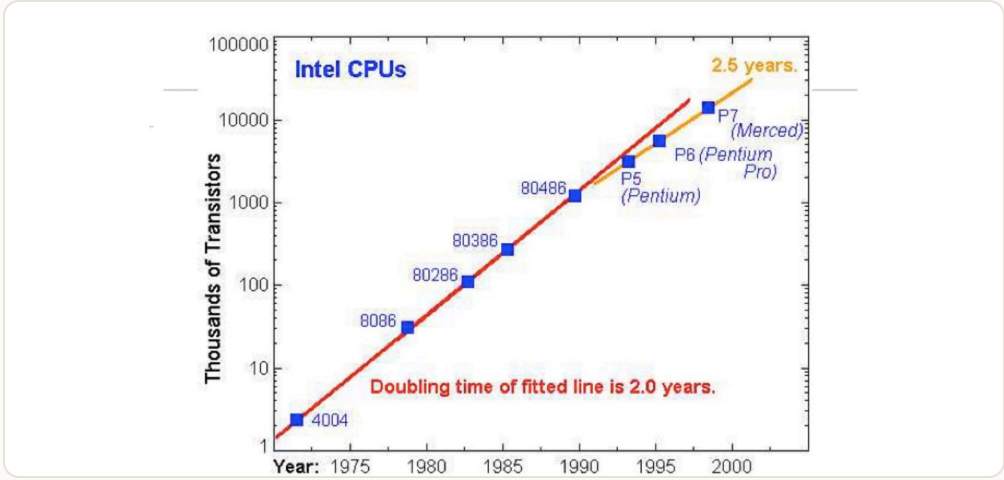
Chips have kept scaling: Nvidia's Blackwell GPU packs 208 billion transistors.

Source: San Francisco Chronicle (SFGate), 29 September 2007.

Intel and Moore's Law

Robert Noyce and Gordon Moore (author of "Moore's Law") were among the "traitorous" of Fairchild!





Photos: Ted Hoff, Bob Noyce, Gordon Moore. Chart: transistors per Intel CPU, 1971–2000 — the fitted line doubles about every 2 years.

Apple

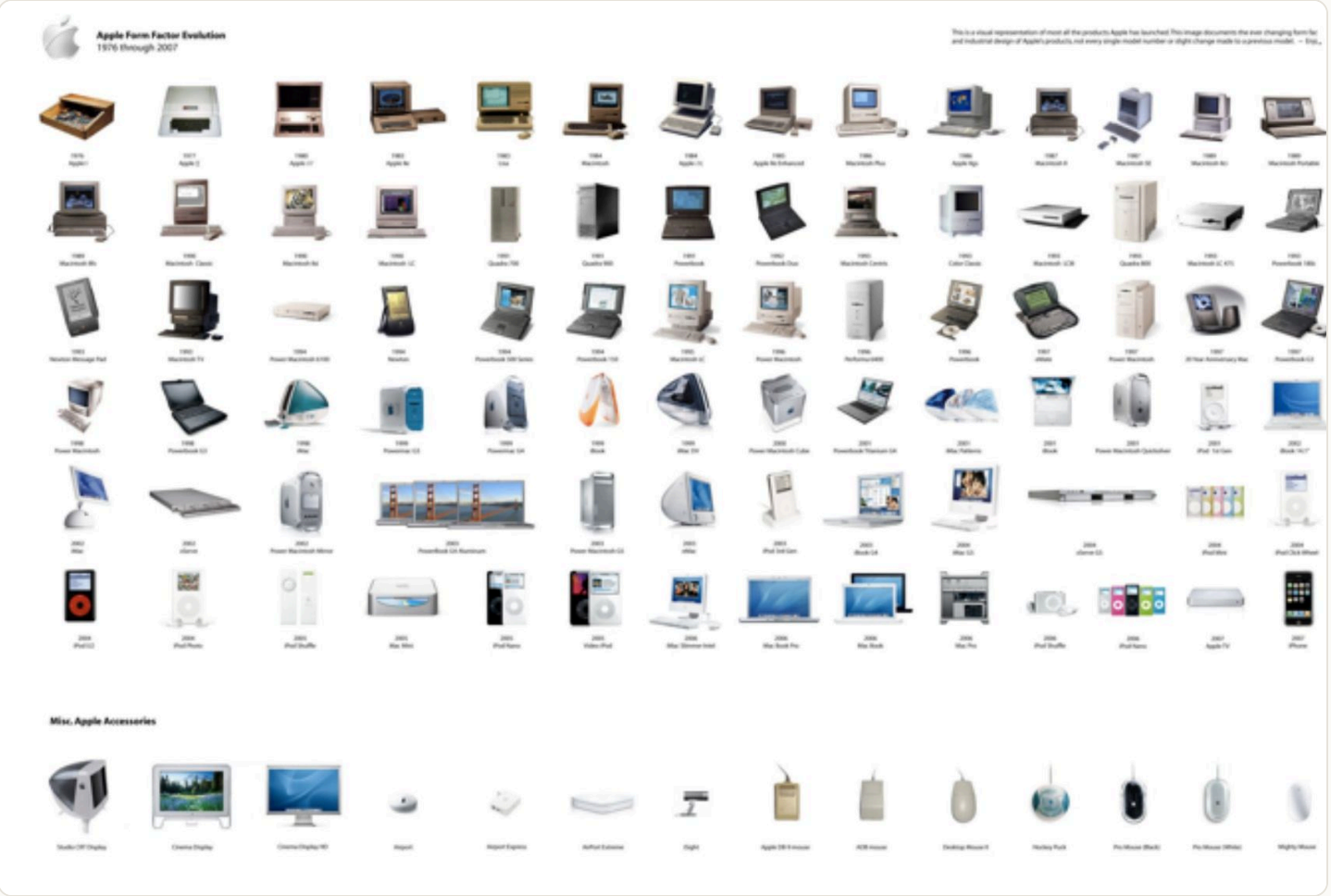
- 1975: the Homebrew Computer Club formed; Steve Wozniak showed off the Apple I there in 1976.
- Jobs, a high-school friend of Wozniak, had worked at Atari, idolized its founder Nolan Bushnell, had a tremendous drive to start a company and excellent ideas for the coming home computer.
- They formed a partnership and built Apple Is at night in the garage. A $50,000 order from a local store put them "in heaven."





The garage of Steve Jobs' parents on Crist Drive in Los Altos, California.

Apple History



Apple form-factor evolution, 1976 through 2007: every product from the Apple I to the iPhone.

Government and Military Funding

- The Soviet launch of Sputnik on 4 October 1957 prodded the United States to modernize its missile and space program.
- The newfangled silicon chips were considered vital — albeit costly — components.
- Historian Paul Ceruzzi writes that NASA and the Defense Department bought so many "that the price dropped from $1,000 a chip to between $20 and $30."

Source: San Francisco Chronicle (SFGate), 29 September 2007.

From Integrated Circuit to PC and Internet

- By the 1970s Silicon Valley was poised to capitalize on new civilian technologies like PCs, as exemplified by Apple Computer.
- In the 1980s excitement shifted to scientific workstations and networking devices from firms like Sun Microsystems and Cisco Systems, and to software like the version of UNIX perfected at UC Berkeley.
- In the 1990s the point-and-click browser popularized by Netscape ignited the dot-com boom. After a painful bust and slow recovery, the rise of Google and social networks such as Facebook signals another wave of entrepreneurship.

2025–2026 UPDATE

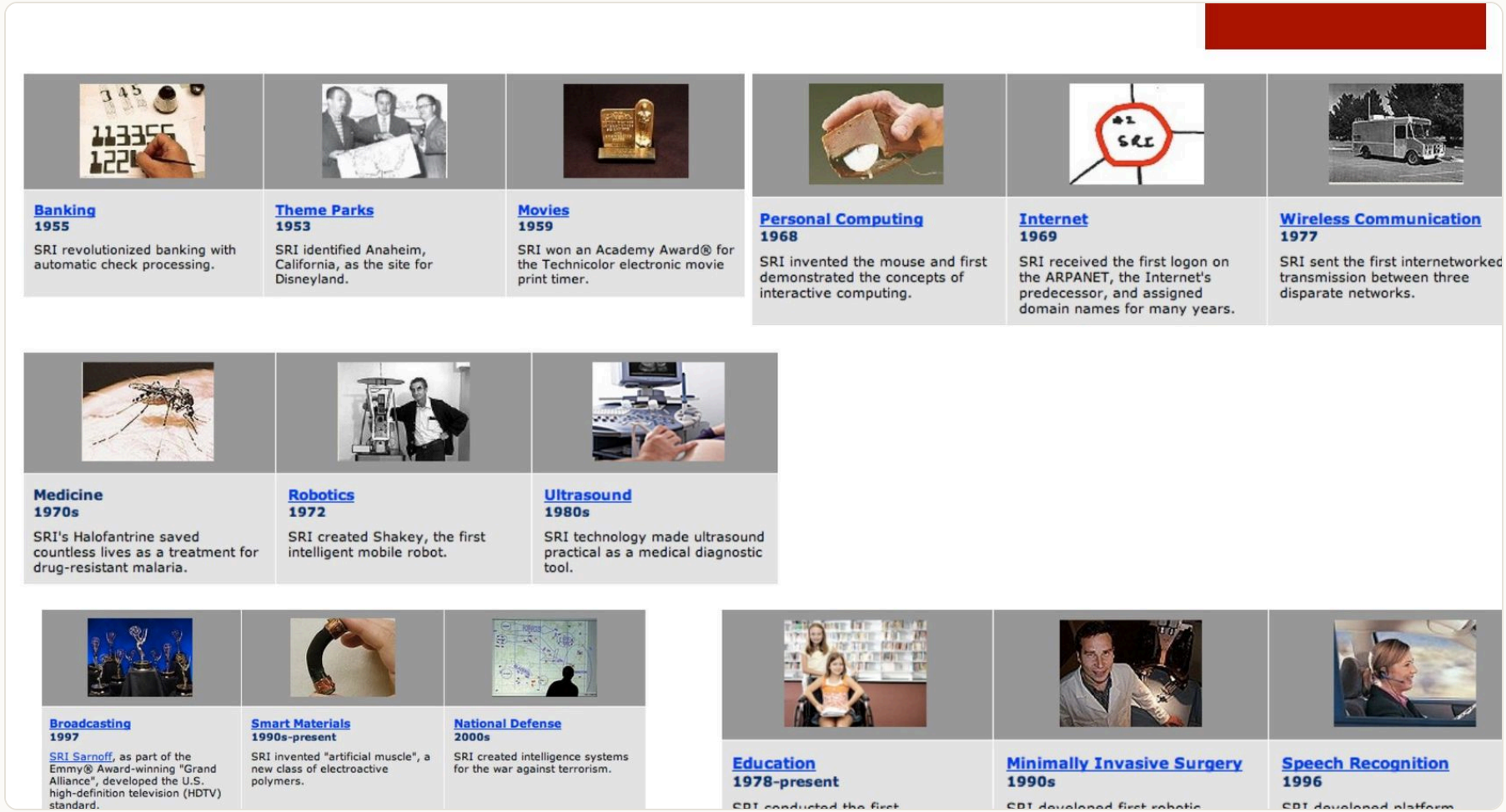
Facebook went public in May 2012 and was renamed Meta in 2021; Google was restructured as Alphabet in 2015.

Source: San Francisco Chronicle (SFGate), 29 September 2007.

SRI — Stanford Research Institute

- SRI International, founded as Stanford Research Institute, is one of the world's largest contract research institutes.
- The trustees of Stanford University established it in 1946 as a center of innovation to support economic development in the region.
- It was later incorporated as an independent non-profit organization under U.S. and California law.
- SRI's headquarters are in Menlo Park, California, near the Stanford campus.

SRI Inventions



SRI firsts: check processing (1955), the mouse (1968), the first ARPANET logon (1969), Shakey the robot (1972), internetworking (1977).

First Industrial Park After SRI

The **first** building of **Silicon Valley**.



First Varian Associates building, Stanford Industrial Park, Palo Alto, California, 1953. Source: "Russell and Sigurd Varian — The Inventor and The Pilot," by Dorothy Varian, Palo Alto, 1983, p. 258.

Stanford's Role

Carolyn Tajnai describes this part of Stanford's history:

- "In the 1950s the idea of building an industrial park arose. The university had plenty of land — over 8,000 acres — but needed money to finance its rapid postwar growth. Leland Stanford's bequest prohibited selling the land, but nothing prevented leasing it.
- Long-term leases proved just as attractive to industry as outright ownership; thus the Stanford Industrial Park was founded, to create a center of high technology close to a cooperative university.
- It was a stroke of genius. Terman, calling it 'our secret weapon,' suggested leases be limited to high-technology companies that might benefit Stanford.
- In 1951 Varian Associates signed a lease and in 1953 moved into the park's first building. Eastman Kodak, General Electric, Preformed Line Products, Admiral, Shockley Transistor Laboratory of Beckman Instruments, Lockheed, Hewlett-Packard and others soon followed."

Source: Carolyn Tajnai, "Fred Terman, the Father of Silicon Valley," 1995.

Silicon Valley Companies Started by Students

- **Hardware:** Apple, Cisco and Sun. (Dell too, but in Texas.)
- **Software:** too many to count ...
- **Internet search engines:** Inktomi, Yahoo, Ask and Google.
- **Social networks:** Facebook, Twitter, LinkedIn and Friendster.
- **Others:** InfoSeek, Powerset (Bing), eBay and Craigslist.

2025–2026 UPDATE

Twitter was bought by Elon Musk in 2022 and renamed X; Microsoft bought LinkedIn in 2016 ($26.2B); Yahoo's core business was sold to Verizon in 2017.

Google

- Google started in Susan Wojcicki's rented garage — but for her that may be the least important fact about her long relationship with the company.
- In 1998 the tiny company's landlord became its 16th employee and first marketing manager. (She married Google executive Dennis Troper; her sister Anne married co-founder Sergey Brin.)
- Today she is one of Google's 12 senior vice presidents; the advertising products she oversees produced about 96% of Google's 2010 revenue.



Source: Mike Swift, San Jose Mercury News, 2011.

When Did Silicon Valley Start?

- Some claim Silicon Valley started in the radio era.
- Others date it to Fairchild, since the notion that the Fairchild founders created the valley is justified by what financier Arthur Rock brought to the party: the money to bankroll bold engineers.
- "The venture capital sector really arises along with the semiconductor industry," according to historian Christophe Lécuyer.
- "Once the venture capital is in place, it makes all the other things possible."

> Start: radio? silicon? venture capital?

Source: San Francisco Chronicle (SFGate), 29 September 2007.

Why California and Not Other States?

- Which historical feature of Silicon Valley was instrumental in its development? Views differ widely.
- Many point to the unique features of Stanford University.
- Others note that the Valley is an exceptionally pleasant place to live on the Pacific coast, so researchers, engineers and programmers who come rarely want to leave.
- Those seeking government funding for a research park stress that the Valley formed at a peak of the Cold War, when high-tech firms enjoyed a "windfall" of defense programs.

> A unique California law, enacted for the sake of gold miners, helped power the high-tech boom in Silicon Valley.

Source: Gregory Gromov, "A Legal Bridge Spanning 100 Years: From the Gold Mines of El Dorado to the 'Golden' Startups of Silicon Valley."

SILICON ERA

The 1872 Law

- The law declared void any contract between employer and employee that restricted the employee's freedom to change employers — even to join a competitor.
- Any agreement signed earlier, such as an employment contract signed on hiring, that limited the right to choose one's workplace was unenforceable; the conflicting clauses were void.
- First enacted in 1872 in California's Civil Code, it is now Business and Professions Code §16600: "Except as provided in this chapter, every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void."
- As a result, in Silicon Valley several standard U.S. legal practices are de facto cancelled.

2025–2026 UPDATE

§16600 still voids non-competes; SB 699 and AB 1076 (effective 2024) extend this to non-competes signed out of state.

Non-Compete and Non-Disclosure Agreements

- Almost anyone hired by a high-tech company in nearly any U.S. state signs an agreement not to work for competitors for a set period (usually two years) after leaving: the **Non-Compete Agreement (NCA)**.
- Employees usually also sign an agreement not to disclose, without the employer's express written permission, confidential information about the company that they learn on the job: the **Non-Disclosure Agreement (NDA)**.

Why This Law?

- To understand why lawmakers adopted this framework in California in 1872 — and not in another state or era — it is worth examining how California became the 31st U.S. state.
- Silicon Valley was essentially built on groundwork laid by its first inhabitants: the gold seekers.
- El Dorado County is two or three hours by car from Silicon Valley, but 100 years separate the first mining camps (1848–1851) from the first high-tech firms in Stanford's industrial park.
- The law aimed to reduce shootings around the gold mines. A fortune-seeker, venturesome and armed to the teeth, who lost a dispute in court might settle it the Wild West way.
- So a law was needed to sharply reduce the chance that disputes between mine owners and hired hands would turn violent.

Gold Mine Disputes

- The owner of a registered gold claim generally had far more motivation than his employees to resolve every business problem in a court of law.
- So California's lawmakers protected the employee by guaranteeing the most peaceful way of resolving any problem with the owner: to turn and walk away to one of the surrounding claims and their potential new employers.
- Crucially, the law guaranteed workers of any level the right to leave an employer and immediately — without legal obstacles — take a position anywhere, even with the former employer's competitor in a neighboring mine.

Valley History: 1848–1872

- **1848** — the first year of the Gold Rush. Gold is found in El Dorado County near Sacramento, and "El Dorado" enters the vocabulary of treasure-seekers worldwide.
- **1849** — the first tens of thousands of gold-seekers arrive in California, then still Mexican territory where only about 2,000 Americans lived: the "Forty-niners."
- **1850** — California becomes a state, "The Golden State."
- **1853** — new arrivals exceed 300,000.
- **1872** — drawing on two decades of regulating violent business disputes, California adopts its Civil Code with a provision guaranteeing employees the freedom to choose their place of work.

Valley History: 1891–1956

- **1891** — former governor Leland Stanford founds Stanford University.
- **1910** — Lee de Forest, inventor of the triode (1908 patent), arrives in the Bay Area. The triode became critical to long-distance telephony, radio, television, radar and early digital electronics.
- His arrival began turning the area into a world center of electronics talent; World War I defense contracts gave it a first boost, and it reached critical mass in the decade after World War II.
- **1951** — Stanford Industrial Park is set up as a high-tech center in partnership with the university; Varian, General Electric and Eastman Kodak are among the first tenants.
- **1956** — William Shockley, co-inventor of the transistor, founds Shockley Semiconductor in Mountain View: the baton passes from the vacuum-tube triode to the solid-state one.

Valley History: 1957–1971

- **1957** — the "Traitorous Eight" leave Shockley Semiconductor to found Fairchild Semiconductor.
- **1968** — two of them, Robert Noyce and Gordon Moore, leave Fairchild to found Intel.
- In just 20 years, eight former Shockley employees gave rise to 65 new enterprises, which did the same in turn.
- Conflicts between creative teams and veteran managers were common in every U.S. industrial park. But outside California, non-compete agreements that new recruits must sign restrict leaving for a rival or starting a competing company. They act like graphite rods in a nuclear reactor, slowing the chain reaction of new startups.
- **1971** — the press coins the term "Silicon Valley."

2025–2026 UPDATE

The US FTC's 2024 nationwide non-compete ban was struck down in court and dropped in 2025, so most states still enforce non-competes.

The 1872 Law's Weight in Gold

- Gold Rush output was about $80 million a year in period dollars — about $2 billion in today's money.
- Compare that with the "gold mines" found by Silicon Valley companies, which could multiply from the first generation of startups only thanks to the 1872 law.
- The New York Times called Apple's impact "the iPhone Gold Rush"; Apple's 2010 sales were about $60 billion.
- Intel — like many Valley startups, it would not have begun without the law — produced about $40 billion of sales in 2010 from its "silicon gold mine."
- This modern gold extraction, legally a legacy of the Gold Rush, has earned tens of thousands of Valley companies hundreds of billions of dollars.

Route 128

- The Route 128 region around Boston shares Silicon Valley's focus on electronics but contrasts in history, geography, community life and how interconnected its firms are.
- As in the Valley, companies along the 65-mile highway near Boston's and Cambridge's research universities grew from academia, industry and government: academics explore, agencies such as the Department of Defense and the National Science Foundation fund the experiments, and firms bring the ideas to market.



Anchors: Massachusetts Institute of Technology; DuPont, Kodak, Xerox (Rosegrant and Lampe). Source: NetValley.

Route 128 vs Silicon Valley

Silicon Valley: regional network

- Promotes **collective learning** and flexible adjustment among companies making specialty products in related technologies.
- Dense social networks and an open labor market encourage entrepreneurship and experimentation.
- Firms compete hard while learning from each other through informal communication and collaboration.
- Boundaries within and between companies, and with universities and trade associations, are porous.

Route 128: independent companies

- Dominated by a few relatively vertically integrated corporations that keep to themselves.
- Secrecy and corporate loyalty govern relations with customers, suppliers and competitors, favoring stability and self-reliance.
- Hierarchies keep authority centralized; information flows vertically.
- Boundaries between and within companies stay distinct.

> These two systems illuminate the different fates of the two economies.

Characteristics of the Valley

- Job mobility shows the networks' success: average turnover at small and mid-size firms was 35%, and average job tenure in the 1980s about two years.
- With so many tech firms close together, people could change employers without moving house or changing their children's school.
- The Valley's attitude catalyzed risk-taking: small groups of dissatisfied employees tinkered with their own ideas after work.
- Roles became interchangeable — employers became employees, co-workers became competitors. Engineers were loyal to technology and their peers more than to any single firm. The regional motto: "Competition demands continuous innovation, which in turn requires cooperation among firms."
- Fast flows of practical information became the currency of choice, driving diversification, flexibility and resilience.
- Hierarchies were weak; from Hewlett and Packard on, firms sought close employer–employee interaction and gave divisions broad autonomy.

Source: AnnaLee Saxenian, Regional Advantage, 1994.

Constant Revolution

- Technological innovation produces constant revolution. Large pools of venture capital mean ideas turn into products more rapidly.
- But it also means existing companies that do not move fast are left behind and ultimately destroyed.
- For engineers, you may become wealthy through stock options — or unemployed when your employer goes extinct.
- IBM and AT&T once offered stability and lifetime employment, and at the start of the 1980s seemed unassailable. IBM set the standards; the industry was "IBM and the BUNCH" (Burroughs, Univac, NCR, CDC, Honeywell).
- By the decade's end IBM had shed tens of thousands of employees and was viewed as a "mainframe dinosaur"; the BUNCH were gone or shadows of their former selves.

DEC

- Digital Equipment Corp. (DEC) rose while IBM declined; at its zenith it was the second-largest U.S. computer company.
- In the early 1980s the DEC VAX delivered computing power at a fraction of IBM's cost. DEC sold PDP-11 and VAX systems to scientists and engineers, then made big inroads into commercial computing. DEC was seen as cutting-edge and a top place for young engineers.
- In 1989 Eugene Brooks of Lawrence Livermore Labs wrote "Attack of the Killer Micros," on the impact of exponentially rising microprocessor power.
- DEC already felt it: the VAX and microVAX could not compete with Sun's UNIX workstations and with PCs. Sales declined and never recovered; DEC was eventually bought by Compaq, a maker of Intel-based PCs.

SGI

- The revolutionary effect of technology is accelerating. Silicon Graphics Inc. (SGI) was founded in 1982 by James Clark, then a Stanford professor.
- Like the DEC VAX, the SGI workstation was coveted by engineers and scientists. It visualized large physics data sets and rendered graphics for movies like Jurassic Park.
- In 1996, at the apex of its success, SGI founded its Silicon Studios subsidiary.
- Three years later SGI was struggling, its profits turned to losses. Faster Intel PC processors and graphics chips from S3, later 3Dfx and Nvidia, put SGI into a decline from which it may never recover.

2025–2026 UPDATE

Nvidia, then one of the small graphics-chip challengers, became the first company to reach $4T in market value (July 2025), then $5T (October 2025).

Eras of Silicon Valley

- **Silicon:** the Valley got its name from semiconductor companies, starting with Shockley Semiconductor; Moore and Noyce left to found Fairchild and later Intel. Chip firms are now a minority, but the Valley still has some of the world's best VLSI designers. Hewlett-Packard also belongs to this era.
- **Software and PC:** software companies like Oracle, and companies built on the microprocessor like Apple and Sun; also the era of mini-computers built from medium-scale integrated circuits.
- **Web 1.0:** networking and Internet startups. Cisco and 3Com were founded in the microprocessor era; Cisco grew explosively in the Internet boom.
- **Next:** the post-Internet-boom era, unfolding now.

2025–2026 UPDATE

The current era is AI: it took 65.4% of 2025 US venture deal value (PitchBook-NVCA).

The Internet Bubble

- Much is made of the Mosaic browser and HTML, but popular Internet use was made possible by cheap 14.4K modems, which appeared around 1994.
- One year later, on 9 August 1995, Netscape's IPO ignited the Internet boom and insane stock valuations for Internet companies.
- Designing and building a computer system takes two to three years: even with VLSI, the boards, power supply, cooling and enclosure must be designed and manufactured.
- It took Compaq a decade to build a billion-dollar valuation; Netscape did it in one year.
- The boom attracted huge pools of venture capital — mostly to Internet companies, but also to many other startups.

Conclusion

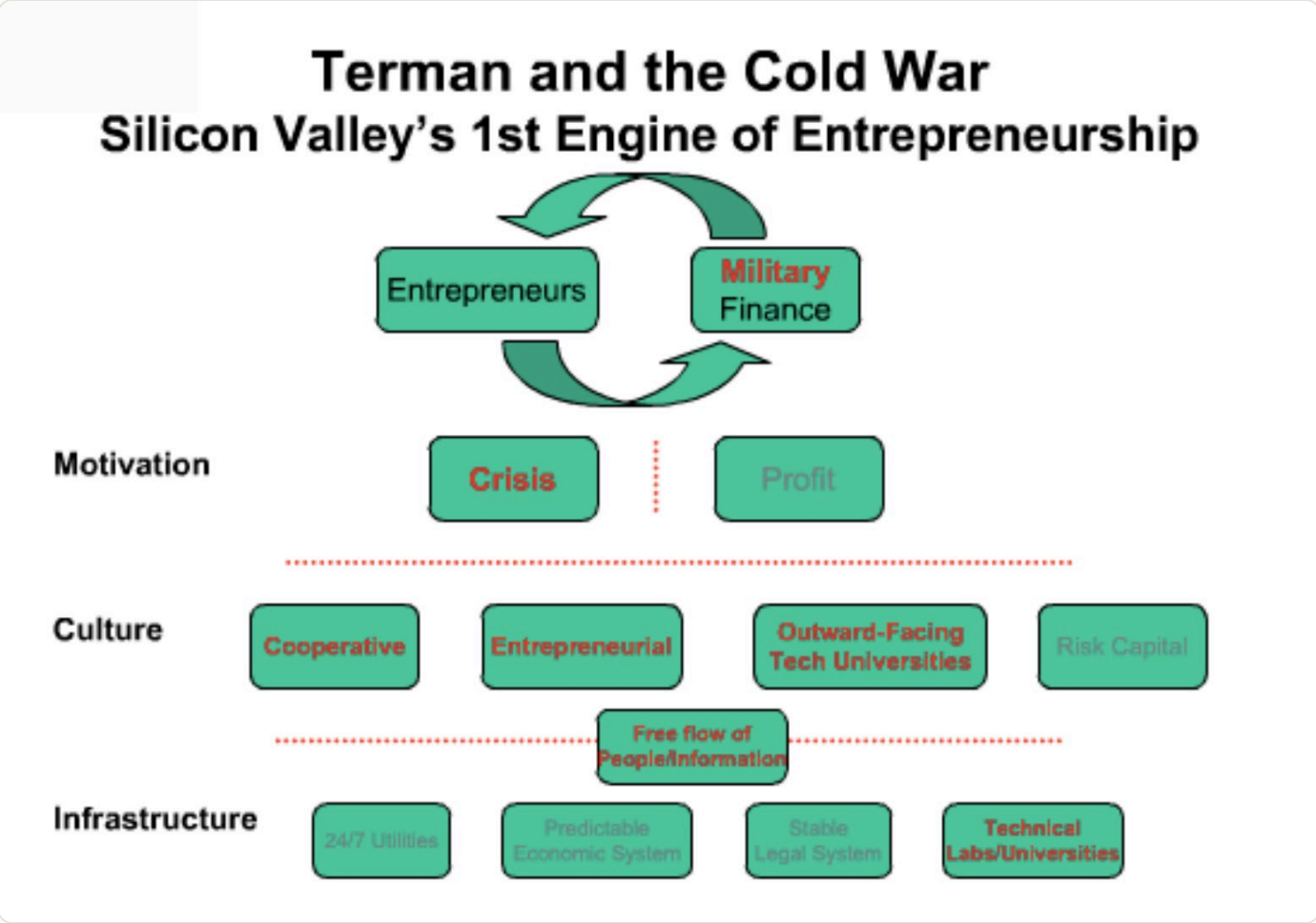
- **Resources:**
  - Excellent academic institutions: UC Berkeley and Stanford
  - Culture: Gold Rush mentality
  - Past successes: HP, Intel and Oracle
  - Ready capital (VC community)
  - Minimal bureaucracy
  - Experienced talent from around the world

> Silicon Valley promotes collective learning and flexible adjustment among companies that make specialty products within a broad range of related technologies (Saxenian, 1994).

2025–2026 UPDATE

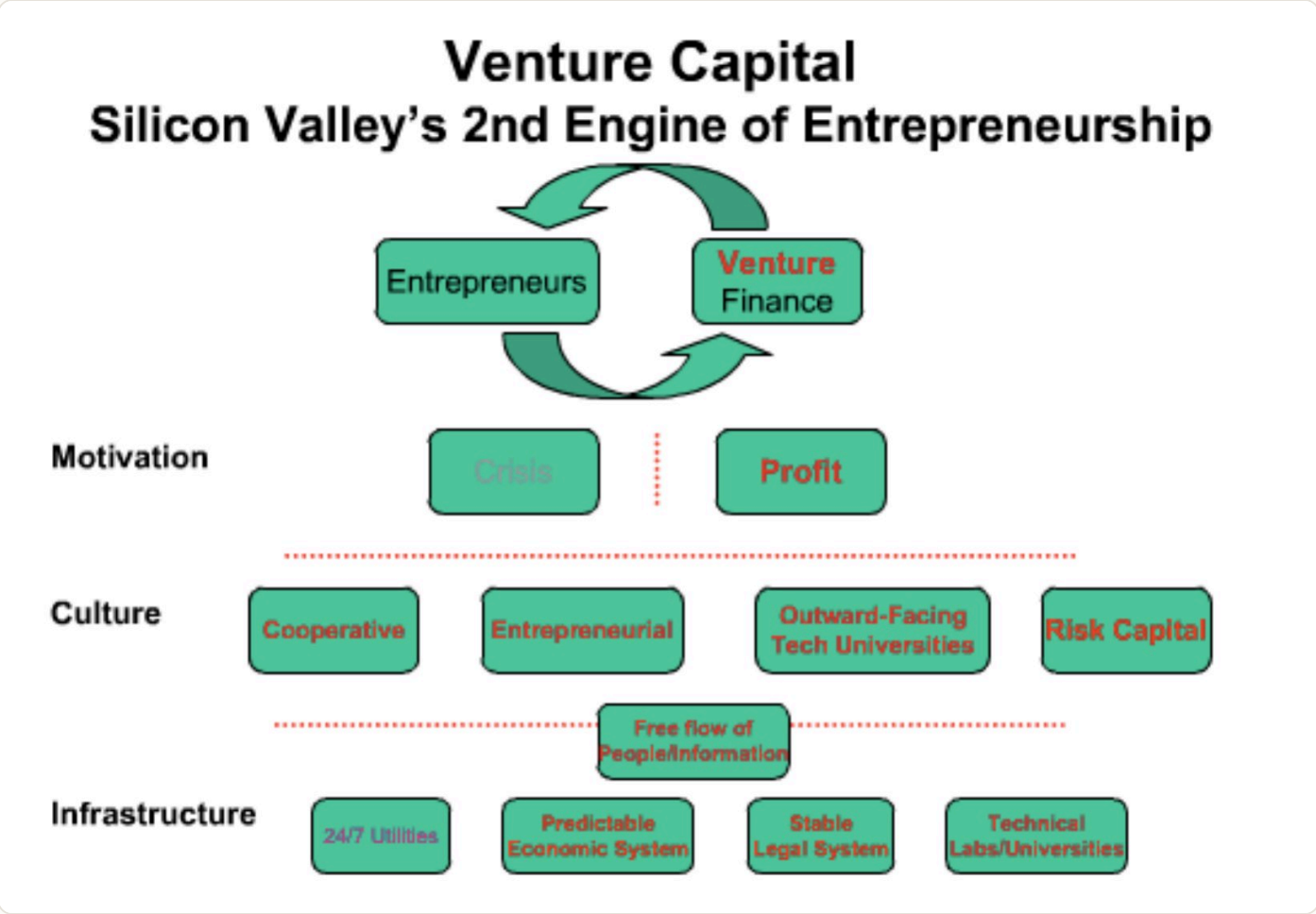
Capital is still concentrated here: the Bay Area and New York took 64.2% of 2025 US venture deal value (PitchBook-NVCA).

Summary: The First Engine



Terman and the Cold War — Silicon Valley's first engine of entrepreneurship: entrepreneurs and military finance, motivated by crisis. Source: Steve Blank.

Summary: The Second Engine



Venture capital — Silicon Valley's second engine of entrepreneurship: entrepreneurs and venture finance, motivated by profit. Source: Steve Blank.

04

The Internet: Web 0.0 to Web 3.0 and SoLoMo

How the Internet evolved — from early ideas of knowledge sharing and ARPANET to Web 1.0, Web 2.0, the semantic web and the Social-Local-Mobile trends.

Outline

- Web 0.0
- Web 1.0
- Web 2.0
- Web 3.0+

> In parallel: the history of venture capital.

The Concept of Knowledge Sharing

Augmentation of human intellect:

- Formatting directives
- Context-sensitive help
- Distributed client-server architecture
- Uniform command syntax
- Universal "user interface" front-end module
- Multi-tool integration
- Grammar-driven command language interpreter
- Protocols for virtual terminals and remote procedure calls
- Compilable "Command Meta Language"

The Concept of Knowledge Sharing (cont.)

- The mouse
- Two-dimensional display editing
- In-file object addressing, linking
- Hypermedia and outline processing
- Flexible view control, multiple windows
- Cross-file editing
- Integrated hypermedia e-mail and publishing
- Document version control
- Shared-screen teleconferencing
- Computer-aided meetings

SRI → Xerox PARC → Apple → Microsoft → open source

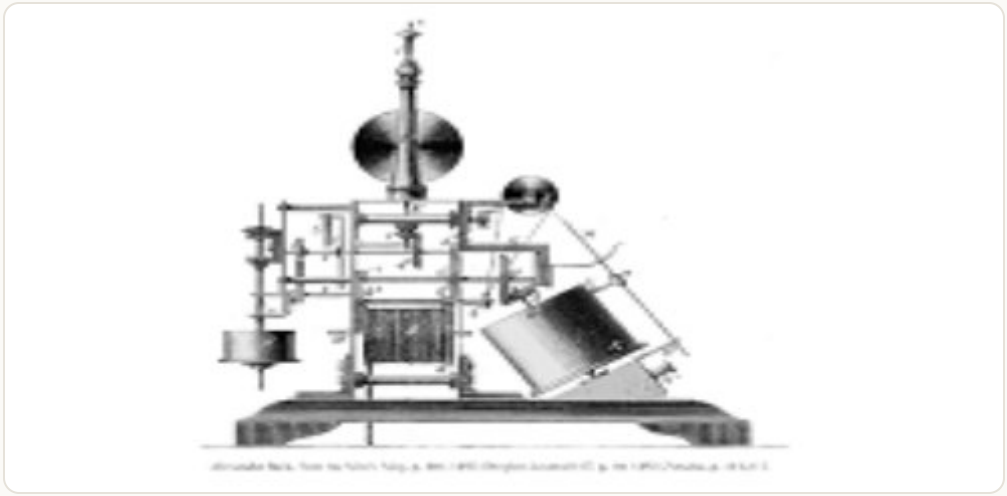


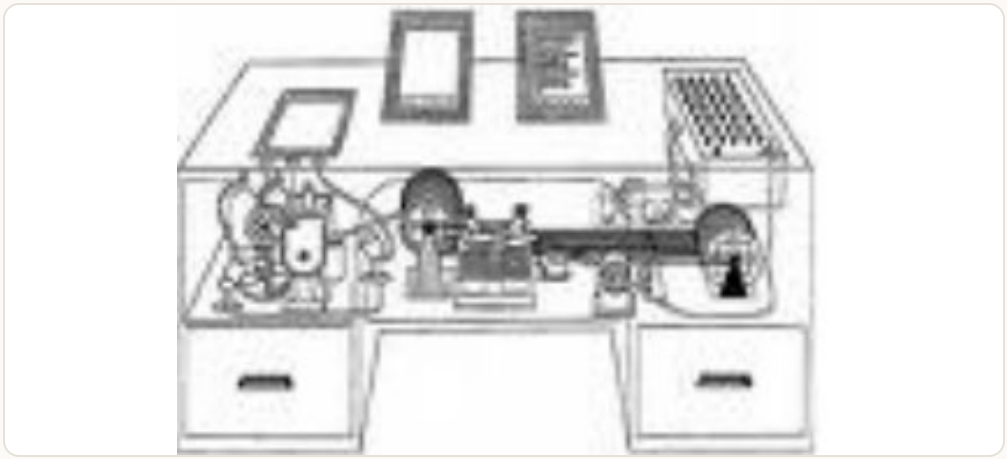


Douglas Engelbart and the first mouse (SRI).

Web 0.0

- Early predecessors:
  - Telegraph (1809)
  - Facsimile (1842), Alexander Bain
  - Telephone (1876), Alexander Graham Bell — who do you call?
  - Memex (1945), Vannevar Bush





> Foundation of dreams

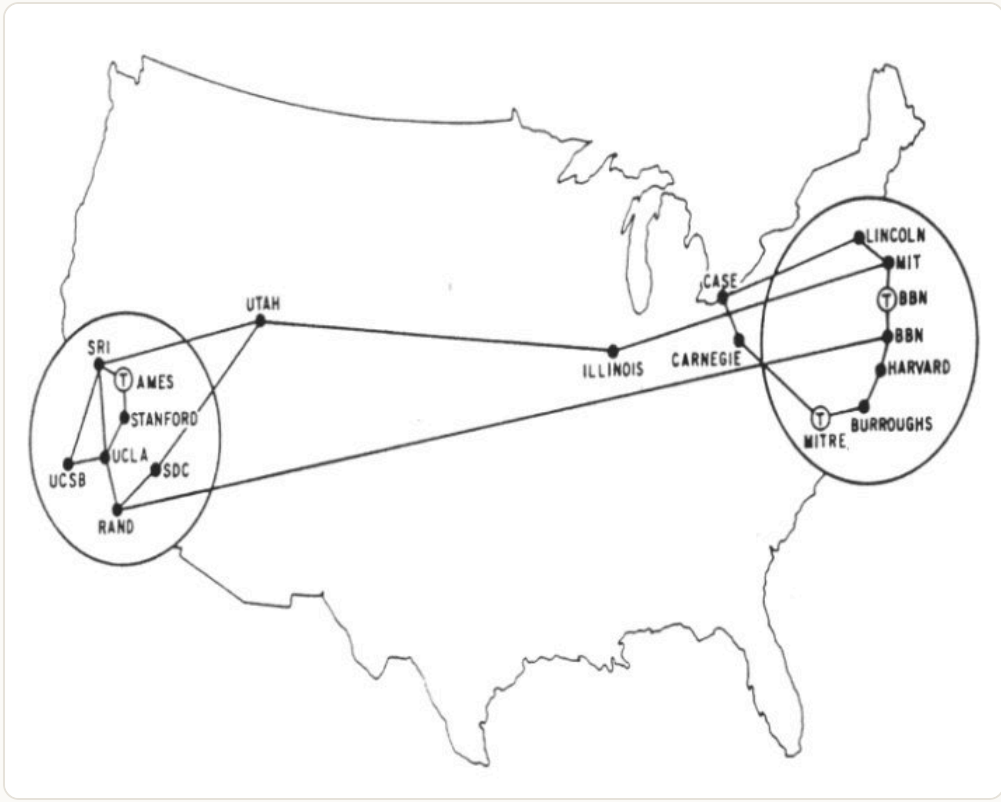
Bain's facsimile machine and Bush's Memex.

History of the Internet

The Internet was the result of visionary thinking by people in the early 1960s who saw great potential value in letting computers share information on research and development in scientific and military fields.

Web 0.3 (Alpha)

- ARPANET (Advanced Research Projects Agency Network).
- The U.S. feared the U.S.S.R. and China could disrupt its communications.
- "Lo...(gin)" — and the network crashed (1969): the first message, from UCLA to SRI (Stanford).



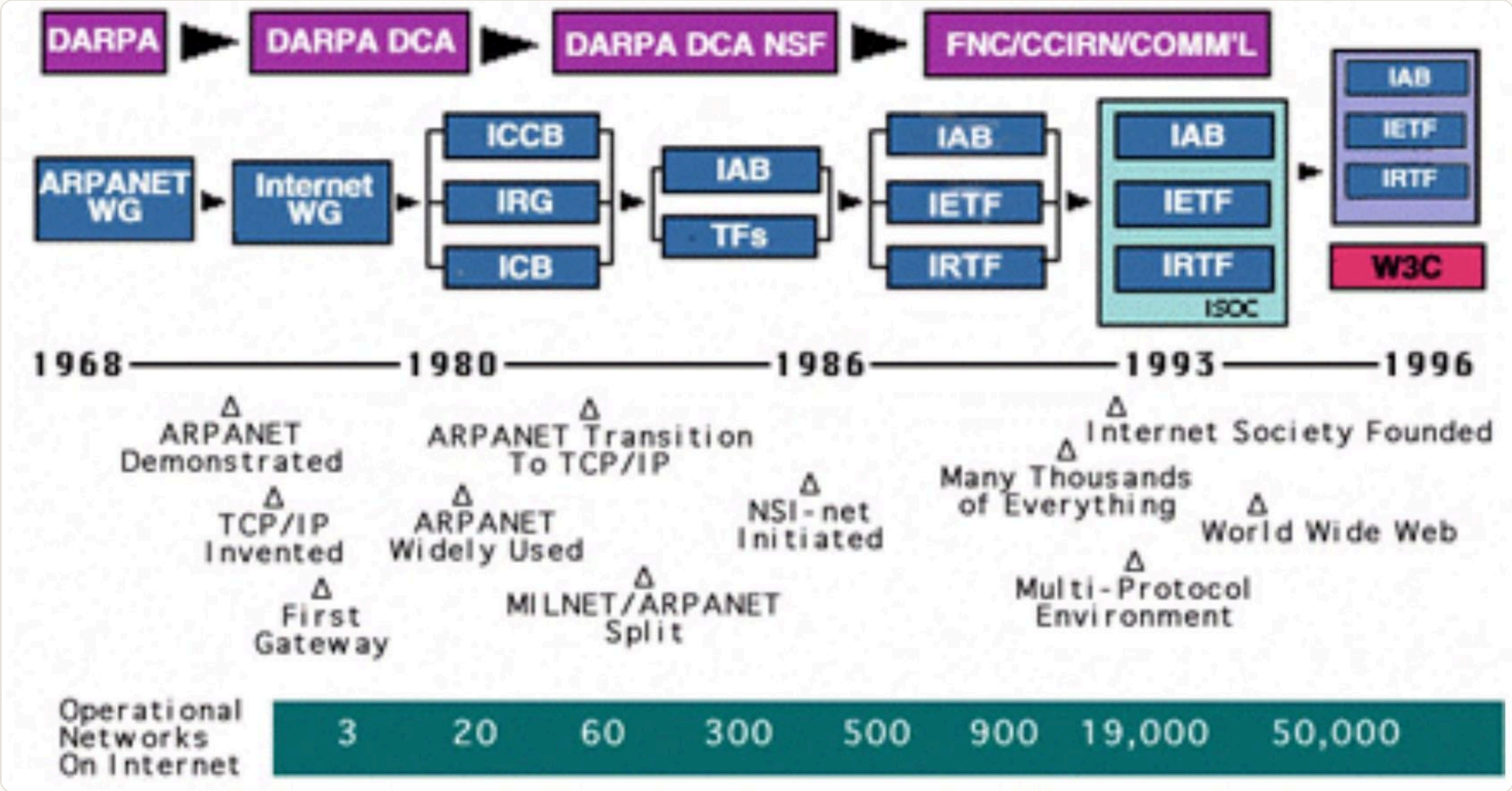
ARPANET map, September 1971.

ARPANET

- J.C.R. Licklider of MIT first proposed a global network of computers in 1962 and moved to the Defense Advanced Research Projects Agency (DARPA) in late 1962 to lead the work.
- Leonard Kleinrock of MIT, later UCLA, developed the theory of packet switching, the basis of Internet connections.
- In 1965 Lawrence Roberts of MIT connected a Massachusetts computer with a California computer over dial-up phone lines: wide-area networking was feasible, but circuit switching was inadequate.
- Kleinrock's packet-switching theory was confirmed. Roberts moved to DARPA in 1966 and developed his plan for ARPANET.

> These visionaries, and many more unnamed here, are the real founders of the Internet.

Internet Evolution

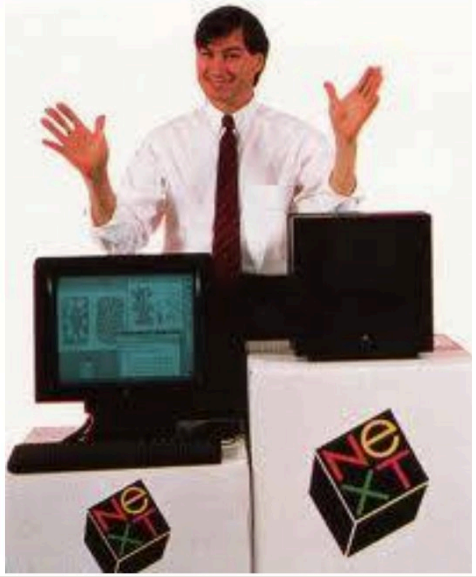


1968–1996: from DARPA and the ARPANET working group to IAB, IETF, the Internet Society and W3C; TCP/IP, NSFNET, the World Wide Web. Operational networks on the Internet grew from 3 to 50,000.

Web 0.5 (Beta)

- The Web: CERN publishing on NeXT (1989).
- Tim Berners-Lee.





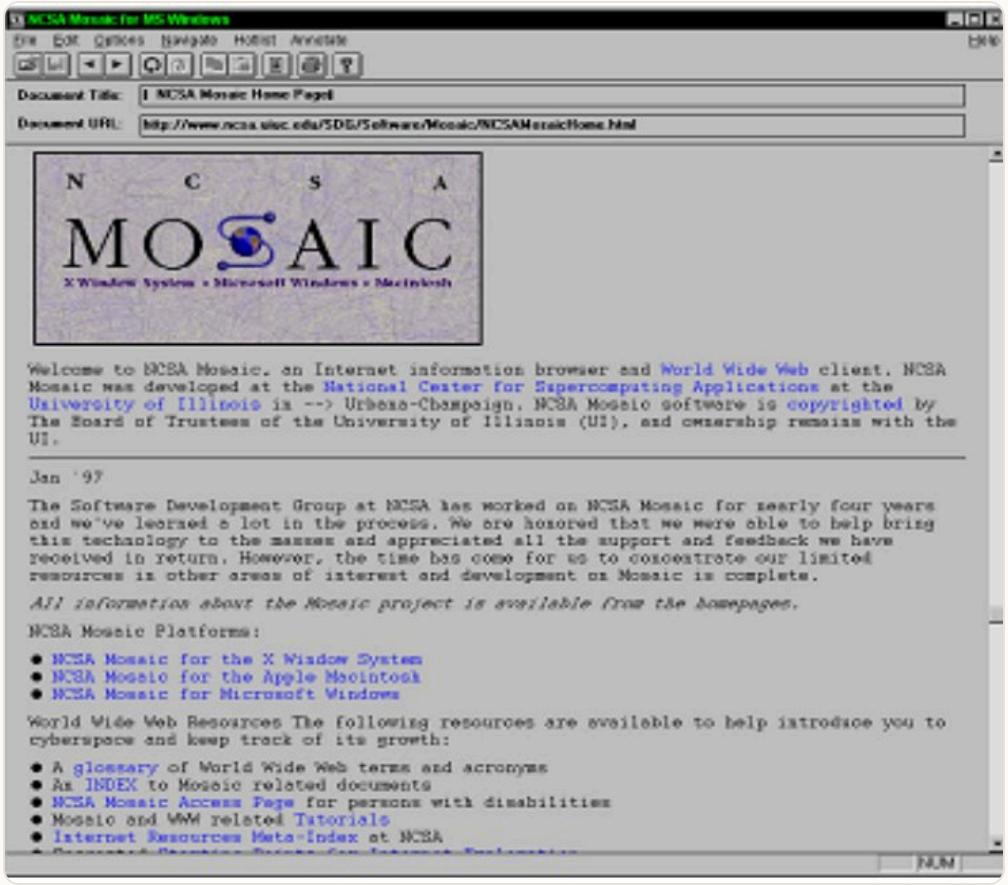
The NeXT computer used by Tim Berners-Lee at CERN; Steve Jobs with the NeXT.

Web 0.7 (Beta)

- FTP, Gopher, Archie, Veronica ... (1990 onward).
- University of Illinois Mosaic, then Netscape (1993): Marc Andreessen.
- In 1994, 23% of the world's Internet users were in Silicon Valley, and Apple had more domain addresses than China.
- In 2010, China had the most Internet users, over 300 million people.

2025–2026 UPDATE

About 6.0 billion people — 74% of the world — used the internet in 2025; about 2.2 billion remain offline (ITU).



Internet Web 1.0

- 1993: the U.S. Congress enacted .com legislation.
- 1995: Internet commerce is a $0 billion industry.
- 2010: Internet commerce advertising is $25 billion.
- Founders: Len Bosack and Sandra Lerner (Cisco), Jerry Yang and David Filo (Yahoo), Jeff Bezos (Amazon), Woz and Jobs (Apple), Pierre Omidyar (eBay), Steve Kirsch (Infoseek, $10 million).

> Foundation of dreams







Web 1.0

- A company card
- A call to action: e-mail
- A button
- A shop

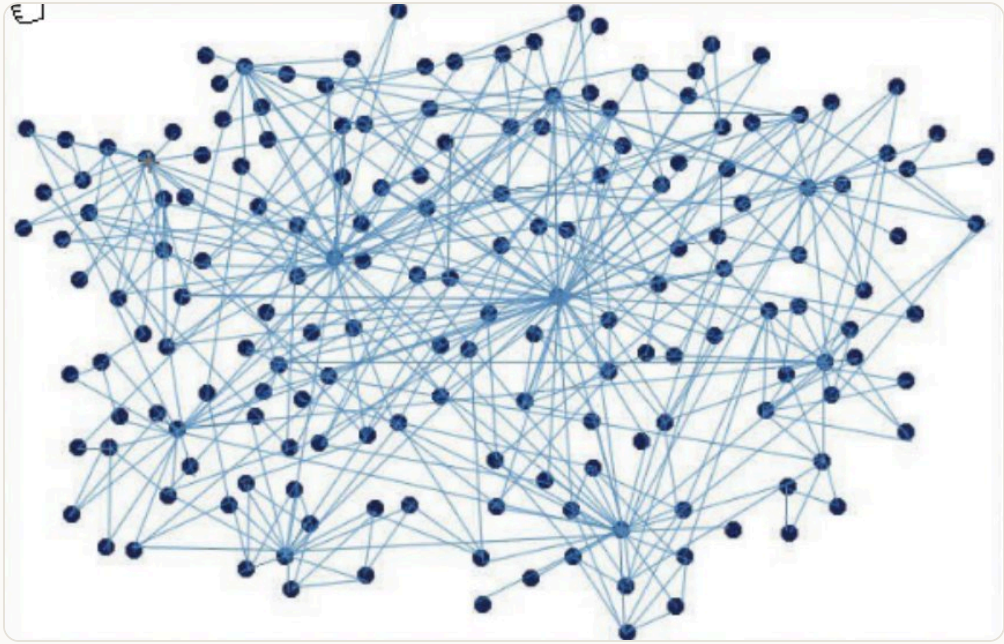
> Search for online viability — the read-only web.



Microsoft's early World Wide Web server home page.

Web 2.0: The Network Effect

- Power of links
- Power of collaboration
- Power of content and reach
- Power of friends



> Web 2.0 is a social change: the read–write web.

Web 1.0 to Web 2.0 (Tim O'Reilly)

Companies: Web 1.0 → Web 2.0

- DoubleClick → Google AdSense
- Ofoto → Flickr
- Akamai → BitTorrent
- mp3.com → Napster
- Britannica Online → Wikipedia
- Personal websites → blogging
- Evite → upcoming.org and EVDB

Practices: Web 1.0 → Web 2.0

- Domain name speculation → search engine optimization
- Page views → cost per click
- Screen scraping → web services
- Publishing → participation
- Content management systems → wikis
- Directories (taxonomy) → tagging ("folksonomy")
- Stickiness → syndication

Source: Tim O'Reilly's Web 2.0 vision.

Web 2.0 Everywhere

Audio · blogging · bookmarking · calendar · chat · collaboration · collect · comics · communication · community · CRM · database · design · dictionary · e-commerce · economy · e-learning · e-mail · file sharing · financials · fun · gambling · games · hosting · identity · images · imaging · jobs · knowledge · lists · mapping · marketing · memo · multimedia · news · office · OS · Outlook · polls · adult content · portal · PowerPoint · projects · publishing · read · RSS · scheduling · search · software · stats · tagging · task manager · text · text-to-speech · time management · track & trace · video · voicemail · web-to-feed · Wi-Fi · wiki · wish list · word · write · venture capital

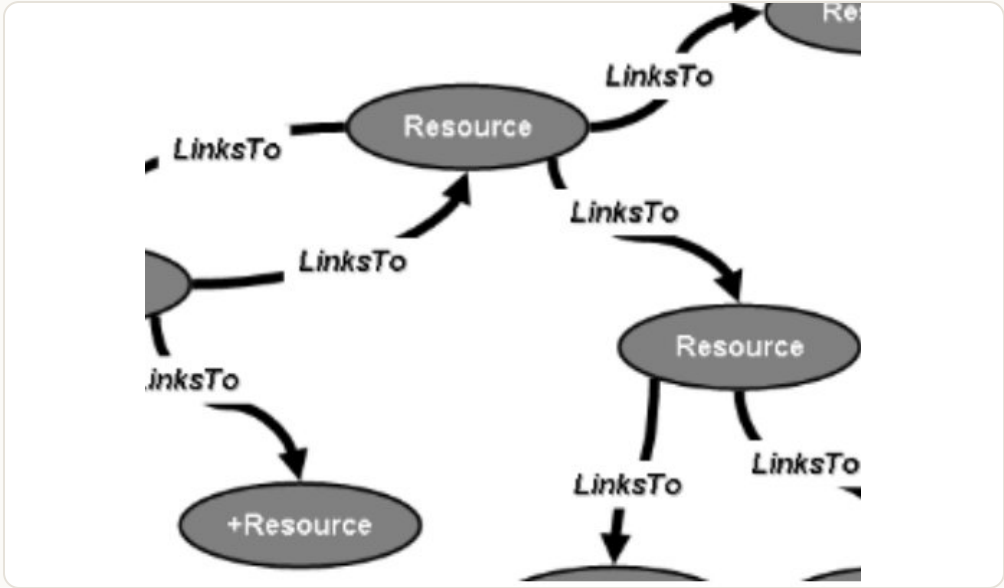
Web 2.0 Tag Cloud

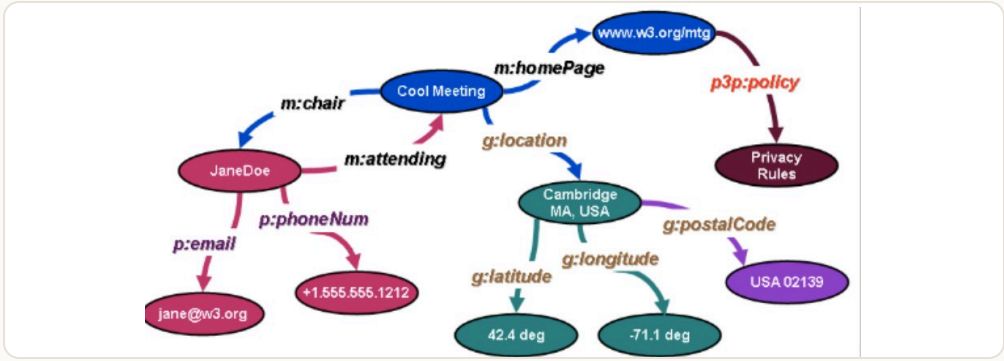


Participation, usability, folksonomy, wikis, blogs, remixability, standardization, the long tail, AJAX, RSS, open APIs and more.

Web 3.0: The Semantic Web

- Today's web is about documents.
- The semantic web is about things.
- It can recognize people, places, events, companies, products, movies, etc.
- It can understand the relationships between things.
- Semantic annotations are built into the data.





Internet Web 3.0+

Creating the future:

- Web 3.0
- Google AdSense → pay per transaction
- Flickr → Photosynth
- BitTorrent → Holodeck
- Napster → Pandora
- Wikipedia → SETI@home, crowdsourcing
- Blogging → tweeting

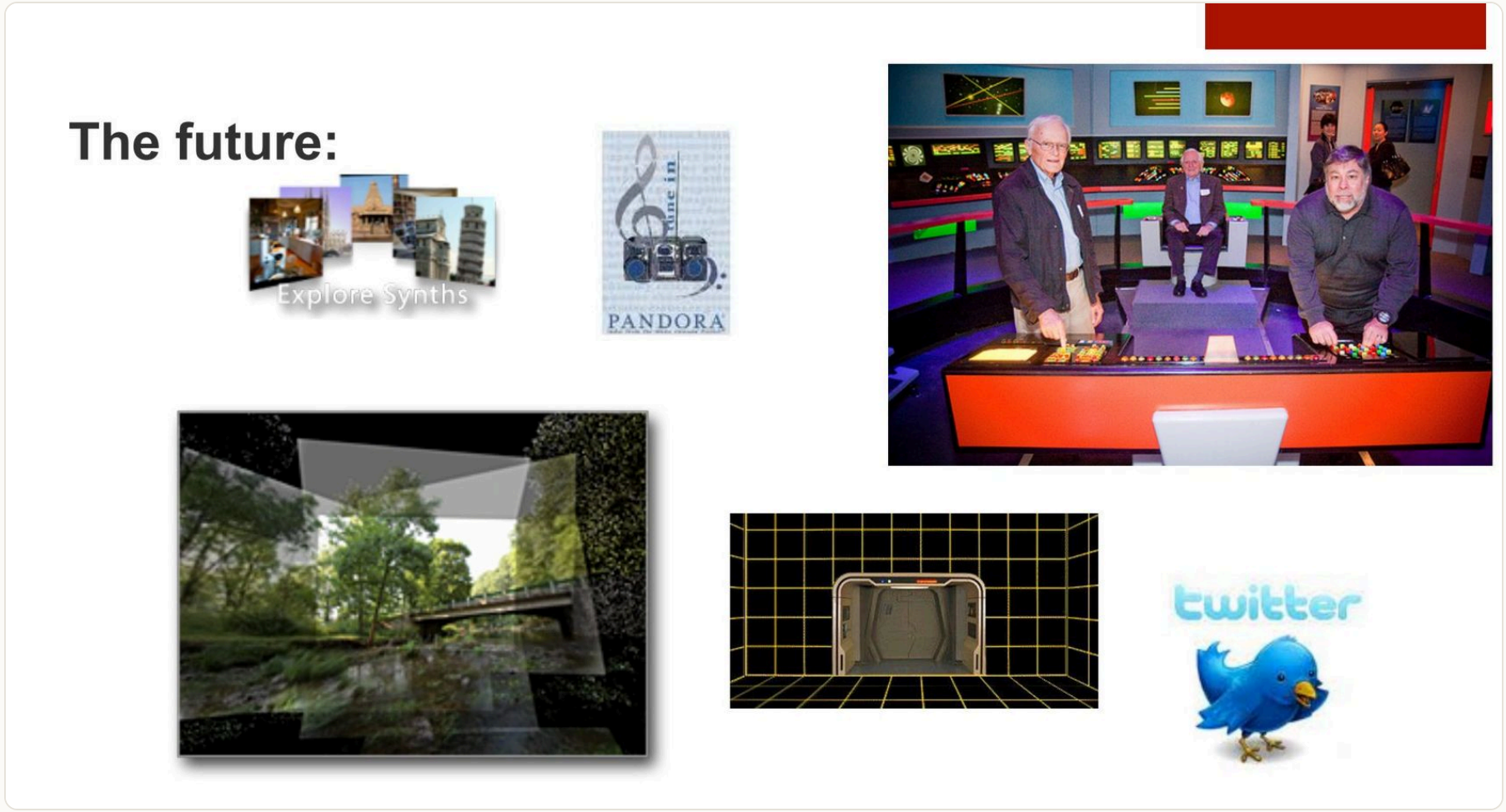


A meeting in the virtual world Second Life.

Internet Web 3.0+ (cont.)

- Upcoming.org → spontaneous crowd formation
- Search engine optimization → anticipating needs and solutions
- Cost per click → sales commission
- Web services → cloud hosting
- Publishing → participation
- Wikis → VR collaboration
- Tagging ("folksonomy") → augmented reality
- Syndication → the semantic web

What Web 3.0 Looks Like: The Future



Photosynth, Pandora, immersive 3D environments, the holodeck idea, Twitter.

Internet Web 3.0+: Tools

Tools for creating the future:

- **Social networking:** Facebook, Twitter and Foursquare
- **Augmented reality:** Second Life, Spore and The Sims
- **Open collaboration:** peer-to-peer, virtual projects, viral learning, crowdsourcing
- **Smartphones and sensors:** classrooms, communities, clustering and shared knowledge
- **Ubiquitous computing:** monitoring the world around us

2025–2026 UPDATE

Facebook was renamed Meta in 2021; Twitter was bought by Elon Musk in 2022 and renamed X.

After the Internet: Business Plan 2.0

- 1. Find the problem
- 2. Find the solution
- 3. Find the customer
- 4. Iterate (and be passionate about it)

> (No business plan)

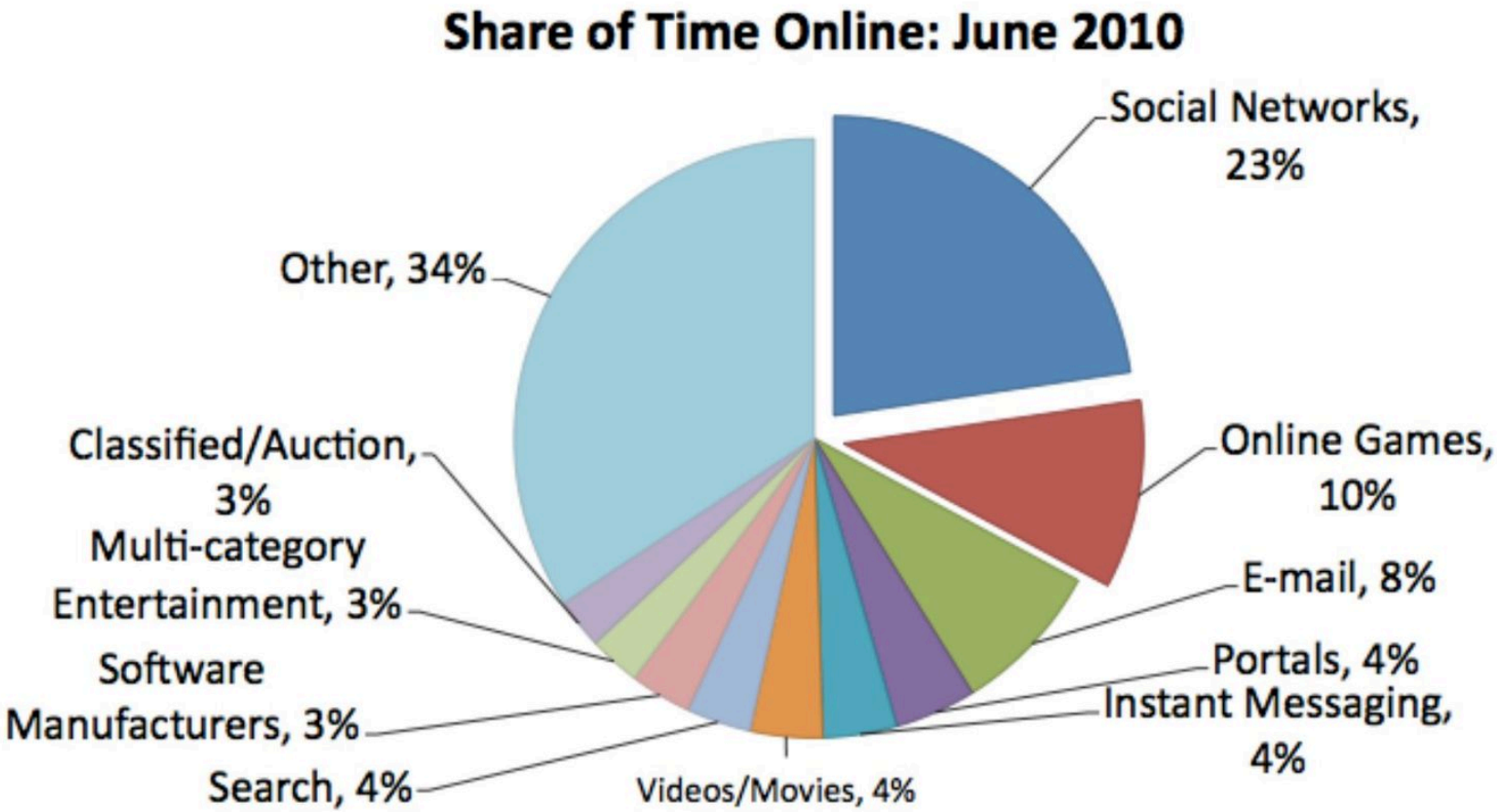
Trends

- Social
- Local
- Mobile
- Cloud
- SoLoMo: Social + Local + Mobile
- Mobile TV
- 3G, 4G–LTE, small cells, WiMAX

2025–2026 UPDATE

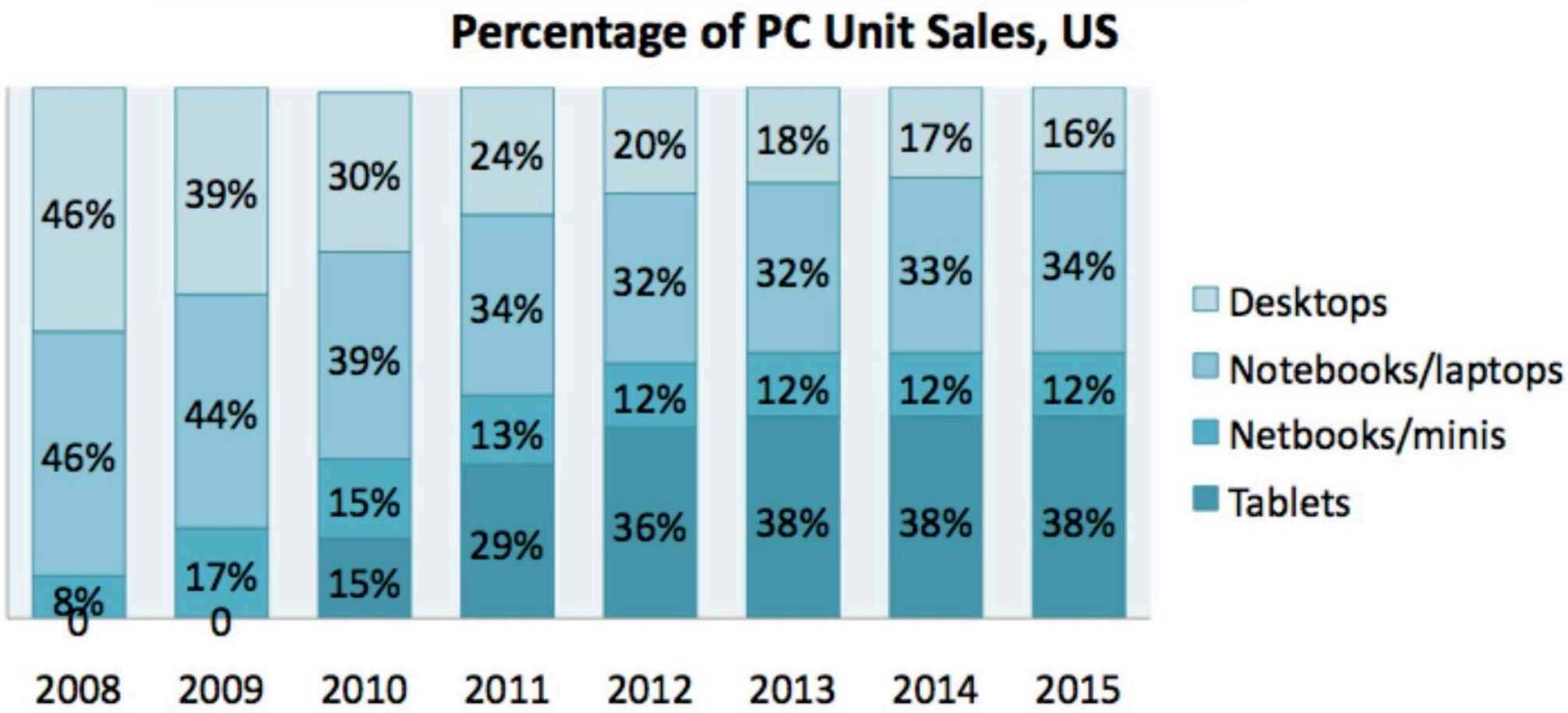
5G reached about 2.9 billion subscriptions at end-2025 and 3.1 billion in Q1 2026, roughly a third of all mobile subscriptions (Ericsson).

Social



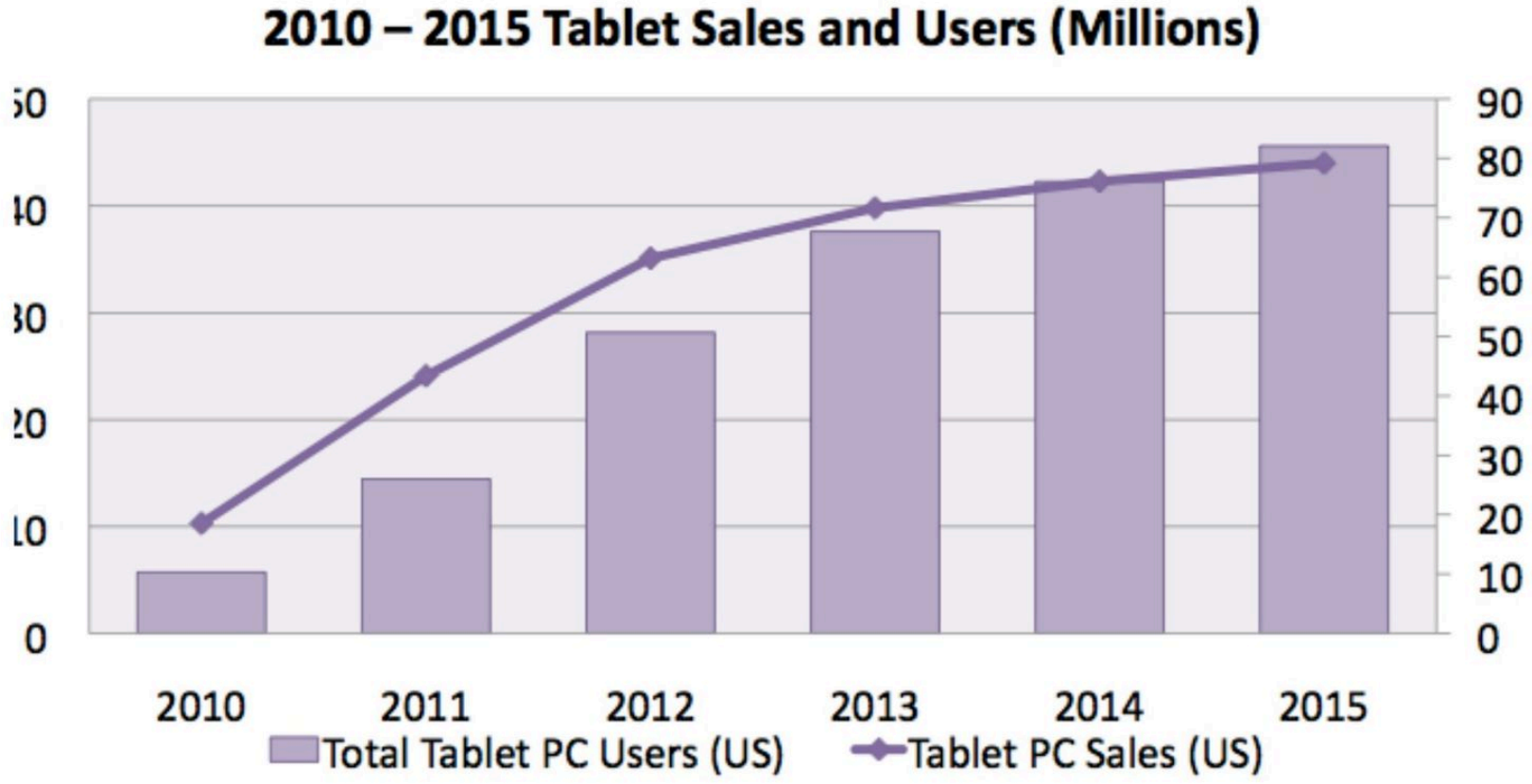
Share of time online, June 2010: social networks 23%, online games 10%, e-mail 8%, portals 4%, instant messaging 4%, search 4%, other 34%.

Cloud



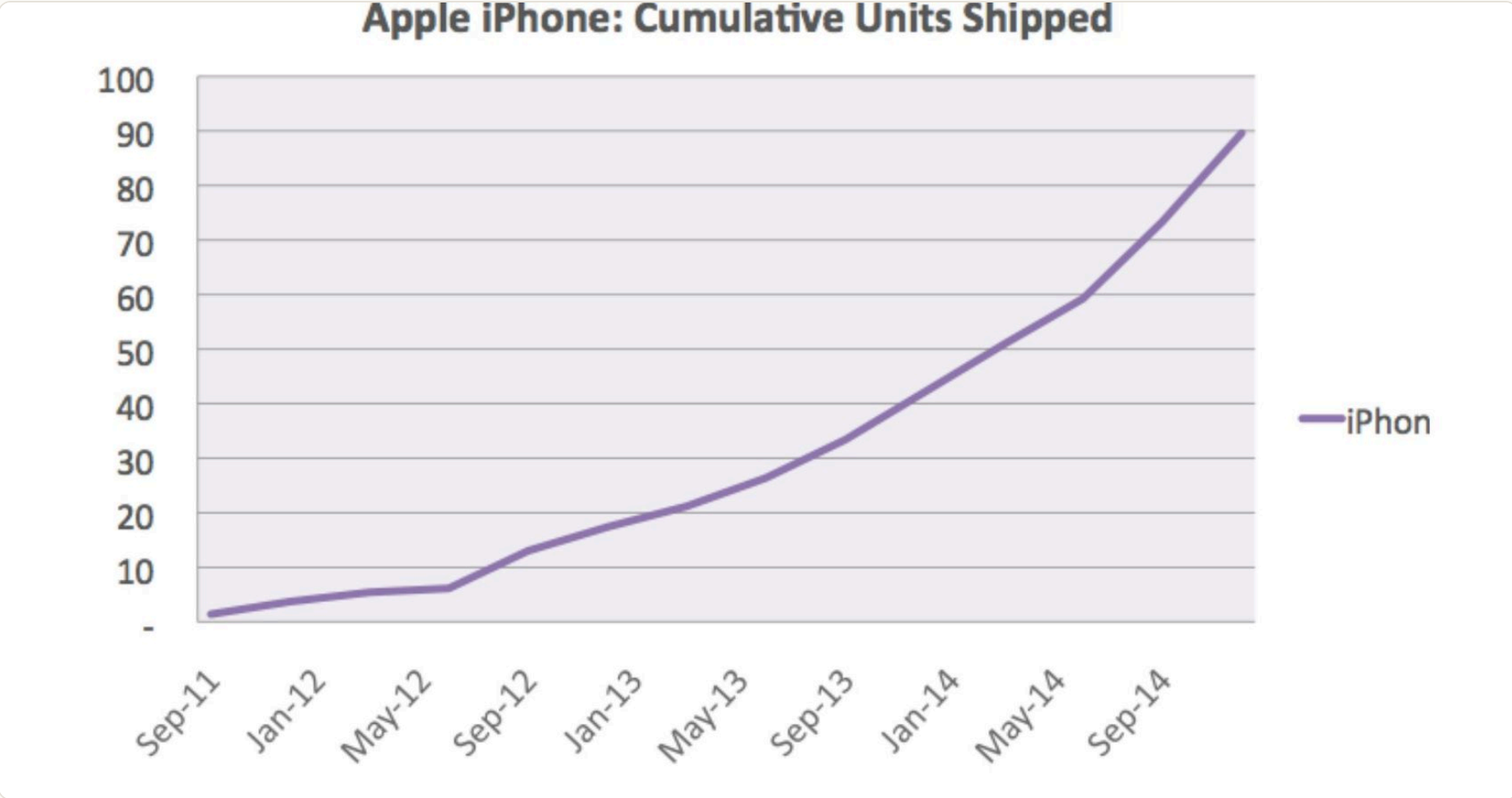
Percentage of PC unit sales in the US, 2008–2015 (2010–2011 projection): tablets rise from 0% to 38%, desktops fall from 46% to 16%.

Mobile



2010–2015 tablet sales and users in the US, millions (projection).

iPhone



Apple iPhone: cumulative units shipped, September 2011 – September 2014 (projection).

05

Funding and Venture Capital

Where entrepreneurs find capital: personal savings, friends and family, angels, corporations, venture capitalists and public markets.

Funding

Types of capital and the sources of equity financing.

The "Secrets" of Successful Financing

- 1. Choosing the right sources of capital is a decision that will influence a company for a lifetime.
- 2. The money is out there; the key is knowing where to look.
- 3. Creativity counts. Entrepreneurs must be as creative in their search for capital as in developing their business ideas.

Three Types of Capital

- **Fixed:** buys the permanent or fixed assets of the business (buildings, land, equipment, etc.).
- **Working:** supports the small company's normal short-term operations (inventory, bills, wages, salaries, etc.).
- **Growth:** helps the small business expand or change its primary direction.

Equity Capital

- Represents the personal investment of the owner(s) in the business.
- Is called risk capital because investors risk losing their money if the business fails.
- Does not have to be repaid with interest like a loan.
- Means the entrepreneur must give up some ownership of the company to outside investors.

Sources of Equity Financing

- Personal savings
- Friends and family members
- Angels
- Partners
- Corporations
- Venture capital companies
- Public stock sale

Personal Savings

- The first place an entrepreneur should look for money.
- The most common source of equity capital for starting a business.
- Outside investors and lenders expect the entrepreneur to put some of her own capital into the business before they invest theirs.
- Sweat equity and personal risk equity (non-monetary) also count.

Friends and Family Members

- After emptying her own pockets, an entrepreneur should turn to those most likely to invest in the business: friends and family members.
- Survey: 10% of business owners turn to family and friends for capital.
- Careful! Inherent dangers lurk in family and friendly business deals, especially those that flop.

Friends and Family: Guidelines

Guidelines for family and friendship financing deals:

- Consider the impact of the investment on everyone involved; keep the arrangement "strictly business."
- Settle the details up front.
- Create a written contract.
- Treat the money as "bridge financing."
- Develop a payment schedule that suits both parties.

Angels

- Angels are private investors who back emerging entrepreneurial companies with their own money.
- The fastest-growing segment of the small-business capital market.
- An excellent source of "patient money" for entrepreneurs who need relatively small amounts of capital — often less than $500,000.

2025–2026 UPDATE

Median 2025 US round sizes: pre-seed $0.5M, seed $3.8M (PitchBook-NVCA).

Finding Angels

- Key: finding them!
- Angels almost always invest locally and can be found through networks.
- The typical angel accepts 30% of the proposals presented and has invested an average of $131,000 in 3.5 businesses.
- What do angels look for?
  - Exciting ideas with clear potential
  - A way to help a trusted friend

Corporate Venture Capital

- 30% of all venture capital investments come from corporations.
- About 900 large corporations around the globe invest in startup companies.
- Capital is just one benefit; corporate partners may share marketing and technical expertise.

2025–2026 UPDATE

Corporations took part in about 21% of 2025 US venture deals (PitchBook-NVCA).

Venture Capitalists

- More than 3,000 venture capital firms operate across the United States.
- Most venture capitalists seek investments of $3–10 million in companies with high-growth and high-profit potential.
- Business plans face an extremely rigorous review: less than 1% are accepted.

2025–2026 UPDATE

In 2025, 537 new US VC funds raised $66.1B, the fewest funds in a decade; median deal sizes were $15M for Series A and $33.8M for Series B (PitchBook-NVCA).

How Venture Capital Firms Invest

- Most venture capitalists take an active role in managing the companies they invest in.
- Many focus their investments on specific industries they know well.
- Most often, venture capitalists invest in a company across several stages.

Going Public

- Initial public offering (IPO): a company raises capital by selling shares of its stock to the public for the first time.
- In a typical year about 550 companies make IPOs.
- Few companies with annual sales below $10 million go public.
- A common exit strategy for investors (but it needs strong justification).

2025–2026 UPDATE

In 2025, 17 US unicorns went public, including CoreWeave, Circle, Figma, Klarna and Chime; US VC exit value reached $297.6B (PitchBook-NVCA).

Advantages of Going Public

- Ability to raise large amounts of capital
- Improved corporate image
- Improved access to future financing
- Attracting and retaining key employees
- Using stock for acquisitions
- Listing on a stock exchange

Disadvantages of Going Public

- Dilution of the founders' ownership
- Loss of control
- Loss of privacy
- Reporting to the SEC
- Filing expenses
- Accountability to shareholders
- Pressure for short-term performance
- Timing

The Registration Process (S-1 Filing)

- Choose the underwriter (who sells the stock)
- Negotiate a letter of intent (fees)
- Prepare the registration statement (including the risks)
- File with the SEC
- Wait to "go effective" (information you may release is limited)
- Meet state requirements

Simplified Registrations and Exemptions

- **Regulation S-B** (small US businesses only)
- **Regulation D, Rule 504** – Small Company Offering Registration (SCOR)
  - Limited legal help required
  - No SEC filing
  - Marketing the offering is allowed
  - Maximum $1 million in a 12-month period
- **Regulation D, Rules 505 and 506**
  - Private placements to a maximum of 35 non-accredited investors
  - Some limits on the total amount that can be raised
- **Section 4(6)** – offerings to accredited investors

Simplified Registrations and Exemptions (Cont.)

- **Rule 147** (intrastate offerings)
- **Regulation A** (few restrictions, but expensive)
- **Direct stock offering on the World Wide Web**
  - Direct Public Offering (DPO)
  - The prospectus must still meet SEC requirements
- **Foreign stock markets** (sometimes easier, but often more volatile)

Debt Financing

- Must be repaid with interest.
- Is carried as a liability on the company's balance sheet.
- Can be just as difficult to secure as equity financing, even though sources of debt financing are more numerous.
- Can be expensive, especially for small companies, because of the risk/return trade-off.
- Convertible loans are very popular when an IPO might be the exit strategy.

2025–2026 UPDATE

At the seed stage the SAFE, created by Y Combinator in 2013 (post-money version 2018), has become the US standard alternative to convertible notes.

Sources of Debt Capital

- Commercial banks

Internal Methods of Financing

- **Factoring** – selling accounts receivable outright
- **Leasing** assets rather than buying them
- **Credit cards**

The Venture Capitalist

Who venture capitalists are, how their funds work and what they bring to a startup besides money.

A Passion for Innovation

- Not all venture capitalists start out as business people. Many come to the industry after successful careers as scientists, engineers or doctors.
- Driven by a desire to find new and better ways of doing things, they combine their industry expertise with their experience as entrepreneurs to identify the most promising innovations in their fields — and then build companies around them.

What Is Venture Capital?

- VC funds build companies from the simplest form — perhaps just an entrepreneur and a business plan — into mature organizations.

> VC has let the US turn ideas and basic science into products and services the world envies.

2025–2026 UPDATE

VC-backed firms: 41% of US public-market value, 62% of public-company R&D (Gornall & Strebulaev, 2021).

Venture Capital Backed Companies
Known for Innovative Business Models
Employment at IPO and Now

Company	As of IPO	Current	# Change
The Home Depot	650	331,000	330,350
Starbucks Corporation	2,521	176,000	173,479
Staples	1,693	75,588	73,895
Whole Foods Market, Inc.	2,350	52,900	50,550
eBay	138	15,500	15,362

Venture Capital Backed Companies
Known for Innovative Technology and Products
Employment at IPO and Now

Company	As of IPO	Current	# Change
Microsoft	1,153	91,000	89,847
Intel Corporation	460	86,300	85,840
Medtronic, Inc.	1,287	40,000	38,713
Apple Inc.	1,015	35,100	34,085
Google	3,021	16,805	13,784
JetBlue	4,011	11,632	7,621

Source: IHS Global Insight. Current data is FY 2007 Year End Data

Table: employment at IPO and in 2007 at VC-backed companies (IHS Global Insight; FY2007 data).

Risk Capital

- VC firms are professional, institutional managers of risk capital that enables and supports the most innovative and promising companies.
- This money funds new ideas that could not be financed by banks, that threaten established products of corporations, and that typically need five to eight years to launch.
- VC is unique as an asset class: it is an equity investment in a company whose stock is essentially illiquid and worthless until the company matures five to eight years later.
- Follow-on investment provides more funding as the company grows.
- These **rounds**, typically every year or two, are also equity, with shares allocated among investors and management at an agreed **valuation**. Unless the company is acquired or goes public, there is little actual value: VC is a long-term investment.

More Than Money

- The US venture industry provides the capital to create some of the most innovative and successful companies.
- **But venture capital is more than money.**
- VC partners become actively engaged with a company, typically taking a board seat.
- With a startup, daily interaction with the management team is common, which limits the number of startups any one fund can invest in.
- Few entrepreneurs approaching VC firms realize that they are essentially asking for **1/6 of a person**!

> For every 100 business plans that reach a VC firm, usually only 10 or so get a serious look, and only one gets funded.

One Part Nature, Two Parts Nurture

- Unlike most investors, VCs provide more than money: they guide the company through multiple rounds of financing.
- At each stage the company must meet milestones to receive fresh funds. If it misses them, or its risk profile changes with market conditions or regulation, the VC's duty to its limited partners requires walking away.
- Patience, hands-on guidance and a willingness to take risk and fail make VC unique as an asset class.
- In no other ecosystem are all stakeholders aligned around one objective: **company growth**. This drives economic growth, creates more jobs than other asset classes and has set the US economy apart.

> VCs typically sit on portfolio boards and help with resources, marketing contacts and management hiring — partners until the company can stand on its own.

Why Venture Capital?

- Many technologies developed by VC-backed firms are truly disruptive; larger companies do not embrace them because they could cannibalize their current products.
- With the emphasis on quarterly results, many large public companies cut R&D and product development when times get tight.
- Many talented teams have come to venture capital after their projects were turned down by their own companies.

The Venture Capital Firm

- Venture capitalists usually team up with like-minded professionals with complementary backgrounds and sector expertise to set up VC firms.
- These firms work as small, tight-knit teams that share risks and responsibilities. In 2008 the average venture firm had nine investing professionals.
- Through their firms, VCs pool their own money with funds from institutional investors such as pension funds, endowments and foundations.
- These investors become **limited partners** in the firm's funds, which typically target specific industries (e.g. information technology, life sciences, clean technology).

> Limited partners?

Structure

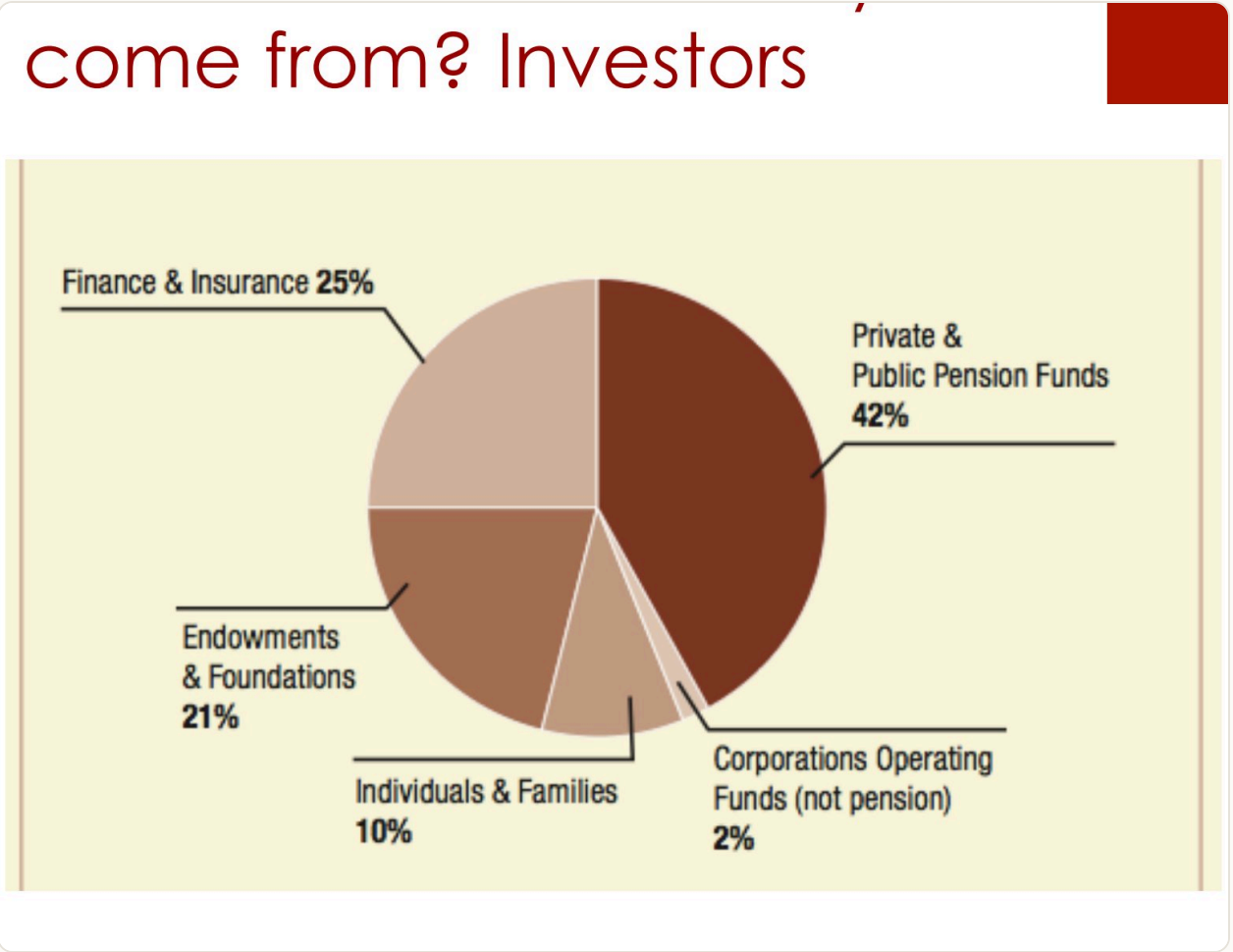
Investors → Limited partnership → General partners → Ventures

- A VC firm typically creates a **limited partnership**, with the investors as limited partners (LPs) and the firm itself as the **general partner** (GP).
- Each fund is a separate partnership, set up once the firm has commitments from its investors — say $100 million.
- Money is drawn from investors as investments are made; for each first investment the fund typically reserves three to four times as much for follow-on rounds.
- Over three to eight years the firm works with the founders to grow the company; the payoff comes when it is acquired or goes public.
- Of the companies funded, only one in six ever goes public and one in three is acquired.

Venture Funds

- Venture funds have a life span of about 10 years. In the first several years, VCs invest in promising new companies that become the fund's portfolio.
- Over the fund's life these companies are nurtured in the hope that they will be acquired or go public at a premium to the total invested — the **exit**.
- Neither the VCs nor the limited partners see a return unless the fund's successful exits outweigh its losses.
- About one-third of portfolio companies fail, so the winners must win big. Because VC is high-risk, investors expect higher returns than from other asset classes — and over the long term the industry has typically outperformed public markets.

Where Does the Money Come From? Investors



Sources of US venture fund commitments: pension funds 42%, finance and insurance 25%, endowments and foundations 21%, individuals and families 10%, corporations 2%.

What You Give Employees: Stock Options

- What are employee stock options worth?
- Three reasons to work for a startup:
  - Interesting, leading-edge projects
  - Smart, motivated and interesting colleagues
  - You might make real money on your stock options
- Two related reasons to think twice:
  - The startup may fail.
  - You may become unemployed and have a hard time finding a new job.

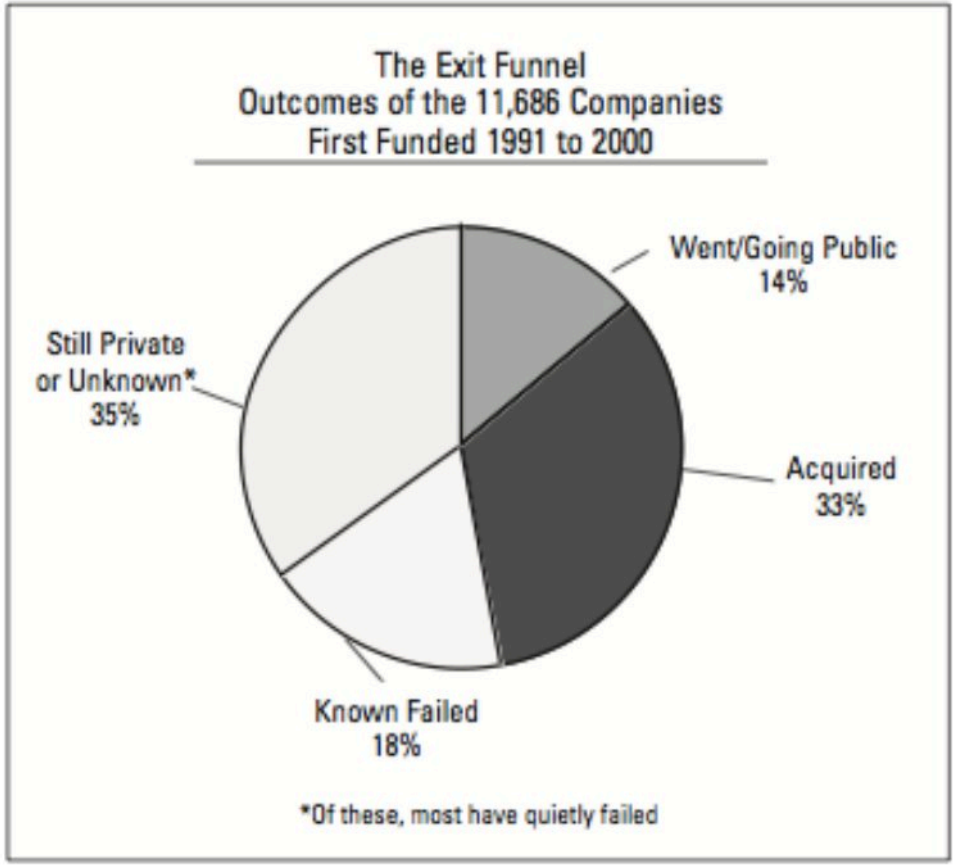
> Startups grant options to attract talented engineers to a venture that might fail, and to compensate staff for long hours and stress. Failure is rarely discussed in Silicon Valley mythology.

Organization Example

- The VCs fund the startup; in return the first VC round usually takes about **60%** of the company's stock.
- Of the **40%** allocated to employees, at least half (**20%**) is usually reserved for future hires (engineers, VP marketing, VP sales).
- A serious startup has a CEO, a CFO/VP operations, at least one VP of engineering and one or two senior engineers — often people who joined before funding and may have worked without salary.
- This founding group splits the remaining **20%**: the CEO gets about 5%, the others 2–4% each.
- A senior engineer with hard-to-find skills may be offered around **1%**; most engineers get options for 0.5% or less of the first-round stock.

Economic Alignment of All Stakeholders

- VC is rare among asset classes in that success is truly shared.
- It is not driven by quick returns or transaction fees.
- Economic success comes when the stock price rises above the purchase price.
- After a strong IPO or acquisition, the stock price reflects the company's success.
- The entrepreneur benefits from appreciated stock and options.
- Rank-and-file employees have historically done well with their options too.



The exit funnel for 11,686 companies first funded 1991–2000: 14% went public, 33% acquired, 18% known failed, 35% still private or unknown (most quietly failed).

Venture Capital Controls the Startup

- The critical role of capital in developing technology also reflects the balance of power in the computer industry.
- Most startups are controlled by the board members who represent the venture capital.
- They can, and do, fire the founders.
- Engineers do not much like the idea that capital holds most of the power.
- In some cases the VC board members are MBAs who have accomplished less than the founders.
- The founders had the insight and did the hard work, yet the company is controlled by "shallow capitalists".
- Engineers tend to discount the power and importance of capital.

Outside the US

- The spread of venture capital to other countries is gated by each country's or region's:
  - cultural fit
  - tolerance for failure
  - services infrastructure that supports developing companies
  - intellectual property protection
  - efficient capital markets
  - willingness of big business to buy from small companies

VC Participates

- Besides funding, venture investors instill in their portfolio companies key cultural practices and traits that keep them growing over the long term:
  - an appreciation for continuous R&D
  - the habit of setting and reaching milestones
  - strong corporate governance
  - the ability to pivot in uncertain markets and adjust business plans when needed
  - a global approach to operations

> These tenets drive companies in their formative years and remain part of their DNA long after — often letting them grow faster and longer than non-venture counterparts.

Venture Capital Nourishes Entire Industries

- VC has turned life-changing innovations into entirely new industries.
- 1970s: biotechnology, via pioneers like Genentech and Amgen.
- 1980s: software and semiconductors became prime drivers of the US economy.
- 1990s: online retailing (Amazon, eBay); today clean technology is poised to extend this legacy.

2025–2026 UPDATE

The next wave was AI, with 65.4% of 2025 US deal value (PitchBook-NVCA); climate tech drew $40.5B globally in 2025 (Sightline Climate).

Penchants for Prescience and Risk

- Given the high failure rate, VCs focus only on innovations that could revolutionize existing industries or create new ones — biotechnology, built on Genentech and Amgen, is an example of the latter.
- Other areas of venture innovation: semiconductors, software and the Internet.
- In the 21st century, VCs are poised to create a new sector — clean technology — with the same promise for jobs and growth.
- Ironically, finding innovative ideas isn't the hard part: government- and university-funded research produces new discoveries all the time.
- The challenge is judging which innovations can become viable products and services, then building companies from scratch to sell them.

How Do VCs Think and Work?

- Tales of formulas on cocktail napkins exaggerate, but VCs often start with little more than an idea in a rudimentary business plan.
- So they vet rigorously: of every 100 plans, an estimated 10 reach due diligence and only one gets funded.
- Investing at the earliest stage is extraordinarily risky. Young companies have no collateral for bank loans, no assets or track record for private equity, and no short-term gains for hedge funds.
- VCs take on this risk, providing capital in exchange for equity.
- The goal: grow the company until it can go public or be acquired — when the firm and its LPs earn a return if the exit is worth more than the total invested.

Changing the World

- For decades the US VC industry has been the envy of the world, spurring high-tech industries and household names: Amazon, Google, Apple, Cisco, Staples, eBay.
- These successes made the US a magnet for the world's best scientists and entrepreneurs.
- Other countries now emulate the US model through tax and regulatory policy and stronger IP protection — more innovation worldwide, but more competition for venture dollars. US primacy is no longer a given.
- US policymakers must weigh new rules carefully against the risk of hobbling one of America's most decisive competitive advantages of the past half century.
- With supportive policy, VC remains a key ingredient of innovation — with entrepreneurial spirit, science and an appetite for risk.

Venture-Created Technologies

Venture capital has played a role in creating many high-tech industries:

- Information technology
- Biotechnology
- Medical devices
- Network security
- Online retailing and social media
- Clean technology

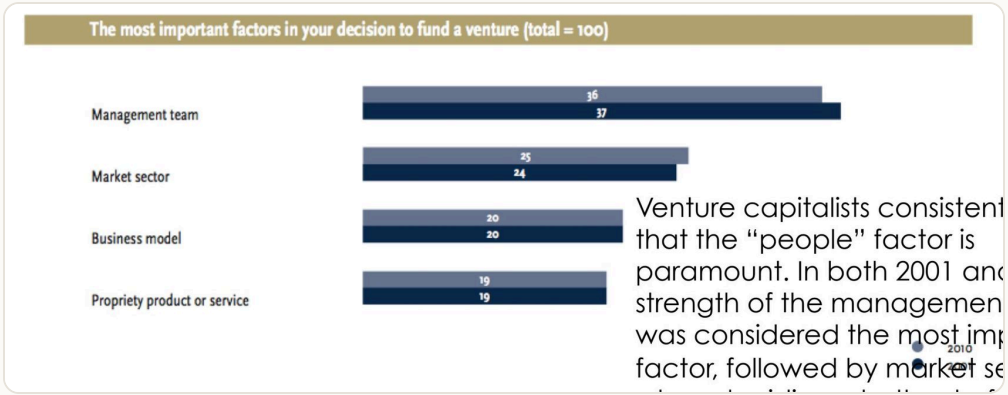
How VCs Evaluate

VCs evaluate potential investments based on:

- Management team
- Concept
- Scalability
- Market conditions
- Fit with the fund's objectives
- Capital needs
- Potential returns

The Funding Decision

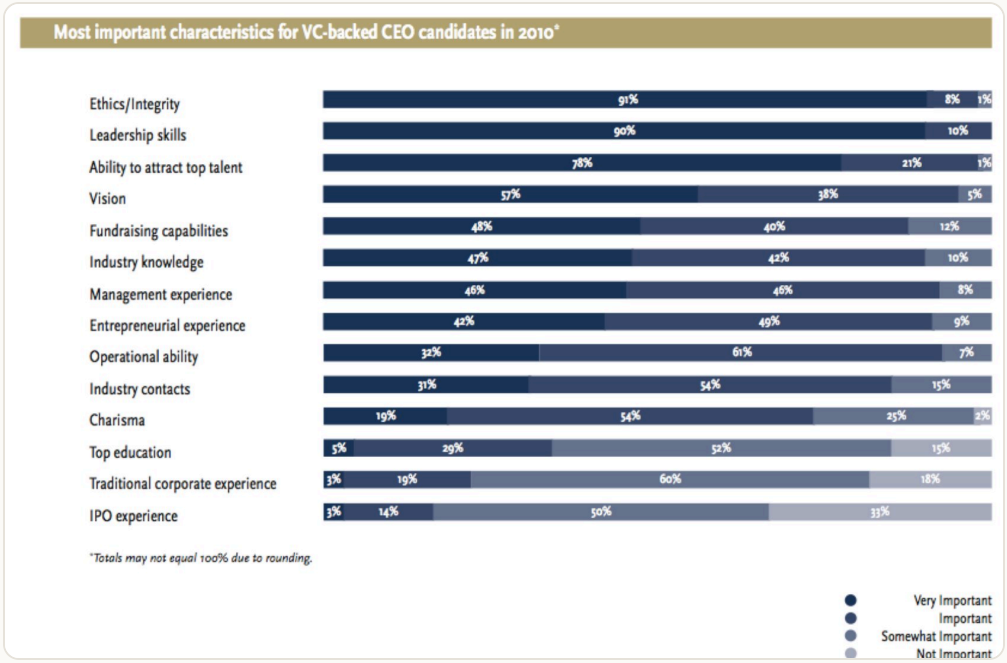
- VCs consistently believe the "people" factor is paramount.
- In both 2001 and 2010, the strength of the management team was the most important factor in deciding to fund a venture, followed by market sector.
- Proprietary product or service and business model trailed slightly behind market sector.



Most important factors in the decision to fund a venture (total = 100), 2001 vs 2010. Source: Spencer Stuart / NVCA survey.

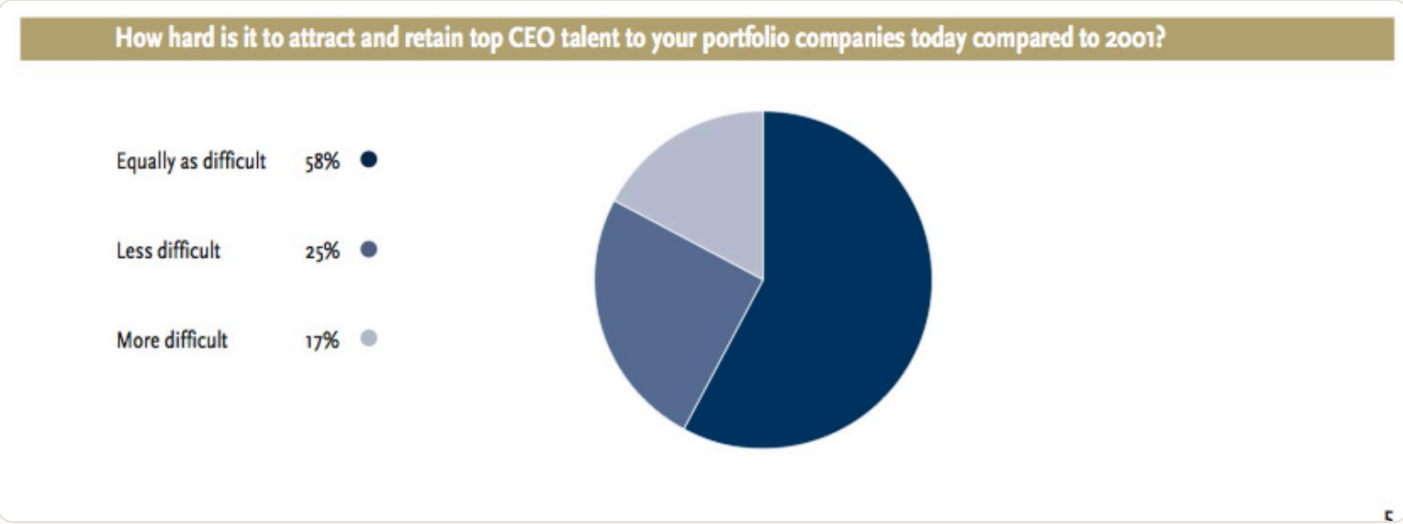
CEO Traits

- The traits most often rated "very important" for VC-backed CEOs are those valued in any leader: ethics/integrity, leadership and the ability to attract top talent.
- Vision and fundraising matter more than a decade ago: vision ranked 4th in 2010 (7th in 2001), fundraising 5th (8th in 2001).



Most important characteristics for VC-backed CEO candidates, 2010. Source: Spencer Stuart / NVCA survey.

People



> "Finding the right CEO and judging people in general is the toughest part of our job."

How hard is it to attract and retain top CEO talent compared to 2001? Equally difficult 58%, less difficult 25%, more difficult 17%.

CEO Candidates

- In many firms, closer ongoing assessment after the hire could be the greatest potential improvement in the industry's talent management.



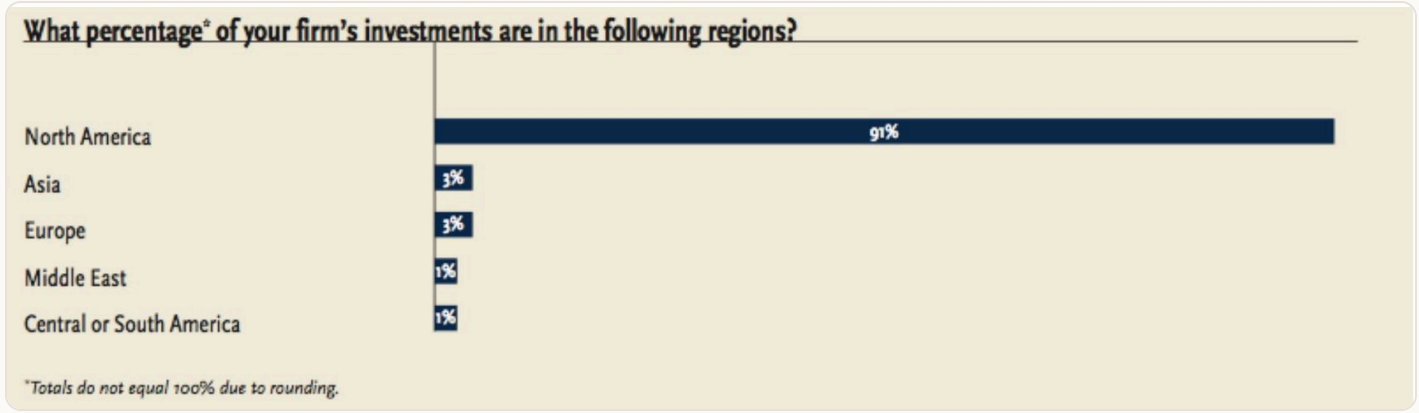
Preferred leadership profile for emerging sectors without an established CEO pool: proven VC-backed CEOs from other sectors 53%, promising entrepreneurs without CEO experience 34%, large-company executives 13%.

Liquidity



A longer path to liquidity. Median company age at acquisition: 3.9 years (2001) vs 7.8 years (2009); at IPO: 6 vs 10 years. Source: NVCA.

Investment Regions

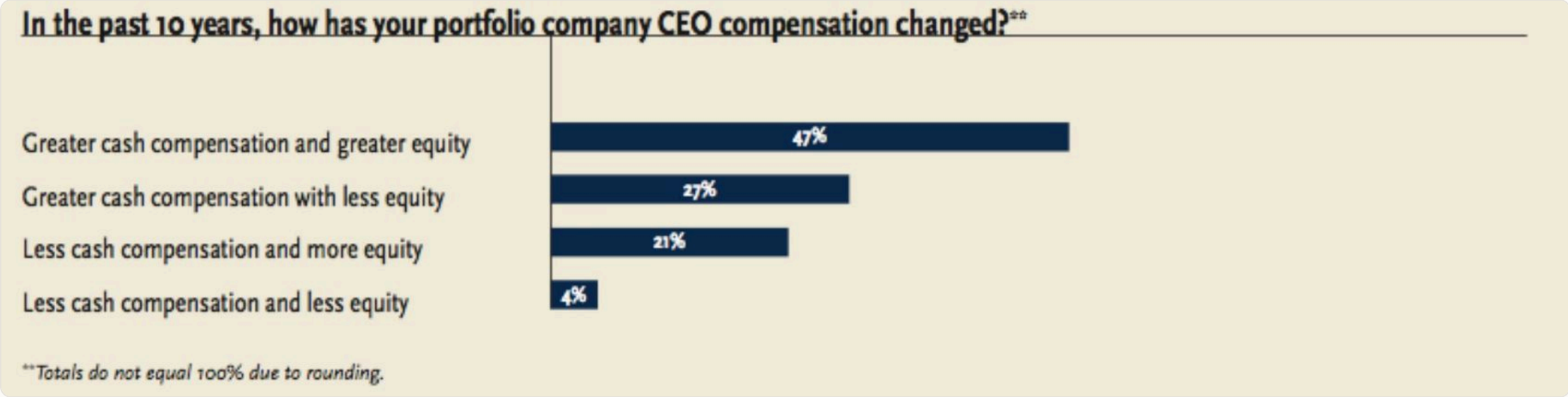


2025–2026 UPDATE

The US still leads: $339.4B of US VC deal value in 2025 (PitchBook-NVCA) against $425B of global venture funding (Crunchbase); trackers use different methods.

Share of surveyed US VC firms' investments by region, 2010: North America 91%, Asia 3%, Europe 3%, Middle East 1%, Central/South America 1%.

CEO Compensation



How portfolio-company CEO pay changed over the past 10 years (2010 survey): more cash and more equity 47%, more cash and less equity 27%, less cash and more equity 21%, less cash and less equity 4%.

New Trends

- Some characteristics and attitudes of VC investors have stayed stable, but there are interesting new trends as the industry adapts to a changing environment.
  - VC firms are taking a more structured approach to building strong, independent and diverse boards for their companies.
  - They assess portfolio management more rigorously and continuously, in response to the longer average tenure of management teams.

Spencer Stuart and the NVCA launched a study in March 2010 on the characteristics, skills and experience required of VC-backed CEOs: in-depth interviews with VC leaders plus a survey of 200+ NVCA members, following a similar study in 2001.

Venture Capital History

From Renaissance trading voyages to Silicon Valley funds: how risk capital evolved alongside technology.

Technology, Politics and Capital Markets

- Computer scientist and science fiction writer Vernor Vinge writes of a technological singularity, where technology accelerates so fast that it moves in entirely unexpected directions.
- What engineers and computer scientists sometimes forget: technological evolution does not spring from information and ideas alone.
- Technological progress is built on political and financial systems that took hundreds of years to evolve.
- Social and financial systems reflect the accepted thinking of a broad group of people, and they evolve much more slowly than science and engineering.

Free Flow of Information

- High-quality scientific research depends on the free flow of information.
- The rise of totalitarian states has always stifled both political and scientific ideas.
- Even in the United States, a long and successful fight was waged to make cryptography research and engineering publicly available.
- This has enabled many technologies, including secure financial transactions over computer networks.

Capital

- Technology consumes capital as well as ideas and information. Liquid, transparent capital markets are critical for its development.
- Every piece of technology we use moved from concept to reality because of capital expenditure.
- Except for technology developed by large companies like IBM, Sony and Nokia, every piece of computer and networking technology we use exists because of strong US capital markets.

2025–2026 UPDATE

Nokia sold its phone business to Microsoft in 2013–14.

Venture Capital

- Commercial venture capital — a wealthy individual providing capital for an enterprise — has probably existed since the Middle Ages (e.g. the 1400s), in industries like British wool cloth manufacturing.

Maritime Trade and Piracy

- The first high-risk, high-reward commercial enterprises were maritime trade and piracy.
- In the Renaissance, trade in spices, tea and coffee produced huge profits — and huge risks: ships could be lost to weather, navigation errors or pirates.
- Syndicates of wealthy merchants leased a ship, hired the captain and financed the cargo; fortunes were made or lost on a single voyage.
- Piracy also offered huge profits, especially once gold flowed from the New World to Spain and Portugal. Conflict between Spain and England legitimized British pirates, and venture capital bought and provisioned ships for a share of captured Spanish gold.
- Venture-backed pirates included Sir Francis Drake, who also had the backing of Elizabeth I.

The Mass Market

- Wealth and energy have always been linked. Humans and animals powered the world until the late 18th century, when the steam engine brought the first industrial revolution.
- The technology explosion produced vast wealth: steam-driven pumps made deep mining of gold, coal and diamonds possible.
- Steam-driven blast furnaces enabled steel production on an unprecedented scale. These industries had an appetite for capital like the steam engine's for coal.
- Capital markets evolved along with the new technology.

Steam Engine to Inventor

- The steam engine also began the era of the inventor, with dreams and, they hoped, a profitable innovation. The problem was funding.
- In the 19th and early 20th centuries, venture capital came from three sources:
  - Wealthy individuals
  - Banks
  - Existing enterprises
- All three are conservative and tend to fund proven ventures (e.g. mining, manufacturing).
- In the 1930s and 1940s none of them would fund Chester Carlson, the inventor of xerography. His first funding came from the Battelle Memorial Institute, a research institute originally set up to fund innovation in metallurgy.

The Modern Venture Fund

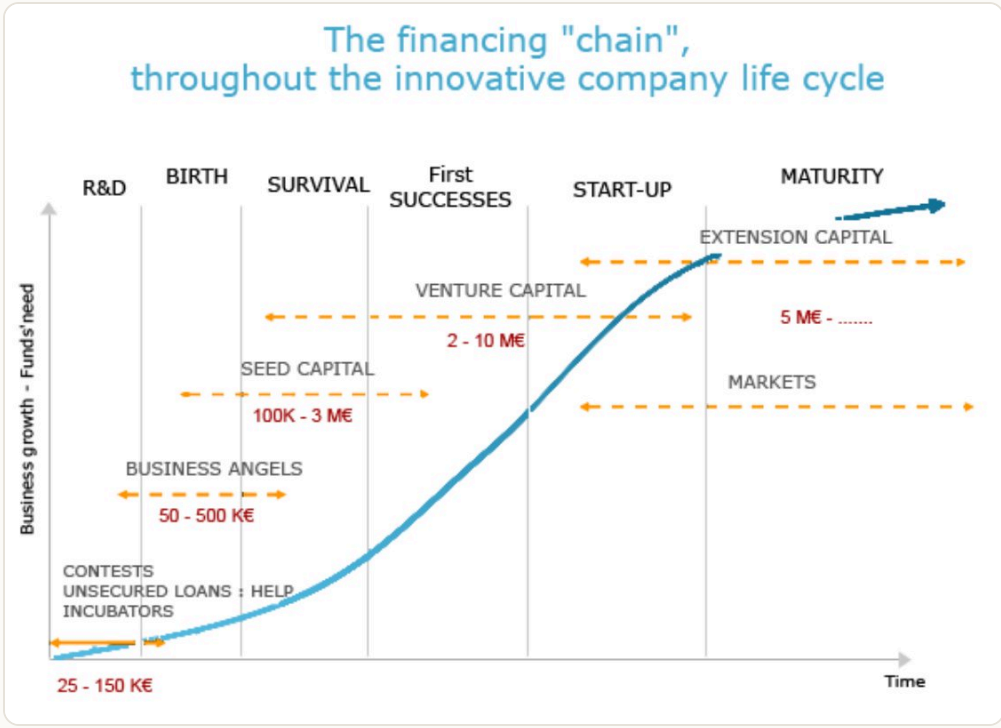
- Modern venture funds appeared only in the 1960s. One of the first was Davis and Rock, founded by Arthur Rock, a lead investor in Intel. Rock also helped arrange funding for Fairchild Semiconductor, which spun off Intel, National Semiconductor and AMD.
- The huge returns from successful deals encouraged new venture groups.
- Wealth created in the computer industry was plowed back into new companies.
- Eugene Kleiner, a Fairchild co-founder, became a founding partner of Kleiner Perkins, a pioneering Silicon Valley venture firm.
- In a historical irony, Intel co-founder Robert Noyce provided funding for Intel's arch-rival, AMD.

Founders Become Venture Capitalists

- VC lets people who became wealthy in the computer industry grow their wealth and stay part of the fast-moving industry.
- Paul Allen, who founded Microsoft with Bill Gates, invested in startups through Vulcan Ventures.
- Ann Winblad, who made a fortune selling her software company, co-founded Hummer Winblad, a VC firm investing in software.
- VC is no longer limited to Silicon Valley insiders: Venrock Associates, founded by the Rockefeller family, invested in Intel and Apple, among others.
- Many pension funds and university endowments invest part of their holdings in VC; Harvard, for example, invested $1 million in MasPar Computer Corp.

Before the Internet

- Before the Internet frenzy, the classic venture-funded company had three rounds:
  - an initial round to build the basic product
  - a follow-on round to build the product and fund marketing and sales
  - a final round to fund a second-generation product and take the company to an IPO
- Each round dilutes the employees' percentage of the total shares outstanding.



The financing chain through the innovative company's life cycle: contests and incubators, business angels, seed capital, venture capital, extension capital and markets.

Example: Dilution Across Rounds

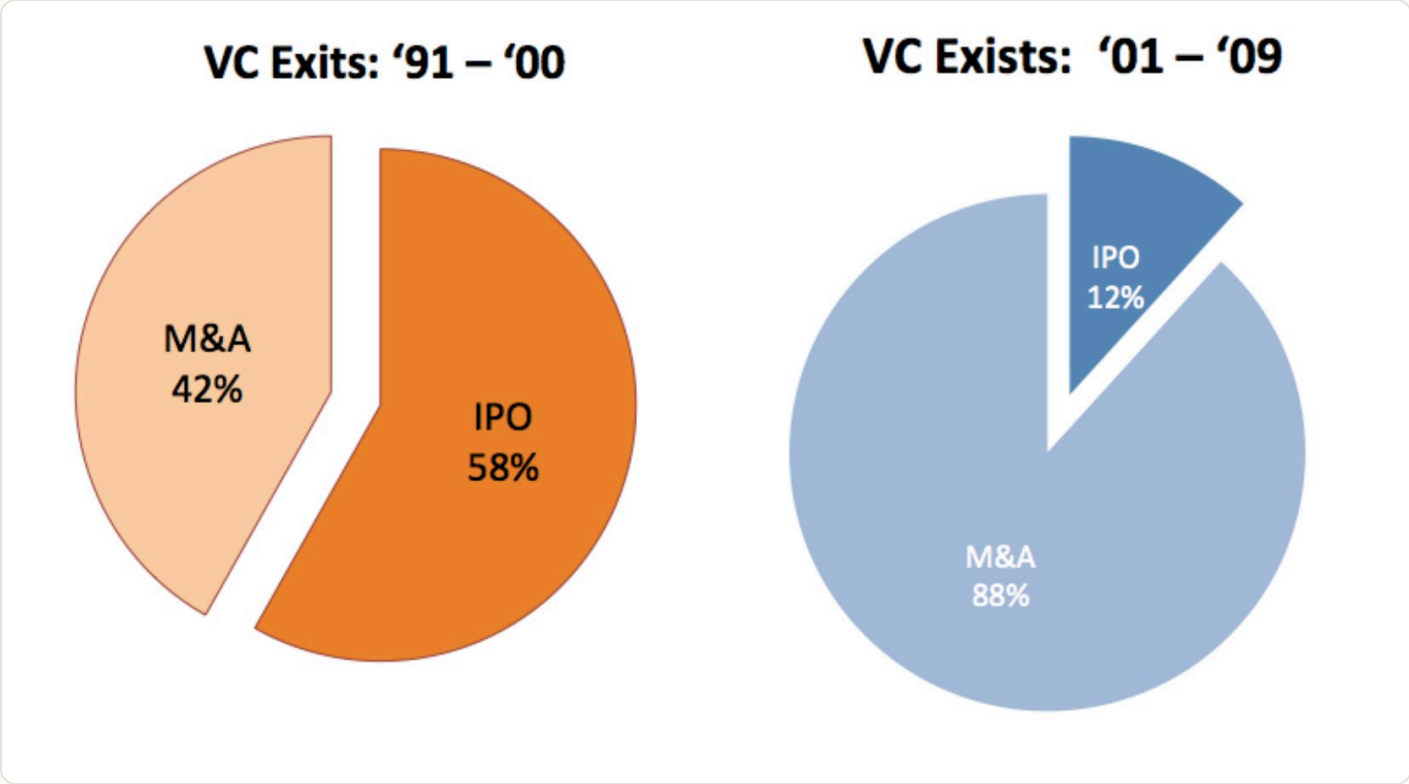
ROUND	FUNDING	TOTAL SHARES	EMPLOYEE SHARE	VALUATION PER SHARE
1	$8,000,000	40,000,000	40%	$0.20
2	$12,000,000	66,000,000	25%	$0.50
3	$20,000,000	84,181,818	19%	$1.10

At the IPO the stock is valued at $2.00/share. The underwriters want a $10/share offer price, so a reverse stock split adjusts the share count. Your stake in the company is worth $800,000.

Venture Capital Statistics

The US venture market around 2010–2011 in numbers: exits, funds, sectors, regions and stages.

VC Exits



2025–2026 UPDATE

US VC exit value peaked at $864.2B in 2021, fell to $117.0B in 2023 and recovered to $297.6B in 2025 (PitchBook-NVCA).

Share of VC exits by IPO vs M&A: 1991–2000, IPO 58% and M&A 42%; 2001–2009, IPO 12% and M&A 88%.

Trends in 2000/2001

INDICATOR	2000 / 2001	TREND DIRECTION
Valuations	Very high	Falling
Capital availability	Substantial	Beginning to tighten
Fund commitments	$83B and a big overhang	Shrinking
Number of active firms	1,338	At a high but going down
Tracking index – NASDAQ	4,000	Falling rapidly
Technology spending	Historically high	Dropping quickly

VENTURE CAPITAL STATISTICS

The Trend in 2011

Economic Situation

	2011	Trend Direction...
Valuations	Moderate	Rising in Certain Growth Markets
Capital availability	Adequate	Stable
Fund commitments	$~12B	Stable but trending down
# of Active Firms	~300	1/2 of the high & shrinking
Tracking index – NASDAQ	2800	Stable with IPO market open
Technology spending	Stable	Good and rising in some sectors

2025–2026 UPDATE

US VC deal value reached $339.4B in 2025, with AI taking 65.4%, while commitments to new funds fell to $66.1B (PitchBook-NVCA).

Economic situation in 2011: moderate valuations, adequate capital, fund commitments ~$12B, ~300 active firms, NASDAQ ~2,800 with the IPO market open, stable technology spending.

VENTURE CAPITAL STATISTICS

Current Trends: 1990, 2000, 2010

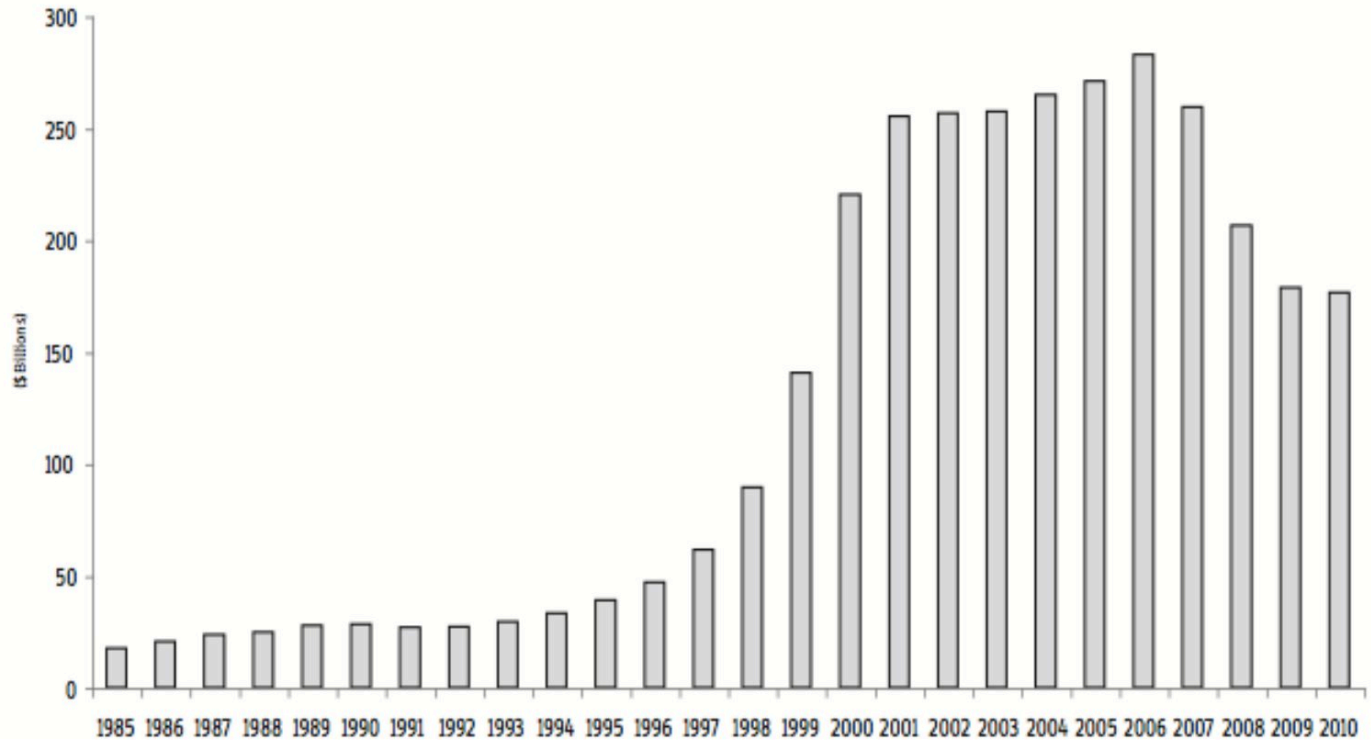
	1990	2000	2010
No. of VC Firms in Existence	384	861	791
No. of VC Funds in Existence	716	1,701	1,183
No. of Professionals	3,686	7,921	6,328
No. of First Time VC Funds Raised	13	104	44
No. of VC Funds Raising Money This Year	86	649	157
VC Capital Raised This Year ($B)	3.2	104.8	12.3
VC Capital Under Management ($B)	28.3	220.3	176.7
Avg VC Capital Under Mgt per Firm ($M)	73.7	255.9	223.4
Avg VC Fund Size to Date ($M)	36.5	88.0	107.8
Avg VC Fund Size Raised This Year ($M)	37.2	161.5	78.3
Largest VC Fund Raised to Date ($M)	1,775.0	5,000.0	6,300.0

2025–2026 UPDATE

New US VC funds raised a peak of $222.9B in 2022, but only $66.1B in 2025 across 537 funds, the fewest in a decade (PitchBook-NVCA).

US venture industry in 1990, 2000 and 2010: firms, funds, professionals, capital raised and under management, average and largest fund size.

US Venture Capital Under Management ($ Billions)

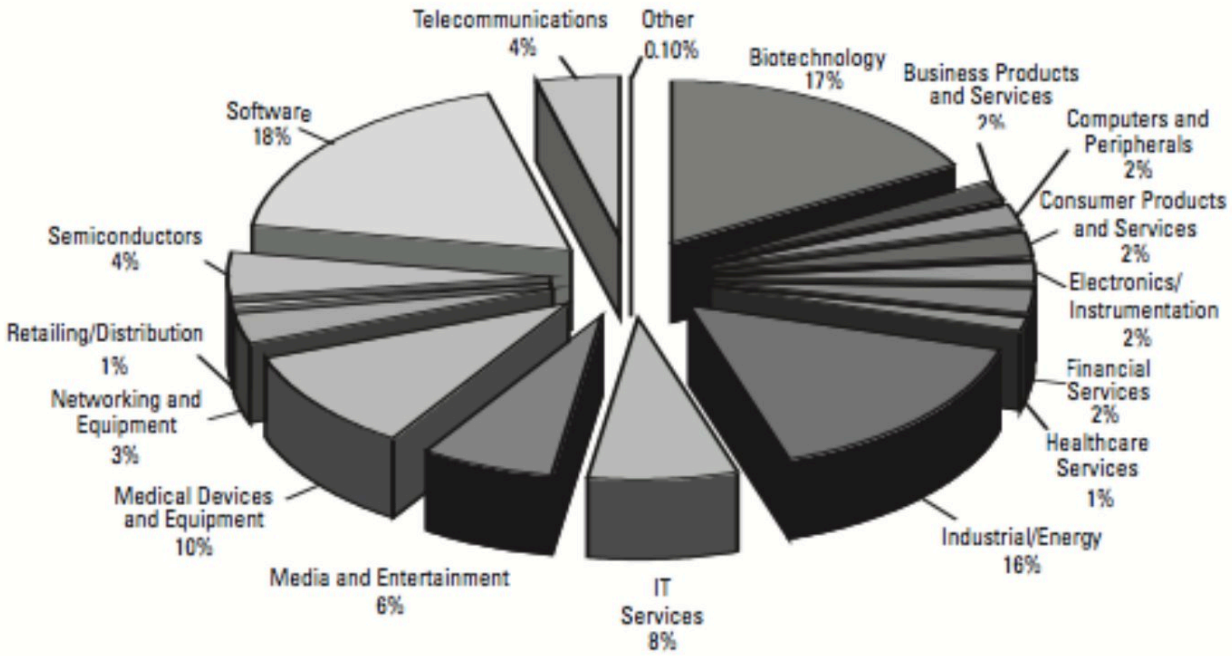


2025–2026 UPDATE

Unrealized value held in US VC funds reached a record $1.02 trillion (PitchBook-NVCA).

US venture capital under management, 1985–2010.

Venture Capital Investments in 2010



2025–2026 UPDATE

In 2025, AI companies took 65.4% of US VC deal value and 39.4% of deal count (PitchBook-NVCA).

2010 investments by sector: software 18%, biotechnology 17%, industrial/energy 16%, medical devices 10%, IT services 8%, media 6%, others smaller.

2010 Investments by State

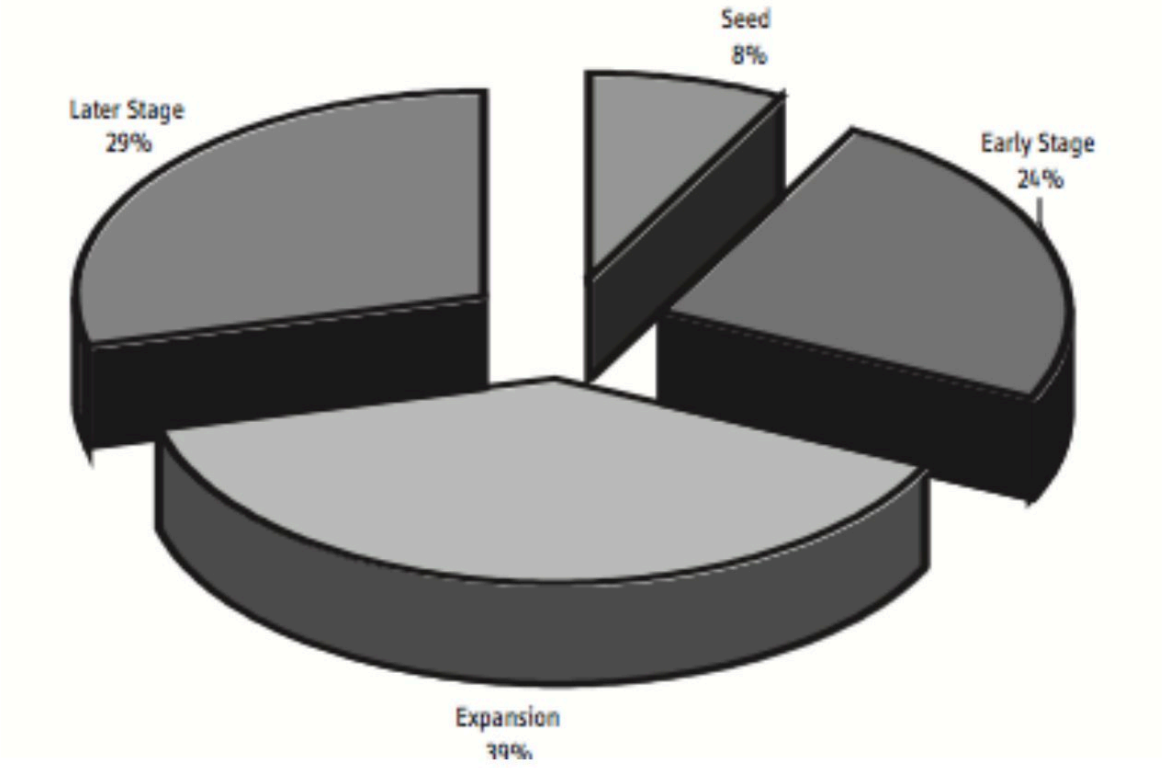
State	Number of Companies	Pct of Total	Investment ($ Millions)	Pct of Total
California	1,298	39%	11,054.9	50%
Massachusetts	353	11%	2,383.4	11%
New York	264	8%	1,312.8	6%
Texas	144	4%	906.4	4%
Washington	117	4%	624.3	3%
Illinois	59	2%	575.4	3%
Pennsylvania	153	5%	508.5	2%
Colorado	77	2%	469.0	2%
North Carolina	57	2%	456.3	2%
New Jersey	71	2%	450.8	2%
All Others	701	21%	3,233.0	15%
Total	3,294		21,974.8	

2025–2026 UPDATE

The Bay Area and New York together took 64.2% of 2025 US deal value (PitchBook-NVCA).

California alone took 50% of the $22.0B invested in 2010 (39% of companies), followed by Massachusetts (11%) and New York (6%).

Funding Stages

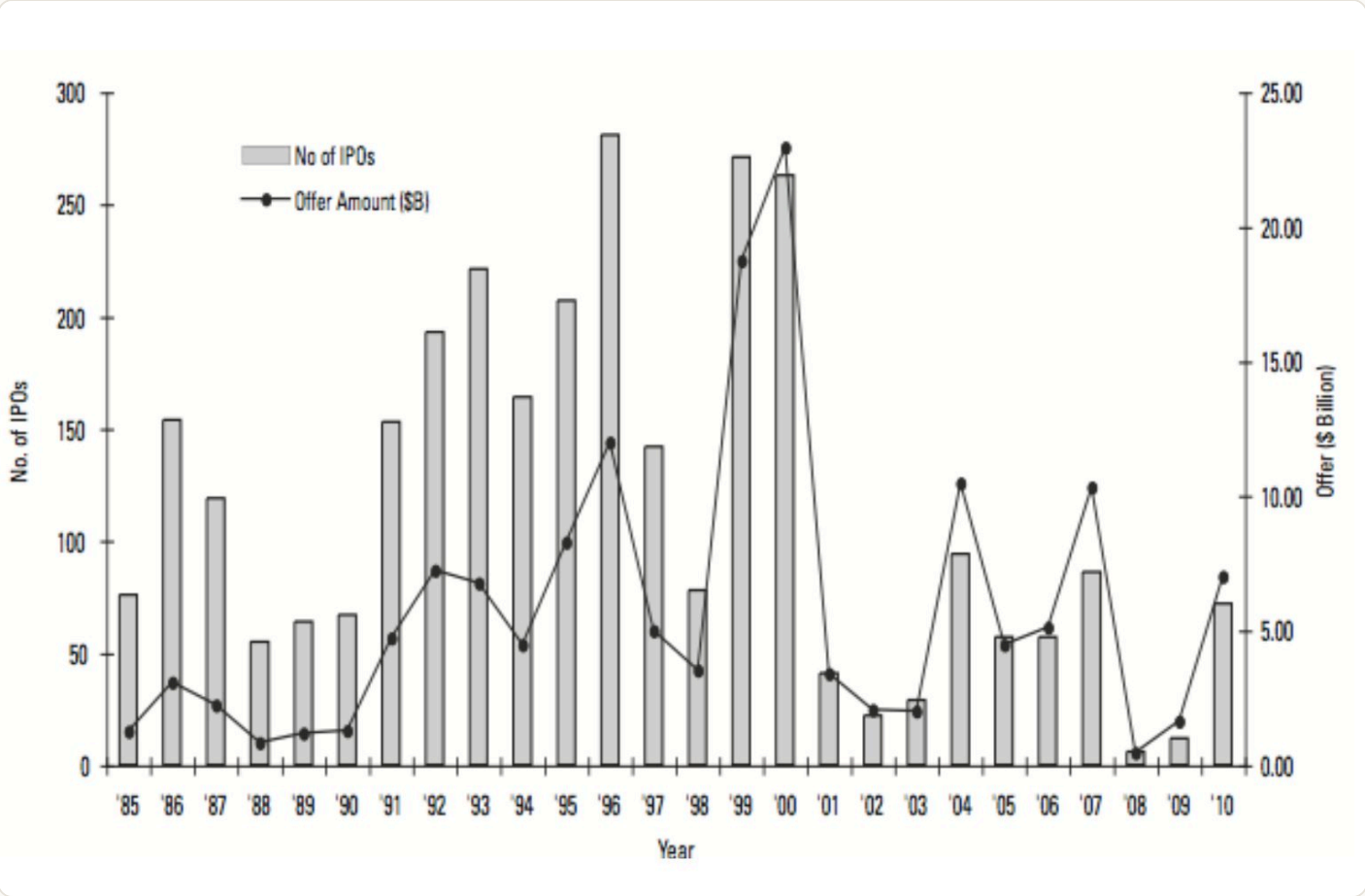


2025–2026 UPDATE

Median 2025 US deal sizes: pre-seed $0.5M, seed $3.8M, Series A $15M, B $33.8M, C $54M, D+ $100M (PitchBook-NVCA).

Share of 2010 investment by stage: seed 8%, early stage 24%, expansion 39%, later stage 29%.

IPOs

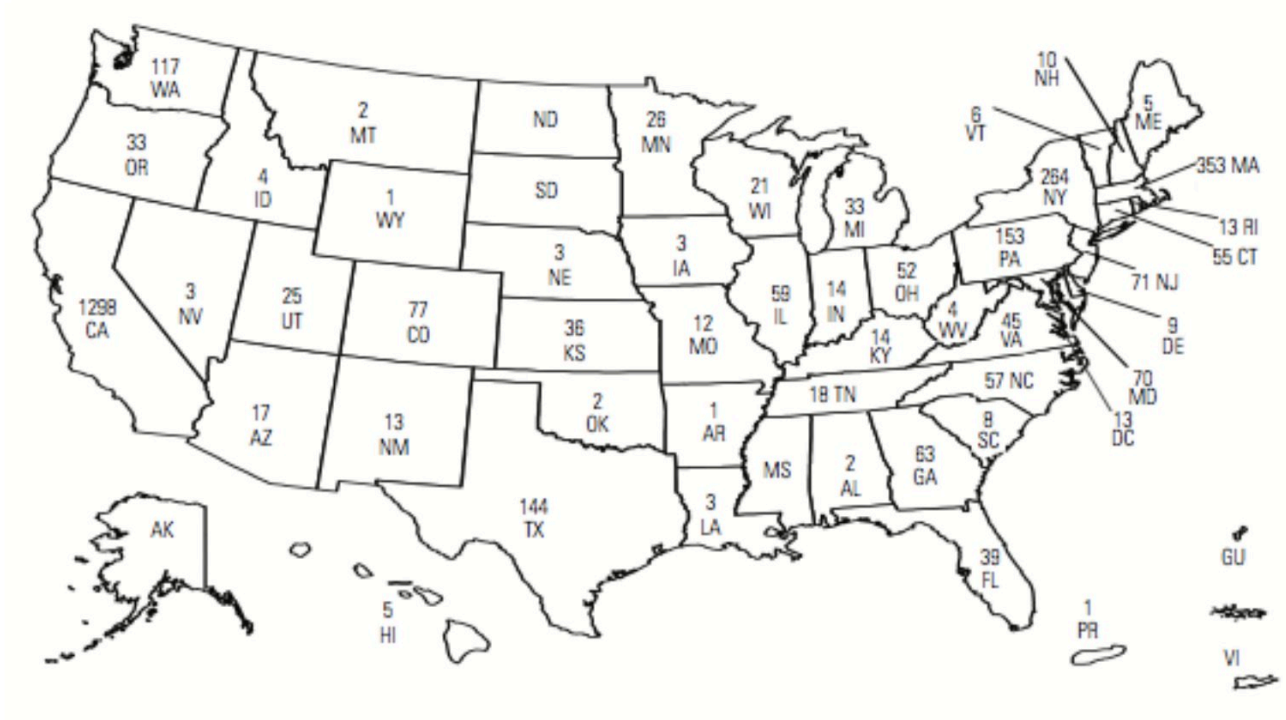


2025–2026 UPDATE

17 VC-backed unicorns went public in 2025, including CoreWeave, Circle, Figma, Klarna and Chime (PitchBook-NVCA).

Number of US venture-backed IPOs and offer amount ($B), 1985–2010.

North America: Number of Investments, 2010



2025–2026 UPDATE

US VC deal count was about 16,709 in 2025, after a peak of 19,634 in 2021 (PitchBook-NVCA); the 2010 count of ~3,300 used a different methodology (PwC MoneyTree).

Number of companies receiving venture investment by state, 2010.

North America: Capital Invested, 2010 ($ Millions)



2025–2026 UPDATE

US VC deal value was $339.4B in 2025, against about $22B in 2010 (PwC MoneyTree); the two series use different methodologies (PitchBook-NVCA).

Venture capital invested by state, 2010 ($ millions).

Sectors in 2010: Number of Companies

2010 Internet-Related vs Non Internet-Related Investments By Industry Sector (Number of Companies)

Industry	Internet Related	Non-Internet Related	Total
Software	561	128	689
Media and Entertainment	230	18	248
IT Services	214	19	233
Telecommunications	105	16	121
Consumer Products and Services	60	28	88
Networking and Equipment	53	7	60
Business Products and Services	36	42	78
Computers and Peripherals	31	21	52
Financial Services	30	34	64
Medical Devices and Equipment	18	245	263
Retailing/Distribution	15	6	21
Healthcare Services	14	24	38
Industrial/Energy	13	219	232
Semiconductors	11	89	100
Biotechnology	7	377	384
Electronics/Instrumentation	5	50	55
Other	0	23	23
Total	1,403	1,346	2,749

2010 Internet-related vs non-Internet-related investments by industry (number of companies): 1,403 Internet-related and 1,346 other, 2,749 in total; software led with 689.

Sectors in 2010: Dollars Invested

2010 Internet-Related vs Non Internet-Related Investments By Industry Sector ($ Millions)

Industry	Internet Related	Non-Internet Related	Total
Software	3,268.7	741.2	4,009.8
IT Services	1,495.9	163.9	1,659.8
Media and Entertainment	1,323.7	102.7	1,426.3
Telecommunications	637.0	257.7	894.7
Networking and Equipment	603.4	60.2	663.6
Consumer Products and Services	362.0	184.5	546.5
Computers and Peripherals	351.0	163.6	514.6
Financial Services	209.4	339.9	549.3
Business Products and Services	167.9	237.4	405.2
Retailing/Distribution	123.8	43.0	166.8
Medical Devices and Equipment	107.9	2,153.0	2,260.9
Healthcare Services	103.7	219.2	322.9
Semiconductors	73.1	904.6	977.7
Biotechnology	50.9	3,685.2	3,736.1
Industrial/Energy	48.5	3,359.1	3,407.7
Electronics/Instrumentation	26.1	384.2	410.2
Other	NA	22.6	22.6
Total	8,952.9	13,022.0	21,974.8

2025–2026 UPDATE

Half of 2025 US deal value went to 0.05% of deals (PitchBook-NVCA) — mega-rounds such as OpenAI's $40B at a $300B valuation (March 2025).

2010 Internet-related vs non-Internet-related investments by industry ($ millions): $8,952.9M Internet-related and $13,022.0M other, $21,974.8M in total.

IPO Breakdown, Q1 2011

Venture-Backed IPO Industry Breakdown

Industry		Q1 2011 *Number of Venture-Backed IPO's in the U.S.	Q1 2011 Total Venture-Backed Offering Size ($M)
Information Technology	Computer Software and Services	2	312.1
	Communications and Media	1	264.9
	Internet Specific	1	151.3
	Semiconductors	2	145.5
	Computer Hardware	1	85.8
		7	**959.6**
Life Sciences	Biotechnology	4	292.3
	Medical/Health	2	82.0
		6	**374.3**
	Consumer Related	1	42.0
		1	**42.0**
TOTAL		**14**	**1,375.8**

*Includes all companies with at least one U.S. VC investor that trade on U.S. exchanges, regardless of domicile

2025–2026 UPDATE

Soon after came Groupon's IPO (2011) and Facebook's (May 2012).

Venture-backed IPOs in the US, Q1 2011: 14 offerings raising $1,375.8M — 7 in information technology, 6 in life sciences, 1 consumer.

M&A Industry Breakdown, Q1 2011

Venture-Backed M&A Industry Breakdown

Industry		Q1 2011 Number of Venture-Backed M&A deals	Number of Venture-Backed M&A deals with a disclosed value	Total Disclosed Venture-Backed Deal Value ($M)
Information Technology	Internet Specific	28	12	2265.3
	Computer Software and Services	35	7	820.3
	Communications and Media	4	1	95.0
	Semiconductors/Other Elect.	3	1	75.0
	Computer Hardware	4	2	52.2
		74	**23**	**3,307.8**
Life Sciences	Medical/Health	17	12	1,524.9
	Biotechnology	6	5	650.5
		23	**17**	**2,175.3**
Non-High Technology	Consumer Related	3	2	248.0
	Other Products	5	1	115.0
	Industrial/Energy	4	2	45.0
		12	**5**	**408.0**
	TOTAL	**109**	**45**	**5,891.2**

Source: Thomson Reuters & National Venture Capital Association

2025–2026 UPDATE

Later landmark deals: Facebook bought Instagram ($1B, 2012) and WhatsApp ($19B, 2014); in 2025 Meta paid $14.3B for 49% of Scale AI.

Venture-backed M&A, Q1 2011: 109 deals, $5,891.2M disclosed value; IT 74 deals, life sciences 23, non-high-tech 12. Source: Thomson Reuters & NVCA.

Related Venture Capital Literature

Books

- *Mastering the VC Game* – Jeffrey Bussgang
- *The Masters of Private Equity and Venture Capital* – Robert Finkel
- *Digging for Disclosure* – Kenneth Springer and Joelle Scott
- *The Start-Up Game* – William H. Draper
- *Private Equity as an Asset Class* – Guy Fraser-Sampson
- *Creative Capital: Georges Doriot and the Birth of Venture Capital* – Spencer Ante
- *The Venture Capital Cycle* (2nd ed.) – Paul Gompers and Josh Lerner

More books

- *The Money of Invention* – Paul Gompers
- *The First Venture Capitalist: Georges Doriot on Leadership, Capital and Business Organization* – Udayan Gupta (2004)
- *Done Deals: Venture Capitalists Tell Their Stories* – Udayan Gupta (2000)
- *eBoys: The First Inside Account of Venture Capitalists at Work* – Randall Stross (2000)
- *Venture Capital at the Crossroads* – William Bygrave and Jeffry Timmons (1992)

Angels and Venture Capital in Turkey

- Innovent · Young Turk Ventures
- Teknoloji Yatırım A.Ş. · Golden Horn & Timar Ventures
- Galata Business Angels · Lab-X
- iLab · 212 Venture Capital

2025–2026 UPDATE

Turkish startups raised about $589M across ~306 rounds in 2025, down from ~$1.1B in 2024 (startups.watch).

VENTURE CAPITAL STATISTICS

Turkish Venture Capital

- Big Band Ventures · KOBİ Girişim
- İş Girişim Sermayesi · Rhea Girişim Sermayesi
- Esas Holding · Fiba Kapital Holding
- Sedes Holding · TurkVen Private Equity

2025–2026 UPDATE

Total Turkish startup deal volume, including M&A, was $1.4B in 2025, down from $2.6B in 2024 (KPMG Türkiye).

Turkish Venture Capital (Cont.)

- Brightwell Holding
- Abraaj Capital
- Actera
- Advent
- Carlyle
- NBGI
- NBK
- Egesea

Turkish Venture Capital (Cont.)

- Templeton Darby · Global Investment House
- Inventram · Endeavor
- Etohum · METUTECH-BAN
- Özyeğin Girişim Factory

2025–2026 UPDATE

A newer channel: equity crowdfunding, under SPK rules since 2019 with licensed platforms since 2021.

Some VC Investments in Turkey

Investments

- Mynet – Tiger
- Yemeksepeti – EFF
- Cember.net – EFF, Xing
- GittiGidiyor – eBay
- Nokta – Intel Capital
- BeFunky.com – Golden Horn Ventures
- Grou.ps – Golden Horn Ventures
- Yoghurt – Golden Horn Ventures
- Trendyol – Tiger
- Peak Games – Hummingbird Ventures

Investments (cont.)

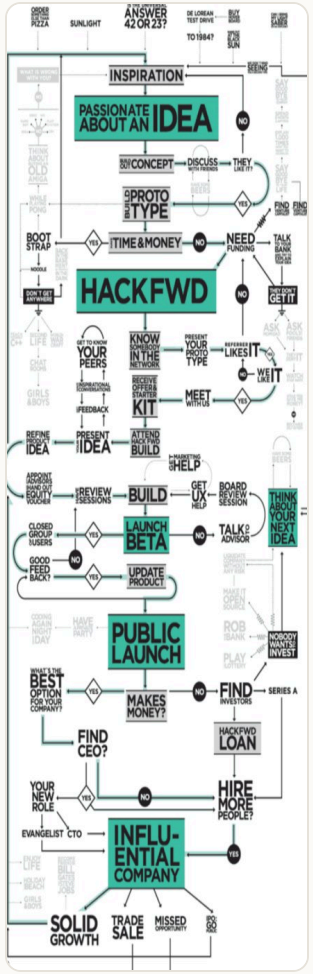
- Markafoni – Trayas; Galata Business Angels
- Selp, NanoTeco, Maxima – Innovent
- AirTies – Ziya Boyacıgiller, GBA
- Groupanya – Young Turk Ventures
- P.I. Works – Abraaj Capital
- Kariyer.net – iLab
- Pegasus Air – Esas Holding
- Digiturk – TurkVen, Providence

2025–2026 update: Zynga bought Peak Games for $1.8B (2020); Trendyol, majority-owned by Alibaba, is a decacorn; Dealroom counts 8 Türkiye-founded companies valued at $1B+.

References

- Ian Kaplan, *Venture Capital and Start-up Companies: Technology, Politics and Capital Markets*, May 2001 (revised September 2005).
- IHS Global Insight, *Venture Impact: The Economic Importance of Venture Capital-Backed Companies to the U.S. Economy*, 2009.
- NVCA, *Emerging Best Practices for Building the Next Generation of Venture-Backed Leadership*.
- William Quigley (Clearstone), *A Venture Capital Revival Is Upon Us*.

From Idea to Influential Company



The HackFWD startup flowchart: from inspiration and prototype through funding, beta and public launch to an influential company — or solid growth, trade sale or a missed opportunity.

06

Venture Impact: Jobs and Returns

How venture-backed companies create jobs and economic growth, and what venture funds have returned to their investors.

Venture Impact

- Like ripples from a raindrop on a lake, innovation's effects fan out from the heart of the economy, bringing opportunities for growth and progress with every wave.
- VCs keep seeking these opportunities and funding ground-breaking ideas in good times and bad — turning single ideas into economic growth.
- This growth can create entire new industries, offering opportunities to all segments of the workforce.

> The venture industry is committed to being an important part of economic growth, technological advancement and the ongoing improvement of quality of life.

Venture Capital Returns

Index	One Quarter	Year To Date	One Year	Three Year	Five Year	Ten Year	Fifteen Year	Twenty Year	Twenty Five Year
U.S. Venture Capital Index® [1]	**3.75**	**4.80**	**8.20**	**(2.06)**	**4.25**	**(4.64)**	**36.90**	**25.61**	**18.74**
Barclays Capital Gov't/Credit Bond Index	3.28	8.95	8.73	7.46	6.15	6.52	6.44	7.30	7.83
Dow Jones Industrials Average	11.13	5.57	14.12	(5.38)	3.12	2.52	7.90	10.28	11.66
Dow Jones U.S. Small Cap Index	11.65	9.73	15.23	(2.62)	3.16	5.40	8.46	NA	NA
Dow Jones U.S. TopCap Index	11.66	4.29	10.68	(6.69)	1.04	(0.37)	6.49	NA	NA
Nasdaq Composite*	12.30	4.38	11.60	(4.29)	1.94	(4.29)	5.62	10.12	8.91
Russell 1000®	11.55	4.41	10.75	(6.79)	0.86	(0.21)	6.64	9.38	10.23
Russell 2000®	11.29	9.12	13.35	(4.29)	1.60	4.00	6.72	10.28	9.10
S&P 500	11.29	3.89	10.16	(7.16)	0.64	(0.43)	6.45	9.05	10.17
Wilshire 5000 Total Market	11.50	5.00	11.08	(6.46)	1.11	0.29	6.58	9.36	10.03

Cambridge Associates U.S. Venture Capital Index: pooled end-to-end returns, net of fees, expenses and carried interest, of 1,290 US VC funds (incl. fully liquidated ones) formed 1981–2010, vs public indexes. Sources: Barclays Capital, Bloomberg, Cambridge Associates, Frank Russell, S&P, Thomson Datastream, WSJ, Wilshire. *Nasdaq: capital change only.

Returns over Multiple Horizons

Multi-Year Returns

Years	End to End Net To LP	Years	End to End Net To LP
1 Year	8.20	16 Years	36.04
2 Years	(2.55)	17 Years	31.77
3 Years	(2.06)	18 Years	30.01
4 Years	3.09	19 Years	27.33
5 Years	4.25	20 Years	25.61
6 Years	5.30	21 Years	22.79
7 Years	5.89	22 Years	21.18
8 Years	3.82	23 Years	19.60
9 Years	0.31	24 Years	19.35
10 Years	(4.64)	25 Years	18.74
11 Years	8.48	26 Years	18.15
12 Years	36.57	27 Years	17.86
13 Years	28.25	28 Years	17.82
14 Years	32.01	29 Years	17.78
15 Years	36.90		

2025–2026 UPDATE

Since 2022, net cash flow to US VC limited partners has been negative $196.9B (PitchBook-NVCA).

Cambridge Associates U.S. Venture Capital Index, end-to-end net returns to LPs (%) over 1 to 29 years, as of 2010: negative over 2, 3 and 10 years, above 30% over 12–17 years.

Returns by Industry

As of September 30, 2010

By Industry

Pooled Gross Mean of Companies Receiving Initial Investment In

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Chemical/Materials	5.71	12.76	(3.83)	(8.12)	(20.93)	2.80	(3.42)	(20.44)	(0.24)	(8.96)	8.43	7.44	(5.01)
Consumer/Retail	(9.85)	5.42	1.51	(3.30)	11.49	(0.18)	15.85	10.51	5.83	0.32	(5.23)	0.42	31.86
Electronics	58.04	178.73	2.08	(15.11)	(1.92)	0.66	(7.86)	1.14	(6.11)	(6.63)	4.74	6.97	23.50
Energy	30.41	6.54	(2.47)	2.67	(6.77)	31.26	44.30	10.61	10.03	5.81	24.11	5.60	7.02
Environmental	(4.67)	NA	(51.13)	NA	(13.27)	21.45	(74.06)	(10.70)	(28.01)	(45.02)	(0.73)	26.22	19.45
Financial Services	10.06	17.75	4.18	2.95	22.71	19.50	29.84	31.79	7.18	13.14	(12.98)	(5.81)	28.53
Hardware/Systems	48.16	201.26	0.99	(7.40)	7.87	4.41	(1.94)	14.21	(1.94)	(3.18)	9.34	(0.12)	28.10
Health Care/Biotech *	10.66	22.17	13.04	2.86	8.43	7.31	15.35	7.64	12.84	3.78	4.19	12.89	9.11
Industrial	(99.89)	16.20	10.95	(17.55)	(100.00)	NA	22.63	68.56	0.26	(99.76)	(18.00)	24.90	0.00
Information Technology *	278.23	274.45	34.18	(3.83)	(1.61)	8.45	18.47	18.77	21.35	13.12	14.47	25.87	44.16
Manufacturing	58.55	(14.14)	8.46	(8.19)	20.53	19.15	18.92	(2.29)	2.25	18.46	4.19	14.83	24.14
Media/Communications	14.57	192.23	12.73	(0.92)	2.86	6.44	4.69	16.80	3.86	(5.49)	0.73	5.90	25.30
Software/Services	115.59	110.42	(5.61)	(7.01)	0.91	16.25	7.50	14.30	6.28	9.11	5.54	17.82	30.51
Other/Fund of Funds	32.50	4.23	(12.94)	(9.37)	(0.26)	(9.28)	22.38	6.90	3.46	2.34	(1.24)	4.74	84.14
All Companies	125.96	147.72	18.03	(3.93)	3.15	9.35	11.75	12.17	10.99	5.89	6.67	15.26	24.14
Number of Companies	1,144	1,580	2,513	3,222	1,587	1,342	1,332	1,571	1,468	1,617	1,705	1,478	933

* See following exhibit for industry sub-groups.

NA indicates inadequate number of companies in sample.

Cambridge Associates: pooled gross mean IRR (%) of US VC-backed companies by year of initial investment (1997–2009) and industry, as of 30 September 2010.

Returns by Sector

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Biotechnology/Biopharm/R&D	9.90	37.99	69.96	(1.80)	8.87	6.12	24.40	4.39	20.53	1.32	3.96	8.61	8.98
Health Care Devices	8.45	13.32	7.43	9.17	2.65	2.30	2.54	1.72	8.57	1.24	3.04	16.83	0.21
Health Care Services	12.59	11.68	6.01	10.78	12.24	12.53	25.21	17.04	13.10	7.67	5.02	5.43	42.92
Health Care Software/Systems	7.64	2.48	1.99	(2.93)	2.39	(1.70)	13.17	4.74	7.54	(9.53)	21.49	41.99	(4.87)
Pharmaceuticals	15.39	64.65	22.14	8.62	14.44	27.53	13.03	21.48	(0.10)	17.49	2.21	7.94	20.77
Internet-eBusiness	682.40	267.82	39.07	3.07	(0.20)	8.71	36.94	52.17	44.31	25.43	23.67	43.35	63.76
Internet-eCommerce	139.67	97.15	(8.83)	1.59	9.86	26.25	28.04	42.85	17.06	14.36	11.98	14.55	25.06
Telecom Network/Systems	255.43	360.68	285.95	(9.18)	(3.34)	14.83	17.47	2.72	(3.74)	(4.04)	9.54	12.34	12.53
Telecom Products	243.51	310.72	75.81	(12.87)	(9.44)	(16.18)	10.18	(10.73)	(7.37)	(7.58)	(13.71)	(0.96)	125.92
Telecom Services	134.26	107.97	(12.44)	(3.96)	3.11	9.52	14.25	5.82	4.25	2.51	6.94	(11.95)	0.19

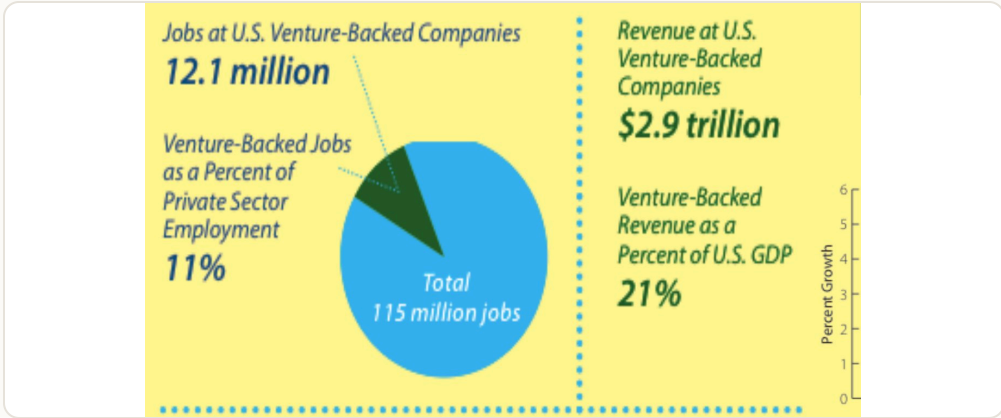
Cambridge Associates benchmark statistics: US VC-backed companies' since-inception IRR (%) by initial investment year and sector (life sciences, Internet, telecom), as of 30 September 2010.

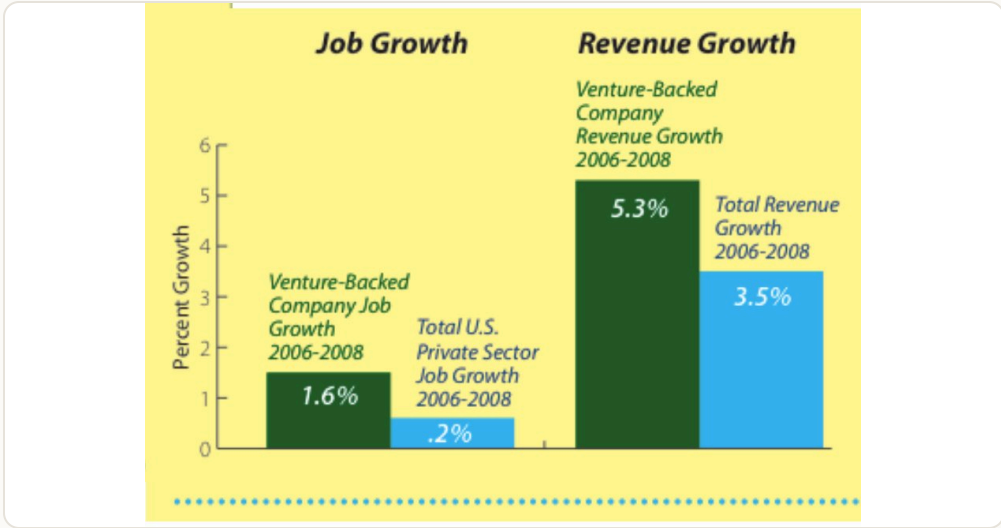
Venture Impact

- 2008: VC-backed companies had **12.1M** jobs (11% of private sector) and **$2.9T** revenue (21% of GDP).
- 2006–2008 growth: jobs 1.6% vs 0.2%; revenue 5.3% vs 3.5% for the whole economy.

2025–2026 UPDATE

VC-backed firms = 41% of US public-market value and 62% of public-company R&D (Gornall & Strebulaev, Stanford, 2021).





Source: NVCA, Venture Impact (IHS Global Insight), 2009 ed. — extends the "ripple effect" tracked since the first edition (2001).

Outperformance

- Venture-backed companies outperformed the overall economy in creating jobs and growing revenue.
- Venture capital's focus on innovative, high-growth-potential companies continues to produce some of the US economy's best performers.
- These companies are wired to drive change and to capitalize on it.

New Industries

- The venture capital industry keeps growing entire new industries almost from scratch.
- In recent decades VC played an instrumental role in creating high-tech, high-growth industries such as information technology, biotechnology, semiconductors and online retailing.
- 2008 investment data suggested that other critical industries, such as clean technology and social media, would join that list.

2025–2026 UPDATE

Both did: social media produced Facebook (IPO 2012, renamed Meta 2021), and climate tech drew $40.5B of global venture and growth investment in 2025 (Sightline Climate).

Regional Impact

- Venture capital's impact across the country grows through the continued development of regional VC hubs.
- Established hubs such as California and New England kept performing well in jobs, revenue and dollars invested, but several upstarts outpaced them in growth.
- Regions such as the Pacific Northwest, the Mid-Atlantic and the Southwest keep building venture and entrepreneurial ecosystems that will serve them well economically over time.

2025–2026 UPDATE

Money has since concentrated again: the Bay Area and New York took 64.2% of US VC deal value in 2025 (PitchBook-NVCA).

Key Statistics

- Total venture investment from 1970 to 2008: **$456 billion** into more than **27,000** companies.
- For every dollar of venture capital invested from 1970 to 2008, **$6.36** of revenue was generated in 2008.
- In 2008, one US job existed for every **$37,702** of venture capital invested.

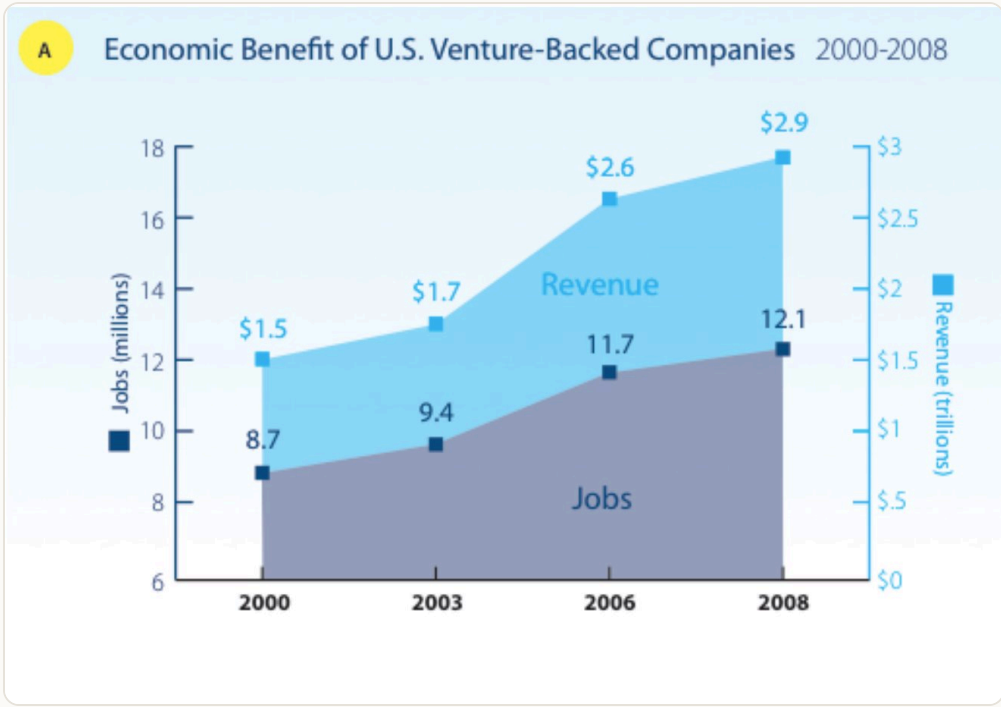
2025–2026 UPDATE

US VC deal value in 2025 alone was $339.4B, across ~16,709 deals (PitchBook-NVCA).

Source: NVCA, Venture Impact (IHS Global Insight), 2009 edition.

Economic Benefit

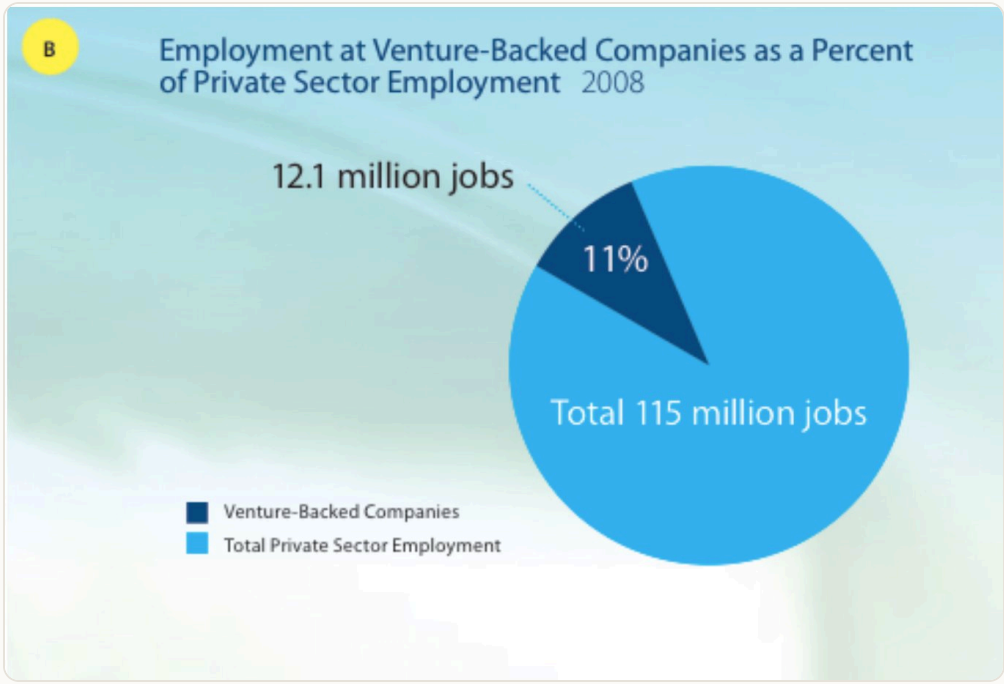
- US venture-backed companies, 2000–2008:
  - Jobs: 8.7 million → 12.1 million
  - Revenue: $1.5 trillion → $2.9 trillion



Economic benefit of US venture-backed companies, 2000–2008 (NVCA, Venture Impact).

Employment

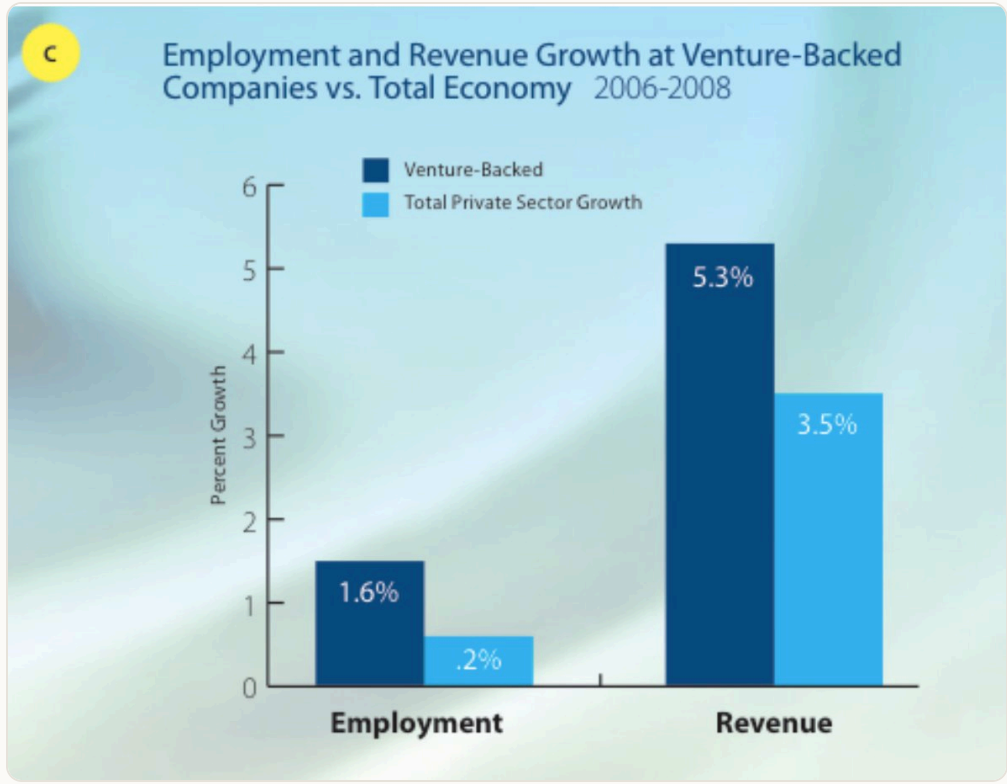
- 12.1 million jobs at venture-backed companies in 2008.
- That is **11%** of total private-sector employment of 115 million jobs.



Employment at venture-backed companies as a percent of private-sector employment, 2008 (NVCA, Venture Impact).

Employment and Revenue Growth

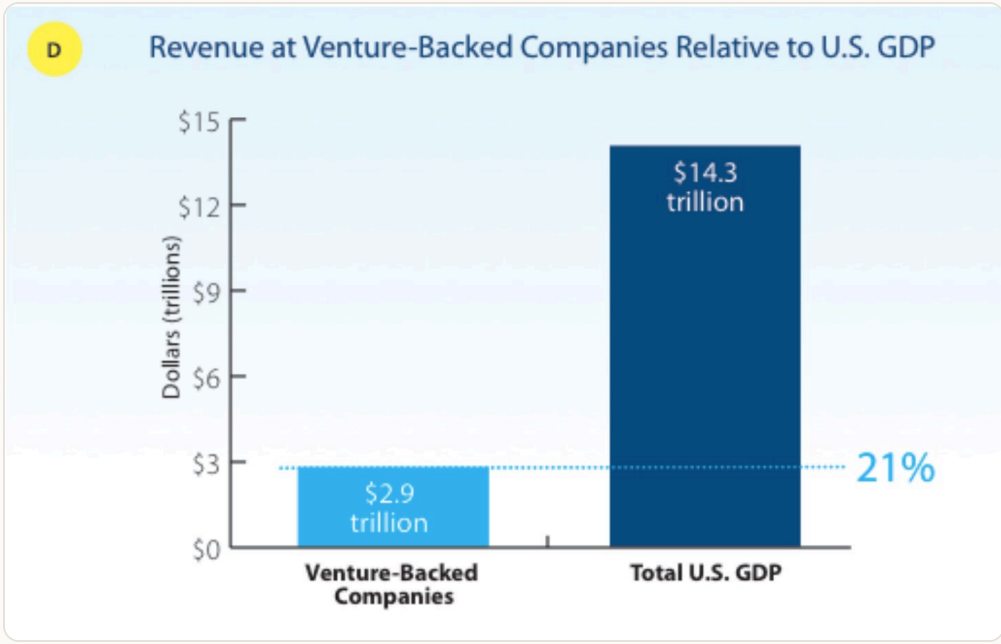
- Annual growth 2006–2008, venture-backed vs total private sector:
  - Employment: **1.6%** vs 0.2%
  - Revenue: **5.3%** vs 3.5%



Employment and revenue growth at venture-backed companies vs the total economy, 2006–2008 (NVCA, Venture Impact).

Revenue

- Venture-backed companies: **$2.9 trillion** in revenue (2008).
- Total US GDP: $14.3 trillion.
- Venture-backed revenue equals **21%** of GDP.



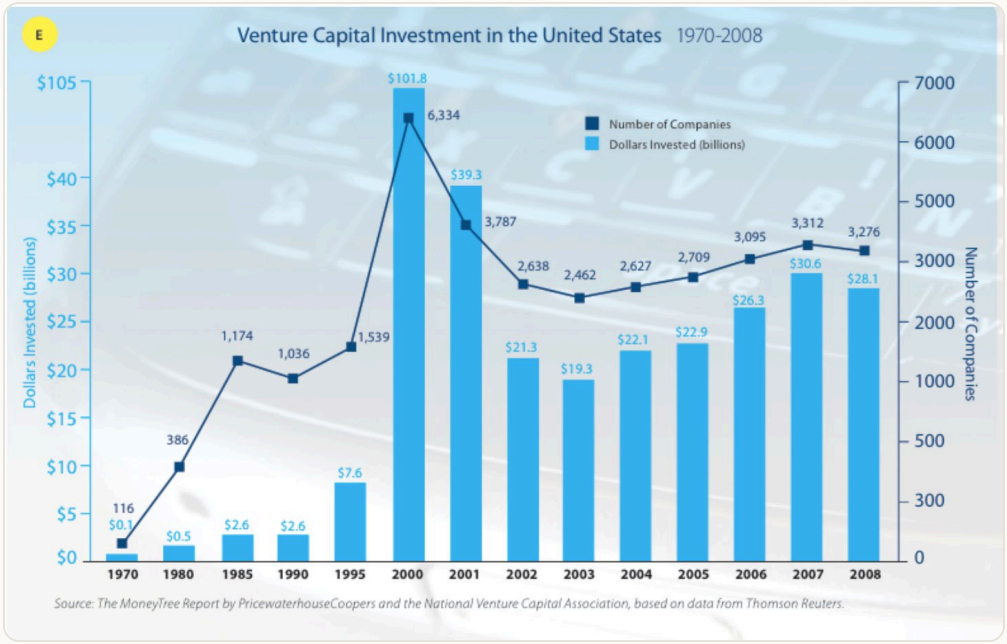
Revenue at venture-backed companies relative to US GDP, 2008 (NVCA, Venture Impact).

Venture Capital Investment in the US

- Peak in 2000: $101.8B into 6,334 companies.
- 2008: $28.1B into 3,276 companies.

2025–2026 UPDATE

US VC deal value: $358.2B in 2021, $339.4B in 2025 (65.4% to AI) (PitchBook-NVCA).



Source: MoneyTree Report by PricewaterhouseCoopers and NVCA, based on Thomson Reuters data.

Venture-Backed Company Employment

INDUSTRY (TOP FIVE, 2008)	VENTURE-BACKED EMPLOYMENT	TOTAL EMPLOYMENT	VC-BACKED SHARE
Software	817,166	1,008,929	80.99%
Telecommunications	736,961	994,862	74.08%
Semiconductors	309,437	418,998	73.85%
Networking and equipment	392,505	668,058	58.75%
Electronics/instrumentation	271,224	528,148	51.35%

Venture-backed company employment as a percentage of total industry employment, top five sectors, 2008 (NVCA, Venture Impact).

Venture-Backed Company Revenue

INDUSTRY (TOP FIVE, 2008)	VENTURE-BACKED REVENUE ($M)	TOTAL SECTOR REVENUE ($M)	VC-BACKED SHARE
Electronics/instrumentation	129,597	193,427	67.00%
Semiconductors	86,776	157,660	55.04%
Telecommunications	256,136	501,729	51.05%
Biotechnology	209,358	444,028	47.15%
Computers and peripherals	315,054	711,331	44.29%

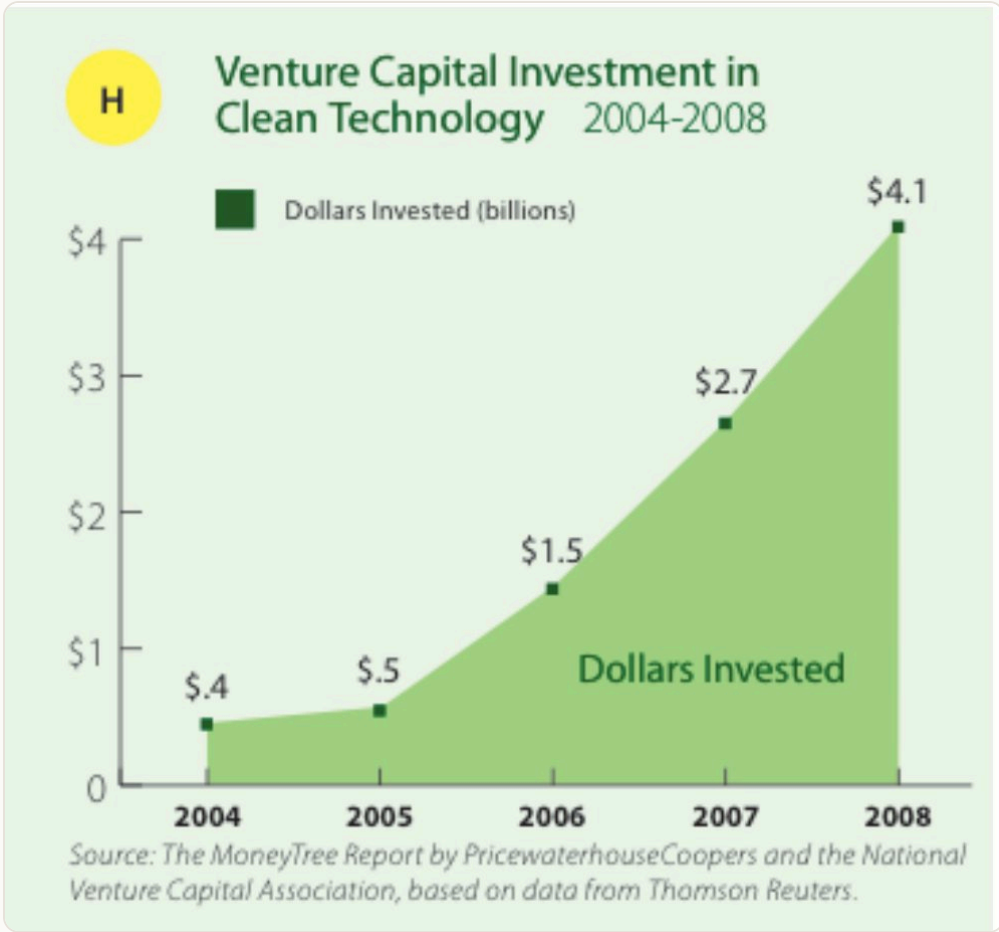
Venture-backed company revenue as a percentage of industry revenue, top five sectors, 2008 (NVCA, Venture Impact).

Venture Capital Investment in Clean Technology

- Clean tech (renewables, recycling, electric cars, clean water, grid management, batteries) comes at a critical time for the US economy.
- VC investment: $0.4B (2004) → $4.1B (2008).

2025–2026 UPDATE

Global climate-tech investment reached $40.5B in 2025; 44% of energy funding went to fusion and fission (Sightline Climate).



Source: MoneyTree Report by PricewaterhouseCoopers and NVCA, based on Thomson Reuters data.

Employment at Venture-Backed Companies

- Top 15 states by 2008 employment at venture-backed companies headquartered in the state.
- Leaders: California (3.9 million), New York (1.7 million), Texas (0.9 million).

I

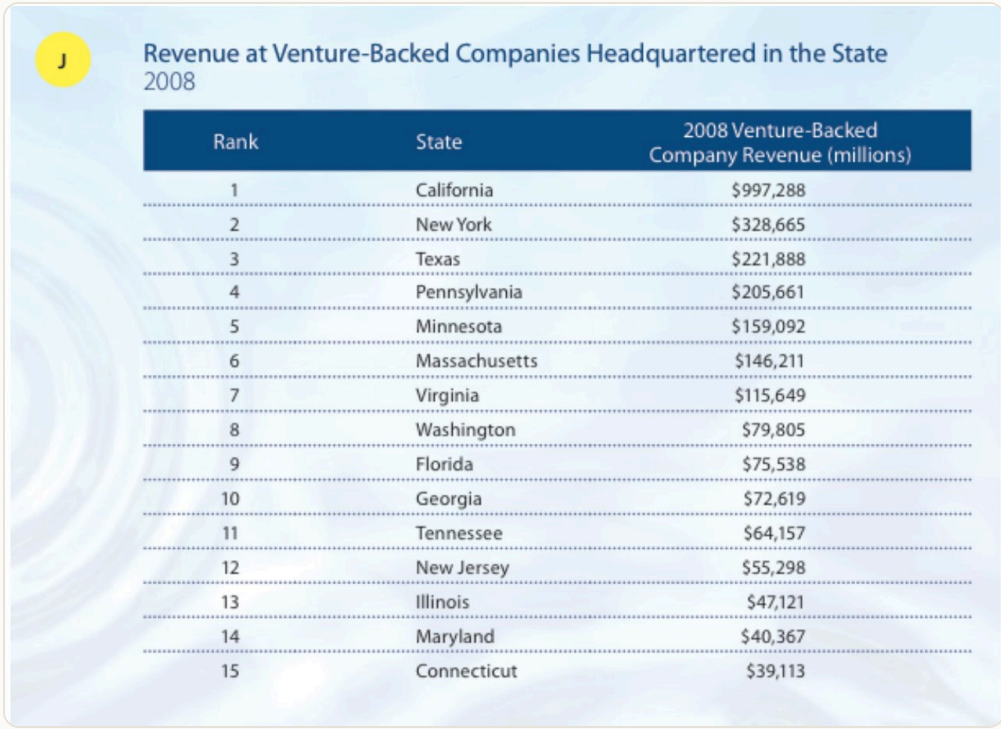
Employment at Venture-Backed Companies Headquartered in the State
2008

Rank	State	2008 Venture-Backed Company Employment
1	California	3,885,888
2	New York	1,694,316
3	Texas	918,451
4	Massachusetts	651,239
5	Georgia	621,181
6	Pennsylvania	561,525
7	Tennessee	434,376
8	Minnesota	365,584
9	Virginia	360,424
10	New Jersey	289,720
11	Florida	242,074
12	Washington	219,954
13	Illinois	214,432
14	Ohio	158,876
15	Connecticut	141,539

Employment at venture-backed companies headquartered in the state, 2008 (NVCA, Venture Impact).

Revenue at Venture-Backed Companies

- Top 15 states by 2008 revenue of venture-backed companies headquartered in the state.
- Leaders: California ($997B), New York ($329B), Texas ($222B).



J

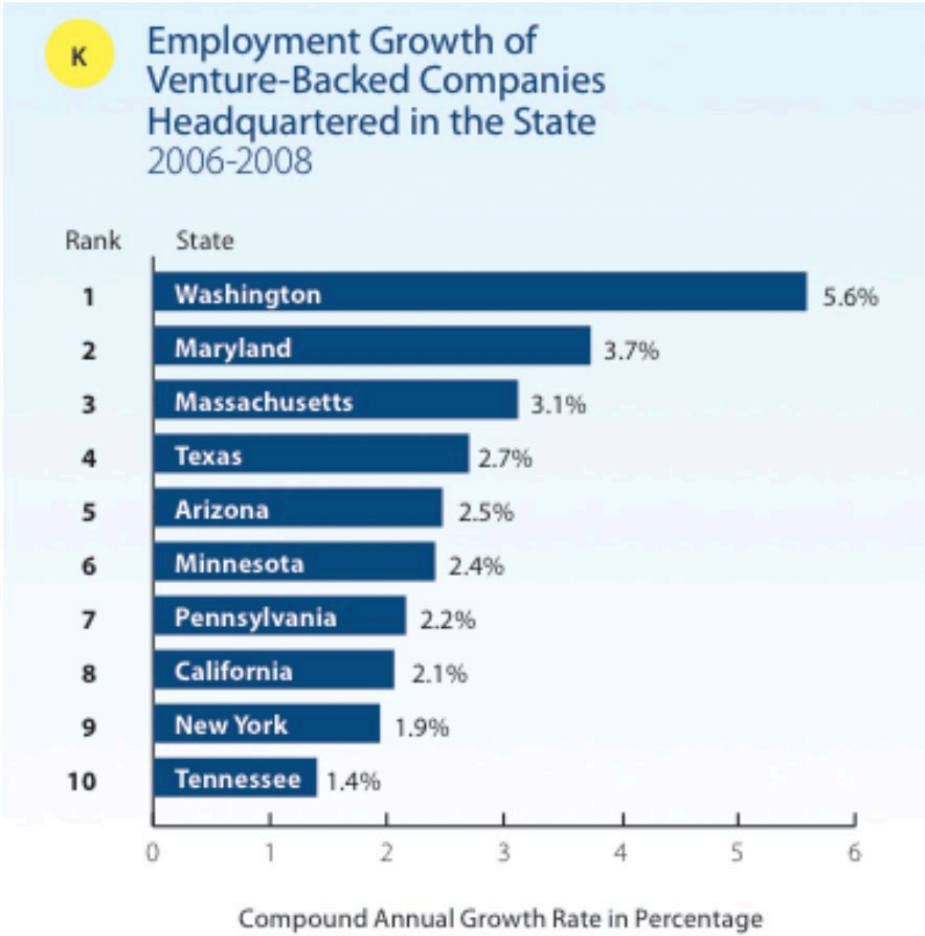
Revenue at Venture-Backed Companies Headquartered in the State
2008

Rank	State	2008 Venture-Backed Company Revenue (millions)
1	California	$997,288
2	New York	$328,665
3	Texas	$221,888
4	Pennsylvania	$205,661
5	Minnesota	$159,092
6	Massachusetts	$146,211
7	Virginia	$115,649
8	Washington	$79,805
9	Florida	$75,538
10	Georgia	$72,619
11	Tennessee	$64,157
12	New Jersey	$55,298
13	Illinois	$47,121
14	Maryland	$40,367
15	Connecticut	$39,113

Revenue at venture-backed companies headquartered in the state, 2008 (NVCA, Venture Impact).

Employment Growth

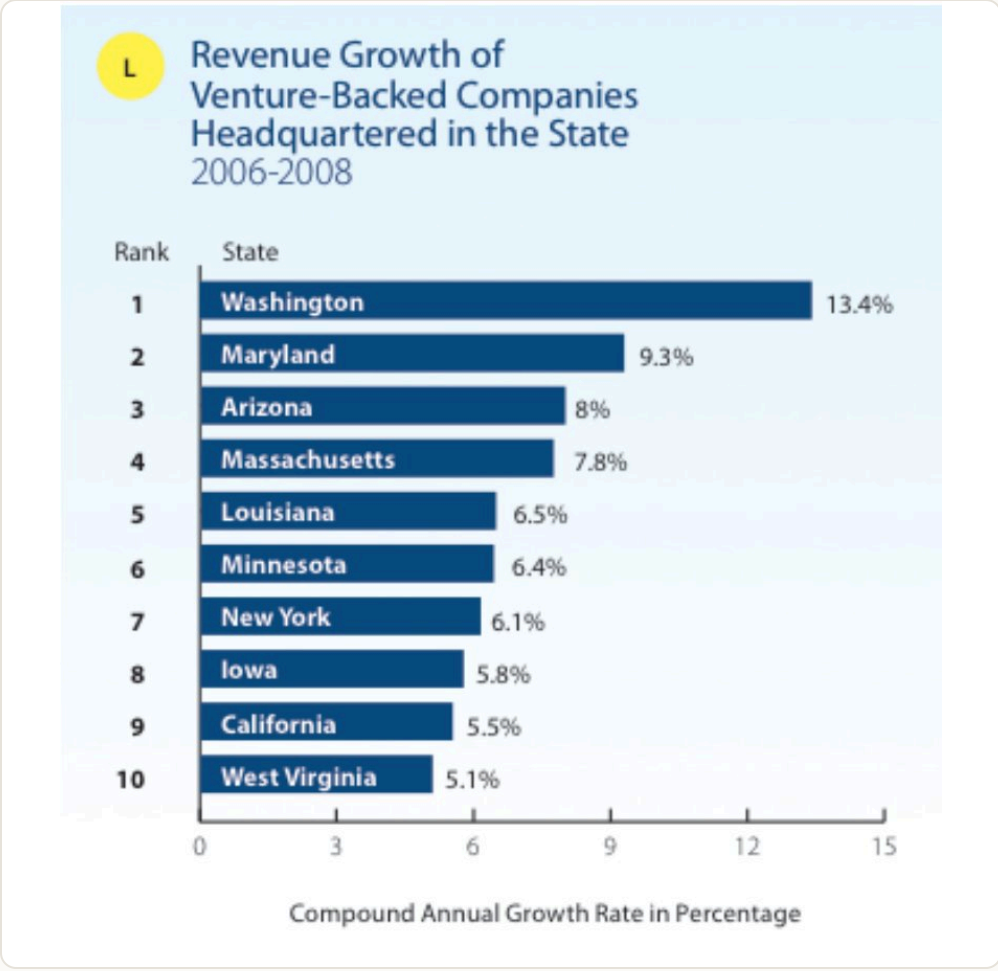
- Fastest job growth at venture-backed companies, 2006–2008 (compound annual rate):
  - Washington 5.6%, Maryland 3.7%, Massachusetts 3.1%
- California ranked 8th (2.1%).



Employment growth of venture-backed companies headquartered in the state, 2006–2008 (NVCA, Venture Impact).

Revenue Growth

- Fastest revenue growth at venture-backed companies, 2006–2008 (compound annual rate):
  - Washington 13.4%, Maryland 9.3%, Arizona 8%
- California ranked 9th (5.5%).



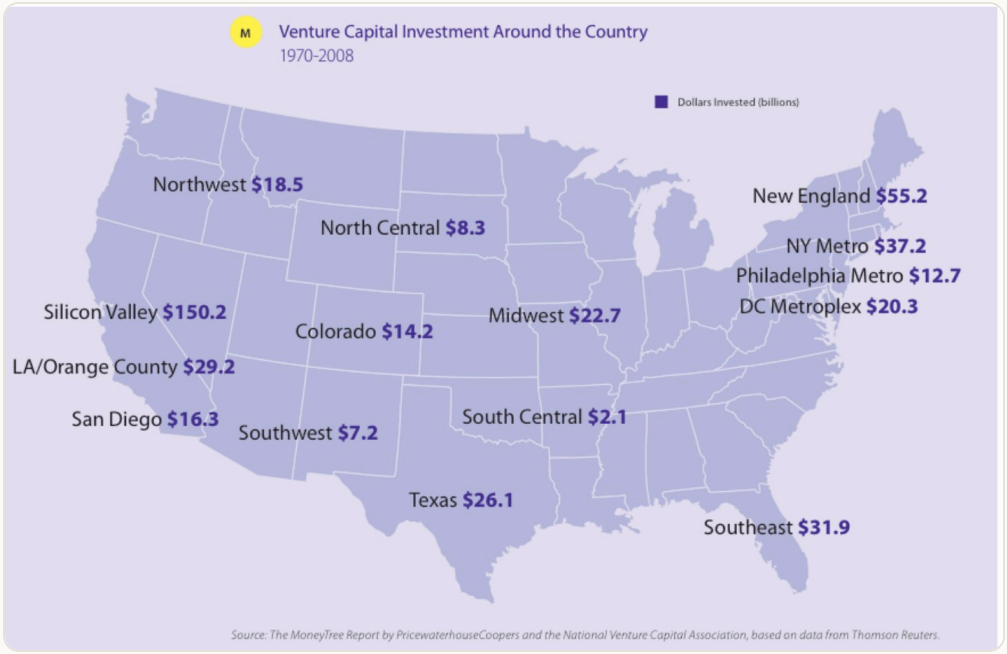
Revenue growth of venture-backed companies headquartered in the state, 2006–2008 (NVCA, Venture Impact).

Around the US

- VC invested by region, 1970–2008: Silicon Valley $150.2B, New England $55.2B, NY Metro $37.2B.

2025–2026 UPDATE

In 2025 the Bay Area and New York took 64.2% of US VC deal value (PitchBook-NVCA).



Source: MoneyTree Report by PricewaterhouseCoopers and NVCA, based on Thomson Reuters data.

07

The Business Pitch

What a good investor pitch contains, slide by slide, with example decks.

Outline

- Pitch template
- Examples

A Good Pitch

14 key slides, and what each should say.

Adapted from Barış Karadoğan's slides (www.karadogan.net).

1 · Mission Statement

- **Show:** A one-liner about the company.
- **Example:** "Amazon.com for dating"
- **The investor thinks:** "Why should I be interested in this?"

2 · Market

- **Show:** How big is it? How is it growing?
- **Example:** 100M singles in the US, 150M in Europe
  - Online dating costs $20/month
- **The investor thinks:** "Can I build a billion-dollar company?"

3 · Problem

- **Show:** How big is the customer's problem?
- **Example:** Finding a soul mate is hard and takes time.
- **The investor thinks:** "Can I get good gross margins?"

4 · Solution to the Problem

- **Show:** What is your unique solution?
- **Example:** We will build an accurate matching engine.
- **The investor thinks:** "Why hasn't anybody done this before?"

5 · Team

- **Show:** Names and experience.
- **Example:** Built a service and got 10M subscribers before.
- **The investor thinks:** "Would I bet my children's future on them?"

6 · Technology

- **Show:** What is the key technology? Is it defensible?
- **Example:** A patented, accurate matching engine.
- **The investor thinks:** "Will it take 1 or 5 years to do it?"

7 · Customers

- **Show:** Who is paying for the product?
- **Example:** We launched and have 200K users.
- **The investor thinks:** "Does the value proposition hold water?"

8 · Per-Customer Economics

- The most important slide — universal across all businesses:
  - What will customers pay?
  - What is the cost of goods?
  - What does it cost to acquire a customer?
  - What does it cost to service a customer?
  - What is the churn?
- **The investor thinks:** "What's a customer worth?"

9 · Go to Market

- **Show:** How do you get in front of the customer?
- **Example:** We advertise online.
- **The investor thinks:** "How will the channel affect the company?"

> Companies must innovate in business model and go-to-market, not only technology: superior technology is rarely enough without a scalable way to distribute it, ideally through existing channels or new ones co-opted from adjacent markets.

10 · Milestones

- **Show:** When is the beta? When is the product ready?
- **Example:** This round will get us to 2M users.
- **The investor thinks:** "Where will this financing get me? Can I exit or get a step-up?"

11 · Financials

- **Show:** Income statement, balance sheet, cash flow.
- **Example:** Our numbers are realistic even if they are off by 2x.
- **The investor thinks:** "Are these numbers credible?"

12 · Competition

- **Show:** A 2×2 matrix, with the most important variables on the axes.
- **Example:** It will take 3 years for others to catch up.
- **The investor thinks:** "Does this team understand its competition?"

13 · Financing History

- **Show:** How much money have you raised to date? What are you raising now?
- **Example:** We've been frugal and will continue to be so.
- **The investor thinks:** "Who are these investors? Do I trust them?"

14 · Why This VC?

- **Show:** Why do you want this investor?
- **Example:** You can help us with xyz relationships.
- **The investor thinks:** "Flattery will get you anywhere!"

Rules for Slides

- **Show faces.** Use your team's photos, not just a list of names — investors invest primarily in people, so feature them.
- **Keep it simple.** The less text, the better.
- **Tell a story.** Product and team matter, but share the journey and offer investors a ride.
- **Never read your slides.** Investors are judging who you are and how well you sell your vision; reading kills the passion.
- **Slides carry supporting data only.** What you say counts most.
- **Most importantly:** slides can't look into people's eyes. You can — your eyes sell your vision, passion, enthusiasm and the journey you want to share.

Example: Short Pitch Deck

A real deck built on five core slides: 365 Days, $10 Million, 3 Rounds, 2 Companies, All With 5 Magic Slides

TechCrunch, 2 November 2010 — the template that follows uses a fictional company, AcmePower.

Cover Slide



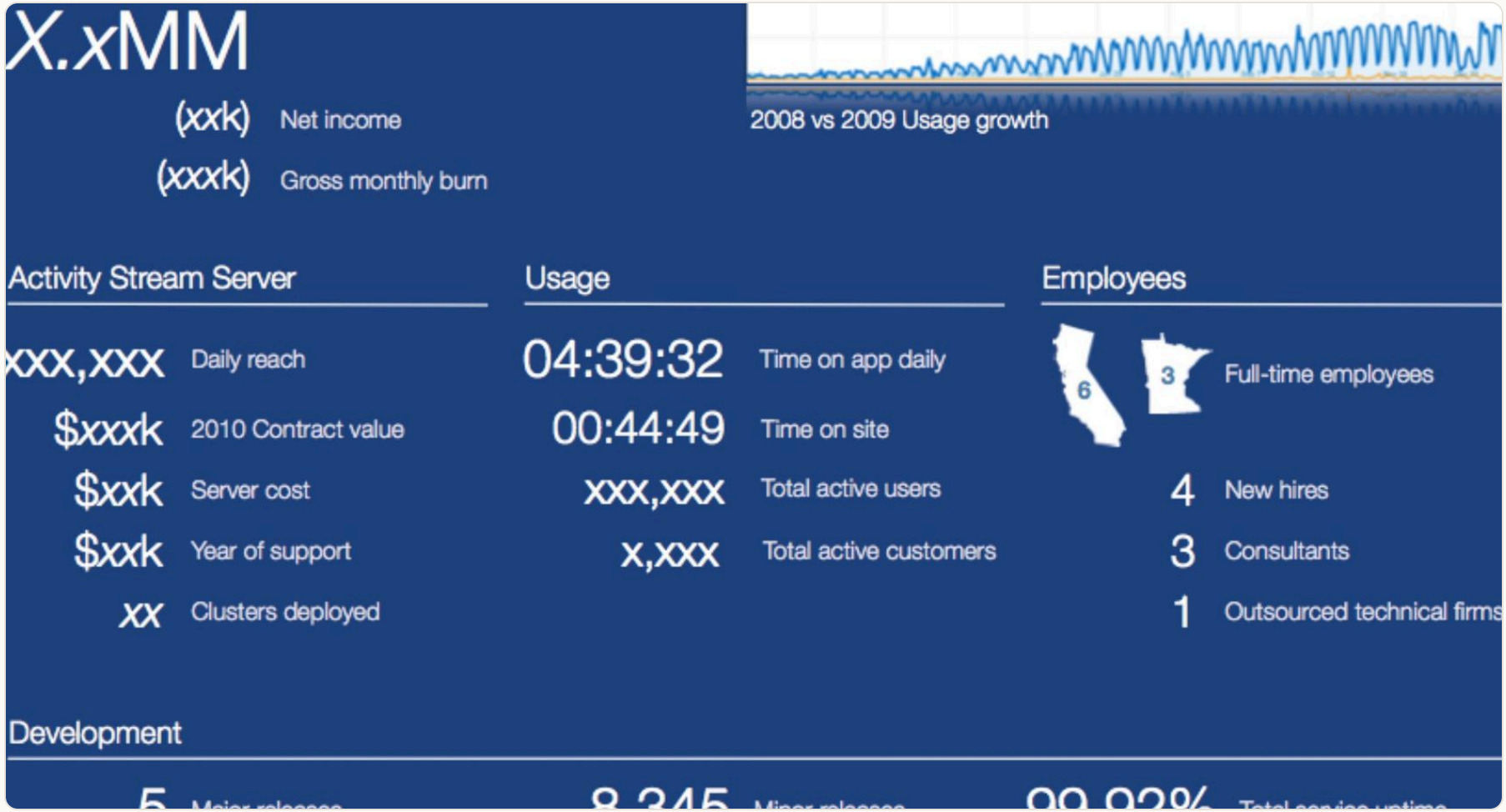
Template cover: company name, corporate tagline, founder's name and title.

AcmePower Snapshot



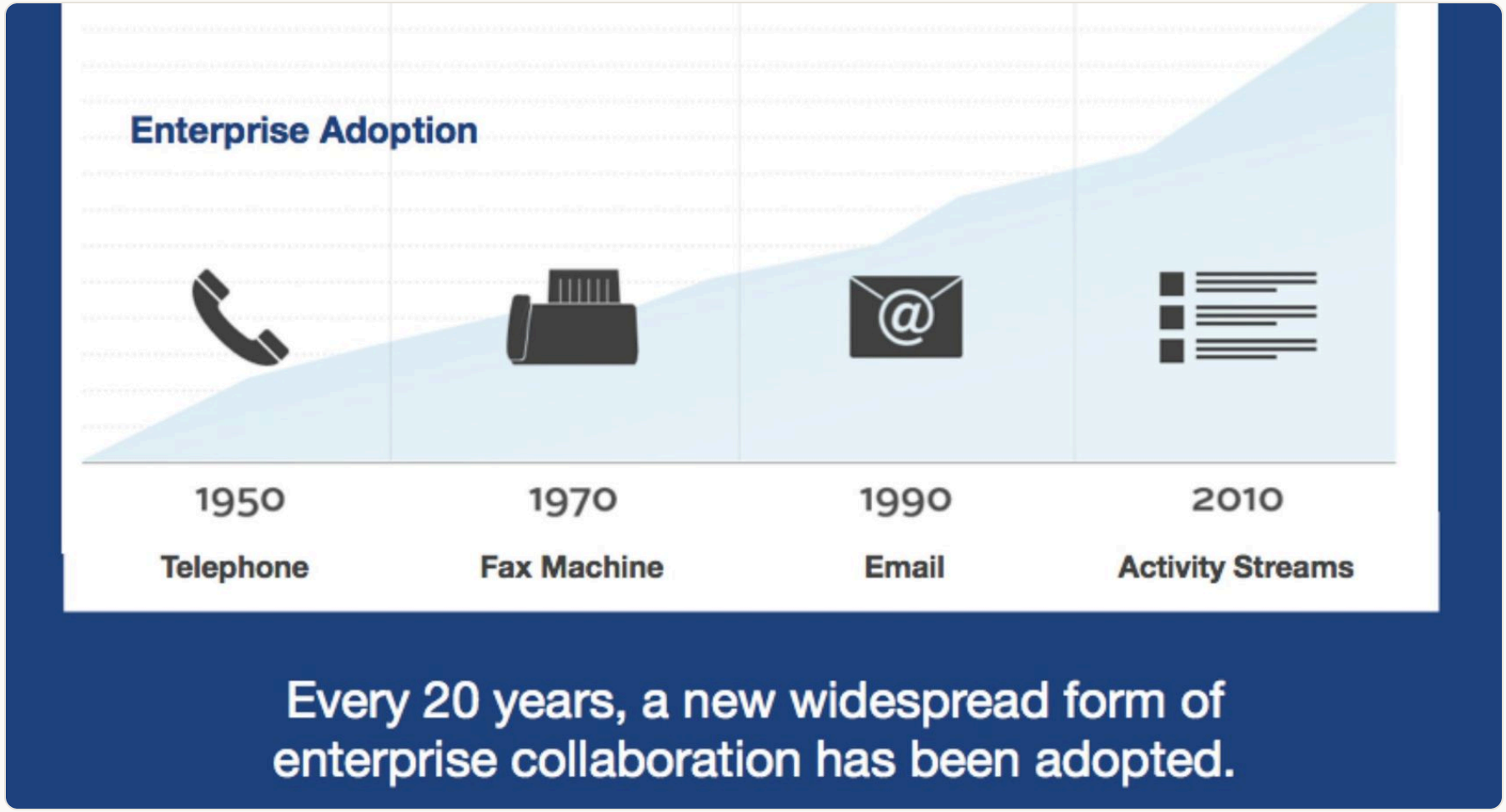
One slide with founder, location and founding year, investors, financials (Series A $1.0M raised 04/2009, raising $6M Series B), key employees, advisors and technology.

AcmePower 2009 by the Numbers



Revenue, net income and burn; server, usage and employee metrics; development stats (releases, uptime) — placeholders for your own numbers.

Activity Streams Are the Future of Collaboration

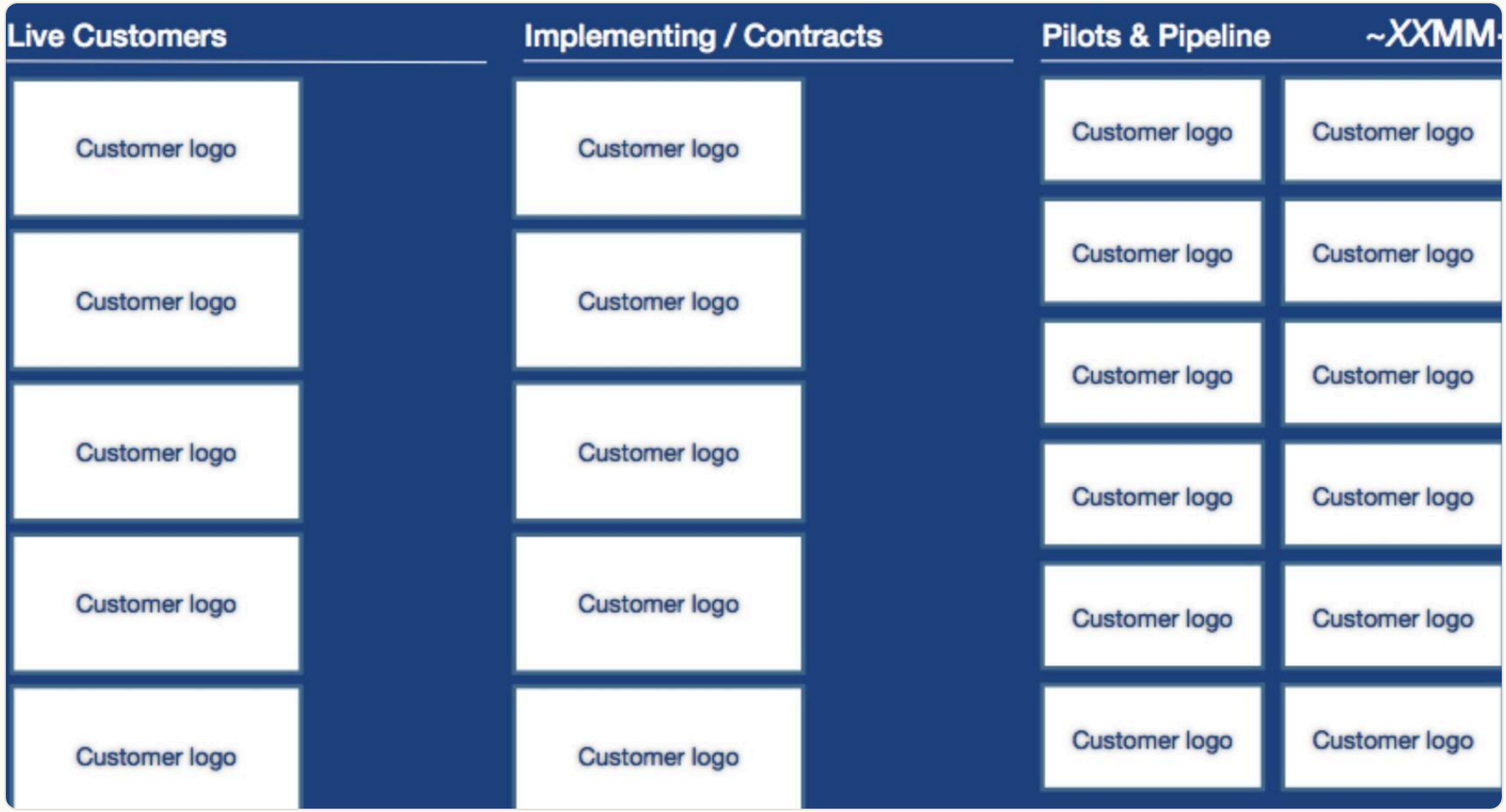


Every 20 years a new widespread form of enterprise collaboration is adopted: telephone (1950), fax (1970), email (1990), activity streams (2010).

Demo Transition

- This slide should be blank as you transition to a laser-focused product demo of no more than 3 minutes.
- Make sure to rehearse. ("I rehearsed ~150 times using ScreenFlow so I could review the playback.")

AcmePower Customer Overview



An analyst quote on the market (Gartner), then logos of live customers, implementations/contracts and pilots & pipeline.

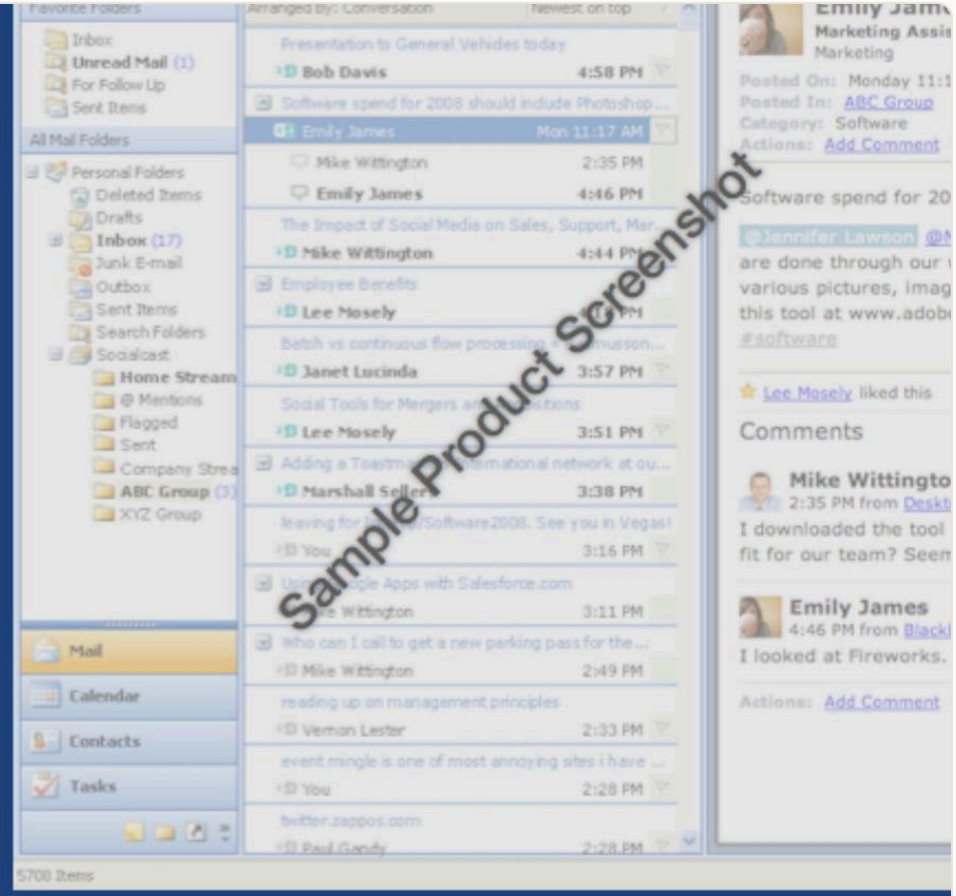
2010: Where We Are Going

- Focus on *X*
- *Need $$$ for Pipeline statement*
- *Biz Dev future statement*

- *Future product innovation 1*
- *Future product innovation 2*
- *Future product innovation 3*
- *Future product innovation 4*
- *Future product innovation 5*

We need

- *Executive position X*
- *Help with X statement*
- *More X talent*
- *Series B of ~$XMM*



Focus, pipeline and business development statements, five future product innovations and what we need (executive, talent, Series B), beside a product screenshot.

Supporting Slides

- In-depth background of each team member
- A couple of existing customer case studies outlining the value proposition
- A couple of slides on customer acquisition strategy
- Deep technology overview
- Target customer profiles
- Market size opportunity

Example: Long Pitch Deck

- Startup pitch for ZapMeals.com

Startup Pitch

Example company: **ZapMeals.com**



ZapMeals



"Closing the gap between your mouse and your tummy"

10 Points

Points 1–5

- 1. Mission
- 2. Problem
- 3. Solution
- 4. Market size
- 5. Business model

Points 6–10

- 6. Proprietary tech
- 7. Competitors
- 8. Marketing plan
- 9. Team
- 10. Financing

Company & Mission

- **ZapMeals** is an online meal order and delivery service matching hungry consumers with great local food preparers — "eBay for takeout orders."
- **Our mission:** help people make, deliver and eat great fast food.
- **Our promise:** we don't make "fast food" great; we make great food fast.

Problem: Fast Food... Isn't Either

Preparers

- Is there a market for my cooking?
- Restaurants have high startup costs.
- Delivery is tough to do fast, warm and well.

Consumers

- It's tough to find good fast food.
- What's the best / cheapest / fastest place to order from?
- It's been 30 minutes — where's my order?

The ZapMeals Solution

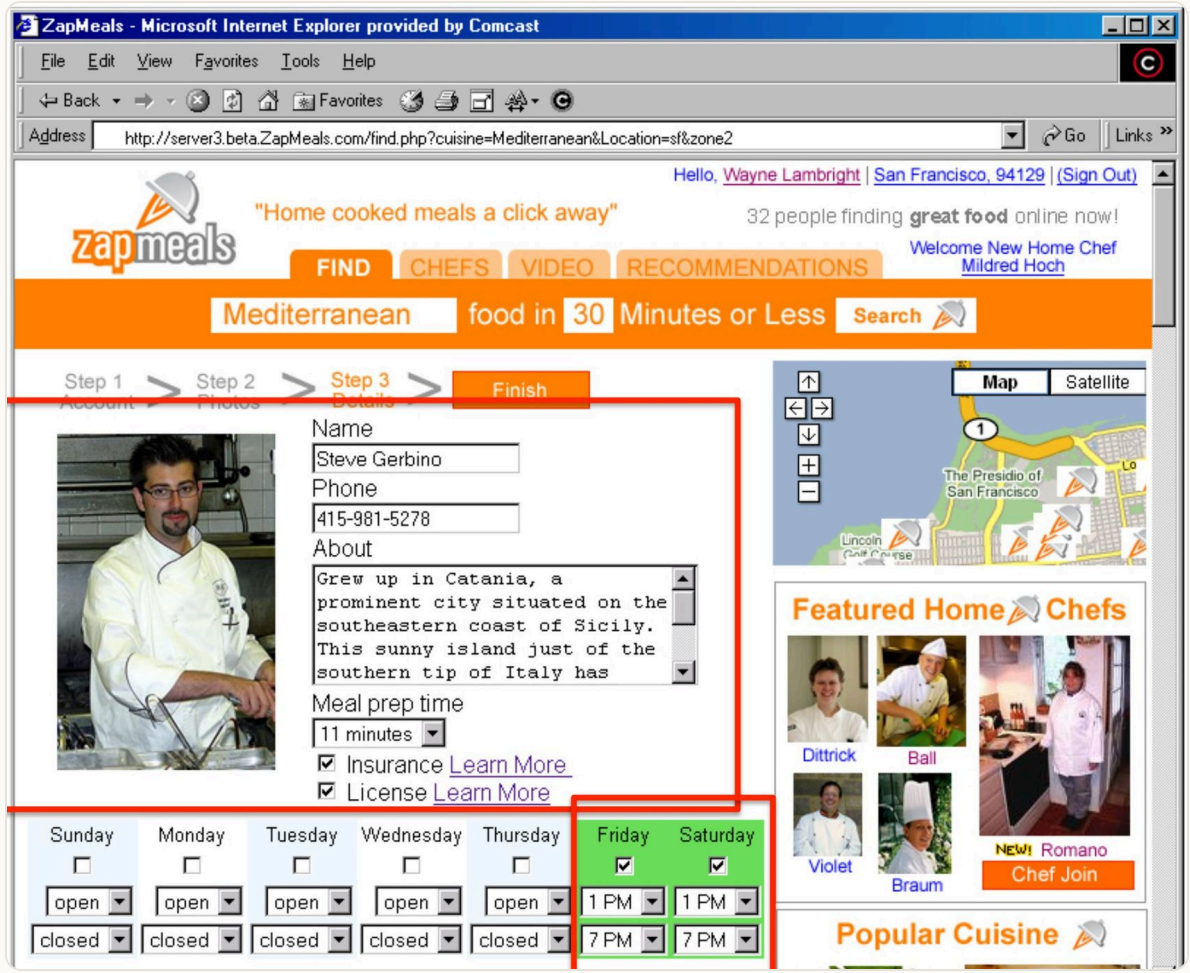
- Help part-time and small-time cooks get started in the food business, quickly and inexpensively.
- Help consumers find great fast food: search by cuisine, price, rating and delivery time.
- Orders are picked up and delivered by a network of independent agents, tracked online in real time via Google or Yahoo Maps.

Screenshots / Demo

- A walk through the beta site: chef sign-up, search, order tracking.

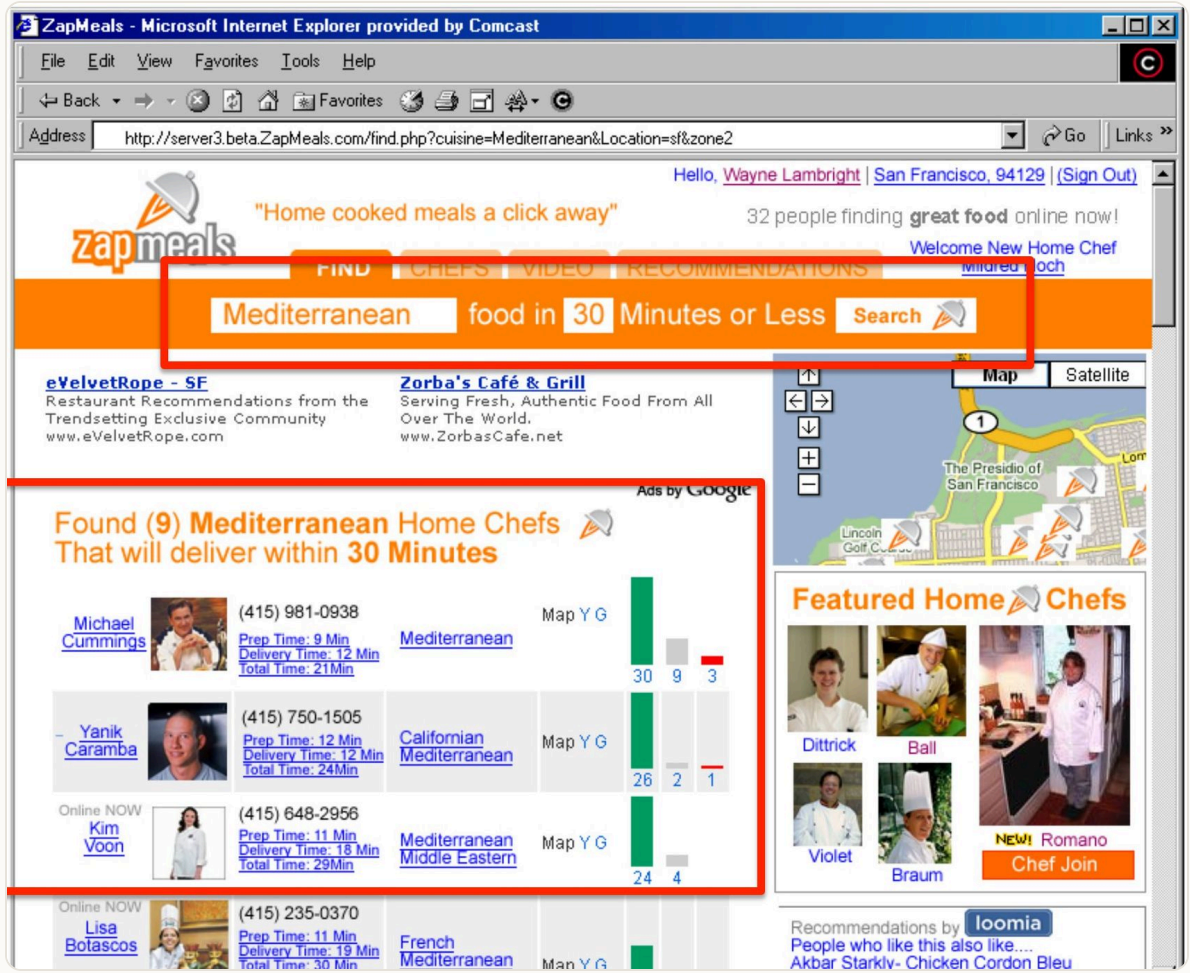


Demo: Chef Sign-Up



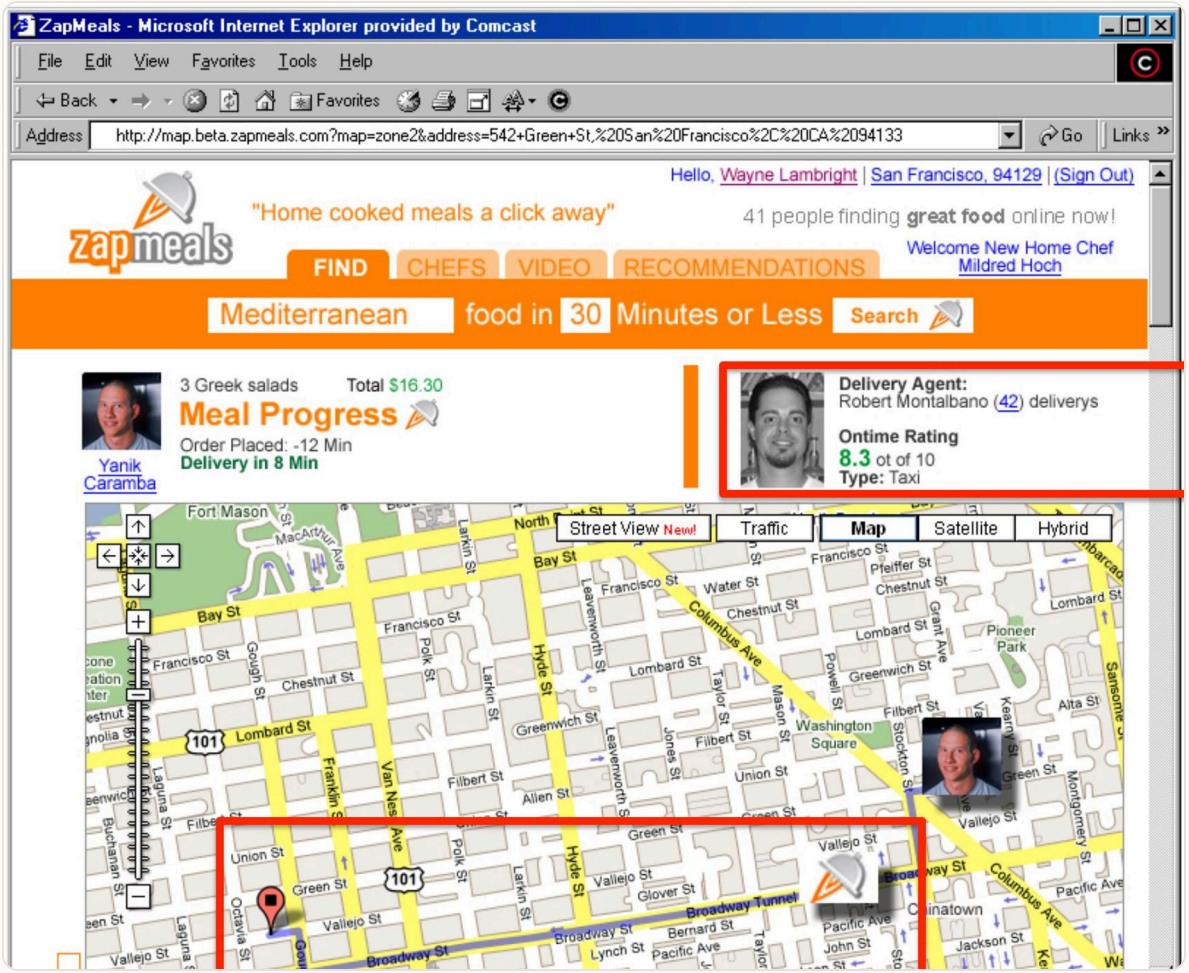
A home chef registers: photo, contact, bio, meal prep time, insurance and license, and the days and hours they cook.

Demo: Search by Takeout Time



"Mediterranean food in 30 minutes or less" — nine home chefs found, each with prep, delivery and total time, on a map.

Demo: Order Tracking



Meal progress (ordered 12 minutes ago, delivery in 8), the delivery agent's on-time rating, and live position on the map.

Size of Market

- **Top down**
  - $511 billion spent dining out annually (Restaurant Association of America)
- **Bottom up**
  - 100M people eat out every day
  - Today ~4% of meals are ordered online (= 4M orders/day)
  - In 5 years, 25% of all meals ordered online (= 25M orders/day)
  - Average takeout order: $14
  - Available total market: $350M daily, more than $125B annually

Business Model

- **Transactional**
  - Charge a 15% food prep fee (min $1)
  - Charge a 15% food delivery fee (min $1)
- **Advertising**
  - Charge small preparers per click-through ("SEM for food")
  - Charge larger preparers for premium / sponsored listings
- **Supplies, equipment, insurance**
  - Provide supplies and education for ZapMeals preparers
  - Free licensing for preparers who buy $250 of equipment
  - Insure against food inspection issues via a large group policy

Technology

- ZapMeals has developed a proprietary least-cost routing and matching algorithm for ordering and delivery.
- **Our secret sauce: "Search by Takeout Time"**
  - Estimated food preparation time (historical)
  - Delivery distance (how far away)
  - Delivery provider (on-time record)
  - Delivery stats shown in real time via Yahoo! or Google Maps (+ GPS)

Competitors

Online

- Waiter.com
- CampusFood.com
- Delivery.com
- Ehungry.com
- ...all of the above source from restaurants *only*

Offline

- McDonald's
- KFC / Taco Bell
- Subway
- ...and your mom!

Marketing Plan

- Partner with notable foodie bloggers
- AdWords campaigns in regional metros
- Generate SEO traffic via food listing pages
- Distribution partnership with Tastyr.com
  - 700 food preparers in San Francisco
  - Q3 rollout to 3–4 West Coast urban areas
- Order discounts for reviews and referrals
  - "Get $3 off your order if you write a review"
  - "Delivery is free if you refer 3 friends!"

Team

- **Wayne Lambright, CEO & co-founder**
  - 10 years of community site development / online sales
  - 5 years of software development on Macromedia Dreamweaver / UltraDev
- **Ivan Krasnov, CTO & co-founder**
  - BSEE, Taganrog State University of Radio Engineering (TSURE)
  - 7 years of software development in an SEI Level 5 organization
  - 5 years managing overseas development teams

Financing

- **Raised a $250K seed round in January 2007**
  - Gil Penchina, CEO of Wikia (ex-eBay)
  - Jeff Clavier, SoftTech VC (Userplane, Truveo, MyBlogLog)
  - Dave McClure (ex-PayPal, SimplyHired)
- **Seeking a $1.5M Series A**
  - $4.5M pre-money valuation
  - Targeted closing: 15 September

2025–2026 UPDATE

Round sizes have grown: the median 2025 US seed deal was $3.8M and the median Series A $15M (PitchBook-NVCA).

On the original slide this whole section is stamped "JUST KIDDING".

Oops!

- Just kidding
- SuperNova 2007 :)



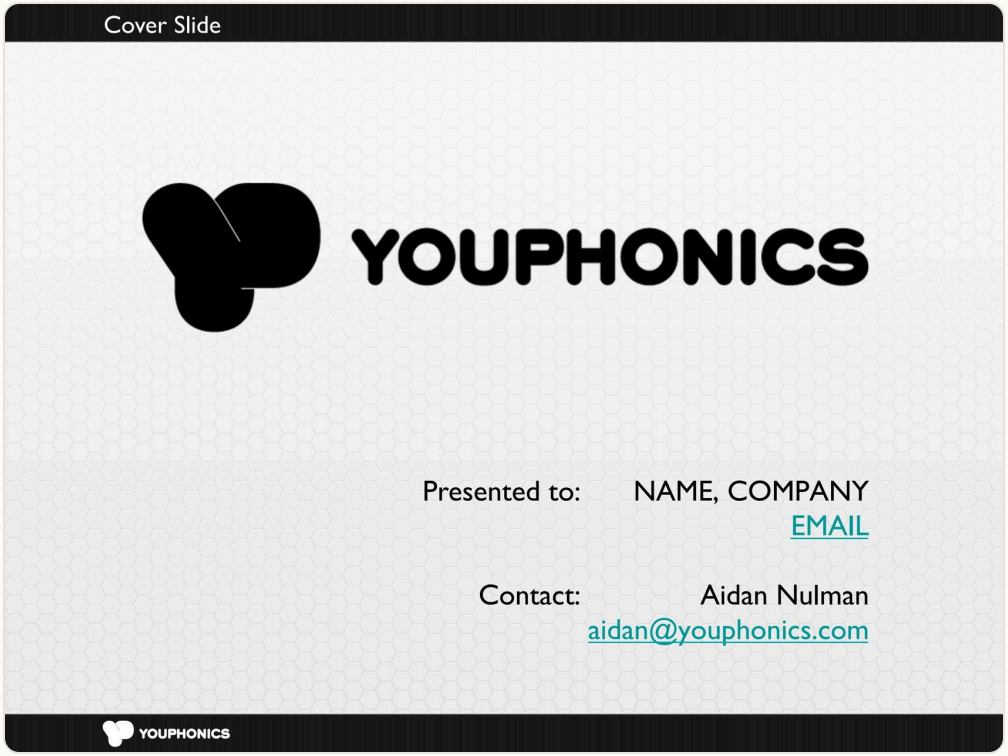
The ZapMeals deck was a mock example pitch, shown at the SuperNova 2007 conference.

Example: Long Pitch Deck

- YouPhonics template deck with a tongue-in-cheek pitch: HeroLink

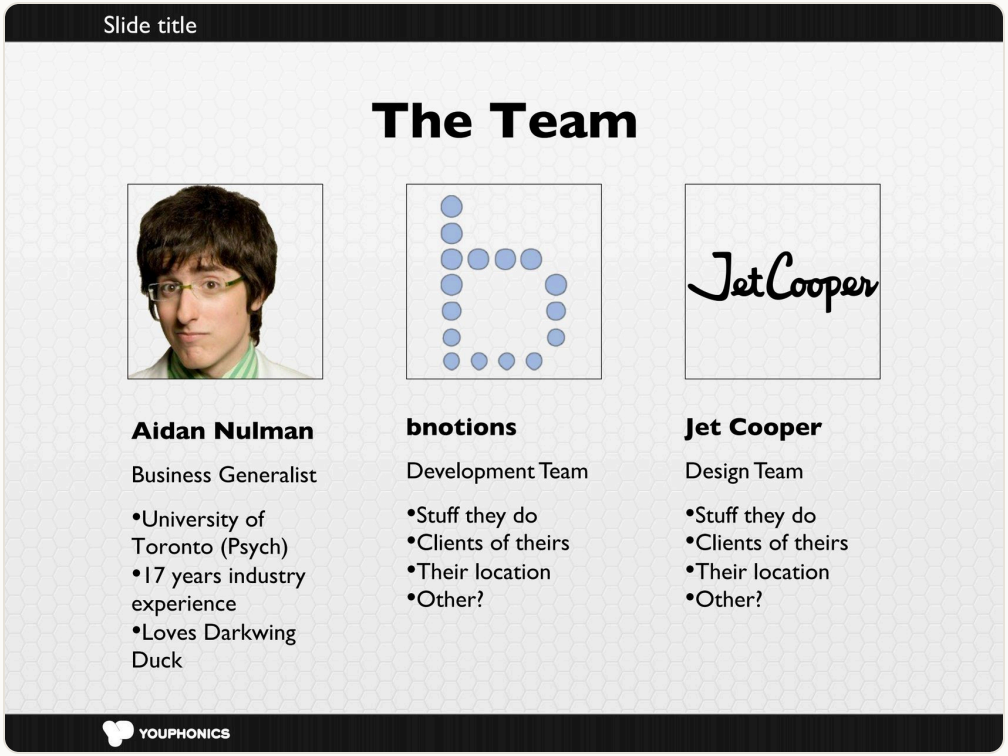
Cover Slide

- Company logo
- Presented to: name, company, email
- Contact: the presenter's name and email



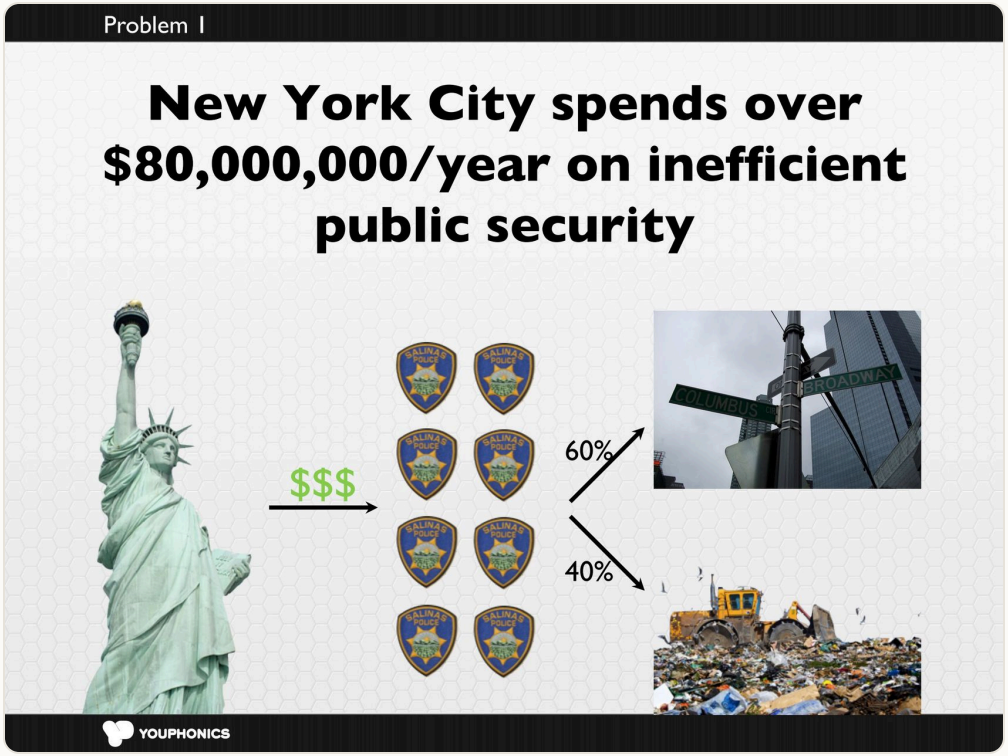
The Team

- **Aidan Nulman**, business generalist: University of Toronto (Psychology), 17 years of industry experience, loves Darkwing Duck
- **bnotions**, development team
- **Jet Cooper**, design team
- For each partner: what they do, their clients, their location



Problem 1

- New York City spends over **$80,000,000/year** on inefficient public security.
- Of the money spent on police, 60% goes to the streets and 40% is wasted.



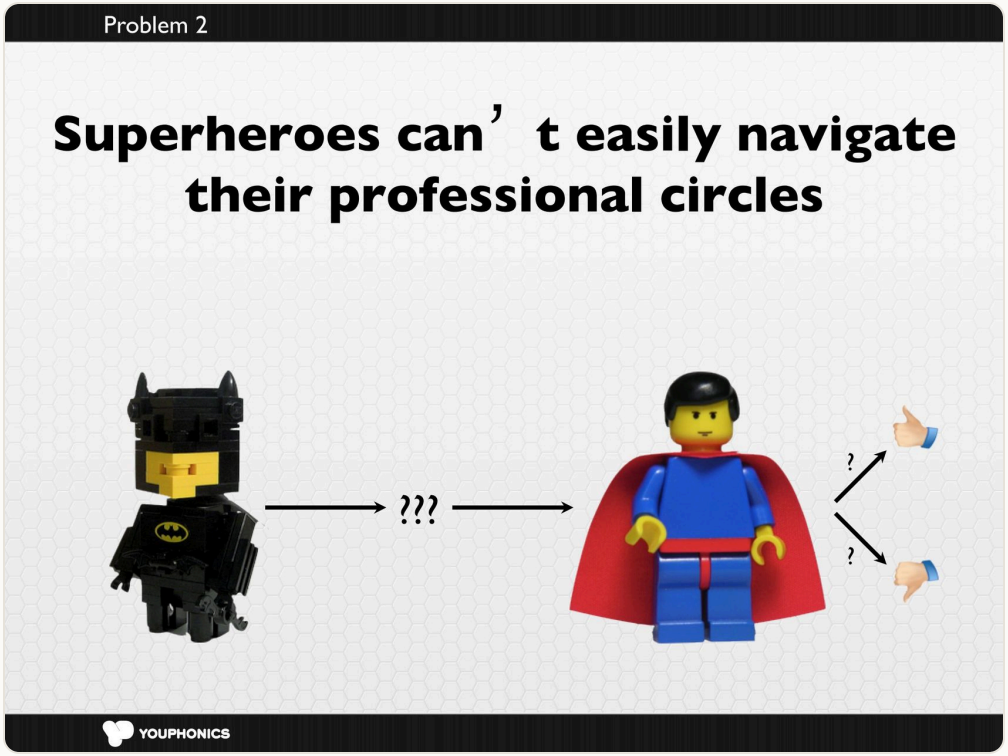
Solution 1

- HeroLink pairs superheroes with cities for cheaper, more efficient public security.
- Less money: 95% goes to the streets, only 5% is wasted.



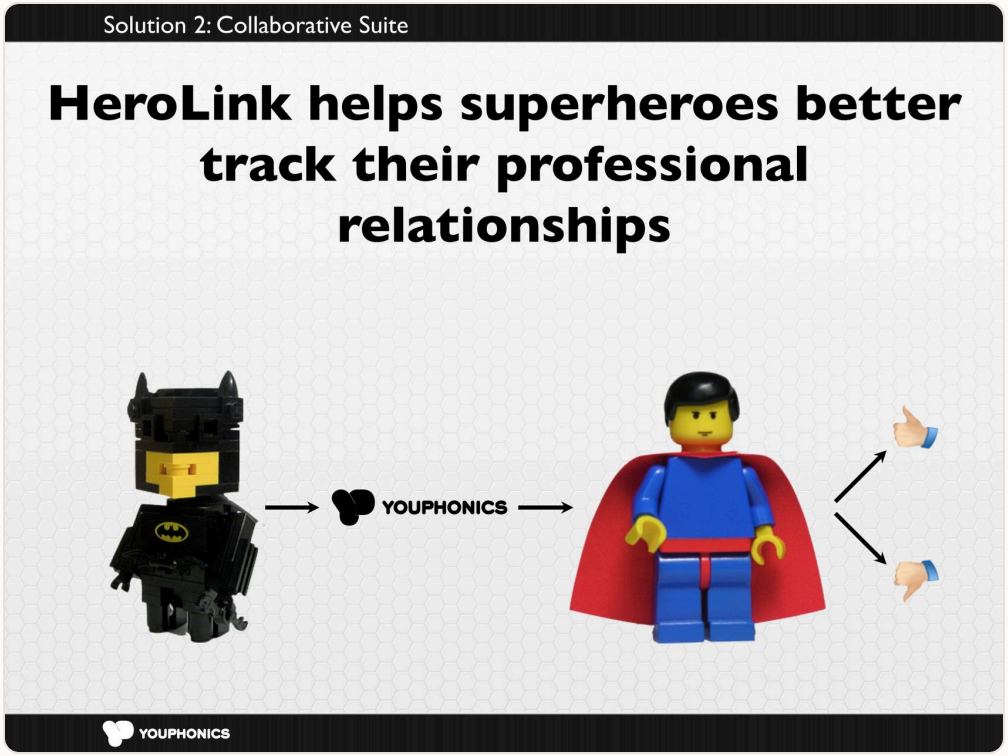
Problem 2

- Superheroes can't easily navigate their professional circles.
- Batman → ??? → Superman: thumbs up or thumbs down?



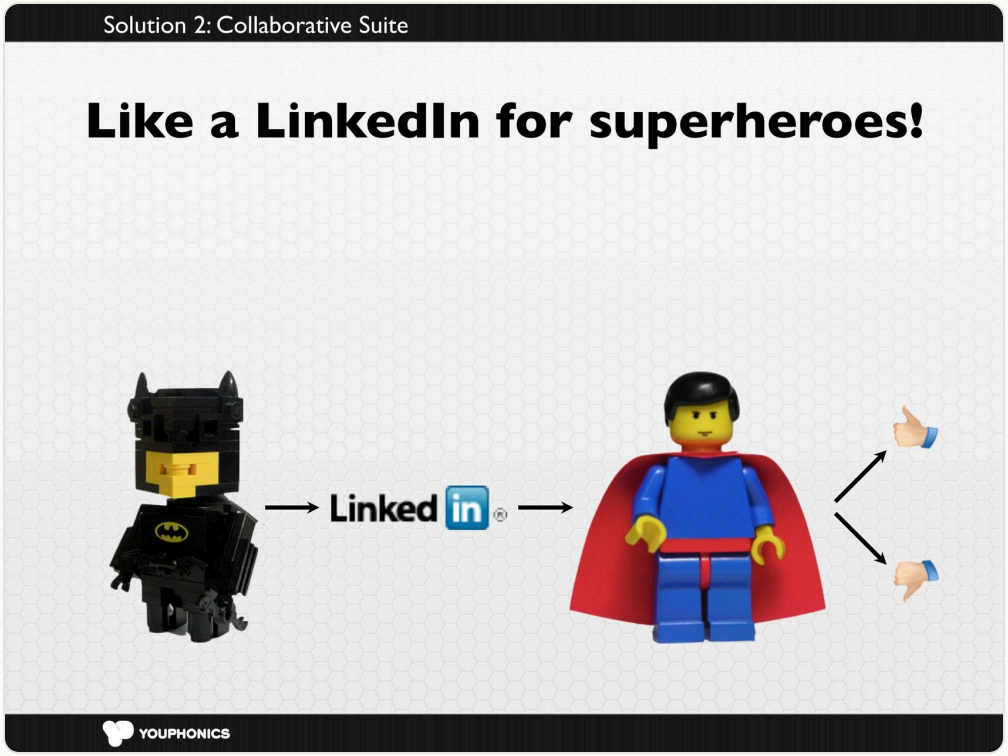
Solution 2: Collaborative Suite

- HeroLink helps superheroes better track their professional relationships.
- Batman → YouPhonics → Superman



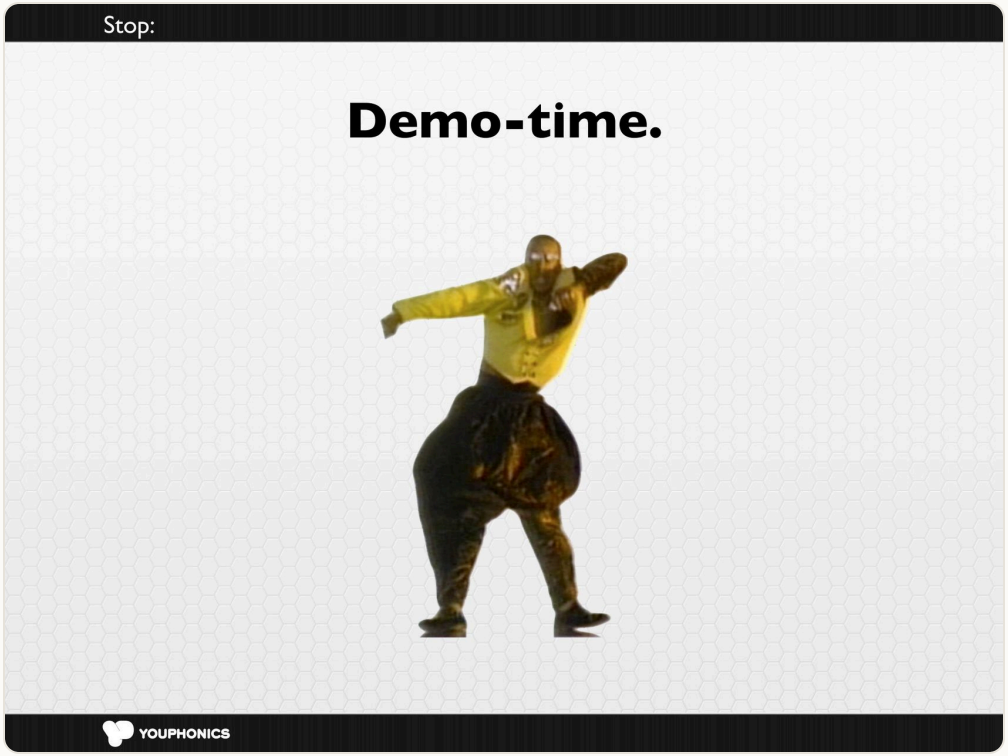
Solution 2: Collaborative Suite

- Like a LinkedIn for superheroes!



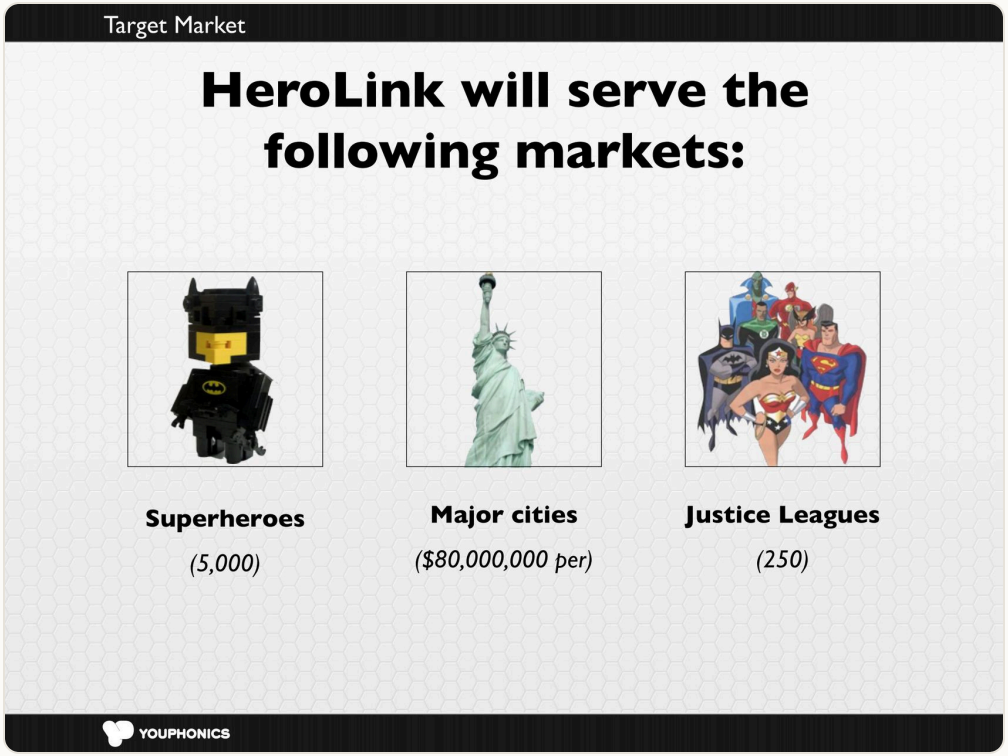
Stop: Demo Time

- Pause the slides and show the product.



Target Market

- HeroLink will serve the following markets:
  - Superheroes (5,000)
  - Major cities ($80,000,000 each)
  - Justice Leagues (250)



Revenue Sources: Subscriptions and Commissions

	HERO	LEAGUE	CITY (SUBSCRIPTION)	CITY (COMMISSION)
Cost	Free!	$100/month	Based on size	5% of deals
Features	Private social network for superheroes; recommendations; health and city updates	Private workspace for your league (up to 10 members)	City officials see information; deals limited to $50,000/year	City officials see information; deals with heroes in all price ranges
Acquisition	Hero conventions; skywriting; bus banners	Individual sales to league leaders	Direct mail; affiliate program	Direct mail; affiliate program

Competition Is Avoiding This Niche's Unique Needs

FEATURE	YOUPHONICS	LINKEDIN	FACEBOOK	CITY OF HEROES
Connect with peers	✓	✓	✓	–
Protection from KNOWN villains	✓	✓	✓	✓
Protection from ALL villains	✓	–	–	✓
League support	✓	✓	✓	–
Fanbase growth	–	✓	✓	–
Connect heroes with cities who need 'em	✓	–	–	–

Go to Market: 3 Phases

Hero adoption (0–9 months)

- Skywriting for flying heroes
- Bus ads for poor heroes
- Booth space at hero conventions

City platform (3–12 months)

- Sign on 5 beta cities
- Build the platform to their specs

City rollout (12–24 months)

- Publicly release the city platform through city halls
- Affiliate program
- Direct mail to city halls

To Date: Progress on Multiple Fronts

Heroes

- 10 heroes signed on already
- Including Batman and Darkwing Duck

Cities

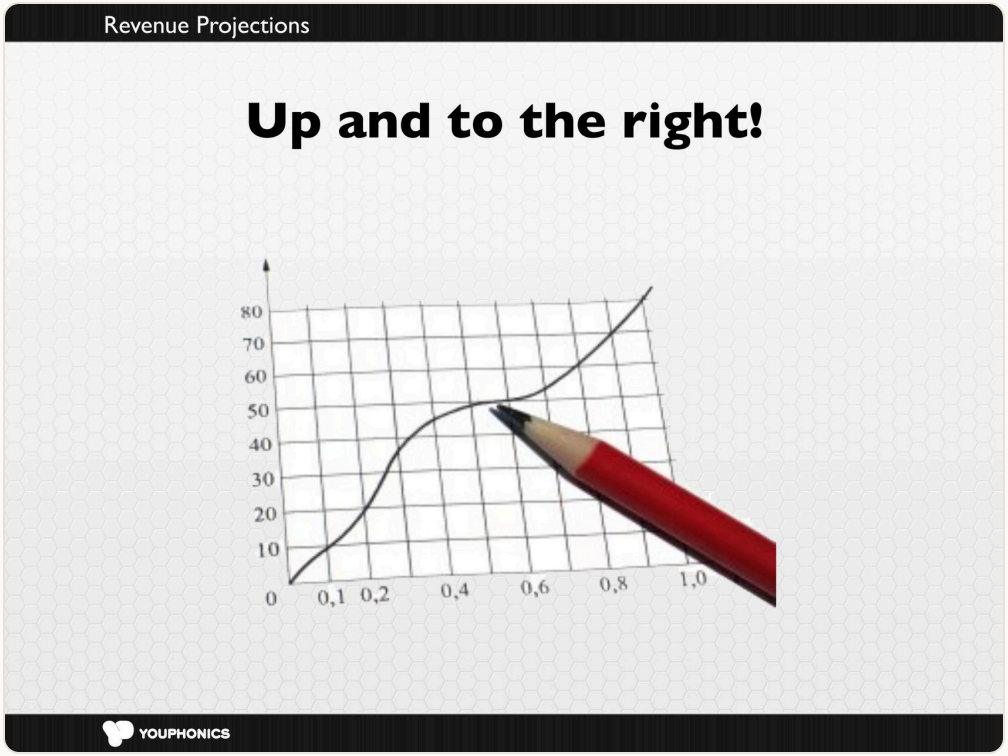
- Letter of intent from the Mayor of New York
- Montreal, Toronto and Chicago signed on as beta cities

Technology

- YouPhonics platform built, ready for launch
- State-of-the-art villain detection system approved by the JLA

Revenue Projections

- Up and to the right!



Investment Sought

- HeroLink is looking to raise **$250,000–$400,000** for:
  - **Personnel:** 3 developers, 1 designer, myself
  - **Web services:** hosting, bandwidth, email
  - **Miscellaneous:** office space/tech, legal fees, travel, marketing, contingency

2025–2026 UPDATE

For comparison, the median 2025 US pre-seed deal was $0.5M and the median seed deal $3.8M (PitchBook-NVCA).

Closing Slide



Example pitch deck: Youphonics.

A Good Venture Pitch

- Hi, I'm ... from ...
- The problem we're solving is ...
- Our solution is ...
- Our target market is ...
- We will acquire customers by ...
- We make money by ...
- Our key competition is ...
- We're better because ...
- Our team is ...
- What we'll do next is ...
- Currently, we are seeking ...
- To summarize ...

> "What is the VC thinking?"

A Good Venture Pitch

- Hi, I'm ... from ...
- The problem we're solving is ...
- Our solution is ...
- Our target market is ...
- We will acquire customers by ...
- We make money by ...
- Our key competition is ...
- We're better because ...
- Our team is ...
- What we'll do next is ...
- Currently, we are seeking ...
- To summarize ...

> "What is the VC thinking?"

08

Market Analysis, Cash Flow and Per-Customer Economics

Building a financial model, understanding per-customer economics, and how financials feed into valuation.

1. Focus on Expenses

- Start your financial model by estimating your expenses.
- People are the foundation of successful startups, so start with your hiring plan:
  - the types of positions you'll need to hire,
  - when you'll need to hire them,
  - and how much you'll pay them (salary, benefits and equity).
- Estimate office expenses, rent, insurance, legal, accounting, taxes, equipment, and travel and entertainment costs.
- Leave space in your model for marketing, hosting, sales support and delivery costs to fill in later.

2. Product/Service Is Built, Marketed, Sold and Delivered

- Build your revenue plan bottom-up: a concrete, tactical look at every step from plan to customer.
- How long will it take to develop the product and build the organization? How do your sales staff, website and channel budgets translate into impressions, click-throughs, visitors, trials and sales?
- The model depends on the business: B2B or B2C? Freemium? Tiered price points? One-time or subscription sales? How long does the average customer stay?
- Consider pricing, discounts, coupons, free trials, payment timing and invoice collection.
- Add partners, commissions, affiliate fees, monthly and per-transaction costs, and the hosting and support your sales level needs.
- Combine expenses and revenue into your first profit and loss statement.

3. Assumptions, Market and Projections

- How big is the addressable market for your product or service, and is it growing or declining?
- Who are your major competitors, and what share of the market do they hold today?
- What share of the market do you expect to capture within 3 months, 6 months and a year? Is that reasonable?
- Analyze key metrics and drivers. Which assumptions have the most impact on your projections? Would a small change in price have a big impact on profits?
- Iterate and refine the model by testing, analyzing, benchmarking and running it past people you trust.

4. Create Detailed Financial Statements

- If you're early-stage and not raising money, you probably won't need the detailed statements late-stage investors expect.
- A balance sheet, cash flow statement, financing structure and cap table require some finance and accounting knowledge. Look for template models online and talk to other entrepreneurs, potential investors and consultants.
- Don't hire someone just to build a financial model. Either work with a consultant who is good at turning strategy into Excel formulas while you learn how models work, or hire someone in your business who can build the basic models your stage needs.
- You won't need a CFO until you have significant traction and opportunities that justify a quality startup CFO.

Summary

- If you can answer all these questions, you've done the analysis needed to build a strong financial model.
- It won't be completely right, but that's not the point.

Per-Customer Economics

- Unit price or revenue per customer
- Cost to acquire a customer
- Cost to serve a customer

1. Unit Price or Revenue per Customer

- How much will you charge one customer for one product?
  - The simpler the answer, the faster your business will be understood.
  - Whether you charge per user, per server or per download, you need to set a price, or a range of prices for different packages.
  - If you offer several packages at different prices, discuss average prices.
- Simplicity is the goal: early-stage businesses win their first key supporters most easily when the revenue plan can be calculated in your head.

2. Cost to Acquire a Customer

- How much does it cost to acquire a new customer?
  - Whether you sell to consumers or to enterprises, winning customers has a direct or indirect cost.
  - If you sell direct, factor in the cost of attracting customers to use and buy your product, and how that cost will change over time.
  - Even better, explain how you can influence acquisition costs to your advantage.
  - If you sell to enterprises, you face the cost of the sales process; the same discussion about change over time applies.

3. Cost to Serve a Customer

- Once a customer has signed on, how much customer care is needed to keep them?
  - The cost to serve must be added to the cost to acquire to estimate the profitability of each new customer relationship.
  - Internet businesses, especially highly self-service ones, have cut the cost to serve dramatically.
  - If you provide ongoing service that requires incremental effort, that cost may make some revenue levels per customer unprofitable.
  - As with the cost to acquire, the key questions are how it will develop and how it can be influenced over time.

Summary

- This analysis can also be called per-customer economics: **1. unit price, 2. cost to serve, 3. cost to acquire.**
- These three elements can seem simplistic, yet they are often overcomplicated or simply overlooked. Their value in explaining your business cannot be overstated.
- Breaking a venture into a few key assumptions helps enormously in convincing early supporters that the idea is viable.
- Separating these numbers strengthens the overall business plan and invites thoughtful discussion from anyone evaluating it.
- Only when the interplay of these revenues and costs is understood, even as assumptions, can a real evaluation of the business model begin.

Business Plan Template: Web

A sample financial model for a web startup, sheet by sheet.

Business Model Template

- Comparables on user growth rates, virality and churn
- Customer acquisition and sales methods and costs
- Price points and conversion rates for your business model and sector
- Payment processing rates and fraud/chargeback levels
- Contractor and salary rates (both "startup discounted" and market) for your hires
- Customer support method and costs, and how they scale with customers
- True travel costs (often underestimated)
- Expected concurrency rates and visit frequency
- Download size per visit, if a web company
- Architecture scaling: owned vs. managed hosting vs. cloud, and how servers and costs scale

Hints to Examine

- Are there variables where a slight change makes a massive difference?
- Are your fundraising milestones well matched to your product and financial milestones?
- When do you hit monthly breakeven?
- How many users must you acquire and keep to reach breakeven?
- How much money will you have spent in total to get to breakeven?
- Are you scaling costs adequately to serve a large user base in later years?
- Can you believe any of it? Cross-check, second-guess, and don't buy too deeply into your own assumptions and guesses!

General & Administrative

GENERAL AND ADMINISTRATIVE								
FTE								
Corp	0	0	0	0	0	0	0	0
Contractors								
Corp	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Additional Headcount Costs								
FTE	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
FTE + Contractors	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
IT and Telephony Costs / FTE	700	700	700	700	700	700	700	700
Office Supplies	40	40	40	40	40	40	40	40
Office Space / FTE	0	0	0	0	0	0	0	0
Office Setup	0	0	0	0	0	0	0	0
Travel Costs	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Computer Equipment	0	0	0	0	0	0	0	0
Other 1	0	0	0	0	0	0	0	0
Other 2	0	0	0	0	0	0	0	0
Total	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740
Professional Services								
Legal	0	0	0	0	0	0	0	0
Auditing	0	0	0	0	0	0	0	0
Accounting/Payroll	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total G&A	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740

Template sheet: G&A headcount, IT and telephony, office, travel and professional services costs by month.

Cash

TOTALS								
Registered Users	0	0	0	100	600	1,600	6,600	16,600
Active Users	0	0	0	100	545	1,260	5,655	12,775
Subscribers	0	0	0	0	0	1	5	19
Subscriber Ratio	*NM*	*NM*	*NM*	*0%*	*0%*	*0%*	*0%*	*0%*
Subscription Revenue	0	0	0	0	0	0	0	0
Cost of Revenues	0	0	0	0	0	0	0	0
Gross Profit	0	0	0	0	0	0	0	0
Gross Margin	NM	NM	NM	NM	NM	NM	NM	NM
Technology	0	0	0	0	0	0	0	0
Sales & Marketing	0	0	0	0	0	0	0	0
G&A	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740
Operating Costs	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740
Total Costs	2,740	2,740	2,740	2,740	2,740	2,740	2,740	2,740
EBITDA	(2,740)	(2,740)	(2,740)	(2,740)	(2,740)	(2,740)	(2,740)	(2,740)
EBITDA Margin	NM	NM	NM	NM	NM	NM	NM	NM
Cumulative P/L	(2,740)	(5,480)	(8,220)	(10,960)	(13,700)	(16,440)	(19,180)	(21,920)
Per Headcount Costs								
FTE	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
FTE + Contractors	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Costs / FTE	685	685	685	685	685	685	685	685
Costs / Entire Team	609	609	609	609	609	609	609	609
CASH								
Name of Round								
Capital Invested	0	0	0	0	0	0	0	0
Cash in Bank	-2,740	-5,480	-8,220	-10,960	-13,700	-16,440	-19,180	-21,920

Template sheet: totals for users, revenue, costs and EBITDA, cumulative P&L and cash in bank.

Staff

Staff

		Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10
Markup for benefits/taxes/etc	1.3						
Contractor Hours / Month	160						

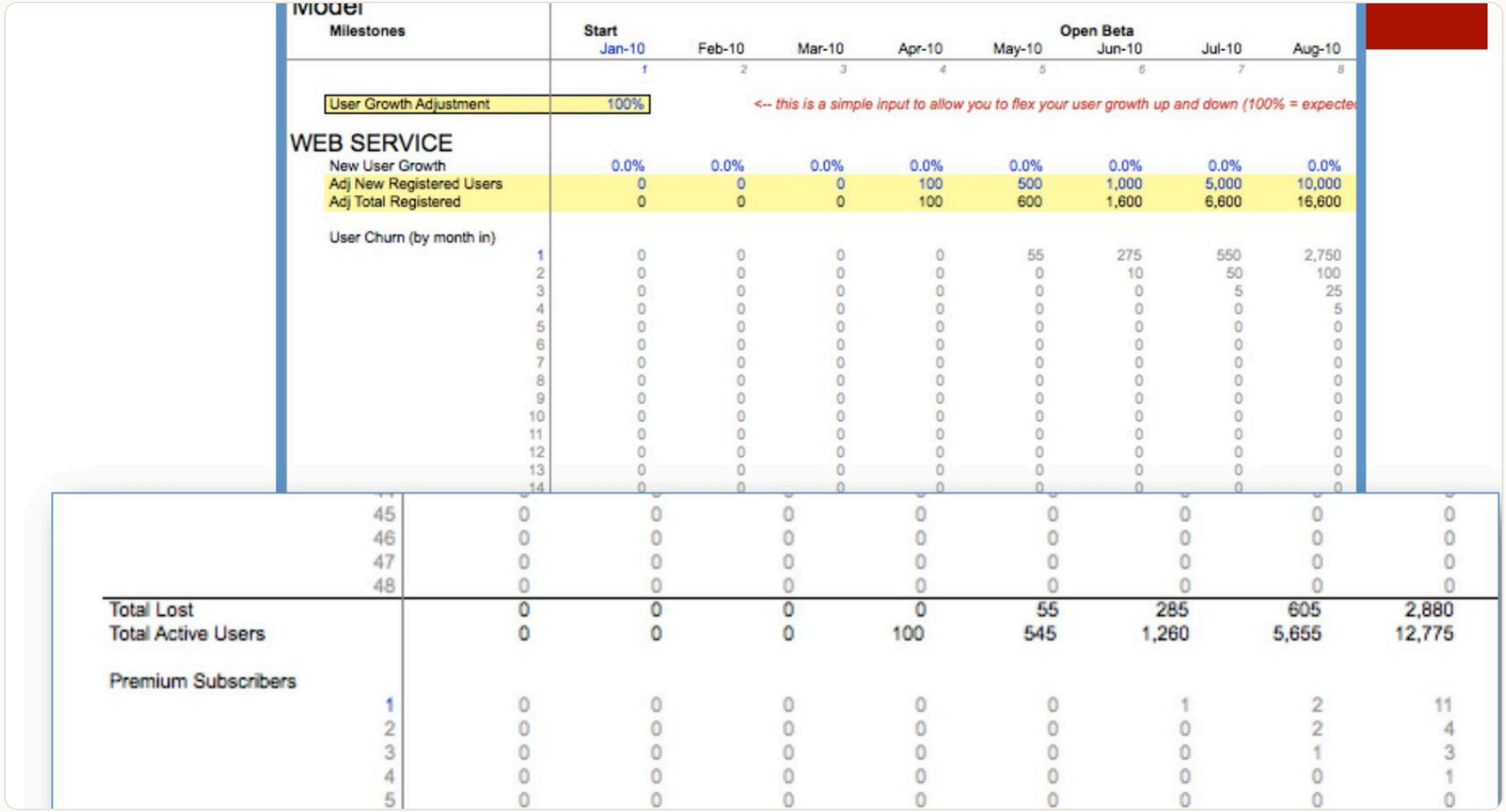
Instructions: edit the salary levels and hourly rates to fit your location and circumstance
Salary phase is set on row 83, which allows you to manually determine when business has reached the point where it can handle more market-competitive salaries

Role	Phase 1 Salary	Phase 2 Salary	Phase 1 Monthly	Phase 2 Monthly	Hourly Rate	Hourly Monthly	Category
CEO	0	0	0	0	0	0	Corp
CFO	0	0	0	0	0	0	Corp
General Counsel	0	0	0	0	0	0	Corp
HR/Finance/Bookkeeping	0	0	0	0	0	0	Corp
Office Manager	0	0	0	0	0	0	Corp
CTO	0	0	0	0	0	0	Technology
VP of Engineering	0	0	0	0	0	0	Technology
Server Dev	0	0	0	0	0	0	Technology
Web / Application Dev	0	0	0	0	0	0	Technology
Sys Admin	0	0	0	0	0	0	Technology
Product Manager	0	0	0	0	0	0	Technology
UI Designer	0	0	0	0	0	0	Technology
VP of Marketing	0	0	0	0	0	0	Sales & Marketing
Marketing Staff	0	0	0	0	0	0	Sales & Marketing
VP of Bizdev	0	0	0	0	0	0	Sales & Marketing
VP of Sales	0	0	0	0	0	0	Sales & Marketing
Inside Sales	0	0	0	0	0	0	Sales & Marketing
Enterprise Sales	0	0	0	0	0	0	Sales & Marketing
VP, Customer Support	0	0	0	0	0	0	Customer Support
Customer Support	0	0	0	0	0	0	Customer Support

EmpCostTable

Template sheet: roles by category (corporate, technology, sales & marketing, support) with phase 1 and phase 2 salaries.

Users



Model								
Milestones	Start				Open Beta			
	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10
	1	2	3	4	5	6	7	8
User Growth Adjustment	100%	<-- this is a simple input to allow you to flex your user growth up and down (100% = expecte						
WEB SERVICE								
New User Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Adj New Registered Users	0	0	0	100	500	1,000	5,000	10,000
Adj Total Registered	0	0	0	100	600	1,600	6,600	16,600
User Churn (by month in)								
1	0	0	0	0	55	275	550	2,750
2	0	0	0	0	0	10	50	100
3	0	0	0	0	0	0	5	25
4	0	0	0	0	0	0	0	5
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0
Total Lost	0	0	0	0	55	285	605	2,880
Total Active Users	0	0	0	100	545	1,260	5,655	12,775
Premium Subscribers								
1	0	0	0	0	0	1	2	11
2	0	0	0	0	0	0	2	4
3	0	0	0	0	0	0	1	3
4	0	0	0	0	0	0	0	1
5	0	0	0	0	0	0	0	0

Template sheet: monthly new registered users, churn by month of joining, total active users and premium subscribers.

Revenue

USER BEHAVIOR								
User "visits" per month	0	0	0	0	0	0	0	0
Download per Visit (MB)	0	0	0	0	0	0	0	0
Peak Concurrency	0	0	0	0	0	0	0	0
REVENUE								
Subscription Revenue								
Total Subscription Revenue	0	0	0	0	0	0	0	0
Display Advertising								
Ads Shown (000s)	0	0	0	0	0	0	0	0
Premium CPM Revenue	0	0	0	0	0	0	0	0
Remnant Revenue	0	0	0	0	0	0	0	0
Total Display Ad Revenue	0	0	0	0	0	0	0	0
Integrated Sponsors								
Insert revenue model if any and make sure to add appropriate sales costs below and in staffing tab								
Total Sponsor Revenue	0	0	0	0	0	0	0	0
Total Advertising Revenue	0	0	0	0	0	0	0	0

Template sheet: user behavior (visits, downloads, peak concurrency), subscription, display advertising and sponsor revenue.

Cost of Revenues

COST OF REVENUES								
Make sure to customize hosting and infrastructure costs to your architecture!								
Hosting & Infrastructure								
Dev/Test Internal Servers	0	0	0	0	0	0	0	0
Purchase Cost	0	0	0	0	0	0	0	0
Users per Server Pair	1000	1000	1000	1000	1000	1000	1000	1000
Production/DB/Staging/Analytics	0	0	0	0	0	0	0	0
Per Server Pair Costs	300	300	300	300	300	300	300	300
Total Production Server Cost	0	0	0	0	0	0	0	0
Total bandwith (TB)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Price Per GB	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Total Bandwidth Cost	0	0	0	0	0	0	0	0
Cloud Fees								
Insert scaling cloud hosting cost structure formulas here, if used								
Total Cloud Fees	0	0	0	0	0	0	0	0
Total Hosting & Infrastructure	0	0	0	0	0	0	0	0
Processing Fees								
Payment Processing	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
PayProc Fees	0	0	0	0	0	0	0	0
Customer Support Team								
FTE								
Customer Support	0	0	0	0	0	0	0	0
Contractors								
Customer Support	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Cost of Revenues	0	0	0	0	0	0	0	0

Template sheet: hosting and infrastructure, bandwidth, cloud fees, payment processing and customer support costs.

Technology & Marketing

TECHNOLOGY								
FTE								
Technology	0	0	0	0	0	0	0	0
Contractors								
Technology	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
SALES & MARKETING								
FTE								
Sales & Marketing	0	0	0	0	0	0	0	0
Contractors								
Sales & Marketing	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Marketing Budget	0	0	0	0	0	0	0	0
Customer Acquisition	0	0	0	0	0	0	0	0
PR Budget	0	0	0	0	0	0	0	0
Marketing Travel	0	0	0	0	0	0	0	0
Conferences	0	0	0	0	0	0	0	0
Total Sales and Marketing	0	0	0	0	0	0	0	0

Template sheet: technology and sales & marketing headcount, marketing, customer acquisition, PR, travel and conference budgets.

Financial Summary

Financial Summary

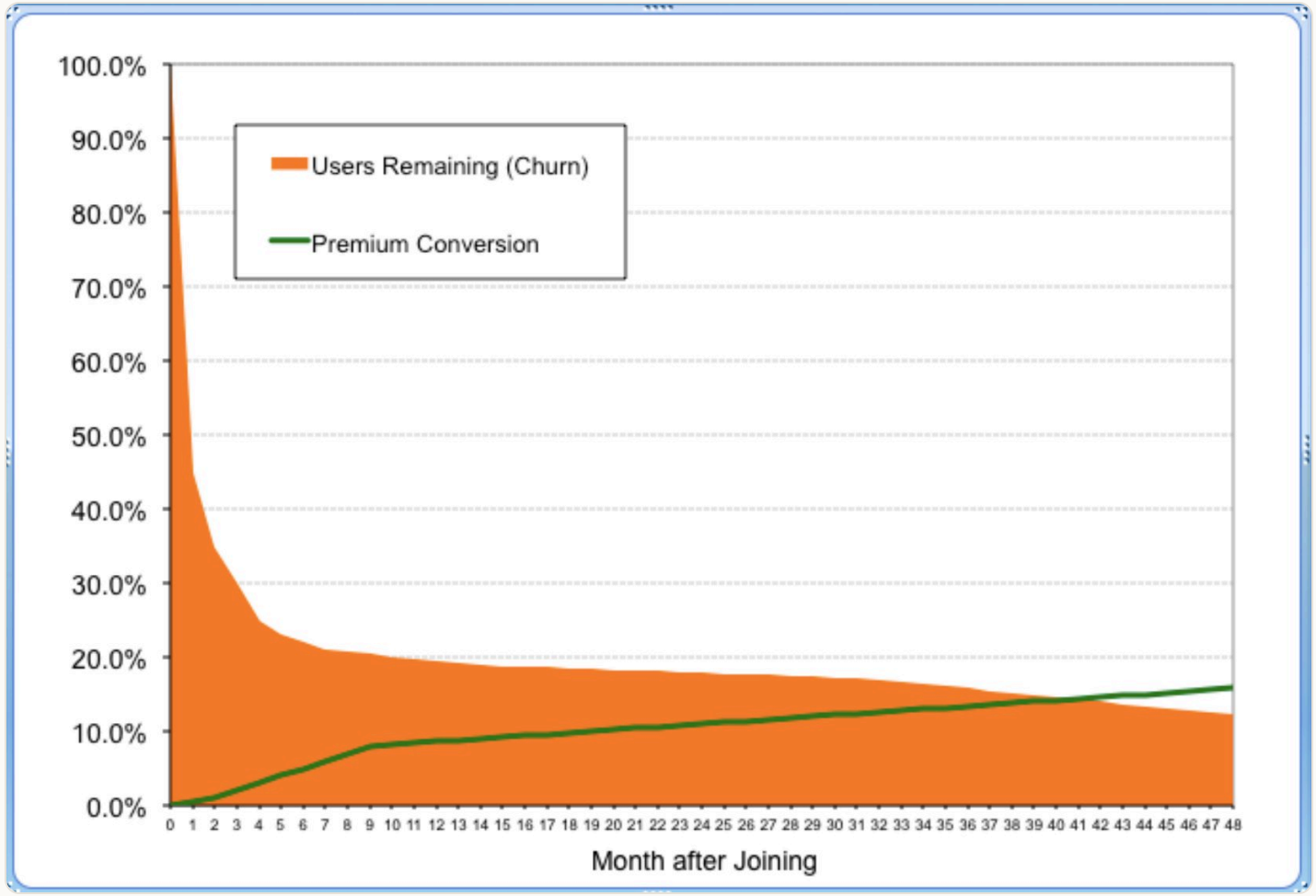
	2010	2011		2012		2013	
Registered Users (FYE)	100	715,188		3,178,669		6,974,996	
Active Users (FYE)	100	334,475		979,648		1,845,493	
Subscribers (FYE)	0	3,197		40,414		126,009	
Subscriber Ratio (FYE)	0%	1%		4%		7%	
Revenue							
Subscriptions	0	0		0		0	
Advertising / Affiliate	0	0		0		0	
Total Revenue	**0**	**0**		**0**		**0**	
Cost of Revenues	0	0		0		0	
Gross Profit	0	0		0		0	
Gross Margin	*0%*	*0%*		*0%*		*0%*	
Technology	0	0	*0%*	0	*0%*	0	*0%*
Sales & Marketing	0	0	*0%*	0	*0%*	0	*0%*
General & Administrative	32,880	72,880	*100%*	132,880	*100%*	152,880	*100%*
Total Operating Costs	32,880	72,880		132,880		152,880	
EBITDA	(32,880)	(72,880)		(132,880)		(152,880)	
EBITDA Margin	*0%*	*0%*		*0%*		*0%*	

FYE Headcount (incl. contractors)	**2010**	**2011**	**2012**	**2013**
Corp	1.0	1.0	1.0	1.0
Technology	3.5	3.5	3.5	3.5
Sales & Marketing	0.0	0.0	0.0	0.0
Customer Support	0.0	0.0	0.0	0.0
Total	4.5	4.5	4.5	4.5

Note: an "active user" is someone who logs in that month
Note: FYE = fiscal year end; numbers represent the last month of the 12 month period
Note: percentages next to operating costs show percent of total costs
Note: headcount show end-of-year numbers, including part-time contractors

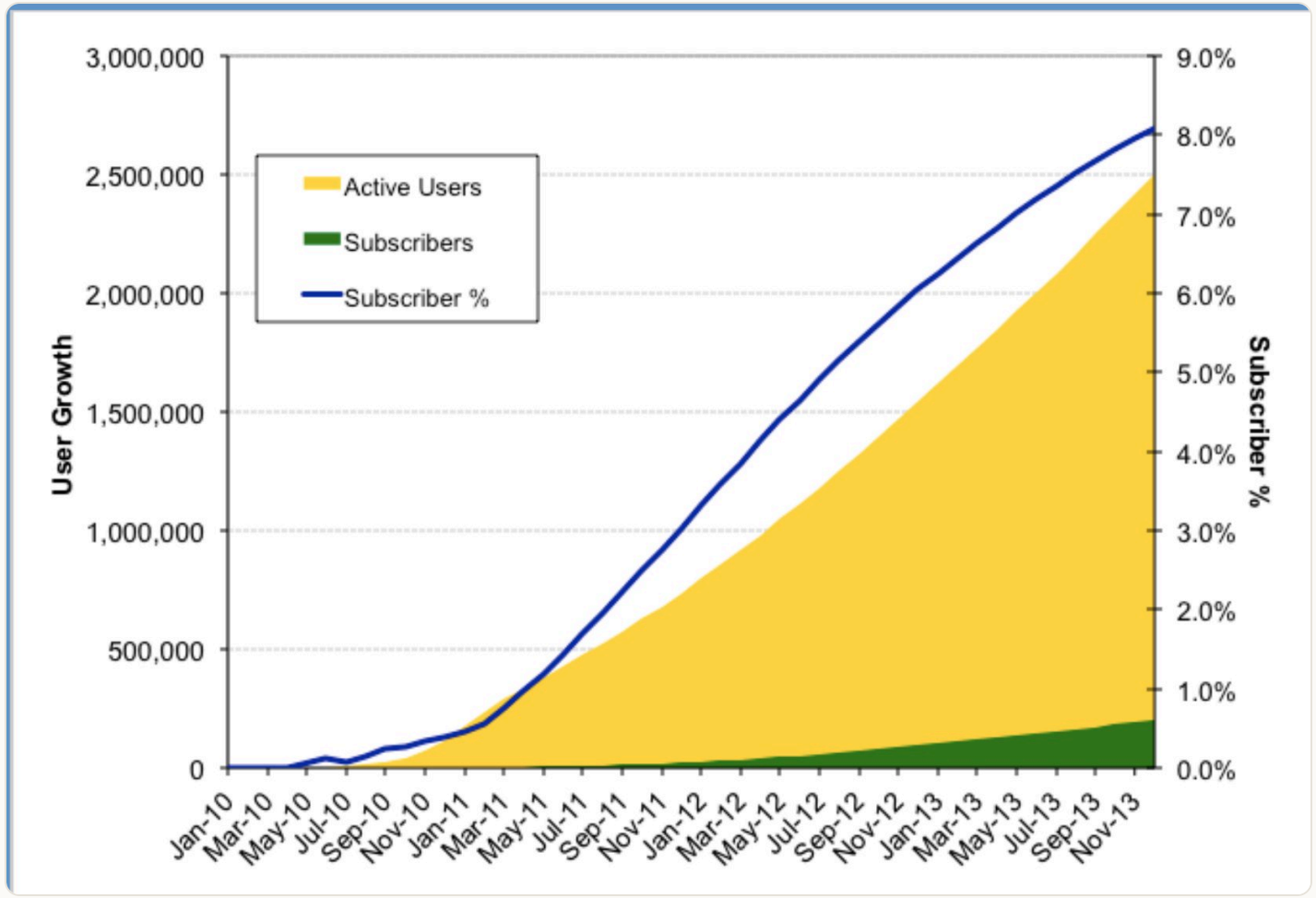
Template sheet: annual users, revenue, costs, EBITDA and year-end headcount, 2010–2013.

Users



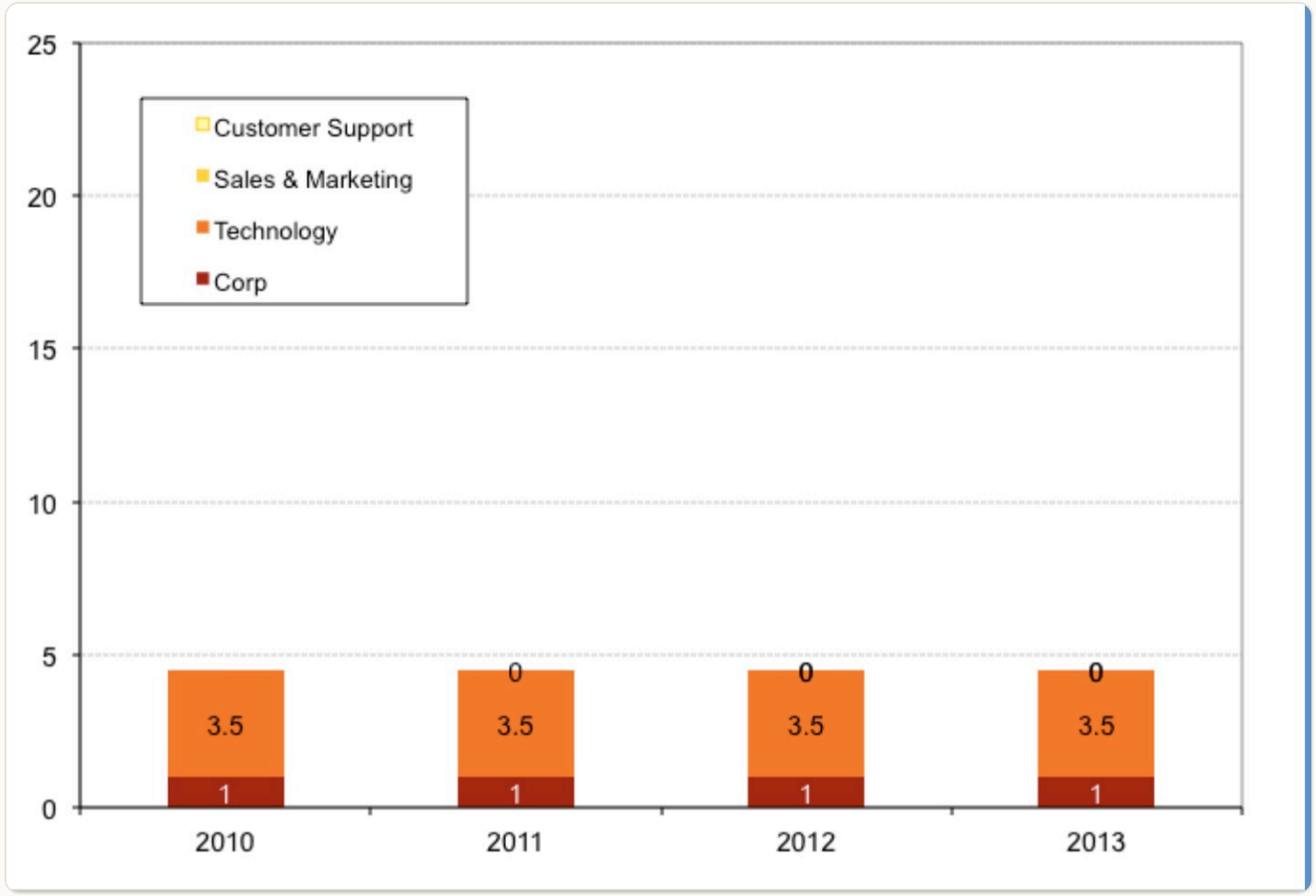
Users remaining (churn) and premium conversion by month after joining.

User Growth



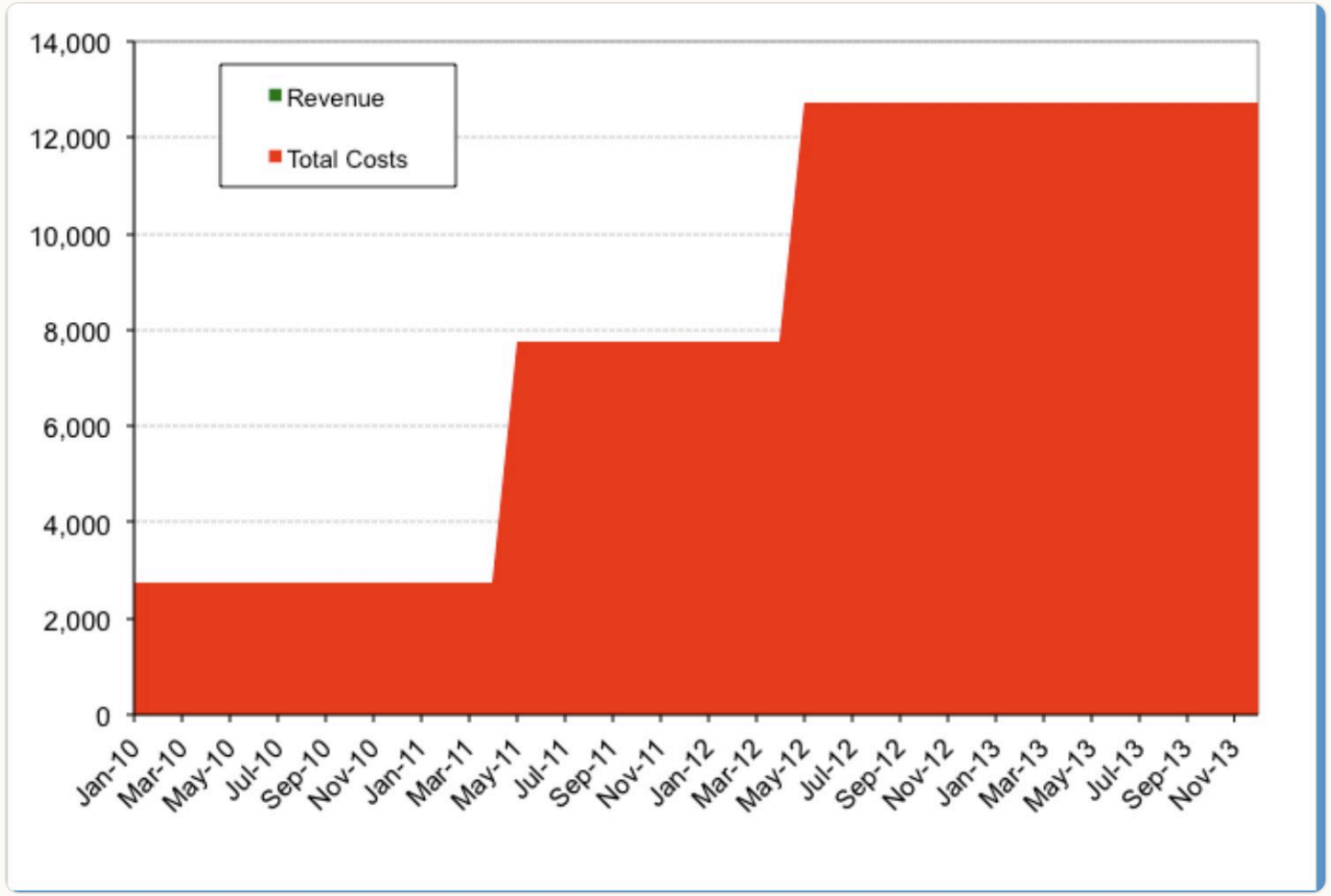
Active users, subscribers and subscriber share, January 2010 – December 2013.

Cost



Headcount by function (corporate, technology, sales & marketing, customer support), 2010–2013.

Revenue



Monthly revenue vs. total costs, January 2010 – December 2013.

Financials to Valuation

- Financials are needed to estimate the funding required, and they are one of the indicators of a venture's valuation in due diligence.
- **Due diligence** covers an investigation of a business or person before signing a contract, or an act carried out with a certain standard of care.
- It can be a legal obligation, but the term more often applies to voluntary investigations.
- A common example is the process in which a potential acquirer evaluates a target company or its assets before an acquisition.

Valuation

- What ultimately matters to investors and private equity practitioners is the cash distributed to them over the life of the fund, compared with the money originally put in.
- But a typical venture fund lives at least 10 years, longer in life sciences. During that time the fund reports progress to its limited partners.
- This usually means quarterly portfolio updates and a complete audited annual financial statement. A typical venture fund pays out very little money in its first four or five years.

2025–2026 UPDATE

Unrealized value in US VC funds is a record $1.02 trillion, and net cash flow to LPs has been negative by $196.9B since 2022 (PitchBook-NVCA, end-2025).

Winner

- Every portfolio company is funded with high expectations, but it can take several years to tell whether a company is a likely winner.
- So tracking portfolio progress requires the venture or private equity firm to estimate the success of its investee companies.
- Most investors and fund managers agree that financial measures mean little in a fund's first three or so years; after that, the fund wants to show progress to its investors.
- This is where specific valuation rules and processes become important.
- The agreed valuation procedures for each portfolio company become the basis for assessing progress as the fund matures and finally distributes cash to investors.

EBITDA

- Portfolio company valuation is more art than science, especially for pre-revenue or even pre-EBITDA companies.
- Even so, most limited partner agreements (LPAs) that establish a venture fund require the firm to provide quarterly and annual financial statements under Generally Accepted Accounting Principles (GAAP).
- GAAP requires fair value measurement for portfolio positions, so most GPs must issue financial statements using fair value.

Evolution of Valuation Guidelines, 1989–2007 (1)

The timeline below reviews efforts to create comprehensive portfolio company valuation guidelines in the US.

- **1989–1990:** Investors, private equity fund managers and fund-of-funds managers formed a group to develop portfolio company valuation guidelines. Contrary to a persistent rumor, the NVCA did not endorse, adopt or publish them.
- **1990s:** Without NVCA endorsement, the guidelines became accepted practice across much of the US industry, especially venture capital, and were widely (wrongly) attributed to the NVCA. National associations, in Europe and elsewhere, built local guidelines on them; by 2005 there had been several European and British versions.
- **2003:** A self-appointed group of practitioners formed the Private Equity Industry Guidelines Group (PEIGG), similar in make-up to the 1989–90 group; valuation guidelines were the first of four planned initiatives.
- **December 2003:** After extensive industry input and review, including from the NVCA, PEIGG issued its first guidelines.

Evolution of Valuation Guidelines, 1989–2007 (2)

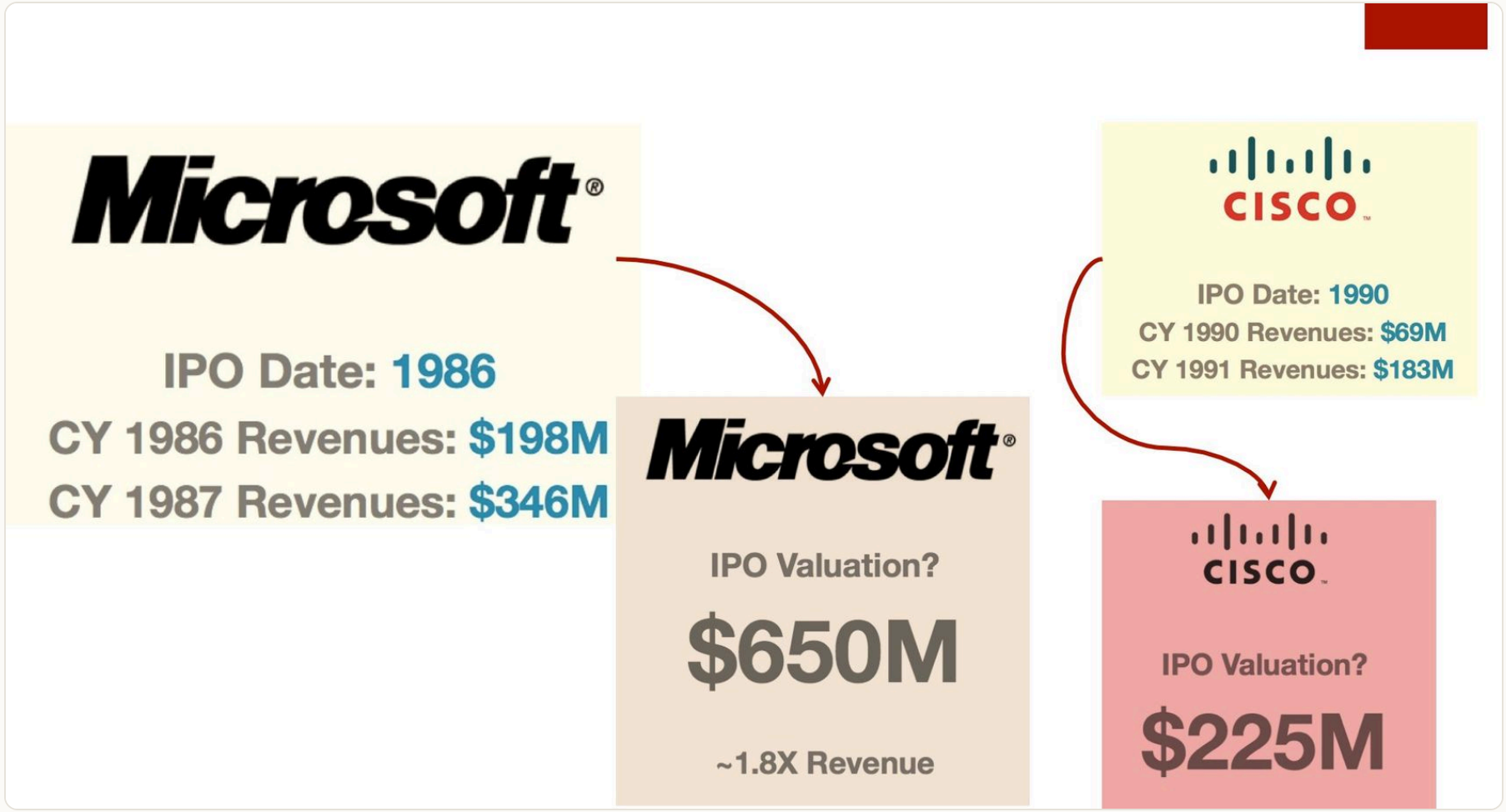
- **March 2004:** The NVCA board issued a statement of support, but not endorsement, consistent with input from its CFO Task Force, members and board.
- **March/April 2004:** The Institutional Limited Partners Association (ILPA) welcomed NVCA support, especially for GPs and LPs mutually agreeing on the valuation process. PEIGG also welcomed it.
- **July 2004:** PEIGG issued guidance on controversial paragraph 30, which allows and requires non-round write-ups in certain circumstances, the most debated provision.
- **September 2004:** On input from ILPA and others, PEIGG made minor wording changes in two paragraphs (version 2), partly inspired by the NVCA's March 2004 statement.
- **October 2004:** ILPA endorsed the PEIGG guidelines.
- **December 2004:** GPs prepared for their first audits under AICPA's SAS 101: if an entity claims to report "fair value", as GAAP requires, auditors must document and test it.

Evolution of Valuation Guidelines, 1989–2007 (3)

- **March 2005:** The NVCA board updated its statement to refer to the September 2004 PEIGG version and made the document widely available to members.
- **April 2006:** Three European associations (AFIC, BVCA, EVCA) released guidelines citing IASB rules. US reviewers found them more formulaic than PEIGG and only partly GAAP-compliant; 30 non-US associations endorsed them, but they got little traction in the US.
- **September 2006:** FASB issued its fair value standard, FAS 157; only a few of its 145 pages concern venture and private equity funds. Some auditors required compliance before the 2008 effective date.
- **March 2007:** PEIGG revised its guidelines to reflect FAS 157.
- **September 2007:** The NVCA board reaffirmed its position, referring to the latest version.
- **March 2008:** The IPEV Guidelines board relaunched with 5 US practitioners, aiming to converge PEIGG and IPEV.
- **August 2008:** The SEC proposed a roadmap toward global accounting standards (IFRS).

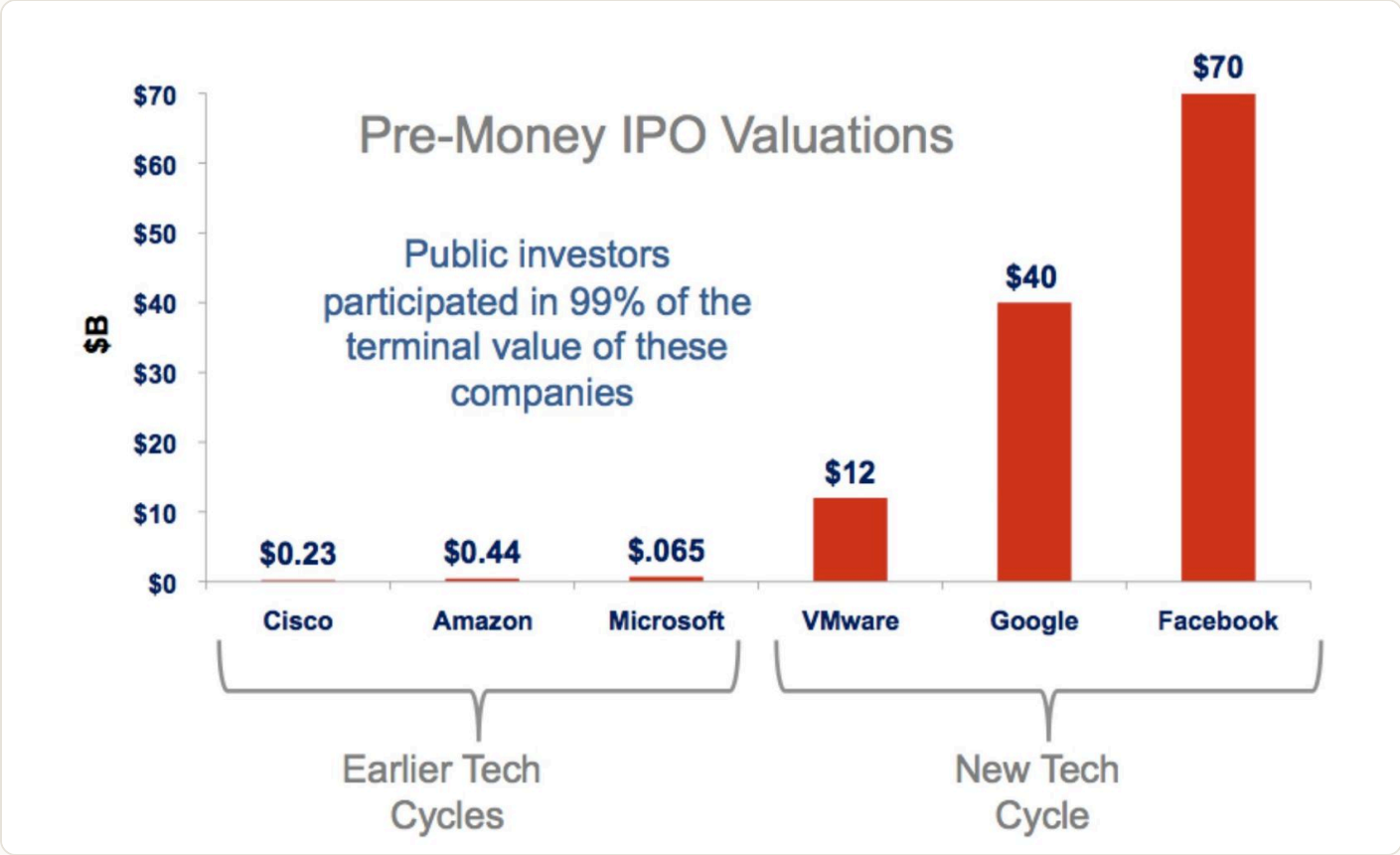
Sources: privateequityvaluation.com; sec.gov (press release 2008-184).

Valuation Before



Microsoft: IPO 1986, revenues $198M (1986) and $346M (1987), IPO valuation ~$650M (~1.8× revenue). Cisco: IPO 1990, revenues $69M (1990) and $183M (1991), IPO valuation ~$225M (~1.25× revenue).

Valuation Now



2025–2026 UPDATE

Facebook went public in May 2012 and was renamed Meta in 2021. In 2025, 17 US unicorns went public, including CoreWeave, Circle, Figma, Klarna and Chime (PitchBook-NVCA).

Pre-money IPO valuations ($B): Cisco 0.23, Amazon 0.44, Microsoft 0.065 (earlier tech cycles) vs. VMware 12, Google 40, Facebook 70 (new tech cycle). Public investors participated in 99% of the terminal value of the earlier companies.

Pre-Money Valuation



2025–2026 UPDATE

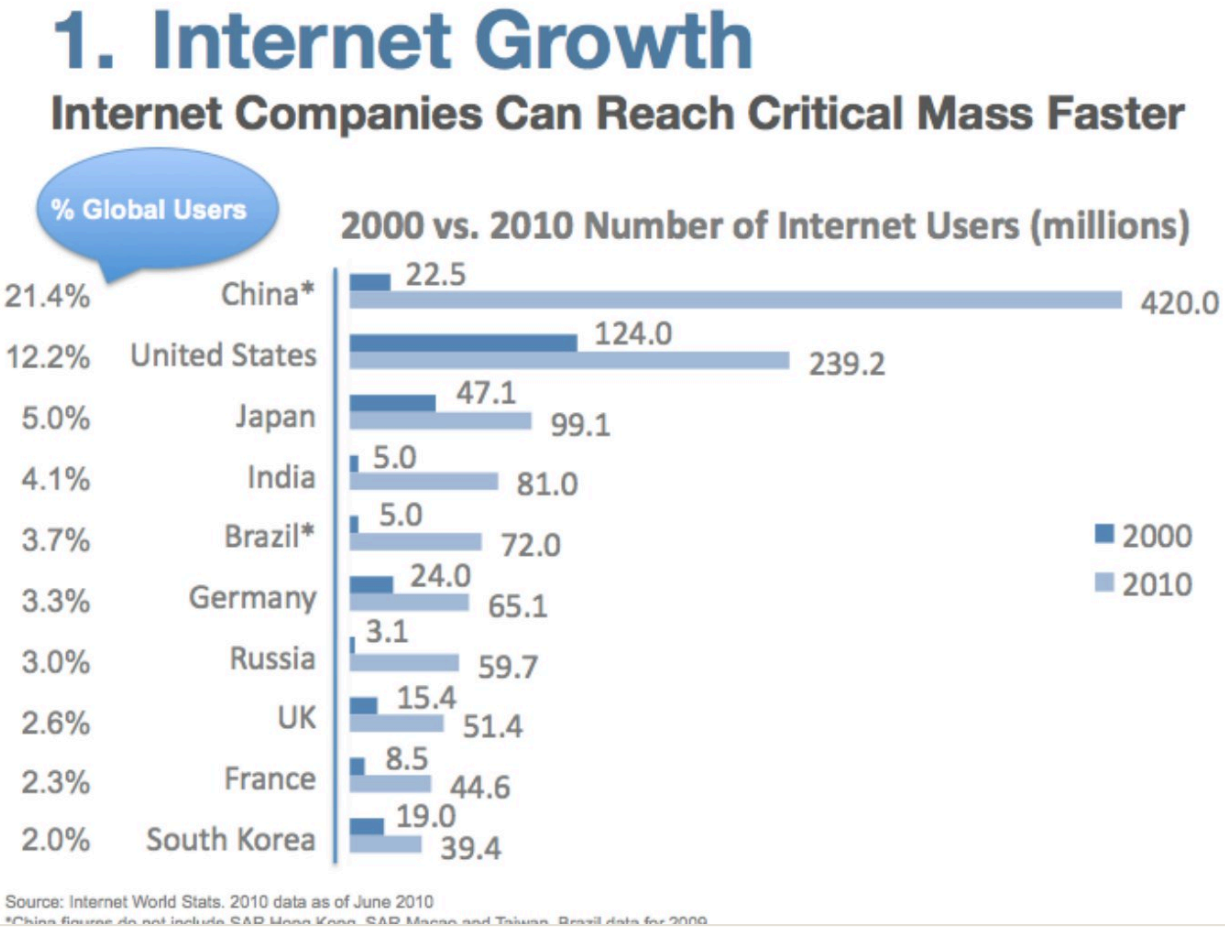
US VC-backed exit value was $297.6B in 2025, up from $154.5B in 2024 but well below the 2021 peak of $864.2B (PitchBook-NVCA).

Mean company age at IPO (years) and mean pre-money valuation at IPO ($M), 1990–2009.

What Is the Reason for the Jump?

- Three reasons:
  - Internet growth
  - Capital markets
  - Global

Internet Growth

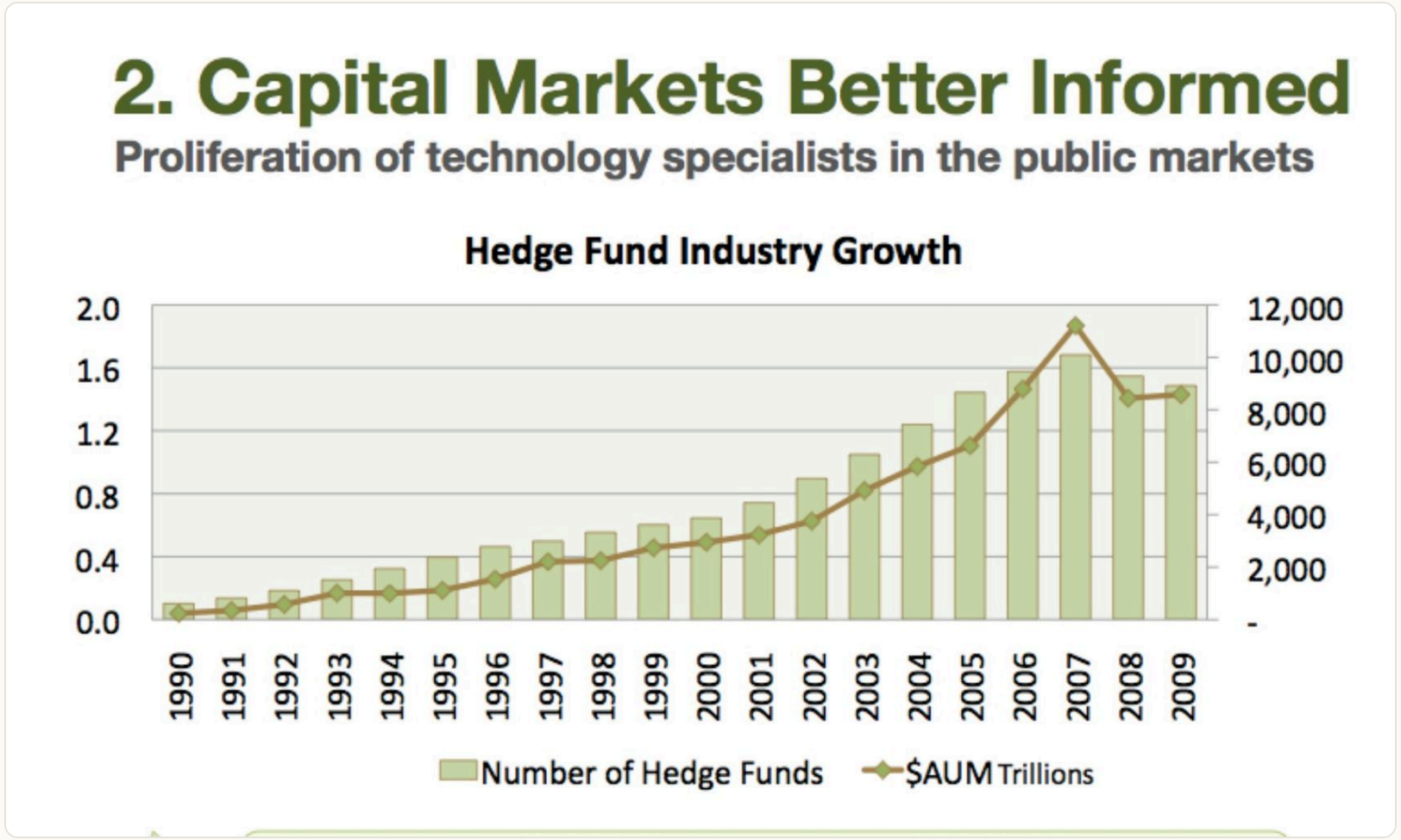


2025–2026 UPDATE

About 6.0 billion people used the internet in 2025, 74% of the world population; about 2.2 billion remain offline (ITU, Nov 2025).

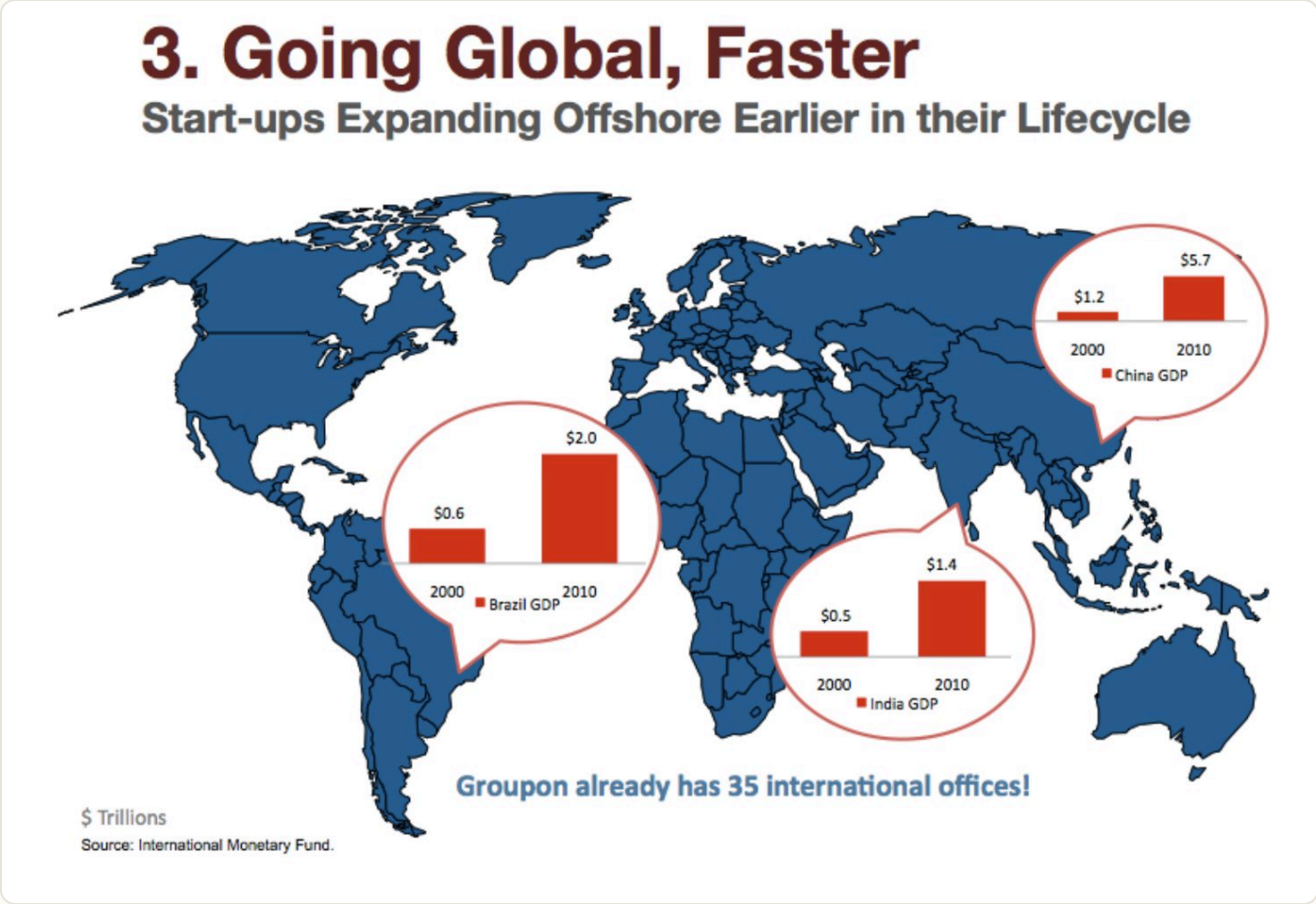
Internet companies can reach critical mass faster. Internet users 2000 vs. 2010 (millions), e.g. China 22.5 → 420, US 124 → 239. Source: Internet World Stats, June 2010.

Capital Markets



Capital markets are better informed: a proliferation of technology specialists in public markets. Hedge fund industry growth (number of funds and AUM), 1990–2009.

Global



2025–2026 UPDATE

Groupon went public in 2011.

Going global, faster: startups expand offshore earlier in their lifecycle. GDP 2000 → 2010 ($T): Brazil 0.6 → 2.0, India 0.5 → 1.4, China 1.2 → 5.7 (IMF). Groupon already had 35 international offices.

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- 24waystostart.com: Four steps to building the perfect financial model (2010)
- Giff Constable: Freemium business model template (2009)
- William Quigley (Clearstone): "A Venture Capital Revival Is Upon Us"

09

Recruitment

Building the company: leadership, organization, hiring and culture.

How to Build the Company?

- Plan
- Recruitment
- Administration

Leadership

- The process of influencing and inspiring others to work toward a common goal, and then giving them the power and freedom to achieve it.
- Entrepreneurs take on many roles in their companies, but none is more important than that of leader.

Effective Leaders (1)

- Create a set of values and beliefs for employees and passionately pursue them.
- Define, and constantly reinforce, their vision for the company.
- Respect and support their employees.
- Set the example for their employees.
- Create a climate of trust in the organization.
- Focus employees' efforts on challenging goals and keep them driving toward those goals.

Effective Leaders (2)

- Provide the resources employees need to achieve their goals.
- Communicate with their employees.
- Value the diversity of their workers.
- Celebrate their workers' successes.
- Encourage creativity among their workers.
- Maintain a sense of humor.

Effective Leaders (3)

- Create an environment in which people have the motivation, the training and the freedom to achieve the goals they have set.
- Become a catalyst for change when change is needed.
- Keep their eyes on the horizon.

Four Vital Tasks of a Leader

- **1.** Hire the right employees and constantly improve their skills.
- **2.** Build an organizational culture and structure that let the company reach its potential.
- **3.** Motivate workers to higher levels of performance.
- **4.** Plan for "passing the torch" to the next generation of leadership.

Early Stages: Plan

- Decide on employee status
- Find good employees
- Outsource human resources
- Understand employment law
- Understand employee-related tax issues
- Decide on employee benefits
- Consider employee training
- Set up payroll services
- Plan for retirement

Organization Structures: Mechanistic

Characteristics

- High specialization
- Rigid departmentalization
- Clear chain of command
- Narrow span of control
- Centralized
- High formalization

Appropriate For

- Cost efficiencies are critical
- Large organizations (2,000+ people)
- Standardized products produced in a routine manner
- Relatively stable external environment

Organization Structures: Organic

Characteristics

- Cross-functional teams
- Free flow of information
- Wide span of control
- Decentralized
- Low formalization

Appropriate For

- Innovation is critical
- Smaller organizations
- Customized products produced in a flexible setting
- Dynamic, complex and uncertain external environment

Standard Org Chart

- The generic organization chart can be your starting point: customize it to reflect the size and structure of your venture.
- Like the chart, the role descriptions here can be customized for each team member.
- In an early-stage startup none of this has to apply yet, but in the long run this is the structure you need to converge to.

Standard Organization

Top

- **Board**
- **CEO** (name), with business development and sales & marketing (member names or titles and organizations)
- **CTO** (member names or titles)
- **Engineering** (name)

Teams

- **Project management:** customer support, administrative assistant
- **Software team:** software team lead, team members
- **Hardware team:** hardware team lead, team members

Definition

- A **hierarchical organization** is a structure in which every entity in the organization, except one, is subordinate to a single other entity.

Flat Organization

- A flat organization structure is also called a horizontal organization.
- It is "flat" because it has no (or few) levels of hierarchy between managers and staff.
- The aim is to motivate staff by giving them more say in decision making and more involvement in the business.
- This structure generally improves motivation, but it has disadvantages too: staff must be well trained to take on participation and responsibility.

Board Members

Who They Are

- A group of investors, the CEO and founders, responsible for business issues affecting the company.
- They may:
  - have budget approval authority
  - decide on changes in goals and scope
  - be the highest authority for resolving issues or disputes

Role Description

- Ensure the company is aligned with its strategy and compliant with policy
- Ensure good use of assets
- Help resolve strategic issues and risks
- Approve or reject changes with a high impact on timelines and budget
- Assess progress and report to senior management and higher authorities
- Advise on business issues; use influence to help achieve outcomes
- Review and approve final deliverables

Advisory Committee

What It Is

- An advisory committee is a group of people who provide advice to the company.

Role

- Provide insights to the team on:
  - market interests
  - technical questions
  - other relevant initiatives
- Help resolve issues and risks
- Use influence and authority to help the company achieve its outcomes
- Talk about the company within their networks

Role of a CEO & President

CEO Background

- The CEO has overall responsibility for meeting requirements within the agreed time, cost, scope and quality constraints set out in the plan.
- The CEO reports to the board.

Role Description

- Supervise and give direction to the team
- Chair board meetings
- Keep the plan, schedule and budget up to date; detect and manage variances
- Execute to make the company successful

Outsourcing Human Resources

Why Outsource

- Many small companies outsource payroll, tax filing, unemployment insurance claims, benefits administration, health and productivity, accounting and more, to save time, cut costs and increase efficiency.
- As a small business owner, weigh the cost of your own time against the cost of HR outsourcing firms.
- A few to get you started: Ceridian, Alcott Group, TriNet.

Benefits

- HR outsourcing firms can give undivided attention to details, so papers are filed properly and the company complies with tax and employment rules.
- A third-party accounting agency ensures trustworthy figures and reduces the opportunity for fraud.
- Small businesses that outsource HR often gain efficiency and quality by spending more time on what they do best, rather than paperwork.

How to Avoid Hiring Mistakes (1)

- Look inside the company first
- Encourage employee referrals
- Make job ads stand out
- Use the internet as a recruiting tool
- Recruit on campus
- Use headhunters

How to Avoid Hiring Mistakes (2)

- Forge relationships with schools and other sources of workers
- Consider offbeat recruiting techniques
- Offer what workers want

Hiring the Right Employees

- Conduct a job analysis and create practical job descriptions and job specifications
- Plan an effective interview
- Conduct the interview
- Check references

Conducting a Job Analysis

- Create a **job description**: a written statement of the duties, responsibilities, reporting relationships, working conditions, and materials and equipment used in a job.
- Create a **job specification**: a written statement of the qualifications and characteristics needed for a job, stated in terms such as education, skills and experience.

How to Write a Job Description

- Basic sections of a job description:
  - Job title
  - Department
  - Location of the position (if there are multiple locations)
  - Title of supervisor
  - Pay grade or level (if your company has this)
  - Type of employment, such as full-time or part-time
  - FLSA status (exempt or non-exempt)

Skills, Knowledge, Ability (SKA)

- **1.** An SKA is something a worker knows or can do that enables them to perform the job's duties. Basic categories include vocational (work content) skills, mathematical skills, reasoning, language skills (reading, writing, speaking), human relations and self-management.
- **2.** Each SKA statement should indicate what ability, at what level or in what amount, and (optionally) in what context and for what purpose.
  - Example: "Skill in reading English words, simple sentences and numbers on documents so that they can be properly filed."
- **3.** Use examples from the job to define the SKA concisely.
- **4.** Avoid subjective modifiers such as "high level", which mean something different to each person.

Sample Job Description

- **Position:** Senior software engineer.
- **Purpose:** Develops information systems by studying operations; designing, developing and installing software solutions; supports and develops the software team.
- **Duties:** Studies information needs and systems flow; evaluates operational feasibility; documents solutions (flowcharts, diagrams, clear code); designs system specifications and standards; recommends changes in policies and procedures; keeps knowledge up to date; protects confidential information; mentors software engineers.
- **Skills:** Analysis, software design, documentation, testing, programming, development process and architecture, coaching.

Adapted from a Monster.com sample job description.

Some Sites to Post Jobs

General

- AOL CareerBuilder.com
- Jobster.com
- Monster.com
- Yahoo HotJobs
- Kariyer.net
- LinkedIn

Startup-Focused

- **GoBigNetwork.com:** one-stop shop for startups to write business plans, find funding and locate employees.
- **HotStartupJobs.com:** aggregates startup listings from many sites.
- **Jobs.Mashable.com:** marketplace with categories for listing and finding jobs.
- **NeoHire.com:** browse jobs by category, add them to a basket and apply to all of them at once.

Startup Job Posting Sites

Listings and Matching

- **nPost.com:** startup listings plus 225+ interviews with people at the companies about what they do and look for.
- **StartupAgents.com:** startups and candidates build profiles to find a match; free for candidates, paid for employers.
- **StartupJobs.biz:** small board with unique listings, searchable by job type or occupation.
- **Startuply.com:** Web 2.0 and startup jobs across industries, by job type.

Search Tools

- **StartupZone.com:** search by occupation, location or funding stage.
- **VentureLoop.com:** internships for students at certain schools; jobs by country or occupation.
- **CoNotes.com:** only startup jobs, since 2007.
- **Dice.com:** jobs by city or skill category.
- **ejob.com:** staffing in and around Silicon Valley.

Planning an Effective Interview (1)

- Develop a set of core questions and ask them of every candidate.
- Ask open-ended questions rather than ones that call for "yes" or "no" answers.
- Create hypothetical situations candidates would face on the job and ask how they would handle them.

Planning an Effective Interview (2)

- Probe for specific examples in the candidate's work history that demonstrate the necessary traits and characteristics.
- Ask candidates to describe a recent success and a recent failure, and how they dealt with them.

Conducting an Effective Interview

- **Break the ice.** Goal: to defuse nervous tension.
- **Ask questions.**
  - Remember the 25/75 rule (you talk 25% of the time, the candidate 75%).
  - Keep it legal!
- **Sell the candidate on the company.** The best candidates will have other offers; your job is to convince them your company is a great place to work.

Checking References

- Checking an applicant's references is an important way to protect a company from a "bad hire."
- Is it really necessary?
- Yes! According to the Society for Human Resource Management, more than half of all candidates exaggerated or falsified information on their résumés.

Company Culture

- The distinctive, unwritten, informal code of conduct that governs the behavior, attitudes, relationships and style of an organization.
- "The way we do things around here."
- In small companies, culture plays as important a part in gaining a competitive edge as strategy does.
- See the Amy's Ice Creams example.

Characteristics of "Cool" Companies

- Respect for work–life balance
- Sense of purpose
- Sense of fun
- Diversity
- Integrity
- Participative management
- Learning environment

Six Styles

- Craftsman
- Classic
- Coordinator
- Entrepreneur-plus-employee team
- Small partnership
- Big-team venture

Advantages of Work Specialization

- Economic advantages:
  - Efficient use of employee skills
  - Employee skills can improve through repetition
  - Easier and less costly to train employees
  - Minimizes resource waste
  - Encourages development of specialized equipment and machinery

Disadvantages of Work Specialization

- Human disadvantages:
  - Boredom
  - Stress
  - Fatigue
  - Poor work quality
  - Lower productivity
  - May lead to absenteeism and turnover

Common Errors with Teams

- Assigning teams inappropriate tasks
- Creating "make-nice teams"
- Failing to provide adequate training for team members and team leaders
- Sabotaging teams with underperformers
- Switching to team responsibilities but keeping pay individually oriented

What Makes Teams Succeed?

- Make sure teams are appropriate for the company and the nature of its work.
- Make sure teams are appropriate for the task to be accomplished.
- Form teams around the natural workflow and give them specific tasks to accomplish.

What Makes Teams Succeed? (cont.)

- Provide adequate support and training for team members and leaders.
- Involve team members in deciding how their performance will be measured, what will be measured and when.
- Make at least part of team members' pay dependent on team performance.

The Challenge of Motivating Workers

- Empowerment
- Job design
- Rewards and compensation
- Feedback

Empowerment

- Gives workers at every level of the organization the power, freedom and responsibility to control their own work, make decisions and take action to meet the company's objectives.
- Requires a different style of management from that of the traditional manager.
- Is built on sharing information, authority and power.

Empowerment Works Best When the Owner...

- Is confident enough to give workers all the authority and responsibility they can handle.
- Plays the role of coach and facilitator, not meddlesome boss.
- Recognizes that empowered employees will make mistakes.
- Hires people who can blossom in an empowered environment.

Empowerment Works Best When the Owner... (cont.)

- Trains workers to continuously upgrade their skills.
- Trusts workers to do their jobs.
- Listens to workers when they have ideas, solutions or suggestions.
- Shares information with workers, perhaps through open-book management.
- Recognizes workers' contributions.

Job Design Strategies

- **Job simplification**: breaks work down into its simplest form and standardizes each task.
- **Job enlargement** (horizontal job loading): adds more tasks to a job to broaden its scope.
- **Job rotation**: cross-trains workers so they can move from one job in the company to others, giving them a greater number and variety of tasks. Often used with a skill-based pay system.

Job Design Strategies (cont.)

- **Job enrichment** (vertical job loading): builds motivators into a job by adding planning, decision-making, organizing and controlling functions, which were traditionally managerial tasks.
- Five core characteristics:
  - Skill variety
  - Task identity
  - Task significance
  - Autonomy
  - Feedback

Job Design Strategies: Flexible Time

- **Flextime**: employees build their work schedules around a set of "core hours" (such as 11 a.m. to 2 p.m.) but are flexible about when they start and stop work.
- **Job sharing**: two or more people share a single full-time job.

Job Design Strategies: Flexible Place

- **Flexplace**: employees work somewhere other than the traditional office, such as a satellite branch closer to their homes or, in some cases, at home.
- **Telecommuting**: employees working from home use modern communications equipment to connect to their workplace.

Rewards and Compensation

- The key to using rewards to motivate workers is tailoring them to the needs and characteristics of each individual worker.
- Money is an effective motivator, up to a point:
  - Pay-for-performance systems
  - Stock options

Rewards and Compensation (cont.)

- Intangible rewards such as praise, recognition and celebrations can be very powerful, yet inexpensive, motivators.
- What kinds of motivators would you rely on if your company's workforce consisted mainly of "Generation Xers"?

The Feedback Loop

1 · Decide What to Measure

- Choose the performance that matters

2 · Decide How to Measure

- Set the method and the standards

3 · Compare Against Standards

- Compare actual performance against the standards

4 · Take Action

- Act to improve performance

The loop then starts again: deciding what to measure.

Guidelines for Successful Performance Appraisals

- Link the employee's performance to the job description.
- Establish meaningful, job-related, observable, measurable and fair performance criteria.
- Prepare for the appraisal by outlining the key points you want to cover with the employee.
- Invite the employee to evaluate his or her own job performance against the criteria.

Performance Appraisal Guidelines (cont.)

- Be specific.
- Keep a record of employees' critical incidents, both positive and negative.
- Discuss the employee's strengths and weaknesses.
- Incorporate the employee's goals into the appraisal.
- Keep the evaluation constructive.

Performance Appraisal Guidelines (cont.)

- Focus on behaviors, actions and results.
- No surprises, for either the employee or the business owner.
- Plan for the future: smart business owners spend about 20% of an appraisal discussing past performance and 80% developing goals, objectives and a plan for improving future performance.

Family Businesses

- Make up 90% of all US businesses.
- Make up one-third of the Fortune 500 companies.
- Unfortunately, only 30% of first-generation businesses survive into the second generation.
- Of those that do, only 12% make it to the third generation.

Why Is Management Succession So Difficult?

No management succession plan!

- 81% of all business founders intend to pass their companies on to their children.
- But 25% of family business owners have no formal management succession plan.

The Succession Plan

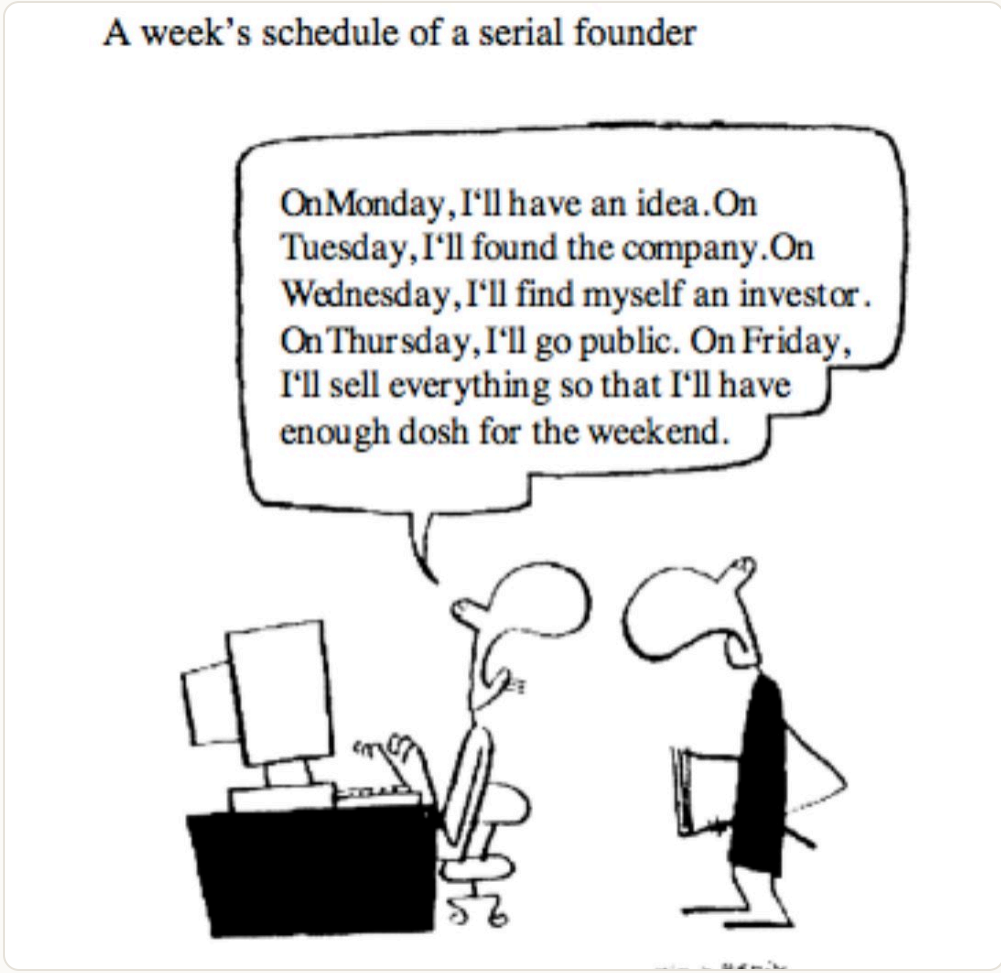
- **Step 1:** Select the successor.
- **Step 2:** Create a survival kit for the successor.
- **Step 3:** Groom the successor.
- **Step 4:** Build an environment of trust and respect.
- **Step 5:** Cope with the financial realities of estate and gift taxes.

Coping With Estate Taxes

- Buy/sell agreement
- Lifetime gifting
- Trusts
  - Bypass trust
  - Irrevocable life insurance trust
  - Irrevocable asset trust
  - Grantor-retained annuity trust (GRAT)
- Estate freeze
- Family limited partnership (FLP)

Serial Founder

A week's schedule of a serial founder.



10

Term Sheet

What a term sheet is, the terms it contains, and a worked example of how they play out.

Outline

- What is a term sheet?
- Which terms does it contain?
- An example of a term sheet

Private Equity

- The generally accepted term for the industry as a whole, encompassing:
  - management buy-out activity
  - management buy-in activity
  - venture capital, which relates exclusively to the seed through expansion stages of investment.

Term Sheet

- A term sheet is a document that outlines the key financial and other terms of a proposed investment.
  - It is the basis for drafting the investment documents.
  - It is not usually intended to be legally binding.
  - It contains conditions that must be met before the investment is completed, known as **conditions precedent**.

What a Term Sheet Encompasses

- **Subscription Agreement**: number and class of shares, payment terms, and the representations and warranties given (qualified by a disclosure letter).
- **Shareholders' or Investors' Rights Agreement**: investor protections, including consent rights, rights to board representation and non-compete restrictions.
- **Articles of Association**: the rights attaching to each share class, the procedures for issuing and transferring shares, and the holding of shareholder and board meetings.

Investment Round

- An investment round is led by one venture capital firm, which puts together a syndicate before or after the term sheet is agreed and then coordinates it until the round is completed.
- The syndicate usually comprises some or all of the existing investors plus some new ones, one of whom typically leads the round.
- Once agreed, lawyers use the term sheet as the basis for drafting the investment documents.

The Investment Process

- A venture capital round is usually led by one firm, which puts together a syndicate before or after the term sheet is agreed and coordinates it until the round is completed.
- The syndicate usually comprises some or all of the existing investors and some new ones, one of whom typically leads.
- Two main sources of institutional funding for Series A and beyond: venture capital funds (including venture capital trusts, VCTs) and corporate strategic investors.
- Once all parties agree, lawyers draft the investment documents from the term sheet.
- The more detailed the term sheet, the fewer issues left to agree during drafting.
- The process can be complex: lawyers familiar with VC transactions help minimize both time and cost.

Undiluted Share Capital

- "NewCo" is spun out of an academic institution to exploit intellectual property developed by a scientist (the founder) while employed there.
- The institution assigns its intellectual property rights (IPR) to NewCo in return for a 50% shareholding.
- The founder, whose research created the IPR, owns the other 50% through founder shares.
- NewCo's start-up capital structure:
  - Founder: 50 ordinary shares, £50 invested at £1 per share
  - Institution: 50 ordinary shares, £50 invested at £1 per share
  - Undiluted share capital: 100 shares

Seed Round

- NewCo attracts a seed investor: a venture capital company specializing in very early-stage companies.
- They agree a pre-money valuation of £200,000 and that NewCo needs to raise £200,000:
  - to run experiments that prove the principle of the technology, so it can raise its next round;
  - the seed investor also requires an option pool to help attract new staff.
- The seed round, fully diluted:
  - Founder(s): £50 invested, 50 shares, value £100,000
  - Institution: £50 invested, 50 shares, value £100,000
  - Seed investor: £200,000 for 100 new 'A' shares, value £200,000
  - Option pool: 20 options
  - Total: £200,100 invested; 200 shares + 20 options = 220 fully diluted; shares valued at £400,000

Type of Share

- **Preferred shares**: a class of shares to which certain rights attach.
  - VCs typically prefer them because they invest more than the founders but do not control day-to-day management.
  - If a preferred class already exists, new investors typically create a new series of preferred shares to distinguish their rights (voting, financial, etc.).
  - This is common practice because each series is usually issued at a different valuation and in different circumstances, and so carries a different risk profile.

Valuation and Milestones

- Investors and the company agree a valuation before the new round: the **pre-money valuation**.
- It sets the price per share paid on completion: the **purchase price**.
- Example: pre-money valuation £200,000 and 100 ordinary shares, so £2,000 per share.
- The **fully diluted** share count includes:
  - shares issued by the company
  - shares allocated to the employee option pool
  - other shares for options, warrants, convertible debt or other commitments
- The **post-money valuation** is the company's value immediately after the round:
  - £440,000 = £2,000 × (200 shares + 20 options)

Investment Tranches

- Venture capital investors do not want to invest everything on completion. Instead they invest in tranches, subject to technical and/or commercial targets (milestones) being met.
- The milestones are set out in the Subscription Agreement.
- Missing a milestone does not automatically mean the investors will withhold the additional money, but they may seek to negotiate different terms for those amounts.

2025–2026 UPDATE

The NVCA model legal documents, updated in October 2025, now add standard tranche mechanics (NVCA).

Ratchet

- A ratchet adjusts the shareholdings of the investors and the founders according to the company's performance or the returns on exit (an **exit ratchet**).
- It is mainly used to bridge widely differing views of a company's value, or to give founders extra rewards for delivering excellent returns to investors.
- Ratchets can be complicated in operation: think them through carefully because of tax issues, and to avoid later conflicts of interest between the founders, the company and its other shareholders.

Dividend Rights

- VCs often invest in early-stage companies in an intense growth phase. The aim is to grow the business and its value and realize a return on investment (ROI) on exit, typically a multiple of the amount invested.
- Such companies usually reinvest in growth rather than pay dividends. Sometimes dividends are prohibited, possibly for a limited period.
- Sometimes a **cumulative dividend** accrues until the exit.

Liquidation Preference and Deemed Liquidation

- A right VC investors may require in recognition of the risk they bear on their capital.
- There are many variations, but typically, if the company is liquidated or undergoes a deemed liquidation, the preferred shareholders receive a set amount of the proceeds before any other shareholders.
- The preference may equal the preferred shareholders' investment, or a multiple of it.
- Investors usually want it to apply not only to a liquidation or winding up but also to a **deemed liquidation**: a merger, acquisition, change of control, consolidation or sale of all or most assets, and sometimes an IPO or qualified exit.

2025–2026 UPDATE

In 2025 the large majority of US VC rounds used a 1× non-participating liquidation preference.

Liquidation Preference: Example

HOLDER (STAKE)	PREFERENCE	£200,000 EXIT	£1,000,000 EXIT
Investor (50%)	None	£100,000	£500,000
Investor (50%)	1×	£200,000	£200,000 preference + £400,000 (share of £800,000 balance)
Investor (50%)	2×	£200,000	£400,000 preference + £300,000 (share of £600,000 balance)
University (25%)	None	£50,000	£250,000
University (25%)	1×	0	£200,000
University (25%)	2×	0	£150,000
Founder (25%)	None	£50,000	£250,000
Founder (25%)	1×	0	£200,000
Founder (25%)	2×	0	£150,000

Redemption

- The right to require the company, under certain conditions, to buy back its own shares from investors at a fixed price.
- It may apply if there has been no exit within a pre-determined period.
- If the company fails to redeem when asked, investors may gain improved rights, such as enhanced voting rights.
- Not appropriate for every investment; not allowed, or limited (e.g. to a percentage of issued shares), in some jurisdictions.
- It can also discourage a company from breaching its obligations by giving the investor a quick way to dispose of its shares.
- Where local law forbids redemption, the alternative is a conditional right to **put** (sell) shares to the founders at a fixed price.

Conversion Rights

- Where preferred shares may be converted into ordinary shares, investors generally require the right to convert at any time, at an initial ratio of 1:1.
- Conversion is normally delayed until exit, so investors do not lose the rights attached to the preferred shares.
- The ratio is adjusted for any reorganization of the company's capital structure.
- In some jurisdictions, adjusting the ratio provides a form of anti-dilution protection.
- If a dilutive event has raised the ratio, the investor may choose, or be compelled, to convert immediately before a liquidity event (such as a trade sale or an IPO).

Automatic Conversion of Share Classes

- Investors are usually required to convert all their shares into ordinary shares before the company lists on a public exchange.
- VCs often require automatic conversion of all share classes immediately before an IPO.
- They want it to apply only when the IPO is likely to give them enough liquidity after any lock-up period.
- So they define criteria in advance for a **Qualified IPO**: e.g. certain exchanges, recognized national underwriters, a valuation above a threshold and minimum gross proceeds.
- Otherwise they could lose all their preferential rights even if the company lists at a low value on a minor exchange.

Anti-dilution

- Protects the value of investors' stake if new shares are issued at a lower valuation than they paid (a **down round**).
- A formula calculates new shares the investors receive for no or minimal cost, offsetting the dilutive effect of the cheaper shares.
- Variations of the formula give different degrees of protection:
  - **Full ratchet** keeps the investors' full ownership at the same level or value in a down round.
  - Others compensate partly and let ownership fall; the most common is **weighted average**.
- The protection required depends on factors such as the valuation at investment and the expected need for further financing.

Founder Shares

- Founders and senior management are usually central to a VC's decision to invest.
- Having backed a team they trust, investors want it to stay in place and deliver the business plan.
- So founders and key managers (sometimes all shareholder-employees) who leave within a set period must offer their shares back to the company or other shareholders.
- The price depends on the departure: market value for a **good leaver**, considerably less for a **bad leaver**, e.g. someone who breached the employment contract or resigned within a set period.
- The board often decides whether to apply the bad leaver provisions.

Vesting

- In addition to, or instead of, leaver provisions, investors may put founder shares on a vesting schedule so founders do not leave in the short term.
- Holders must stay employed, or engaged as consultants, for a set period to own all their shares outright.
- Shares may vest straight-line or on any negotiated basis; founders may have different schedules reflecting their contributions.
- Example: 12.5% of the shares vest each year, so 12.5%, 25%, 37.5% and 50% have vested cumulatively after 12, 24, 36 and 48 months.

Pre-emption Rights on New Share Issues

- In any future share offering, a VC investor will want the right to maintain at least its percentage stake by participating up to its pro rata holding, on the same terms as other investors.
- In the UK and most Continental European jurisdictions this right is provided automatically by law, although it can be waived.
- If the new offering is priced below the investor's earlier valuation, it may also receive shares under its anti-dilution rights.
- Some issues are usually exempt, such as anti-dilution shares and shares issued on the exercise of options.

Right of First Refusal, Co-sale and Tag-along

- Contractual terms between shareholders, usually set out in the Articles of Association.
- **Right of first refusal (ROFR)**: a shareholder selling shares must first offer them to the shareholders who hold the ROFR.
  - Usual exceptions: transfers by individuals to close relatives and trusts, and by investors to third parties, to each other or within their group.
  - The ROFR process can add several weeks to a sale.
- **Co-sale / tag-along**: the other shareholders can insist the buyer purchase the same percentage of their shares at the same price and terms, which can make shares harder to sell.
- VCs invest largely on the strength of the founders and managers, so they do not want them selling out while the VC is still invested.
- Investors therefore often require ROFR and co-sale rights on any founder or key-manager sale, sometimes even a ban on selling for a set period.

Drag-along and Bring-along

- **Drag-along** (or bring-along): if a set percentage of shareholders (or of one class) vote to sell to a buyer, all shareholders must sell their shares to that buyer.
- In early rounds it often needs the consent of holders of at least a majority of the investors' shares.
- Useful when buyers want 100% of the company, to avoid duties to minority shareholders after the acquisition.
- Many jurisdictions provide a legal route, usually once a third party holds at least 90% (a **squeeze-out**), though it is usually subject to court review.
- VCs may require exceptions where they cannot be forced to sell: e.g. if they would not receive cash or marketable securities, or would have to give the buyer representations, warranties, indemnities or covenants (such as non-compete and non-solicitation of employees).

Representations and Warranties

- VCs expect representations and warranties from key founders and management and, where allowed, from the company.
- Purpose: give investors a complete and accurate picture of the company's condition and history, so they can assess the risks before investing. They typically cover legal existence and share capital, financial statements, business plan, assets (especially IP), liabilities, material contracts, employees and litigation.
- No company is perfect: the warrantors list exceptions in a **disclosure letter** (schedule of exceptions). Investors are deemed to know anything disclosed there and cannot claim breach of warranty for it.
- Warrantors must reimburse investors if warranties prove inaccurate or exceptions were not fully disclosed. Limits on their exposure are negotiated and vary with the severity of the breach, the size of the investment and the warrantors' resources.

Voting Rights

- VC investors have certain consent and voting rights attached to their class of shares.
- Preferred shares may carry the same votes as ordinary shares at a general meeting or, where allowed, more than one vote per share in certain circumstances.
- If an event changes the conversion ratio, the votes carried by the investors' shares are often adjusted automatically to reflect the ratio at the time of the vote.

Protective Provisions and Consent Rights

- Investors normally require that certain actions need the consent of a majority (or other set percentage) of their class or series: the **investor majority**.
  - Consent may be split between the investor majority, the investor director(s) and the board.
- Major changes typically need investor-majority or investor-director consent; urgent operational matters are left to the board.
  - Alternatively, each of the largest investors may hold specific consent rights, protecting it from actions that could harm the value of its investment.
- Covered actions include, among many others:
  - changes to share classes, share rights or capital structure; issuing new shares
  - mergers and acquisitions, sale of major assets, winding up or liquidation
  - declaring dividends, debt above a set amount, appointing key managers, materially changing the business plan

> These rights matter most to investors who do not appoint a director to the board.

Board of Directors and Board Observer

- Investors require the company to have an appropriate board of directors.
  - Some Continental European jurisdictions (e.g. Germany) require a two-tier board, a management board and a supervisory board; where it is optional (e.g. France), some investors prefer one board.
- Investors prefer a majority of non-executive directors (not company employees). That may be impractical for small companies, but one or two non-executives is usual.
- One or more non-executives are appointed by the investors under the investment documents.
- Some investors never appoint a director, because of conflicts of interest and liability, and instead appoint a **board observer**, who attends meetings but takes no part in decisions.
- Boards generally meet monthly, especially in early-stage companies with active investors.

Information Rights

- To monitor their investment, investors need regular updates on the company's financial condition and budgets, plus a general right to visit the company and examine its books and records.
- This sometimes includes direct access to the auditors and bankers. The obligations typically cover timely delivery of audited annual financial statements, annual budgets, and unaudited monthly and quarterly statements.
- In some Continental European jurisdictions all shareholders must be treated equally, so information given to one must be given to all.

Exit

- Investors want a path to an exit, most often selling their shares after an IPO or taking part in a sale.
- Sometimes the threshold for a liquidity event or conversion is a **qualified exit**: conversion becomes compulsory only if the IPO meets that definition.
- A qualified exit is usually a sale or an IPO on a recognized exchange above a set value, ensuring investors a minimum return.
- Investors usually require undertakings from the company and other shareholders to seek a listing or trade sale within a limited period, typically five to seven years depending on stage and maturity.
- If no such exit is achieved, investors often build in structures to withdraw some or all of their investment (such as liquidation preference and redemption rights).

Registration Rights

- A US securities-law concept alien to many European companies and investors.
  - Needed because securities can be offered for public sale in the US (with some exceptions) only after registration with the SEC.
  - Registration requires the company to disclose extensive information on its operations and finances, which is time-consuming and costly.
- Unlike in Europe, where all shares usually become tradable on listing, a company registering in the US need not register all its outstanding shares.
- Unregistered shares can trade only in very restricted circumstances, which can greatly reduce their value.
- So investors in US companies (or those that may list in the US) usually require a **Registration Rights Agreement**, giving **demand rights** and **piggy-back rights** (to join any other registration) and allocating the costs and liabilities.

Confidentiality, IP Assignment and Non-compete

- Every company should have certain agreements with its employees. For technology start-ups this generally means:
  - **Confidentiality Agreements**: protect trade secrets, know-how, customer lists and other sensitive information.
  - **IP Assignment Agreements**: ensure IP developed by academic institutions, or by employees before they joined, belongs to the company.
  - **Employment or Consultancy Agreements**: ensure all IP developed by employees belongs to the company.
- In academic spin-outs, founders are often consultants to the company while remaining employees of the institution, at least until the company is more established.
- Investors also want key founders and managers to sign **Non-compete Agreements**: the investment rests largely on their technology and experience, and leaving for a competitor could badly hurt the company's value. These are included in the Investment Agreement too, giving investors a direct right of action.

2025–2026 UPDATE

California (Business & Professions Code §16600) still voids non-competes, and SB 699 and AB 1076 (2024) extend this to out-of-state ones; the US FTC's 2024 nationwide ban was struck down and dropped in 2025.

Employee Share Option Plan

- An employee share option plan (ESOP) reserves a percentage of the company's shares for option grants to current and future employees (and certain others), at the discretion of a management committee.
- It gives employees an incentive by letting them share in the financial rewards of the company's success.
- Investors typically want 10–20% of the share capital reserved in an ESOP, creating an option pool.
- The company can then issue shares under the plan without further investor approval.
- Founders and managers with significant shareholdings may be excluded from the ESOP.

Transaction and Monitoring Fees

- Investors are usually paid a fee by the company to cover the internal and external costs of the investment process. In some jurisdictions this might constitute illegal financial assistance.
- Some investors require an annual monitoring fee for their level of involvement with the company, in addition to the usual reimbursement of travel and out-of-pocket expenses.

Confidentiality

- All exchanges of confidential information between potential investors and the company should be covered by a Confidentiality Agreement.
- It should be signed as soon as investment discussions begin. If it has not been, a confidentiality restriction should be included in the term sheet.

Exclusivity

- Once a term sheet is signed, investors carry out due diligence on the company (technical, commercial, legal and/or financial).
- They usually give the company a list of areas they want to cover and information they want to receive.
- It can take several weeks or even months, often with third-party advisers (lawyers, accountants, consultants).
- Investors do not want to incur this expense only to find the company has accepted money from other investors.
- So some ask for an **exclusivity period** during which the company may not seek investment from third parties.
- A breach results in a financial penalty for the company and the founders.

Enforceability

- Apart from the clauses on confidentiality, transaction fees and exclusivity, a signed term sheet is not intended to be legally binding.
- In some Continental European jurisdictions, however, there is a duty to act in good faith when deciding not to proceed, either at all or on the terms set out in the term sheet.
- There, investors or the company may not be able to walk away from, or unilaterally change, the term sheet without a justifiable reason.

Conditions Precedent

- The term sheet includes a full list of conditions to be met before investment.
- Investment usually depends on agreeing definitive legal documents, satisfactory due diligence, and approval by each investor's Investment Committee.
- Due diligence can cover commercial, scientific and IP review; current trading and forecasts; existing and proposed management service contracts; financial history and current position; a full or targeted legal review; key-man insurance if not in place; and references and checks on key employees.
- Founders and senior managers are often required to sign Employment or Consultancy Agreements approved by the investors.
- For investment from VCTs, tax clearance from the Inland Revenue (UK tax authority) must be obtained first.

Reference

- *A Guide to Venture Capital Term Sheets*, British Private Equity & Venture Capital Association (BVCA)

2025–2026 UPDATE

In the US, the NVCA model legal documents were updated in October 2025 (charter, stock purchase, investors' rights, ROFR/co-sale) and the voting agreement in June 2026 (nvca.org/model-legal-documents).

11

The Board

The duties, alignment, governance and internal controls of a venture-backed company's board, stage by stage.

Joining the Board

- You have become a director of a venture capital-backed company (VCBC). What level of board governance knowledge should you have?

The Typical VC-Backed Board

- Privately held venture capital-backed company (VCBC) boards have a very high percentage of inexperienced corporate directors.
- First-time entrepreneurs who become founding CEOs often become corporate directors even before they raise their first institutional round of venture capital.

> Taking venture capital is always a choice, but there is no opting out of the legal responsibilities of corporate directors.

VC Boards Are Unique

- VCBC boards face challenges particular to emerging companies in rapidly changing competitive markets.
- VCBCs develop through four distinct stages:
  - (1) seed funding and product/technology/service development
  - (2) early commercialization
  - (3) late-stage expansion
  - (4) liquidity through an acquisition or an initial public offering (IPO)
- As companies grow in size and invested capital, boards typically grow from 3 to as many as 7 members, adding more independent directors, especially if the company wants to go public.

> Through this evolution, business processes grow more complex and boards are naturally exposed to conflicts of interest among their members.

Self-regulation

- Private companies are exempt from most of Sarbanes-Oxley (SOX) and other rules that impose governance standards on public companies, but it is in the VC industry's interest to develop and proactively follow governance best practices for private companies.
- Otherwise, lawmakers, agencies or courts are likely to impose regulation from outside, without deep knowledge of what makes entrepreneurs and their ecosystem unique.
- Failing to respond to changing governance expectations could also expose VCBC directors to personal liability.

> Most important, good governance practices help us build better companies.

How to Achieve an Aligned and Effective Board

- The legal fiduciary duties of board service are owed to all shareholders, not just to the class in which a VC director's firm has invested.
- At a minimum, the board must agree on common goals and basic tenets of behavior.
- All boards are made up of individuals with differing interests and responsibilities outside the boardroom, but inside it they must serve common goals.

Align Expectations

- A key feature of effective boards is that they deliberately align expectations:
  - The board is economically and strategically aligned within itself.
  - The board's expectations of the CEO, and the CEO's expectations of the board, are mutually well understood.

Four Main Areas of Economic Alignment

To align the board economically, four areas of investment strategy should be considered:

- **Exit plans**: VCs should openly discuss expected exit values (or ranges) so management, likely the final arbiter of any M&A, shares them. Investors in the same round may differ: one happy to sell for $100M, another needing $300M even to consider a deal.
- **Exit timing**: discuss timeframes openly. Some investors will wait longer than others, especially when VCs joined in different rounds, years apart.
- **Investment expectations**: be candid about follow-on reserves; some funds reserve 1–3× or more of their initial investment. The whole board should know each investor's reserves and conditions.
- **Syndication expectations**: some VCs follow a "fully funded syndicate" model, backing the company through liquidity; others expect new investors in later rounds. Discuss this openly, so the company does not recruit new investors if current ones do not want outside capital.

Behavior of the Board

- One of the board's most important jobs is to promote effective behavior in the boardroom, so management can focus on running the business without distractions from boardroom intrigue and political maneuvering.
- This does not mean the CEO should not work actively with the board; it means that work should be geared toward building the business.
- Meeting legal governance requirements is important, but not sufficient.
- Directors should help the board do its best job to promote the company's interests and maximize shareholder value.
- Peer review and self-evaluation can bring greater director accountability, better education and governance practices suited to private companies.

Governance Process and Internal Controls

Who owns the governance education process on the board?

- Someone on the board MUST own the process of educating directors about their responsibilities and running director evaluations.
- Whether that owner is a VC, the CEO or an independent director is secondary. At a minimum, the CEO should start a board discussion to assign this responsibility.
- Because VCBC boards change greatly in size and composition over their life cycle, not every process applies to every company, especially at the earlier stages.

Audit Committee

Audit committee oversight varies with development stage

- Applying sound governance standards to an emerging company does not end in the boardroom.
- From a compliance standpoint, the most critical board committee is the audit committee, whose duty of oversight centers on assessing the adequacy of the company's internal controls.
- Key questions about a company's internal controls are measured against its stage of development, and so its operational complexity, to suggest control levels that match its governance processes and maturity.

Internal Controls at the Seed/R&D Stage

- Even a small company that sells nothing yet has purchasing and disbursements, payroll, treasury, fixed assets, equity and stock administration, and financial reporting.
- Risks around cash disbursements depend largely on the volume and type of transactions.
- The board should set thresholds for board approval and approve management authorization levels.
- The board is usually close to financial metrics, such as spending levels, which serve as effective monitoring controls.
- Awareness of fraud risk (small companies often have segregation-of-duties issues) and an understanding of key financial processes, on top of the board's review of metrics, should normally cover the typical risks.

Internal Controls in Early Commercialization

- Moving from product development to generating revenue is one of the hardest transitions for emerging companies: priorities are reset and new senior people come on board.
- These newcomers did not live through the "birthing" of the development program, which can stress the earlier team.
- As the operating model is established, the company's accounting policies take shape (e.g. how what is sold drives revenue recognition).
- This is the time to assess what accounting expertise is needed and what is in place. Accounting has grown complex, especially for small organizations; larger companies often have a Chief Accounting Officer or similar.

Questions for the Audit Committee

A Chief Accounting Officer is not practical for a small company with limited resources, so the full board, or at least the audit committee, should ask:

- What are our critical accounting policies (and the applicable technical literature)?
- What experience and expertise do we have in-house?
- Is our finance team deep enough for someone to review complex accounting judgments, or do we rely on the "preparer" to get it right?
- If we lack the expertise, can we train existing staff to own areas of accounting complexity?
- As the finance team grows (from early commercialization to expansion), what accounting skills should our next hire have?
- What processes identify new accounting issues and whether they apply to us?
- Is the ongoing training of finance staff sufficient to maintain competence?
- Do we need outside parties to supplement our skills in specific areas?

Internal Controls in Late-Stage Expansion

- As annual revenue growth accelerates, the company should adopt more formal risk-assessment processes for financial-reporting risk, addressing questions such as:
  - What are the significant accounting processes?
  - What are the areas of accounting complexity?
  - Where is my highest risk of material misstatement?

Other Factors in Risk Assessment

Factors to consider as management prepares, and the board reviews, process- and account-level risks:

- Materiality to the financial statements
- Level of accounting and reporting complexity
- Account characteristics (transactional and routine, or estimates and non-routine)
- Fraud risk inherent in the account or process
- Volume of activity
- Volatility
- Other reporting considerations inherent in the account or process

> The risk assessment guides monitoring; the audit committee or board should also weigh known weaknesses (especially reported significant deficiencies or material weaknesses) and the maturity of financial reporting.

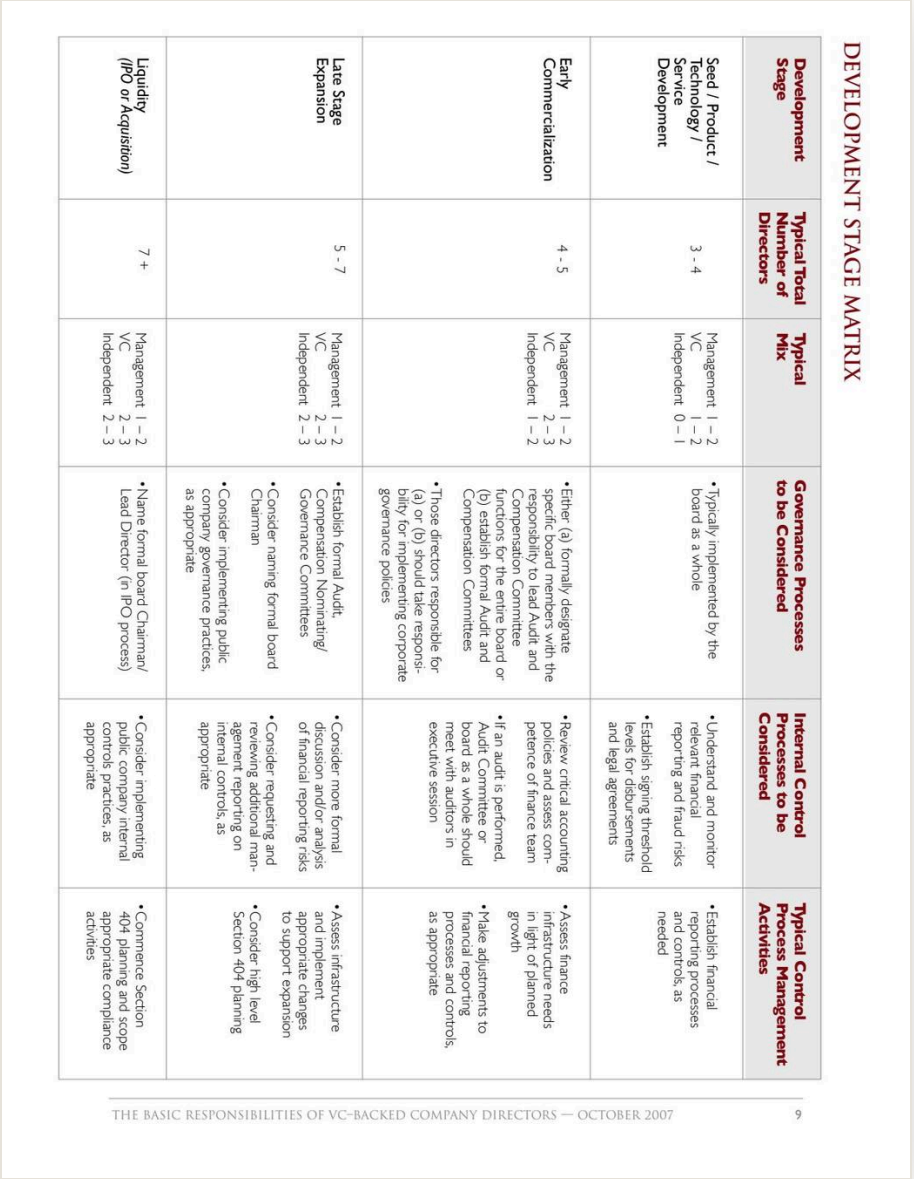
Anticipating a Liquidity Event (IPO or Acquisition)

- Whether or not an IPO is expected, public-company accounting and governance standards matter, because acquisition by a public company is likely.
- Companies without proper internal controls may get a lower acquisition valuation than those with well-defined controls and high governance standards.
- Many companies start SOX compliance as they approach an IPO, often as an early implementation.
- SOX work can be scaled to the risk assessments so far, the timing and probability of the event, and the type of exit. Activities and milestones depend on:
  - the risk-assessment process and risk tolerance
  - perceived process maturity
  - anticipated remediation, including known significant deficiencies and material weaknesses
  - existing control documentation and current control monitoring
- Board involvement and monitoring will follow from the agreed SOX activities.

BOARD · READING

Development Stage Matrix

A page from "The Basic Responsibilities of VC-Backed Company Directors" (NVCA, October 2007): for each stage from seed to liquidity, the typical board size (3–4 rising to 7+), the mix of management, VC and independent directors, and the governance and internal-control processes to consider.



DEVELOPMENT STAGE MATRIX

Development Stage	Typical Total Number of Directors	Typical Mix	Governance Processes to be Considered	Internal Control Processes to be Considered	Typical Control Process Management Activities
Seed / Product / Technology / Service Development	3 - 4	Management 1 – 2 VC 1 – 2 Independent 0 – 1	• Typically implemented by the board as a whole	• Understand and monitor relevant financial reporting and fraud risks • Establish signing threshold levels for disbursements and legal agreements	• Establish financial reporting processes and controls as needed
Early Commercialization	4 - 5	Management 1 – 2 VC 2 – 3 Independent 1 – 2	• Either (a) formally designate specific board members with the responsibility to lead Audit and Compensation Committee functions for the entire board or (b) establish formal Audit and Compensation Committees • Those directors responsible for (a) or (b) should take responsibility for implementing corporate governance policies	• Review critical accounting policies and assess competence of finance team • If an audit is performed, Audit Committee or board as a whole should meet with auditors in executive session	• Assess finance infrastructure needs in light of planned growth • Make adjustments to financial reporting processes and controls, as appropriate
Late Stage Expansion	5 - 7	Management 1 – 2 VC 2 – 3 Independent 2 – 3	• Establish formal Audit, Compensation Nominating/ Governance Committees • Consider naming formal board Chairman • Consider implementing public company governance practices, as appropriate	• Consider more formal discussion and/or analysis of financial reporting risks • Consider requesting and reviewing additional management reporting on internal controls, as appropriate	• Assess infrastructure and implement appropriate changes to support expansion • Consider high level Section 404 planning
Liquidity *(IPO or Acquisition)*	7 +	Management 1 – 2 VC 2 – 3 Independent 2 – 3	• Name formal board Chairman/ Lead Director (in IPO process)	• Consider implementing public company internal controls practices, as appropriate	• Commence Section 404 planning and scope appropriate compliance activities

THE BASIC RESPONSIBILITIES OF VC-BACKED COMPANY DIRECTORS — OCTOBER 2007 9

Board Composition

- There is no firm rule for VCBC board size or composition: as small groups, boards are heavily shaped by individual personalities, relationships and skill sets.
- With the average time from founding to exit at six years when the paper was written, the longest in over a decade, boards should watch their composition to avoid duplicated skills.
- VCBCs should build boards whose members have different strengths: technical, operational, financial, managerial.

> VCs' skills should complement those of the independent directors, who may bring different but relevant domain expertise, such as the accounting credentials audit committee chairs need.

Source: The Basic Responsibilities of VC-Backed Company Directors (October 2007).

Role of Board Observers

- Some investors, particularly strategic investors in later-stage rounds, negotiate the right to have a representative, a **board observer**, attend board and committee meetings and receive the materials distributed to directors.
- An observer does not have the legal status of a director: no right to vote on board matters and no fiduciary duties.
- The observer's role should therefore be set out in a contract between the company and the investor.
- For example, the company will often require that the observer:
  - treats all information received as confidential; and
  - may be excluded from board meetings (and board materials) if he or she has a conflict of interest or if participation would harm the company's attorney-client privilege.

Role of Company Counsel

- Directors often ask whom company counsel represents: investors, founders, the board, management or employees?
- Company counsel represents **the company** and plays an important role in advising the board on its legal responsibilities. Counsel often helps the board with:
  - Discharging its fiduciary duties (e.g. in equity financings and liquidity events)
  - Complying with legal and regulatory requirements (e.g. option-granting practices and procedures)
  - Structuring and implementing governance policies (e.g. audit and compensation committee charters, codes of business conduct)
  - Advising on management matters (e.g. CEO compensation and management changes)
  - Documenting board and committee actions (e.g. preparing and approving minutes)

Legal and Business Basics Before Joining a Board

What to cover

- 1. The board's essential role
- 2. General duties and responsibilities of private company directors
- 3. Summary of the legal requirements of board service
- 4. Common characteristics of effective and of ineffective private company boards and directors
- 5. Minimum service expectations for directors of VC-backed companies: all directors, management directors, independent directors, VC directors

How to use it

- Before the board's first meeting, and whenever a new director joins, distribute the following material to **all** board members and review it briefly at the start of the meeting.
- This should easily take no more than 15 minutes.
- An in-person initial meeting with new directors to review their key responsibilities and the board's process and culture is also recommended.

The Board's Essential Role

- Maximize shareholder value for all of the company's shareholders
- Attract, recruit and retain a talented management team and board members
- Mentor, task and measure the executive team
- Provide insight, business perspective and expertise otherwise unavailable to the management team
- Oversee and promote fiscal, legal and ethical governance standards

General Duties and Responsibilities

- Serve as fiduciaries for all shareholders
- Hire, evaluate and fire the CEO, and approve the selection of officers
- Oversee company performance and establish oversight mechanisms
- Review and confirm basic company objectives and business strategy
- Identify barriers to the company's progress and deal with them proactively
- Inquire into performance deficiencies and set metrics for measurement and remediation
- Seek continuity and strengthen the board
- Approve equity incentives and set executive compensation
- Oversee regulatory and legal compliance

Legal Requirements: Duty of Care

- **Duty of care**
  - Requires a director to act with the care that an ordinarily prudent person in a like position would exercise under similar circumstances.
- Directors are required to:
  - obtain the information they believe is reasonably necessary to make a decision
  - make due inquiry
  - make informed decisions in good faith

Legal Requirements: Duty of Loyalty

Duty of loyalty

- A director must act in the best interests of the corporation, not in the interest of the director or a related party.
- Issues often arise when the director has a conflict of interest:
  - the director or a related party has a personal financial interest in a transaction with the company (e.g. the inherent conflict between VCs as directors and as representatives of their funds)
  - the director usurps a "corporate opportunity" that belongs to the company
  - the director represents a third-party corporation whose objectives conflict with the company's best interests
  - the director abdicates the oversight role and does not act in good faith

Good faith

- Examples of not acting in good faith: consciously or recklessly not devoting enough time to required duties; disregarding known risks; failing to exercise oversight on a sustained basis.
- State corporate laws generally have procedures for interested transactions and corporate opportunities, such as full disclosure and approval by disinterested directors.

> Failure to act in good faith can expose a director to personal liability for breaches of the duty of care or to loss of coverage under indemnification provisions or insurance.

Legal Requirements: Confidentiality and Disclosure

- **Duty of confidentiality**
  - A subset of the duty of loyalty: a director must keep non-public information about the company confidential.
- **Duty of disclosure**
  - Under the duties of care and loyalty, a director must take reasonable steps to ensure that the company gives its stockholders all material information about any matter on which stockholder action is sought.

Business Judgment Rule

- Creates a presumption that, in making a business decision, the directors acted on an informed basis, in good faith and in the honest belief that the action was in the company's best interests.
- It helps protect directors from personal liability for allegedly bad business decisions by shifting the burden of proof to a plaintiff who claims the directors did not meet their fiduciary duties.
- The presumption and its protections are lost if the directors involved are not disinterested, do not make appropriate inquiry before deciding, or fail to establish adequate oversight mechanisms.

Effective Boards: Common Characteristics

- Establish a clear, mutual understanding of expectations between the directors and the CEO
- Conduct a formal annual performance evaluation of the CEO
- Hold routine executive sessions of non-management board members only
- Have directors who work as a team and make important contributions outside the boardroom

Effective Boards: In the Boardroom

- Encourage open, honest communication
- Resolve differences of opinion constructively and quickly
- Have directors who are accountable to each other
- Promote continuing director education on current best practices
- Know their responsibilities as directors; arrive at the meeting informed, knowing the industry and the company's place in it
- Do not attack the CEO or other board members when they answer questions; communicate freely outside the boardroom
- Where appropriate, offer a different perspective as an individual member of the group

> The board must challenge the CEO and the team, but respectfully and without personal animus; the CEO's credibility should not be undermined in front of his or her team, even during a transition.

Ineffective Boards and Directors (1/2)

- Fail to communicate, both in and out of the boardroom
- Suffer from denial: fail to act and make decisions
- Fail to reconcile diverging viewpoints
- Avoid addressing existing conflicts
- Regularly hold excessively long board meetings (over three hours without a strategic planning or other extraordinary agenda)
- Allow the use of PDAs and computers during meetings for purposes unrelated to board business
- Feel compelled to say something and be heard, regardless of whether their comments are relevant or effective

Ineffective Boards and Directors (2/2)

- Become disengaged because they feel their opinion no longer matters, for example after a strategic disagreement
- Fail to resolve disagreements quickly and constructively
- Do not attend board meetings regularly
- Send inconsistent messages between the meeting and their behavior afterwards (passive-aggressive behavior)
- Defer to lead investors who discourage constructive discussion from the rest of the board
  - Smaller firms in particular are afraid to break ranks with a dominant investor for fear of missing future deals.
  - They should speak up and express their views independently.

Minimum Expectations: All Directors

- Attend all board meetings (barring unexpected emergencies)
- Prepare in advance for board meetings and conferences
- Keep communication with the board open, not only at meetings but whenever pertinent information needs to be shared
- Communicate openly and honestly with each other
- Discuss points of difference openly rather than resisting passively
- Be available for informal consultation with management and the board outside the normal board schedule

Minimum Expectations: Management Directors

- Keep communication with the board open, not only at meetings but whenever pertinent information needs to be shared
- Provide adequate, timely information so the board can fulfil its duties
- Prepare board materials that enable in-depth discussion of requested topics
- Respond positively to board input
- Deliver good and bad news promptly, directly and in a balanced way
- Engage with non-management directors between board meetings
- Proactively draw on directors' know-how, contacts and ability to help promote the business
- Avoid surprises at the board meeting

Minimum Expectations: Independent Directors

- Work as a team with fellow board members
- Serve as a sounding board for the CEO and, in some cases, a mentor
- Provide an independent perspective and constructive input
- Chair or serve on board committees that require independent directors
- Mediate between management and investor directors when conflicts of interest arise in financial negotiations and other matters, and act as disinterested directors on those matters

Minimum Expectations: VC Directors

- Understand the company's competitive position and follow developments in its industry
- Help the company close new business and build sales outside the board meeting
- Serve as a sounding board for the CEO and, in some cases, a mentor
- Proactively share relevant knowledge from their portfolio experience with fellow directors
- Be available for informal consultation outside the normal board schedule
- Take a lead role in financing the company
- Contribute knowledge and experience during liquidity events
- Distinguish between their responsibilities as directors and their role within their fund
- Invite and respect input from non-VC directors, even those with much smaller ownership stakes

You Are a Board Member: Evaluate Yourself

- How should you evaluate your own participation on the board?
- Each director should work through a list of questions once a year on whether he or she has properly fulfilled the obligations of board service.
- The self-evaluation should be a formal agenda item once a year. In addition, each director should ask one overall question:

> Did I meet the minimum expectations for myself as a director of this company?

Sample Director Self-Evaluation

- Did I attend every board meeting?
- Did I consistently read the material before the meeting?
- Did I consult the CEO before the meeting as needed, to know what the agenda will emphasize and what help is needed from me and from the board?
- Did I work with the company outside the board on any projects and get to know the management team and other key contributors?
- Did I communicate with fellow directors as needed on alignment of interests?
- Did I contribute positively and at least try to make a difference?
- Did I establish and maintain an effective oversight role?
- Did I stay focused in the meeting and limit PDA or laptop use to breaks?
- Did I identify, and discuss with co-directors, any potential conflicts of interest?

Annual CEO Performance Review

- Boards should conduct a formal annual performance evaluation of the CEO. Anecdotal evidence suggests the CEO is the **least reviewed employee** of the typical venture-backed company.
- A board would hardly let the CEO adjust salaries or grant options without first reviewing employee performance. Why hold the board to a lower standard for the CEO?
- A board review process is essential for managing expectations between the board and the CEO.
- It need not be cumbersome or tied to compensation; it is a chance to make sure the CEO and board agree on current objectives and priorities.
- It can be especially useful to combine the board's review with a 360-degree review by all of the CEO's direct reports.

CEO Review: Recommendations

- Use one short written questionnaire for both directors and direct reports.
- Separate the reviewers: a designated non-management director collects the directors' answers; an outside consultant or the head of HR does the same for the CEO's direct reports.
- The board reviewer consolidates the director questionnaires into one consensus document shared among directors.
- The designated director coordinates with whoever runs the 360 review and receives a written synopsis of the direct reports' comments.
- Comments stay **anonymous but not confidential** (e.g. "one employee felt the CEO did not do X enough, but most disagreed").
- The designated director compares both reports and writes a final report for the CEO reflecting the consensus of team and board.
- Two directors deliver it to the CEO orally, discuss the conclusions, then hand over a written copy signed by the entire board.

Annual Board Peer Review

- VCs on private company boards usually get their seats through contractual or charter provisions, but this does not absolve them of the responsibility to be effective directors.
- Peer review can surface issues that are hard to raise face to face, such as contribution, communication, accessibility, engagement, professionalism and courtesy, and can greatly improve how the whole board functions.
- The later the company's stage of development, the greater the need for good self-evaluation and peer review.

Peer Review: Logistics for Implementation

- The questionnaire that follows is completed confidentially and individually by each director, and sent confidentially to a third party (the company's outside counsel or an outside facilitator), who aggregates and reviews the comments.
- An annual board self-evaluation creates a channel for disagreements or misalignments that directors may be reluctant to raise openly.

> Treated as a safety valve and a consensus-building tool, the review can only be a positive force on the board.

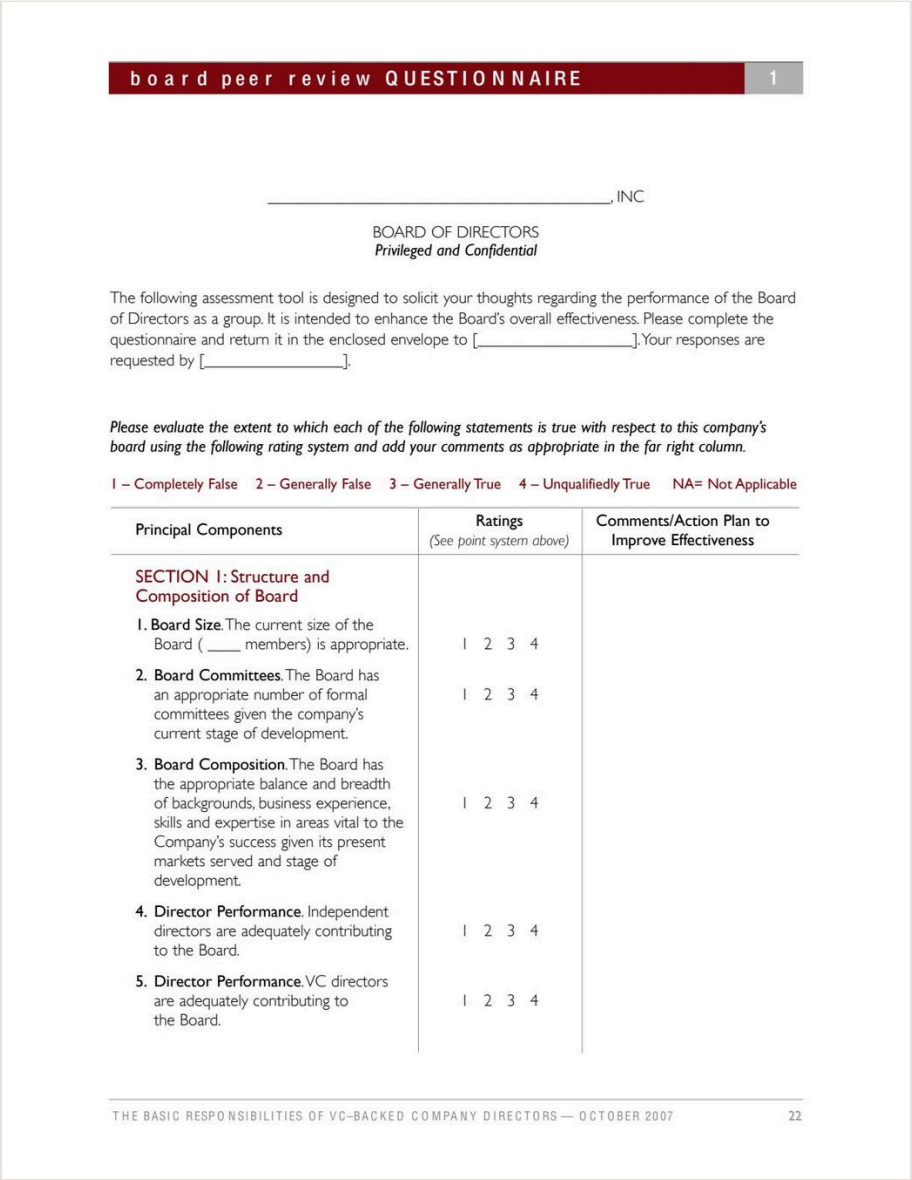
Reference

- Adapted from *A Simple Guide to the Basic Responsibilities of VC-Backed Company Directors* by the Working Group on Director Accountability and Board Effectiveness.
- Originally released January 2007; expanded October 2007.

BOARD · QUESTIONNAIRE

Board Peer Review Questionnaire (1/4)

A confidential assessment of the board as a group, rated from 1 (completely false) to 4 (unqualifiedly true). Section 1, structure and composition: board size, committees, composition and director performance.



board peer review QUESTIONNAIRE 1

_____, INC

BOARD OF DIRECTORS
Privileged and Confidential

The following assessment tool is designed to solicit your thoughts regarding the performance of the Board of Directors as a group. It is intended to enhance the Board's overall effectiveness. Please complete the questionnaire and return it in the enclosed envelope to [_____]. Your responses are requested by [_____].

Please evaluate the extent to which each of the following statements is true with respect to this company's board using the following rating system and add your comments as appropriate in the far right column.

1 – Completely False 2 – Generally False 3 – Generally True 4 – Unqualifiedly True NA= Not Applicable

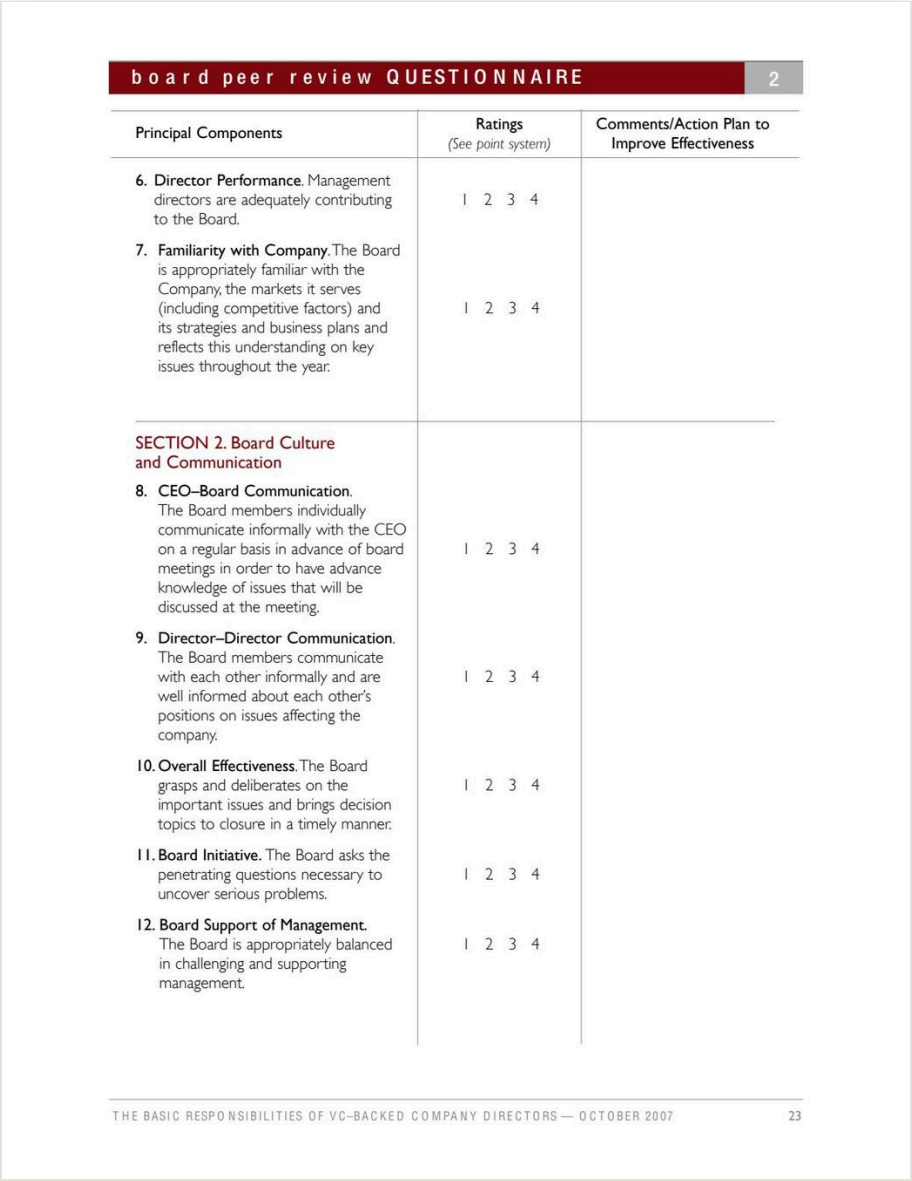
Principal Components	Ratings *(See point system above)*	Comments/Action Plan to Improve Effectiveness
SECTION 1: Structure and Composition of Board		
1. **Board Size.** The current size of the Board (____ members) is appropriate.	1 2 3 4	
2. **Board Committees.** The Board has an appropriate number of formal committees given the company's current stage of development.	1 2 3 4	
3. **Board Composition.** The Board has the appropriate balance and breadth of backgrounds, business experience, skills and expertise in areas vital to the Company's success given its present markets served and stage of development.	1 2 3 4	
4. **Director Performance.** Independent directors are adequately contributing to the Board.	1 2 3 4	
5. **Director Performance.** VC directors are adequately contributing to the Board.	1 2 3 4	

THE BASIC RESPONSIBILITIES OF VC-BACKED COMPANY DIRECTORS — OCTOBER 2007 22

BOARD · QUESTIONNAIRE

Board Peer Review Questionnaire (2/4)

Management director performance and familiarity with the company, then Section 2, board culture and communication: CEO–board and director–director communication, effectiveness, initiative and support of management.



board peer review QUESTIONNAIRE 2

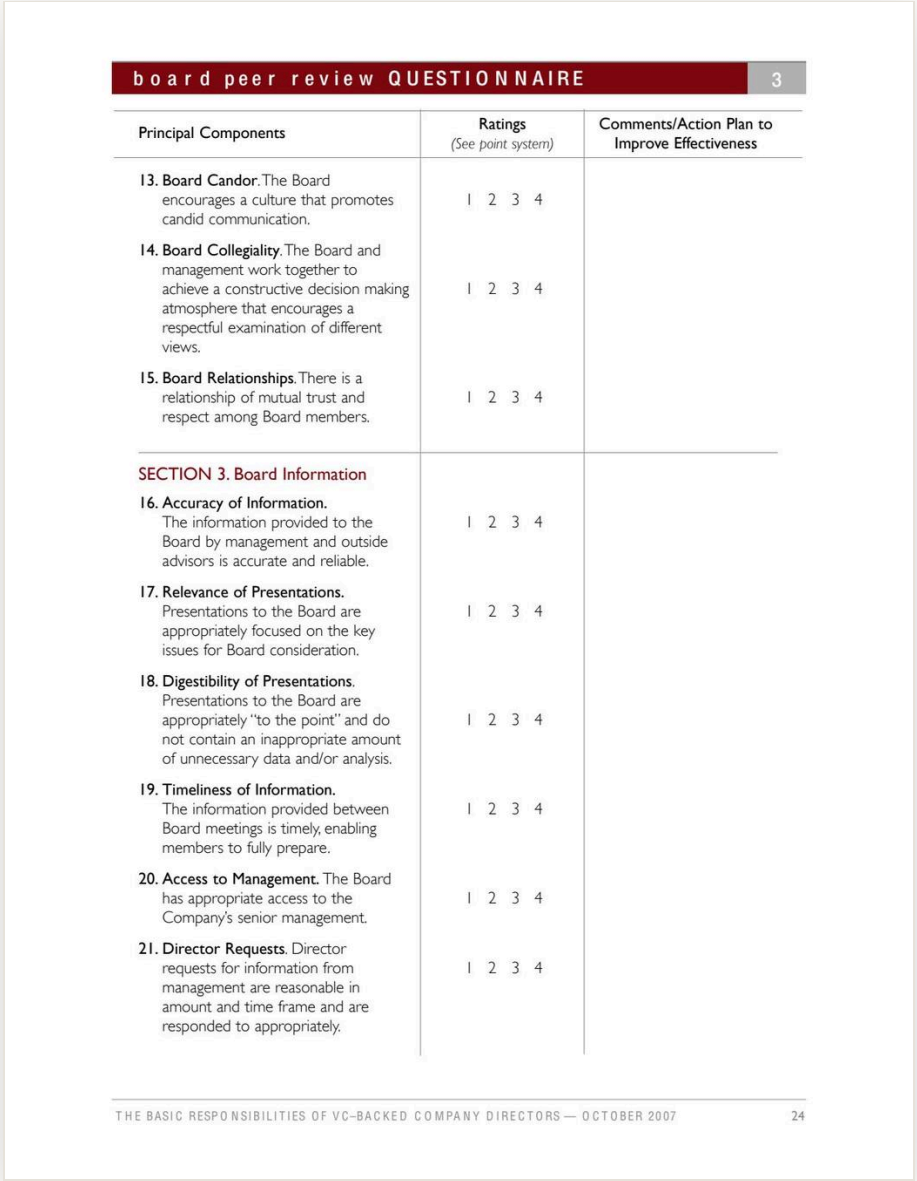
Principal Components	Ratings (See point system)	Comments/Action Plan to Improve Effectiveness
6. **Director Performance.** Management directors are adequately contributing to the Board.	1 2 3 4	
7. **Familiarity with Company.** The Board is appropriately familiar with the Company, the markets it serves (including competitive factors) and its strategies and business plans and reflects this understanding on key issues throughout the year.	1 2 3 4	
SECTION 2. Board Culture and Communication		
8. **CEO–Board Communication.** The Board members individually communicate informally with the CEO on a regular basis in advance of board meetings in order to have advance knowledge of issues that will be discussed at the meeting.	1 2 3 4	
9. **Director–Director Communication.** The Board members communicate with each other informally and are well informed about each other's positions on issues affecting the company.	1 2 3 4	
10. **Overall Effectiveness.** The Board grasps and deliberates on the important issues and brings decision topics to closure in a timely manner.	1 2 3 4	
11. **Board Initiative.** The Board asks the penetrating questions necessary to uncover serious problems.	1 2 3 4	
12. **Board Support of Management.** The Board is appropriately balanced in challenging and supporting management.	1 2 3 4	

THE BASIC RESPONSIBILITIES OF VC-BACKED COMPANY DIRECTORS — OCTOBER 2007 23

BOARD · QUESTIONNAIRE

Board Peer Review Questionnaire (3/4)

Candor, collegiality and relationships, then Section 3, board information: accuracy, relevance, digestibility and timeliness of information, access to management and handling of director requests.



board peer review QUESTIONNAIRE 3

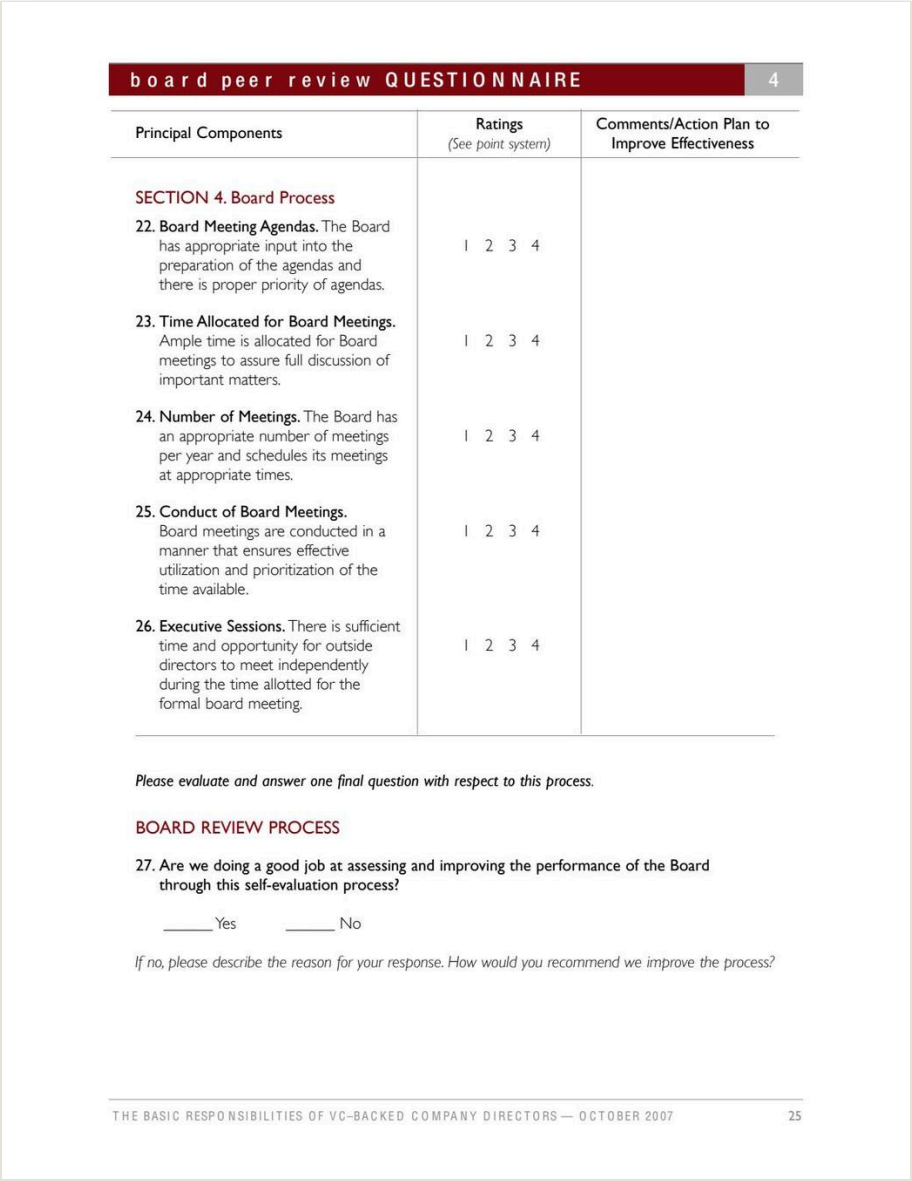
Principal Components	Ratings (See point system)	Comments/Action Plan to Improve Effectiveness
13. Board Candor. The Board encourages a culture that promotes candid communication.	1 2 3 4	
14. Board Collegiality. The Board and management work together to achieve a constructive decision making atmosphere that encourages a respectful examination of different views.	1 2 3 4	
15. Board Relationships. There is a relationship of mutual trust and respect among Board members.	1 2 3 4	
SECTION 3. Board Information		
16. Accuracy of Information. The information provided to the Board by management and outside advisors is accurate and reliable.	1 2 3 4	
17. Relevance of Presentations. Presentations to the Board are appropriately focused on the key issues for Board consideration.	1 2 3 4	
18. Digestibility of Presentations. Presentations to the Board are appropriately "to the point" and do not contain an inappropriate amount of unnecessary data and/or analysis.	1 2 3 4	
19. Timeliness of Information. The information provided between Board meetings is timely, enabling members to fully prepare.	1 2 3 4	
20. Access to Management. The Board has appropriate access to the Company's senior management.	1 2 3 4	
21. Director Requests. Director requests for information from management are reasonable in amount and time frame and are responded to appropriately.	1 2 3 4	

THE BASIC RESPONSIBILITIES OF VC-BACKED COMPANY DIRECTORS — OCTOBER 2007 24

BOARD · QUESTIONNAIRE

Board Peer Review Questionnaire (4/4)

Section 4, board process: agendas, meeting time, number and conduct of meetings and executive sessions, ending with a yes/no question on whether the self-evaluation process itself works.



board peer review QUESTIONNAIRE 4

Principal Components	Ratings (See point system)	Comments/Action Plan to Improve Effectiveness
SECTION 4. Board Process		
22. Board Meeting Agendas. The Board has appropriate input into the preparation of the agendas and there is proper priority of agendas.	1 2 3 4	
23. Time Allocated for Board Meetings. Ample time is allocated for Board meetings to assure full discussion of important matters.	1 2 3 4	
24. Number of Meetings. The Board has an appropriate number of meetings per year and schedules its meetings at appropriate times.	1 2 3 4	
25. Conduct of Board Meetings. Board meetings are conducted in a manner that ensures effective utilization and prioritization of the time available.	1 2 3 4	
26. Executive Sessions. There is sufficient time and opportunity for outside directors to meet independently during the time allotted for the formal board meeting.	1 2 3 4	

Please evaluate and answer one final question with respect to this process.

BOARD REVIEW PROCESS

27. Are we doing a good job at assessing and improving the performance of the Board through this self-evaluation process?

_____ Yes _____ No

If no, please describe the reason for your response. How would you recommend we improve the process?

THE BASIC RESPONSIBILITIES OF VC-BACKED COMPANY DIRECTORS — OCTOBER 2007 25

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Venture capital glossary

Frequently asked questions about venture capital and an A–Z glossary of the terms used in venture deals.

Venture Capital FAQ (1/7)

- **What kind of investors are venture capitalists?**
  - Professional investors who specialize in funding and building young, innovative companies. They are long-term, hands-on investors who work actively with entrepreneurial teams to build great companies.
- **Where do venture capitalists get their money?**
  - Most VC firms raise their funds from institutional investors (pension funds, insurance companies, endowments, foundations) and high-net-worth individuals.
  - The investors in the fund are **limited partners**; the VCs who manage it are **general partners**, with a fiduciary responsibility to the limited partners.

Venture Capital FAQ (2/7)

- **How many venture capital firms are there in the US?**
  - About 794 in 2009, managing roughly $179 billion.
- **What is the average size of a venture fund?**
  - In 2009, the average venture fund was $151 million.
- **How many companies receive venture capital each year?**
  - In 2009, VCs invested about $18 billion in nearly 2,400 companies.

2025–2026 UPDATE

In 2025 US VC deal value reached $339.4B across ~16,709 deals, while new funds raised only $66.1B across 537 funds, the fewest in a decade (PitchBook-NVCA).

Venture Capital FAQ (3/7)

- **What types of companies and industries do VCs invest in?**
  - Mostly young, private companies with great potential for innovation and growth.
  - VCs were instrumental in building the computer, biotechnology and communications industries.
  - Today most venture capital goes to high technology: software, biotech, medical devices, media and entertainment, wireless, Internet and networking.
  - In the last five years VCs have also committed to clean technology: renewable energy, environmental and sustainability technologies, power management.
  - VCs also back innovative companies in traditional industries: consumer products, manufacturing, financial services, healthcare services, business products and services.

2025–2026 UPDATE

AI took 65.4% of 2025 US deal value (PitchBook-NVCA); climate tech drew $40.5B of global venture and growth investment in 2025 (Sightline Climate).

Venture Capital FAQ (4/7)

- **What impact does venture capital have on the economy?**
  - VC is a catalyst for job creation, innovation, technology, international competitiveness and tax revenues.
  - The 2009 Venture Impact study (IHS Global Insight): originally venture-backed companies accounted for 12.1 million US jobs and over $2.9 trillion in revenue (2008 data).
- **How are VCs different from other investors?**
  - They are long-term investors who take a very active role; they expect a return only after 7–10 years on average.
  - The investment begins a long relationship: VCs add capital and management expertise, help build strong teams, manage rapid growth and broker strategic partnerships.

2025–2026 UPDATE

Gornall & Strebulaev (Stanford, 2021): VC-backed companies make up 41% of US public-market value and 62% of US public companies' R&D.

Venture Capital FAQ (5/7)

- **How do VCs realize a return on their investment?**
  - Portfolio companies are private. VCs typically realize a return when the company goes public (IPO) or is merged with or acquired by another company (M&A).
- **What percentage of venture-backed companies succeed?**
  - VCs invest in high-risk companies but manage the risk at portfolio level.
  - Roughly 40% of venture-backed companies fail, 40% return moderate amounts of capital, and only 20% or fewer produce high returns.
  - That small share of high-return deals is mostly why venture capital has consistently outperformed the public markets.

Venture Capital FAQ (6/7)

- **How does angel investing differ from venture capital?**
  - VC firms are professional investors who devote 100% of their time to investing in and building innovative companies on behalf of third parties, their limited partners.
  - Angels are a more informal network of investors who invest for their own account.
  - Typically, angels invest less than $1 million in a company, while VCs usually invest more than $1 million.

2025–2026 UPDATE

Round sizes have grown: median 2025 US pre-seed $0.5M, seed $3.8M, Series A $15M (PitchBook-NVCA).

Venture Capital FAQ (7/7)

- **What is the difference between venture capital and private equity?**
  - VC is a subset of private equity, which also includes buyouts and mezzanine investing.
  - VC funds young, fast-growing private companies; buyout and mezzanine investors focus on more mature companies.
  - VCs invest cash for equity and, unlike buyout investors, do not use leverage.
- **What impact does corporate venture investing have?**
  - Many corporations have long been active VC investors, often co-investing with traditional VCs.
  - Besides capital, they can give portfolio companies access to corporate distribution channels and important strategic partners.

2025–2026 UPDATE

Corporates participated in about 21% of 2025 US venture deals (PitchBook-NVCA).

Venture Capital Glossary (1/24)

Angels – Anti-dilution

- **Angels** — high-net-worth individuals who provide seed money to very early-stage companies, usually from their own money rather than institutional funds.
- **Anti-dilution provisions** — protect an investor when later shares are issued at a lower price, by adjusting the option price or conversion ratio or by issuing new shares.

As Converted – Audit Committee

- **As converted basis** — preferred shares' rights (e.g. voting, dividend participation) determined as if the shares had been converted into ordinary shares, with any necessary adjustments.
- **Audit committee** — board committee with a majority of independent (non-executive) directors; selects and oversees the outside auditors and other audit work. "Independent" is defined differently across markets.

Venture Capital Glossary (2/24)

Bridge – Capitalise

- **Bridge loan / bridge round** — a loan or equity investment that funds the company for a short period until a longer-term financing, such as an IPO or new round, is completed.
- **Burn rate** — the rate at which a company consumes cash each month.
- **Capitalise** — converting a debt into equity.

Cap Table – Carried Interest

- **Capitalisation table (cap table)** — a spreadsheet of all holders of shares, options and other securities, with the number of each held.
- **Carried interest (carry)** — the share of a fund's profits due to the fund managers, on top of returns on their own invested capital; customary in venture capital.

Venture Capital Glossary (3/24)

Closing – Conversion

- **Completion / closing** — release of the investment funds to the company and issue of shares to investors, once documents are signed and all conditions verified.
- **Co-investment** — see Syndication.
- **Conversion** — exchanging one security for another of the same company, e.g. preferred for ordinary shares, or debt for equity.

Conversion Ratio – Convertible Debt

- **Conversion ratio** — the number of underlying securities received on converting a convertible security, e.g. ordinary shares per preferred share.
- **Convertible debt** — a company debt obligation that can be converted into shares.

Venture Capital Glossary (4/24)

Convertible – Covenants

- **Convertible preferred shares** — preferred shares convertible into ordinary shares.
- **Co-sale / tag-along rights** — if one investor or founder gets to sell shares, the other shareholders may sell on a proportional basis too.
- **Covenants** — undertakings by the company (sometimes also the founders) to do or not do certain things.

Cumulative – Debt/Equity

- **Cumulative dividends** — dividends that accumulate if unpaid and must be paid in full before any dividend on ordinary shares.
- **Cumulative preferred shares** — preferred shares whose omitted dividends accumulate and must be paid in full before ordinary dividends.
- **Debt/equity ratio** — a leverage measure: long-term debt divided by ordinary shareholders' equity.

Venture Capital Glossary (5/24)

Debt Financing – Deemed Liquidation

- **Debt financing** — financing by selling notes or other debt instruments.
- **Deed of adherence** — an agreement that new or existing share buyers may have to sign so they are bound by the Investment Agreement.
- **Deemed liquidation / liquidity event** — events that trigger a liquidation preference, usually a merger, acquisition, change of control, consolidation or sale of all or most assets.

Default – Demand Registration

- **Default** — failure to meet a contractual obligation, e.g. paying interest or principal when due.
- **Demand registration rights (US)** — a holder's right to require the issuer to register its securities so they can be sold freely in the public market.

Venture Capital Glossary (6/24)

Dilution – Disclosure Letter

- **Dilution** — reduction of an investor's percentage holding when new securities are issued.
- **Directors & officers (D&O) insurance** — liability cover for legal costs and claims by shareholders, creditors or others arising from directors' or officers' acts or omissions.
- **Disclosure letter** — a letter from the founders (and possibly key managers) and the company setting out exceptions to the representations and warranties.

DCF – Dividends

- **Discounted cash flow (DCF)** — an appraisal method reflecting the time value of money and a project's total profitability over its life.
- **Divestment** — disposal of a business or business segment.
- **Dividends** — part of profits paid to shareholders as cash, extra shares or other assets.

Venture Capital Glossary (7/24)

Down Round – Due Diligence

- **Down round** — a financing round at a lower valuation than the previous round.
- **Drag-along / bring-along** — if a set percentage of shareholders agree to sell, they can compel the others to sell too, so a buyer can acquire 100% of the company.
- **Due diligence** — researching a business and its management before deciding to invest.

Early Stage – Earnings

- **Early-stage capital** — financing to start commercial manufacturing and sales, following seed capital.
- **Earnings** — profits after expenses.

Venture Capital Glossary (8/24)

EBITDA – Equity

- **EBIT / EBITDA** — earnings before interest and taxes / before interest, taxes, depreciation and amortisation; often used in valuing a company.
- **Employee share option plan (ESOP)** — a scheme that lets employees acquire shares in the company they work for.
- **Equity** — ownership interest in a company, represented by shares.

Exclusivity – Exit Mechanism

- **Exclusivity agreement** — often negotiated by an investor syndicate: a period in which the company and/or its shareholders may not negotiate with other investors.
- **Exercise price** — the price at which an option or warrant can be exercised.
- **Exit mechanism** — the method by which a VC eventually sells out of an investment.

Venture Capital Glossary (9/24)

Exit Strategy – Follow-on

- **Exit strategy** — scenarios for liquidating an investment at the maximum return; for VC-backed companies, typically an IPO or a sale to or merger with a larger company.
- **Flotation** — obtaining a listing (IPO) on a stock exchange.
- **Follow-on round** — additional investment by existing and/or new investors, sometimes provided for in the initial investment documents.

Founder Shares – Full Ratchet

- **Founder shares** — shares issued to founders, usually at a low price compared with investors. See also Sweat equity.
- **Full ratchet** — anti-dilution that resets the option or conversion price to the lowest price at which the company later sells ordinary shares (or equivalents).

Venture Capital Glossary (10/24)

Fully Diluted – GAAP

- **Fully diluted share capital** — the issued share capital if all options and other subscription rights were exercised.
- **Fully participating** — a liquidation preference giving a fixed priority payment plus a pro-rata share, with other classes, of the remaining proceeds.
- **GAAP** — generally accepted accounting principles: rules and procedures accepted by the accounting profession.

Good Leaver – Independent Director

- **Good leaver / bad leaver** — criteria applied to a departing employee-shareholder to decide whether his or her shares must be sold, and at what price.
- **Independent / outside director** — a non-executive board member who is neither an employee nor affiliated with a controlling shareholder; definitions vary by country and market.

Venture Capital Glossary (11/24)

Information Rights – Institutional

- **Information rights** — the contractual right to company information, to attend board meetings, etc.; typical for VCs in private companies.
- **Initial public offering (IPO)** — a company's first sale of shares to the public on a market such as a stock exchange; before it the company is privately held. Also called flotation, float, going public or listing.
- **Institutional investor** — an organisation investing its own or entrusted assets: banks, pension funds, insurers, mutual funds, university endowments.

Intangibles – IP

- **Intangibles** — non-physical assets that have value, e.g. intellectual property rights such as trademarks and patents.
- **Intellectual property (IP)** — the patents, licences, copyrights, trademarks and designs owned by a company.

Venture Capital Glossary (12/24)

IRR – Investment Agreement

- **Internal rate of return (IRR)** — the interest rate that equates the present value of future returns with the initial investment; heavily affected by the timing of the exit.
- **Investment agreement** — summary of the main investment terms: amounts and types of shares issued and investor rights such as veto and information rights.

Key Man – Lead Investor

- **Key man insurance** — life insurance the company takes out on key employees, usually the CEO and those ultimately responsible for developing the technology.
- **Lead investor** — in a syndicated investment, the investor who leads negotiation of the terms and manages due diligence.

Venture Capital Glossary (13/24)

Licence – Liquidation Preference

- **Licence agreement** — lets a licensee use certain commercial and/or IP rights, e.g. a research institution licensing IP to an investee company.
- **Liquidation / winding up** — sale of all assets for distribution to creditors and shareholders in priority order, through insolvency or by shareholder agreement.
- **Liquidation preference** — a negotiated right for certain investors to have all or most of their investment repaid if the company is liquidated; often also triggered by a deemed liquidation.

Liquidity – Listing

- **Liquidity** — converting an asset (such as shares) into cash.
- **Listing** — a company whose shares trade on a stock market is said to be listed.

Venture Capital Glossary (14/24)

Lock-up – Milestone

- **Lock-up** — an underwriting-agreement provision that bars insiders and private equity investors from selling for a period after a public offering (usually 180 days after an IPO).
- **Milestone** — a contractual target the company must meet; often a condition for releasing further financing.

NPV – New Money

- **Net present value (NPV)** — the current value of future cash flows discounted back to today at a stated rate.
- **NewCo** — a newly formed investee company.
- **New money** — funds from an investor who is not yet a shareholder.

Venture Capital Glossary (15/24)

Non-executive – Options

- **Non-executive director** — a part-time director with the same legal responsibilities as executive colleagues; can act independently, take a long-term view and protect shareholders. Investors often appoint one to monitor their investment.
- **Non-qualified IPO** — an IPO that is not a qualified IPO.
- **Options** — the right, but not the obligation, to buy or sell a security at a set price (or range) within a given period.

Ordinary Shares – Par

- **Ordinary shares** — equity shares entitled to all income and capital left once all other classes and creditors are satisfied.
- **Outside director** — see Independent director.
- **Par** — the nominal amount the issuer assigns to a security; for equity usually tiny and unrelated to market price.

Venture Capital Glossary (16/24)

Pari Passu – Patent

- **Pari passu** — equally, without preference; describes securities of equal priority.
- **Participating preferred shares** — preferred shares that receive their stated dividend and liquidation preference and also share in dividends and distributions on ordinary shares.
- **Patent** — the exclusive right to make, use or sell an invention or process for a set period.

Pay to Play – Piggy-back

- **Pay to play** — investors must take part in later rounds or forfeit certain rights, such as anti-dilution.
- **Piggy-back registration rights (US)** — the right to have one's holdings included whenever the issuer files a registration statement.

Venture Capital Glossary (17/24)

Post-money – Pre-emption

- **Post-money valuation** — a private company's value right after its latest round: total fully diluted shares × the latest round's share price.
- **Pre-emption right** — the right to join a financing so one's percentage ownership stays the same afterwards; sometimes also used for a right of first refusal on other investors' shares.

Preferred Ordinary (UK)

- **Preferred ordinary shares (UK)** — also called A ordinary or (cumulative convertible participating) preferred ordinary shares: equity with preferred rights, ranking ahead of ordinary shares for income and capital; once repaid, both classes may share any surplus pari passu.
- Income rights may be a fixed dividend (e.g. 8% of the subscription price) and/or a participating dividend, a defined share of profits (e.g. 5% of pre-tax profits).

Venture Capital Glossary (18/24)

Pre-money – Put Option

- **Pre-money valuation** — a private company's value before its latest round of financing.
- **Put option** — the holder's right to sell shares to the grantor at a set (strike) price at some future time.

Qualified IPO – Recapitalisation

- **Qualified IPO** — an IPO giving the company at least a set market value (often a multiple of the investment valuation), with a fully underwritten raise of a set amount.
- **Recapitalisation** — reorganising the capital structure through new cash and/or replacing current shareholders; an alternative exit for VCs.

Venture Capital Glossary (19/24)

Ratchets – Redeemable

- **Ratchets** — final equity split between shareholder groups depends on the company's future performance or the VC's return, so management can increase its stake if the company does especially well.
- **Redeemable shares** — shares the company can be required, or has the right, to repurchase at a predetermined value.

Registration – Remuneration

- **Registration rights (US)** — a shareholder's right to take part in registering the issuer's stock for resale in the public market.
- **Remuneration / compensation committee** — board committee, typically majority independent, that reviews and sets pay for certain executives and may allocate employee share options.

Venture Capital Glossary (20/24)

Reps & Warranties – Non-competes

- **Representations and warranties** — statements by founders, key managers and (where law allows) the company on its past and present condition, e.g. lawful operation, no bad debts, ownership of assets. A breach lets investors claim damages and, if fundamental, terminate.
- **Restrictive covenants / non-competes** — undertakings by founders and key managers limiting competing activities during and after their employment or consultancy, to protect the business and its value.

ROFR – ROI

- **Right of first refusal (ROFR)** — a right, often given to VCs, to buy other shareholders' shares before they can be sold to a third party.
- **ROI** — return on investment.

Venture Capital Glossary (21/24)

Secured Debt – Series

- **Secured debt / loan** — a loan where the lender gains title to specific assets if an interest or principal payment is missed.
- **Seed capital** — capital to develop a business concept (business plan, prototypes, further research) before market launch and large-scale manufacturing.
- **Series** — a VC financing round; successive rounds are lettered A, B, C, etc.

Shareholders' Agreement – Option

- **Shareholders' / investor rights agreement** — many shareholder rights sit in the public Articles of Association (in the UK, filed at Companies House); rights to be kept confidential go in a private Shareholders' Agreement. If it also covers share subscription, it is often called the Investment Agreement.
- **Share option** — an agreement to buy or sell shares within a stipulated time at a set price.

Venture Capital Glossary (22/24)

Subscription – Sweat Equity

- **Subscription agreement** — the terms on which an investor subscribes for shares in a company; if it also covers shareholders' rights, it may be called the Investment Agreement.
- **Sweat equity** — shares given to a founder in recognition of the effort ("sweat") spent getting the company started.

Syndication

- **Syndication** — a group of investors joining together on a deal that none would take on alone, because of the risk or the amount needed; there is usually a lead investor.

Venture Capital Glossary (23/24)

Trade Sale – Tranching

- **Trade sale** — sale of a company to another company; a more common exit than flotation.
- **Trade secret** — non-public information (formula, pattern, device, process) that gives its holder a competitive advantage; may include customer lists, marketing or business plans and supplier details.
- **Tranching** — investment in stages, each dependent on meeting targets or milestones.

Transfer Restrictions – Use of Proceeds

- **Transfer restrictions** — limits on founders, management or investors selling shares for a set period or until certain conditions are met.
- **Use of proceeds** — what the company intends to do with the new funds; documents often require the funds to be used for that purpose.

Venture Capital Glossary (24/24)

Vesting

- **Vesting** — options or shares granted subject to a period of service or milestones vest once these are met; the holder can then exercise the options or has full rights to the shares.

Warrant – Weighted Average

- **Warrant** — another word for an option to buy a security; generally used for options the company gives to outside investors (not officers or employees).
- **Weighted average** — anti-dilution that adjusts an early investor's option price or conversion ratio by a weighted-average formula based on the price and number of shares the company later sells.

Reference

- *A Guide to Venture Capital Term Sheets*, British Private Equity & Venture Capital Association (BVCA)

13

Mindset

The attitudes and habits of an entrepreneur, and how to build a global entrepreneur mindset.

Risk Taking

% STRONGLY AGREE + AGREE	US	EU	CHINA
In general, I am willing to take risks	82%	65%	65%
I like situations in which I compete with others	77%	55%	69%
When facing difficult tasks, I am certain that I will accomplish them	96%	81%	91%

Flash Eurobarometer (December 2009), via Gallup: attitudes toward entrepreneurship and entrepreneurs in the 27 EU member states, the US, 50 Chinese cities and a handful of other countries.

Individual Attitudes

- In individual attitudes related to entrepreneurship, the US seems to have a cultural advantage over the European Union.
- Americans see themselves as risk takers, competitive, and able to accomplish difficult tasks.
- Further research is needed on how such attitudes relate to actual entrepreneurial activity, and how much they matter compared with other factors, such as the desire to be self-employed, and practical considerations like available capital and training.

Are You a Self-Starter?

- Nothing in business happens by itself.
- As the owner, you are responsible for everything, from setting your firm's vision to setting the daily work schedule.
- The fact that you are exploring business ownership and asking questions is a good sign.

Are You a Positive Thinker?

- The moment you become a business owner, you represent yourself, your business and your expectations for success.
- What you say and do must convey confidence and commitment to moving forward.
- Employees who sense these qualities will share your determination to succeed, even in difficult circumstances.
- If you work alone, there will be days when you have to be your own cheerleader.

Are You Disciplined?

- Your days of the "9-to-5 routine" are over.
- Running a small business requires a continuous commitment to quality and detail.
- You cannot afford to cut corners, miss deadlines or make promises beyond your capabilities.
- If you run the business from home, you must resist temptations and distractions to get your work done.

Are You a Lifelong Learner?

- Entrepreneurs who continually seek information, new ideas and sound advice have the best chance of success.
- Being attuned to market trends and issues makes it easier to adapt products and services to customers' needs and preferences.
- You are also better placed to strengthen your competitive advantage and efficiency, and to address potential problems before they harm your business.

Can You Market Yourself and Your Business?

- Some people struggle here because of the negative (and often unfair) connotations of being a "salesperson."
- No business, however good, will succeed without some kind of marketing.
- The good news: promoting your business is easier than you may think, as long as you know what to do and how to do it.
- After all, we all enjoy saying good things about ourselves. Craft and tell your story the right way, and more people will be willing and eager to hear it.

Can You Be Objective?

- Your ideas and practices may seem "bulletproof," but reality may be very different.
  - Is there really a need for this product or service in your area?
  - Are the hours of operation fair to your employees?
  - Is renting equipment better than owning it?

> A good business owner examines an issue from many perspectives and understands the strengths and limitations of each.

Investing in Yourself

- With the right entrepreneurial mindset, are you set for great success? Unfortunately, life is not that simple: it takes more.
- Many people invest time and effort in their current jobs, hoping their boss will notice and promote them. That is not the key to becoming an entrepreneur.
- People fail to realize they must invest in themselves, their greatest asset.
- Start investing in yourself: do research and acquire the right knowledge. If you need to invest some money, do it.
- Successful entrepreneurs decide fast based on calculated risk, and dare to try different things to succeed.

Accept Failure

- Life is not as smooth as one would like. In building a business, you are bound to face many failures along the way.
- Treat every failure as a lesson, and learn from every one you face.
- You must have the desire to succeed, persistence and an unwillingness to quit.
- The more you fail at the start, the more you will achieve later, as you become smarter.

Global Entrepreneur Mindset

- **Risk/reward**
- **Reputation**
- **Relationships**

> "Actively take a risk every day + work to spread your reputation + develop and improve your relationships."

Risk/Reward

- Entrepreneurship is built on taking risk in expectation of a reward or return.
- Entrepreneurs are willing to put their reputation and financial security on the line because they believe in an idea and that it will pay off.
- They consciously risk their time and money, often on an uncertain venture.
- Culture and custom matter: a culture can support entrepreneurs by accepting failure, valuing individualism, celebrating heroic icons and retelling rags-to-riches stories.
- The US is an enormous breeding and training ground for global entrepreneurs because the story of the successful entrepreneur is part of its culture.

Reputation

- Angel investors invest in competent entrepreneurs, not just ideas.
- Business partners join reputable business people and known leaders, and even talented employees will risk working for an entrepreneur they believe in.
- Today much can be done to enhance your reputation and spread the word about who you are.

> Reputation is essential to your success: embrace risk, don't fear failure, and manage your reputation.

Relationships

- Relationships with your prospects, customers and clients.
- Your past networks: bosses, fellow employees, teachers, classmates, all of your networks.
- Entrepreneurs are the PR, marketing and sales departments, whether or not they employ someone in those roles.
- You are the face of the company (did we say reputation is important?).

> Build and nurture your network of influential people, and ask for their help.

Developing a Global Entrepreneur Mindset (I)

- **1. Increase your global IQ**
  - Travel and enjoy an international lifestyle
  - Watch international news every day (BBC, CNN)
  - Read international blogs and newsletters every day
- **2. Become a student of the business model**
  - As you read about and review businesses, think about the business model. Ask: "Would it work here? Would it work there?"

> Business models cross borders more easily than people.

Developing a Global Entrepreneur Mindset (II)

- **3. Increase your global network**
  - Find foreigners and expats in your home town and go to dinner with them
  - Eat at foreign restaurants and go to local community fairs
  - Join networking groups with foreigners, online and offline
- A global-minded entrepreneur enters a new situation with many more questions than answers, assumptions or presumptions. Ask wherever you go:
  - "What do you have in your home country that is great?" "What do you miss most from home?"
  - "What problems do you see here that you wish you could fix?" "What is missing here that you remember from home?"

Developing a Global Entrepreneur Mindset (III)

- **4. Develop your global skills**
  - Learn a new language: set a goal for a minimum level of fluency, and as it grows, add more languages. One global entrepreneur who speaks six languages calls this skill irreplaceable for truly understanding many cultures.
  - Join an international club or group, and seek international professionals among your social media friends: you are a reflection of the people you surround yourself with.
  - Travel overseas and take a class while abroad; even a class with tourists from other countries will expand your global network.

Developing a Global Entrepreneur Mindset (IV)

- A global entrepreneur mindset helps you understand the complexities of global competitors and customers, leverage global supply-chain relationships, stay aware of political and economic influences, and seize the many global opportunities others miss.
- It is the ability to avoid assuming that all cultures are the same, without being paralyzed by the complexity of their differences.
- **Think globally:** pay attention to what is going on around the world.
- **Act globally:** live global, network global, and launch companies, products and services with global potential.

The Social Network (2010)

- Hollywood made *The Social Network* to tell the Facebook story.
- Exercise: analyse the character of Zuckerberg in the film.

2025–2026 UPDATE

Facebook went public in May 2012 and renamed itself Meta in 2021.



Stills from *The Social Network* (Columbia Pictures, 2010).

Zuckerberg's Mindset (1)

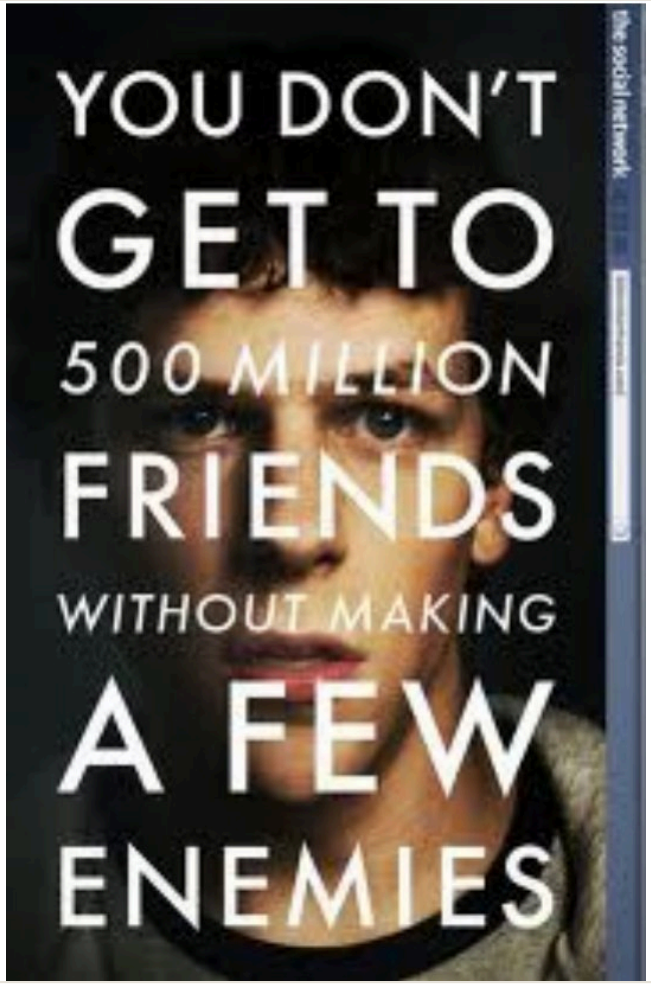
- He tried several other ideas; none worked, but they built experience.
- He takes the idea from Harvard Connection and drops that team brutally, because he doesn't need them.
- He gives 30% to the CFO because he needs money.
- He codes himself, then gives 5% each to his marketing and software-guru roommates, but nothing to the two students who offered help early on: he shares only when he needs to.
- He draws inspiration from real-world problems (e.g. the relationship status).
- Unlike the CFO, he keeps making the right calls: no ads for monetisation, user-friendliness first, and he fights for his decisions. He starts to think the CFO contributes nothing but money.

> The film is fiction: the character need not be the real Zuckerberg. Haven't we heard the same about Steve Jobs and Wozniak?



Zuckerberg's Mindset (2)

- He keeps his edge alive by playing on "exclusivity" (the initial idea), moving from universities to the public; that is how Facebook spread further than MySpace, Orkut and others.
- He moves to Silicon Valley; he can grasp the right ideas and doesn't insist his own are superior (many came from the Napster founder).
- His company comes first, not his friends: he drops the CFO, then the Napster founder, when their contributions become useless or harmful.
- He thoroughly understands the social network and wants to build the platform: right time, right people, right place.
- He is focused.
- Anything else?



14

Current Venture Trends and Statistics

Where venture money went around 2010–2011: the largest US rounds, investment by industry and region, and global investor sentiment after the 2008–2009 recession.

U.S.

The United States: largest venture rounds, clean-tech investment, deals and dollars by industry, and the rise of new venture regions.

Largest US Venture Capital Investments, 2011

AMOUNT	BUSINESS DESCRIPTION
$201,686,400	BrightSource Energy: develops utility-scale solar power plants
$200,000,000	Develops plastic circuits for mass applications
$111,920,900	Fisker Automotive: designs and manufactures electric vehicles
$108,000,200	Manufactures semiconductors for general-purpose chips
$78,575,100	Manufactures thin-film solar cells
$77,000,100	Beyond Oblivion: digital music service
$76,400,000	Coda Automotive: manufactures electric vehicles
$75,000,000	Developer of facilities converting municipal solid waste
$72,000,400	Biotechnology research services
$70,000,000	User virtualisation solutions for enterprises

Since then: BrightSource's Ivanpah solar plant opened in 2014; Fisker Automotive went bankrupt in 2013.

Corporate VC Investment in Clean Technology

YEAR	# DEALS	# COMPANIES	$M INVESTED	YEAR	# DEALS	# COMPANIES	$M INVESTED
1995	36	29	75.89	2003	60	51	252.86
1996	47	40	147.07	2004	87	66	439.54
1997	48	39	145.82	2005	93	80	500.78
1998	39	35	118.24	2006	154	121	1,689.96
1999	47	38	213.80	2007	249	204	2,654.96
2000	52	42	600.35	2008	295	236	4,069.96
2001	64	55	383.55	2009	220	180	2,281.60
2002	64	57	361.92	2010	284	233	3,695.22

Source: PricewaterhouseCoopers/NVCA MoneyTree Report, data: Thomson Reuters.

Total US VC Investment: Deals by Industry, 1995–2001

INDUSTRY	1995	1996	1997	1998	1999	2000	2001
Software	434	686	815	970	1,405	2,136	1,275
Biotechnology	177	236	246	278	266	357	332
Medical devices	180	213	271	292	284	293	255
Industrial/energy	130	160	218	191	203	257	204
Telecommunications	140	212	269	338	533	867	493
Media and entertainment	143	190	223	271	706	942	369
IT services	61	124	166	205	453	698	329
Networking and equipment	81	123	140	213	290	483	335
Semiconductors	62	71	114	120	148	254	206
All other industries	479	620	766	846	1,303	1,752	781
Total	1,887	2,635	3,228	3,724	5,591	8,039	4,579

Number of deals; nine largest industries shown, the rest combined. Source: PwC/NVCA MoneyTree Report, data: Thomson Reuters.

Total US VC Investment: Deals by Industry, 2002–2008

INDUSTRY	2002	2003	2004	2005	2006	2007	2008
Software	988	943	926	912	962	982	1,004
Biotechnology	317	351	394	393	465	498	499
Medical devices	235	246	277	284	361	399	403
Industrial/energy	131	133	145	149	223	309	364
Telecommunications	280	215	222	244	317	284	235
Media and entertainment	161	136	141	205	328	399	405
IT services	176	150	161	165	228	276	298
Networking and equipment	228	186	193	181	136	143	106
Semiconductors	164	211	249	223	249	221	200
All other industries	497	429	449	476	518	574	568
Total	3,177	3,000	3,157	3,232	3,787	4,085	4,082

Number of deals; nine largest industries shown, the rest combined. Source: PwC/NVCA MoneyTree Report, data: Thomson Reuters.

Total US VC Investment: Deals and Dollars, 2008–2011

INDUSTRY	DEALS 2009	DEALS 2010	DEALS 2011*	$M 2011*	$M 2010	$M 2009	$M 2008
Software	727	876	187	1,114	4,309	3,439	5,370
Biotechnology	434	473	85	784	3,765	3,682	4,491
Medical devices	338	347	79	602	2,394	2,634	3,555
Industrial/energy	254	294	75	1,034	3,502	2,494	4,549
Telecommunications	134	142	28	142	984	526	1,469
Media and entertainment	267	316	73	555	1,681	1,610	1,847
IT services	233	306	76	517	1,891	1,397	2,113
Networking and equipment	105	63	15	111	656	816	701
Semiconductors	124	132	23	274	1,044	720	1,516
All other industries	425	498	95	741	3,036	2,064	3,046
Total	3,041	3,447	736	5,873	23,263	19,383	28,657

*2011 = first quarter only. Nine largest industries shown, the rest combined. Source: PwC/NVCA MoneyTree Report, data: Thomson Reuters.

A 2007 Study

- New York, March 11, 2008: while Silicon Valley and New England remain the country's leading regions for venture capital investment, they are not the fastest growing, according to the MoneyTree Report by PricewaterhouseCoopers and the National Venture Capital Association (NVCA), based on Thomson Financial data.

New Regions

- Over the last ten years, smaller pockets in non-traditional venture regions have seen impressive growth in the number of companies funded each year.
- New Mexico and Pittsburgh have not had a strong venture presence in the past but have recently shown notable signs of growth.
- Larger metropolitan areas such as Seattle, Los Angeles and the Washington DC metro area have been quietly growing their venture base over the last ten years.

2025–2026 UPDATE

Concentration has since increased: the Bay Area and New York took 64.2% of 2025 US deal value (PitchBook-NVCA).

> Venture capital growth is extremely organic. Once a critical mass of companies is funded in a region, a new ecosystem develops. Start-ups breed innovative thinkers and entrepreneurs who, in turn, attract venture capitalists. For regions without a large indigenous investor base, it is important to give outside VCs a reason to visit.

Mark Heesen, president of the NVCA

Regions: Growth from 1997 to 2007

REGION	COMPANIES 2007	INVESTMENT 2007 ($M)	COMPANIES 1997	INVESTMENT 1997 ($M)	CHANGE, COMPANIES	CHANGE, INVESTMENT
New Mexico	21	128.26	3	27.03	650%	375%
Pittsburgh/Tristate	44	198.17	12	32.32	267%	513%
Seattle	132	1,253.41	65	403.20	103%	211%
Los Angeles	124	1,146.04	73	459.41	72%	155%
Washington DC Metroplex	180	1,282.16	105	558.24	71%	130%

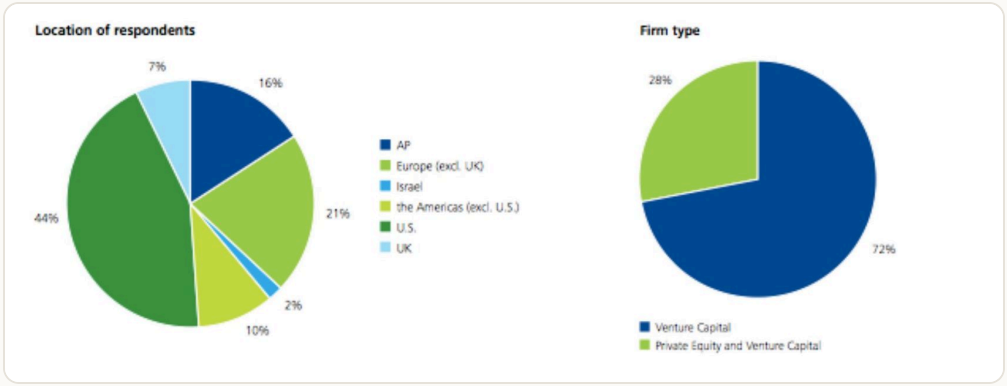
Source: PwC/NVCA MoneyTree Report.

Global Trends

How venture capitalists around the world saw the market after the 2008–2009 recession: stages, sectors, regions, investors and the role of governments.

Global Trends in Venture Capital: The Survey

- Respondents by location: U.S. 44%, Europe excl. UK 21%, Asia-Pacific 16%, the Americas excl. U.S. 10%, UK 7%, Israel 2%.
- By firm type: 72% venture capital, 28% private equity and venture capital.



2025–2026 UPDATE

Global venture funding reached $425B in 2025 (+30% on 2024), about half of it to AI (Crunchbase).

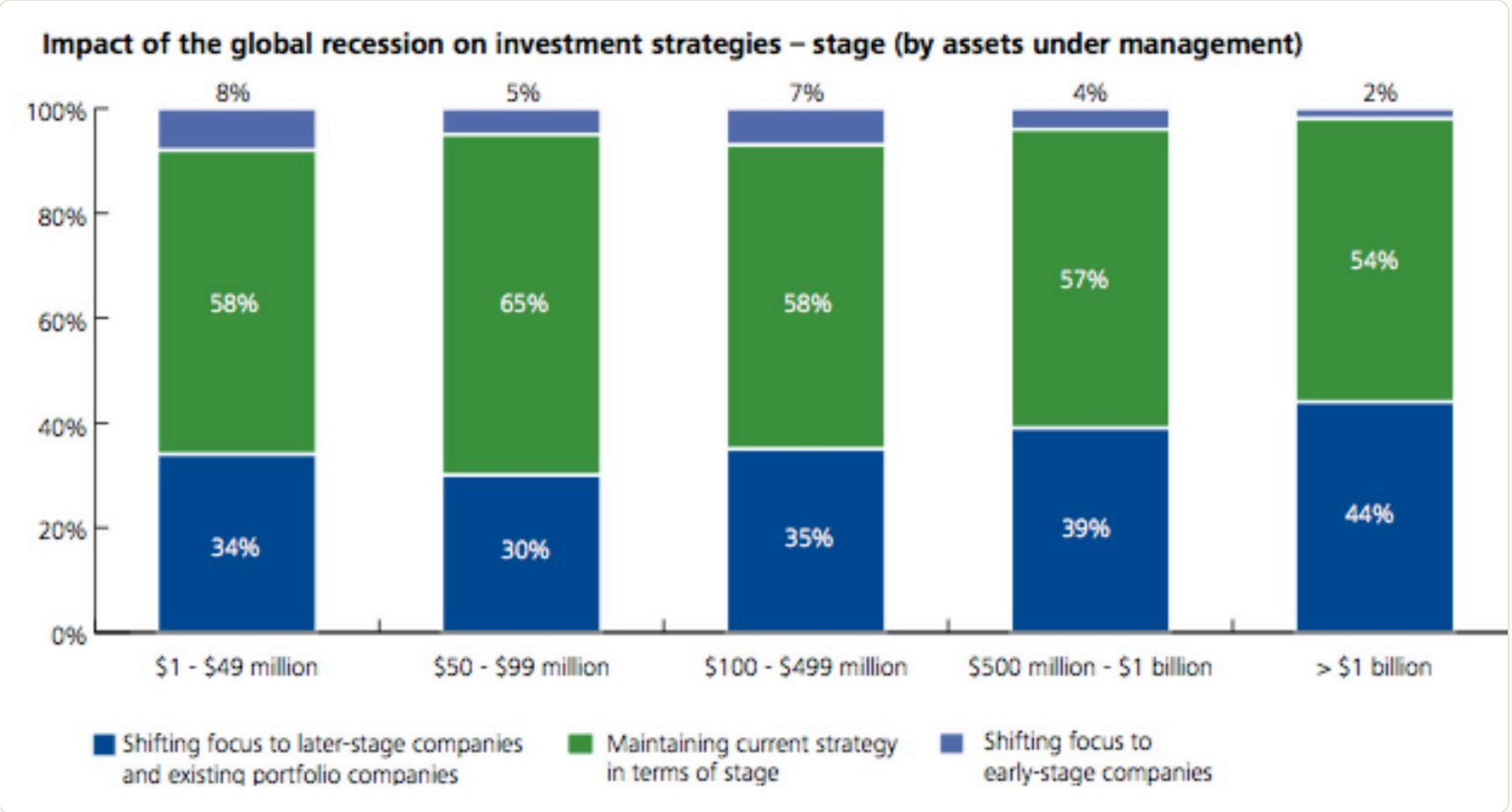
Source: Deloitte, Global Trends in Venture Capital 2009 Global Report.

Global Economic Recession of 2008–2009

- Today's economic environment is dramatically different from the one VCs operated in five years ago.
- Then, the industry was recovering from the tech bubble and just beginning to globalise.
- Today the economy is in a far different place, but there are still signs of optimism.
- VCs are more attuned to the global economy. Some sectors (semiconductors, telecom) are maturing, while **clean technologies and life sciences** are emerging with great growth potential.
- With this shake-up, VCs are adjusting their strategies to weather the storm and build a foundation to thrive.

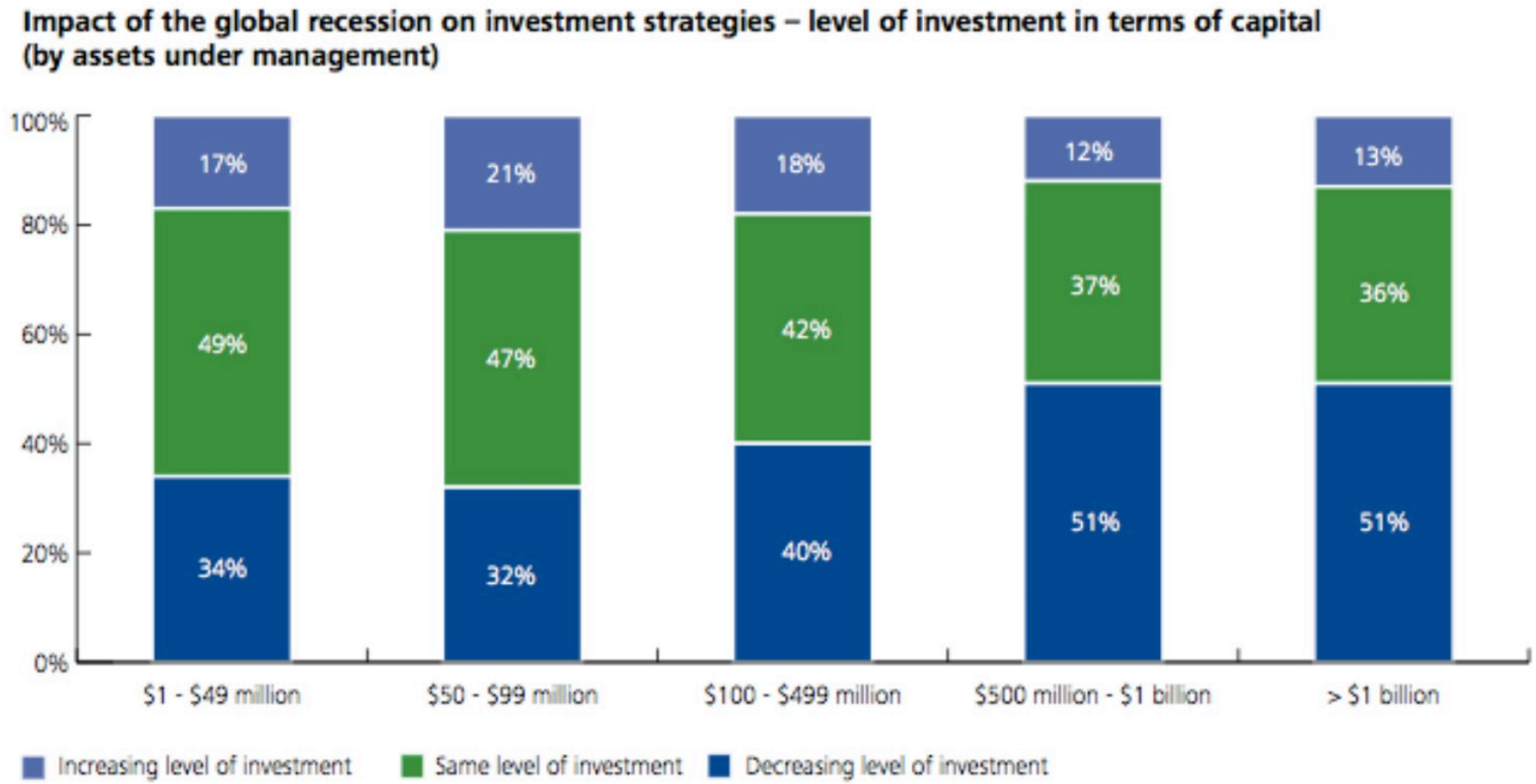
> One trend unchanged for five years: VCs' interest in China and India. Regardless of firm size, investors are intrigued by these two countries.

Impact of the Global Recession: Stage



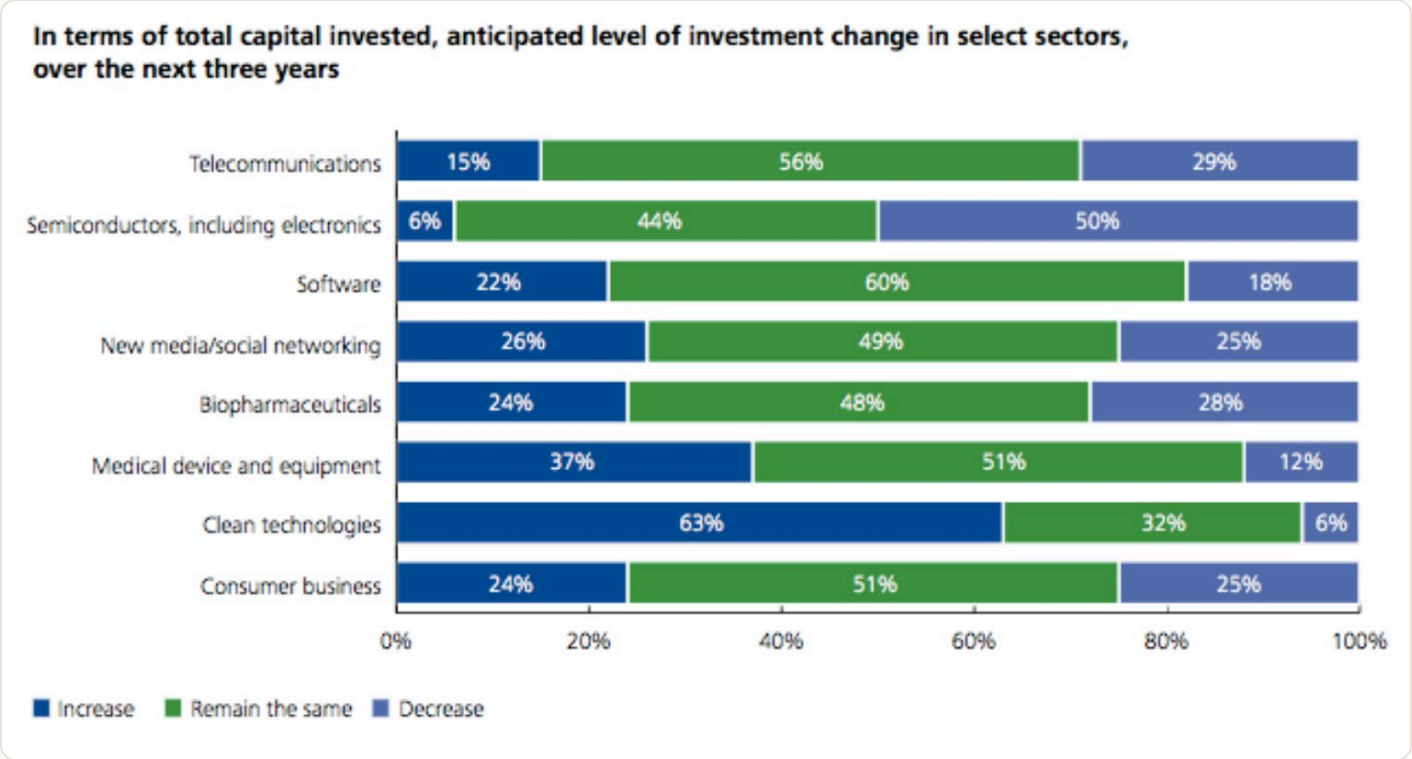
Investment strategy by stage, by assets under management: most firms kept their strategy; 30–44% shifted to later-stage and existing portfolio companies, only 2–8% to early stage. Source: Deloitte 2009.

Impact of the Global Recession: Capital



Level of investment by assets under management: 32–51% expected to invest less; larger firms (over $500M) cut most. Source: Deloitte 2009.

Change in Sectors

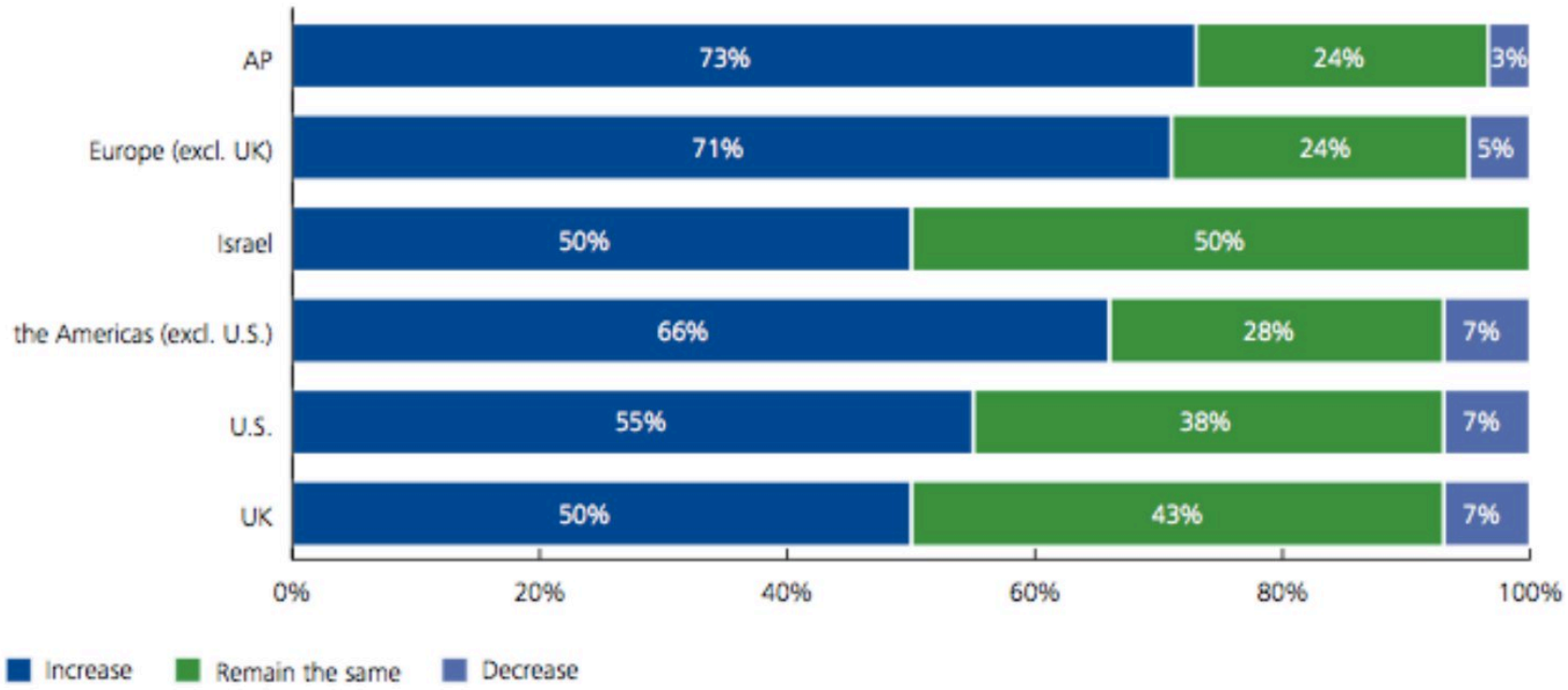


2025–2026 UPDATE

The expected shift has run its course: in 2025 AI took 65.4% of US venture deal value (PitchBook-NVCA).

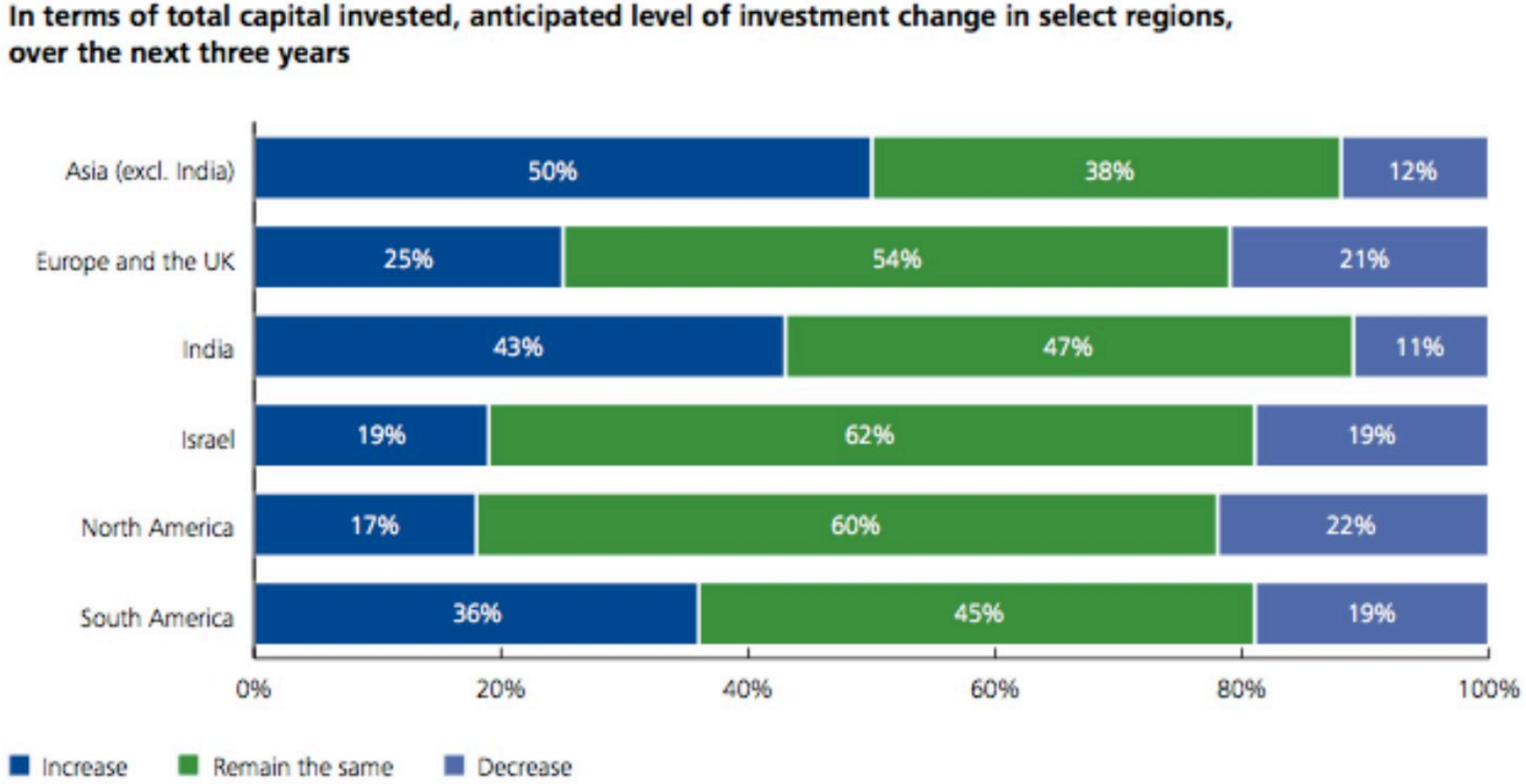
Expected change in capital invested over the next three years: clean technologies led (63% increase), semiconductors trailed (50% decrease). Source: Deloitte 2009.

Change in Clean Technologies



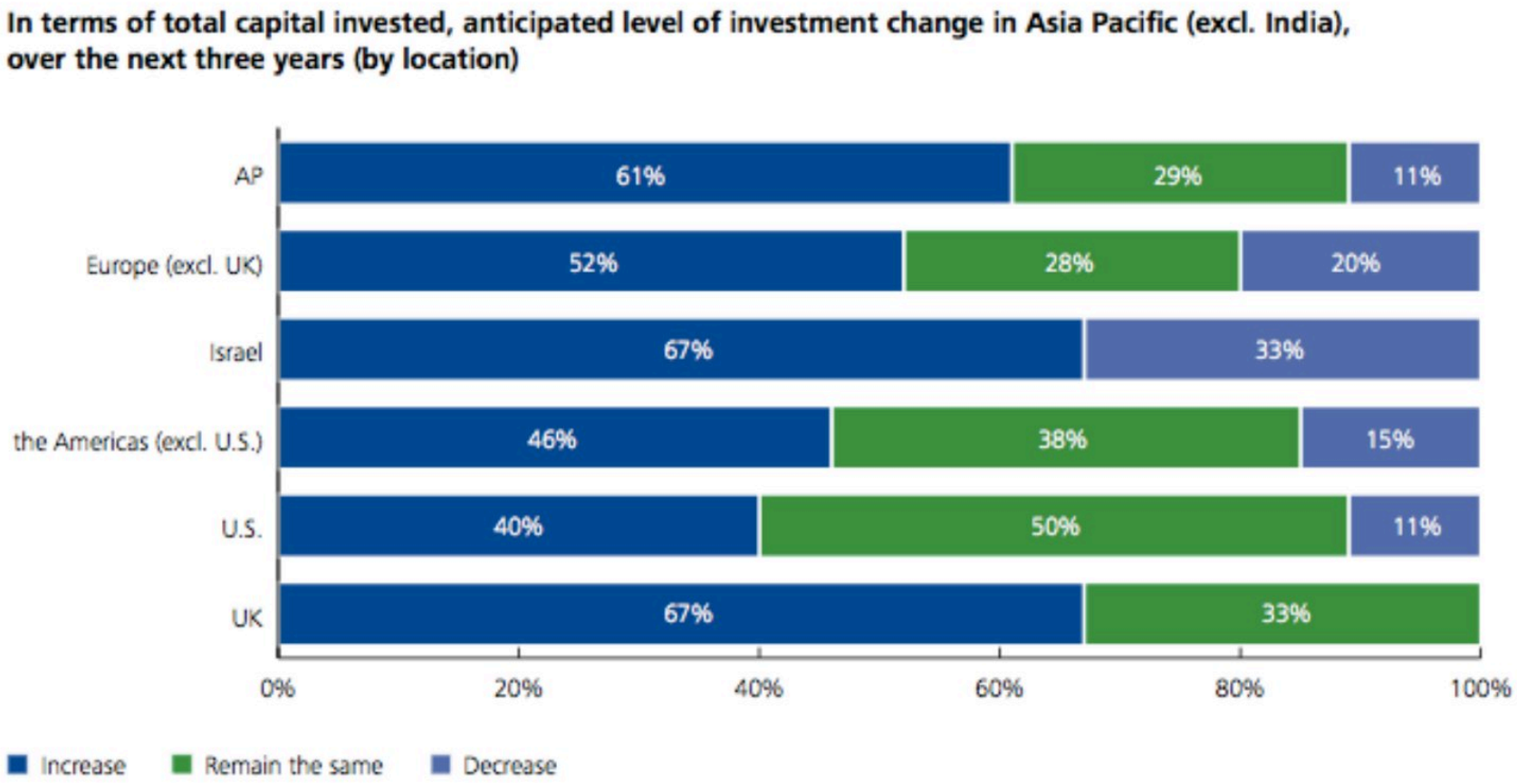
Expected change in clean-tech investment over the next three years, by respondent location: 50–73% expected an increase everywhere. Source: Deloitte 2009.

Change in Regions



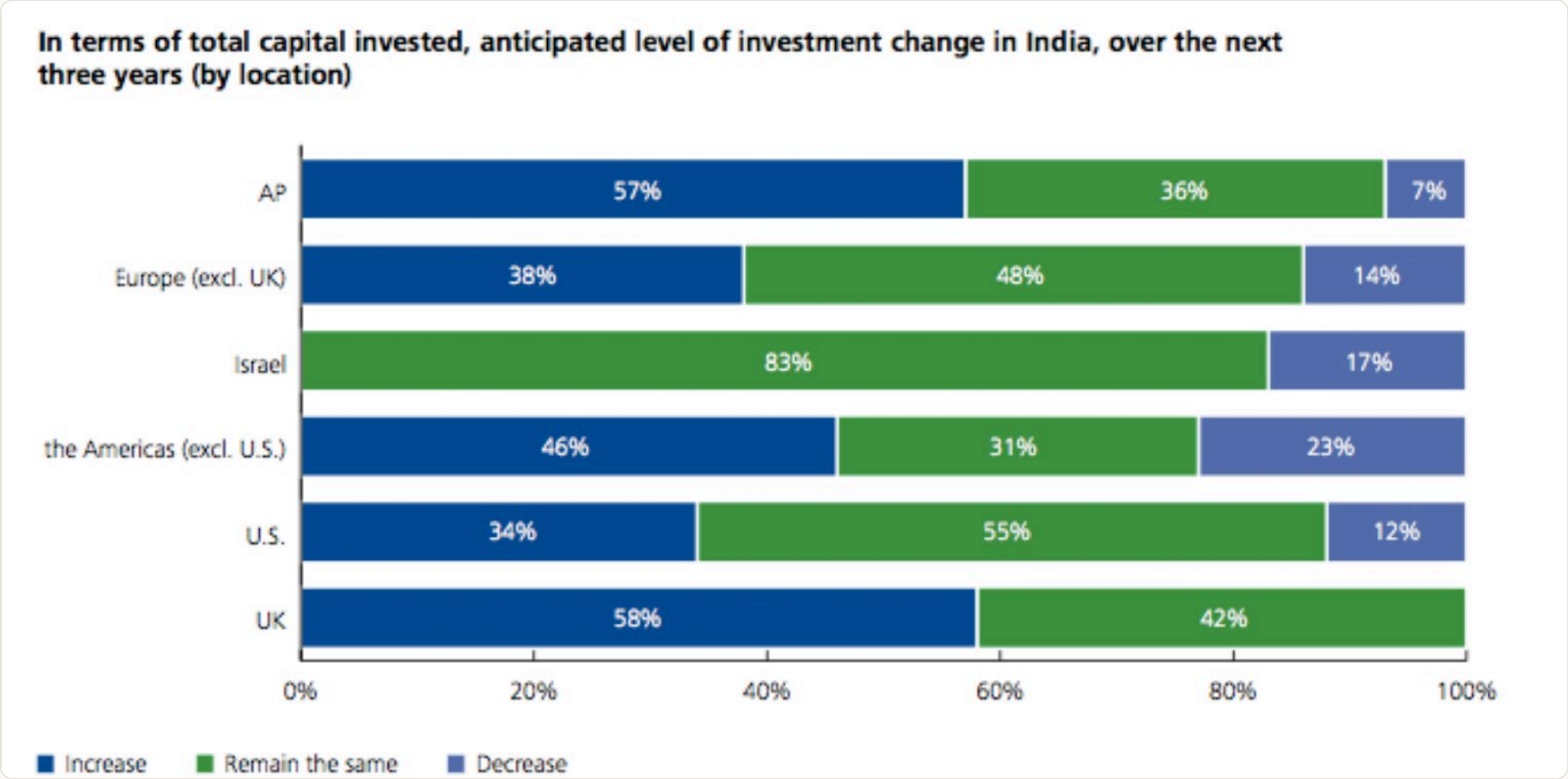
Expected change in investment by target region over the next three years: Asia excl. India (50% increase) and India (43%) led. Source: Deloitte 2009.

Change in Asia-Pacific



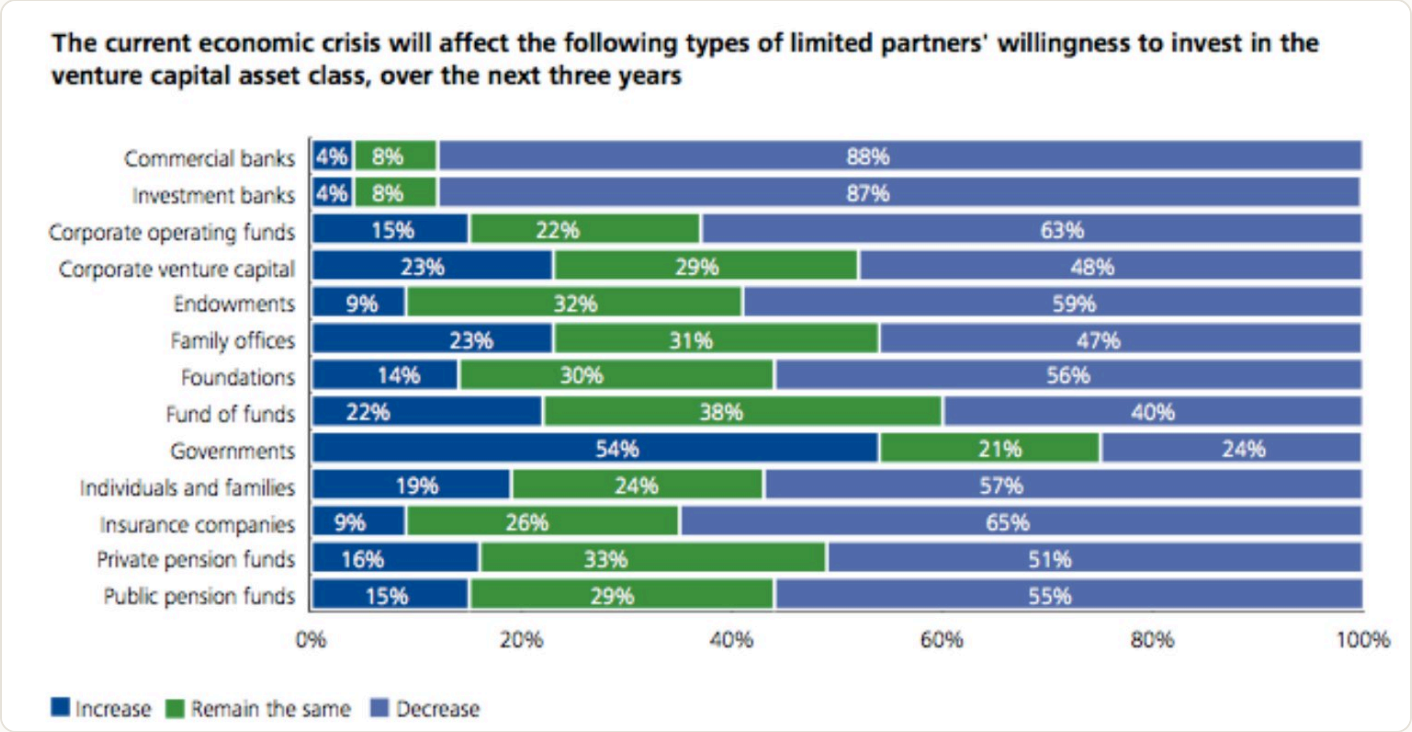
Expected change in investment in Asia-Pacific (excl. India) over the next three years, by respondent location. Source: Deloitte 2009.

Change in India



Expected change in investment in India over the next three years, by respondent location. Source: Deloitte 2009.

Investors

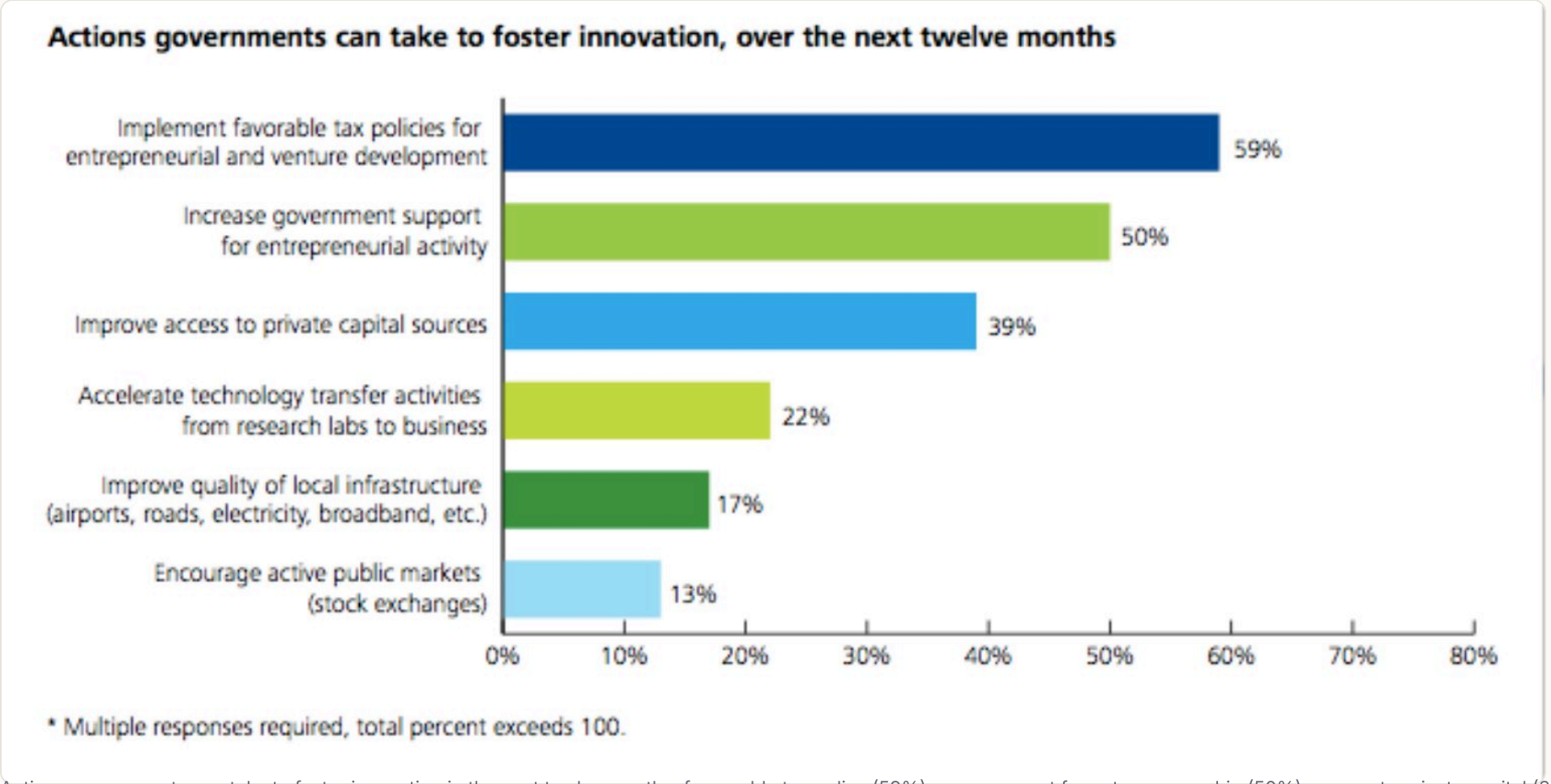


2025–2026 UPDATE

LP appetite tightened again after 2022: new US VC funds raised $66.1B in 2025 across 537 funds, the fewest in a decade (PitchBook-NVCA).

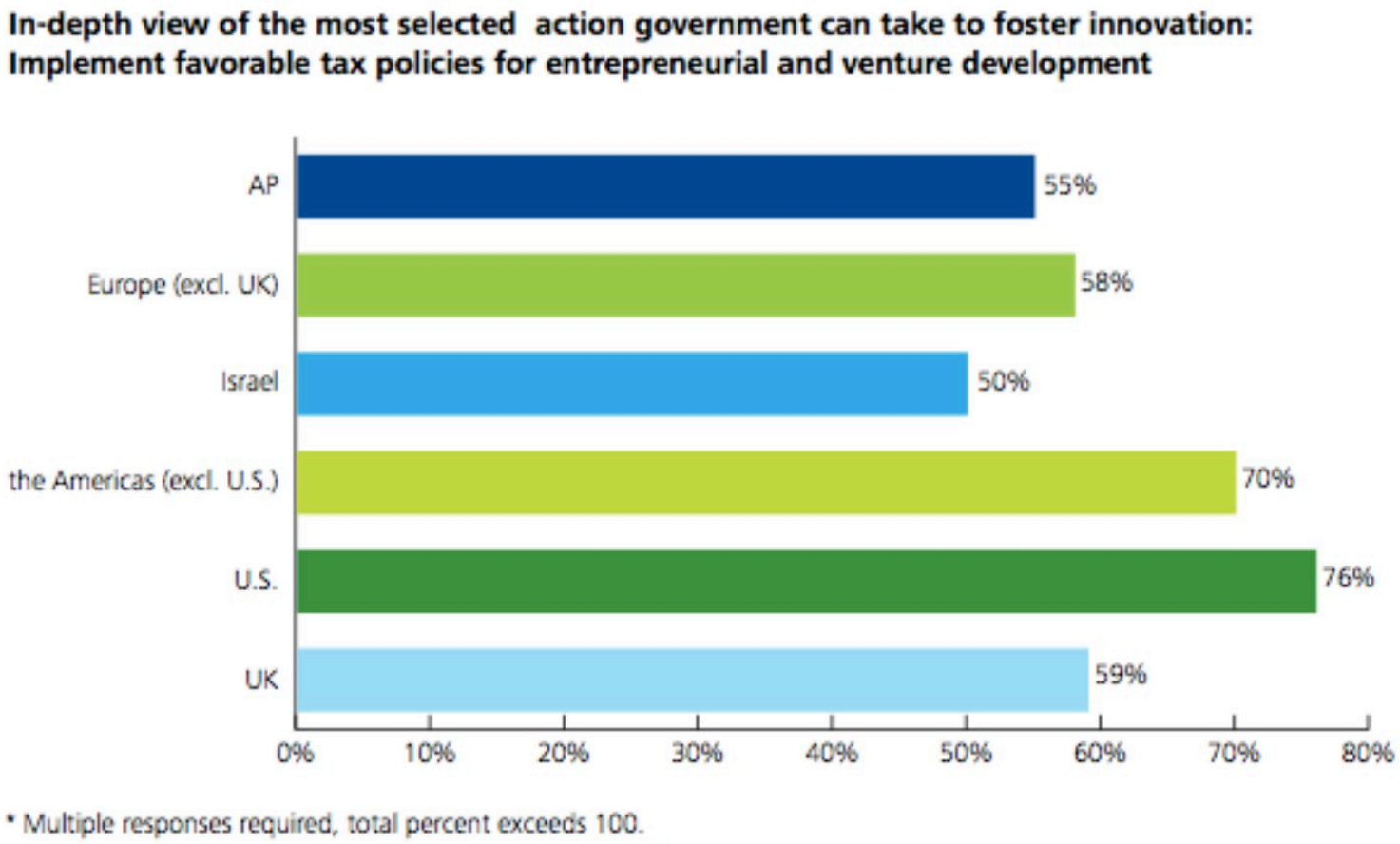
Expected effect of the crisis on limited partners' willingness to invest in VC over the next three years: only governments were expected to increase (54%); banks were expected to pull back most. Source: Deloitte 2009.

Governments



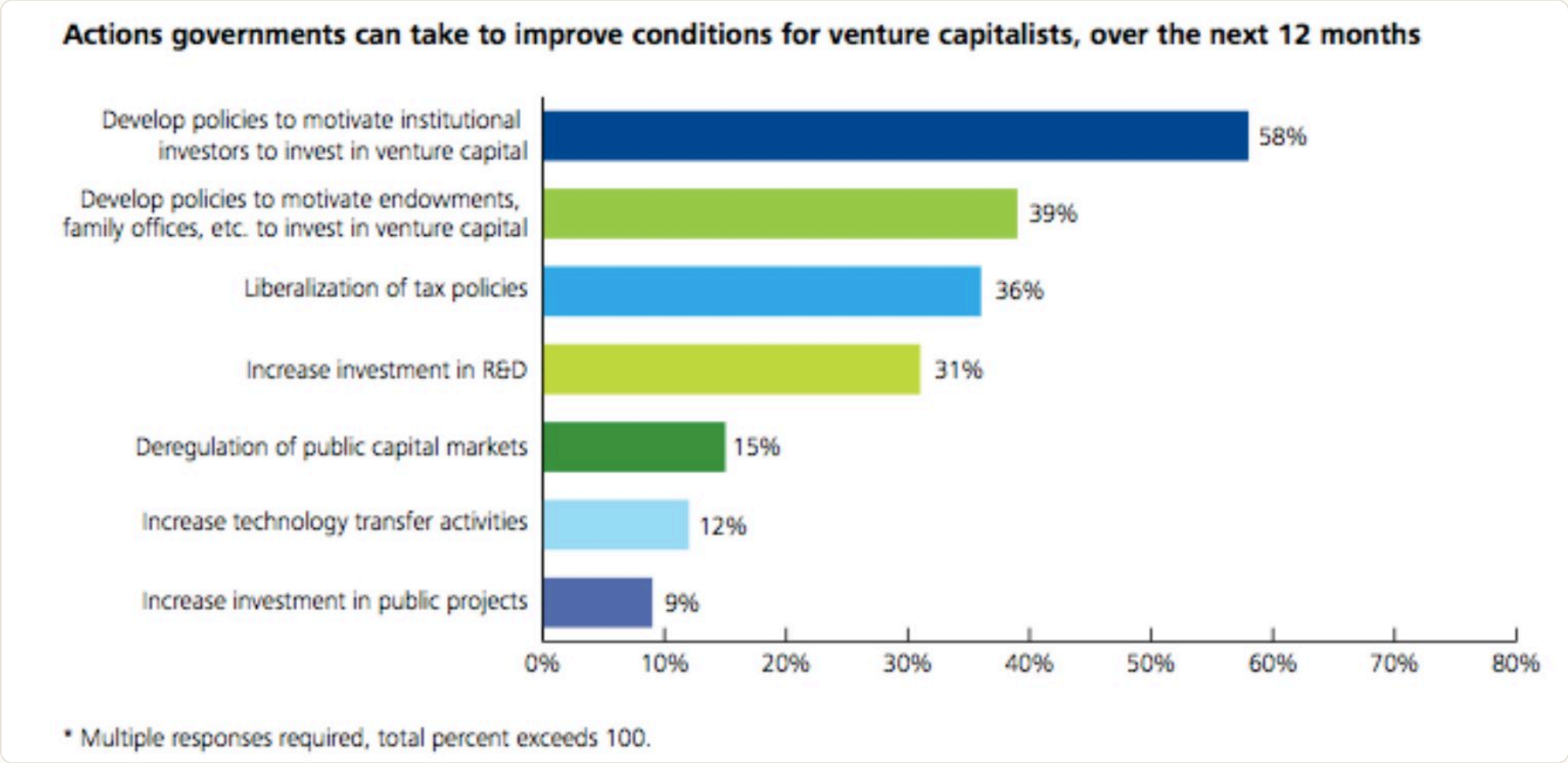
Actions governments can take to foster innovation in the next twelve months: favourable tax policy (59%), more support for entrepreneurship (50%), access to private capital (39%). Multiple answers allowed. Source: Deloitte 2009.

Government Actions



In-depth view of the top choice, favourable tax policy for entrepreneurial and venture development, by location (50–76%; highest in the U.S.). Source: Deloitte 2009.

What Governments Should Improve



Actions to improve conditions for VCs in the next 12 months: policies to motivate institutional investors (58%), endowments and family offices (39%), tax liberalisation (36%). Source: Deloitte 2009.

15

New Venture Trends

Two sectors that venture capital expected to grow: life sciences and clean energy.

Trends

- New trends
  - Life sciences
  - Clean energy

Life Science Ventures

How venture capital builds the life sciences sector: investment, employment, acquisitions and the hurdles of regulation.

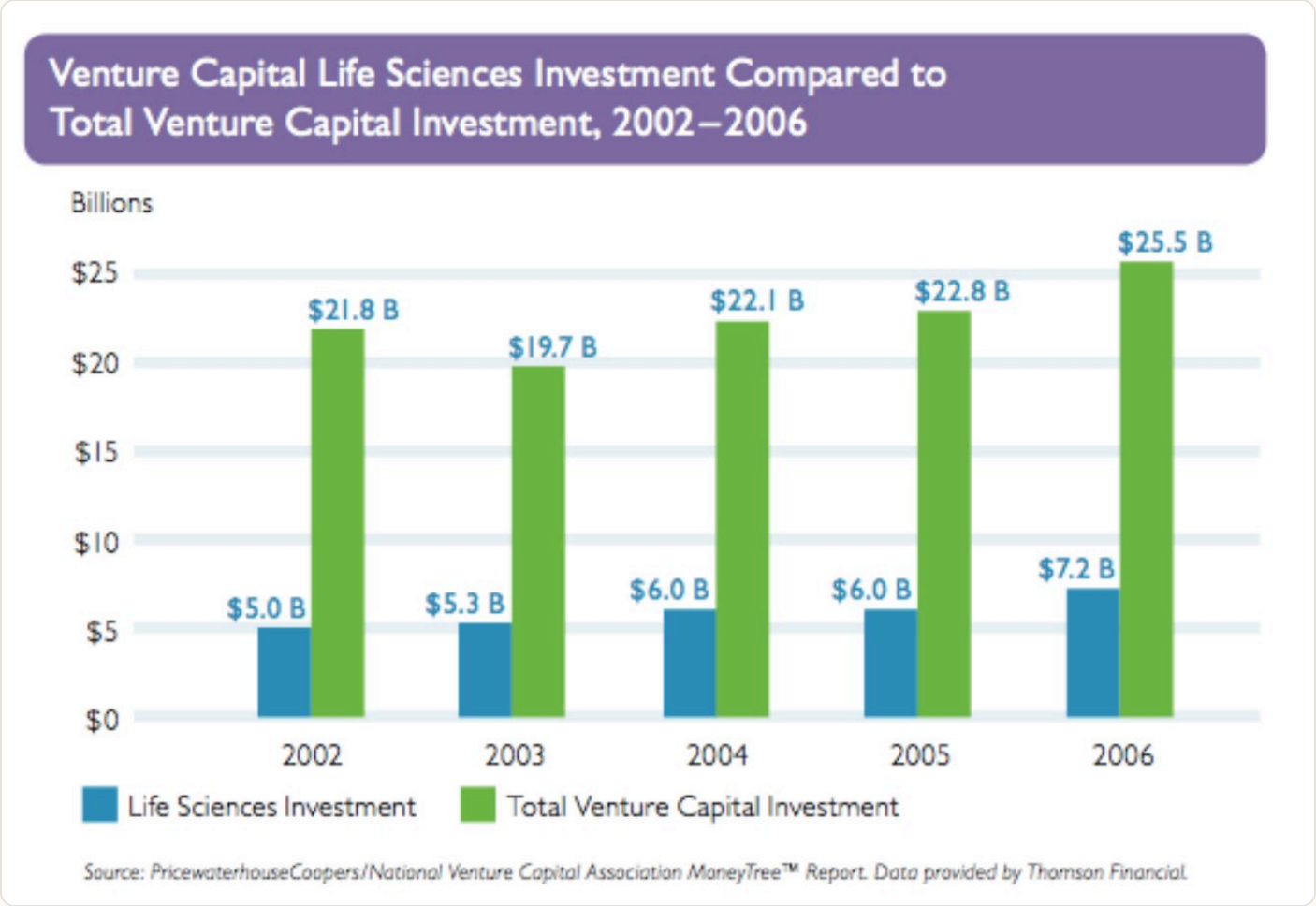
The Life Sciences Sector

- Venture capitalists are committed to growing the life sciences sector.
- Since 2002, over $29 billion of venture capital has flowed into life sciences, at a growing pace: $7.2 billion in 2006 alone, 28% of all venture investment.
- Experts agree that virtually the entire biotech industry, and most major medical-device breakthroughs, would not exist without venture capital.
- In 2006, VC-backed life sciences companies held 54% of the sector's employment and 60% of its revenue: 493,800 jobs and $132 billion.
- More than 100 venture-backed life sciences IPOs since 2002.

Life Sciences Companies

- Impact of discoveries by venture-backed life sciences companies:
  - Saves millions of lives
  - Improves medical procedures
  - Reduces health-care costs
  - Brings overall economic benefits to the U.S. economy

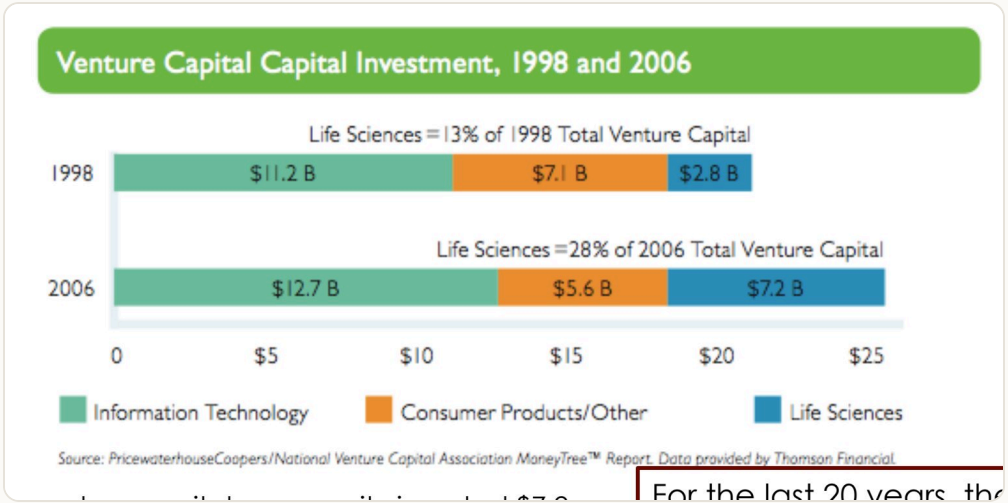
Life Sciences Investment



Venture capital life sciences investment vs. total VC investment, 2002–2006: from $5.0B of $21.8B to $7.2B of $25.5B. Source: PwC/NVCA MoneyTree Report, data: Thomson Financial.

Venture Capital Investment, 1998 and 2006

- VCs invested $7.2 billion in life sciences in 2006, up from $2.8 billion in 1998; the share of total VC rose from 13% to 28%.
- For 20 years, VC has enabled the most promising life sciences companies to do groundbreaking research while building viable businesses that bring innovative products to market and contribute to the U.S. economy.



Source: PwC/NVCA MoneyTree Report, data: Thomson Financial.

Investment in Biotechnology

- VCs have invested heavily in biotechnology and in medical devices and equipment.
- Biotechnology: more than 420 deals totalling $4.5 billion in 2006, vs. $3.2 billion in 2002 and $1.6 billion in 1998.
- Medical devices and equipment: $2.7 billion in some 300 deals in 2006, vs. $1.8 billion in 2002.
- VC invested in medical devices alone rose by nearly 60% between 2004 and 2006.

Venture Investment in Life Sciences

- Venture investment in life sciences is highly beneficial to the U.S. economy.
- Employment at VC-backed life sciences companies reached almost 494,000 in 2006, up from about 381,000 in 2003: 54% of total life sciences employment (Global Insight).
- In 2006, 40% of all biotech employment was at companies that started with venture capital; in medical devices, 83%.
- VC-backed biotech companies grew employment by 9.2% a year (2003–2006), far above the 4.3% compound growth of the whole biotech industry.

Pharmaceutical and Life Sciences Corporations

- VCs fund only companies with truly fundamental innovation; many of these discoveries are revolutionary enough to disrupt markets and industry segments.
- Many large pharmaceutical and life sciences corporations treat young VC-backed companies as their de facto R&D pipeline.
- So VC-backed companies are often acquired by these larger organisations for their disruptive technologies.
- From 2002 to 2006, close to 200 VC-backed life sciences companies were acquired for their innovations.

Average Cost to Develop One Medicine

- Average cost (in 2000 dollars): $138M in 1975, $318M in 1987, $802M in 2000.
- Regulatory hurdles: FDA approval, USPTO patents, CMS (Medicare and Medicaid) payment, Sarbanes-Oxley compliance.

2025–2026 UPDATE

Developing a new drug now costs $2B+ and takes 10–15 years.

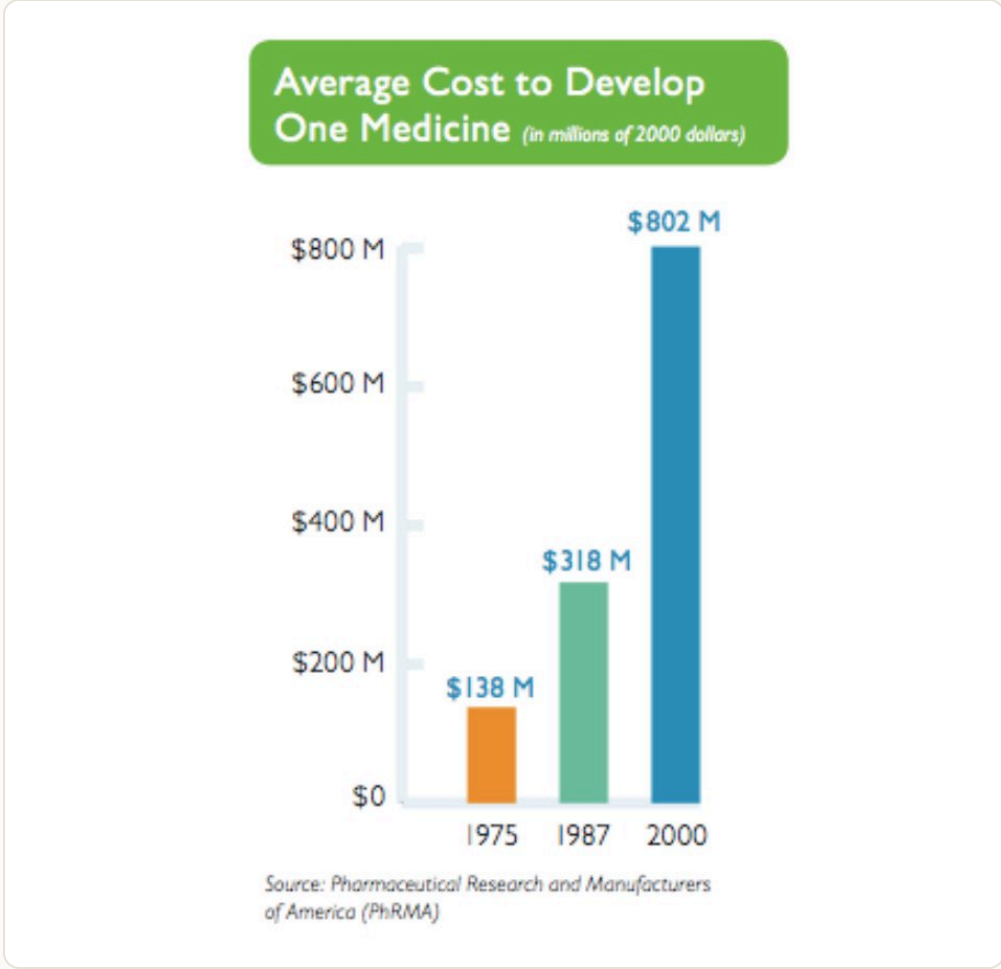


Chart source: Pharmaceutical Research and Manufacturers of America (PhRMA).

Venture-Backed Life Sciences Employment, 2003 and 2006

SECTOR	VC-BACKED 2003	VC-BACKED 2006	TOTAL 2006	VC-BACKED SHARE 2006
Biotechnology	190,600	247,900	627,600	40%
Medical devices and equipment	190,200	245,900	294,900	83%
Life sciences total	380,800	493,800	922,500	54%

Source: Global Insight.

Revolutionary Innovations of Venture-Backed Medical Startups

DISEASE	INNOVATIVE TREATMENT EXAMPLES
Heart disease	Angioplasty, aortic aneurysm stent grafts, atherectomy, minimally invasive bypass, electro-ablation, implantable defibrillators, Integrilin and ReoPro
Cancer	Doppler ultrasound, minimally invasive biopsy, prostate-specific antigen (PSA), MRI, Avastin, Erbitux, Gliadel, Herceptin, Rituxan and Velcade
Stroke	MRI and tissue plasminogen activator (TPA)
Respiratory disease	FluMist and ventilators
Diabetes	Glucose self-monitoring devices and recombinant human insulin
Spinal injuries	Kyphoplasty, artificial spinal discs and spinal fusion cages

Medical Technology Revolutionises Breast Biopsies

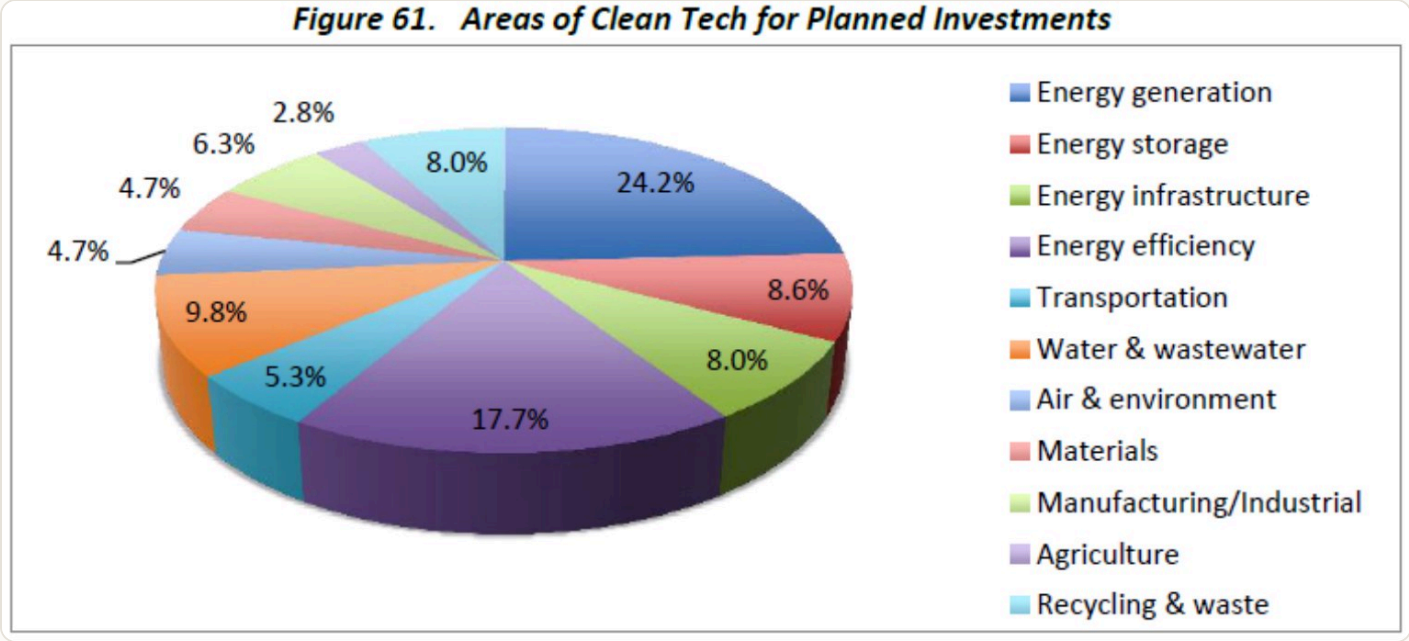
	OPEN SURGICAL BIOPSY	MINIMALLY INVASIVE BIOPSY
Incision size	1.5–2"	0.12–0.2"
Procedure time	2–4 hours	30–60 minutes
Recovery time	Several hours	Immediate
Scarring	Substantial	Minimal
Cost	$1,169–$1,360	$517–$855

Source: AdvaMed.

Clean-Tech Ventures

Where the entrepreneurial opportunities lie in energy: solar, consumer energy management, the smart grid, storage and the role of utilities and aggregators.

Areas of Clean Tech



2025–2026 UPDATE

Global climate-tech venture and growth investment was $40.5B in 2025; of the ~$14.4B going to energy, 44% went to fusion and fission (Sightline Climate).

Areas of clean tech for planned investments: energy generation 24.2%, energy efficiency 17.7%, water and wastewater 9.8%, energy storage 8.6%.

Demand or Supply Side

- Conventional wisdom says capital-efficient, entrepreneur-friendly opportunities are on the "demand side" of energy:
  - energy consumption management
  - energy-efficient products
  - demand response management
- Entrepreneur-friendly opportunities also exist on the "supply side".

Solar Energy

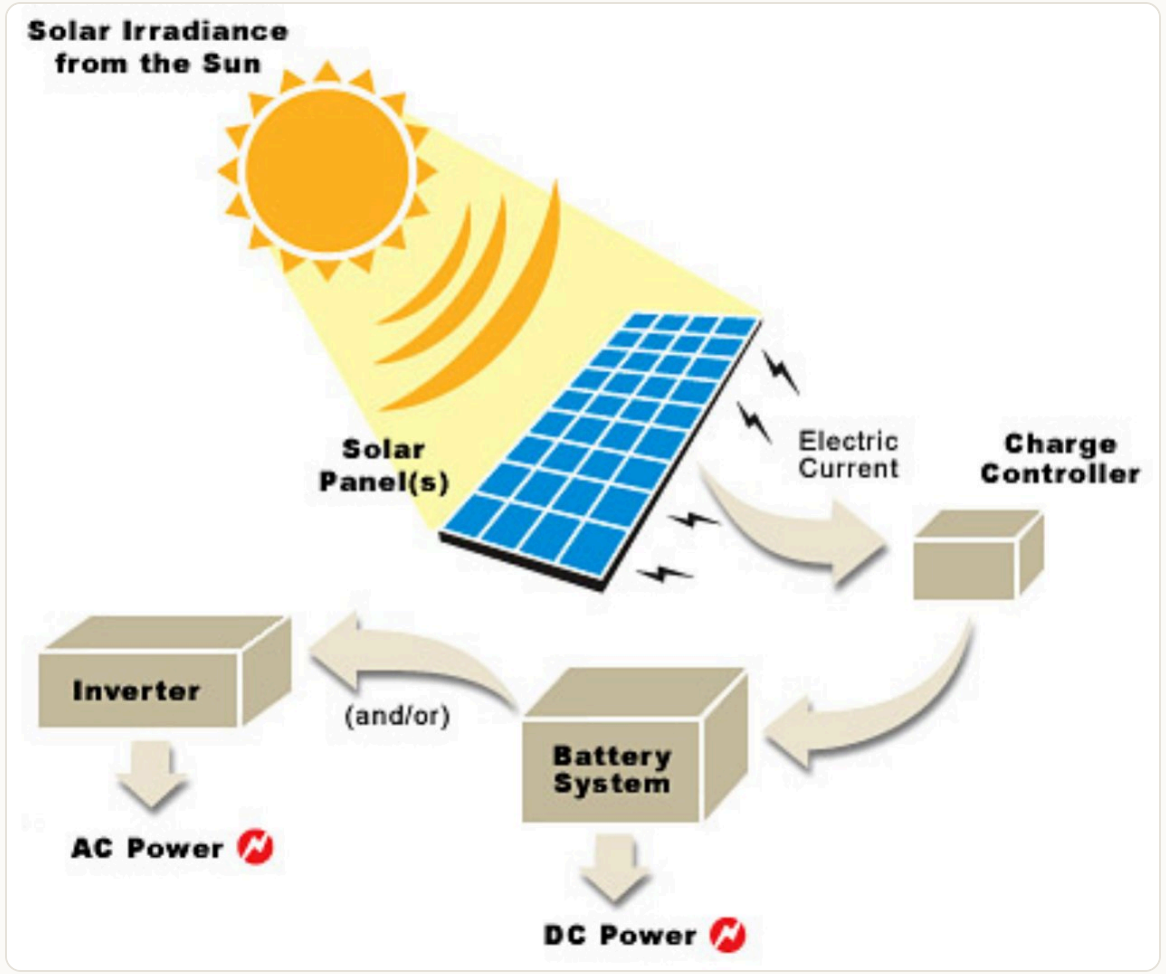
- Solar has been the dominant category for venture investment in energy for several years, focused mainly on new materials and manufacturing.
- As solar deployment gains scale, new opportunities are emerging around underserved parts of the solar ecosystem.



2025–2026 UPDATE

Solar module prices have fallen roughly 90% since 2010.

How a Solar System Works



Sunlight hits the solar panels; the current passes a charge controller to a battery system (DC power) and/or an inverter (AC power).

The Inverter

- The inverter is an interesting part of the system for several reasons.
- It is the most despised part of the chain: it accounts for most failures in the field and stubbornly resists cost reduction because of its Edison-era architecture.
- As cell prices drop, the inverter's share of system cost rises, making it an increasingly important economic focus and an attractive target for reinvention by entrepreneurs.

Value-Added Services

- Value-added capabilities such as monitoring, optimisation, control and storage can significantly strengthen the business case for solar and accelerate its adoption in new markets.

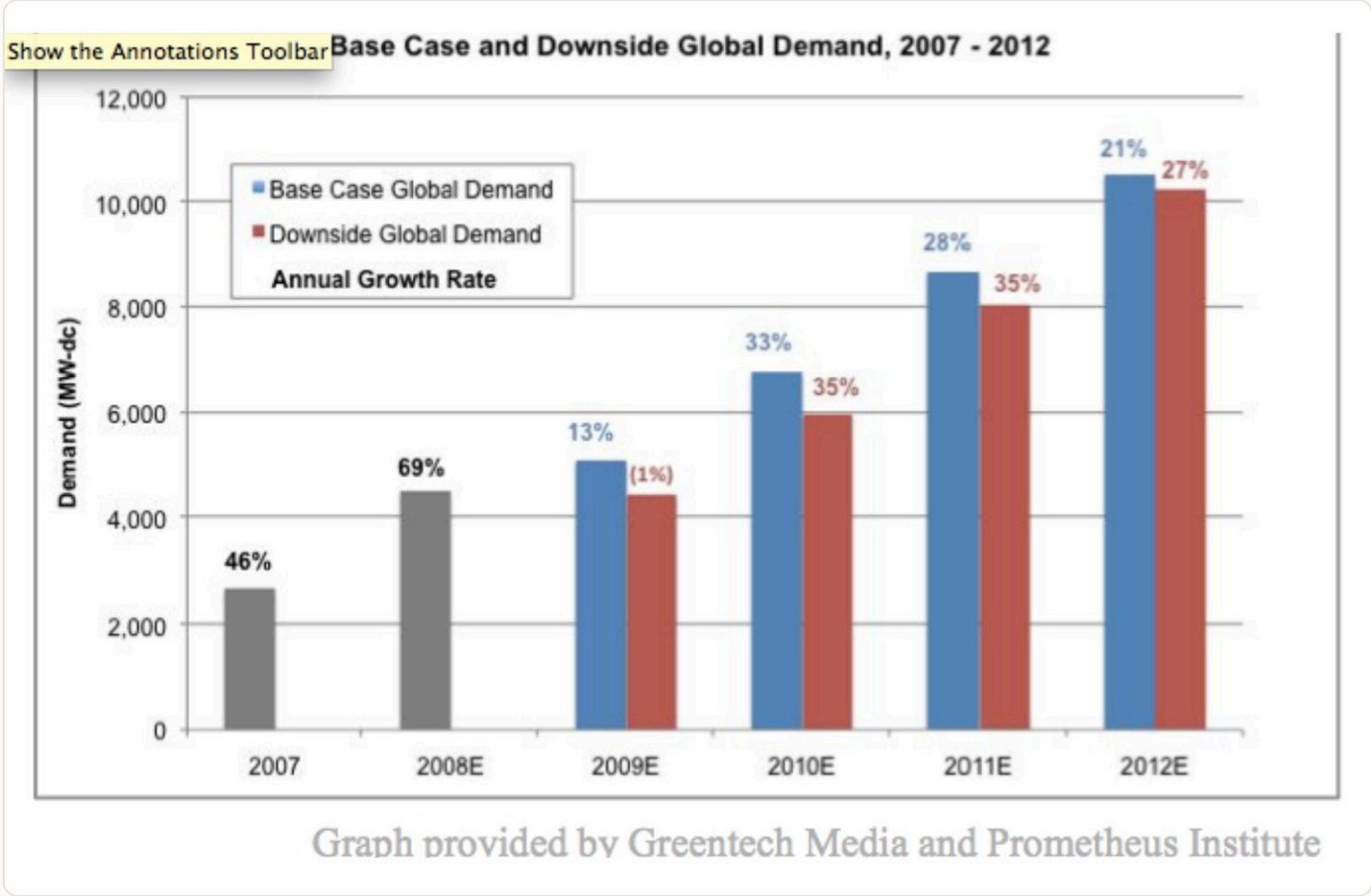
Green Energy

- As consumers' "green" consciousness rises, opportunities open to serve this emerging media and commerce segment; the Internet will be a driving force.
- Many consumers take an ever greater interest in their energy consumption.
- This drives them to seek more energy-efficient products (e.g. the Prius), understand their own energy usage and compare their "green-ness" with others.

Control

- Actual control of the key electric devices in the home.
  - How to engage consumers in energy consumption is the central question: fine-grained control is moot if the consumer isn't paying attention.
  - Strategic question: go to market with and through the utility, or go after the consumer directly?
  - The utility is a powerful channel, but its sales cycle is long, and its complex business model and motivations may not align with a consumer energy startup.
  - Going direct poses the classic online customer-acquisition challenge, but could create a valuable new consumer Internet brand.

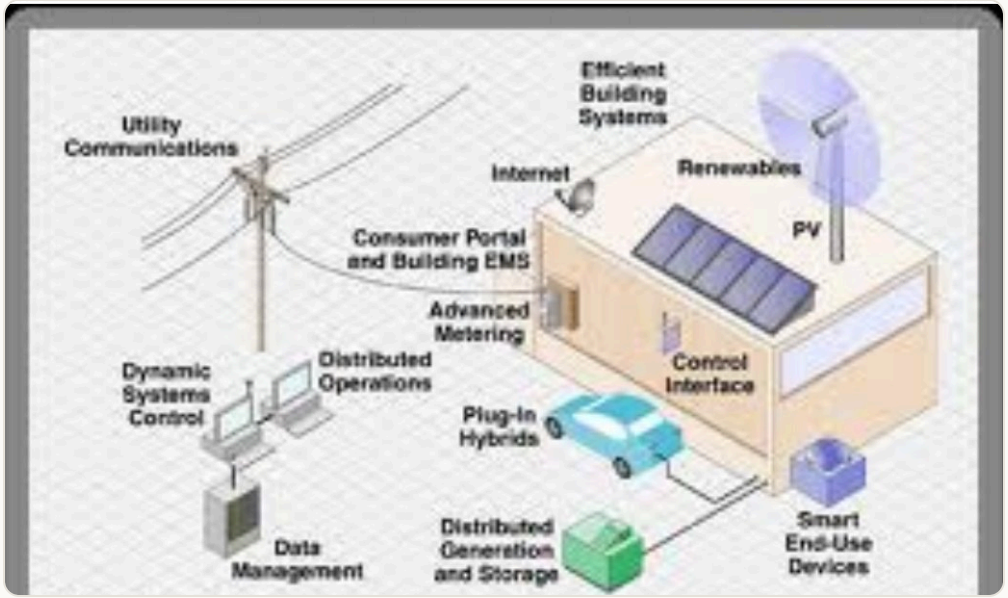
Solar Demand Forecast, 2007–2012



Base-case and downside global solar demand (MW-dc) with annual growth rates; 2008–2012 are estimates. Graph: Greentech Media and Prometheus Institute.

Smart Grid

- The electricity distribution network is emerging as the next great opportunity in communications.
- It carries many of the same promises and challenges as prior waves in networking.

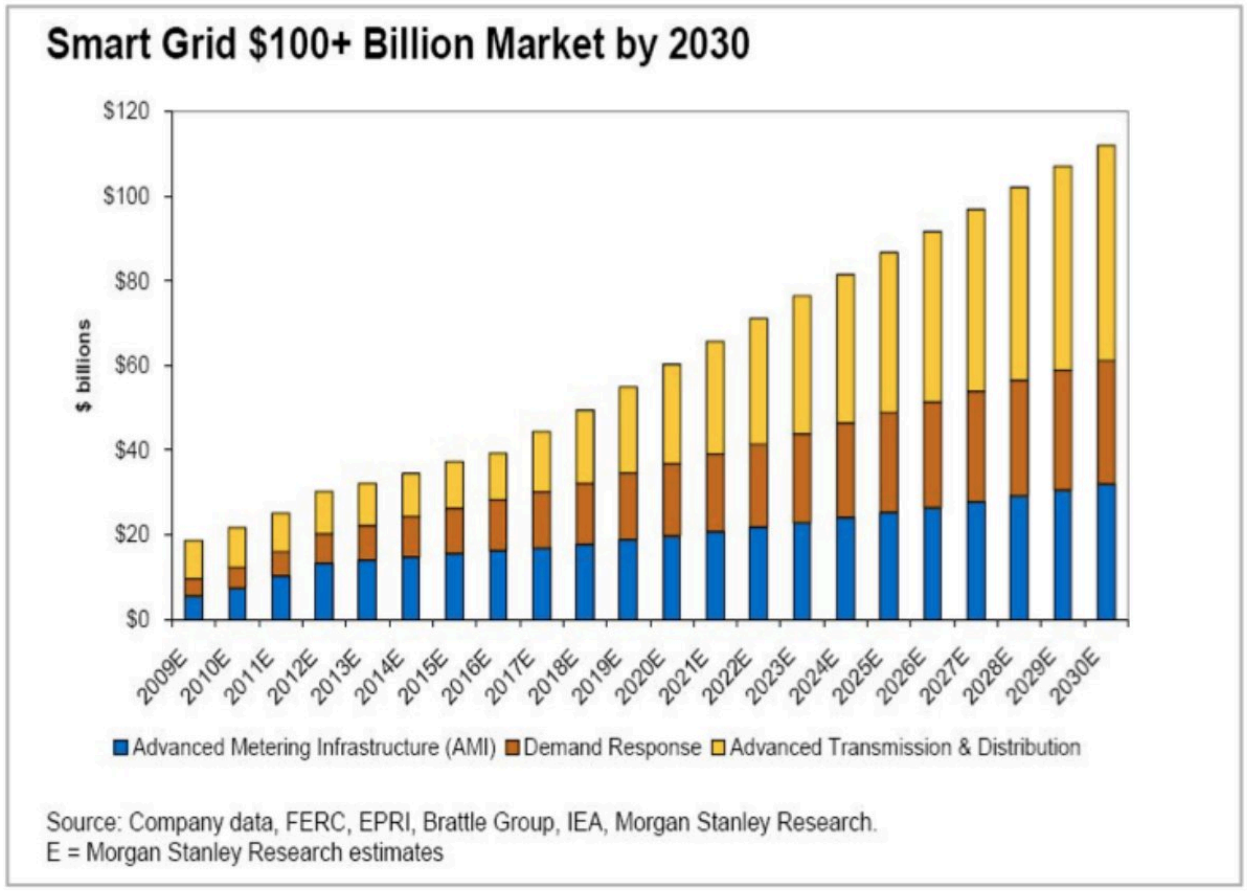


Smart grid elements: utility communications, advanced metering, distributed generation and storage, plug-in hybrids, smart end-use devices.

The Electric Grid

- Many new forces are pushing the electric grid to its limits.
- When most of the grid was built, no homes or businesses had central air conditioning, now its largest load.
- New loads once unimagined (computers, 60"+ plasma TVs, even plug-in hybrid cars) are becoming staples of the American household.
- Peak load is growing faster than off-peak, creating an unbalanced, inefficient system, made worse by virtually no storage on the grid.
- Until the recent recession and the first drop in demand since WWII, supply could not keep up and capacity margins fell, so interest from government, regulators and utilities in new technologies grew.

Smart Grid: a $100+ Billion Market by 2030



Forecast of smart grid spending, 2009–2030: advanced metering infrastructure (AMI), demand response, advanced transmission and distribution. Source: Morgan Stanley Research estimates.

AMR and AMI

- Automated meter reading (AMR), meant to save utilities the cost of manual reads, has grown into a vision of a complex, two-way information and communication network over the grid.
- The vision extends beyond the meter into homes and businesses, giving utilities granular visibility and control of demand, which today is outside their control except for manual dealings with their largest customers.
- Most venture investment here has gone to the networking infrastructure for the smart grid (AMI, Advanced Metering Infrastructure).



Software Platforms

- Opportunities lie in the software platforms integral to this new infrastructure and the applications built on them.
- A new generation of infrastructure software will be needed, much as the IP revolution in telecom opened the door to new software architectures before consolidation took hold.
- New entrants must integrate with legacy back-office and operations systems and compete with software incumbents already filling gaps in their smart grid portfolios.

The Smart Grid Market

- The smart grid market is very large: every device connected to the grid is a candidate for a technology upgrade, and every individual, home and business is a customer for new energy hardware, software and services.
- We expect it to be fertile ground for investment for many years to come.

Energy Storage

- Energy storage could "change the game" in how electricity is generated, distributed and consumed.
- This potential has gone unrealised for decades, but there is reason for optimism behind a new generation of aspirants.

2025–2026 UPDATE

Lithium-ion battery prices have fallen roughly 90% since 2010.

Energy and Social

- Internet-based consumer plays that engage the consumer, build a community and discern purchasing intent, all around green themes and market segments.

The Energy Data Cloud

- An authoritative repository application to which other applications must interface.
- It would naturally underpin a future "Energy Data Cloud", home to the customer's energy data, operational applications and analytics.
- It would also be the natural integration point between the enterprise and the rest of the grid: energy service aggregators, energy markets and intermediaries, grid operators and even utilities.
- Vendors that gain a footprint through rock-solid business cases will win the chance to contend for the Energy Data Cloud title.

Getting Engaged

- Apart from a few die-hard energy geeks, people are not very interested in slicing and dicing the kWh they consume, which explains why ever more granular presentation of raw data hasn't taken off.
- A new tack is needed to win consumer mindshare, and social media will be a large part of the equation.

Utilities

- The utility offers scale, but can be a challenging partner for entrepreneurial innovators.
- Utilities cast such a long shadow in energy that they are the most obvious partner for smart grid ventures seeking large-scale distribution.
- Yet working in harmony with a utility is rarely easy for fast-moving startups.
- Utilities have their own business models, policy goals, political considerations, regulatory obligations, operational priorities and culture.
- Most of these are foreign to entrepreneurs from other industries; a startup that wants the utility's scale must learn to work in this strange world.

The Consumer Energy Platform

- Once the consumer is engaged, further steps in relationship and demand management become possible.
- With the consumer finally paying attention, richer interactions and transactions open up.
- One avenue is active control: equipping the most engaged consumers with grid-connected devices (communicating thermostats, "smart plugs") and enrolling them in consumer-friendly demand response programmes.

The Role of the Aggregator

- Energy market structure and operations create openings for technology-enabled, market-savvy intermediaries.
- An aggregator/service-provider model gains control of a large pool of loads and assets and monetises them in the energy markets in an optimised way.
- Demand response aggregators already use the simplest form and will aim for more automation, more monetisation and a wider base of assets and loads.
  - Variations by target market (commercial and industrial, or consumers?) and target megawatts (EVs, storage, building systems?).
  - Some will integrate all the way to owning assets, a more capital-intensive version of the same play.

Top Venture Capital Clean Technology Sectors, 2009

TECHNOLOGY SECTOR	AMOUNT INVESTED	% OF TOTAL
Solar	$1.2 billion	21%
Transportation (electric vehicles, advanced batteries, fuel cells)	$1.1 billion	20%
Energy efficiency	$1.0 billion	18%
Biofuels	$554 million	10%
Smart grid	$414 million	7%
Water	$117 million	2%

Source: Cleantech Group (cleantech.com).

Clean Technology VC Investment by Year

- North America, Europe and Israel, China, India:
- 2002: $908M (164 deals) · 2003: $1,260M (301 deals)
- 2004: $1,322M (333 deals) · 2005: $1,994M (381 deals)
- 2006: $4,519M (409 deals) · 2007: $6,053M (488 deals)
- 2008: $8,465M (567 deals) · 2009 (prelim.): $5,641M (557 deals)

2025–2026 UPDATE

Global climate-tech venture and growth investment reached $40.5B in 2025, up 8% (Sightline Climate; other trackers $38–49B).

Source: Cleantech Group (cleantech.com).

Five Largest Clean Technology Rounds, 2009

- **Solyndra** (USA) – thin-film solar (CIGS) – $198 million
- **A123 Systems** (USA) – advanced batteries – $100 million
- **Landis+Gyr** (Switzerland) – smart meters – $100 million
- **Silver Spring Networks** (USA) – smart grid – $100 million
- **V-Vehicle** (USA) – car maker – $100 million

2025–2026 UPDATE

Solyndra, the largest round of 2009, went bankrupt in 2011.

Source: Cleantech Group (cleantech.com).

References

- *Entrepreneurial Energy*, P. Wagner et al., Accel
- *Entrepreneurial Energy 2.0*, P. Wagner, Accel
- Cleantech Group press release, 6 January 2009: cleantech.com/about/pressreleases/20090106.cfm

16

Appendix

Guest speakers: entrepreneurs and investors from the Turkish technology ecosystem.

Guest Speakers

Entrepreneurs and investors who shared their experience as guest speakers in spring 2011. The bios that follow are as written at the time.

Guest speaker: Cemil Türün

- **Founder and CEO of Yogurtistan**
- Since 1995, he and his friends at Yogurt Technologies have built products and projects at the intersection of marketing, technology and design.
- A pioneer of web technologies in Turkey, he was behind many firsts: corporate site, advergame, SMS marketing campaign, 3D video game.
- Teaches his signature course "Cyberculture" at Istanbul universities.
- Since 2007 they have been building Yogurtistan, a browser-based 3D social network soon to launch.



Bio as of 2011.

Guest speaker: Bülent Kaytaz

- **Founder and CEO, Argela Technologies**
- Over 25 years in design, development, business development and leadership in telecommunications.
- Earlier, founder and managing director of Oksijen Technology (intelligent network infrastructure, service delivery and value-added service platforms for wireless and wireline networks); within three years it won strong regional growth and global visibility for Turkish telecoms.
- At Alcatel, he managed key communications and Internet software projects for 10 years in Belgium, Norway and Turkey.
- B.S. in electrical and electronics engineering, Marmara University; MIS degree and MBA, European University, Belgium.



Bio as of 2011.

Guest speaker: Tuğrul Tekbulut

- **Chairman of the Board, Logo**
- A founding member of LOGO; graduated in electrical engineering from Boğaziçi University (1980), master's from the same department (1983).
- In 1984 he and his friends founded the software venture now under Logo Group.
- Led many civil initiatives on IT, entrepreneurship and innovation: co-founded the Turkish Informatics Foundation and the Turkish Software Industrialists Association; founded TÜSİAD's Entrepreneurship and Innovation Working Group.
- Chaired TÜBİSAD (Informatics Industry Association) in 2006–2009; currently Chairman of Logo Group.



Bio as of 2011.

Guest speaker: Selçuk Atlı

- **Co-founder, iletken Technologies**
- Fulbright scholar and Internet entrepreneur. iletken builds smart systems that help online services recommend relevant products and content and personalise user experiences; founded in garage mode in 2009, now based in Maslak, Istanbul.
- Graduate studies in Semantic Web and Technology Commercialization at Rensselaer Polytechnic Institute (Fulbright); earlier master's studies at Politecnico di Milano.
- B.S. in Computer Science, graduated as valedictorian.
- Also a singer-songwriter with bands in Istanbul, Milan and New York: soundcloud.com/selcukatli.

Bio as of 2011.

Guest speaker: Mehtap Mae Özkan

- **Founder and Managing Partner, Golden Horn Ventures and TIMAR Ventures**, early- to expansion-stage VC firms in Turkey.
- Over 15 years of technology and startup experience; Chief Technologist, VP of Product Management and Chief Architect at several startups and software companies.
- Worked with Microsoft and Nokia on strategy, technology and product development (web services, enterprise security, connectivity, integration); evangelised technology for Microsoft in the US, Europe and South Africa.
- Investor and board member: Grou.ps, Yogurt, BeFunky, Soundklan, Yogurt 3D Engine, Livego.
- Speaker at Tech-Ed, Comdex and InternetWorld; co-author of the *Web Services Implementation Guide*.



Bio as of 2011.

Guest speaker: Cem Sertoğlu

- **Founder and Managing Partner, Young Turk Ventures**: investments in Grou.ps, YemekSepeti.com, Wikimart.ru, CivicSolar and Grupanya.
- Earlier, General Partner at iLab, Turkey's largest Internet investment firm: key to its minority stake in GittiGidiyor; co-founder and CEO of the Turkish social network Mondus.
- Before moving to Istanbul in 2005: co-founder (1999) and CEO of SelectMinds, a leading enterprise social networking provider; before that, VP of U.S. operations at Farmer & Co., a London strategy consultancy.
- Economics degree, University of Texas at Austin; published in Harvard Business Review; member of YPO Istanbul.



Bio as of 2011.

Guest speaker: Tümay Asena

- **Co-founder and CEO, Nokta Teknoloji**
- Graduated from Bilkent University in 1996 and completed the E-commerce and CIS programmes at UC Berkeley.
- In 2002 he founded Nokta İnternet Teknolojileri with five partners.
- Responsible for Nokta's business development in North America and the UK, he took over its Turkish media operations in 2006.
- Currently CEO of Nokta; 37 years old and married.



Bio as of 2011.

Guest speaker: Ziya Boyacıgiller

- **Investor, entrepreneur, mentor**: early-stage investments in technology start-ups in Silicon Valley and Istanbul (USA: Formative Ventures, Aeroprise, FusionOps; Turkey: AirTies, Artesis, Vistek).
- Consulting member of Endeavor Turkey and Inovent; teaches entrepreneurship to MBA students at Sabancı University; co-president of the National Innovation Initiative's Financing of Innovation group; founding member of Galata Business Angels.
- Founding partner of Maxim Integrated Products (1983–2000), rising to Business Unit VP/GM and helping build it past $1 billion in revenue.
- Earlier: mixed-signal CMOS design at Intersil, incl. the first digitally calibrated 14-bit data converters; founded E/Z CAD in the late 1970s.
- MSc in Engineering, UCLA; BSEE, Boğaziçi University. Mission: a world-class tech entrepreneurship environment in Turkey.



Bio as of 2011.

Guest speaker: Cem Soysal

- **CEO, Inventram**
- Began as an engineer in 1987; in 1992 Director of Information Systems in the US textile sector; from 1994 System Group Manager at the Istanbul Stock Exchange's information systems centre.
- 1997–2002: General Manager of Vestelnet, which he launched within Zorlu Holding; with creative marketing models such as VeezyGo it reached $74M in sales and became Turkey's second-largest ISP.
- 2003–2005: Group President at Teknoloji Holding; then Group President of portal and content companies at Doğan Holding.
- 2007: Country Manager of Fujitsu Siemens Computers Türkiye, growing revenue to $117M; 2010: General Manager of Inventram, founded within Koç Holding.
- Civil engineering, Istanbul Technical University; MS in Computer Science, Pace University; marketing management, Columbia University.



Bio as of 2011.

Term Sheet

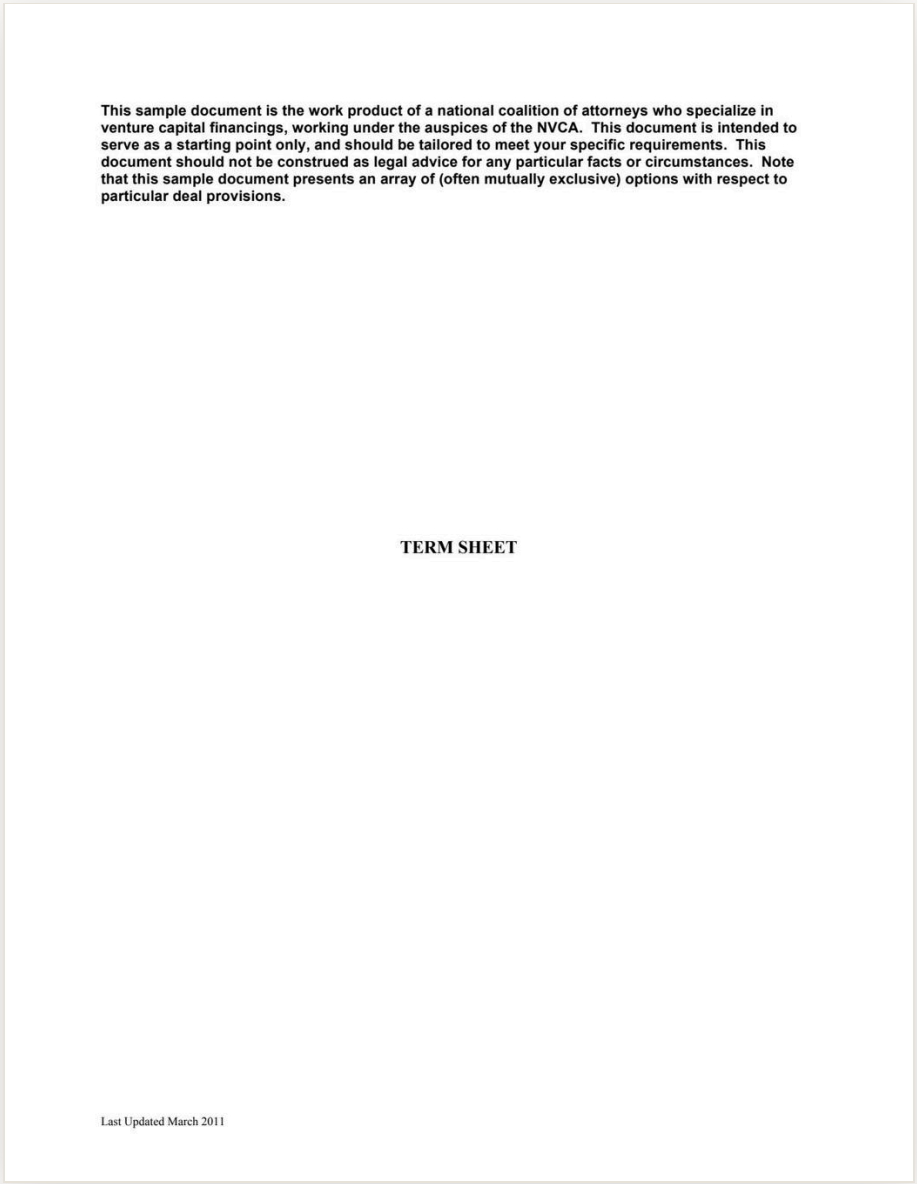
- Summary of the key terms of a Series A preferred stock financing: valuation, liquidation preference, dividends, conversion, anti-dilution, voting, board, investor rights.
- Mostly non-binding; it guides the lawyers who draft the definitive agreements.
- Exhibit A shows the pre- and post-financing capitalization table.

Original NVCA sample document, reproduced as published (2011). The current version is at nvca.org/model-legal-documents (updated October 2025).

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Term Sheet — Page 1 of 16

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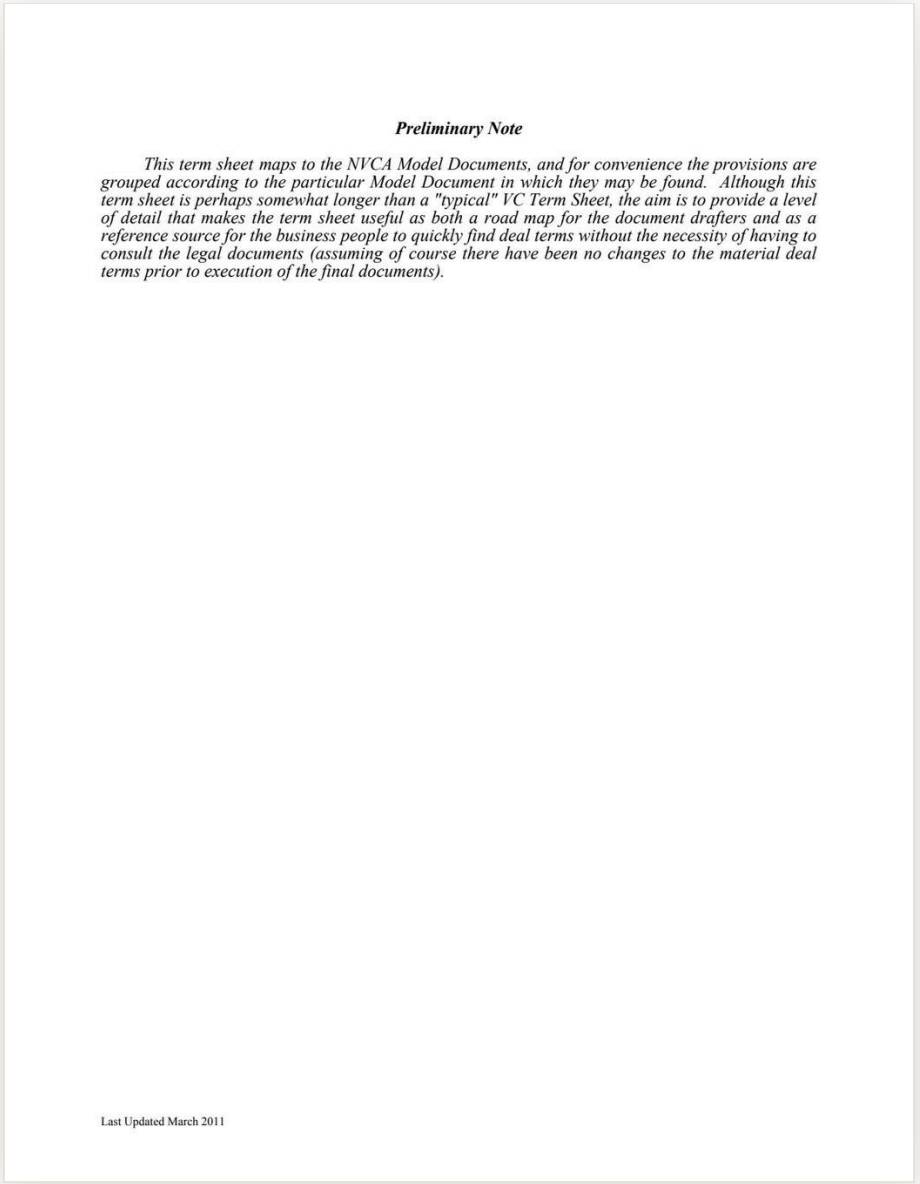
This sample document is the work product of a national coalition of attorneys who specialize in venture capital financings, working under the auspices of the NVCA. This document is intended to serve as a starting point only, and should be tailored to meet your specific requirements. This document should not be construed as legal advice for any particular facts or circumstances. Note that this sample document presents an array of (often mutually exclusive) options with respect to particular deal provisions.

TERM SHEET

Last Updated March 2011

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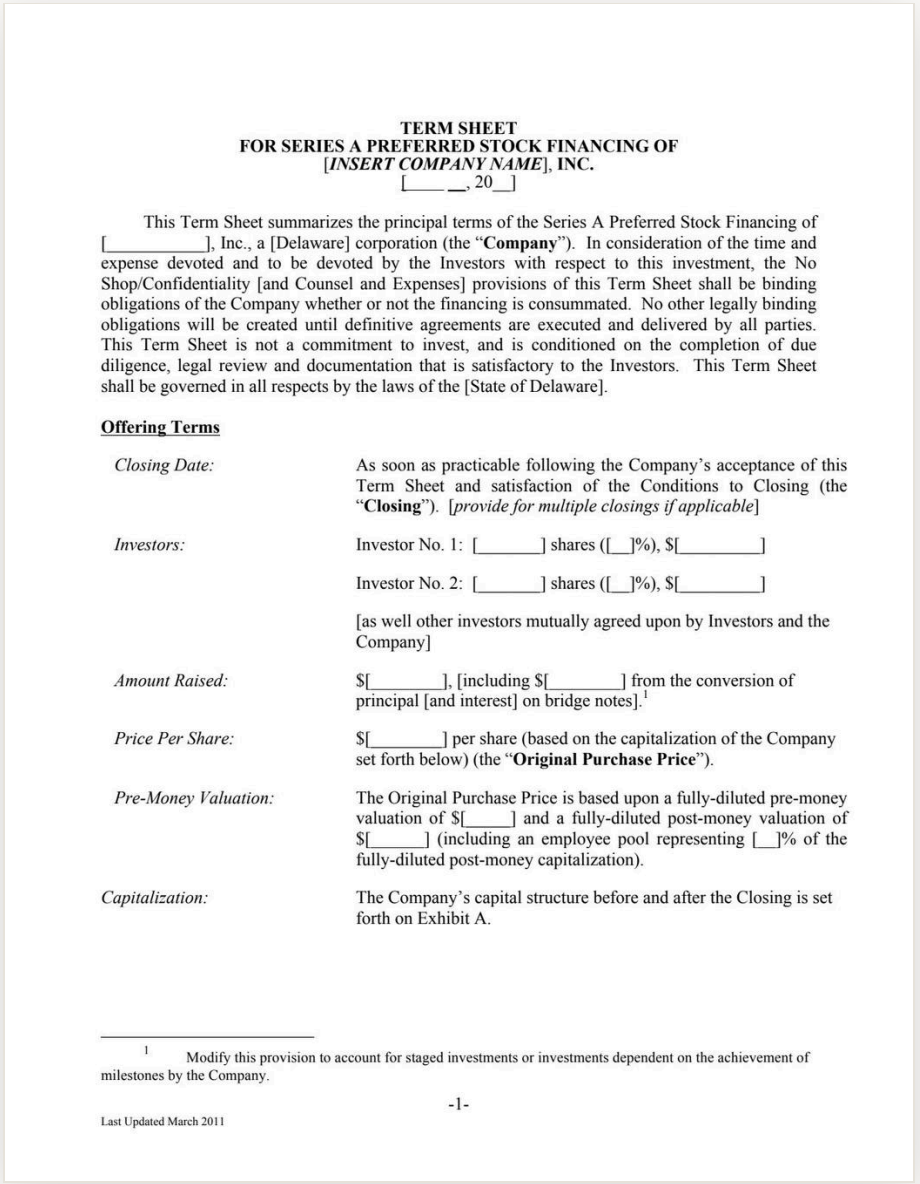
Preliminary Note

This term sheet maps to the NVCA Model Documents, and for convenience the provisions are grouped according to the particular Model Document in which they may be found. Although this term sheet is perhaps somewhat longer than a "typical" VC Term Sheet, the aim is to provide a level of detail that makes the term sheet useful as both a road map for the document drafters and as a reference source for the business people to quickly find deal terms without the necessity of having to consult the legal documents (assuming of course there have been no changes to the material deal terms prior to execution of the final documents).

Last Updated March 2011

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Term Sheet — Page 3 of 16



TERM SHEET
FOR SERIES A PREFERRED STOCK FINANCING OF
[*INSERT COMPANY NAME*], INC.
[____ __, 20__]

This Term Sheet summarizes the principal terms of the Series A Preferred Stock Financing of [_____], Inc., a [Delaware] corporation (the "**Company**"). In consideration of the time and expense devoted and to be devoted by the Investors with respect to this investment, the No Shop/Confidentiality [and Counsel and Expenses] provisions of this Term Sheet shall be binding obligations of the Company whether or not the financing is consummated. No other legally binding obligations will be created until definitive agreements are executed and delivered by all parties. This Term Sheet is not a commitment to invest, and is conditioned on the completion of due diligence, legal review and documentation that is satisfactory to the Investors. This Term Sheet shall be governed in all respects by the laws of the [State of Delaware].

Offering Terms

Closing Date:	As soon as practicable following the Company's acceptance of this Term Sheet and satisfaction of the Conditions to Closing (the "**Closing**"). [*provide for multiple closings if applicable*]
Investors:	Investor No. 1: [_____] shares ([__]%), $[_____] Investor No. 2: [_____] shares ([__]%), $[_____] [as well other investors mutually agreed upon by Investors and the Company]
Amount Raised:	$[_____], [including $[_____] from the conversion of principal [and interest] on bridge notes].[1]
Price Per Share:	$[_____] per share (based on the capitalization of the Company set forth below) (the "**Original Purchase Price**").
Pre-Money Valuation:	The Original Purchase Price is based upon a fully-diluted pre-money valuation of $[_____] and a fully-diluted post-money valuation of $[_____] (including an employee pool representing [__]% of the fully-diluted post-money capitalization).
Capitalization:	The Company's capital structure before and after the Closing is set forth on Exhibit A.

[1] Modify this provision to account for staged investments or investments dependent on the achievement of milestones by the Company.

-1-

Last Updated March 2011

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CHARTER[2]

Dividends:

[*Alternative 1:* Dividends will be paid on the Series A Preferred on an as-converted basis when, as, and if paid on the Common Stock]

[*Alternative 2:* The Series A Preferred will carry an annual [__]% cumulative dividend [payable upon a liquidation or redemption]. For any other dividends or distributions, participation with Common Stock on an as-converted basis.][3]

[*Alternative 3:* Non-cumulative dividends will be paid on the Series A Preferred in an amount equal to $[_____] per share of Series A Preferred when and if declared by the Board.]

Liquidation Preference:

In the event of any liquidation, dissolution or winding up of the Company, the proceeds shall be paid as follows:

[*Alternative 1 (non-participating Preferred Stock)*: First pay [one] times the Original Purchase Price [plus accrued dividends] [plus declared and unpaid dividends] on each share of Series A Preferred. The balance of any proceeds shall be distributed pro rata to holders of Common Stock.]

[*Alternative 2 (full participating Preferred Stock)*: First pay [one] times the Original Purchase Price [plus accrued dividends] [plus declared and unpaid dividends] on each share of Series A Preferred. Thereafter, the Series A Preferred participates with the Common Stock pro rata on an as-converted basis.]

[*Alternative 3 (cap on Preferred Stock participation rights)*: First pay [one] times the Original Purchase Price [plus accrued dividends] [plus declared and unpaid dividends] on each share of Series A Preferred. Thereafter, Series A Preferred participates with Common Stock pro rata on an as-converted basis until the holders of Series A Preferred receive an aggregate of [_____] times the Original Purchase Price (including the amount paid pursuant to the preceding sentence).]

A merger or consolidation (other than one in which stockholders of

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[2] The Charter (Certificate of Incorporation) is a public document, filed with the Secretary of State of the state in which the company is incorporated, that establishes all of the rights, preferences, privileges and restrictions of the Preferred Stock.

[3] In some cases, accrued and unpaid dividends are payable on conversion as well as upon a liquidation event. Most typically, however, dividends are not paid if the preferred is converted. Another alternative is to give the Company the option to pay accrued and unpaid dividends in cash or in common shares valued at fair market value. The latter are referred to as "PIK" (payment-in-kind) dividends.

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the Company own a majority by voting power of the outstanding shares of the surviving or acquiring corporation) and a sale, lease, transfer, exclusive license or other disposition of all or substantially all of the assets of the Company will be treated as a liquidation event (a "**Deemed Liquidation Event**"), thereby triggering payment of the liquidation preferences described above [unless the holders of [___]% of the Series A Preferred elect otherwise]. [The Investors' entitlement to their liquidation preference shall not be abrogated or diminished in the event part of the consideration is subject to escrow in connection with a Deemed Liquidation Event.][4]

Voting Rights: The Series A Preferred shall vote together with the Common Stock on an as-converted basis, and not as a separate class, except (i) [so long as [*insert fixed number, or %, or "any"*] shares of Series A Preferred are outstanding,] the Series A Preferred as a class shall be entitled to elect [_____] [(_)] members of the Board (the "**Series A Directors**"), and (ii) as required by law. The Company's Certificate of Incorporation will provide that the number of authorized shares of Common Stock may be increased or decreased with the approval of a majority of the Preferred and Common Stock, voting together as a single class, and without a separate class vote by the Common Stock.[5]

Protective Provisions: [So long as [*insert fixed number, or %, or "any"*] shares of Series A Preferred are outstanding,] in addition to any other vote or approval required under the Company's Charter or By-laws, the Company will not, without the written consent of the holders of at least [__]% of the Company's Series A Preferred, either directly or by amendment, merger, consolidation, or otherwise:

(i) liquidate, dissolve or wind-up the affairs of the Company, or effect any merger or consolidation or any other Deemed Liquidation Event; (ii) amend, alter, or repeal any provision of the Certificate of Incorporation or Bylaws [in a manner adverse to the Series A Preferred];[6] (iii) create or authorize the creation of or issue any other security convertible into or exercisable for any equity security, having rights, preferences or privileges senior to or on parity with the Series A Preferred, or increase the

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[4] See Subsection 2.3.4 of the Model Certificate of Incorporation and the detailed explanation in related footnote 25.

[5] For corporations incorporated in California, one cannot "opt out" of the statutory requirement of a separate class vote by Common Stockholders to authorize shares of Common Stock. The purpose of this provision is to "opt out" of DGL 242(b)(2).

[6] Note that as a matter of background law, Section 242(b)(2) of the Delaware General Corporation Law provides that if any proposed charter amendment would adversely alter the rights, preferences and powers of one series of Preferred Stock, but not similarly adversely alter the entire class of all Preferred Stock, then the holders of that series are entitled to a separate series vote on the amendment.

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authorized number of shares of Series A Preferred; (iv) purchase or redeem or pay any dividend on any capital stock prior to the Series A Preferred, [other than stock repurchased from former employees or consultants in connection with the cessation of their employment/services, at the lower of fair market value or cost;] [other than as approved by the Board, including the approval of [_____] Series A Director(s)]; or (v) create or authorize the creation of any debt security [if the Company's aggregate indebtedness would exceed $[_____][other than equipment leases or bank lines of credit][unless such debt security has received the prior approval of the Board of Directors, including the approval of [_____] Series A Director(s)]; (vi) create or hold capital stock in any subsidiary that is not a wholly-owned subsidiary or dispose of any subsidiary stock or all or substantially all of any subsidiary assets; [or (vii) increase or decrease the size of the Board of Directors].[7]

Optional Conversion: The Series A Preferred initially converts 1:1 to Common Stock at any time at option of holder, subject to adjustments for stock dividends, splits, combinations and similar events and as described below under "Anti-dilution Provisions."

Anti-dilution Provisions: In the event that the Company issues additional securities at a purchase price less than the current Series A Preferred conversion price, such conversion price shall be adjusted in accordance with the following formula:

[*Alternative 1:* "Typical" weighted average:

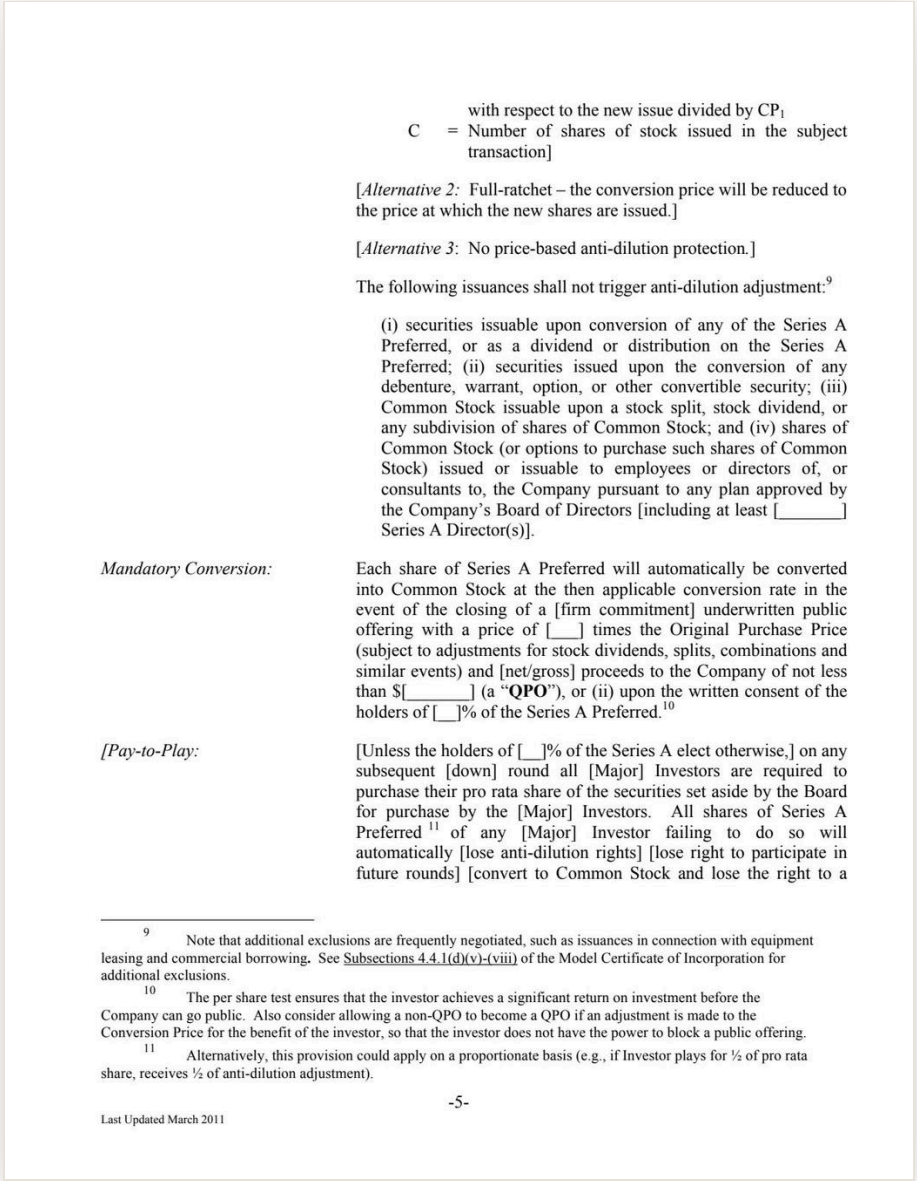
$$CP_2 = CP_1 * (A+B) / (A+C)$$

CP_2 = Series A Conversion Price in effect immediately after new issue
CP_1 = Series A Conversion Price in effect immediately prior to new issue
A = Number of shares of Common Stock deemed to be outstanding immediately prior to new issue (includes all shares of outstanding common stock, all shares of outstanding preferred stock on an as-converted basis, and all outstanding options on an as-exercised basis; and does not include any convertible securities converting into this round of financing)[8]
B = Aggregate consideration received by the Corporation

[7] The board size provision may also be addressed in the Voting Agreement; see Section 1.1 of the Model Voting Agreement.
[8] The "broadest" base would include shares reserved in the option pool.

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with respect to the new issue divided by CP_1

C = Number of shares of stock issued in the subject transaction]

[*Alternative 2:* Full-ratchet – the conversion price will be reduced to the price at which the new shares are issued.]

[*Alternative 3*: No price-based anti-dilution protection.]

The following issuances shall not trigger anti-dilution adjustment:[9]

(i) securities issuable upon conversion of any of the Series A Preferred, or as a dividend or distribution on the Series A Preferred; (ii) securities issued upon the conversion of any debenture, warrant, option, or other convertible security; (iii) Common Stock issuable upon a stock split, stock dividend, or any subdivision of shares of Common Stock; and (iv) shares of Common Stock (or options to purchase such shares of Common Stock) issued or issuable to employees or directors of, or consultants to, the Company pursuant to any plan approved by the Company's Board of Directors [including at least [_____] Series A Director(s)].

Mandatory Conversion: Each share of Series A Preferred will automatically be converted into Common Stock at the then applicable conversion rate in the event of the closing of a [firm commitment] underwritten public offering with a price of [___] times the Original Purchase Price (subject to adjustments for stock dividends, splits, combinations and similar events) and [net/gross] proceeds to the Company of not less than $[_____] (a "**QPO**"), or (ii) upon the written consent of the holders of [__]% of the Series A Preferred.[10]

[Pay-to-Play: [Unless the holders of [__]% of the Series A elect otherwise,] on any subsequent [down] round all [Major] Investors are required to purchase their pro rata share of the securities set aside by the Board for purchase by the [Major] Investors. All shares of Series A Preferred [11] of any [Major] Investor failing to do so will automatically [lose anti-dilution rights] [lose right to participate in future rounds] [convert to Common Stock and lose the right to a

[9] Note that additional exclusions are frequently negotiated, such as issuances in connection with equipment leasing and commercial borrowing. See Subsections 4.4.1(d)(v)-(viii) of the Model Certificate of Incorporation for additional exclusions.

[10] The per share test ensures that the investor achieves a significant return on investment before the Company can go public. Also consider allowing a non-QPO to become a QPO if an adjustment is made to the Conversion Price for the benefit of the investor, so that the investor does not have the power to block a public offering.

[11] Alternatively, this provision could apply on a proportionate basis (e.g., if Investor plays for ½ of pro rata share, receives ½ of anti-dilution adjustment).

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Board seat if applicable].[12]

Redemption Rights:[13] Unless prohibited by Delaware law governing distributions to stockholders, the Series A Preferred shall be redeemable at the option of holders of at least [__]% of the Series A Preferred commencing any time after [_____] at a price equal to the Original Purchase Price [plus all accrued but unpaid dividends]. Redemption shall occur in three equal annual portions. Upon a redemption request from the holders of the required percentage of the Series A Preferred, all Series A Preferred shares shall be redeemed [(except for any Series A holders who affirmatively opt-out)].[14]

STOCK PURCHASE AGREEMENT

Representations and Warranties: Standard representations and warranties by the Company. [Representations and warranties by Founders regarding [technology ownership, etc.].[15]

Conditions to Closing: Standard conditions to Closing, which shall include, among other things, satisfactory completion of financial and legal due diligence, qualification of the shares under applicable Blue Sky laws, the filing of a Certificate of Incorporation establishing the rights and

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[12] If the punishment for failure to participate is losing some but not all rights of the Preferred (e.g., anything other than a forced conversion to common), the Certificate of Incorporation will need to have so-called "blank check preferred" provisions at least to the extent necessary to enable the Board to issue a "shadow" class of preferred with diminished rights in the event an investor fails to participate. Because these provisions flow through the charter, an alternative Model Certificate of Incorporation with "pay-to-play lite" provisions (e.g., shadow Preferred) has been posted. As a drafting matter, it is far easier to simply have (some or all of) the preferred convert to common.

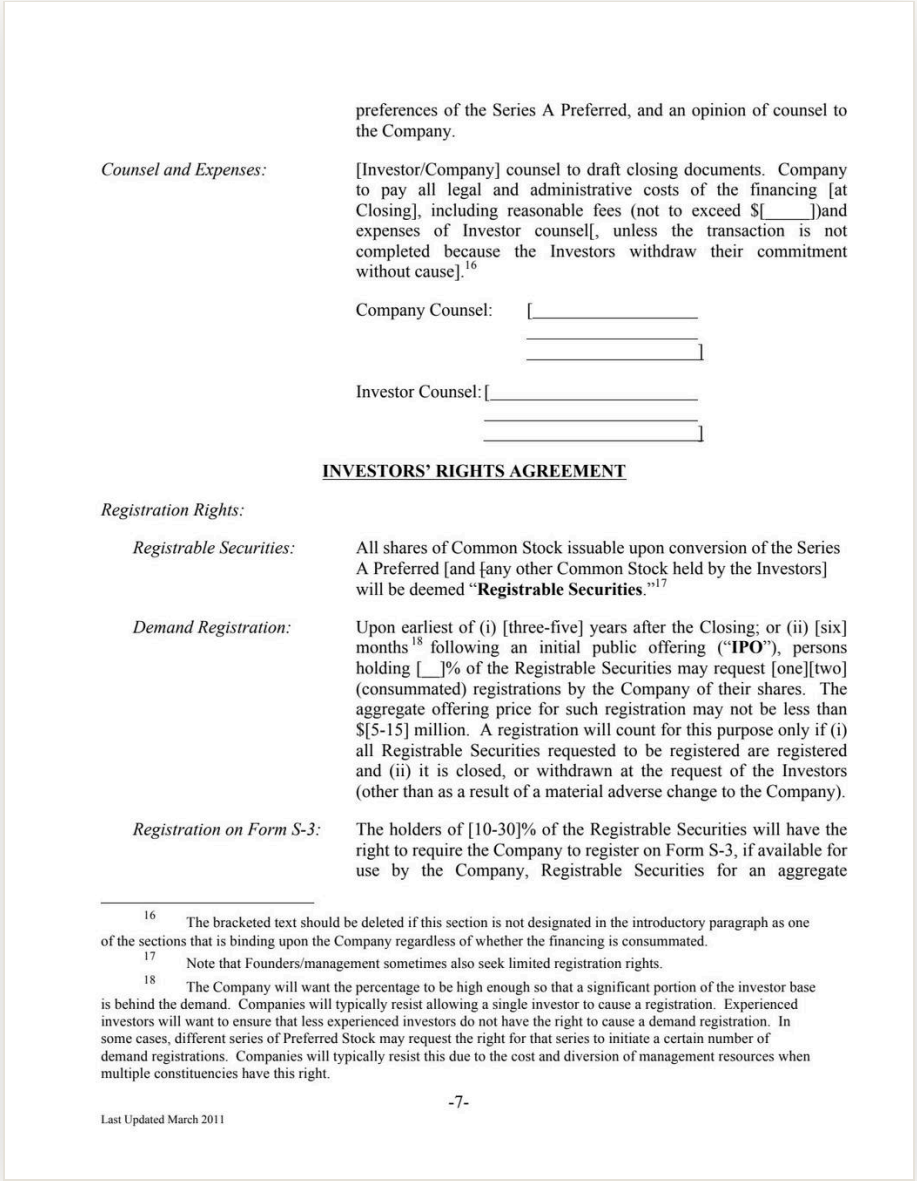
[13] Redemption rights allow Investors to force the Company to redeem their shares at cost (and sometimes investors may also request a small guaranteed rate of return, in the form of a dividend). In practice, redemption rights are not often used; however, they do provide a form of exit and some possible leverage over the Company. While it is possible that the right to receive dividends on redemption could give rise to a Code Section 305 "deemed dividend" problem, many tax practitioners take the view that if the liquidation preference provisions in the Charter are drafted to provide that, on conversion, the holder receives the greater of its liquidation preference or its as-converted amount (as provided in the Model Certificate of Incorporation), then there is no Section 305 issue.

[14] Due to statutory restrictions, the Company may not be legally permitted to redeem in the very circumstances where investors most want it (the so-called "sideways situation"). Accordingly, and particulary in light of the Delaware Chancery Court's ruling in *Thoughtworks (*see discussion in Model Charter*),* investors may seek enforcement provisions to give their redemption rights more teeth - - e.g., the redemption amount shall be paid in the form of a one-year note to each unredeemed holder of Series A Preferred, and the holders of a majority of the Series A Preferred shall be entitled to elect a majority of the Company's Board of Directors until such amounts are paid in full.

[15] Founders' representations are controversial and may elicit significant resistance as they are found in a minority of venture deals. They are more likely to appear if Founders are receiving liquidity from the transaction, or if there is heightened concern over intellectual property (e.g., the Company is a spin-out from an academic institution or the Founder was formerly with another company whose business could be deemed competitive with the Company), or in international deals. Founders' representations are even less common in subsequent rounds, where risk is viewed as significantly diminished and fairly shared by the investors, rather than being disproportionately borne by the Founders. A sample set of Founders Representations is attached as an Addendum at the end of the Model Stock Purchase Agreement.

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preferences of the Series A Preferred, and an opinion of counsel to the Company.

Counsel and Expenses: [Investor/Company] counsel to draft closing documents. Company to pay all legal and administrative costs of the financing [at Closing], including reasonable fees (not to exceed $[_____])and expenses of Investor counsel[, unless the transaction is not completed because the Investors withdraw their commitment without cause].[16]

Company Counsel: [_____
_____
_____]

Investor Counsel: [_____
_____
_____]

INVESTORS' RIGHTS AGREEMENT

Registration Rights:

Registrable Securities: All shares of Common Stock issuable upon conversion of the Series A Preferred [and [any other Common Stock held by the Investors] will be deemed "**Registrable Securities**."[17]

Demand Registration: Upon earliest of (i) [three-five] years after the Closing; or (ii) [six] months[18] following an initial public offering ("**IPO**"), persons holding [__]% of the Registrable Securities may request [one][two] (consummated) registrations by the Company of their shares. The aggregate offering price for such registration may not be less than $[5-15] million. A registration will count for this purpose only if (i) all Registrable Securities requested to be registered are registered and (ii) it is closed, or withdrawn at the request of the Investors (other than as a result of a material adverse change to the Company).

Registration on Form S-3: The holders of [10-30]% of the Registrable Securities will have the right to require the Company to register on Form S-3, if available for use by the Company, Registrable Securities for an aggregate

[16] The bracketed text should be deleted if this section is not designated in the introductory paragraph as one of the sections that is binding upon the Company regardless of whether the financing is consummated.

[17] Note that Founders/management sometimes also seek limited registration rights.

[18] The Company will want the percentage to be high enough so that a significant portion of the investor base is behind the demand. Companies will typically resist allowing a single investor to cause a registration. Experienced investors will want to ensure that less experienced investors do not have the right to cause a demand registration. In some cases, different series of Preferred Stock may request the right for that series to initiate a certain number of demand registrations. Companies will typically resist this due to the cost and diversion of management resources when multiple constituencies have this right.

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	offering price of at least $[1-5 million]. There will be no limit on the aggregate number of such Form S-3 registrations, provided that there are no more than [two] per year.
Piggyback Registration:	The holders of Registrable Securities will be entitled to "piggyback" registration rights on all registration statements of the Company, subject to the right, however, of the Company and its underwriters to reduce the number of shares proposed to be registered to a minimum of [20-30]% on a pro rata basis and to complete reduction on an IPO at the underwriter's discretion. In all events, the shares to be registered by holders of Registrable Securities will be reduced only after all other stockholders' shares are reduced.
Expenses:	The registration expenses (exclusive of stock transfer taxes, underwriting discounts and commissions will be borne by the Company. The Company will also pay the reasonable fees and expenses[, not to exceed $_____,] of one special counsel to represent all the participating stockholders.
Lock-up:	Investors shall agree in connection with the IPO, if requested by the managing underwriter, not to sell or transfer any shares of Common Stock of the Company [(including/excluding shares acquired in or following the IPO)] for a period of up to 180 days [plus up to an additional 18 days to the extent necessary to comply with applicable regulatory requirements][19] following the IPO (provided all directors and officers of the Company [and [1 – 5]% stockholders] agree to the same lock-up). [Such lock-up agreement shall provide that any discretionary waiver or termination of the restrictions of such agreements by the Company or representatives of the underwriters shall apply to Investors, pro rata, based on the number of shares held.
Termination:	Upon a Deemed Liquidation Event, [and/or] when all shares of an Investor are eligible to be sold without restriction under Rule 144 [and/or] the [____] anniversary of the IPO. No future registration rights may be granted without consent of the holders of a [majority] of the Registrable Securities unless subordinate to the Investor's rights.
Management and Information Rights:	A Management Rights letter from the Company, in a form reasonably acceptable to the Investors, will be delivered prior to Closing to each Investor that requests one.[20]

[19] See commentary in footnotes 23 and 24 of the Model Investors' Rights Agreement regarding possible extensions of lock-up period.

[20] See commentary in introduction to Model Managements Rights Letter, explaining purpose of such letter.

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Any [Major] Investor [(who is not a competitor)] will be granted access to Company facilities and personnel during normal business hours and with reasonable advance notification. The Company will deliver to such Major Investor (i) annual, quarterly, [and monthly] financial statements, and other information as determined by the Board; (ii) thirty days prior to the end of each fiscal year, a comprehensive operating budget forecasting the Company's revenues, expenses, and cash position on a month-to-month basis for the upcoming fiscal year[; and (iii) promptly following the end of each quarter an up-to-date capitalization table. A "Major Investor" means any Investor who purchases at least $[_____] of Series A Preferred.

Right to Participate Pro Rata in Future Rounds: All [Major] Investors shall have a pro rata right, based on their percentage equity ownership in the Company (assuming the conversion of all outstanding Preferred Stock into Common Stock and the exercise of all options outstanding under the Company's stock plans), to participate in subsequent issuances of equity securities of the Company (excluding those issuances listed at the end of the "Anti-dilution Provisions" section of this Term Sheet. In addition, should any [Major] Investor choose not to purchase its full pro rata share, the remaining [Major] Investors shall have the right to purchase the remaining pro rata shares.

Matters Requiring Investor Director Approval: [So long as the holders of Series A Preferred are entitled to elect a Series A Director, the Company will not, without Board approval, which approval must include the affirmative vote of [one/both] of the Series A Director(s):

(i) make any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company; (ii) make any loan or advance to any person, including, any employee or director, except advances and similar expenditures in the ordinary course of business or under the terms of a employee stock or option plan approved by the Board of Directors; (iii) guarantee~~,~~ any indebtedness except for trade accounts of the Company or any subsidiary arising in the ordinary course of business; (iv) make any investment inconsistent with any investment policy approved by the Board**;** (v) incur any aggregate indebtedness in excess of $[_____] that is not already included in a Board-approved budget, other than trade credit incurred in the ordinary course of business; (vi) enter into or be a party to any transaction with any director, officer or employee of the Company or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such person [except transactions resulting in payments to or by the Company in an amount less than $[60,000] per year], [or transactions made

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in the ordinary course of business and pursuant to reasonable requirements of the Company's business and upon fair and reasonable terms that are approved by a majority of the Board of Directors];[21] (vii) hire, fire, or change the compensation of the executive officers, including approving any option grants; (viii) change the principal business of the Company, enter new lines of business, or exit the current line of business; (ix) sell, assign, license, pledge or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business; or (x) enter into any corporate strategic relationship involving the payment contribution or assignment by the Company or to the Company of assets greater than [$100,000.00].

Non-Competition and Non-Solicitation Agreements:[22]	Each Founder and key employee will enter into a [one] year non-competition and non-solicitation agreement in a form reasonably acceptable to the Investors.
Non-Disclosure and Developments Agreement:	Each current and former Founder, employee and consultant will enter into a non-disclosure and proprietary rights assignment agreement in a form reasonably acceptable to the Investors.
Board Matters:	[Each Board Committee shall include at least one Series A Director.]
	The Board of Directors shall meet at least [monthly][quarterly], unless otherwise agreed by a vote of the majority of Directors.
	The Company will bind D&O insurance with a carrier and in an amount satisfactory to the Board of Directors. Company to enter into Indemnification Agreement with each Series A Director [and affiliated funds] in form acceptable to such director. In the event the Company merges with another entity and is not the surviving corporation, or transfers all of its assets, proper provisions shall be made so that successors of the Company assume the Company's obligations with respect to indemnification of Directors.

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[21] Note that Section 402 of the Sarbanes-Oxley Act of 2003 would require repayment of any loans in full prior to the Company filing a registration statement for an IPO.

[22] Note that non-compete restrictions (other than in connection with the sale of a business) are prohibited in California, and may not be enforceable in other jurisdictions, as well. In addition, some investors do not require such agreements for fear that employees will request additional consideration in exchange for signing a Non-Compete/Non-Solicit (and indeed the agreement may arguably be invalid absent such additional consideration - - although having an employee sign a non-compete contemporaneous with hiring constitutes adequate consideration in jurisdictions where non-competes are generally enforceable). Others take the view that it should be up to the Board on a case-by-case basis to determine whether any particular key employee is required to sign such an agreement. Non-competes typically have a one year duration, although state law may permit up to two years.

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Employee Stock Options:	All employee options to vest as follows: [25% after one year, with remaining vesting monthly over next 36 months]. [Immediately prior to the Series A Preferred Stock investment, [_____] shares will be added to the option pool creating an unallocated option pool of [_____] shares.]
Key Person Insurance:	Company to acquire life insurance on Founders [*name each Founder*] in an amount satisfactory to the Board. Proceeds payable to the Company.

RIGHT OF FIRST REFUSAL/CO-SALE AGREEMENT

Right of first Refusal/ Right of Co-Sale (Take-me-Along):	Company first and Investors second (to the extent assigned by the Board of Directors,) will have a right of first refusal with respect to any shares of capital stock of the Company proposed to be transferred by Founders [and future employees holding greater than [1]% of Company Common Stock (assuming conversion of Preferred Stock and whether then held or subject to the exercise of options)], with a right of oversubscription for Investors of shares unsubscribed by the other Investors. Before any such person may sell Common Stock, he will give the Investors an opportunity to participate in such sale on a basis proportionate to the amount of securities held by the seller and those held by the participating Investors.[23]

VOTING AGREEMENT

Board of Directors:	At the initial Closing, the Board shall consist of [_____] members comprised of (i) [*Name*] as [the representative designated by [____], as the lead Investor, (ii) [*Name*] as the representative designated by the remaining Investors, (iii) [*Name*] as the representative designated by the Founders, (iv) the person then serving as the Chief Executive Officer of the Company, and (v) [___] person(s) who are not employed by the Company and who are mutually acceptable [to the Founders and Investors][to the other directors].
[*DragAlong:*	Holders of Preferred Stock and the Founders [and all future holders of greater than [1]% of Common Stock (assuming conversion of Preferred Stock and whether then held or subject to the exercise of options)] shall be required to enter into an agreement with the Investors that provides that such stockholders will vote their shares in favor of a Deemed Liquidation Event or transaction in which 50% or more of the voting power of the Company is transferred and which is approved by [the Board of Directors] [and the holders of

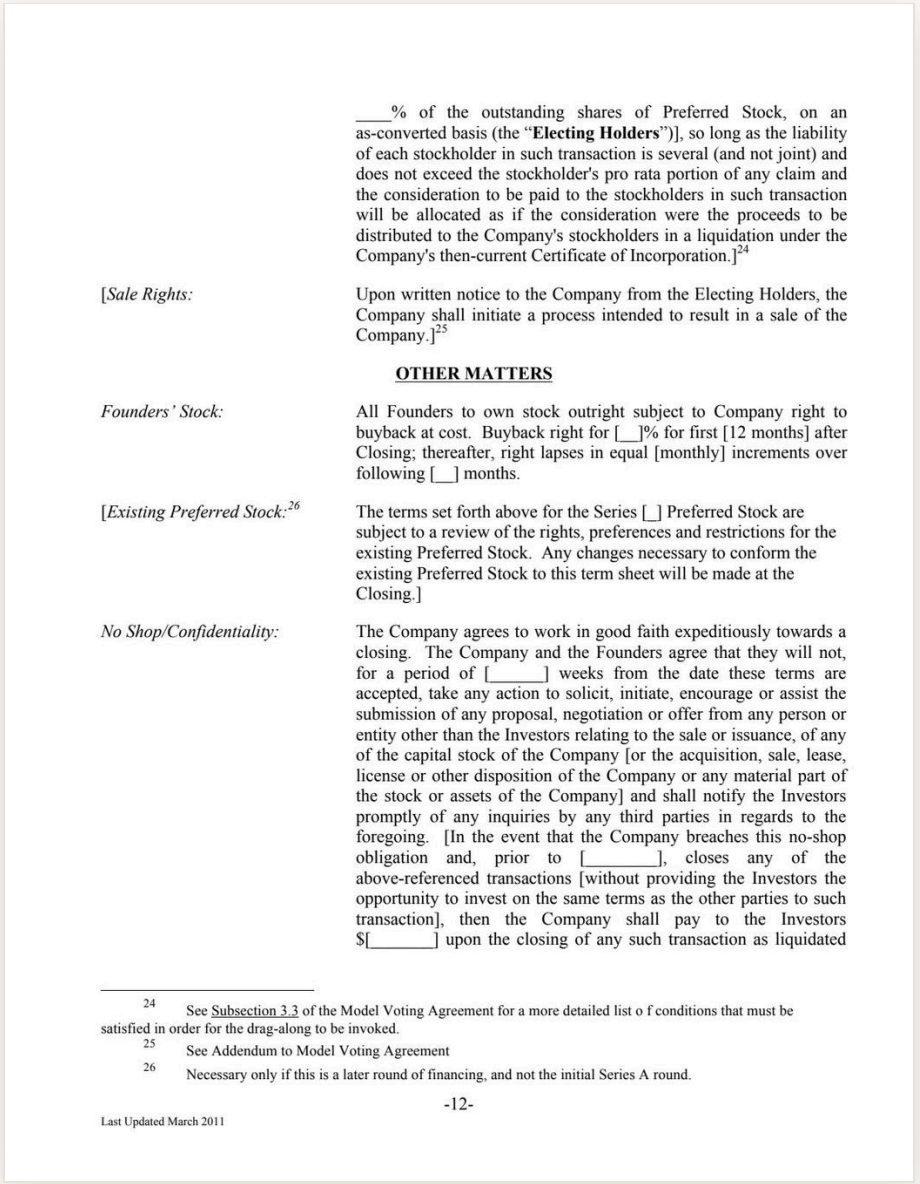
[23] Certain exceptions are typically negotiated, e.g., estate planning or *de minimis* transfers. Investors may also seek ROFR rights with respect to transfers by investors, in order to be able to have some control over the composition of the investor group.

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____% of the outstanding shares of Preferred Stock, on an as-converted basis (the "**Electing Holders**")], so long as the liability of each stockholder in such transaction is several (and not joint) and does not exceed the stockholder's pro rata portion of any claim and the consideration to be paid to the stockholders in such transaction will be allocated as if the consideration were the proceeds to be distributed to the Company's stockholders in a liquidation under the Company's then-current Certificate of Incorporation.][24]

[*Sale Rights:* Upon written notice to the Company from the Electing Holders, the Company shall initiate a process intended to result in a sale of the Company.][25]

OTHER MATTERS

Founders' Stock: All Founders to own stock outright subject to Company right to buyback at cost. Buyback right for [__]% for first [12 months] after Closing; thereafter, right lapses in equal [monthly] increments over following [__] months.

[*Existing Preferred Stock:*[26] The terms set forth above for the Series [_] Preferred Stock are subject to a review of the rights, preferences and restrictions for the existing Preferred Stock. Any changes necessary to conform the existing Preferred Stock to this term sheet will be made at the Closing.]

No Shop/Confidentiality: The Company agrees to work in good faith expeditiously towards a closing. The Company and the Founders agree that they will not, for a period of [_____] weeks from the date these terms are accepted, take any action to solicit, initiate, encourage or assist the submission of any proposal, negotiation or offer from any person or entity other than the Investors relating to the sale or issuance, of any of the capital stock of the Company [or the acquisition, sale, lease, license or other disposition of the Company or any material part of the stock or assets of the Company] and shall notify the Investors promptly of any inquiries by any third parties in regards to the foregoing. [In the event that the Company breaches this no-shop obligation and, prior to [_____], closes any of the above-referenced transactions [without providing the Investors the opportunity to invest on the same terms as the other parties to such transaction], then the Company shall pay to the Investors $[_____] upon the closing of any such transaction as liquidated

[24] See Subsection 3.3 of the Model Voting Agreement for a more detailed list o f conditions that must be satisfied in order for the drag-along to be invoked.

[25] See Addendum to Model Voting Agreement

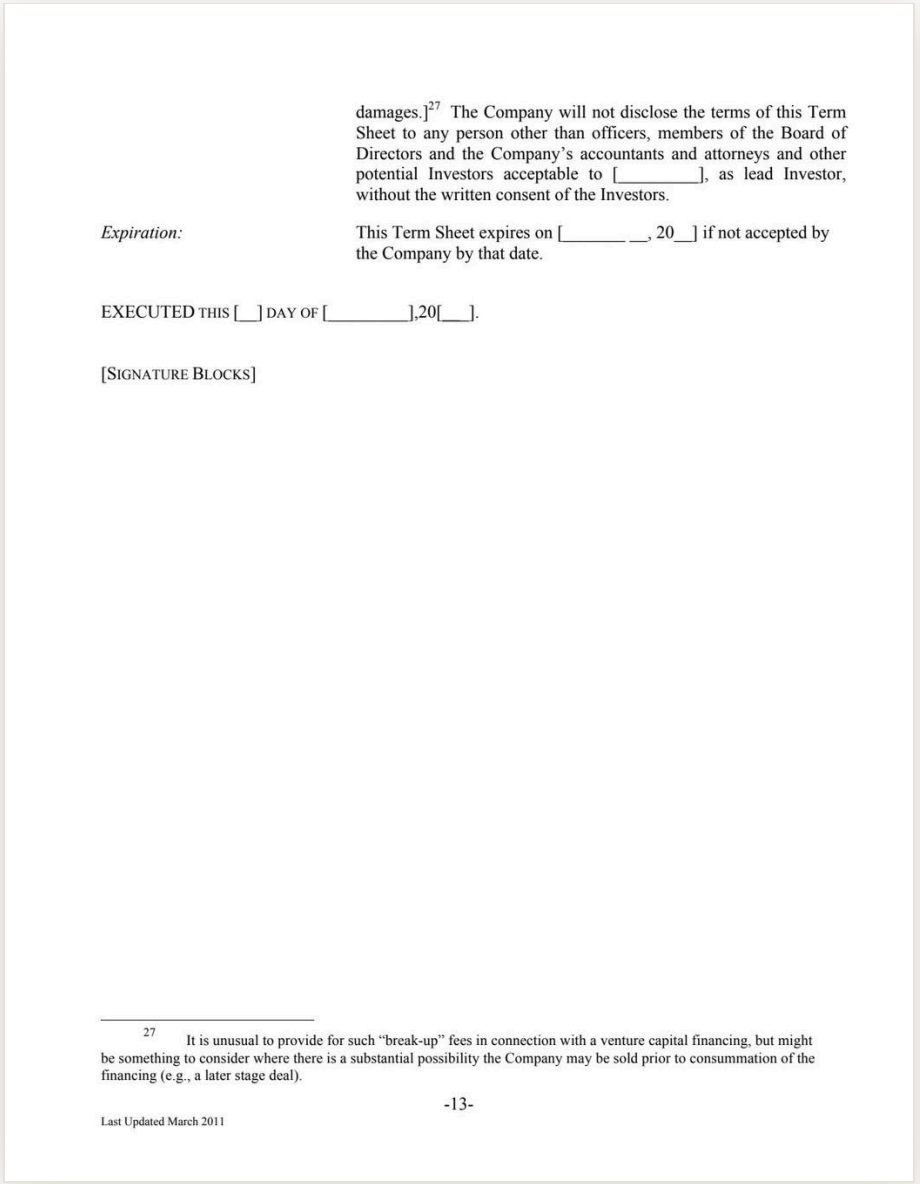
[26] Necessary only if this is a later round of financing, and not the initial Series A round.

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damages.][27] The Company will not disclose the terms of this Term Sheet to any person other than officers, members of the Board of Directors and the Company's accountants and attorneys and other potential Investors acceptable to [_____], as lead Investor, without the written consent of the Investors.

Expiration: This Term Sheet expires on [_____ __, 20__] if not accepted by the Company by that date.

EXECUTED THIS [__] DAY OF [_____],20[___].

[SIGNATURE BLOCKS]

[27] It is unusual to provide for such "break-up" fees in connection with a venture capital financing, but might be something to consider where there is a substantial possibility the Company may be sold prior to consummation of the financing (e.g., a later stage deal).

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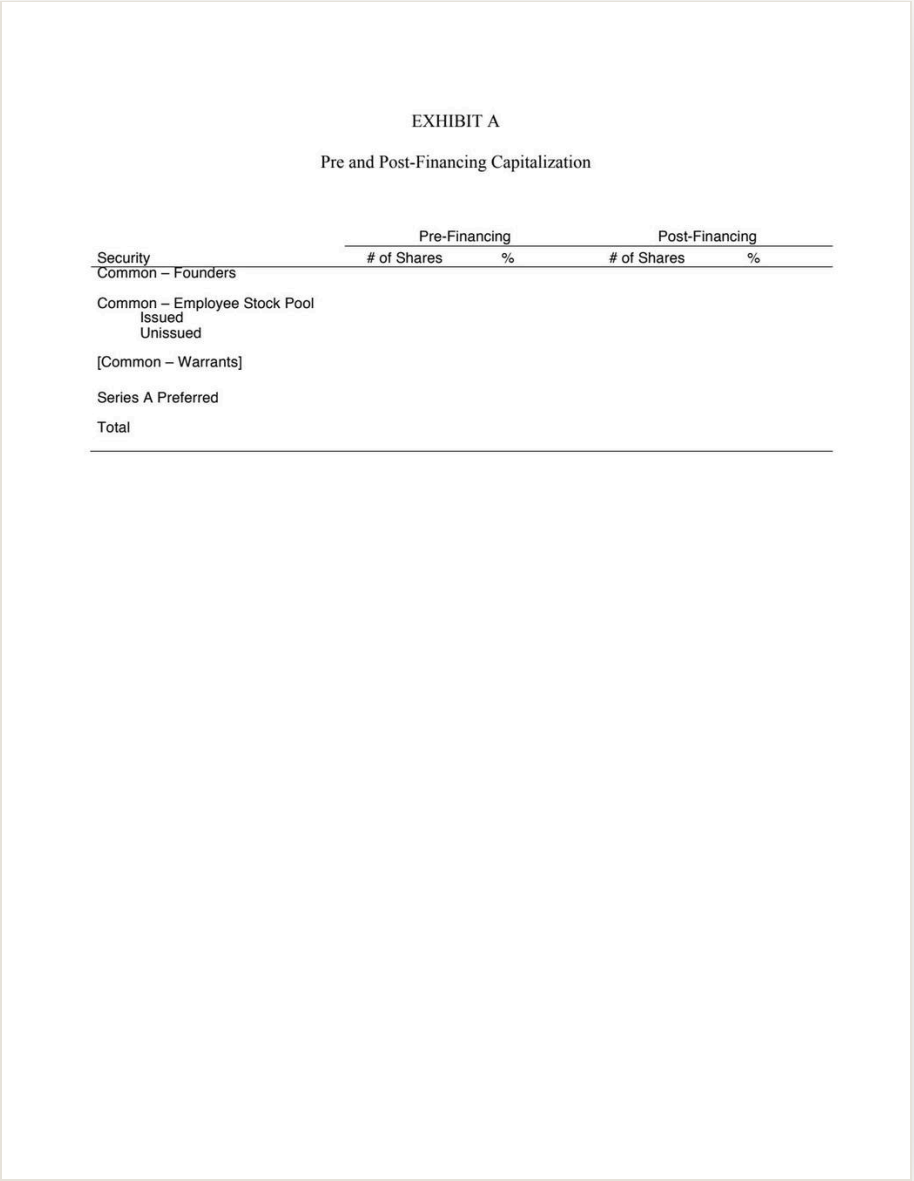


EXHIBIT A

Pre and Post-Financing Capitalization

	Pre-Financing		Post-Financing	
Security	# of Shares	%	# of Shares	%
Common – Founders				
Common – Employee Stock Pool				
Issued				
Unissued				
[Common – Warrants]				
Series A Preferred				
Total				

Stock Purchase Agreement

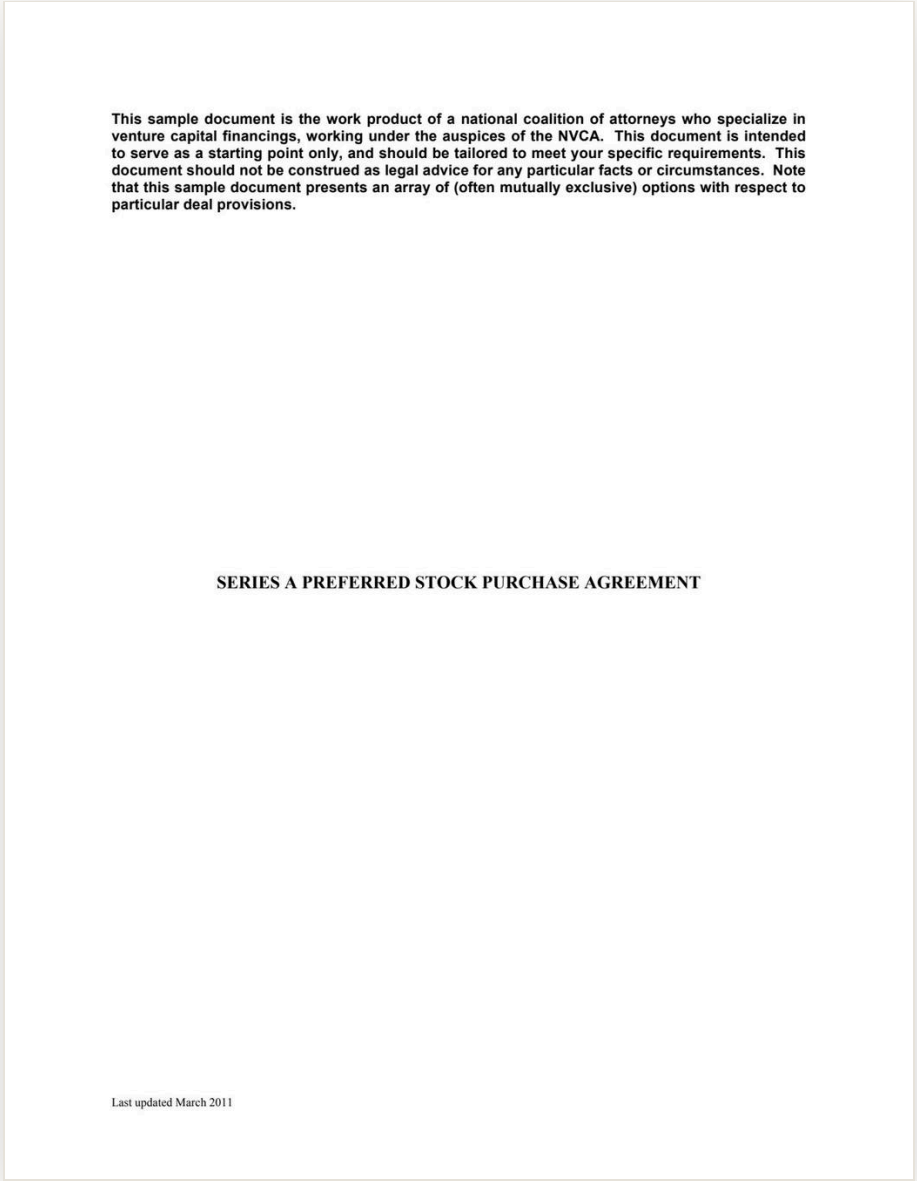
- The agreement under which investors buy the Series A shares: price, closing mechanics, the company's representations and warranties, investors' representations, conditions to closing.
- Schedules and exhibits list the capitalization, disclosures and related agreements.

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SERIES A PREFERRED STOCK PURCHASE AGREEMENT

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Preliminary Note

The Stock Purchase Agreement sets forth the basic terms of the purchase and sale of the preferred stock to the investors (such as the purchase price, closing date, conditions to closing) and identifies the other financing documents. Generally this agreement does not set forth either (1) the characteristics of the stock being sold (which are defined in the Certificate of Incorporation) or (2) the relationship among the parties after the closing, such as registration rights, rights of first refusal and co-sale, voting arrangements (these matters often implicate other persons than just the Company and the investors in this round of financing, and are usually embodied in separate agreements to which those others persons are parties, or in some cases by the Certificate of Incorporation). The main items of negotiation in the Stock Purchase Agreement are therefore the price and number of shares being sold, and the representations and warranties that the Company, and sometimes the Founders as well, must make to the investors.

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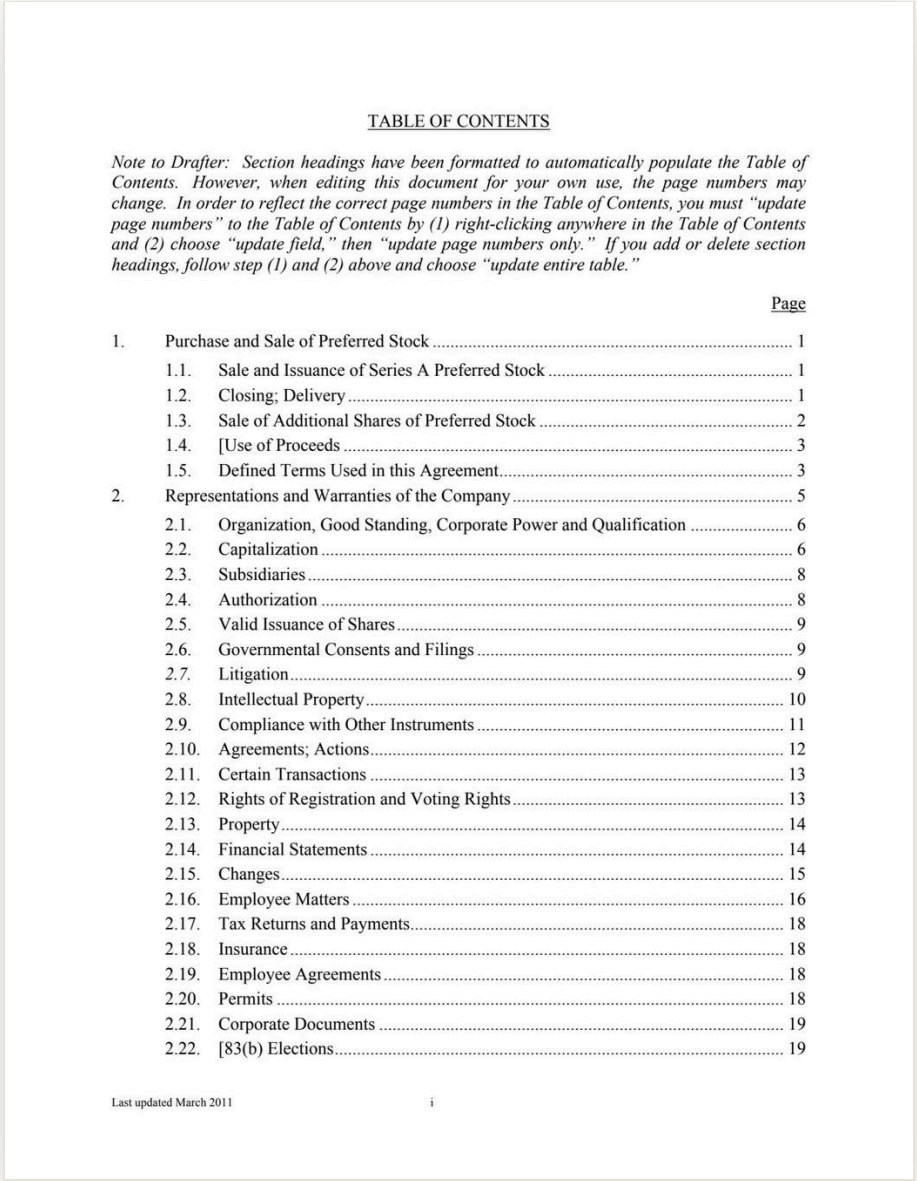


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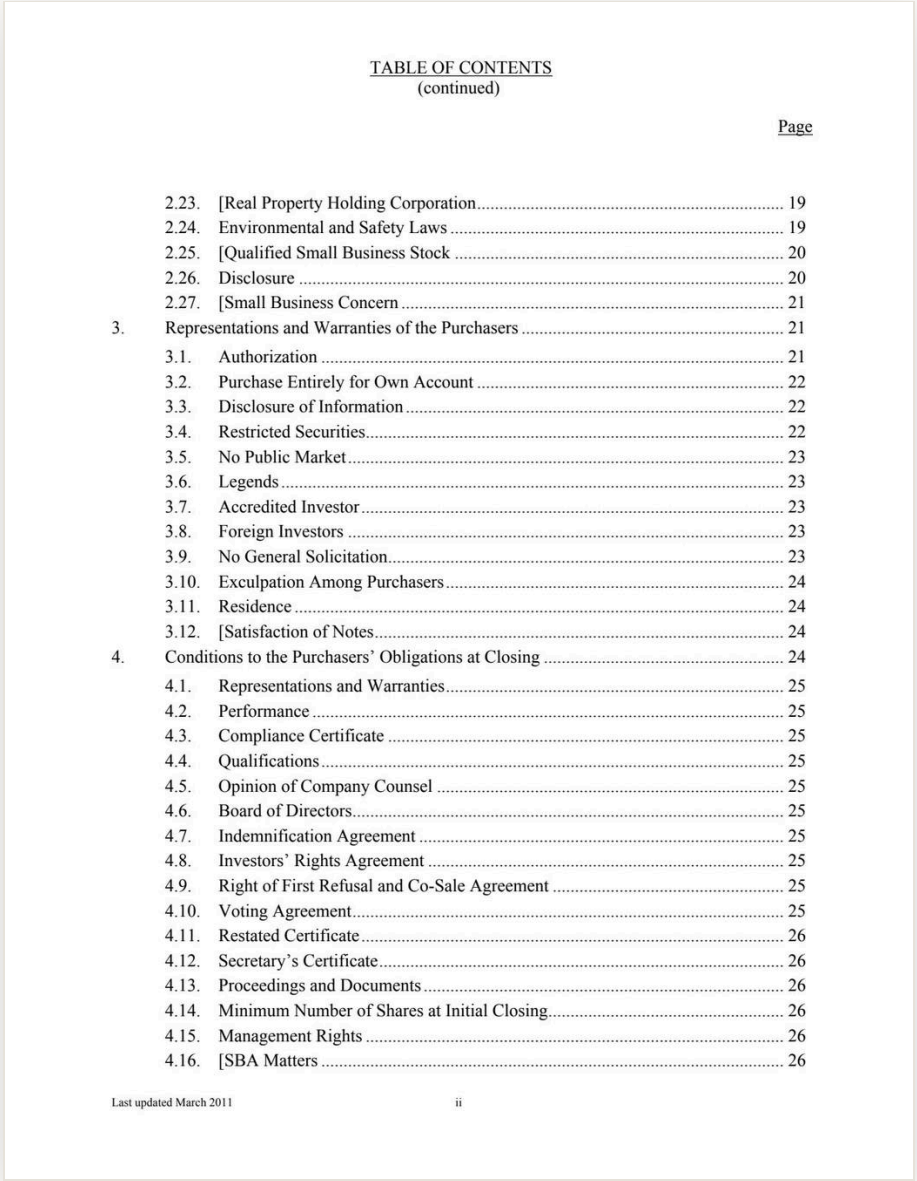


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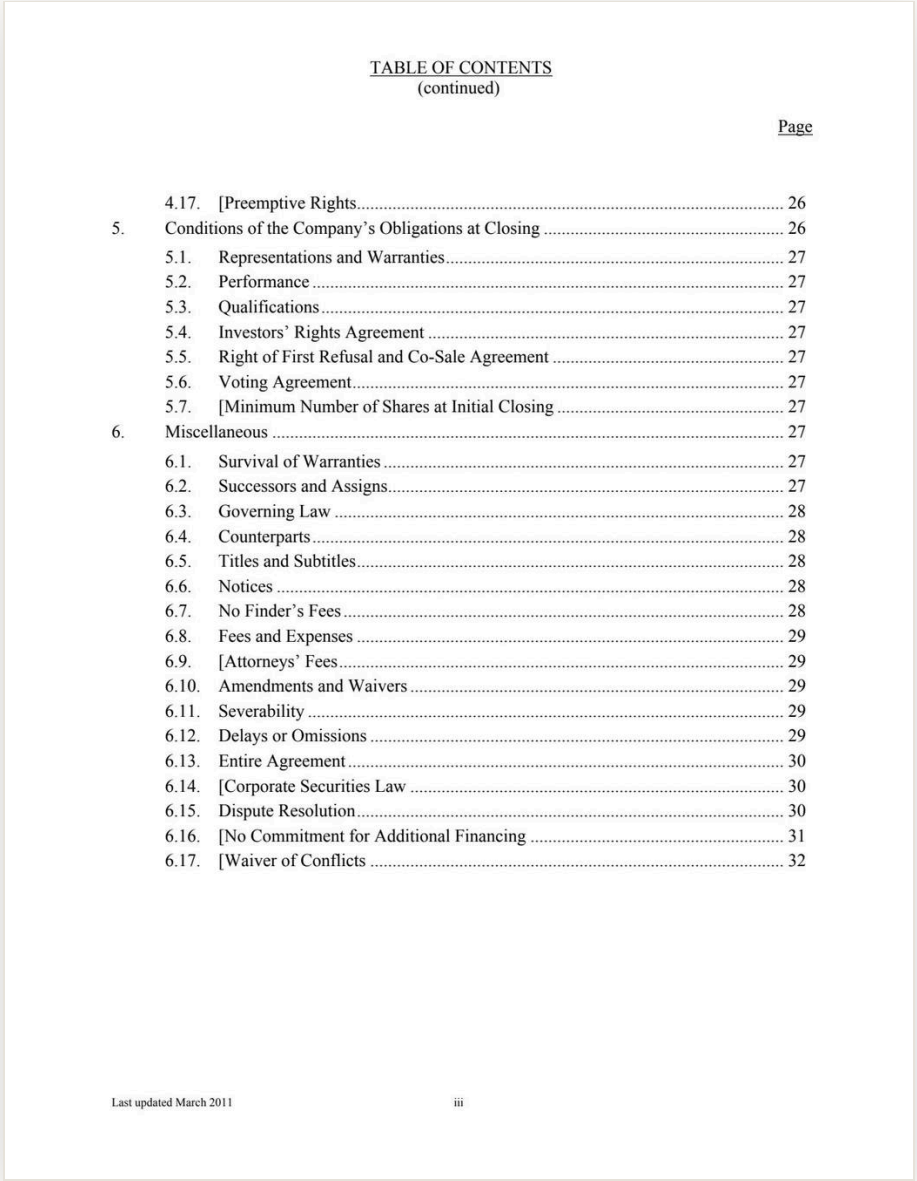


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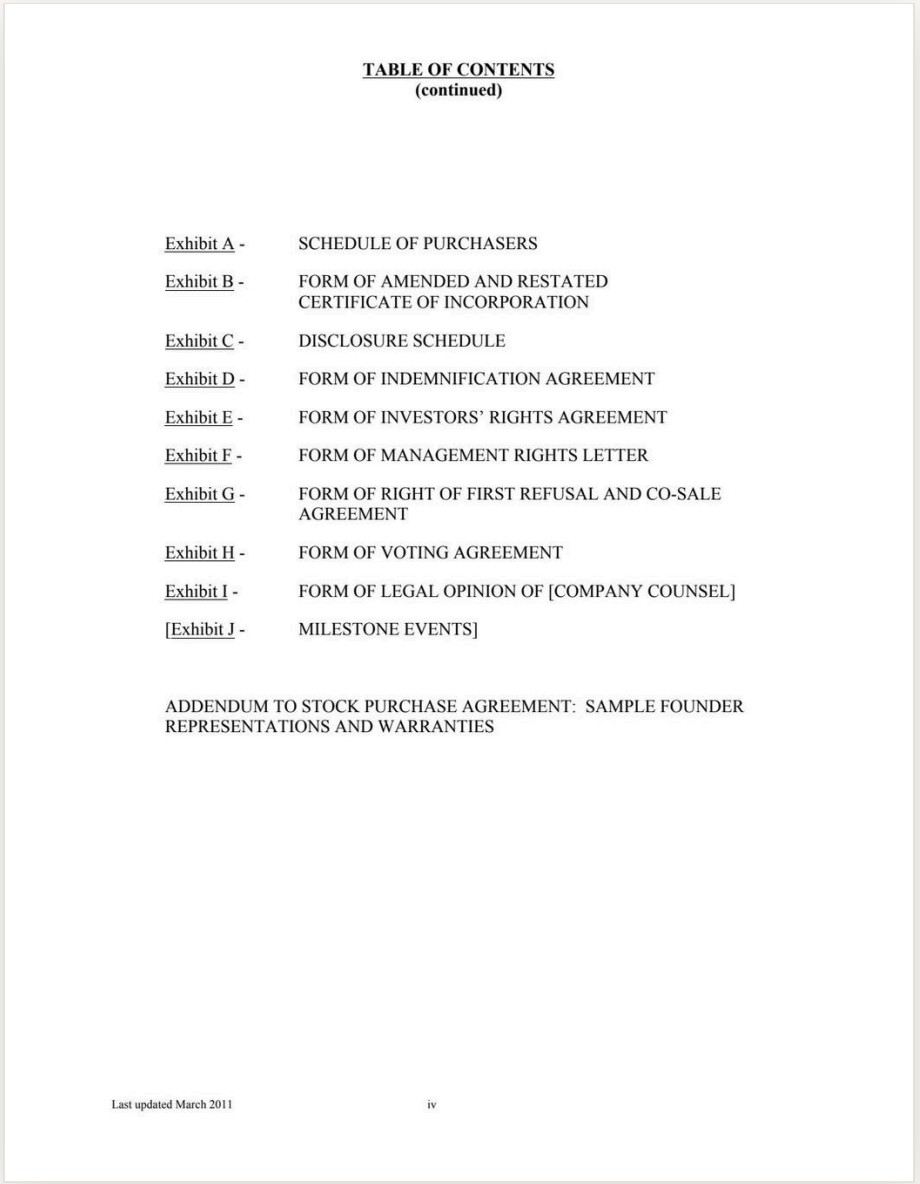


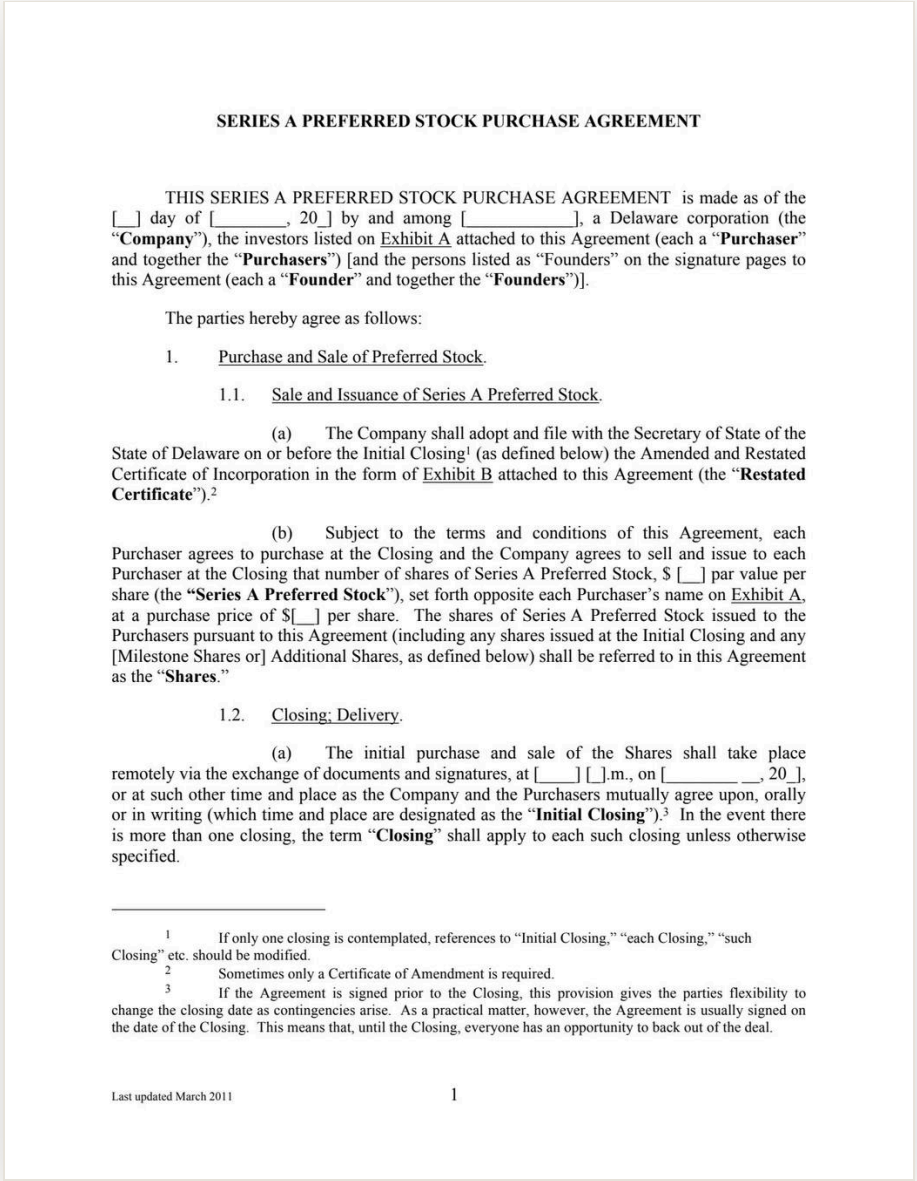
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SERIES A PREFERRED STOCK PURCHASE AGREEMENT

THIS SERIES A PREFERRED STOCK PURCHASE AGREEMENT is made as of the [__] day of [_____, 20_] by and among [_____], a Delaware corporation (the "**Company**"), the investors listed on Exhibit A attached to this Agreement (each a "**Purchaser**" and together the "**Purchasers**") [and the persons listed as "Founders" on the signature pages to this Agreement (each a "**Founder**" and together the "**Founders**")].

The parties hereby agree as follows:

1. Purchase and Sale of Preferred Stock.

1.1. Sale and Issuance of Series A Preferred Stock.

(a) The Company shall adopt and file with the Secretary of State of the State of Delaware on or before the Initial Closing[1] (as defined below) the Amended and Restated Certificate of Incorporation in the form of Exhibit B attached to this Agreement (the "**Restated Certificate**").[2]

(b) Subject to the terms and conditions of this Agreement, each Purchaser agrees to purchase at the Closing and the Company agrees to sell and issue to each Purchaser at the Closing that number of shares of Series A Preferred Stock, $ [__] par value per share (the **"Series A Preferred Stock**"), set forth opposite each Purchaser's name on Exhibit A, at a purchase price of $[__] per share. The shares of Series A Preferred Stock issued to the Purchasers pursuant to this Agreement (including any shares issued at the Initial Closing and any [Milestone Shares or] Additional Shares, as defined below) shall be referred to in this Agreement as the "**Shares**."

1.2. Closing; Delivery.

(a) The initial purchase and sale of the Shares shall take place remotely via the exchange of documents and signatures, at [____] [_].m., on [_____ __, 20_], or at such other time and place as the Company and the Purchasers mutually agree upon, orally or in writing (which time and place are designated as the "**Initial Closing**").[3] In the event there is more than one closing, the term "**Closing**" shall apply to each such closing unless otherwise specified.

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[1] If only one closing is contemplated, references to "Initial Closing," "each Closing," "such Closing" etc. should be modified.

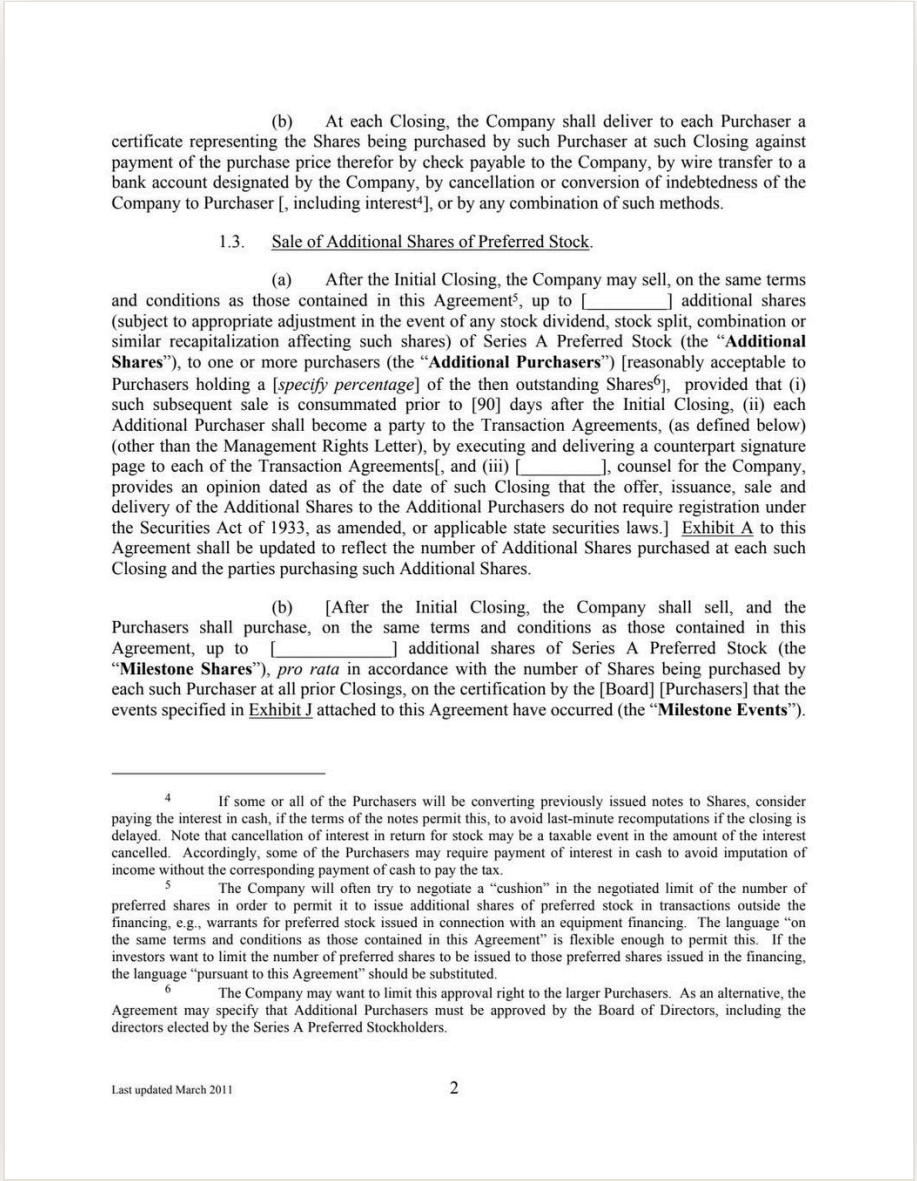
[2] Sometimes only a Certificate of Amendment is required.

[3] If the Agreement is signed prior to the Closing, this provision gives the parties flexibility to change the closing date as contingencies arise. As a practical matter, however, the Agreement is usually signed on the date of the Closing. This means that, until the Closing, everyone has an opportunity to back out of the deal.

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(b) At each Closing, the Company shall deliver to each Purchaser a certificate representing the Shares being purchased by such Purchaser at such Closing against payment of the purchase price therefor by check payable to the Company, by wire transfer to a bank account designated by the Company, by cancellation or conversion of indebtedness of the Company to Purchaser [, including interest[4]], or by any combination of such methods.

1.3. Sale of Additional Shares of Preferred Stock.

(a) After the Initial Closing, the Company may sell, on the same terms and conditions as those contained in this Agreement[5], up to [_____] additional shares (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or similar recapitalization affecting such shares) of Series A Preferred Stock (the "**Additional Shares**"), to one or more purchasers (the "**Additional Purchasers**") [reasonably acceptable to Purchasers holding a [*specify percentage*] of the then outstanding Shares[6]], provided that (i) such subsequent sale is consummated prior to [90] days after the Initial Closing, (ii) each Additional Purchaser shall become a party to the Transaction Agreements, (as defined below) (other than the Management Rights Letter), by executing and delivering a counterpart signature page to each of the Transaction Agreements[, and (iii) [_____], counsel for the Company, provides an opinion dated as of the date of such Closing that the offer, issuance, sale and delivery of the Additional Shares to the Additional Purchasers do not require registration under the Securities Act of 1933, as amended, or applicable state securities laws.] Exhibit A to this Agreement shall be updated to reflect the number of Additional Shares purchased at each such Closing and the parties purchasing such Additional Shares.

(b) [After the Initial Closing, the Company shall sell, and the Purchasers shall purchase, on the same terms and conditions as those contained in this Agreement, up to [_____] additional shares of Series A Preferred Stock (the "**Milestone Shares**"), *pro rata* in accordance with the number of Shares being purchased by each such Purchaser at all prior Closings, on the certification by the [Board] [Purchasers] that the events specified in Exhibit J attached to this Agreement have occurred (the "**Milestone Events**").

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[4] If some or all of the Purchasers will be converting previously issued notes to Shares, consider paying the interest in cash, if the terms of the notes permit this, to avoid last-minute recomputations if the closing is delayed. Note that cancellation of interest in return for stock may be a taxable event in the amount of the interest cancelled. Accordingly, some of the Purchasers may require payment of interest in cash to avoid imputation of income without the corresponding payment of cash to pay the tax.

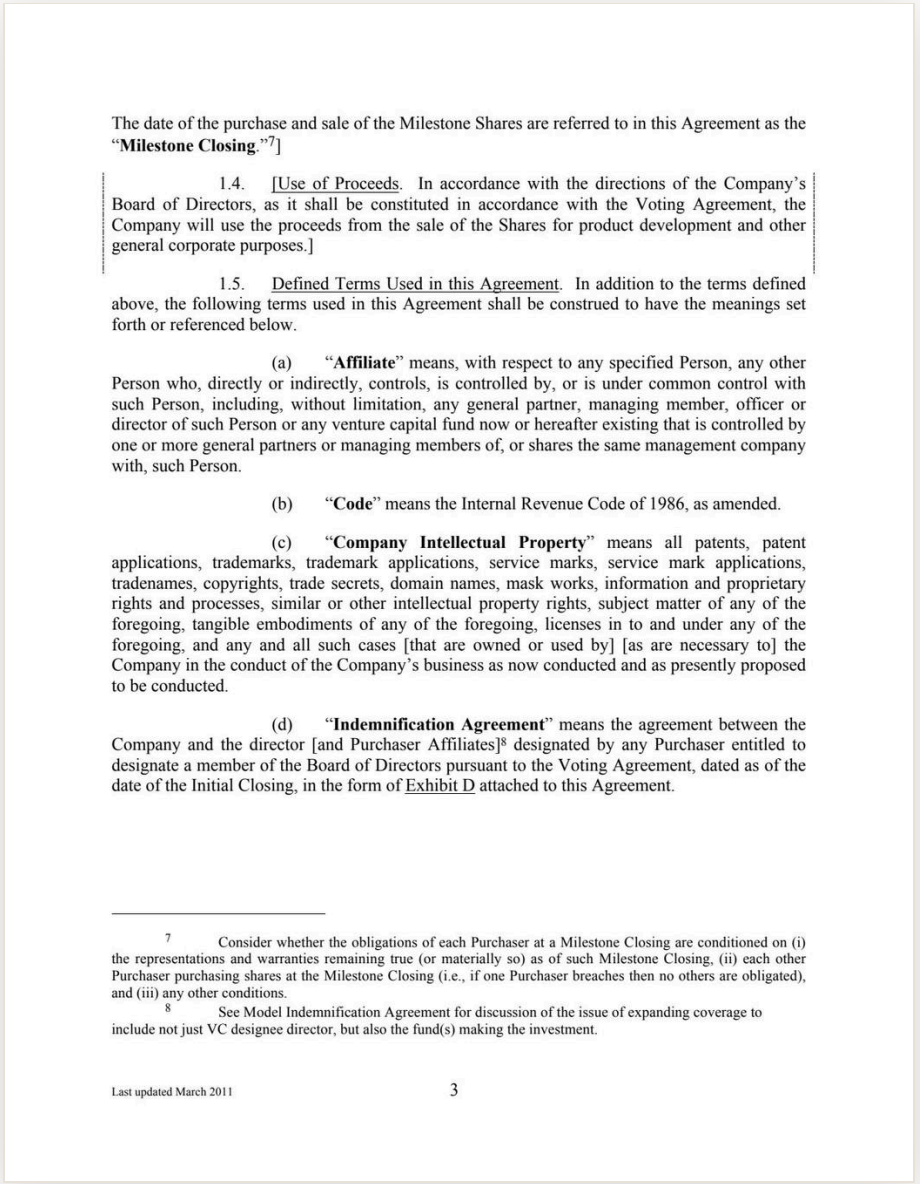
[5] The Company will often try to negotiate a "cushion" in the negotiated limit of the number of preferred shares in order to permit it to issue additional shares of preferred stock in transactions outside the financing, e.g., warrants for preferred stock issued in connection with an equipment financing. The language "on the same terms and conditions as those contained in this Agreement" is flexible enough to permit this. If the investors want to limit the number of preferred shares to be issued to those preferred shares issued in the financing, the language "pursuant to this Agreement" should be substituted.

[6] The Company may want to limit this approval right to the larger Purchasers. As an alternative, the Agreement may specify that Additional Purchasers must be approved by the Board of Directors, including the directors elected by the Series A Preferred Stockholders.

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The date of the purchase and sale of the Milestone Shares are referred to in this Agreement as the "**Milestone Closing**."[7]]

1.4. [Use of Proceeds. In accordance with the directions of the Company's Board of Directors, as it shall be constituted in accordance with the Voting Agreement, the Company will use the proceeds from the sale of the Shares for product development and other general corporate purposes.]

1.5. Defined Terms Used in this Agreement. In addition to the terms defined above, the following terms used in this Agreement shall be construed to have the meanings set forth or referenced below.

(a) "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

(b) "**Code**" means the Internal Revenue Code of 1986, as amended.

(c) "**Company Intellectual Property**" means all patents, patent applications, trademarks, trademark applications, service marks, service mark applications, tradenames, copyrights, trade secrets, domain names, mask works, information and proprietary rights and processes, similar or other intellectual property rights, subject matter of any of the foregoing, tangible embodiments of any of the foregoing, licenses in to and under any of the foregoing, and any and all such cases [that are owned or used by] [as are necessary to] the Company in the conduct of the Company's business as now conducted and as presently proposed to be conducted.

(d) "**Indemnification Agreement**" means the agreement between the Company and the director [and Purchaser Affiliates][8] designated by any Purchaser entitled to designate a member of the Board of Directors pursuant to the Voting Agreement, dated as of the date of the Initial Closing, in the form of Exhibit D attached to this Agreement.

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[7] Consider whether the obligations of each Purchaser at a Milestone Closing are conditioned on (i) the representations and warranties remaining true (or materially so) as of such Milestone Closing, (ii) each other Purchaser purchasing shares at the Milestone Closing (i.e., if one Purchaser breaches then no others are obligated), and (iii) any other conditions.

[8] See Model Indemnification Agreement for discussion of the issue of expanding coverage to include not just VC designee director, but also the fund(s) making the investment.

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(e) "**Investors' Rights Agreement**" means the agreement among the Company and the Purchasers[9] [and certain other stockholders of the Company] dated as of the date of the Initial Closing, in the form of Exhibit E attached to this Agreement.

(f) "**Key Employee**" means any executive-level employee (including division director and vice president-level positions) as well as any employee or consultant who either alone or in concert with others develops, invents, programs or designs any Company Intellectual Property.[10]

(g) **"Knowledge,"** including the phrase **"to the Company's knowledge,"** shall mean the actual knowledge [after reasonable investigation] of the following officers: [specify names].[11]

(h) "**Management Rights Letter**" means the agreement between the Company and [Purchaser], dated as of the date of the Initial Closing, in the form of Exhibit F attached to this Agreement.

(i) "**Material Adverse Effect**" means a material adverse effect on the business, assets (including intangible assets), liabilities, financial condition, property, prospects[12] or results of operations of the Company.

(j) **"Person"** means any individual, corporation, partnership, trust, limited liability company, association or other entity.

(k) "**Purchaser**" means each of the Purchasers who is initially a party to this Agreement and any Additional Purchaser who becomes a party to this Agreement at a subsequent Closing under Subsection 1.3.

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9 In Series A Preferred Stock financings, the Investors' Rights Agreement will normally be signed by all the Series A Purchasers. In subsequent financing rounds, the standard practice is to amend and restate the Investor Rights Agreement, which will then be signed by the Company as well as the subsequent and prior round purchasers.

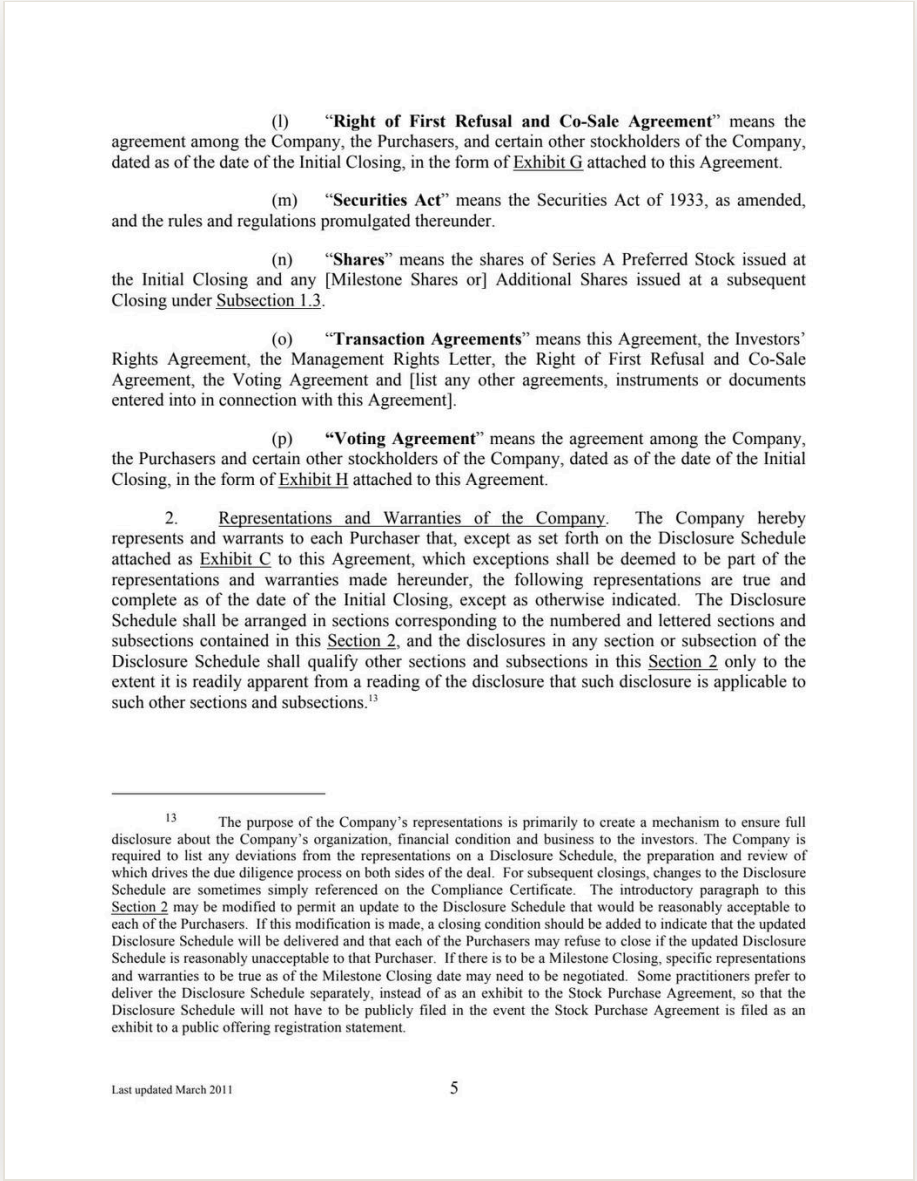
10 In a Series A round at a high-tech start-up, it is likely that the only key employees in addition to management, if any, are those who are responsible for developing the Company's key intellectual property assets. It may be simpler for these early-stage companies to list the Key Employees by name. In later rounds, it may be appropriate to include others, e.g., important salespeople or consultants and define Key Employees by function (e.g., division director).

11 An important point of negotiation is often whether the Company will represent that a given fact (a) is true or (b) is true to the Company's knowledge. Alternative (a) requires the Company to bear the entire risk of the truth or falsity of the represented fact, regardless whether the Company knew (or could have known) at the time of the representation whether or not the fact was true. Alternative (b) is preferable from the Company's standpoint, since it holds the Company responsible only for facts of which it is actually aware.

12 Since the prospects of high-tech start-up companies are by definition highly uncertain, the Company may resist the inclusion of the word "prospects" on the grounds that investors in a Series A financing are in the business of shouldering that risk.

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(l) "**Right of First Refusal and Co-Sale Agreement**" means the agreement among the Company, the Purchasers, and certain other stockholders of the Company, dated as of the date of the Initial Closing, in the form of Exhibit G attached to this Agreement.

(m) "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(n) "**Shares**" means the shares of Series A Preferred Stock issued at the Initial Closing and any [Milestone Shares or] Additional Shares issued at a subsequent Closing under Subsection 1.3.

(o) "**Transaction Agreements**" means this Agreement, the Investors' Rights Agreement, the Management Rights Letter, the Right of First Refusal and Co-Sale Agreement, the Voting Agreement and [list any other agreements, instruments or documents entered into in connection with this Agreement].

(p) **"Voting Agreement**" means the agreement among the Company, the Purchasers and certain other stockholders of the Company, dated as of the date of the Initial Closing, in the form of Exhibit H attached to this Agreement.

2. Representations and Warranties of the Company. The Company hereby represents and warrants to each Purchaser that, except as set forth on the Disclosure Schedule attached as Exhibit C to this Agreement, which exceptions shall be deemed to be part of the representations and warranties made hereunder, the following representations are true and complete as of the date of the Initial Closing, except as otherwise indicated. The Disclosure Schedule shall be arranged in sections corresponding to the numbered and lettered sections and subsections contained in this Section 2, and the disclosures in any section or subsection of the Disclosure Schedule shall qualify other sections and subsections in this Section 2 only to the extent it is readily apparent from a reading of the disclosure that such disclosure is applicable to such other sections and subsections.[13]

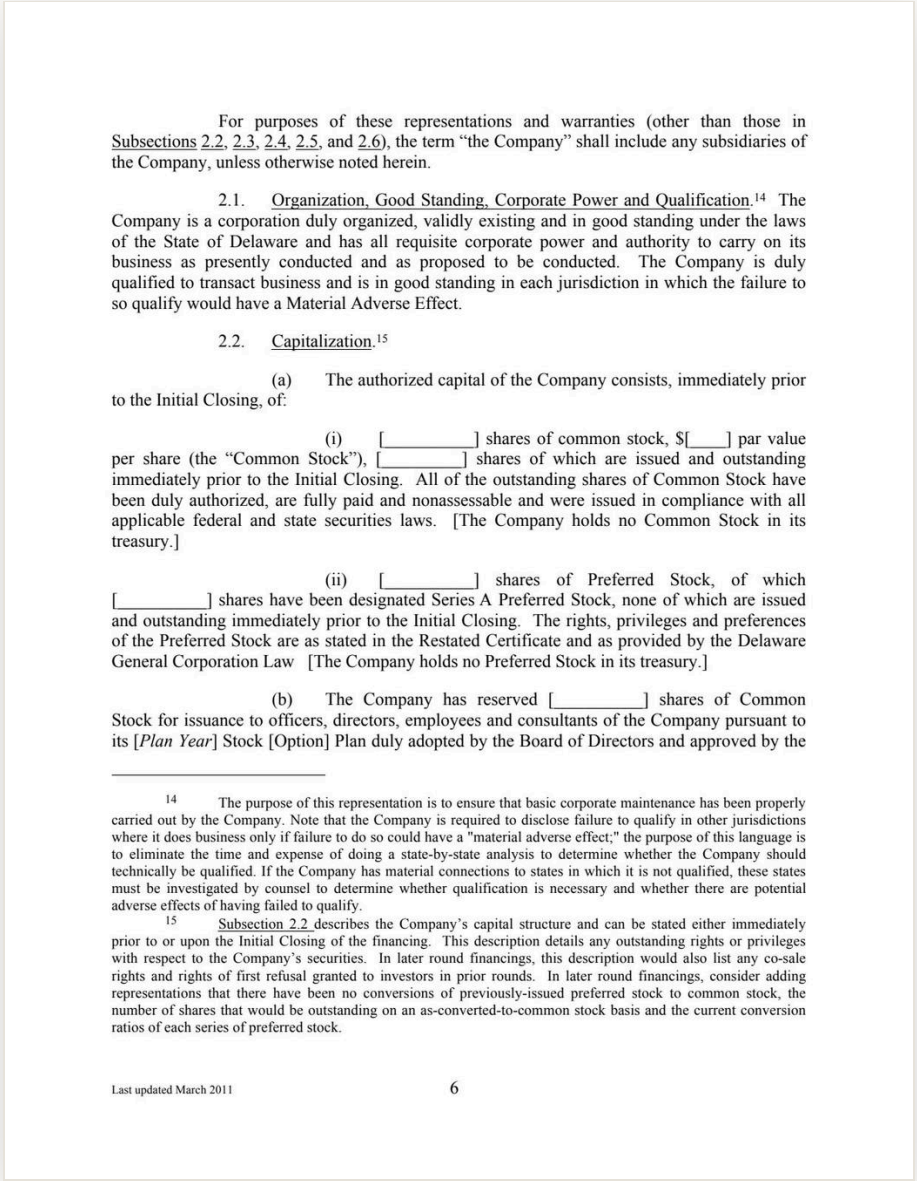
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[13] The purpose of the Company's representations is primarily to create a mechanism to ensure full disclosure about the Company's organization, financial condition and business to the investors. The Company is required to list any deviations from the representations on a Disclosure Schedule, the preparation and review of which drives the due diligence process on both sides of the deal. For subsequent closings, changes to the Disclosure Schedule are sometimes simply referenced on the Compliance Certificate. The introductory paragraph to this Section 2 may be modified to permit an update to the Disclosure Schedule that would be reasonably acceptable to each of the Purchasers. If this modification is made, a closing condition should be added to indicate that the updated Disclosure Schedule will be delivered and that each of the Purchasers may refuse to close if the updated Disclosure Schedule is reasonably unacceptable to that Purchaser. If there is to be a Milestone Closing, specific representations and warranties to be true as of the Milestone Closing date may need to be negotiated. Some practitioners prefer to deliver the Disclosure Schedule separately, instead of as an exhibit to the Stock Purchase Agreement, so that the Disclosure Schedule will not have to be publicly filed in the event the Stock Purchase Agreement is filed as an exhibit to a public offering registration statement.

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For purposes of these representations and warranties (other than those in Subsections 2.2, 2.3, 2.4, 2.5, and 2.6), the term "the Company" shall include any subsidiaries of the Company, unless otherwise noted herein.

2.1. Organization, Good Standing, Corporate Power and Qualification.[14] The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as presently conducted and as proposed to be conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a Material Adverse Effect.

2.2. Capitalization.[15]

(a) The authorized capital of the Company consists, immediately prior to the Initial Closing, of:

(i) [_____] shares of common stock, $[____] par value per share (the "Common Stock"), [_____] shares of which are issued and outstanding immediately prior to the Initial Closing. All of the outstanding shares of Common Stock have been duly authorized, are fully paid and nonassessable and were issued in compliance with all applicable federal and state securities laws. [The Company holds no Common Stock in its treasury.]

(ii) [_____] shares of Preferred Stock, of which [_____] shares have been designated Series A Preferred Stock, none of which are issued and outstanding immediately prior to the Initial Closing. The rights, privileges and preferences of the Preferred Stock are as stated in the Restated Certificate and as provided by the Delaware General Corporation Law [The Company holds no Preferred Stock in its treasury.]

(b) The Company has reserved [_____] shares of Common Stock for issuance to officers, directors, employees and consultants of the Company pursuant to its [*Plan Year*] Stock [Option] Plan duly adopted by the Board of Directors and approved by the

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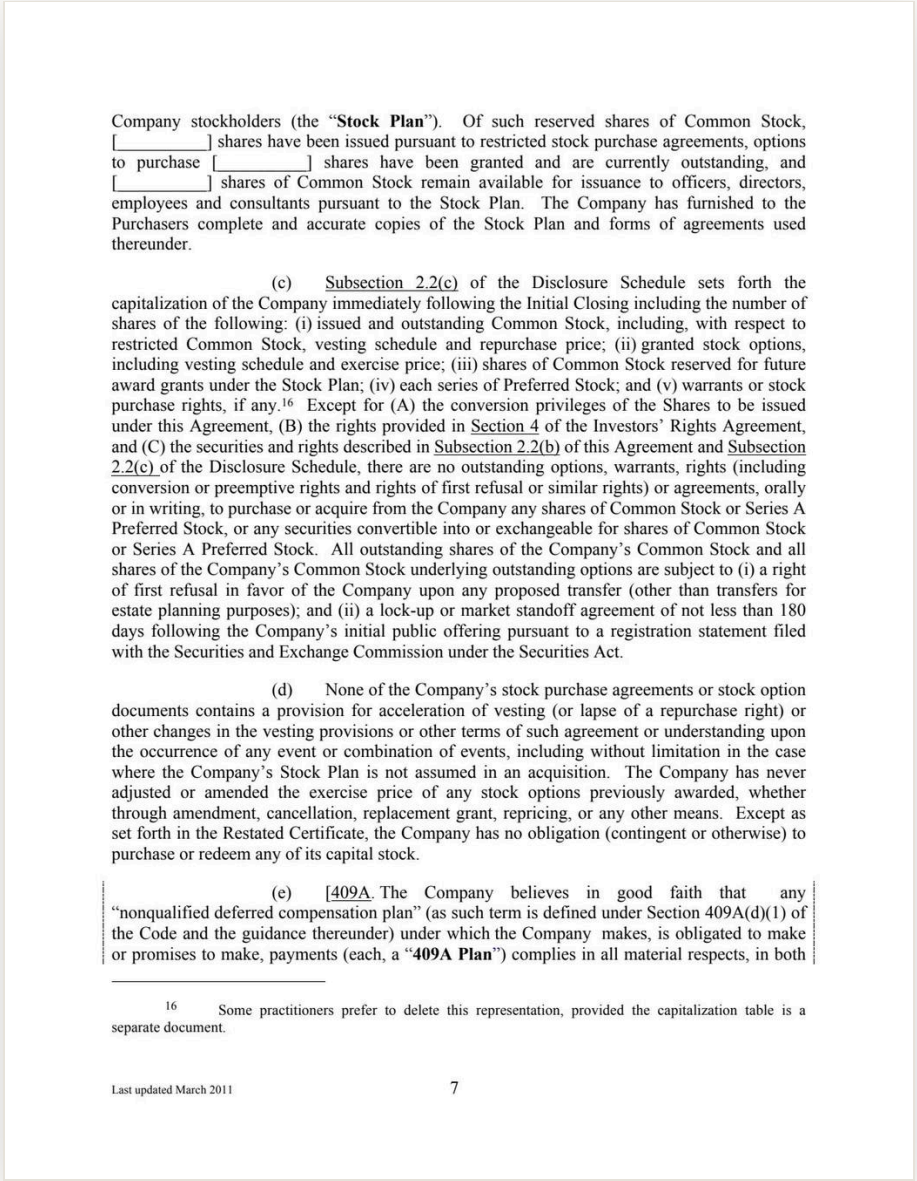
[14] The purpose of this representation is to ensure that basic corporate maintenance has been properly carried out by the Company. Note that the Company is required to disclose failure to qualify in other jurisdictions where it does business only if failure to do so could have a "material adverse effect;" the purpose of this language is to eliminate the time and expense of doing a state-by-state analysis to determine whether the Company should technically be qualified. If the Company has material connections to states in which it is not qualified, these states must be investigated by counsel to determine whether qualification is necessary and whether there are potential adverse effects of having failed to qualify.

[15] Subsection 2.2 describes the Company's capital structure and can be stated either immediately prior to or upon the Initial Closing of the financing. This description details any outstanding rights or privileges with respect to the Company's securities. In later round financings, this description would also list any co-sale rights and rights of first refusal granted to investors in prior rounds. In later round financings, consider adding representations that there have been no conversions of previously-issued preferred stock to common stock, the number of shares that would be outstanding on an as-converted-to-common stock basis and the current conversion ratios of each series of preferred stock.

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Company stockholders (the "**Stock Plan**"). Of such reserved shares of Common Stock, [_____] shares have been issued pursuant to restricted stock purchase agreements, options to purchase [_____] shares have been granted and are currently outstanding, and [_____] shares of Common Stock remain available for issuance to officers, directors, employees and consultants pursuant to the Stock Plan. The Company has furnished to the Purchasers complete and accurate copies of the Stock Plan and forms of agreements used thereunder.

(c) Subsection 2.2(c) of the Disclosure Schedule sets forth the capitalization of the Company immediately following the Initial Closing including the number of shares of the following: (i) issued and outstanding Common Stock, including, with respect to restricted Common Stock, vesting schedule and repurchase price; (ii) granted stock options, including vesting schedule and exercise price; (iii) shares of Common Stock reserved for future award grants under the Stock Plan; (iv) each series of Preferred Stock; and (v) warrants or stock purchase rights, if any.[16] Except for (A) the conversion privileges of the Shares to be issued under this Agreement, (B) the rights provided in Section 4 of the Investors' Rights Agreement, and (C) the securities and rights described in Subsection 2.2(b) of this Agreement and Subsection 2.2(c) of the Disclosure Schedule, there are no outstanding options, warrants, rights (including conversion or preemptive rights and rights of first refusal or similar rights) or agreements, orally or in writing, to purchase or acquire from the Company any shares of Common Stock or Series A Preferred Stock, or any securities convertible into or exchangeable for shares of Common Stock or Series A Preferred Stock. All outstanding shares of the Company's Common Stock and all shares of the Company's Common Stock underlying outstanding options are subject to (i) a right of first refusal in favor of the Company upon any proposed transfer (other than transfers for estate planning purposes); and (ii) a lock-up or market standoff agreement of not less than 180 days following the Company's initial public offering pursuant to a registration statement filed with the Securities and Exchange Commission under the Securities Act.

(d) None of the Company's stock purchase agreements or stock option documents contains a provision for acceleration of vesting (or lapse of a repurchase right) or other changes in the vesting provisions or other terms of such agreement or understanding upon the occurrence of any event or combination of events, including without limitation in the case where the Company's Stock Plan is not assumed in an acquisition. The Company has never adjusted or amended the exercise price of any stock options previously awarded, whether through amendment, cancellation, replacement grant, repricing, or any other means. Except as set forth in the Restated Certificate, the Company has no obligation (contingent or otherwise) to purchase or redeem any of its capital stock.

(e) [409A. The Company believes in good faith that any "nonqualified deferred compensation plan" (as such term is defined under Section 409A(d)(1) of the Code and the guidance thereunder) under which the Company makes, is obligated to make or promises to make, payments (each, a "**409A Plan**") complies in all material respects, in both

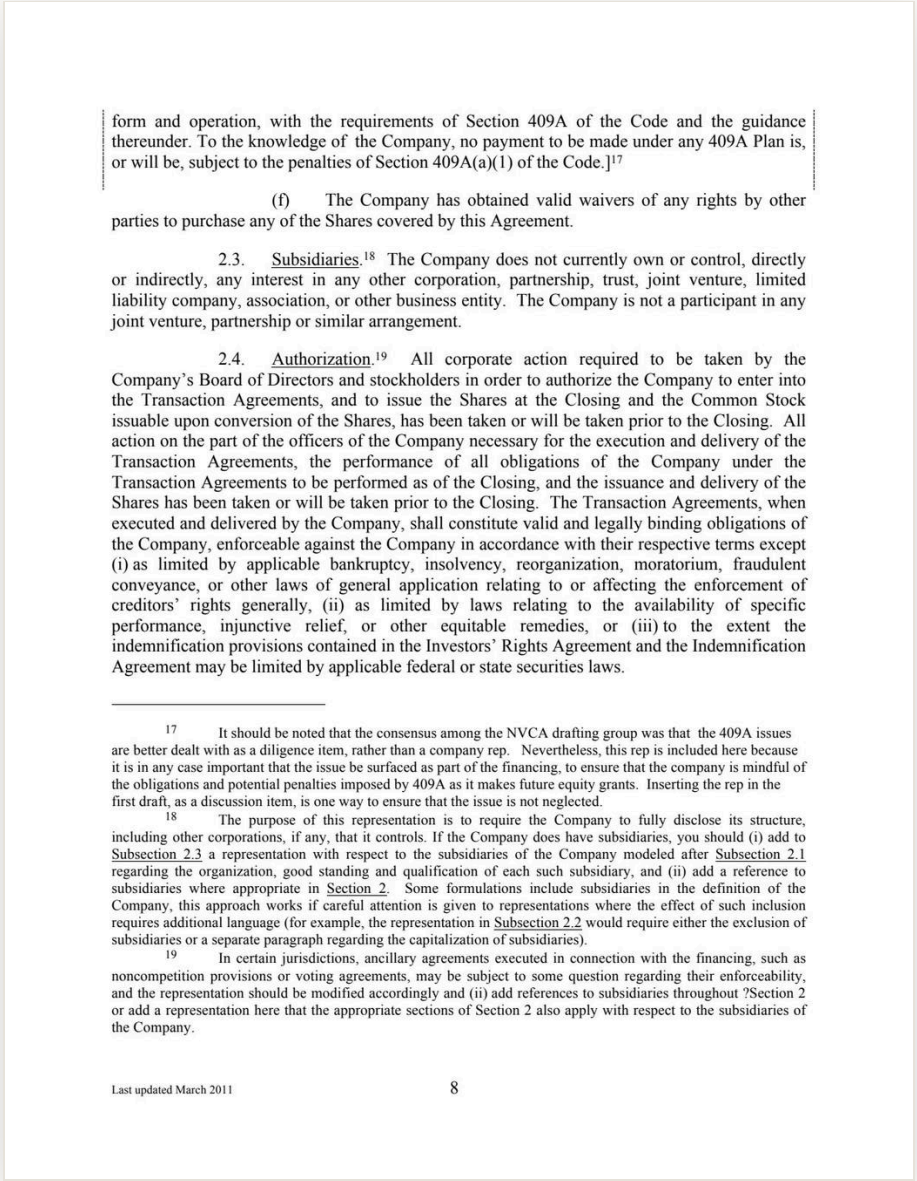
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16 Some practitioners prefer to delete this representation, provided the capitalization table is a separate document.

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form and operation, with the requirements of Section 409A of the Code and the guidance thereunder. To the knowledge of the Company, no payment to be made under any 409A Plan is, or will be, subject to the penalties of Section 409A(a)(1) of the Code.][17]

(f) The Company has obtained valid waivers of any rights by other parties to purchase any of the Shares covered by this Agreement.

2.3. Subsidiaries.[18] The Company does not currently own or control, directly or indirectly, any interest in any other corporation, partnership, trust, joint venture, limited liability company, association, or other business entity. The Company is not a participant in any joint venture, partnership or similar arrangement.

2.4. Authorization.[19] All corporate action required to be taken by the Company's Board of Directors and stockholders in order to authorize the Company to enter into the Transaction Agreements, and to issue the Shares at the Closing and the Common Stock issuable upon conversion of the Shares, has been taken or will be taken prior to the Closing. All action on the part of the officers of the Company necessary for the execution and delivery of the Transaction Agreements, the performance of all obligations of the Company under the Transaction Agreements to be performed as of the Closing, and the issuance and delivery of the Shares has been taken or will be taken prior to the Closing. The Transaction Agreements, when executed and delivered by the Company, shall constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their respective terms except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, or other laws of general application relating to or affecting the enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, or (iii) to the extent the indemnification provisions contained in the Investors' Rights Agreement and the Indemnification Agreement may be limited by applicable federal or state securities laws.

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[17] It should be noted that the consensus among the NVCA drafting group was that the 409A issues are better dealt with as a diligence item, rather than a company rep. Nevertheless, this rep is included here because it is in any case important that the issue be surfaced as part of the financing, to ensure that the company is mindful of the obligations and potential penalties imposed by 409A as it makes future equity grants. Inserting the rep in the first draft, as a discussion item, is one way to ensure that the issue is not neglected.

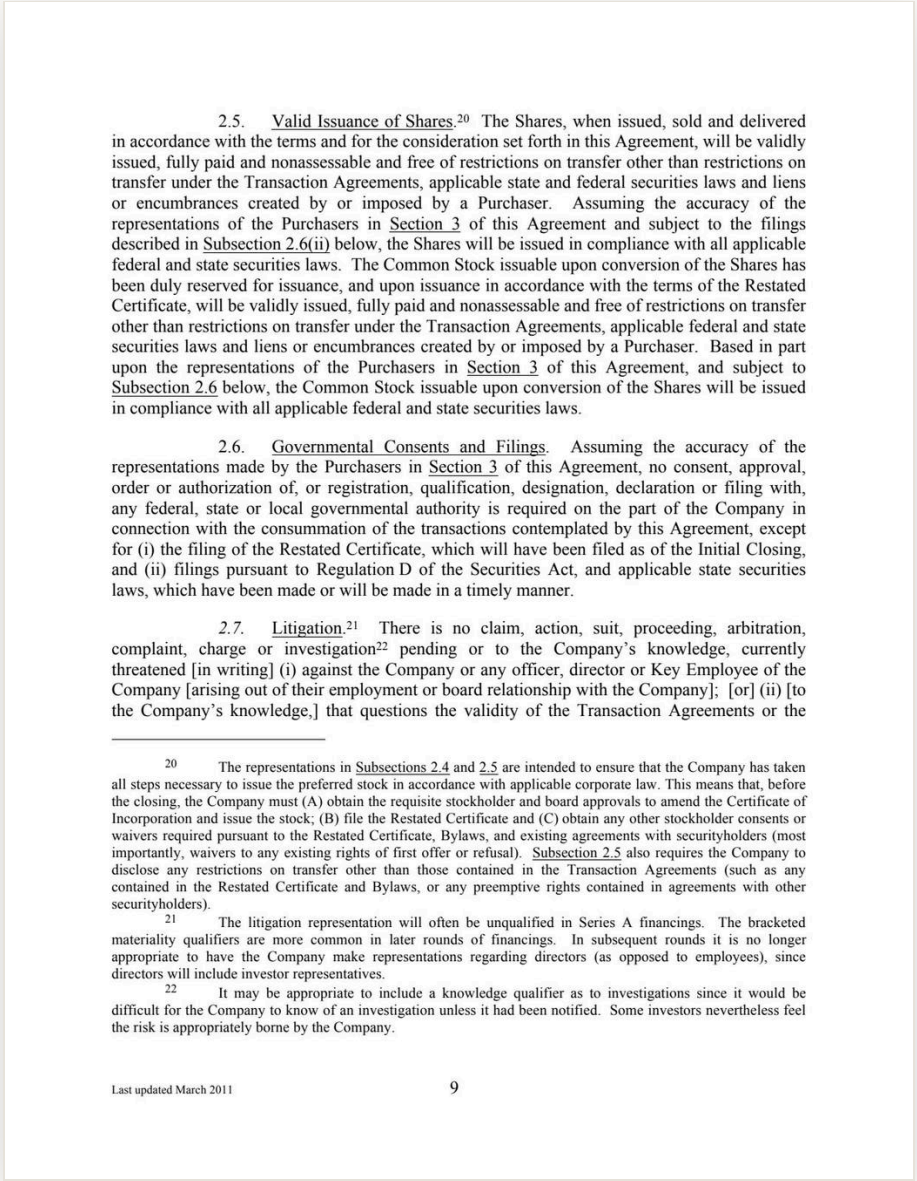
[18] The purpose of this representation is to require the Company to fully disclose its structure, including other corporations, if any, that it controls. If the Company does have subsidiaries, you should (i) add to Subsection 2.3 a representation with respect to the subsidiaries of the Company modeled after Subsection 2.1 regarding the organization, good standing and qualification of each such subsidiary, and (ii) add a reference to subsidiaries where appropriate in Section 2. Some formulations include subsidiaries in the definition of the Company, this approach works if careful attention is given to representations where the effect of such inclusion requires additional language (for example, the representation in Subsection 2.2 would require either the exclusion of subsidiaries or a separate paragraph regarding the capitalization of subsidiaries).

[19] In certain jurisdictions, ancillary agreements executed in connection with the financing, such as noncompetition provisions or voting agreements, may be subject to some question regarding their enforceability, and the representation should be modified accordingly and (ii) add references to subsidiaries throughout ?Section 2 or add a representation here that the appropriate sections of Section 2 also apply with respect to the subsidiaries of the Company.

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2.5. Valid Issuance of Shares.[20] The Shares, when issued, sold and delivered in accordance with the terms and for the consideration set forth in this Agreement, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable state and federal securities laws and liens or encumbrances created by or imposed by a Purchaser. Assuming the accuracy of the representations of the Purchasers in Section 3 of this Agreement and subject to the filings described in Subsection 2.6(ii) below, the Shares will be issued in compliance with all applicable federal and state securities laws. The Common Stock issuable upon conversion of the Shares has been duly reserved for issuance, and upon issuance in accordance with the terms of the Restated Certificate, will be validly issued, fully paid and nonassessable and free of restrictions on transfer other than restrictions on transfer under the Transaction Agreements, applicable federal and state securities laws and liens or encumbrances created by or imposed by a Purchaser. Based in part upon the representations of the Purchasers in Section 3 of this Agreement, and subject to Subsection 2.6 below, the Common Stock issuable upon conversion of the Shares will be issued in compliance with all applicable federal and state securities laws.

2.6. Governmental Consents and Filings. Assuming the accuracy of the representations made by the Purchasers in Section 3 of this Agreement, no consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required on the part of the Company in connection with the consummation of the transactions contemplated by this Agreement, except for (i) the filing of the Restated Certificate, which will have been filed as of the Initial Closing, and (ii) filings pursuant to Regulation D of the Securities Act, and applicable state securities laws, which have been made or will be made in a timely manner.

2.7. Litigation.[21] There is no claim, action, suit, proceeding, arbitration, complaint, charge or investigation[22] pending or to the Company's knowledge, currently threatened [in writing] (i) against the Company or any officer, director or Key Employee of the Company [arising out of their employment or board relationship with the Company]; [or] (ii) [to the Company's knowledge,] that questions the validity of the Transaction Agreements or the

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[20] The representations in Subsections 2.4 and 2.5 are intended to ensure that the Company has taken all steps necessary to issue the preferred stock in accordance with applicable corporate law. This means that, before the closing, the Company must (A) obtain the requisite stockholder and board approvals to amend the Certificate of Incorporation and issue the stock; (B) file the Restated Certificate and (C) obtain any other stockholder consents or waivers required pursuant to the Restated Certificate, Bylaws, and existing agreements with securityholders (most importantly, waivers to any existing rights of first offer or refusal). Subsection 2.5 also requires the Company to disclose any restrictions on transfer other than those contained in the Transaction Agreements (such as any contained in the Restated Certificate and Bylaws, or any preemptive rights contained in agreements with other securityholders).

[21] The litigation representation will often be unqualified in Series A financings. The bracketed materiality qualifiers are more common in later rounds of financings. In subsequent rounds it is no longer appropriate to have the Company make representations regarding directors (as opposed to employees), since directors will include investor representatives.

[22] It may be appropriate to include a knowledge qualifier as to investigations since it would be difficult for the Company to know of an investigation unless it had been notified. Some investors nevertheless feel the risk is appropriately borne by the Company.

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right of the Company to enter into them, or to consummate the transactions contemplated by the Transaction Agreements; [or (iii) to the Company's knowledge, that would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect.] Neither the Company nor, to the Company's knowledge, any of its officers, directors or Key Employees is a party or is named as subject to the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality (in the case of officers, directors or Key Employees, such as would affect the Company). There is no action, suit, proceeding or investigation by the Company pending or which the Company intends to initiate. The foregoing includes, without limitation, actions, suits, proceedings or investigations pending or threatened in writing (or any basis therefor known to the Company) involving the prior employment of any of the Company's employees, their services provided in connection with the Company's business, or any information or techniques allegedly proprietary to any of their former employers, or their obligations under any agreements with prior employers.

2.8. Intellectual Property.[23] [The Company owns or possesses or [believes it] can acquire on commercially reasonable terms sufficient legal rights to all Company Intellectual Property without any known conflict with, or infringement of, the rights of others.] To the Company's knowledge, no product or service marketed or sold (or proposed to be marketed or sold) by the Company violates or will violate any license or infringes or will infringe any intellectual property rights of any other party. Other than with respect to commercially available software products under standard end-user object code license agreements, there are no outstanding options, licenses, agreements, claims, encumbrances or shared ownership interests of any kind relating to the Company Intellectual Property, nor is the Company bound by or a party to any options, licenses or agreements of any kind with respect to the patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, proprietary rights and processes of any other Person. The Company has not received any communications alleging that the Company has violated or, by conducting its business, would violate any of the patents, trademarks, service marks, tradenames, copyrights, trade secrets, mask works or other proprietary rights or processes of any other Person. The Company has obtained and possesses valid licenses to use all of the software programs present on the computers and other software-enabled electronic devices that it owns or leases or that it has otherwise provided to its employees for their use in connection with the Company's business. To the Company's knowledge, it will not be necessary to use any inventions of any of its employees or consultants (or Persons it currently intends to hire) made prior to their employment by the Company. Each employee and consultant has assigned to the Company all intellectual property rights he or she owns that are related to the Company's business as now conducted and as presently proposed to be conducted. Subsection 2.8 of the Disclosure Schedule lists all Company Intellectual

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[23] Subsection 2.8 gives the Purchasers assurances that the Company has the intellectual property rights necessary to conduct its business, or has disclosed its need to acquire further rights. Although Purchasers prefer an unqualified representation, this provision is often heavily negotiated, and may be impossible for the Company to make with certainty for a product in a very early stage of development. Under a common compromise, the Company provides an unqualified representation with respect to everything but patents, on the theory that potential patent conflicts cannot always be uncovered even after reasonable investigation, and that patent conflicts therefore represent an unknown risk that is fairly borne by both parties.

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Property.[24] The Company has not embedded any open source, copyleft or community source code in any of its products generally available or in development, including but not limited to any libraries or code licensed under any General Public License, Lesser General Public License or similar license arrangement.[25] For purposes of this Subsection 2.8, the Company shall be deemed to have knowledge of a patent right if the Company has actual knowledge of the patent right or would be found to be on notice of such patent right as determined by reference to United States patent laws.

2.9. Compliance with Other Instruments. The Company is not in violation or default (i) of any provisions of its Restated Certificate or Bylaws, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party or by which it is bound that is required to be listed on the Disclosure Schedule, or, [to its knowledge], of any provision of federal or state statute, rule or regulation applicable to the Company, the violation of which would have a Material Adverse Effect. The execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated by the Transaction Agreements will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement or (ii) an event which results in the creation of any lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to the Company.

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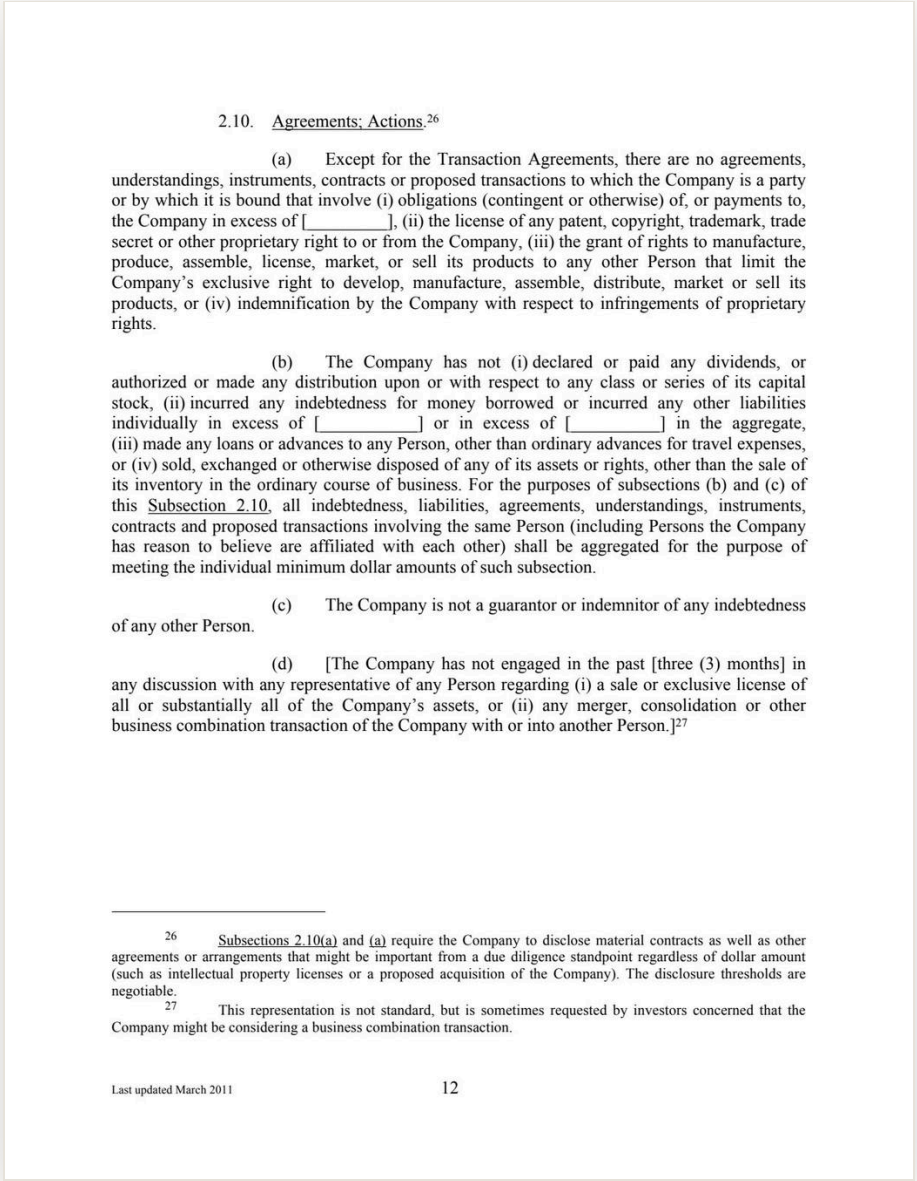
[24] If you represent the Company, you may seek to use a more specific list of items (a subset of the broader definition of Company Intellectual Property) to be set forth on the Disclosure Schedule: "patents, patent applications, trademarks, trademark applications, service marks, service mark applications, tradenames, copyrights, and licenses to and under any of the foregoing."

[25] This representation regarding non-use of open source software is intended to elicit disclosure of publicly available, third-party source code that the Company has incorporated, or intends to incorporate, into its products. In most cases, the Purchasers should be concerned primarily about use of third-party source code distributed under a license that requires the Company to disclose and distribute its own source code, that grants licensees rights under the Company's patents, or that contains other provisions that relinquish or may compromise the Company's intellectual property rights or commercial prospects. Much publicly available source code is distributed under licenses that permit it to be freely used and redistributed without imposing onerous obligations upon those that use it to develop their own software. Note also that the General Public License (GPL) and other so-called "viral" open source licenses impose potentially onerous obligations upon licensees only if code distributed under them is incorporated into a product that is actually released to the general public. Some proprietary software companies experiment with code distributed under the GPL during the development process with no intention of retaining GPL code in the products ultimately released to their customers. (This experimentation typically is done in a separate "branch" of the source code of a product in development.) The Company may wish to consider narrowing this representation to include use of third-party source code distributed under any license that imposes specified obligations upon the Company, and perhaps then only if the third party source code has been included in a product that the Company has released.

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2.10. Agreements; Actions.[26]

(a) Except for the Transaction Agreements, there are no agreements, understandings, instruments, contracts or proposed transactions to which the Company is a party or by which it is bound that involve (i) obligations (contingent or otherwise) of, or payments to, the Company in excess of [_____], (ii) the license of any patent, copyright, trademark, trade secret or other proprietary right to or from the Company, (iii) the grant of rights to manufacture, produce, assemble, license, market, or sell its products to any other Person that limit the Company's exclusive right to develop, manufacture, assemble, distribute, market or sell its products, or (iv) indemnification by the Company with respect to infringements of proprietary rights.

(b) The Company has not (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred any indebtedness for money borrowed or incurred any other liabilities individually in excess of [_____] or in excess of [_____] in the aggregate, (iii) made any loans or advances to any Person, other than ordinary advances for travel expenses, or (iv) sold, exchanged or otherwise disposed of any of its assets or rights, other than the sale of its inventory in the ordinary course of business. For the purposes of subsections (b) and (c) of this Subsection 2.10, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same Person (including Persons the Company has reason to believe are affiliated with each other) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such subsection.

(c) The Company is not a guarantor or indemnitor of any indebtedness of any other Person.

(d) [The Company has not engaged in the past [three (3) months] in any discussion with any representative of any Person regarding (i) a sale or exclusive license of all or substantially all of the Company's assets, or (ii) any merger, consolidation or other business combination transaction of the Company with or into another Person.][27]

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[26] Subsections 2.10(a) and (a) require the Company to disclose material contracts as well as other agreements or arrangements that might be important from a due diligence standpoint regardless of dollar amount (such as intellectual property licenses or a proposed acquisition of the Company). The disclosure thresholds are negotiable.

[27] This representation is not standard, but is sometimes requested by investors concerned that the Company might be considering a business combination transaction.

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2.11. Certain Transactions.[28]

(a) Other than (i) standard employee benefits generally made available to all employees, (ii) standard director and officer indemnification agreements approved by the Board of Directors, and (iii) the purchase of shares of the Company's capital stock and the issuance of options to purchase shares of the Company's Common Stock, in each instance, approved in the written minutes of the Board of Directors (previously provided to the Purchasers or their counsel), there are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, consultants or Key Employees, or any Affiliate thereof.

(b) The Company is not indebted, directly or indirectly, to any of its directors, officers or employees or to their respective spouses or children or to any Affiliate of any of the foregoing, other than in connection with expenses or advances of expenses incurred in the ordinary course of business or employee relocation expenses and for other customary employee benefits made generally available to all employees. None of the Company's directors, officers or employees, or any members of their immediate families, or any Affiliate of the foregoing are, directly or indirectly, indebted to the Company[or, [to the Company's knowledge], have any (i) material commercial, industrial, banking, consulting, legal, accounting, charitable or familial relationship with any of the Company's customers, suppliers, service providers, joint venture partners, licensees and competitors, (ii) direct or indirect ownership interest in any firm or corporation with which the Company is affiliated or with which the Company has a business relationship, or any firm or corporation which competes with the Company except that directors, officers or employees or stockholders of the Company may own stock in (but not exceeding two percent (2%) of the outstanding capital stock of) publicly traded companies that may compete with the Company or (iii) financial interest in any [material] contract with the Company].[29]

2.12. Rights of Registration and Voting Rights.[30] Except as provided in the Investors' Rights Agreement, the Company is not under any obligation to register under the Securities Act any of its currently outstanding securities or any securities issuable upon exercise

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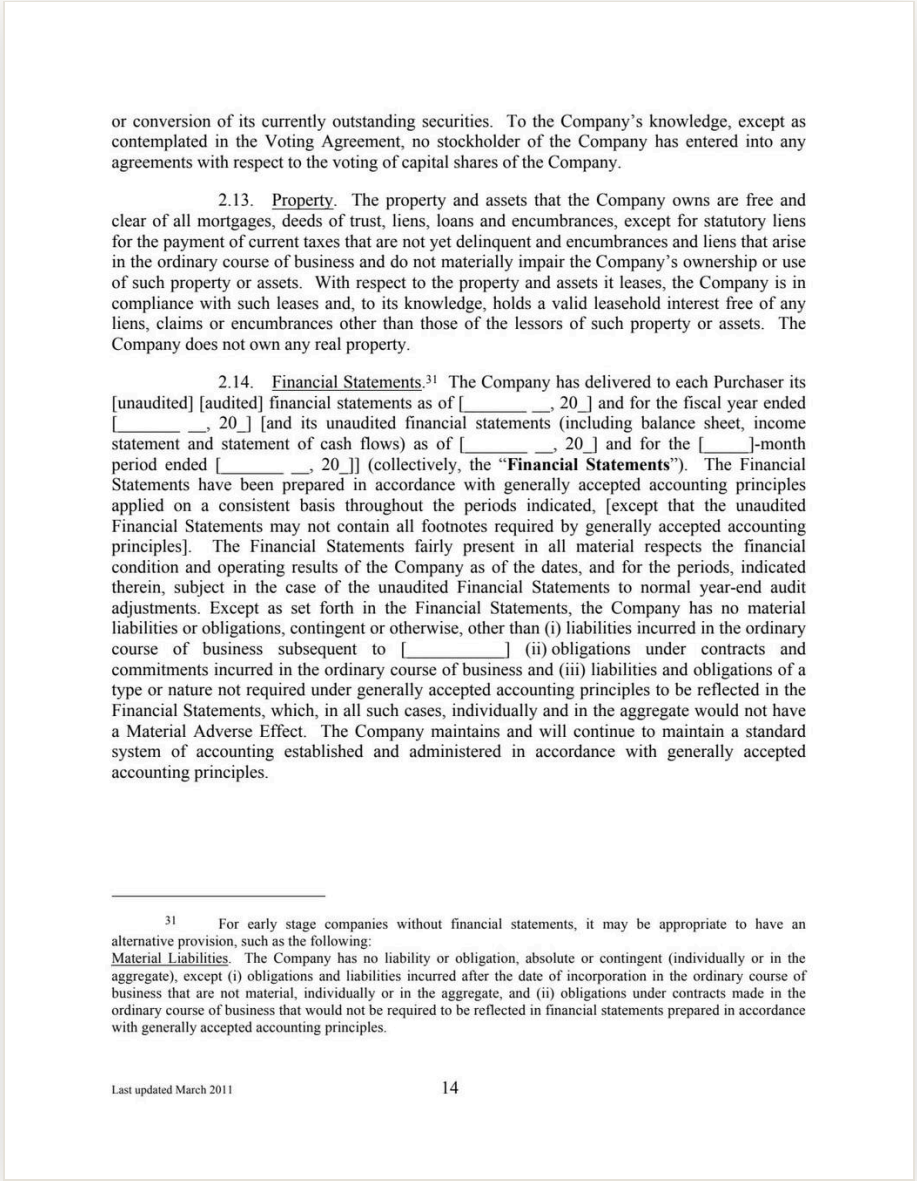
[28] This representation requires disclosure of situations which could create a conflict of interest. This is an item of particular concern in the first round of venture capital financing, since loans among the Company and its founders and their families (which may not be well documented) are especially common prior to the first infusion of outside capital.

[29] The bracketed portion of this sentence may be a broader representation than the Company is comfortable giving. In addition, it is appropriate to include directors throughout this section only at the first financing round. In subsequent rounds the directors will include investor representatives, and it should not be incumbent on the Company to make disclosures as to them.

[30] Prior registration rights may conflict with those currently being negotiated among the investors and the Company. Therefore, any such rights must be carefully reviewed and any conflicts resolved. It is common to have any previous registration rights agreement amended to include the new investors, or replaced by a new agreement including the old and new investors and clarifying their rights relative to each other as well as the Company. It is preferable to have all registration rights relating to the Company's securities set forth in one document. Having several different sets of rights outstanding can be a significant (and confusing) complication when the Company goes public.

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or conversion of its currently outstanding securities. To the Company's knowledge, except as contemplated in the Voting Agreement, no stockholder of the Company has entered into any agreements with respect to the voting of capital shares of the Company.

2.13. Property. The property and assets that the Company owns are free and clear of all mortgages, deeds of trust, liens, loans and encumbrances, except for statutory liens for the payment of current taxes that are not yet delinquent and encumbrances and liens that arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets. With respect to the property and assets it leases, the Company is in compliance with such leases and, to its knowledge, holds a valid leasehold interest free of any liens, claims or encumbrances other than those of the lessors of such property or assets. The Company does not own any real property.

2.14. Financial Statements.[31] The Company has delivered to each Purchaser its [unaudited] [audited] financial statements as of [_____ __, 20_] and for the fiscal year ended [_____ __, 20_] [and its unaudited financial statements (including balance sheet, income statement and statement of cash flows) as of [_____ __, 20_] and for the [_____]-month period ended [_____ __, 20_]] (collectively, the "**Financial Statements**"). The Financial Statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated, [except that the unaudited Financial Statements may not contain all footnotes required by generally accepted accounting principles]. The Financial Statements fairly present in all material respects the financial condition and operating results of the Company as of the dates, and for the periods, indicated therein, subject in the case of the unaudited Financial Statements to normal year-end audit adjustments. Except as set forth in the Financial Statements, the Company has no material liabilities or obligations, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to [_____] (ii) obligations under contracts and commitments incurred in the ordinary course of business and (iii) liabilities and obligations of a type or nature not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in all such cases, individually and in the aggregate would not have a Material Adverse Effect. The Company maintains and will continue to maintain a standard system of accounting established and administered in accordance with generally accepted accounting principles.

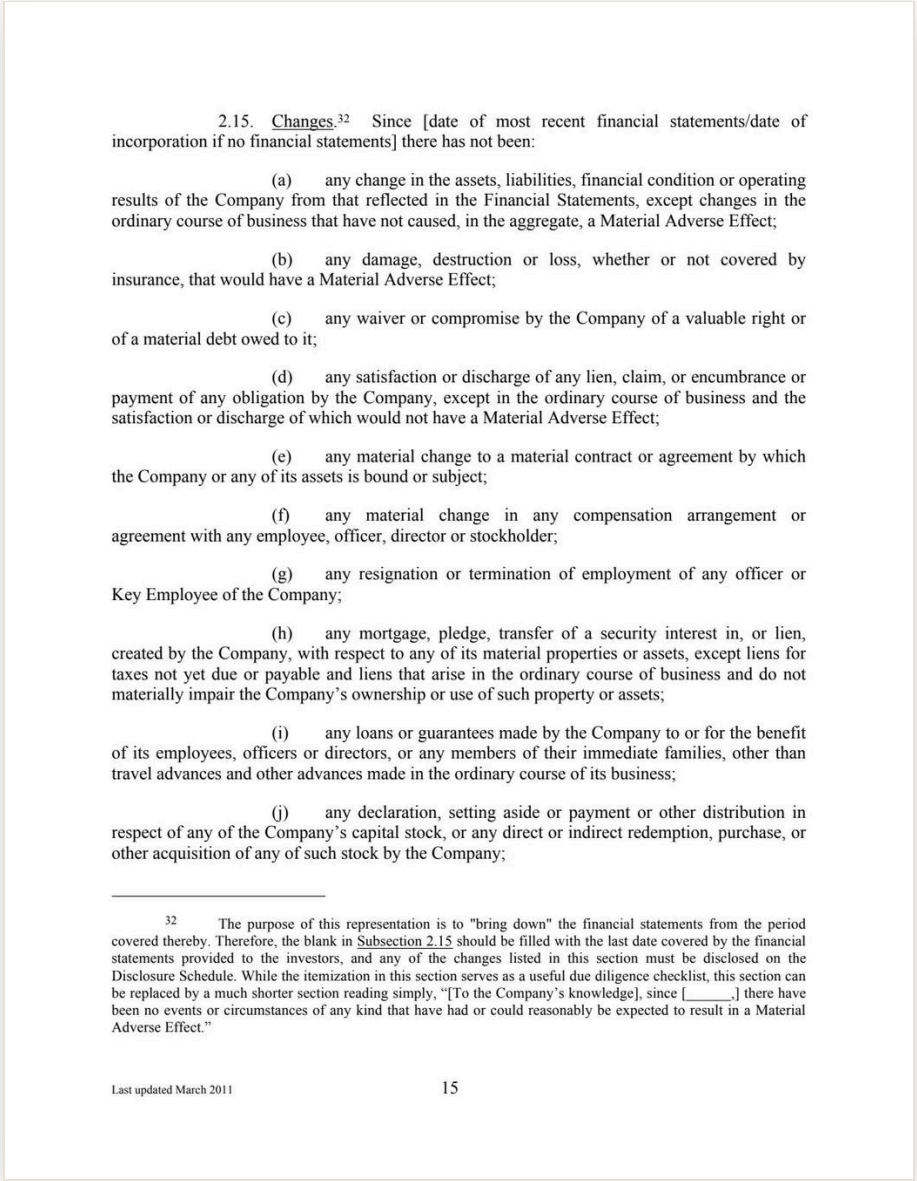
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[31] For early stage companies without financial statements, it may be appropriate to have an alternative provision, such as the following:
Material Liabilities. The Company has no liability or obligation, absolute or contingent (individually or in the aggregate), except (i) obligations and liabilities incurred after the date of incorporation in the ordinary course of business that are not material, individually or in the aggregate, and (ii) obligations under contracts made in the ordinary course of business that would not be required to be reflected in financial statements prepared in accordance with generally accepted accounting principles.

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2.15. Changes.[32] Since [date of most recent financial statements/date of incorporation if no financial statements] there has not been:

(a) any change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the Financial Statements, except changes in the ordinary course of business that have not caused, in the aggregate, a Material Adverse Effect;

(b) any damage, destruction or loss, whether or not covered by insurance, that would have a Material Adverse Effect;

(c) any waiver or compromise by the Company of a valuable right or of a material debt owed to it;

(d) any satisfaction or discharge of any lien, claim, or encumbrance or payment of any obligation by the Company, except in the ordinary course of business and the satisfaction or discharge of which would not have a Material Adverse Effect;

(e) any material change to a material contract or agreement by which the Company or any of its assets is bound or subject;

(f) any material change in any compensation arrangement or agreement with any employee, officer, director or stockholder;

(g) any resignation or termination of employment of any officer or Key Employee of the Company;

(h) any mortgage, pledge, transfer of a security interest in, or lien, created by the Company, with respect to any of its material properties or assets, except liens for taxes not yet due or payable and liens that arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets;

(i) any loans or guarantees made by the Company to or for the benefit of its employees, officers or directors, or any members of their immediate families, other than travel advances and other advances made in the ordinary course of its business;

(j) any declaration, setting aside or payment or other distribution in respect of any of the Company's capital stock, or any direct or indirect redemption, purchase, or other acquisition of any of such stock by the Company;

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[32] The purpose of this representation is to "bring down" the financial statements from the period covered thereby. Therefore, the blank in Subsection 2.15 should be filled with the last date covered by the financial statements provided to the investors, and any of the changes listed in this section must be disclosed on the Disclosure Schedule. While the itemization in this section serves as a useful due diligence checklist, this section can be replaced by a much shorter section reading simply, "[To the Company's knowledge], since [_____,] there have been no events or circumstances of any kind that have had or could reasonably be expected to result in a Material Adverse Effect."

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(k) any sale, assignment or transfer of any Company Intellectual Property that could reasonably be expected to result in a Material Adverse Effect;

(l) receipt of notice that there has been a loss of, or material order cancellation by, any major customer of the Company;

(m) to the Company's knowledge, any other event or condition of any character, other than events affecting the economy or the Company's industry generally, that could reasonably be expected to result in a Material Adverse Effect; or

(n) any arrangement or commitment by the Company to do any of the things described in this Subsection 2.15.

2.16. Employee Matters.

(a) As of the date hereof, the Company employs [_____] full-time employees and [_____] part-time employees and engages [_____] consultants or independent contractors. [Subsection 2.16 of] the Disclosure Schedule sets forth a detailed description of all compensation, including salary, bonus, severance obligations and deferred compensation paid or payable for each officer, employee, consultant and independent contractor of the Company who received compensation in excess of $[_____] for the fiscal year ended [____ __, 20_] or is anticipated to receive compensation in excess of $[_____] for the fiscal year ending [____ __, 20_].[33]

(b) To the Company's knowledge, none of its employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with such employee's ability to promote the interest of the Company or that would conflict with the Company's business. Neither the execution or delivery of the Transaction Agreements, nor the carrying on of the Company's business by the employees of the Company, nor the conduct of the Company's business as now conducted and as presently proposed to be conducted, will, to the Company's knowledge, conflict with or result in a breach of the terms, conditions, or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated.

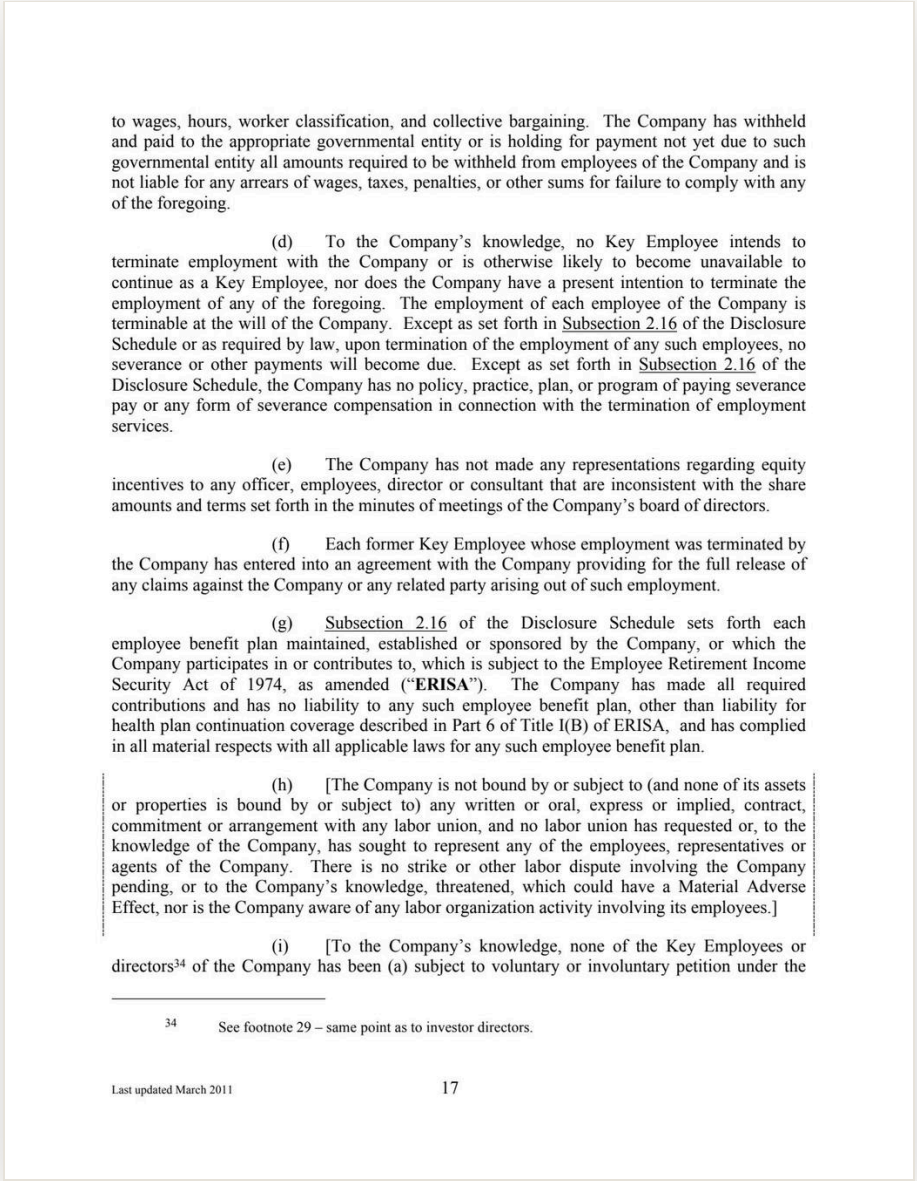
(c) The Company is not delinquent in payments to any of its employees, consultants, or independent contractors for any wages, salaries, commissions, bonuses, or other direct compensation for any service performed for it to the date hereof or amounts required to be reimbursed to such employees, consultants, or independent contractors. The Company has complied in all material respects with all applicable state and federal equal employment opportunity laws and with other laws related to employment, including those related

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[33] Many practitioners prefer not to list employee compensation in the Disclosure Schedule, particularly if employees are participating in the round. Even if there is no employee participation, however, employee compensation is a sensitive matter for many companies, and there is always a risk of the Disclosure Schedule inadvertently winding up in the wrong hands.

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to wages, hours, worker classification, and collective bargaining. The Company has withheld and paid to the appropriate governmental entity or is holding for payment not yet due to such governmental entity all amounts required to be withheld from employees of the Company and is not liable for any arrears of wages, taxes, penalties, or other sums for failure to comply with any of the foregoing.

(d) To the Company's knowledge, no Key Employee intends to terminate employment with the Company or is otherwise likely to become unavailable to continue as a Key Employee, nor does the Company have a present intention to terminate the employment of any of the foregoing. The employment of each employee of the Company is terminable at the will of the Company. Except as set forth in Subsection 2.16 of the Disclosure Schedule or as required by law, upon termination of the employment of any such employees, no severance or other payments will become due. Except as set forth in Subsection 2.16 of the Disclosure Schedule, the Company has no policy, practice, plan, or program of paying severance pay or any form of severance compensation in connection with the termination of employment services.

(e) The Company has not made any representations regarding equity incentives to any officer, employees, director or consultant that are inconsistent with the share amounts and terms set forth in the minutes of meetings of the Company's board of directors.

(f) Each former Key Employee whose employment was terminated by the Company has entered into an agreement with the Company providing for the full release of any claims against the Company or any related party arising out of such employment.

(g) Subsection 2.16 of the Disclosure Schedule sets forth each employee benefit plan maintained, established or sponsored by the Company, or which the Company participates in or contributes to, which is subject to the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"). The Company has made all required contributions and has no liability to any such employee benefit plan, other than liability for health plan continuation coverage described in Part 6 of Title I(B) of ERISA, and has complied in all material respects with all applicable laws for any such employee benefit plan.

(h) [The Company is not bound by or subject to (and none of its assets or properties is bound by or subject to) any written or oral, express or implied, contract, commitment or arrangement with any labor union, and no labor union has requested or, to the knowledge of the Company, has sought to represent any of the employees, representatives or agents of the Company. There is no strike or other labor dispute involving the Company pending, or to the Company's knowledge, threatened, which could have a Material Adverse Effect, nor is the Company aware of any labor organization activity involving its employees.]

(i) [To the Company's knowledge, none of the Key Employees or directors[34] of the Company has been (a) subject to voluntary or involuntary petition under the

[34] See footnote 29 – same point as to investor directors.

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federal bankruptcy laws or any state insolvency law or the appointment of a receiver, fiscal agent or similar officer by a court for his business or property; (b) convicted in a criminal proceeding or named as a subject of a pending criminal proceeding (excluding traffic violations and other minor offenses); (c) subject to any order, judgment, or decree (not subsequently reversed, suspended, or vacated) of any court of competent jurisdiction permanently or temporarily enjoining him from engaging, or otherwise imposing limits or conditions on his engagement in any securities, investment advisory, banking, insurance, or other type of business or acting as an officer or director of a public company; or (d) found by a court of competent jurisdiction in a civil action or by the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated any federal or state securities, commodities, or unfair trade practices law, which such judgment or finding has not been subsequently reversed, suspended, or vacated.]

2.17. Tax Returns and Payments. There are no federal, state, county, local or foreign taxes dues and payable by the Company which have not been timely paid. There are no accrued and unpaid federal, state, country, local or foreign taxes of the Company which are due, whether or not assessed or disputed. There have been no examinations or audits of any tax returns or reports by any applicable federal, state, local or foreign governmental agency. The Company has duly and timely filed all federal, state, county, local and foreign tax returns required to have been filed by it and there are in effect no waivers of applicable statutes of limitations with respect to taxes for any year.

2.18. Insurance.[35] The Company has in full force and effect fire and casualty insurance policies with extended coverage, sufficient in amount (subject to reasonable deductions) to allow it to replace any of its properties that might be damaged or destroyed.

2.19. Employee Agreements. Each current and former employee, consultant and officer of the Company has executed an agreement with the Company regarding confidentiality and proprietary information substantially in the form or forms delivered to the counsel for the Purchasers (the "**Confidential Information Agreements**"). No current or former Key Employee has excluded works or inventions from his or her assignment of inventions pursuant to such Key Employee's Confidential Information Agreement. Each current and former Key Employee has executed a [non-competition and] non-solicitation agreement substantially in the form or forms delivered to counsel for the Purchasers. The Company is not aware that any of its Key Employees is in violation of any agreement covered by this Subsection 2.19.

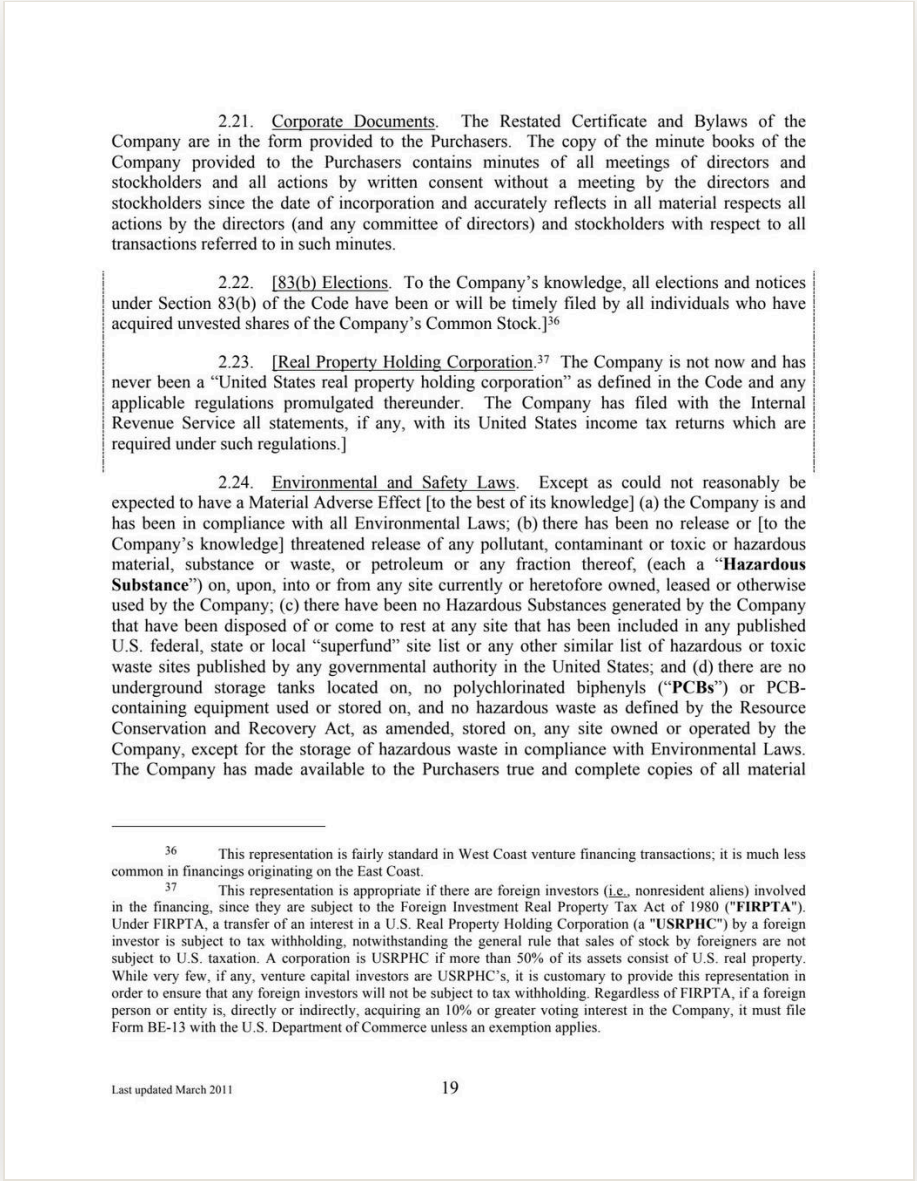
2.20. Permits. The Company has all franchises, permits, licenses and any similar authority necessary for the conduct of its business, the lack of which could reasonably be expected to have a Material Adverse Effect. The Company is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

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[35] The investors may negotiate life insurance coverage in favor of the Company for certain founders or other key employees. If such coverage is in effect prior to the closing, it may be appropriate to add to this representation a statement of the covered individuals and amount of coverage for each.

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2.21. Corporate Documents. The Restated Certificate and Bylaws of the Company are in the form provided to the Purchasers. The copy of the minute books of the Company provided to the Purchasers contains minutes of all meetings of directors and stockholders and all actions by written consent without a meeting by the directors and stockholders since the date of incorporation and accurately reflects in all material respects all actions by the directors (and any committee of directors) and stockholders with respect to all transactions referred to in such minutes.

2.22. [83(b) Elections. To the Company's knowledge, all elections and notices under Section 83(b) of the Code have been or will be timely filed by all individuals who have acquired unvested shares of the Company's Common Stock.][36]

2.23. [Real Property Holding Corporation.[37] The Company is not now and has never been a "United States real property holding corporation" as defined in the Code and any applicable regulations promulgated thereunder. The Company has filed with the Internal Revenue Service all statements, if any, with its United States income tax returns which are required under such regulations.]

2.24. Environmental and Safety Laws. Except as could not reasonably be expected to have a Material Adverse Effect [to the best of its knowledge] (a) the Company is and has been in compliance with all Environmental Laws; (b) there has been no release or [to the Company's knowledge] threatened release of any pollutant, contaminant or toxic or hazardous material, substance or waste, or petroleum or any fraction thereof, (each a "**Hazardous Substance**") on, upon, into or from any site currently or heretofore owned, leased or otherwise used by the Company; (c) there have been no Hazardous Substances generated by the Company that have been disposed of or come to rest at any site that has been included in any published U.S. federal, state or local "superfund" site list or any other similar list of hazardous or toxic waste sites published by any governmental authority in the United States; and (d) there are no underground storage tanks located on, no polychlorinated biphenyls ("**PCBs**") or PCB-containing equipment used or stored on, and no hazardous waste as defined by the Resource Conservation and Recovery Act, as amended, stored on, any site owned or operated by the Company, except for the storage of hazardous waste in compliance with Environmental Laws. The Company has made available to the Purchasers true and complete copies of all material

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36 This representation is fairly standard in West Coast venture financing transactions; it is much less common in financings originating on the East Coast.

37 This representation is appropriate if there are foreign investors (i.e., nonresident aliens) involved in the financing, since they are subject to the Foreign Investment Real Property Tax Act of 1980 ("**FIRPTA**"). Under FIRPTA, a transfer of an interest in a U.S. Real Property Holding Corporation (a "**USRPHC**") by a foreign investor is subject to tax withholding, notwithstanding the general rule that sales of stock by foreigners are not subject to U.S. taxation. A corporation is USRPHC if more than 50% of its assets consist of U.S. real property. While very few, if any, venture capital investors are USRPHC's, it is customary to provide this representation in order to ensure that any foreign investors will not be subject to tax withholding. Regardless of FIRPTA, if a foreign person or entity is, directly or indirectly, acquiring an 10% or greater voting interest in the Company, it must file Form BE-13 with the U.S. Department of Commerce unless an exemption applies.

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environmental records, reports, notifications, certificates of need, permits, pending permit applications, correspondence, engineering studies, and environmental studies or assessments.

For purposes of this Section 3, "Environmental Laws" means any law, regulation, or other applicable requirement relating to (a) releases or threatened release of Hazardous Substance; (b) pollution or protection of employee health or safety, public health or the environment; or (c) the manufacture, handling, transport, use, treatment, storage, or disposal of Hazardous Substances.

2.25. [Qualified Small Business Stock.[38] As of and immediately following the Closing: (i) the Company will be an eligible corporation as defined in Section 1202(e)(4) of the Code, (ii) the Company will not have made purchases of its own stock described in Code Section 1202(c)(3)(B) during the one-year period preceding the Initial Closing, except for purchases that are disregarded for such purposes under Treasury Regulation Section 1.1202-2 and (iii) the Company's aggregate gross assets, as defined by Code Section 1202(d)(2), at no time between its incorporation and through the Initial Closing have exceeded $50 million, taking into account the assets of any corporations required to be aggregated with the Company in accordance with Code Section 1202(d)(3); provided, however, that in no event shall the Company be liable to the Purchasers or any other party for any damages arising from any subsequently proven or identified error in the Company's determination with respect to the applicability or interpretation of Code Section 1202, unless such determination shall have been given by the Company in a manner either grossly negligent or fraudulent.]

2.26. Disclosure.[39] The Company has made available to the Purchasers all the information reasonably available to the Company that the Purchasers have requested for deciding whether to acquire the Shares, including certain of the Company's projections describing its proposed business plan (the "**Business Plan**"). No representation or warranty of the Company contained in this Agreement, as qualified by the Disclosure Schedule, and no certificate

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[38] Section 1202 of the Internal Revenue Code provides for a 50% exclusion (subject to certain limitations) from taxable income of gains recognized on the disposition of certain stock in qualifying corporations that has been held for at least five years. Although investors may ask for such a representation, companies may resist on the theory that the analysis regarding current compliance is complex, and that many elements of the test are outside the Company's control. In any event, compliance with numerous other requirements during the time the investor holds the stock is needed for the investor to qualify for the benefits of Section 1202.

[39] There is no consensus position on what should be included in the "Disclosure" representation Purchasers will generally try to obtain an unqualified representation that none of the written information and business plan information provided to them by the Company contains a material misstatement or a materially misleading omission. The Company will generally try to resist such a broad representation, on the basis that a 10b-5 type representation, commonly found in an IPO prospectus, is inappropriate for a private financing in which a prospectus-type due diligence process has not occurred. The language shown represents a compromise position. It is important to note that the investors' right of recovery for a breach of this rep may be broader than under Rule SEC 10b-5, because in order to prevail in a Rule 10b-5 securities fraud action, the purchaser must establish that the seller acted with scienter. That is, a purely innocent misrepresentation normally does not give rise to civil liability under 10b-5. Another issue for a Series A investor to consider is the relative utility of this rep to the Series A investor at this stage, versus the risk of giving such a broad rep to investors in later rounds (who, in a worst case, may be looking for a rep on which to "hang their hat" if they decide they want out of the investment).

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furnished or to be furnished to Purchasers at the Closing contains any untrue statement of a material fact or [, to the Company's knowledge,] omits to state a material fact necessary in order to make the statements contained herein or therein not misleading in light of the circumstances under which they were made. The Business Plan was prepared in good faith; however, the Company does not warrant that it will achieve any results projected in the Business Plan. It is understood that this representation is qualified by the fact that the Company has not delivered to the Purchasers, and has not been requested to deliver, a private placement or similar memorandum or any written disclosure of the types of information customarily furnished to purchasers of securities.

2.27. [Small Business Concern.[40] The Company together with its "affiliates" (as that term is defined in Section 121.103 of Title 13 of the Code of Federal Regulations ("**CFR**"), is a ["small business concern"]["smaller business"] within the meaning of the Small Business Investment Act of 1958, as amended (the "**Small Business Act**"), and the regulations promulgated thereunder, including [Section 121.301 of Title 13 of the CFR] [Section 107.710 of Title 13 of the CFR]. The information delivered to each Purchaser that is a licensed Small Business Investment Company (an "**SBIC Purchaser**") on SBA Forms 480, 652 and 1031 delivered in connection herewith is true and complete. The Company is not ineligible for financing by any SBIC Purchaser pursuant to Section 107.720 of the CFR. The Company acknowledges that each SBIC Purchaser is a Federal licensee under the Small Business Act.]

[See ADDENDUM at end of this document with sample Founders Representations and Warranties.][41]

3. Representations and Warranties of the Purchasers.[42] Each Purchaser hereby represents and warrants to the Company, severally and not jointly, that:

3.1. Authorization. The Purchaser has full power and authority to enter into the Transaction Agreements. The Transaction Agreements to which the Purchaser is a party, when executed and delivered by the Purchaser, will constitute valid and legally binding obligations of the Purchaser, enforceable in accordance with their terms, except (a) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, and any other laws of general application affecting enforcement of creditors' rights generally, and as

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[40] The Small Business Concern representation is only necessary if one or more Purchasers is an SBIC.

[41] Founders' representations are controversial and may elicit significant resistance as they are found in a minority of venture deals. They are more likely to appear if Founders are receiving liquidity from the transaction, or if there is heightened concern over intellectual property (e.g., the Company is a spin-out from an academic institution or the Founder was formerly with another company whose business could be deemed competitive with the Company), or in international deals. Founders' representations are even less common in subsequent rounds, where risk is viewed as significantly diminished and fairly shared by the investors, rather than being disproportionately borne by the Founders. A sample set of Founders Representations is attached as an Addendum at the end of this Model Stock Purchase Agreement.

[42] The main purpose of the Purchasers' representations and warranties in Section 4 are to ensure that the investors meet the criteria for private placement exceptions under applicable state and federal securities laws.

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limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies, or (b) to the extent the indemnification provisions contained in the Investors' Rights Agreement may be limited by applicable federal or state securities laws.

3.2. Purchase Entirely for Own Account.[43] This Agreement is made with the Purchaser in reliance upon the Purchaser's representation to the Company, which by the Purchaser's execution of this Agreement, the Purchaser hereby confirms, that the Shares to be acquired by the Purchaser will be acquired for investment for the Purchaser's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same. By executing this Agreement, the Purchaser further represents that the Purchaser does not presently have any contract, undertaking, agreement or arrangement with any Person to sell, transfer or grant participations to such Person or to any third Person, with respect to any of the Shares. The Purchaser has not been formed for the specific purpose of acquiring the Shares.

3.3. Disclosure of Information. The Purchaser has had an opportunity to discuss the Company's business, management, financial affairs and the terms and conditions of the offering of the Shares with the Company's management and has had an opportunity to review the Company's facilities. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 2 of this Agreement or the right of the Purchasers to rely thereon.

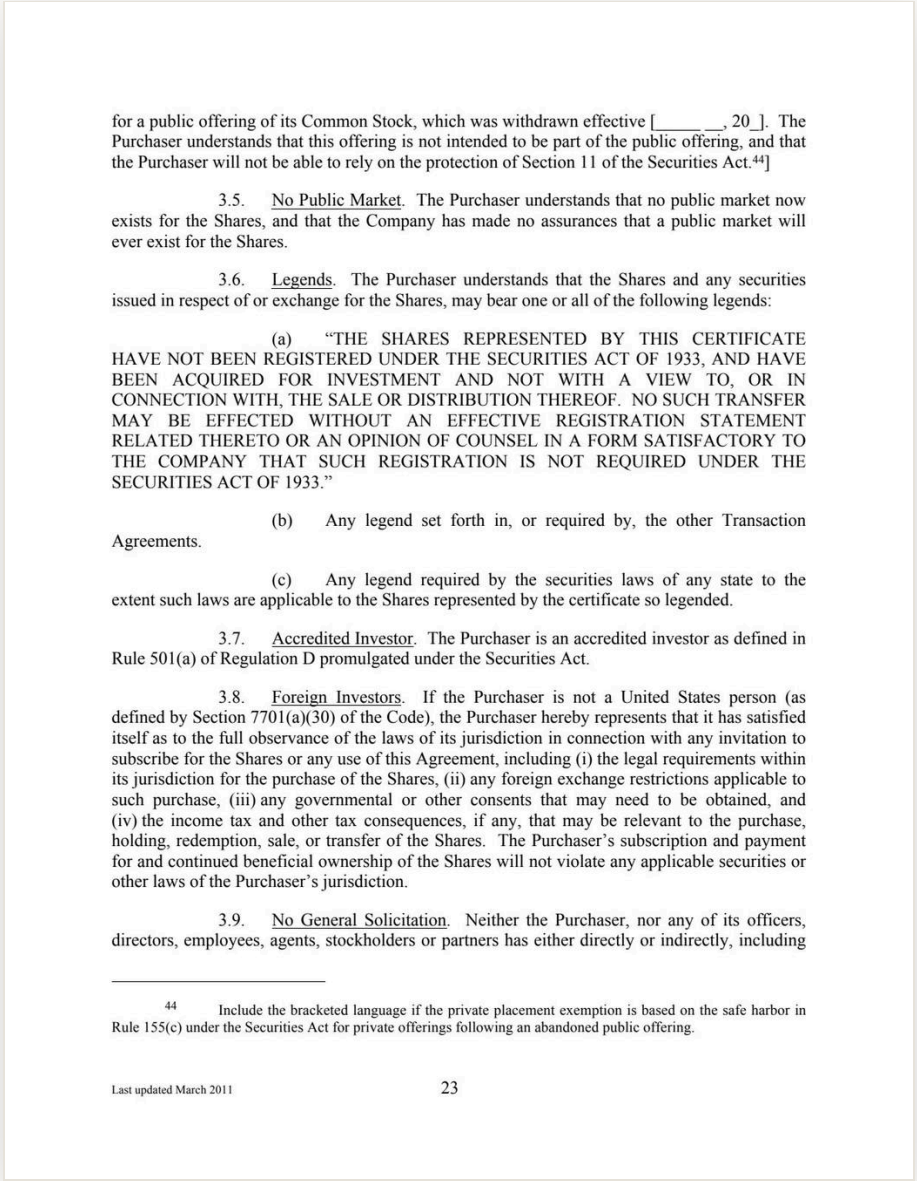
3.4. Restricted Securities. The Purchaser understands that the Shares have not been, and will not be, registered under the Securities Act, by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Purchaser's representations as expressed herein. The Purchaser understands that the Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Purchaser must hold the Shares indefinitely unless they are registered with the Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available. The Purchaser acknowledges that the Company has no obligation to register or qualify the Shares, or the Common Stock into which it may be converted, for resale except as set forth in the Investors' Rights Agreement. The Purchaser further acknowledges that if an exemption from registration or qualification is available, it may be conditioned on various requirements including, but not limited to, the time and manner of sale, the holding period for the Shares, and on requirements relating to the Company which are outside of the Purchaser's control, and which the Company is under no obligation and may not be able to satisfy. [The Purchaser acknowledges that the Company filed a registration statement

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[43] Occasionally, a venture capital fund will allow its employees and principals to co-invest through a special entity as nominee. Assuming these employees and principals meet the accreditation or sophistication standards necessary for the private placement exemption being relied on, and assuming the special purpose entity is not formed solely for the purpose of this investment, the language of this provision can be tailored to carve out that special entity.

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for a public offering of its Common Stock, which was withdrawn effective [_____ __, 20_]. The Purchaser understands that this offering is not intended to be part of the public offering, and that the Purchaser will not be able to rely on the protection of Section 11 of the Securities Act.[44]]

3.5. No Public Market. The Purchaser understands that no public market now exists for the Shares, and that the Company has made no assurances that a public market will ever exist for the Shares.

3.6. Legends. The Purchaser understands that the Shares and any securities issued in respect of or exchange for the Shares, may bear one or all of the following legends:

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933."

(b) Any legend set forth in, or required by, the other Transaction Agreements.

(c) Any legend required by the securities laws of any state to the extent such laws are applicable to the Shares represented by the certificate so legended.

3.7. Accredited Investor. The Purchaser is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act.

3.8. Foreign Investors. If the Purchaser is not a United States person (as defined by Section 7701(a)(30) of the Code), the Purchaser hereby represents that it has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Shares or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the Shares. The Purchaser's subscription and payment for and continued beneficial ownership of the Shares will not violate any applicable securities or other laws of the Purchaser's jurisdiction.

3.9. No General Solicitation. Neither the Purchaser, nor any of its officers, directors, employees, agents, stockholders or partners has either directly or indirectly, including

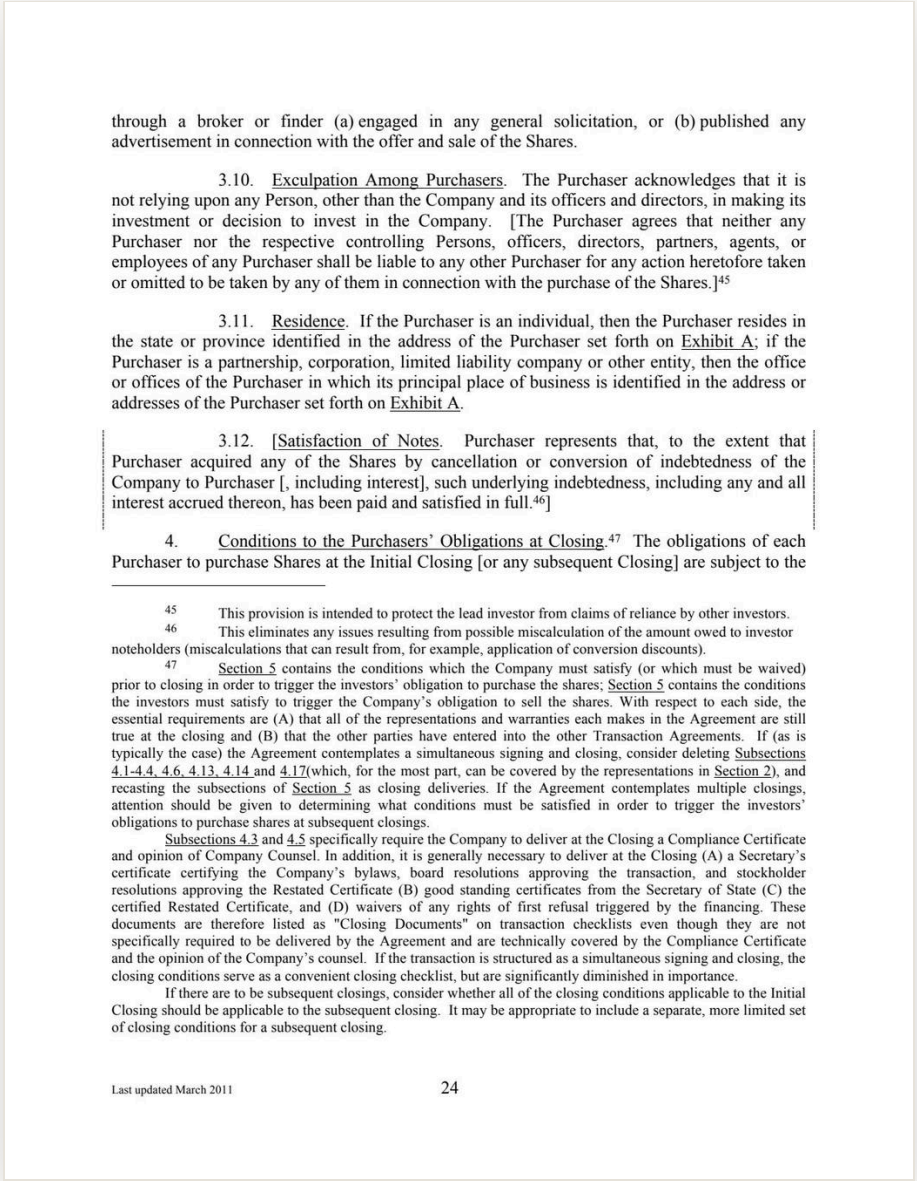
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[44] Include the bracketed language if the private placement exemption is based on the safe harbor in Rule 155(c) under the Securities Act for private offerings following an abandoned public offering.

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through a broker or finder (a) engaged in any general solicitation, or (b) published any advertisement in connection with the offer and sale of the Shares.

3.10. Exculpation Among Purchasers. The Purchaser acknowledges that it is not relying upon any Person, other than the Company and its officers and directors, in making its investment or decision to invest in the Company. [The Purchaser agrees that neither any Purchaser nor the respective controlling Persons, officers, directors, partners, agents, or employees of any Purchaser shall be liable to any other Purchaser for any action heretofore taken or omitted to be taken by any of them in connection with the purchase of the Shares.][45]

3.11. Residence. If the Purchaser is an individual, then the Purchaser resides in the state or province identified in the address of the Purchaser set forth on Exhibit A; if the Purchaser is a partnership, corporation, limited liability company or other entity, then the office or offices of the Purchaser in which its principal place of business is identified in the address or addresses of the Purchaser set forth on Exhibit A.

3.12. [Satisfaction of Notes. Purchaser represents that, to the extent that Purchaser acquired any of the Shares by cancellation or conversion of indebtedness of the Company to Purchaser [, including interest], such underlying indebtedness, including any and all interest accrued thereon, has been paid and satisfied in full.[46]]

4. Conditions to the Purchasers' Obligations at Closing.[47] The obligations of each Purchaser to purchase Shares at the Initial Closing [or any subsequent Closing] are subject to the

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45 This provision is intended to protect the lead investor from claims of reliance by other investors.

46 This eliminates any issues resulting from possible miscalculation of the amount owed to investor noteholders (miscalculations that can result from, for example, application of conversion discounts).

47 Section 5 contains the conditions which the Company must satisfy (or which must be waived) prior to closing in order to trigger the investors' obligation to purchase the shares; Section 5 contains the conditions the investors must satisfy to trigger the Company's obligation to sell the shares. With respect to each side, the essential requirements are (A) that all of the representations and warranties each makes in the Agreement are still true at the closing and (B) that the other parties have entered into the other Transaction Agreements. If (as is typically the case) the Agreement contemplates a simultaneous signing and closing, consider deleting Subsections 4.1-4.4, 4.6, 4.13, 4.14 and 4.17(which, for the most part, can be covered by the representations in Section 2), and recasting the subsections of Section 5 as closing deliveries. If the Agreement contemplates multiple closings, attention should be given to determining what conditions must be satisfied in order to trigger the investors' obligations to purchase shares at subsequent closings.

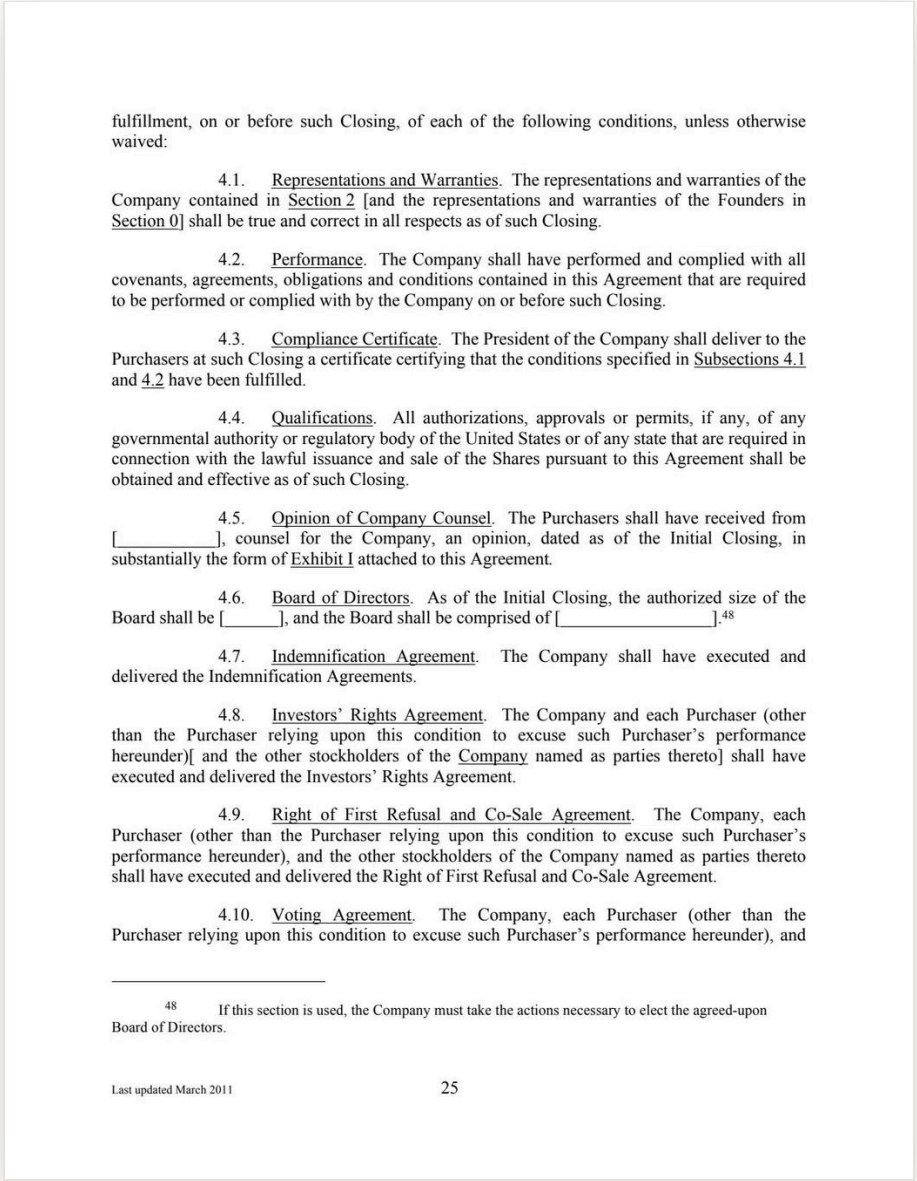
Subsections 4.3 and 4.5 specifically require the Company to deliver at the Closing a Compliance Certificate and opinion of Company Counsel. In addition, it is generally necessary to deliver at the Closing (A) a Secretary's certificate certifying the Company's bylaws, board resolutions approving the transaction, and stockholder resolutions approving the Restated Certificate (B) good standing certificates from the Secretary of State (C) the certified Restated Certificate, and (D) waivers of any rights of first refusal triggered by the financing. These documents are therefore listed as "Closing Documents" on transaction checklists even though they are not specifically required to be delivered by the Agreement and are technically covered by the Compliance Certificate and the opinion of the Company's counsel. If the transaction is structured as a simultaneous signing and closing, the closing conditions serve as a convenient closing checklist, but are significantly diminished in importance.

If there are to be subsequent closings, consider whether all of the closing conditions applicable to the Initial Closing should be applicable to the subsequent closing. It may be appropriate to include a separate, more limited set of closing conditions for a subsequent closing.

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fulfillment, on or before such Closing, of each of the following conditions, unless otherwise waived:

4.1. Representations and Warranties. The representations and warranties of the Company contained in Section 2 [and the representations and warranties of the Founders in Section 0] shall be true and correct in all respects as of such Closing.

4.2. Performance. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by the Company on or before such Closing.

4.3. Compliance Certificate. The President of the Company shall deliver to the Purchasers at such Closing a certificate certifying that the conditions specified in Subsections 4.1 and 4.2 have been fulfilled.

4.4. Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be obtained and effective as of such Closing.

4.5. Opinion of Company Counsel. The Purchasers shall have received from [_____], counsel for the Company, an opinion, dated as of the Initial Closing, in substantially the form of Exhibit I attached to this Agreement.

4.6. Board of Directors. As of the Initial Closing, the authorized size of the Board shall be [_____], and the Board shall be comprised of [_____].[48]

4.7. Indemnification Agreement. The Company shall have executed and delivered the Indemnification Agreements.

4.8. Investors' Rights Agreement. The Company and each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder)[and the other stockholders of the Company named as parties thereto] shall have executed and delivered the Investors' Rights Agreement.

4.9. Right of First Refusal and Co-Sale Agreement. The Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder), and the other stockholders of the Company named as parties thereto shall have executed and delivered the Right of First Refusal and Co-Sale Agreement.

4.10. Voting Agreement. The Company, each Purchaser (other than the Purchaser relying upon this condition to excuse such Purchaser's performance hereunder), and

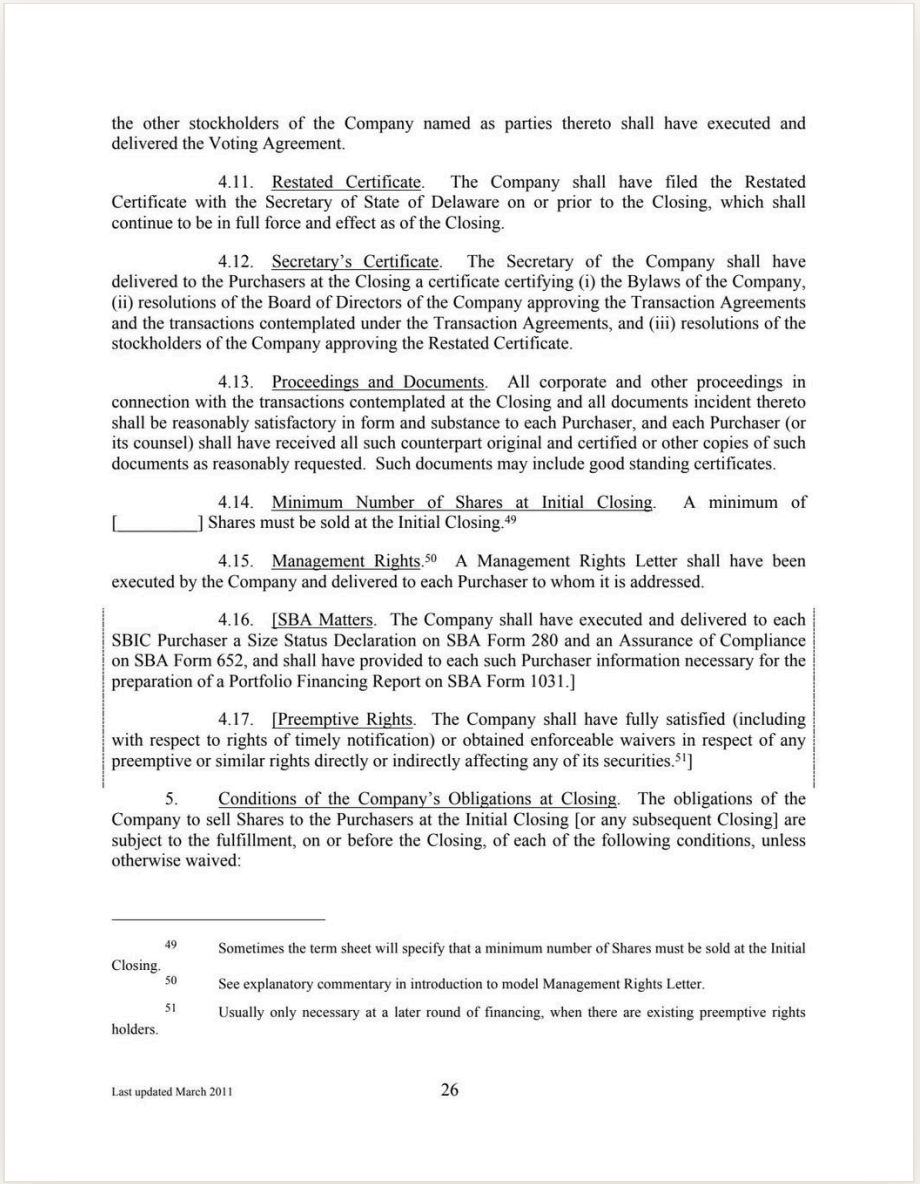
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[48] If this section is used, the Company must take the actions necessary to elect the agreed-upon Board of Directors.

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the other stockholders of the Company named as parties thereto shall have executed and delivered the Voting Agreement.

4.11. Restated Certificate. The Company shall have filed the Restated Certificate with the Secretary of State of Delaware on or prior to the Closing, which shall continue to be in full force and effect as of the Closing.

4.12. Secretary's Certificate. The Secretary of the Company shall have delivered to the Purchasers at the Closing a certificate certifying (i) the Bylaws of the Company, (ii) resolutions of the Board of Directors of the Company approving the Transaction Agreements and the transactions contemplated under the Transaction Agreements, and (iii) resolutions of the stockholders of the Company approving the Restated Certificate.

4.13. Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the Closing and all documents incident thereto shall be reasonably satisfactory in form and substance to each Purchaser, and each Purchaser (or its counsel) shall have received all such counterpart original and certified or other copies of such documents as reasonably requested. Such documents may include good standing certificates.

4.14. Minimum Number of Shares at Initial Closing. A minimum of [_____] Shares must be sold at the Initial Closing.[49]

4.15. Management Rights.[50] A Management Rights Letter shall have been executed by the Company and delivered to each Purchaser to whom it is addressed.

4.16. [SBA Matters. The Company shall have executed and delivered to each SBIC Purchaser a Size Status Declaration on SBA Form 280 and an Assurance of Compliance on SBA Form 652, and shall have provided to each such Purchaser information necessary for the preparation of a Portfolio Financing Report on SBA Form 1031.]

4.17. [Preemptive Rights. The Company shall have fully satisfied (including with respect to rights of timely notification) or obtained enforceable waivers in respect of any preemptive or similar rights directly or indirectly affecting any of its securities.[51]]

5. Conditions of the Company's Obligations at Closing. The obligations of the Company to sell Shares to the Purchasers at the Initial Closing [or any subsequent Closing] are subject to the fulfillment, on or before the Closing, of each of the following conditions, unless otherwise waived:

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[49] Sometimes the term sheet will specify that a minimum number of Shares must be sold at the Initial Closing.

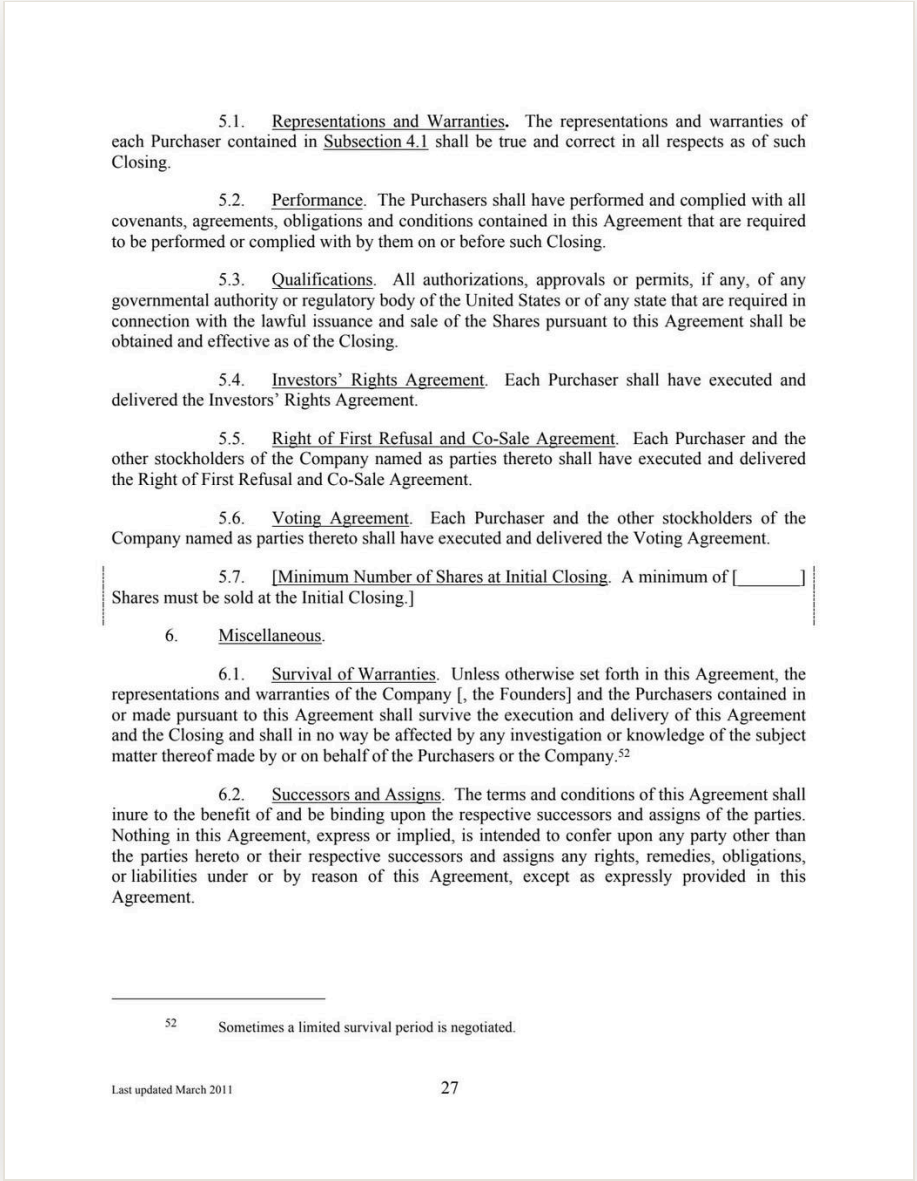
[50] See explanatory commentary in introduction to model Management Rights Letter.

[51] Usually only necessary at a later round of financing, when there are existing preemptive rights holders.

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5.1. Representations and Warranties. The representations and warranties of each Purchaser contained in Subsection 4.1 shall be true and correct in all respects as of such Closing.

5.2. Performance. The Purchasers shall have performed and complied with all covenants, agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by them on or before such Closing.

5.3. Qualifications. All authorizations, approvals or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful issuance and sale of the Shares pursuant to this Agreement shall be obtained and effective as of the Closing.

5.4. Investors' Rights Agreement. Each Purchaser shall have executed and delivered the Investors' Rights Agreement.

5.5. Right of First Refusal and Co-Sale Agreement. Each Purchaser and the other stockholders of the Company named as parties thereto shall have executed and delivered the Right of First Refusal and Co-Sale Agreement.

5.6. Voting Agreement. Each Purchaser and the other stockholders of the Company named as parties thereto shall have executed and delivered the Voting Agreement.

5.7. [Minimum Number of Shares at Initial Closing. A minimum of [_____] Shares must be sold at the Initial Closing.]

6. Miscellaneous.

6.1. Survival of Warranties. Unless otherwise set forth in this Agreement, the representations and warranties of the Company [, the Founders] and the Purchasers contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation or knowledge of the subject matter thereof made by or on behalf of the Purchasers or the Company.[52]

6.2. Successors and Assigns. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

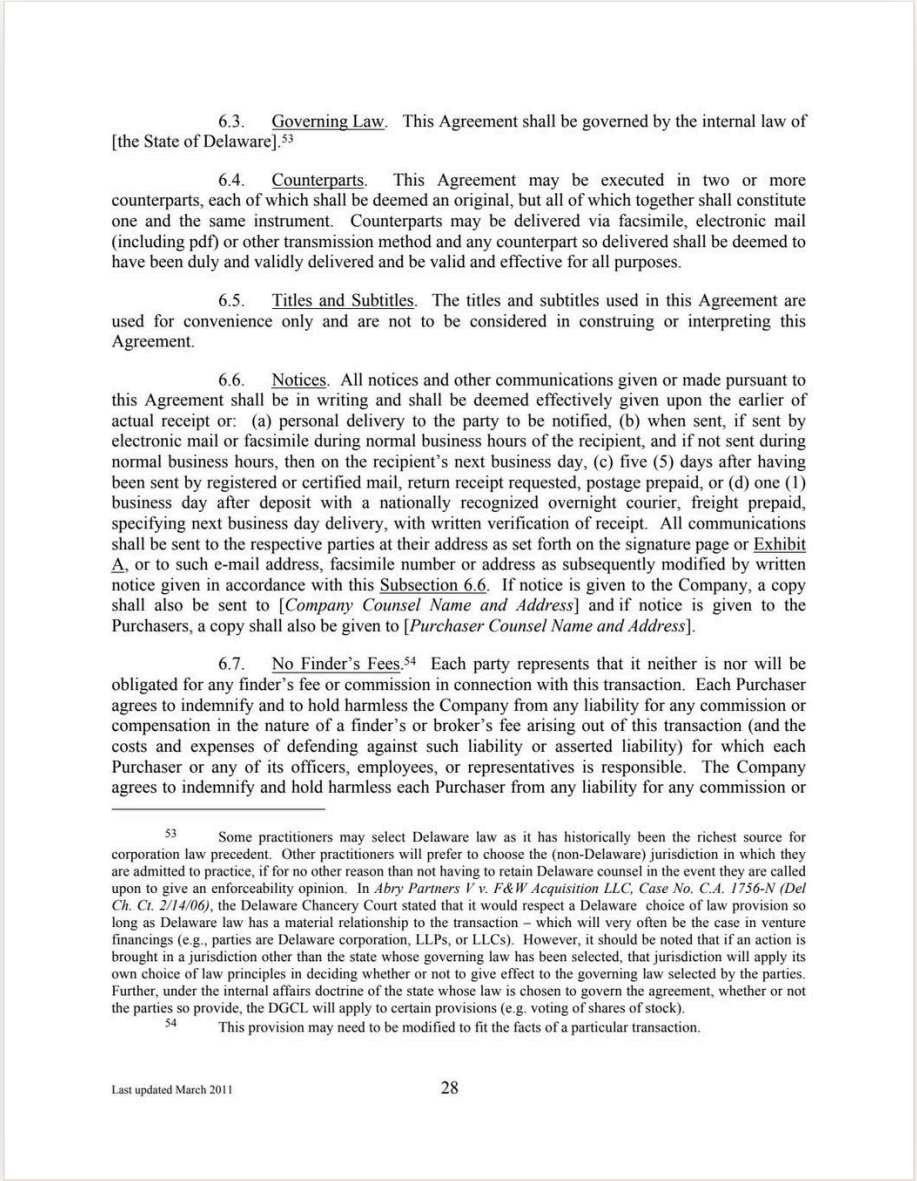
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52 Sometimes a limited survival period is negotiated.

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6.3. Governing Law. This Agreement shall be governed by the internal law of [the State of Delaware].[53]

6.4. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.5. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.6. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on the signature page or Exhibit A, or to such e-mail address, facsimile number or address as subsequently modified by written notice given in accordance with this Subsection 6.6. If notice is given to the Company, a copy shall also be sent to [*Company Counsel Name and Address*] and if notice is given to the Purchasers, a copy shall also be given to [*Purchaser Counsel Name and Address*].

6.7. No Finder's Fees.[54] Each party represents that it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. Each Purchaser agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finder's or broker's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which each Purchaser or any of its officers, employees, or representatives is responsible. The Company agrees to indemnify and hold harmless each Purchaser from any liability for any commission or

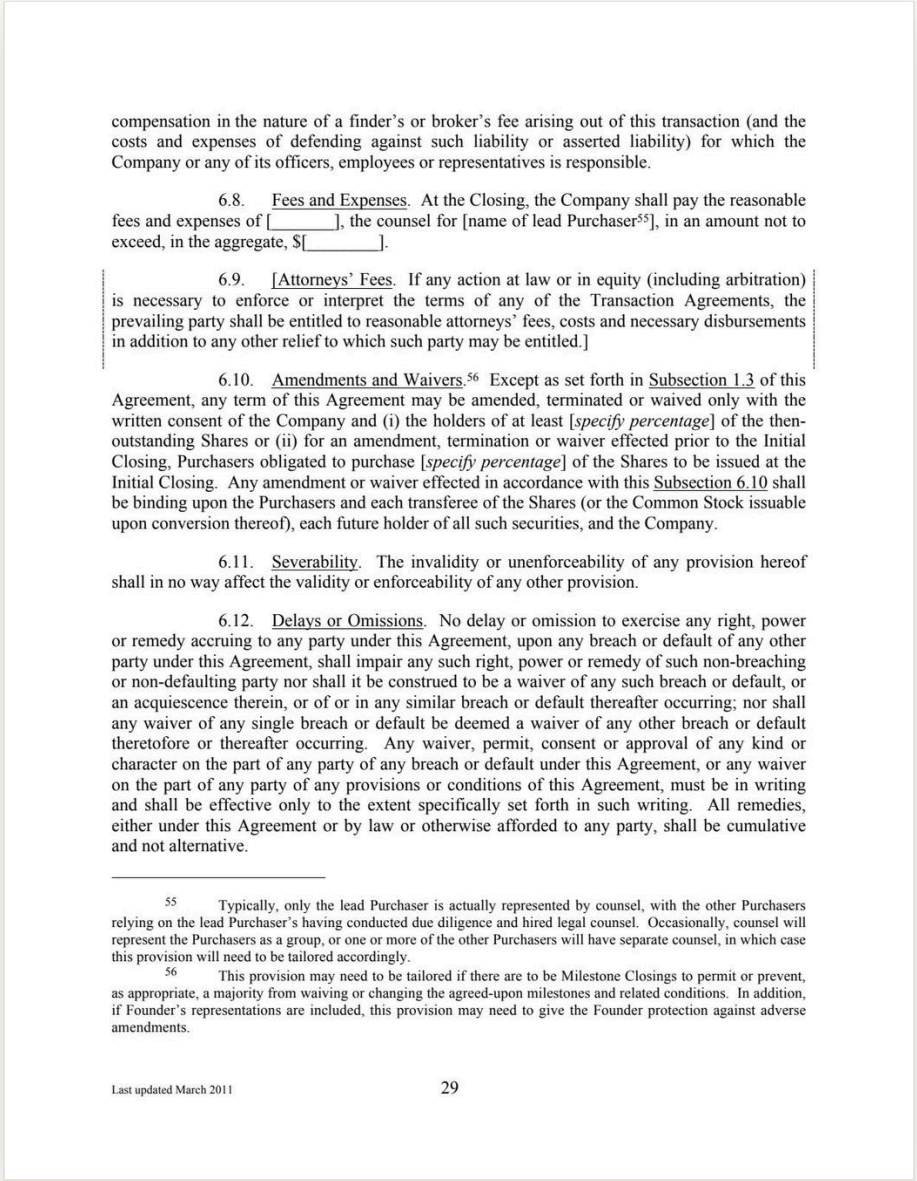
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[53] Some practitioners may select Delaware law as it has historically been the richest source for corporation law precedent. Other practitioners will prefer to choose the (non-Delaware) jurisdiction in which they are admitted to practice, if for no other reason than not having to retain Delaware counsel in the event they are called upon to give an enforceability opinion. In *Abry Partners V v. F&W Acquisition LLC, Case No. C.A. 1756-N (Del Ch. Ct. 2/14/06)*, the Delaware Chancery Court stated that it would respect a Delaware choice of law provision so long as Delaware law has a material relationship to the transaction – which will very often be the case in venture financings (e.g., parties are Delaware corporation, LLPs, or LLCs). However, it should be noted that if an action is brought in a jurisdiction other than the state whose governing law has been selected, that jurisdiction will apply its own choice of law principles in deciding whether or not to give effect to the governing law selected by the parties. Further, under the internal affairs doctrine of the state whose law is chosen to govern the agreement, whether or not the parties so provide, the DGCL will apply to certain provisions (e.g. voting of shares of stock).

[54] This provision may need to be modified to fit the facts of a particular transaction.

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compensation in the nature of a finder's or broker's fee arising out of this transaction (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

6.8. Fees and Expenses. At the Closing, the Company shall pay the reasonable fees and expenses of [_____], the counsel for [name of lead Purchaser[55]], in an amount not to exceed, in the aggregate, $[_____].

6.9. [Attorneys' Fees. If any action at law or in equity (including arbitration) is necessary to enforce or interpret the terms of any of the Transaction Agreements, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.]

6.10. Amendments and Waivers.[56] Except as set forth in Subsection 1.3 of this Agreement, any term of this Agreement may be amended, terminated or waived only with the written consent of the Company and (i) the holders of at least [*specify percentage*] of the then-outstanding Shares or (ii) for an amendment, termination or waiver effected prior to the Initial Closing, Purchasers obligated to purchase [*specify percentage*] of the Shares to be issued at the Initial Closing. Any amendment or waiver effected in accordance with this Subsection 6.10 shall be binding upon the Purchasers and each transferee of the Shares (or the Common Stock issuable upon conversion thereof), each future holder of all such securities, and the Company.

6.11. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

6.12. Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

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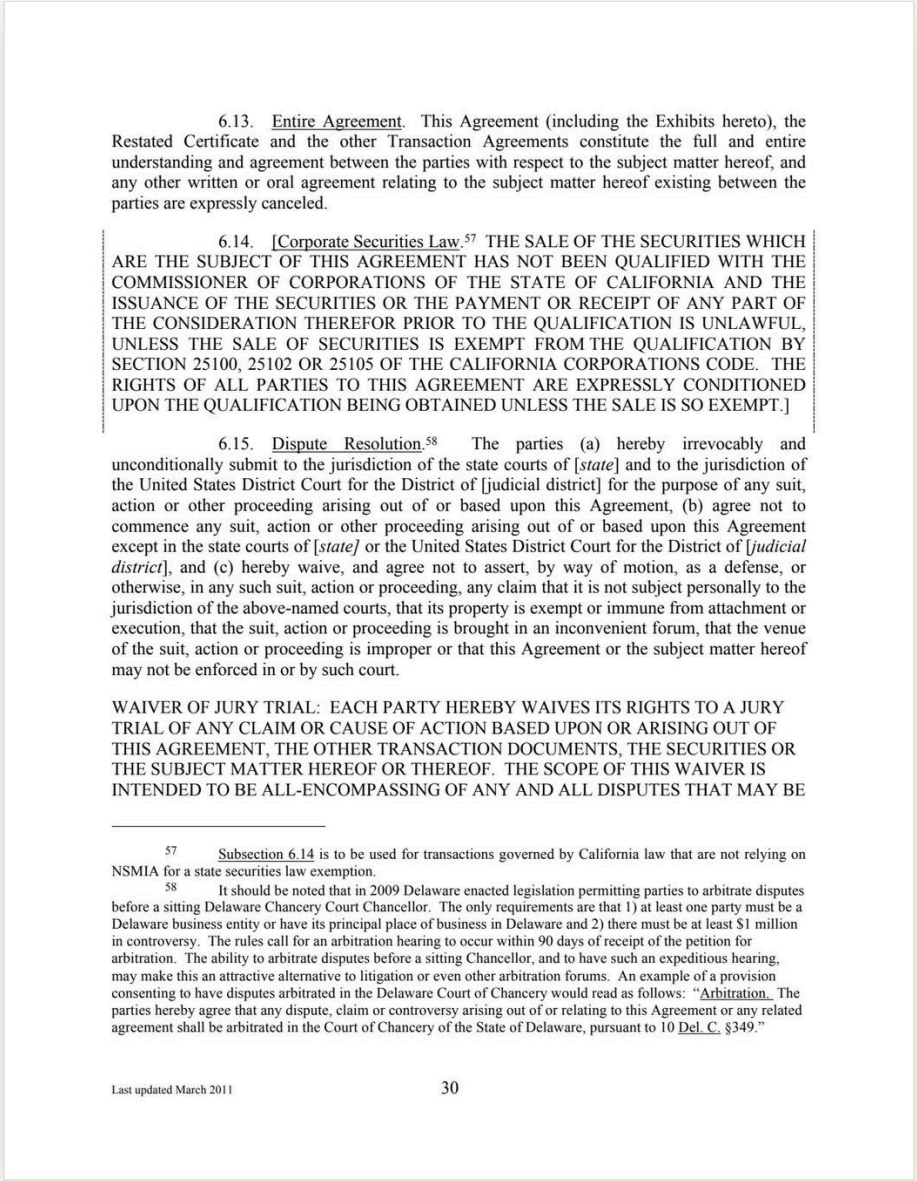
[55] Typically, only the lead Purchaser is actually represented by counsel, with the other Purchasers relying on the lead Purchaser's having conducted due diligence and hired legal counsel. Occasionally, counsel will represent the Purchasers as a group, or one or more of the other Purchasers will have separate counsel, in which case this provision will need to be tailored accordingly.

[56] This provision may need to be tailored if there are to be Milestone Closings to permit or prevent, as appropriate, a majority from waiving or changing the agreed-upon milestones and related conditions. In addition, if Founder's representations are included, this provision may need to give the Founder protection against adverse amendments.

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6.13. Entire Agreement. This Agreement (including the Exhibits hereto), the Restated Certificate and the other Transaction Agreements constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled.

6.14. [Corporate Securities Law.[57] THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM THE QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED UNLESS THE SALE IS SO EXEMPT.]

6.15. Dispute Resolution.[58] The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of [*state*] and to the jurisdiction of the United States District Court for the District of [judicial district] for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of [*state]* or the United States District Court for the District of [*judicial district*], and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE

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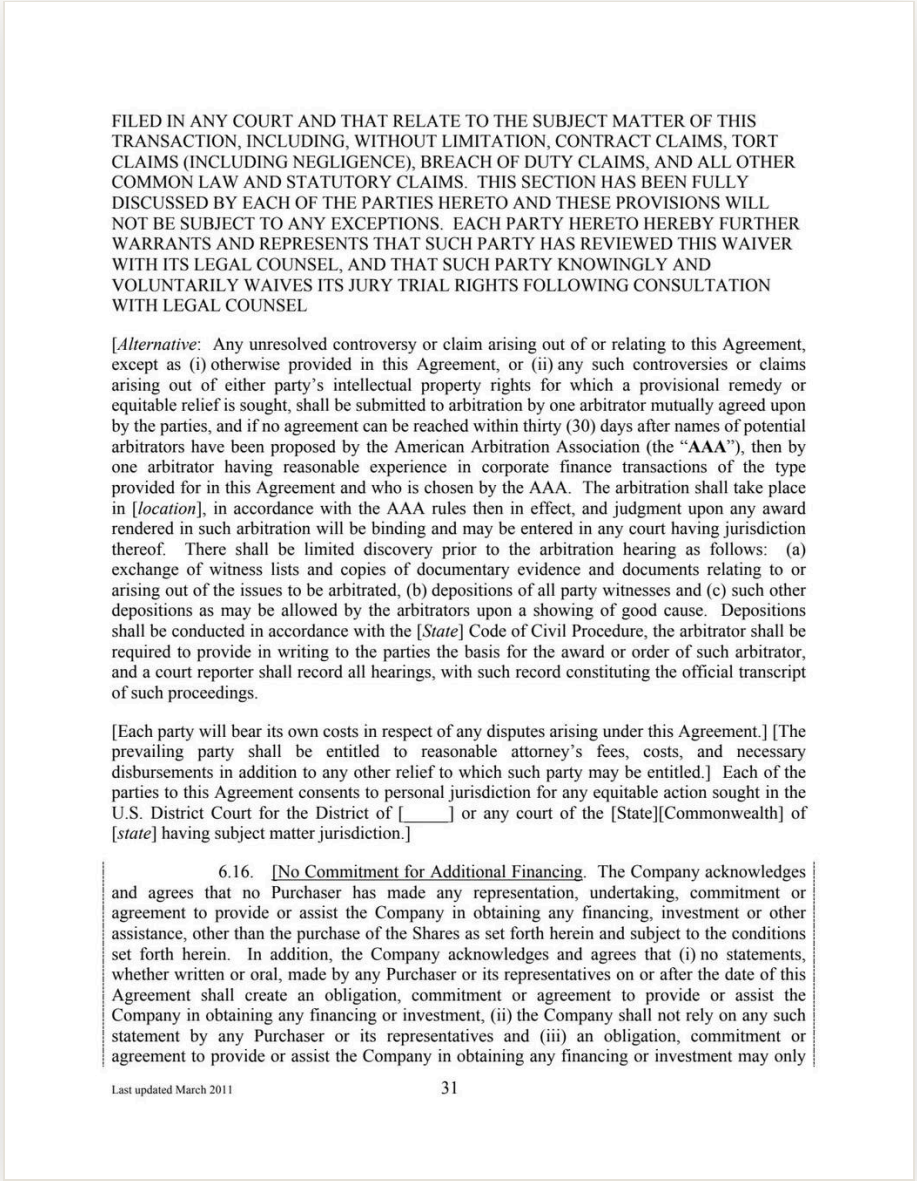
[57] Subsection 6.14 is to be used for transactions governed by California law that are not relying on NSMIA for a state securities law exemption.

[58] It should be noted that in 2009 Delaware enacted legislation permitting parties to arbitrate disputes before a sitting Delaware Chancery Court Chancellor. The only requirements are that 1) at least one party must be a Delaware business entity or have its principal place of business in Delaware and 2) there must be at least $1 million in controversy. The rules call for an arbitration hearing to occur within 90 days of receipt of the petition for arbitration. The ability to arbitrate disputes before a sitting Chancellor, and to have such an expeditious hearing, may make this an attractive alternative to litigation or even other arbitration forums. An example of a provision consenting to have disputes arbitrated in the Delaware Court of Chancery would read as follows: "Arbitration. The parties hereby agree that any dispute, claim or controversy arising out of or relating to this Agreement or any related agreement shall be arbitrated in the Court of Chancery of the State of Delaware, pursuant to 10 Del. C. §349."

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FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL

[*Alternative*: Any unresolved controversy or claim arising out of or relating to this Agreement, except as (i) otherwise provided in this Agreement, or (ii) any such controversies or claims arising out of either party's intellectual property rights for which a provisional remedy or equitable relief is sought, shall be submitted to arbitration by one arbitrator mutually agreed upon by the parties, and if no agreement can be reached within thirty (30) days after names of potential arbitrators have been proposed by the American Arbitration Association (the "**AAA**"), then by one arbitrator having reasonable experience in corporate finance transactions of the type provided for in this Agreement and who is chosen by the AAA. The arbitration shall take place in [*location*], in accordance with the AAA rules then in effect, and judgment upon any award rendered in such arbitration will be binding and may be entered in any court having jurisdiction thereof. There shall be limited discovery prior to the arbitration hearing as follows: (a) exchange of witness lists and copies of documentary evidence and documents relating to or arising out of the issues to be arbitrated, (b) depositions of all party witnesses and (c) such other depositions as may be allowed by the arbitrators upon a showing of good cause. Depositions shall be conducted in accordance with the [*State*] Code of Civil Procedure, the arbitrator shall be required to provide in writing to the parties the basis for the award or order of such arbitrator, and a court reporter shall record all hearings, with such record constituting the official transcript of such proceedings.

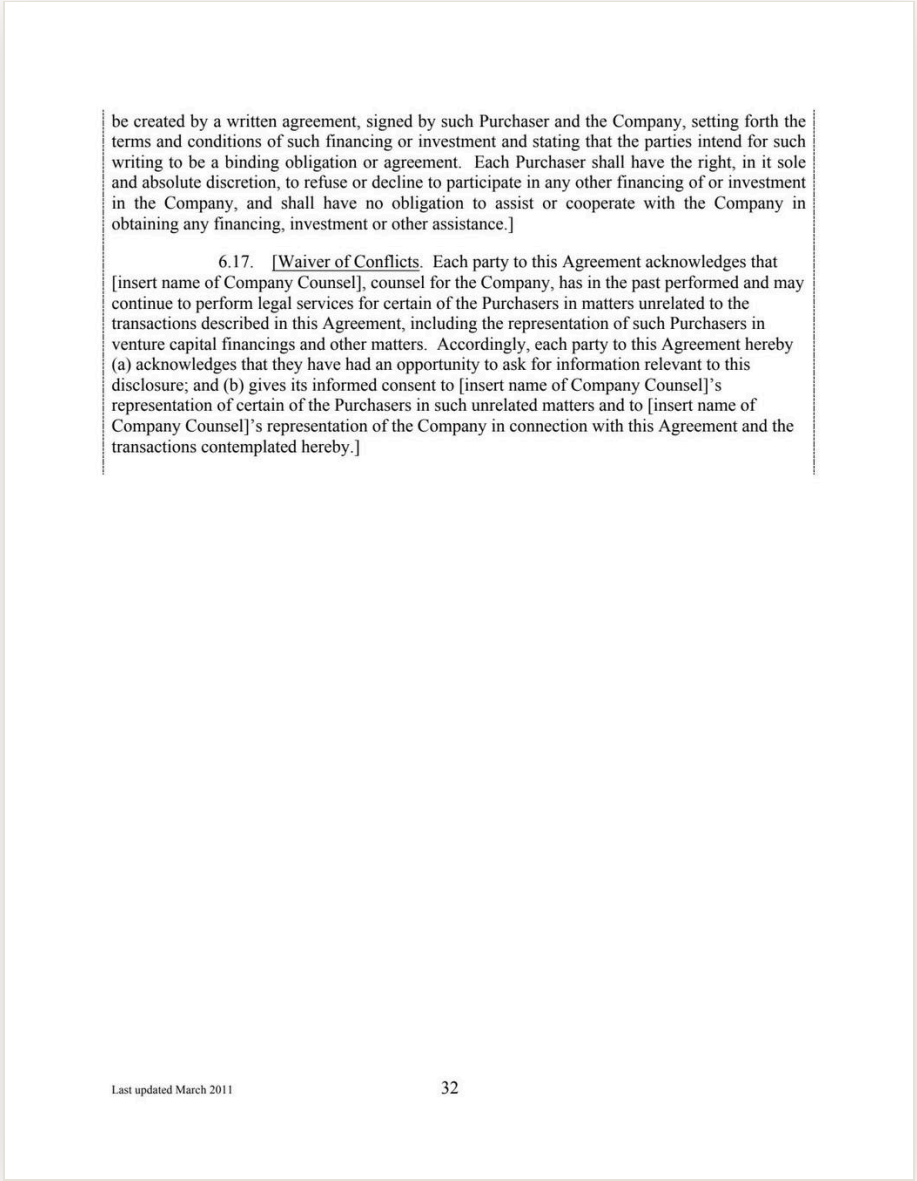
[Each party will bear its own costs in respect of any disputes arising under this Agreement.] [The prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.] Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in the U.S. District Court for the District of [_____] or any court of the [State][Commonwealth] of [*state*] having subject matter jurisdiction.]

6.16. [No Commitment for Additional Financing. The Company acknowledges and agrees that no Purchaser has made any representation, undertaking, commitment or agreement to provide or assist the Company in obtaining any financing, investment or other assistance, other than the purchase of the Shares as set forth herein and subject to the conditions set forth herein. In addition, the Company acknowledges and agrees that (i) no statements, whether written or oral, made by any Purchaser or its representatives on or after the date of this Agreement shall create an obligation, commitment or agreement to provide or assist the Company in obtaining any financing or investment, (ii) the Company shall not rely on any such statement by any Purchaser or its representatives and (iii) an obligation, commitment or agreement to provide or assist the Company in obtaining any financing or investment may only

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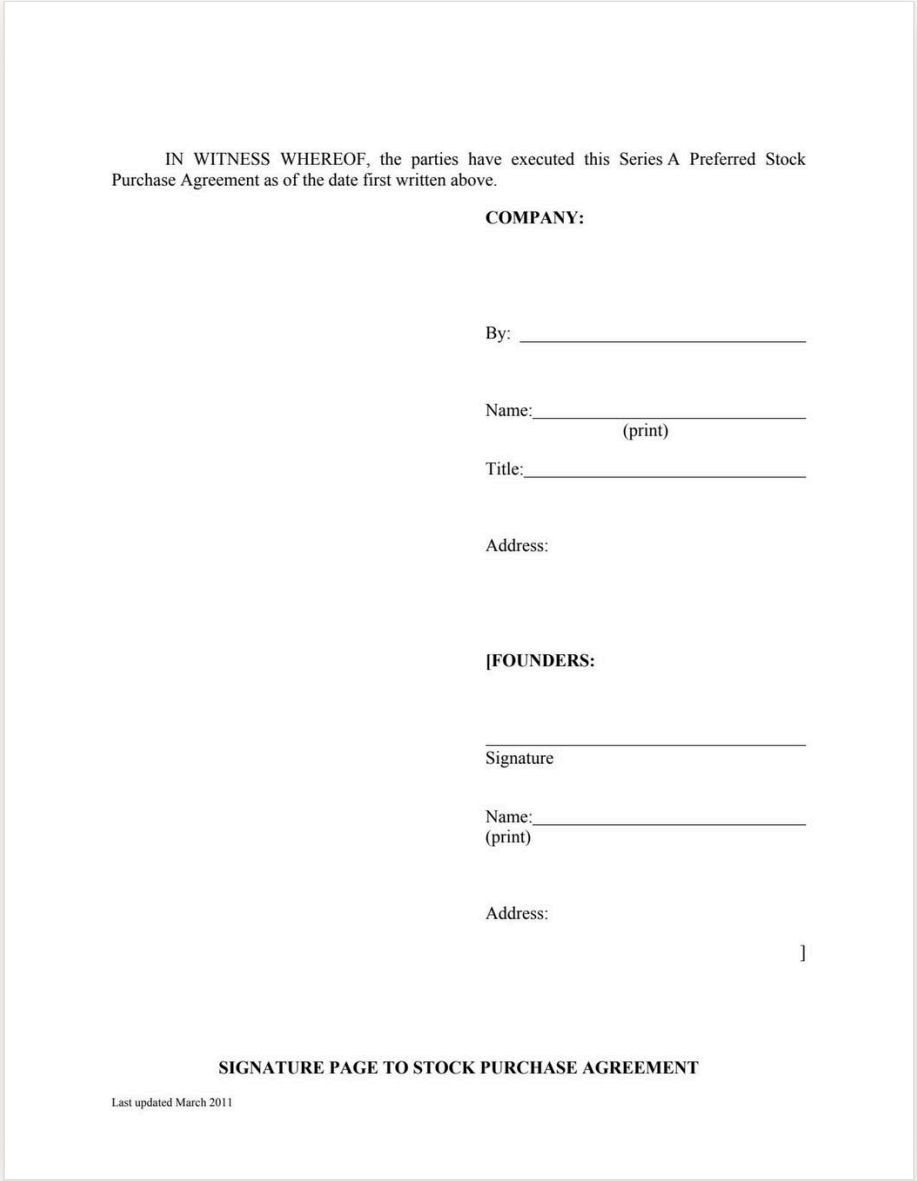
be created by a written agreement, signed by such Purchaser and the Company, setting forth the terms and conditions of such financing or investment and stating that the parties intend for such writing to be a binding obligation or agreement. Each Purchaser shall have the right, in it sole and absolute discretion, to refuse or decline to participate in any other financing of or investment in the Company, and shall have no obligation to assist or cooperate with the Company in obtaining any financing, investment or other assistance.]

6.17. [Waiver of Conflicts. Each party to this Agreement acknowledges that [insert name of Company Counsel], counsel for the Company, has in the past performed and may continue to perform legal services for certain of the Purchasers in matters unrelated to the transactions described in this Agreement, including the representation of such Purchasers in venture capital financings and other matters. Accordingly, each party to this Agreement hereby (a) acknowledges that they have had an opportunity to ask for information relevant to this disclosure; and (b) gives its informed consent to [insert name of Company Counsel]'s representation of certain of the Purchasers in such unrelated matters and to [insert name of Company Counsel]'s representation of the Company in connection with this Agreement and the transactions contemplated hereby.]

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IN WITNESS WHEREOF, the parties have executed this Series A Preferred Stock Purchase Agreement as of the date first written above.

COMPANY:

By: _____

Name:_____
(print)

Title:_____

Address:

[FOUNDERS:

_____
Signature

Name:_____
(print)

Address:

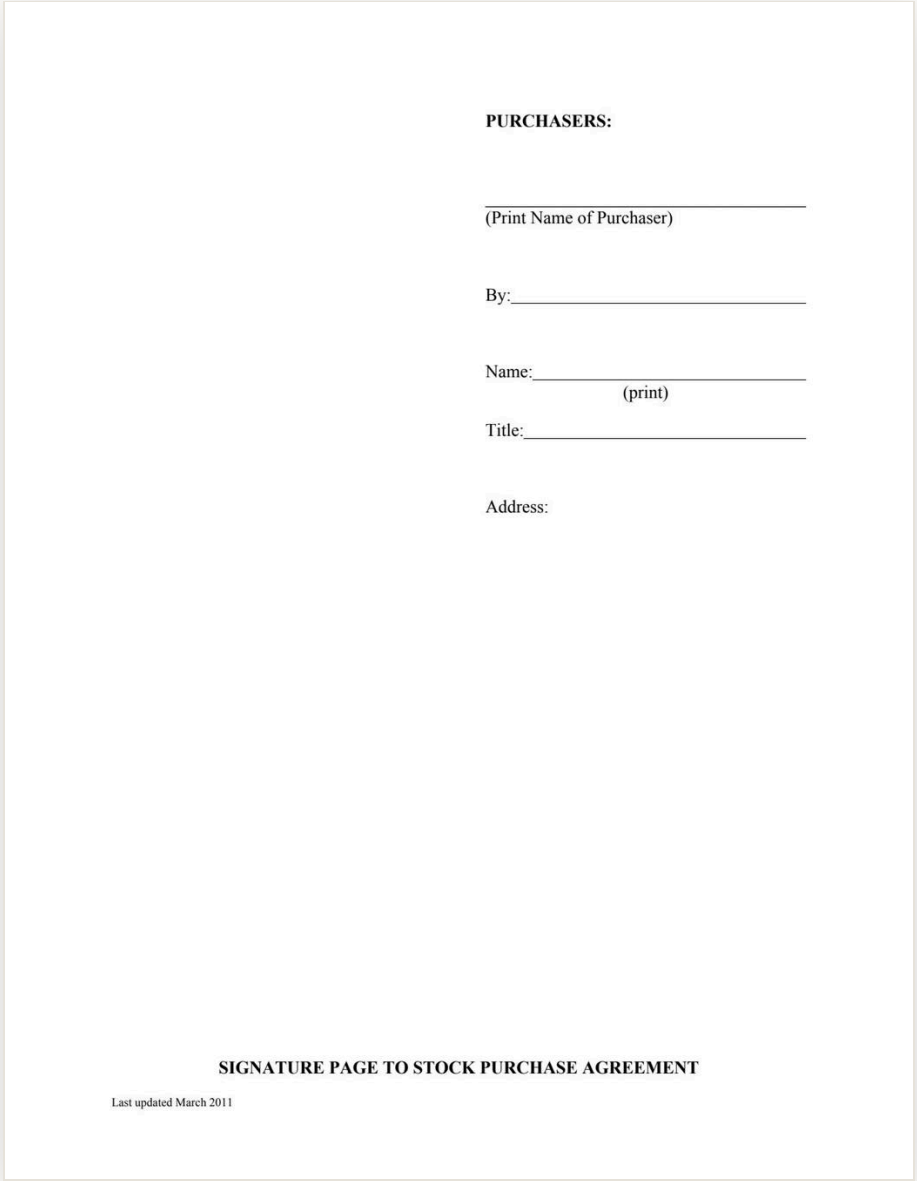
]

SIGNATURE PAGE TO STOCK PURCHASE AGREEMENT

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PURCHASERS:

_____
(Print Name of Purchaser)

By:_____

Name:_____
(print)

Title:_____

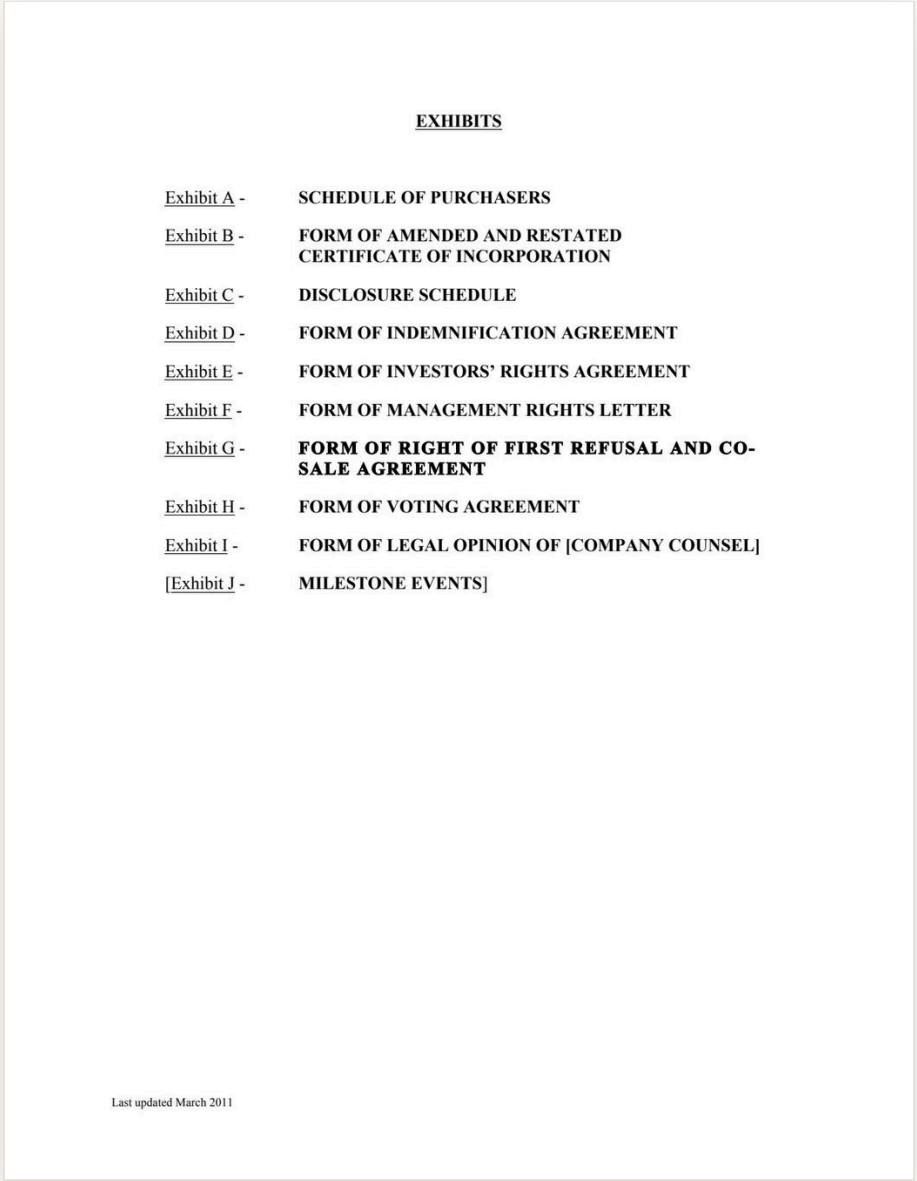
Address:

SIGNATURE PAGE TO STOCK PURCHASE AGREEMENT

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EXHIBITS

Exhibit A -	**SCHEDULE OF PURCHASERS**
Exhibit B -	**FORM OF AMENDED AND RESTATED CERTIFICATE OF INCORPORATION**
Exhibit C -	**DISCLOSURE SCHEDULE**
Exhibit D -	**FORM OF INDEMNIFICATION AGREEMENT**
Exhibit E -	**FORM OF INVESTORS' RIGHTS AGREEMENT**
Exhibit F -	**FORM OF MANAGEMENT RIGHTS LETTER**
Exhibit G -	**FORM OF RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT**
Exhibit H -	**FORM OF VOTING AGREEMENT**
Exhibit I -	**FORM OF LEGAL OPINION OF [COMPANY COUNSEL]**
[Exhibit J -	**MILESTONE EVENTS]**

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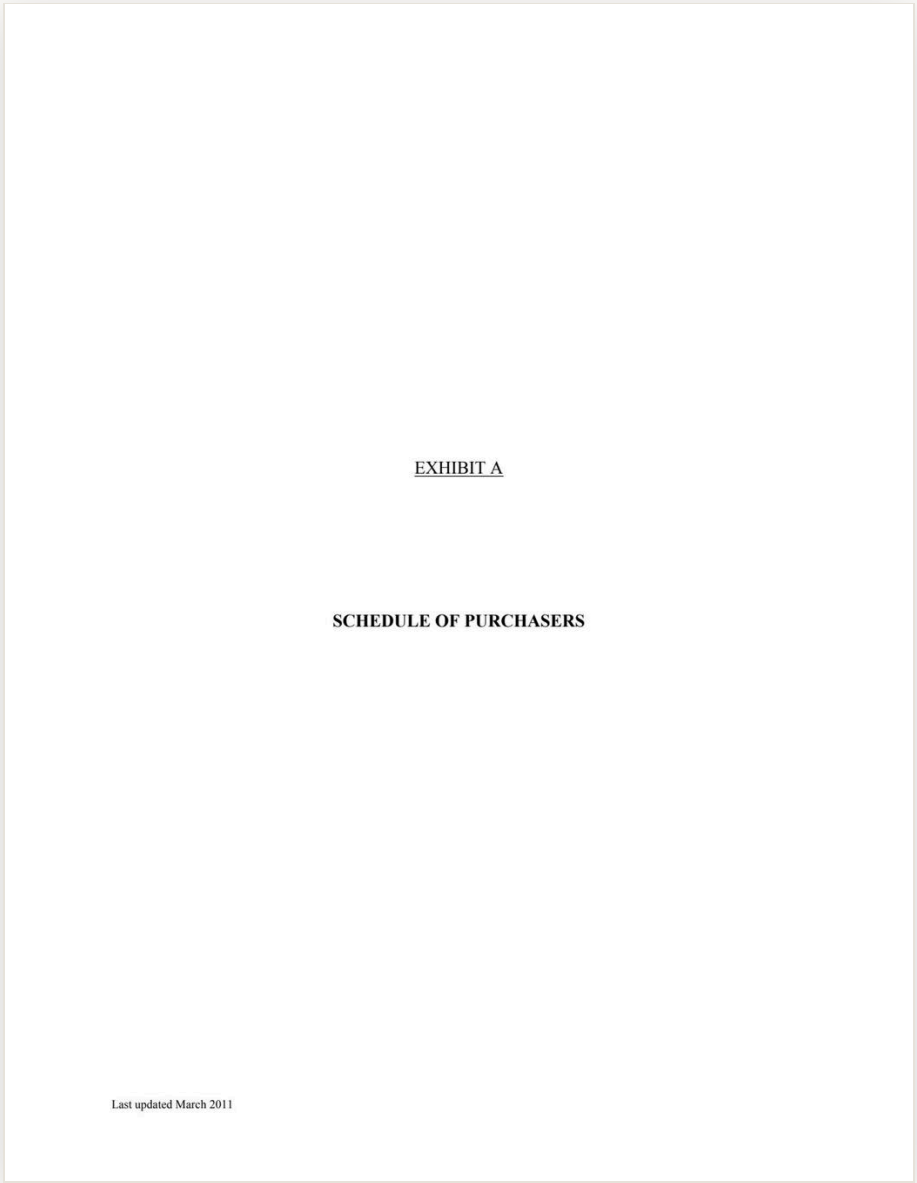


EXHIBIT A

SCHEDULE OF PURCHASERS

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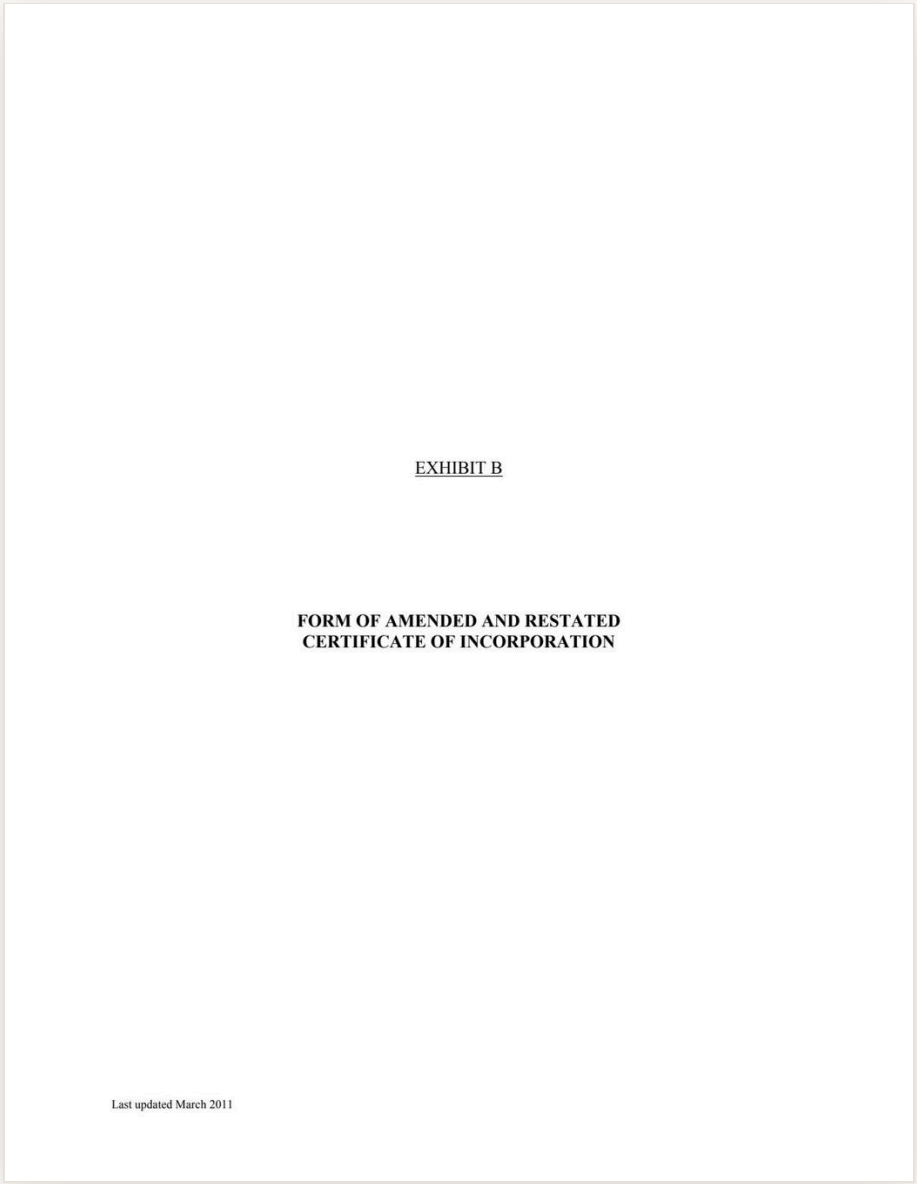


EXHIBIT B

FORM OF AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION

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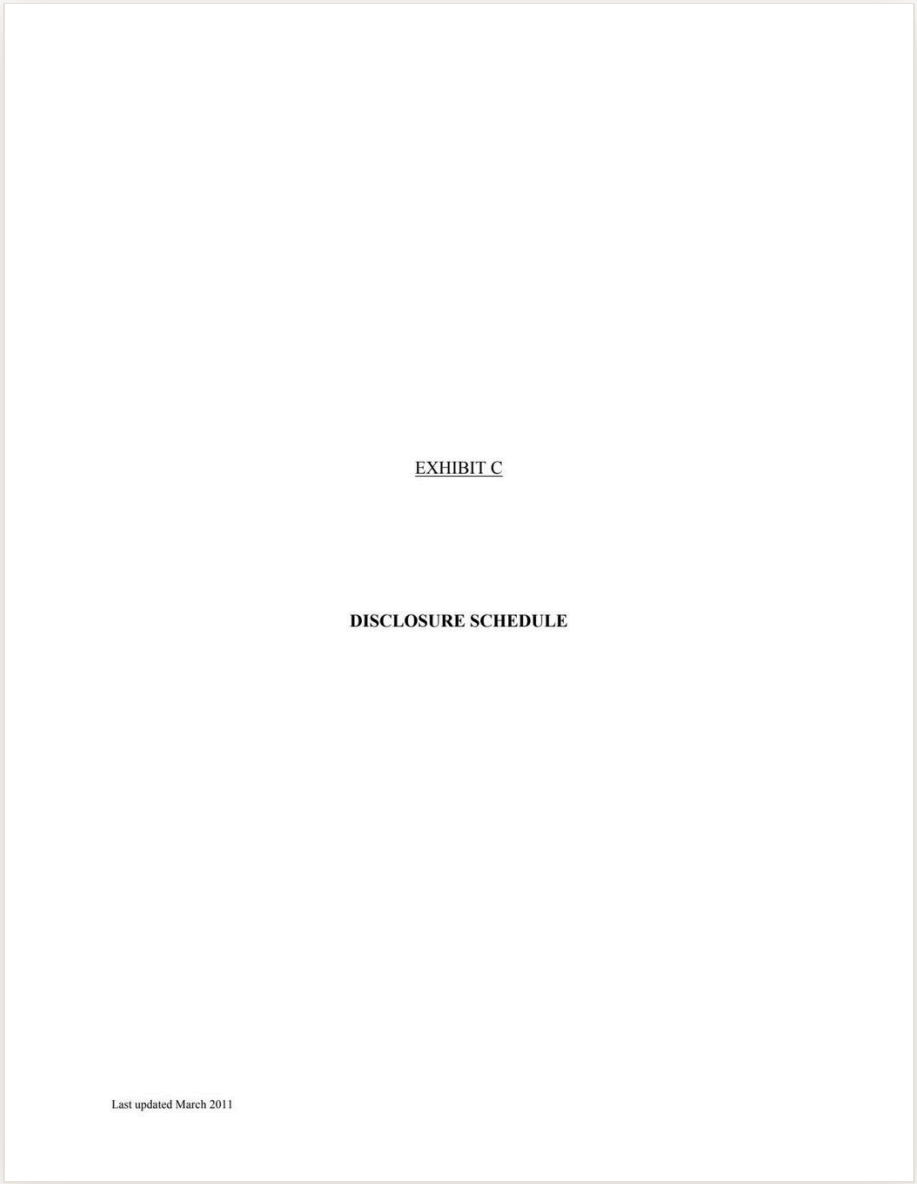


EXHIBIT C

DISCLOSURE SCHEDULE

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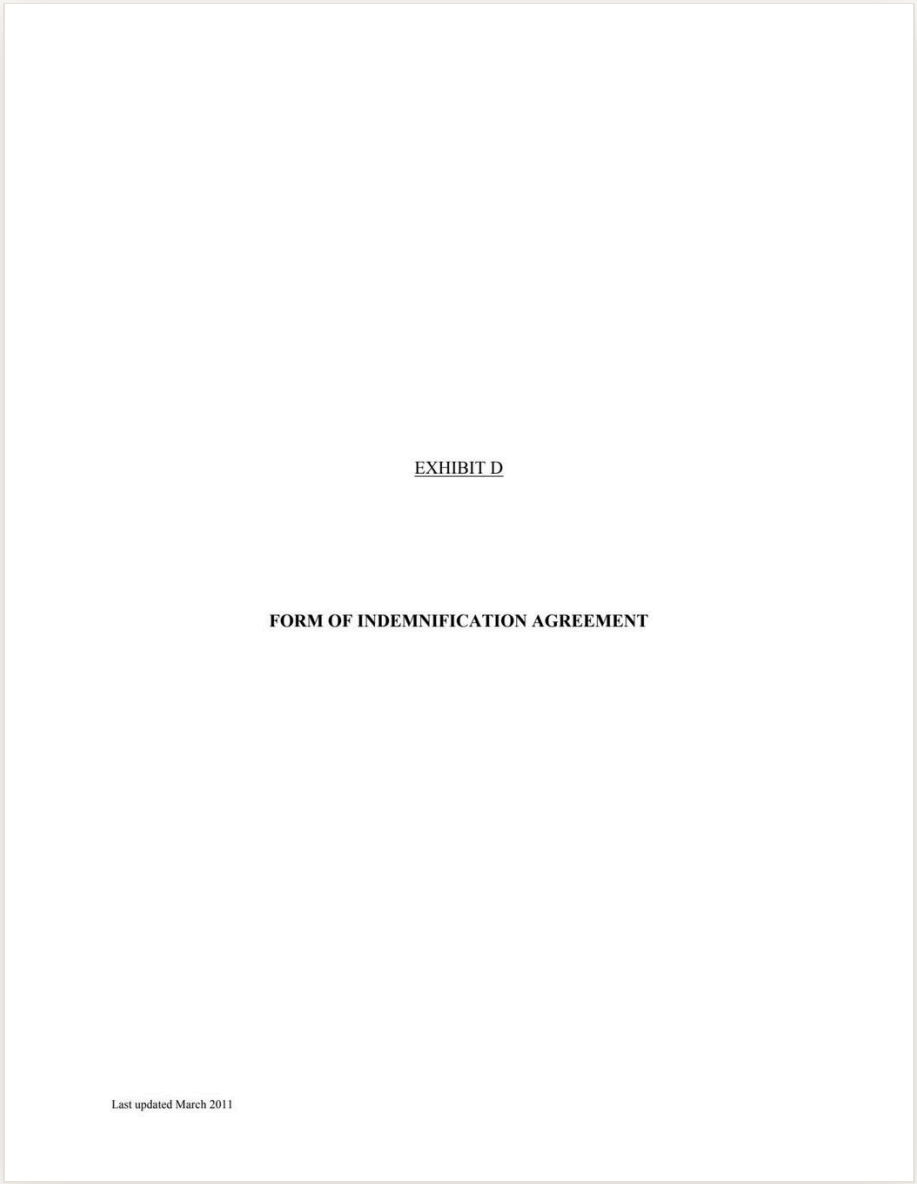


EXHIBIT D

FORM OF INDEMNIFICATION AGREEMENT

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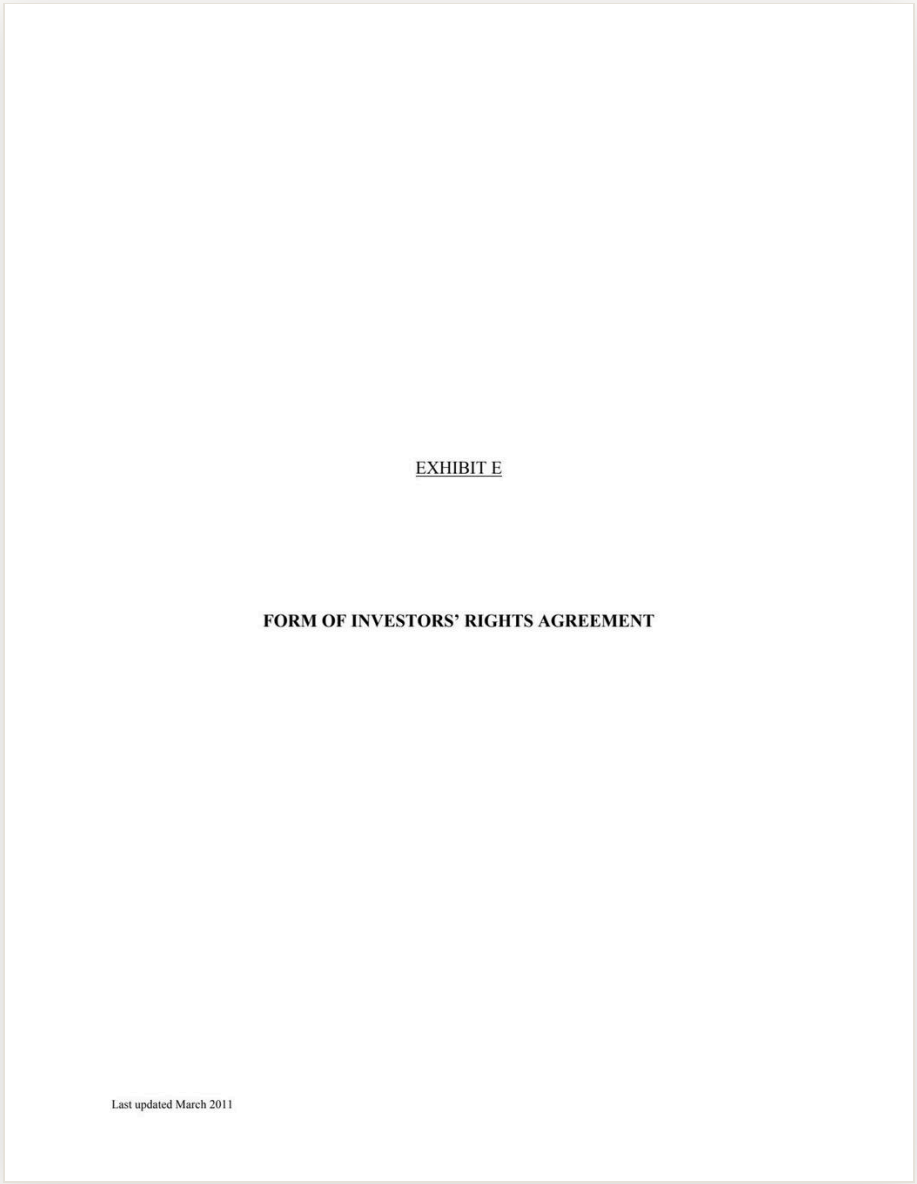


EXHIBIT E

FORM OF INVESTORS' RIGHTS AGREEMENT

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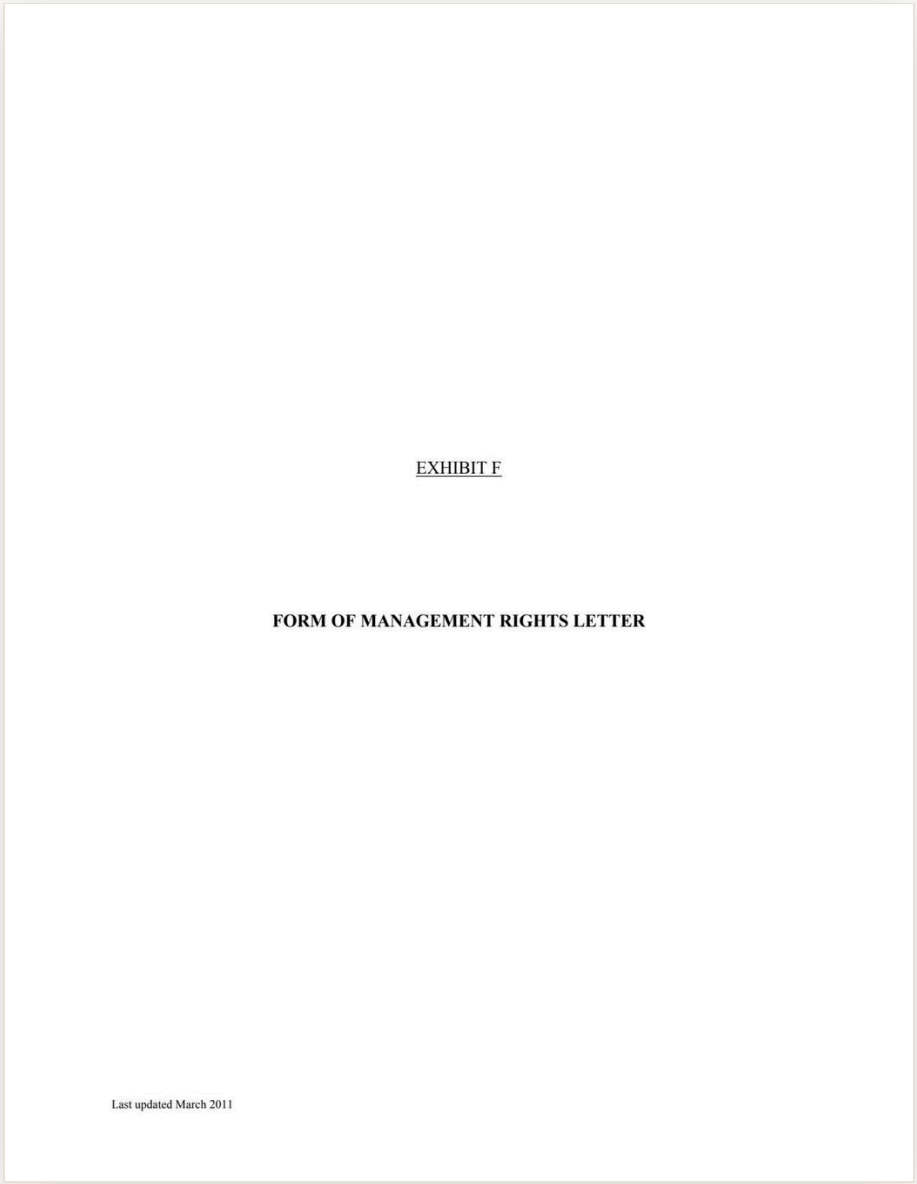


EXHIBIT F

FORM OF MANAGEMENT RIGHTS LETTER

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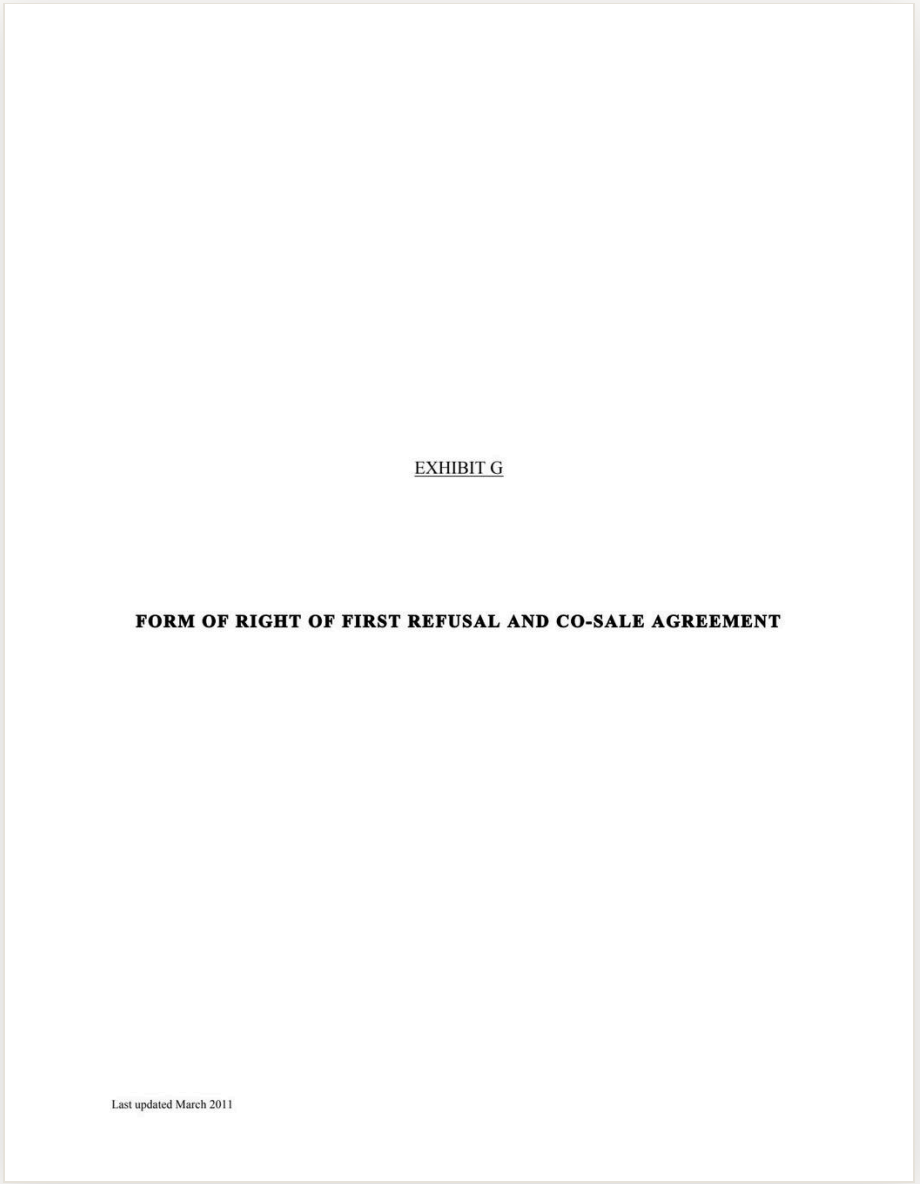


EXHIBIT G

FORM OF RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT

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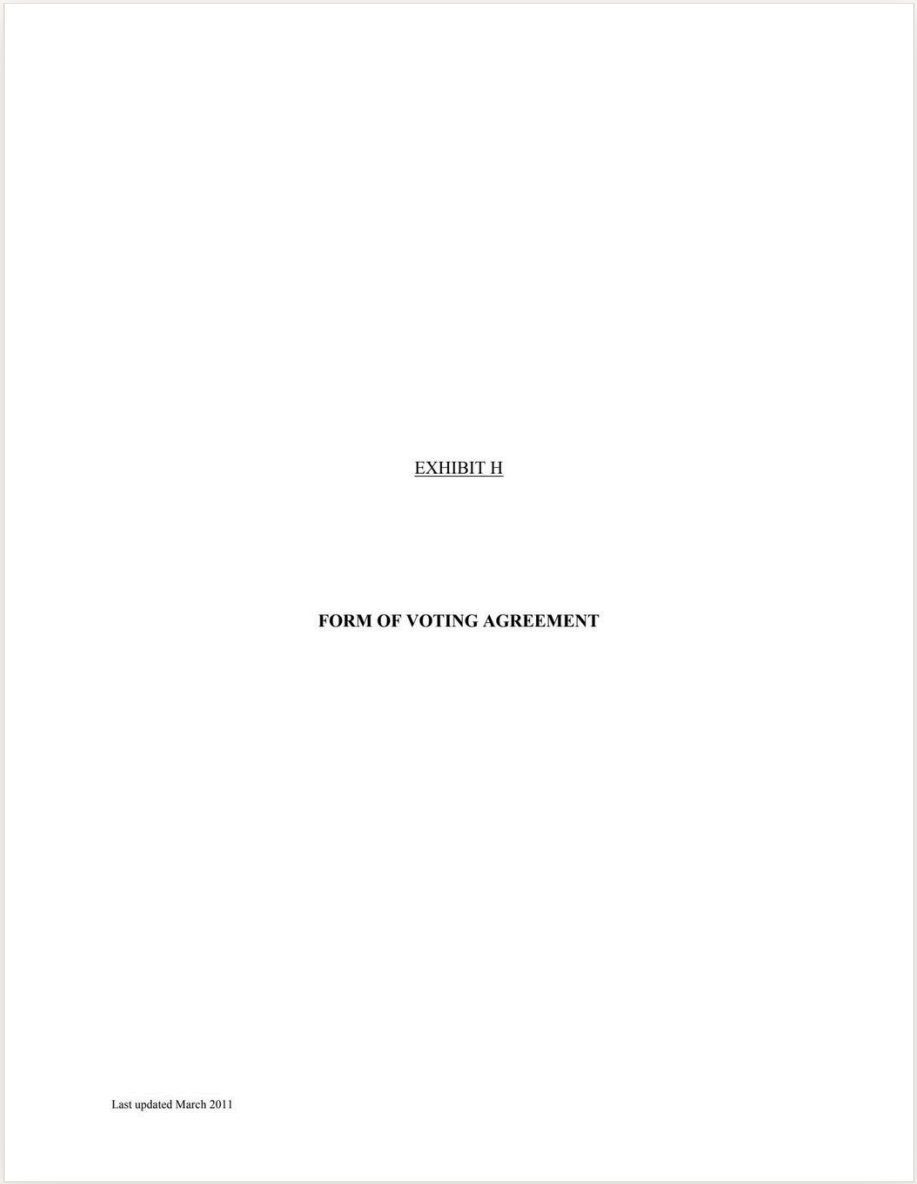


EXHIBIT H

FORM OF VOTING AGREEMENT

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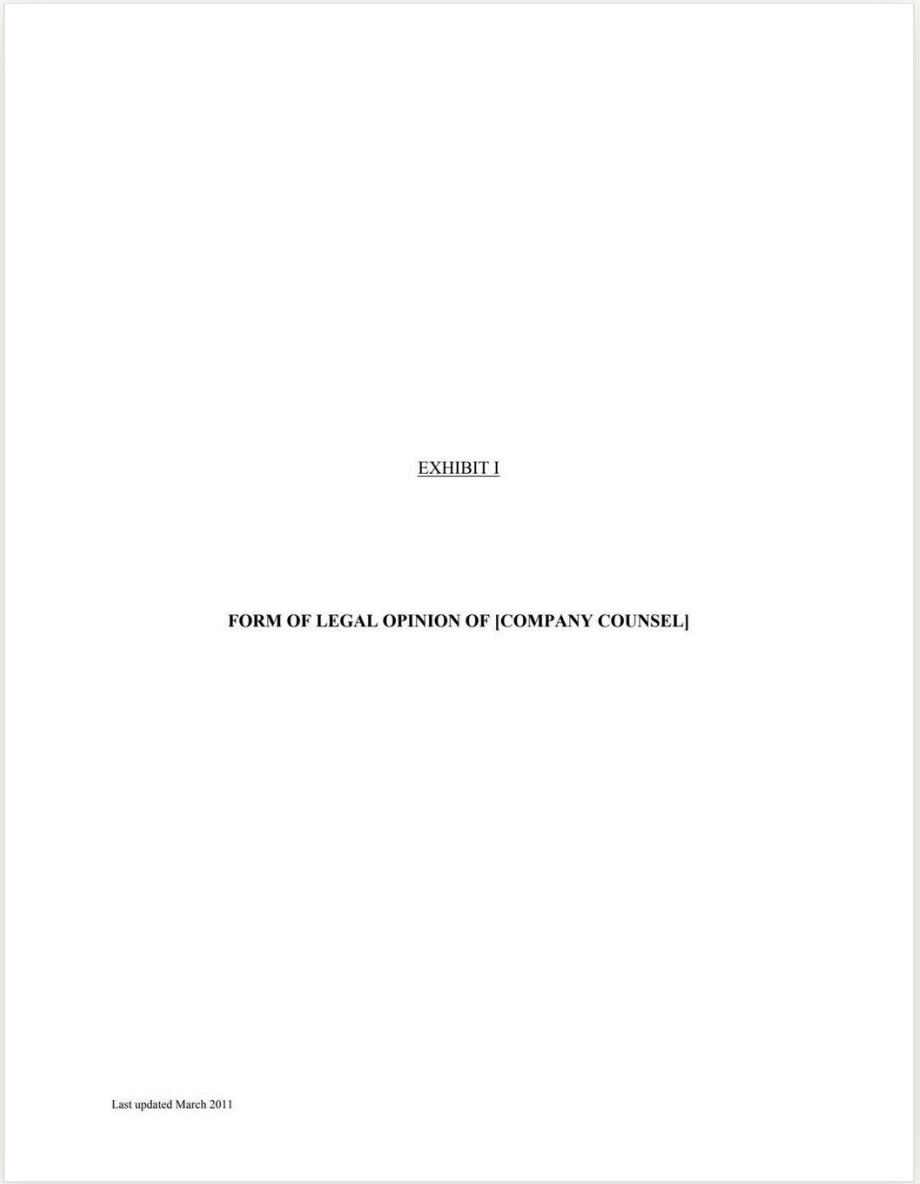


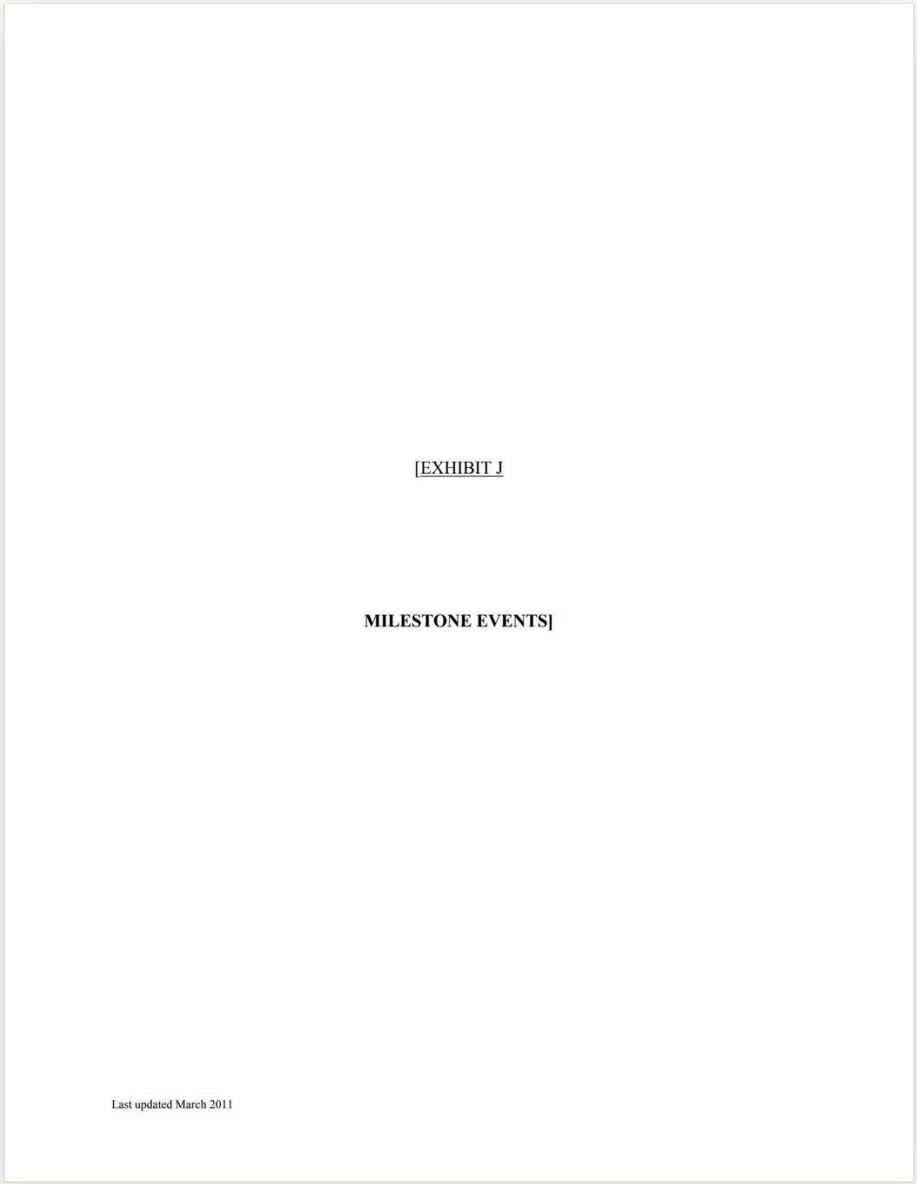
EXHIBIT I

FORM OF LEGAL OPINION OF [COMPANY COUNSEL]

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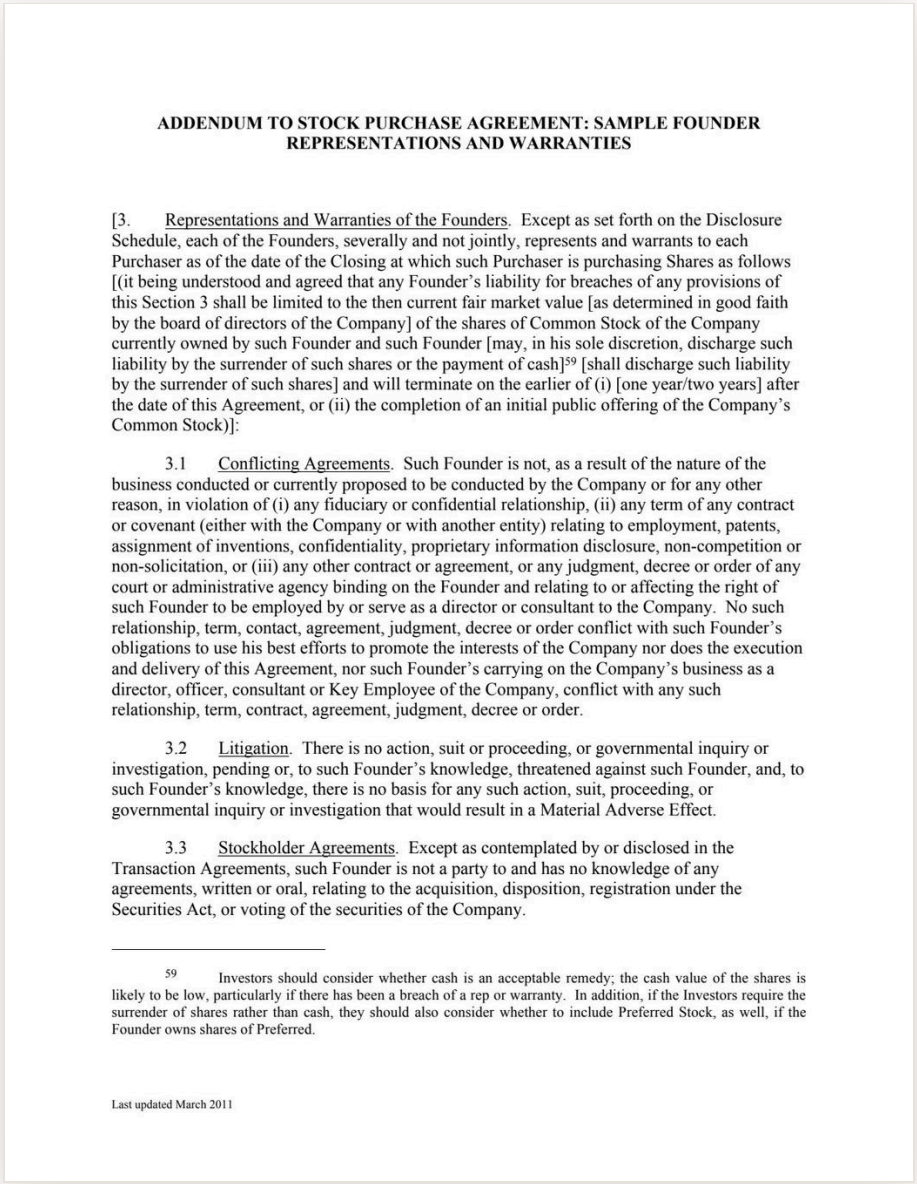
[EXHIBIT J

MILESTONE EVENTS]

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ADDENDUM TO STOCK PURCHASE AGREEMENT: SAMPLE FOUNDER REPRESENTATIONS AND WARRANTIES

[3. Representations and Warranties of the Founders. Except as set forth on the Disclosure Schedule, each of the Founders, severally and not jointly, represents and warrants to each Purchaser as of the date of the Closing at which such Purchaser is purchasing Shares as follows [(it being understood and agreed that any Founder's liability for breaches of any provisions of this Section 3 shall be limited to the then current fair market value [as determined in good faith by the board of directors of the Company] of the shares of Common Stock of the Company currently owned by such Founder and such Founder [may, in his sole discretion, discharge such liability by the surrender of such shares or the payment of cash][59] [shall discharge such liability by the surrender of such shares] and will terminate on the earlier of (i) [one year/two years] after the date of this Agreement, or (ii) the completion of an initial public offering of the Company's Common Stock)]:

3.1 Conflicting Agreements. Such Founder is not, as a result of the nature of the business conducted or currently proposed to be conducted by the Company or for any other reason, in violation of (i) any fiduciary or confidential relationship, (ii) any term of any contract or covenant (either with the Company or with another entity) relating to employment, patents, assignment of inventions, confidentiality, proprietary information disclosure, non-competition or non-solicitation, or (iii) any other contract or agreement, or any judgment, decree or order of any court or administrative agency binding on the Founder and relating to or affecting the right of such Founder to be employed by or serve as a director or consultant to the Company. No such relationship, term, contact, agreement, judgment, decree or order conflict with such Founder's obligations to use his best efforts to promote the interests of the Company nor does the execution and delivery of this Agreement, nor such Founder's carrying on the Company's business as a director, officer, consultant or Key Employee of the Company, conflict with any such relationship, term, contract, agreement, judgment, decree or order.

3.2 Litigation. There is no action, suit or proceeding, or governmental inquiry or investigation, pending or, to such Founder's knowledge, threatened against such Founder, and, to such Founder's knowledge, there is no basis for any such action, suit, proceeding, or governmental inquiry or investigation that would result in a Material Adverse Effect.

3.3 Stockholder Agreements. Except as contemplated by or disclosed in the Transaction Agreements, such Founder is not a party to and has no knowledge of any agreements, written or oral, relating to the acquisition, disposition, registration under the Securities Act, or voting of the securities of the Company.

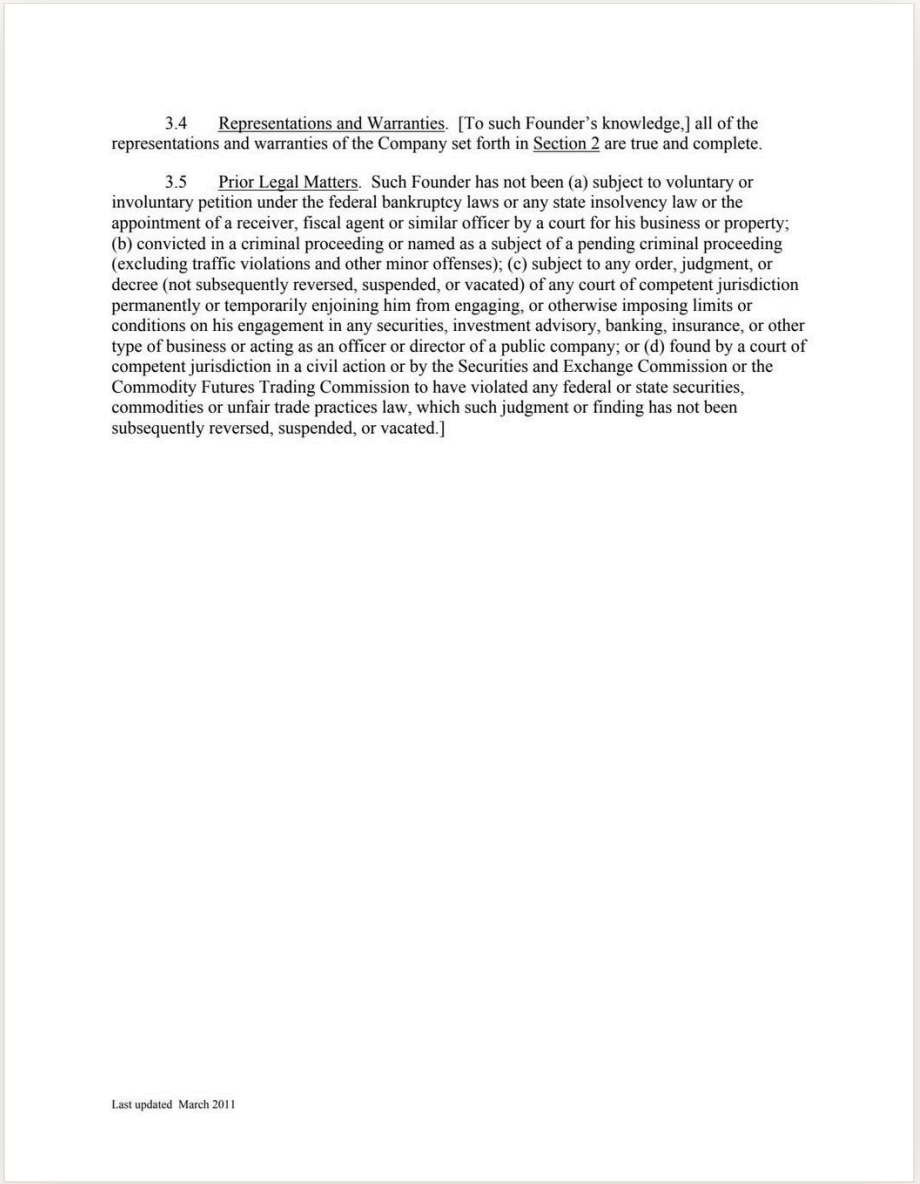
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[59] Investors should consider whether cash is an acceptable remedy; the cash value of the shares is likely to be low, particularly if there has been a breach of a rep or warranty. In addition, if the Investors require the surrender of shares rather than cash, they should also consider whether to include Preferred Stock, as well, if the Founder owns shares of Preferred.

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3.4 Representations and Warranties. [To such Founder's knowledge,] all of the representations and warranties of the Company set forth in Section 2 are true and complete.

3.5 Prior Legal Matters. Such Founder has not been (a) subject to voluntary or involuntary petition under the federal bankruptcy laws or any state insolvency law or the appointment of a receiver, fiscal agent or similar officer by a court for his business or property; (b) convicted in a criminal proceeding or named as a subject of a pending criminal proceeding (excluding traffic violations and other minor offenses); (c) subject to any order, judgment, or decree (not subsequently reversed, suspended, or vacated) of any court of competent jurisdiction permanently or temporarily enjoining him from engaging, or otherwise imposing limits or conditions on his engagement in any securities, investment advisory, banking, insurance, or other type of business or acting as an officer or director of a public company; or (d) found by a court of competent jurisdiction in a civil action or by the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated any federal or state securities, commodities or unfair trade practices law, which such judgment or finding has not been subsequently reversed, suspended, or vacated.]

Last updated March 2011

Management Rights Letter and Legal Opinion

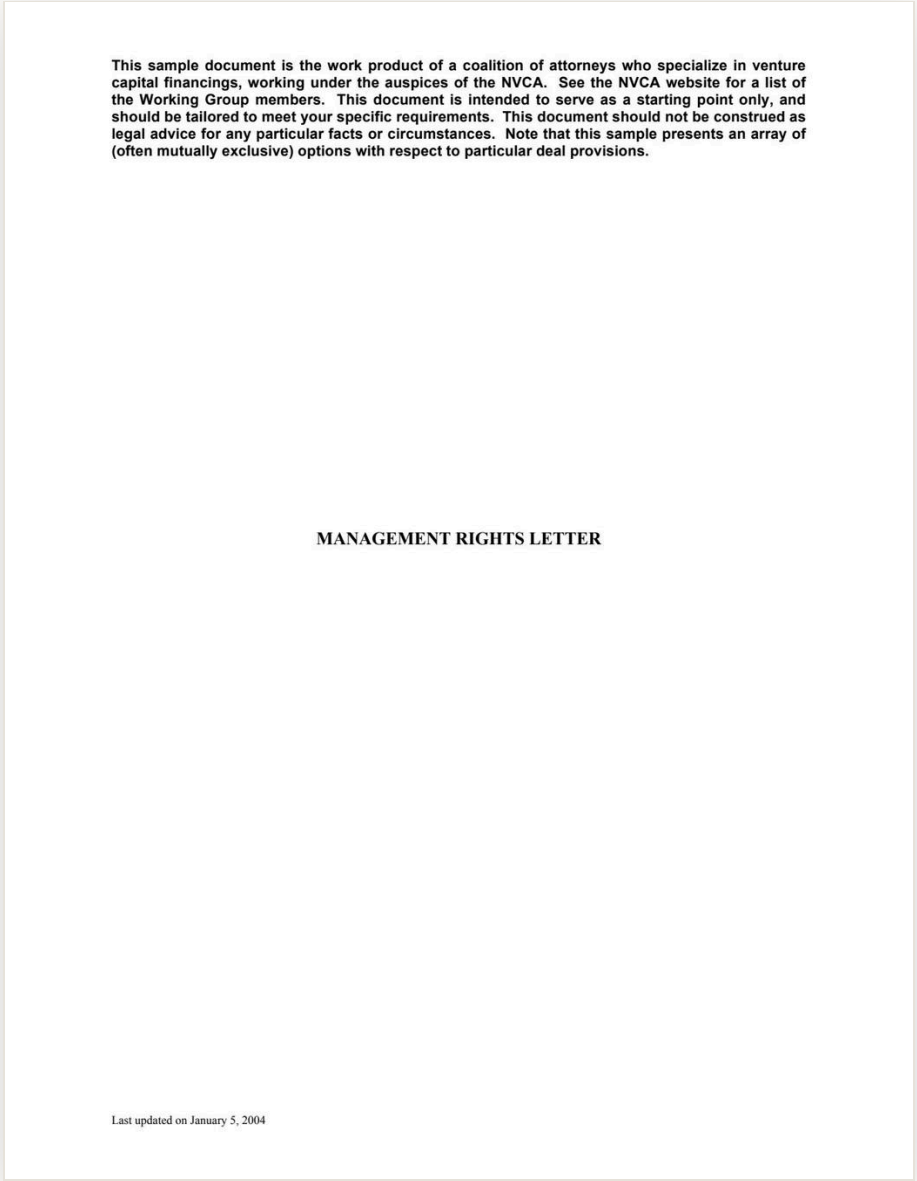
- **Management rights letter**: gives a venture fund rights to consult with and advise management — needed by funds that rely on the US ERISA "venture capital operating company" exemption.
- **Model legal opinion**: an example of the opinions company counsel gives investors at closing (due incorporation, authority, valid issuance of shares).

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MANAGEMENT RIGHTS LETTER

Last updated on January 5, 2004

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Preliminary Note

The assets of a pension plan subject to the Employee Retirement Security Act of 1974 ("ERISA") must be held in trust. Moreover, the persons responsible for managing those assets have significant fiduciary duties under ERISA and cannot engage in certain transactions prohibited by ERISA. If a pension plan covered by ERISA (an "ERISA Plan") invests in a venture fund, then all of the fund's assets—such as its investments in portfolio companies—are treated as assets of the ERISA Plan, absent an exemption. As a result, the trust requirement applies, the managing partner of the fund is treated as an ERISA fiduciary, and the fund must comply with the rules regarding prohibited transactions.

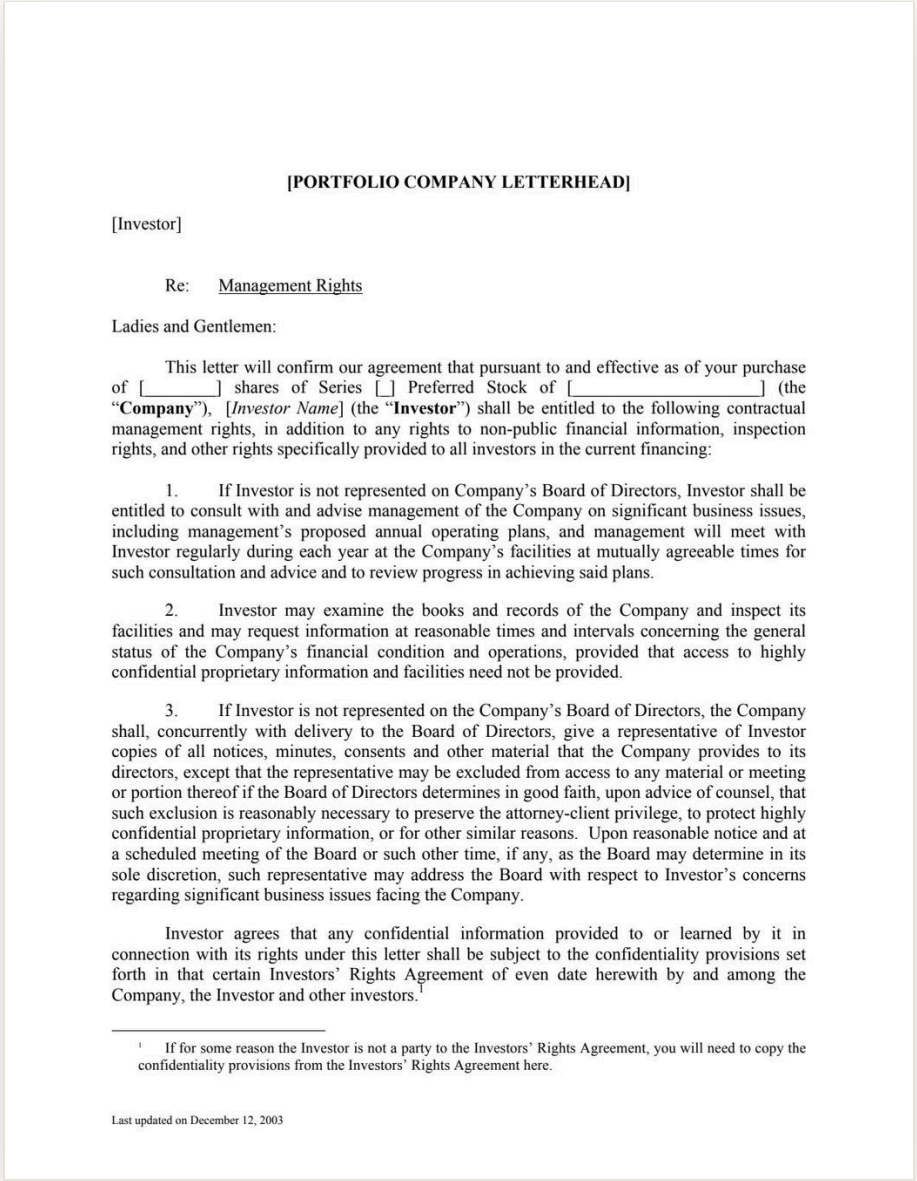
The U.S. Department of Labor, which is charged with administering ERISA, has issued regulations that contain certain exemptions from the plan assets rules. Under one exemption, a venture fund is not deemed to hold ERISA plan assets if it qualifies as a venture capital operating company (a "VCOC"). To qualify as a VCOC, the fund must have at least 50% of its assets invested in venture capital investments. An investment in a portfolio company qualifies as a "venture capital investment" if the fund obtains certain management rights with respect to the portfolio company. "Management rights," in turn, are defined as contractual rights running directly from the portfolio company to the fund that give the fund the right to participate substantially in, or substantially influence the conduct of, the management of the portfolio company. In addition to obtaining management rights, the fund is also required to actually exercise its management rights with respect to one or more of its portfolio companies every year.

In order to build a case for an exemption from the ERISA Plan asset rules, a venture fund will generally ask each of its portfolio companies to sign a management rights letter in connection with the fund's initial investment. An example of such a letter follows.

Last updated on December 12, 2003 i

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Management Rights Letter and Legal Opinion — Page 3 of 10



[PORTFOLIO COMPANY LETTERHEAD]

[Investor]

Re: Management Rights

Ladies and Gentlemen:

This letter will confirm our agreement that pursuant to and effective as of your purchase of [_____] shares of Series [_] Preferred Stock of [_____] (the "**Company**"), [*Investor Name*] (the "**Investor**") shall be entitled to the following contractual management rights, in addition to any rights to non-public financial information, inspection rights, and other rights specifically provided to all investors in the current financing:

1. If Investor is not represented on Company's Board of Directors, Investor shall be entitled to consult with and advise management of the Company on significant business issues, including management's proposed annual operating plans, and management will meet with Investor regularly during each year at the Company's facilities at mutually agreeable times for such consultation and advice and to review progress in achieving said plans.

2. Investor may examine the books and records of the Company and inspect its facilities and may request information at reasonable times and intervals concerning the general status of the Company's financial condition and operations, provided that access to highly confidential proprietary information and facilities need not be provided.

3. If Investor is not represented on the Company's Board of Directors, the Company shall, concurrently with delivery to the Board of Directors, give a representative of Investor copies of all notices, minutes, consents and other material that the Company provides to its directors, except that the representative may be excluded from access to any material or meeting or portion thereof if the Board of Directors determines in good faith, upon advice of counsel, that such exclusion is reasonably necessary to preserve the attorney-client privilege, to protect highly confidential proprietary information, or for other similar reasons. Upon reasonable notice and at a scheduled meeting of the Board or such other time, if any, as the Board may determine in its sole discretion, such representative may address the Board with respect to Investor's concerns regarding significant business issues facing the Company.

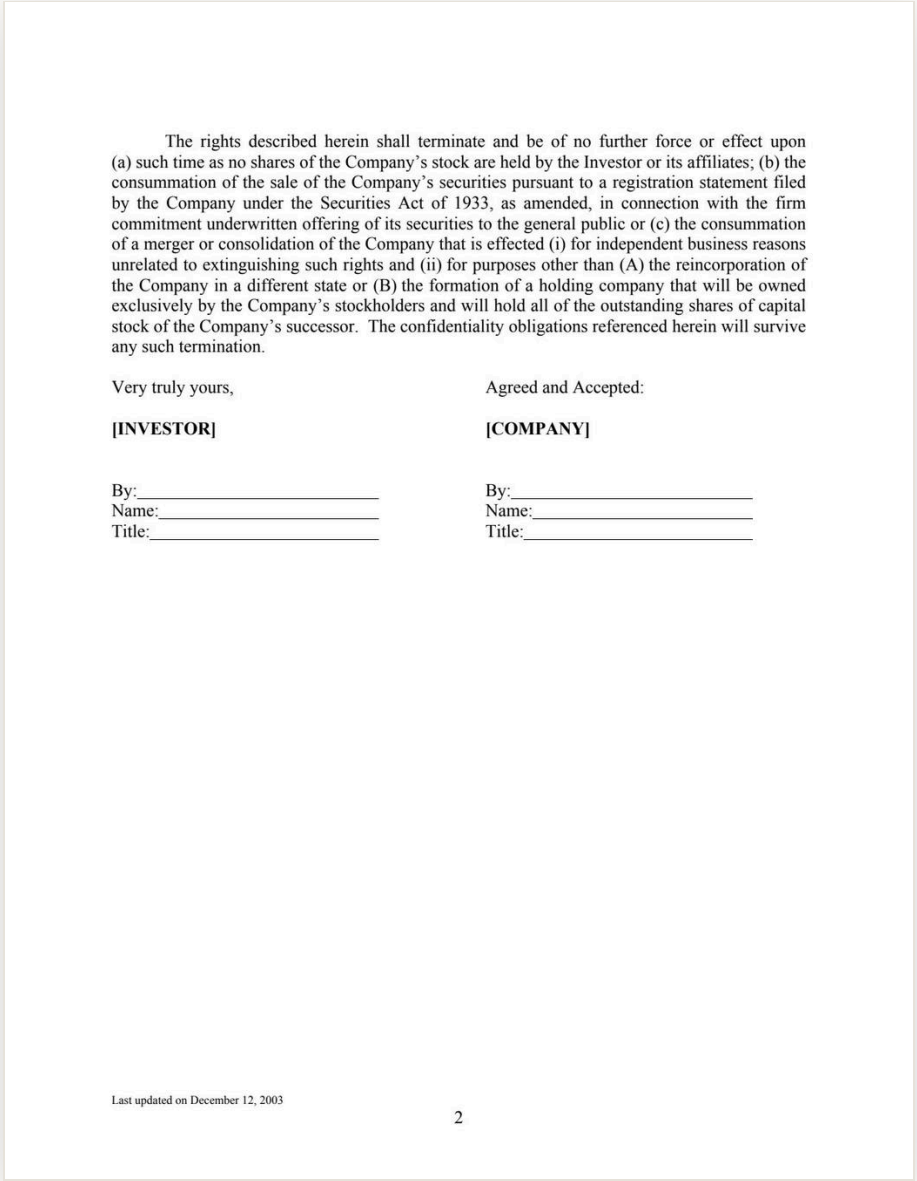
Investor agrees that any confidential information provided to or learned by it in connection with its rights under this letter shall be subject to the confidentiality provisions set forth in that certain Investors' Rights Agreement of even date herewith by and among the Company, the Investor and other investors.[1]

[1] If for some reason the Investor is not a party to the Investors' Rights Agreement, you will need to copy the confidentiality provisions from the Investors' Rights Agreement here.

Last updated on December 12, 2003

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The rights described herein shall terminate and be of no further force or effect upon (a) such time as no shares of the Company's stock are held by the Investor or its affiliates; (b) the consummation of the sale of the Company's securities pursuant to a registration statement filed by the Company under the Securities Act of 1933, as amended, in connection with the firm commitment underwritten offering of its securities to the general public or (c) the consummation of a merger or consolidation of the Company that is effected (i) for independent business reasons unrelated to extinguishing such rights and (ii) for purposes other than (A) the reincorporation of the Company in a different state or (B) the formation of a holding company that will be owned exclusively by the Company's stockholders and will hold all of the outstanding shares of capital stock of the Company's successor. The confidentiality obligations referenced herein will survive any such termination.

Very truly yours,

[INVESTOR]

By:_____
Name:_____
Title:_____

Agreed and Accepted:

[COMPANY]

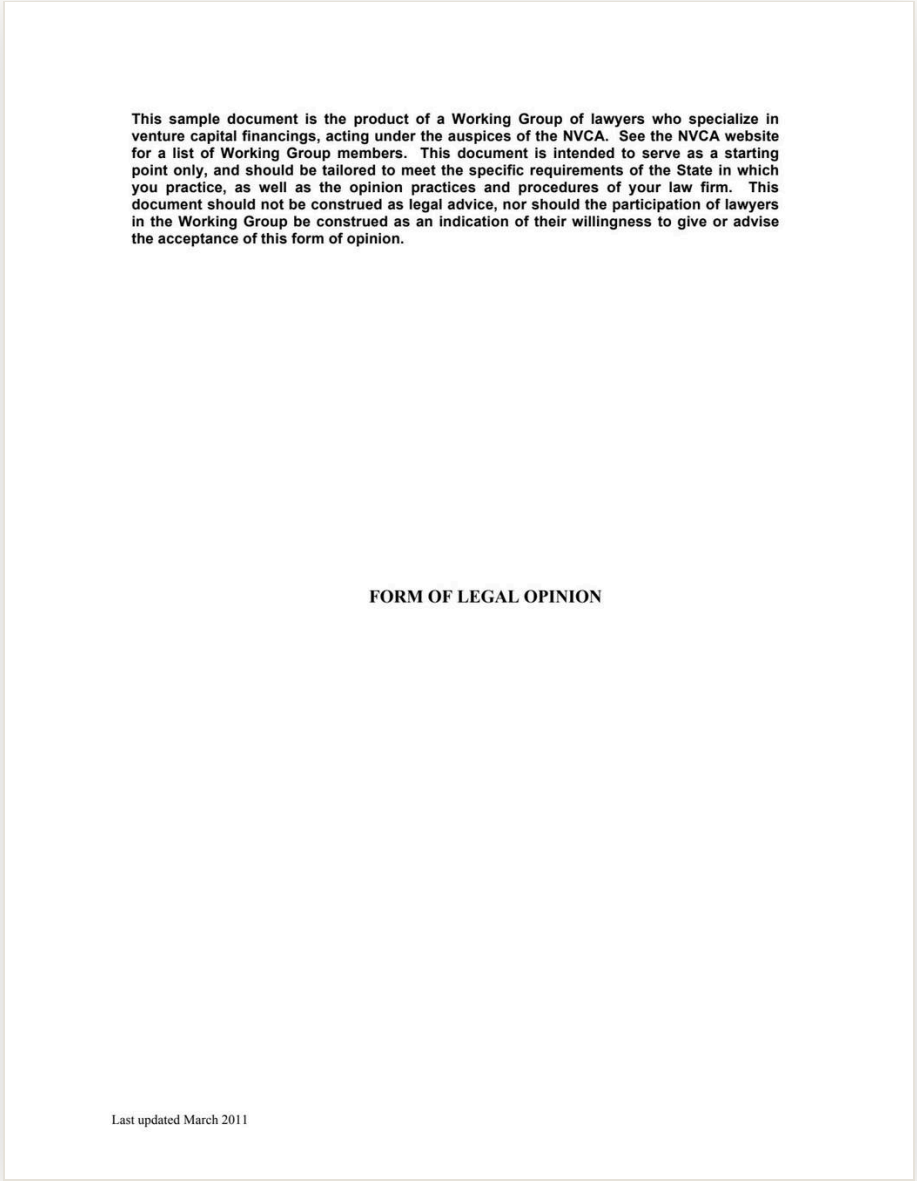
By:_____
Name:_____
Title:_____

Last updated on December 12, 2003

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This sample document is the product of a Working Group of lawyers who specialize in venture capital financings, acting under the auspices of the NVCA. See the NVCA website for a list of Working Group members. This document is intended to serve as a starting point only, and should be tailored to meet the specific requirements of the State in which you practice, as well as the opinion practices and procedures of your law firm. This document should not be construed as legal advice, nor should the participation of lawyers in the Working Group be construed as an indication of their willingness to give or advise the acceptance of this form of opinion.

FORM OF LEGAL OPINION

Last updated March 2011

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Management Rights Letter and Legal Opinion — Page 6 of 10

Below is an example of the legal opinions that might be given in a typical venture-backed preferred stock financing. As most law firms have their own forms and the opinions given depend on the specific circumstances, this is meant only as a starting point for reference purposes.

NOTE: The following assumes a Delaware corporation headquartered in California.

Based upon the foregoing and subject to the additional qualifications set forth below, we are of the opinion that:

1. The Company is validly existing as a corporation[1] and in good standing under Delaware law and is qualified as a foreign corporation and in good standing in [California].

2. The Company has the corporate power to execute and deliver the Transaction Documents[2] in which it is named as a party and to perform its obligations thereunder.[3]

3. The Company has duly authorized, executed and delivered the Transaction Documents in which it is named as a party, and such Transaction Documents constitute its valid and binding obligations[4] enforceable against it in accordance with their terms. [5]

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[1] Opinion recipients sometimes request an opinion that the Company is "duly incorporated." This opinion requires the opinion preparers to conduct a more extensive inquiry into the past than an opinion that the "Company is validly existing as a corporation" and, at least in the venture financing context, often is not cost justified. See *Third-Party "Closing" Opinions: A Report of The TriBar Opinion Committee*, 53 Bus. Law 591, 651–652 (1998). Ordinarily, an opinion that a Company has been "duly organized" should be avoided because of uncertainty as to what additional matters, if any, it covers.

[2] Opinion preparers should take care that the Company's certificate of incorporation is not included in the definition of "Transaction Documents." Inclusion of the certificate of incorporation would be both illogical (e.g., in the case of the due execution and delivery opinion) and troublesome (e.g., in the case of the enforceability opinion).

[3] Opinion recipients sometimes ask that this opinion be broadened, for example to cover the Company's corporate power to conduct its business. If given, this broader opinion typically is based on a description in a disclosure document or an officer's certificate.

[4] Note that this opinion covers only obligations of the Company and, therefore, does not cover obligations of other parties to the Transaction Documents, such as investors and other stockholders. Sometimes, an opinion recipient requests that the enforceability opinion be expanded to cover those parties to give the recipient comfort that important obligations, such as promises by those parties to vote stock in favor of the election of directors designated by the recipient, also are enforceable. Since the law of many states permits the enforcement of promises to vote stock, in appropriate circumstances, counsel to the Company might be able to give that opinion based on an assumption as to status and due authorization, execution and delivery in the case of parties that are entities, and legal capacity, due execution and delivery in the case of parties who are natural persons. Such an opinion, however, may be of limited value to an opinion recipient whose principal concern is the availability of specific performance as a remedy, since equitable remedies are excluded from the opinion's coverage by the equitable principles limitation.

[5] Often, the law covered by the opinion letter is the same as the law chosen as the governing law in the Transaction Documents. When that is not the case, apart from obtaining an opinion of counsel in the state whose law is chosen as the governing law, several alternatives are available. These include giving an opinion on whether the law chosen

(continued...)

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Management Rights Letter and Legal Opinion — Page 7 of 10

4. The execution and delivery by the Company of the Transaction Documents and the performance by the Company of its obligations under the Transaction Documents, including its issuance and sale of the Preferred Shares and issuance of shares of Common Stock upon conversion of the Preferred Shares in accordance with the Company's certificate of incorporation (the "Conversion Shares"), do not and will not (i) violate the Delaware General Corporation Law ("DGCL"), the law of [indicate state whose law is generally covered by the opinion letter] or United States federal law,[6] (ii) violate any court order, judgment or decree, if any, listed in [Schedule __ to this opinion letter] [Schedule __ to the Purchase Agreement], (iii) result in a breach of, or constitute a default under, any of the agreements or instruments listed in Schedule __ to this opinion letter[7], or (iv) violate the Company's certificate of incorporation or by-laws.

5. The Company is not required to obtain any consent, approval, license or exemption by, or order or authorization of, or to make any filing, recording or registration with, any governmental authority pursuant to the DGCL, the law of [indicate state whose law is generally covered by the opinion letter] or United States federal law in connection with the execution and delivery by the Company of the Transaction Documents in which it is named as a party or the performance by it of its obligations other than those that have been obtained or made.[8]

(continued...)

as the governing law will be given effect under the law covered by the opinion or, alone or in combination with the choice-of-law opinion, giving an opinion on the enforceability of the Transaction Documents as though the law covered by the opinion governed the Transaction Documents. If the Company is incorporated in Delaware rather than the state whose law is generally covered by the opinion letter, the opinion letter typically will state that it also covers the Delaware General Corporation Law ("DGCL"). Unless otherwise expressly stated, the enforceability opinion will cover the DGCL to the extent the internal affairs doctrine of the state whose law is generally covered by the enforceability opinion deems the DGCL applicable to the agreement. Among the provisions of the agreement to which the DGCL is likely to be deemed applicable are provisions relating to the governance of the Company.

[6] For the law covered, see part II of the ABA Legal Opinion Principles, 53 Bus. Law. 831 (1998). Opinion recipients and preparers should agree on whether this opinion should be drafted to cover industry-specific laws that are applicable to the business of the Company and could have applicability to the transaction but are not generally reviewed in connection with the types of transactions covered by the Transaction Documents, such as laws applicable to companies in the financial services industry.

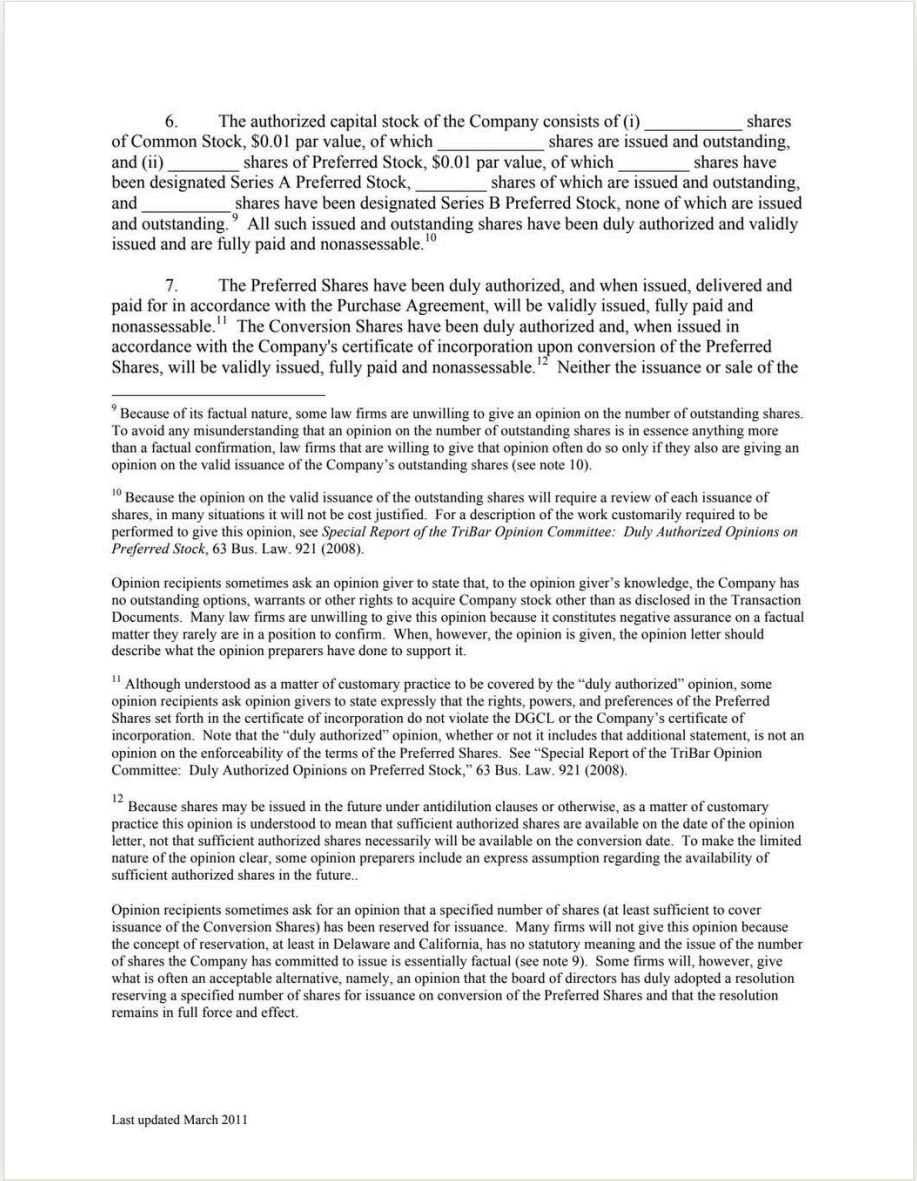
[7] Consideration should be given to which contracts should be covered in light of the cost constraints of many venture financings.

[8] Securities law approvals and filings are understood as a matter of customary practice not to be covered by this opinion unless referred to specifically. Some lawyers, however, choose to make this explicit by including an exception (such as: ", except [the filing of a Form D pursuant to Regulation D of the Securities Act] and the notice filing required by [Section 25102(f) or 25102.1 of the California Corporate Securities Law of 1968, as amended]") or a statement indicating that the only opinion covering securities laws is in numbered paragraph 8. Such an exclusion does not mean that other laws customarily understood to be excluded are covered.

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6. The authorized capital stock of the Company consists of (i) _____ shares of Common Stock, $0.01 par value, of which _____ shares are issued and outstanding, and (ii) _____ shares of Preferred Stock, $0.01 par value, of which _____ shares have been designated Series A Preferred Stock, _____ shares of which are issued and outstanding, and _____ shares have been designated Series B Preferred Stock, none of which are issued and outstanding.[9] All such issued and outstanding shares have been duly authorized and validly issued and are fully paid and nonassessable.[10]

7. The Preferred Shares have been duly authorized, and when issued, delivered and paid for in accordance with the Purchase Agreement, will be validly issued, fully paid and nonassessable.[11] The Conversion Shares have been duly authorized and, when issued in accordance with the Company's certificate of incorporation upon conversion of the Preferred Shares, will be validly issued, fully paid and nonassessable.[12] Neither the issuance or sale of the

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[9] Because of its factual nature, some law firms are unwilling to give an opinion on the number of outstanding shares. To avoid any misunderstanding that an opinion on the number of outstanding shares is in essence anything more than a factual confirmation, law firms that are willing to give that opinion often do so only if they also are giving an opinion on the valid issuance of the Company's outstanding shares (see note 10).

[10] Because the opinion on the valid issuance of the outstanding shares will require a review of each issuance of shares, in many situations it will not be cost justified. For a description of the work customarily required to be performed to give this opinion, see *Special Report of the TriBar Opinion Committee: Duly Authorized Opinions on Preferred Stock*, 63 Bus. Law. 921 (2008).

Opinion recipients sometimes ask an opinion giver to state that, to the opinion giver's knowledge, the Company has no outstanding options, warrants or other rights to acquire Company stock other than as disclosed in the Transaction Documents. Many law firms are unwilling to give this opinion because it constitutes negative assurance on a factual matter they rarely are in a position to confirm. When, however, the opinion is given, the opinion letter should describe what the opinion preparers have done to support it.

[11] Although understood as a matter of customary practice to be covered by the "duly authorized" opinion, some opinion recipients ask opinion givers to state expressly that the rights, powers, and preferences of the Preferred Shares set forth in the certificate of incorporation do not violate the DGCL or the Company's certificate of incorporation. Note that the "duly authorized" opinion, whether or not it includes that additional statement, is not an opinion on the enforceability of the terms of the Preferred Shares. See "Special Report of the TriBar Opinion Committee: Duly Authorized Opinions on Preferred Stock," 63 Bus. Law. 921 (2008).

[12] Because shares may be issued in the future under antidilution clauses or otherwise, as a matter of customary practice this opinion is understood to mean that sufficient authorized shares are available on the date of the opinion letter, not that sufficient authorized shares necessarily will be available on the conversion date. To make the limited nature of the opinion clear, some opinion preparers include an express assumption regarding the availability of sufficient authorized shares in the future..

Opinion recipients sometimes ask for an opinion that a specified number of shares (at least sufficient to cover issuance of the Conversion Shares) has been reserved for issuance. Many firms will not give this opinion because the concept of reservation, at least in Delaware and California, has no statutory meaning and the issue of the number of shares the Company has committed to issue is essentially factual (see note 9). Some firms will, however, give what is often an acceptable alternative, namely, an opinion that the board of directors has duly adopted a resolution reserving a specified number of shares for issuance on conversion of the Preferred Shares and that the resolution remains in full force and effect.

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Preferred Shares nor the issuance of the Conversion Shares is subject to any preemptive rights under the DGCL or the Company's certificate of incorporation or by-laws.[13]

8. Based on, and assuming the accuracy of, the representations of each of the Purchasers in the Purchase Agreement, the sale of the Preferred Shares pursuant to the Purchase Agreement does not, and the issuance of the Conversion Shares upon conversion of the Preferred Shares in accordance with the Company's certificate of incorporation will not (assuming no commission or other remuneration is paid or given directly or indirectly for soliciting the conversion),[14] require registration under the Securities Act.[15/16]

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[13] Even though a valid issuance opinion could not be given on shares issued in violation of preemptive rights granted by statute or the Company's certificate of incorporation or by-laws, opinion recipients sometimes request an opinion that expressly addresses the absence of those rights. Such an opinion does not cover contractual rights (which may be covered by the no breach or default opinion in numbered opinion 4(iii) above).

[14] Ordinarily, no registration opinions covering the future issuance of the Conversion Shares are based on an assumption that the conditions for availability of the exemption provided by Section 3(a)(9) from the registration requirements of the Securities Act of 1933 will be satisfied at the time of conversion. In the factual situation covered by this form, the only condition that needs to be assumed is that no commission or other remuneration will have been paid when the shares are converted. As in this form, some opinion givers state this assumption expressly. Other opinion givers do not for various reasons, including their belief that satisfaction of the matters assumed is so well understood that it does not have to be stated. No registration opinions are discussed in Subcommittee on Securities Law Opinions, Committee on Federal Regulation of Securities, ABA Section of Business Law, *No Registration Opinions*, 63 Bus. Law. 187 (2007).

[15] As provided in this form, the no registration opinion is usually given in reliance on appropriate representations and warranties set forth in the Purchase Agreement (or information obtained in other ways, such as back-up certificates from the Company) relating to the absence of "general solicitation" and "general advertising" and prior sales of similar securities that could be integrated with the offering covered by the opinion. (If a placement agent is involved, the opinion also is usually based on representations and warranties of, or a certificate from, the placement agent.) Some opinion givers expressly exclude coverage of the no "general solicitation" and "general advertising" requirement from the opinion (that requirement is contained in Rule 502(c) of Regulation D and is understood to be a condition of compliance with the exemption provided by Section 4(2) of the Securities Act). See Subcommittee on Securities Law Opinions, Committee on Federal Regulation of Securities, ABA Section of Business Law, *No Registration Opinions*, 63 Bus. Law. 187 (2007).

[16] When warrants, options or other rights to acquire Company stock are exercisable upon the payment of cash, the no registration opinion can raise difficult issues because the exemption under Section 3(a)(9) of the Securities Act would not be available (other than possibly if the warrants, options or other rights are exercised on a net exercise basis) and the availability of another exemption, such as under Section 4(2) of the Securities Act, would depend on the facts at the time of exercise. Accordingly, many firms will not give a no registration opinion on the issuance of shares upon the future exercise of warrants, options or other rights. Some firms, however, will give the opinion based on an express assumption that the warrants, options or other rights were exercised and the underlying shares issued at the closing of the sale of the Preferred Shares.

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Except as disclosed in Schedule __ to the Purchase Agreement, we are not representing the Company in any pending litigation in which it is a named defendant that challenges the validity or enforceability of, or seeks to enjoin the performance of, the Transaction Documents.[17]

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[17] This version of the "no-litigation" confirmation is narrower than the version that historically has been given, which covered litigation against the company generally. Because of its factual nature and in light of recent cases brought against law firms by recipients of no-litigation confirmations, many law firms no longer are willing to give the broader no-litigation confirmation, and some firms are unwilling to give any confirmation relating to litigation.

Although this form obviates the need for the phrase "to our knowledge" or a variant of it, other forms include that phrase. When they do, a definition of "knowledge" normally should be included to avoid misunderstanding as to the meaning of the term. An example of a definition that is derived from the ABA Legal Opinion Principles (see note 5) (and that would apply if no definition were included) is:

> When the phrase "to our knowledge" or an equivalent phrase is used in this opinion, its purpose is to limit the statements it qualifies to the actual knowledge of the lawyers in this firm responsible for preparing this opinion letter after such inquiry as they deemed appropriate.

Some opinions preparers include in the definition in place of "this opinion letter" the phrase "the particular opinion or confirmation containing that reference." Also, some opinion preparers refer to "conscious awareness" instead of "actual knowledge."

In preparing the confirmation, the opinion preparers normally would conduct an inquiry of those lawyers in their firm who the opinion preparers believe are reasonably likely to have information not otherwise known to them that is called for by the confirmation. As a matter of customary practice, the confirmation is understood not to cover information known to other lawyers in the firm but not known to the opinion preparers after such inquiry. Depending on the circumstances and the wording of the confirmation, the opinion preparers also might make inquiry of appropriate officials of the Company. In preparing a no litigation confirmation, the opinion preparers are not required as a matter of customary diligence to check court or other public records. Although not necessary, some opinion preparers choose to make this clear, for example, by stating expressly that they did not examine court or other public records.

If the opinion preparers are aware that, unknown to the opinion recipient, a material legal proceeding is being handled by another firm, they should consider whether providing a confirmation (however worded) regarding litigation without noting the existence of that legal proceeding would be misleading to the opinion recipient.

Last updated March 2011

Investors' Rights Agreement

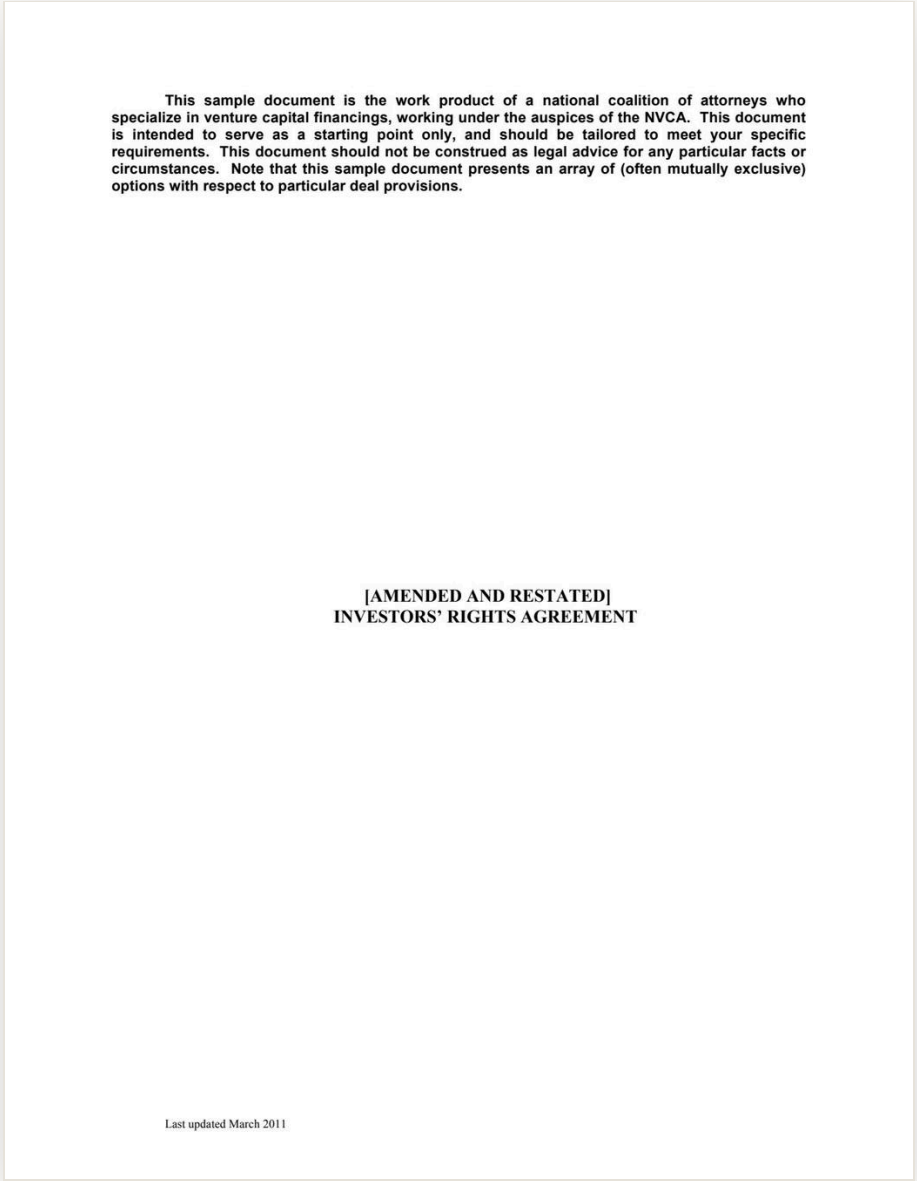
- Registration rights (demand, piggyback, S-3), information and inspection rights, pre-emptive (pro-rata) rights on new securities, and other covenants of the company.
- Survives until an IPO or sale of the company.

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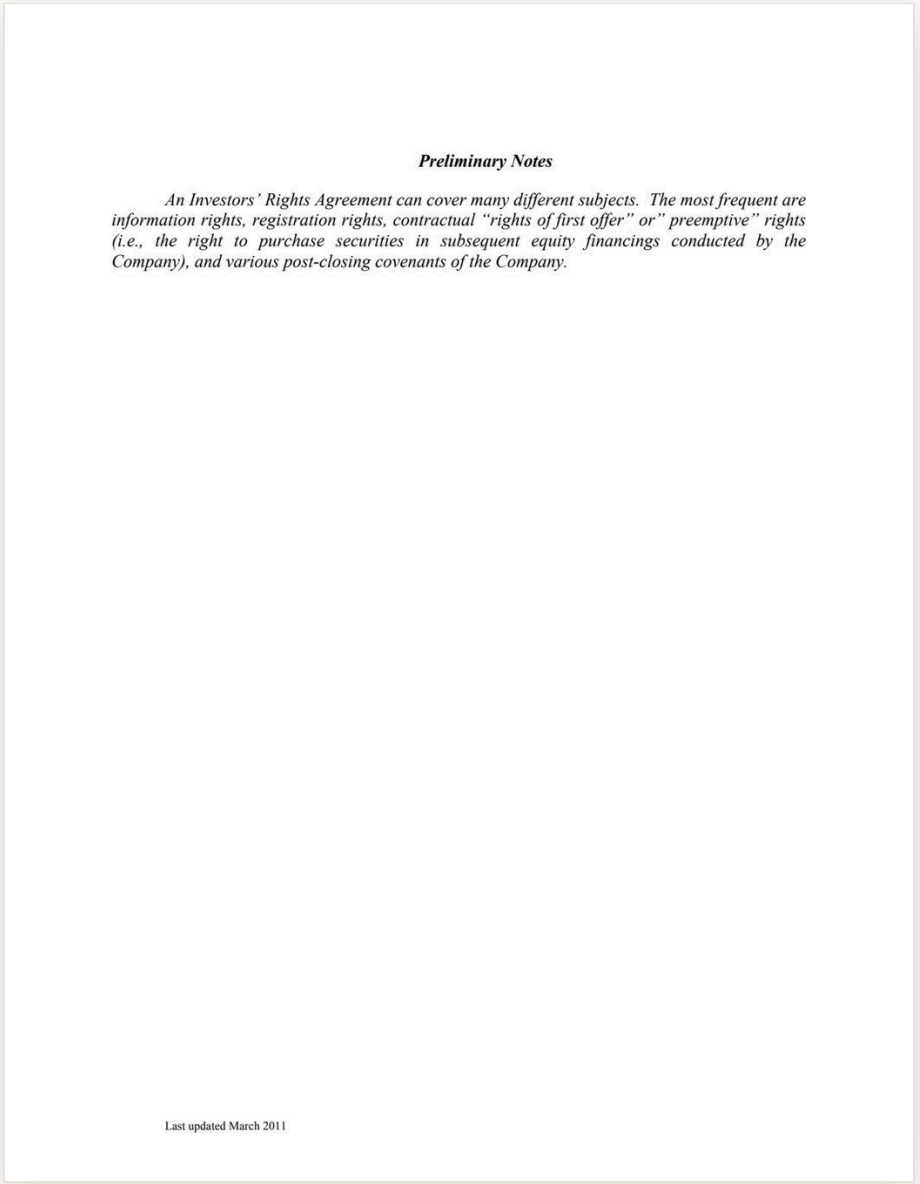
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[AMENDED AND RESTATED]
INVESTORS' RIGHTS AGREEMENT

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Investors' Rights Agreement — Page 2 of 43



Preliminary Notes

An Investors' Rights Agreement can cover many different subjects. The most frequent are information rights, registration rights, contractual "rights of first offer" or" preemptive" rights (i.e., the right to purchase securities in subsequent equity financings conducted by the Company), and various post-closing covenants of the Company.

Last updated March 2011

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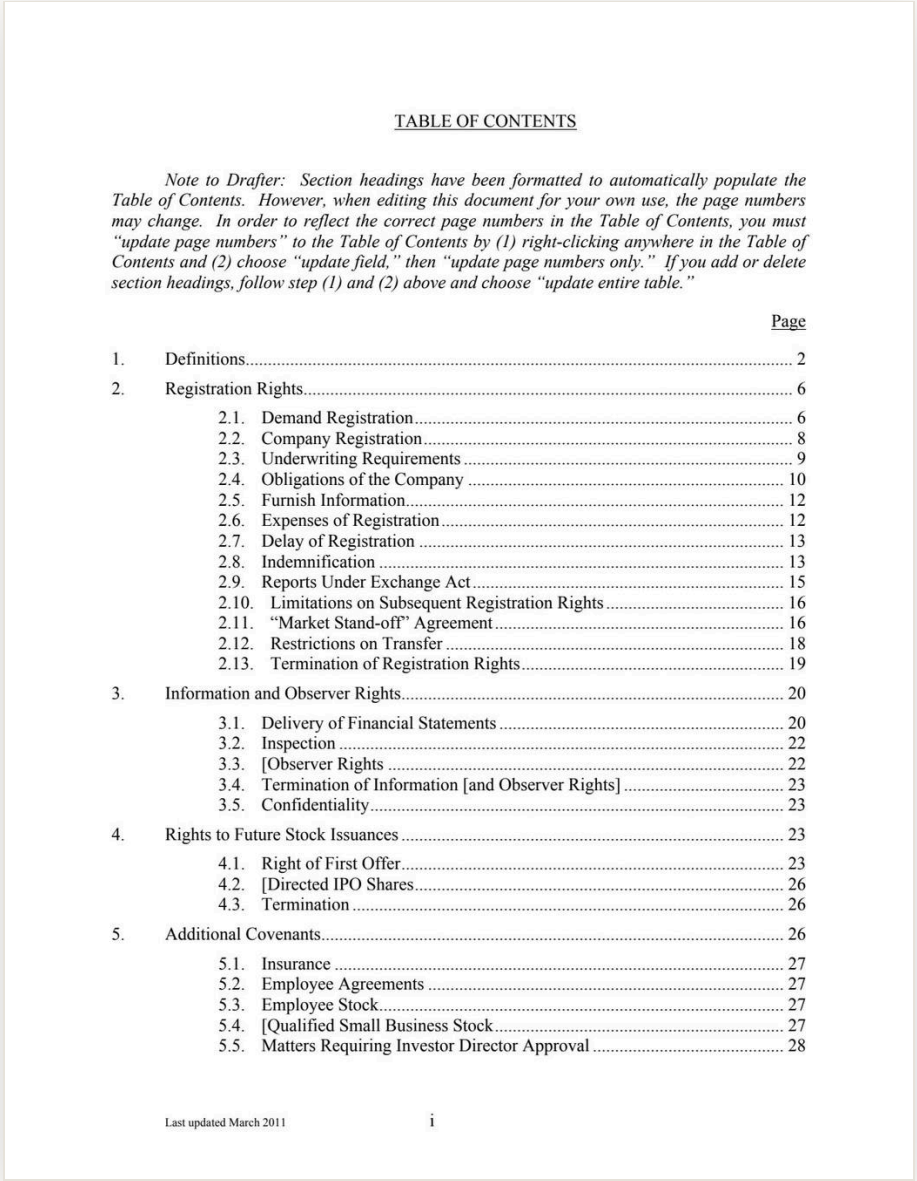


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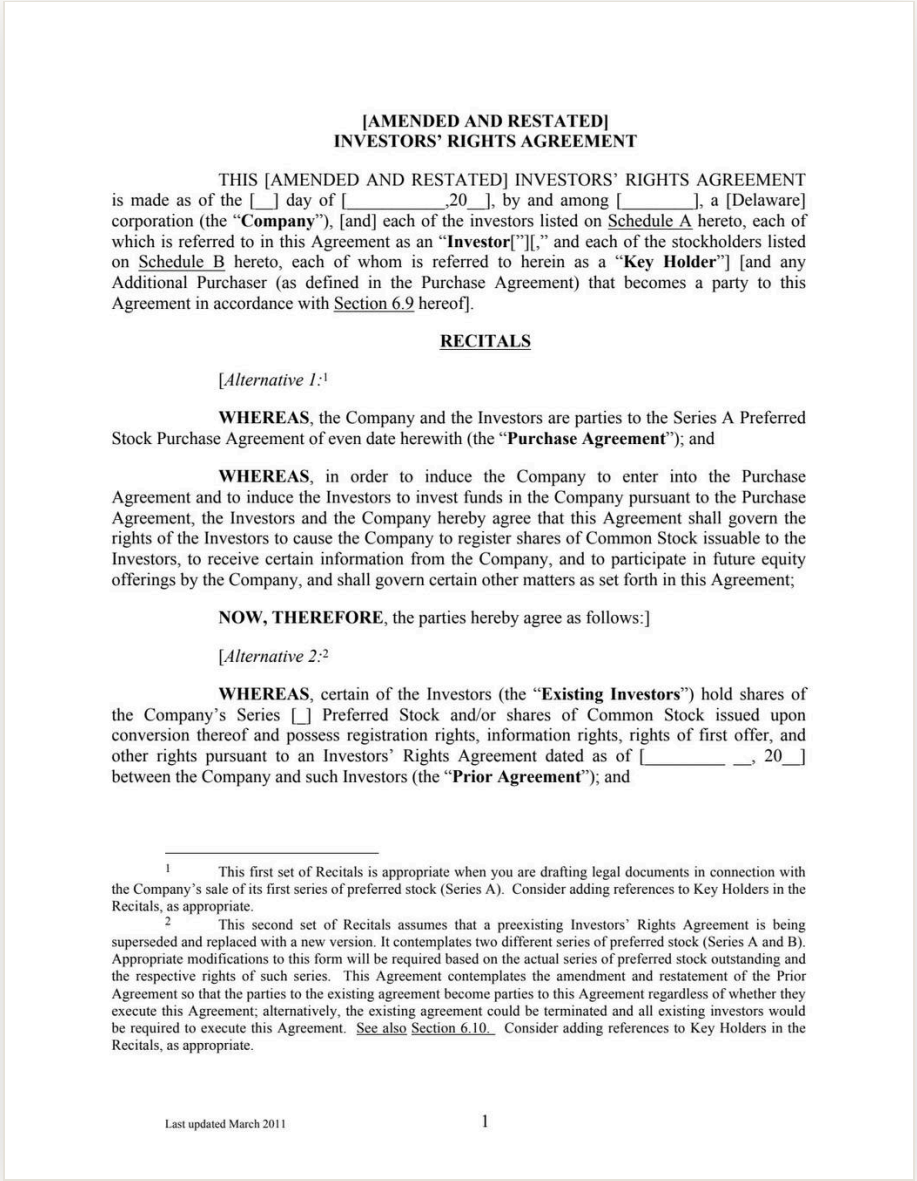
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[AMENDED AND RESTATED]
INVESTORS' RIGHTS AGREEMENT

THIS [AMENDED AND RESTATED] INVESTORS' RIGHTS AGREEMENT is made as of the [__] day of [_____,20__], by and among [_____], a [Delaware] corporation (the "**Company**"), [and] each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**["][," and each of the stockholders listed on Schedule B hereto, each of whom is referred to herein as a "**Key Holder**"] [and any Additional Purchaser (as defined in the Purchase Agreement) that becomes a party to this Agreement in accordance with Section 6.9 hereof].

RECITALS

[*Alternative 1:*[1]

WHEREAS, the Company and the Investors are parties to the Series A Preferred Stock Purchase Agreement of even date herewith (the "**Purchase Agreement**"); and

WHEREAS, in order to induce the Company to enter into the Purchase Agreement and to induce the Investors to invest funds in the Company pursuant to the Purchase Agreement, the Investors and the Company hereby agree that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors, to receive certain information from the Company, and to participate in future equity offerings by the Company, and shall govern certain other matters as set forth in this Agreement;

NOW, THEREFORE, the parties hereby agree as follows:]

[*Alternative 2:*[2]

WHEREAS, certain of the Investors (the "**Existing Investors**") hold shares of the Company's Series [_] Preferred Stock and/or shares of Common Stock issued upon conversion thereof and possess registration rights, information rights, rights of first offer, and other rights pursuant to an Investors' Rights Agreement dated as of [_____ __, 20__] between the Company and such Investors (the "**Prior Agreement**"); and

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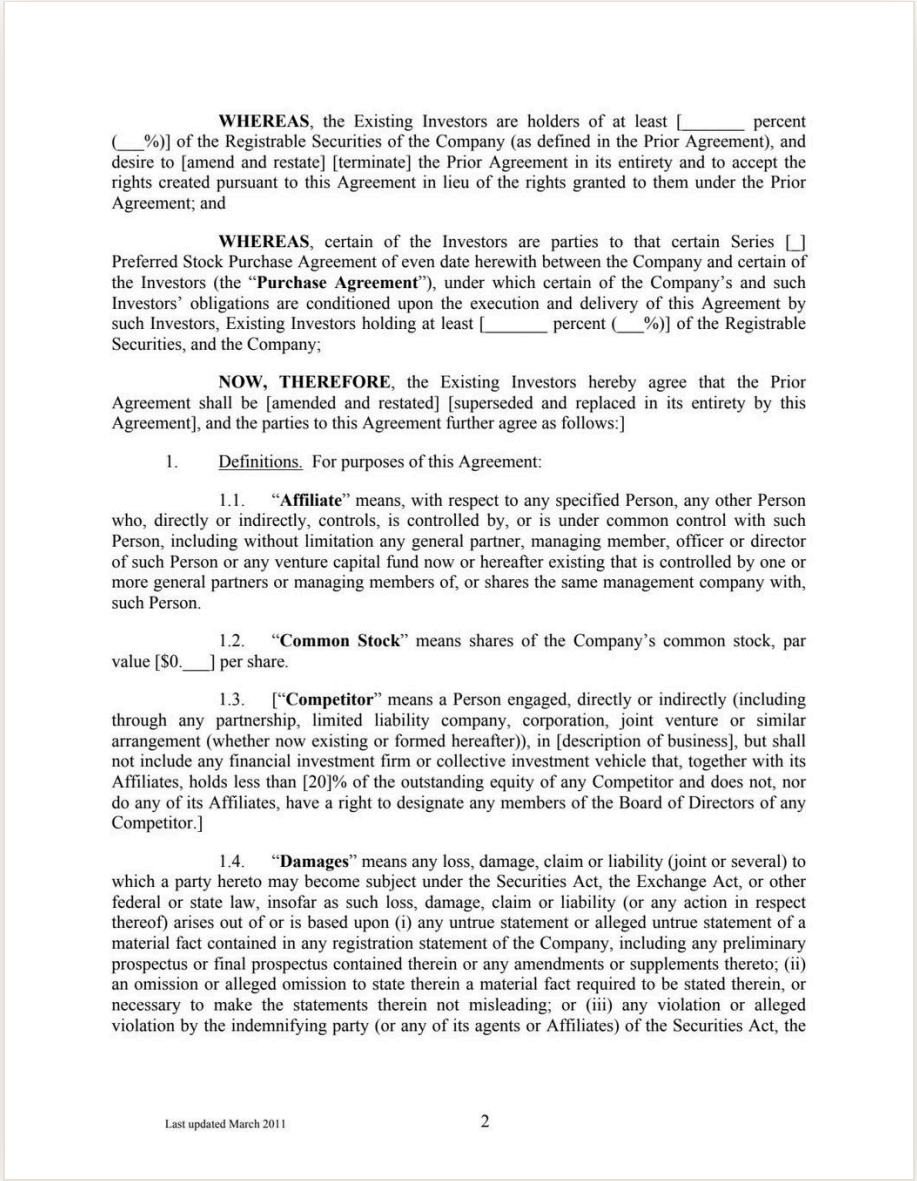
[1] This first set of Recitals is appropriate when you are drafting legal documents in connection with the Company's sale of its first series of preferred stock (Series A). Consider adding references to Key Holders in the Recitals, as appropriate.

[2] This second set of Recitals assumes that a preexisting Investors' Rights Agreement is being superseded and replaced with a new version. It contemplates two different series of preferred stock (Series A and B). Appropriate modifications to this form will be required based on the actual series of preferred stock outstanding and the respective rights of such series. This Agreement contemplates the amendment and restatement of the Prior Agreement so that the parties to the existing agreement become parties to this Agreement regardless of whether they execute this Agreement; alternatively, the existing agreement could be terminated and all existing investors would be required to execute this Agreement. See also Section 6.10. Consider adding references to Key Holders in the Recitals, as appropriate.

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WHEREAS, the Existing Investors are holders of at least [_____ percent (___%)] of the Registrable Securities of the Company (as defined in the Prior Agreement), and desire to [amend and restate] [terminate] the Prior Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Prior Agreement; and

WHEREAS, certain of the Investors are parties to that certain Series [_] Preferred Stock Purchase Agreement of even date herewith between the Company and certain of the Investors (the "**Purchase Agreement**"), under which certain of the Company's and such Investors' obligations are conditioned upon the execution and delivery of this Agreement by such Investors, Existing Investors holding at least [_____ percent (___%)] of the Registrable Securities, and the Company;

NOW, THEREFORE, the Existing Investors hereby agree that the Prior Agreement shall be [amended and restated] [superseded and replaced in its entirety by this Agreement], and the parties to this Agreement further agree as follows:]

1. Definitions. For purposes of this Agreement:

1.1. "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2. "**Common Stock**" means shares of the Company's common stock, par value [$0.___] per share.

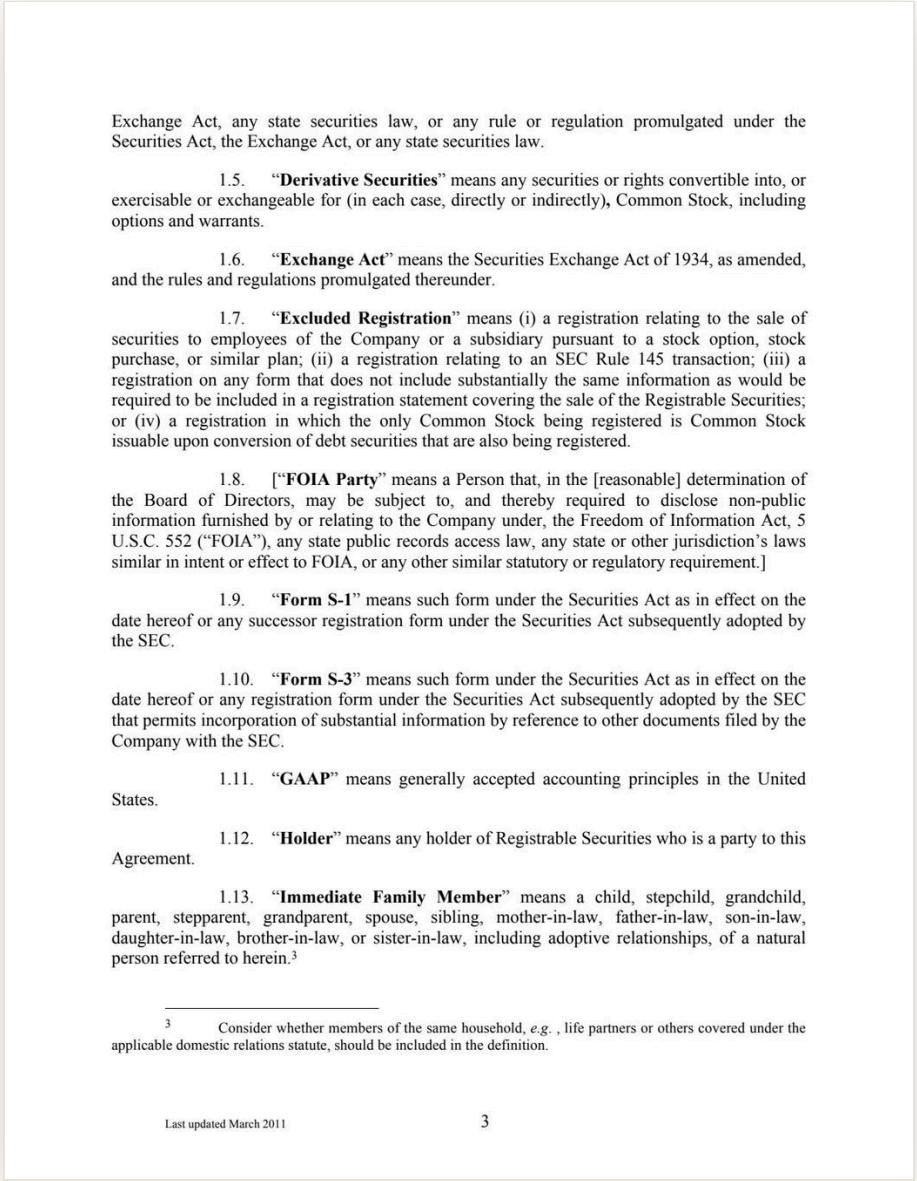
1.3. ["**Competitor**" means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in [description of business], but shall not include any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than [20]% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the Board of Directors of any Competitor.]

1.4. "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the

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Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.5. "**Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.6. "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.7. "**Excluded Registration**" means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.8. ["**FOIA Party**" means a Person that, in the [reasonable] determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 ("FOIA"), any state public records access law, any state or other jurisdiction's laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.]

1.9. "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.10. "**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.11. "**GAAP**" means generally accepted accounting principles in the United States.

1.12. "**Holder**" means any holder of Registrable Securities who is a party to this Agreement.

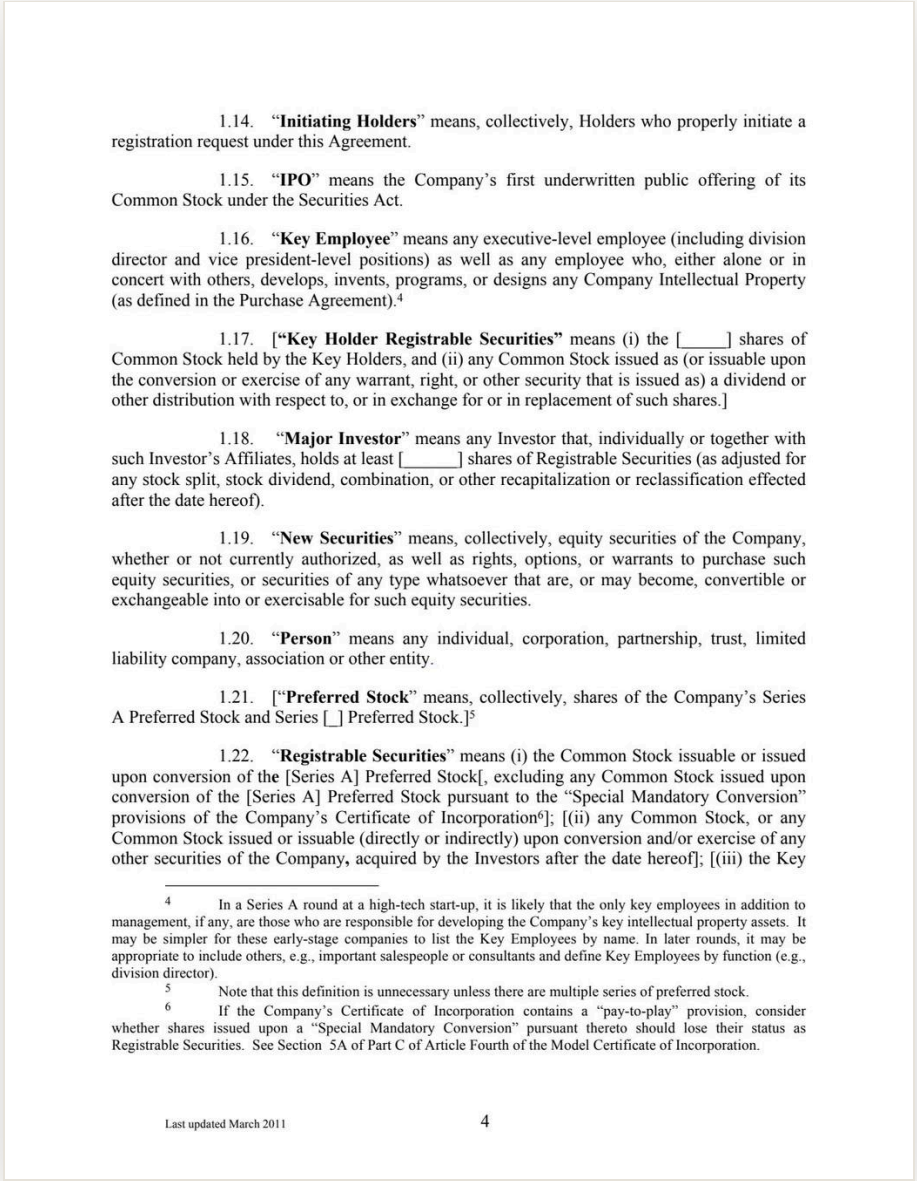
1.13. "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.[3]

[3] Consider whether members of the same household, *e.g.* , life partners or others covered under the applicable domestic relations statute, should be included in the definition.

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1.14. "**Initiating Holders**" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.15. "**IPO**" means the Company's first underwritten public offering of its Common Stock under the Securities Act.

1.16. "**Key Employee**" means any executive-level employee (including division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).[4]

1.17. [**"Key Holder Registrable Securities"** means (i) the [_____] shares of Common Stock held by the Key Holders, and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of such shares.]

1.18. "**Major Investor**" means any Investor that, individually or together with such Investor's Affiliates, holds at least [_____] shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.19. "**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.20. "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.21. ["**Preferred Stock**" means, collectively, shares of the Company's Series A Preferred Stock and Series [_] Preferred Stock.][5]

1.22. "**Registrable Securities**" means (i) the Common Stock issuable or issued upon conversion of the [Series A] Preferred Stock[, excluding any Common Stock issued upon conversion of the [Series A] Preferred Stock pursuant to the "Special Mandatory Conversion" provisions of the Company's Certificate of Incorporation[6]]; [(ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired by the Investors after the date hereof]; [(iii) the Key

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4 In a Series A round at a high-tech start-up, it is likely that the only key employees in addition to management, if any, are those who are responsible for developing the Company's key intellectual property assets. It may be simpler for these early-stage companies to list the Key Employees by name. In later rounds, it may be appropriate to include others, e.g., important salespeople or consultants and define Key Employees by function (e.g., division director).

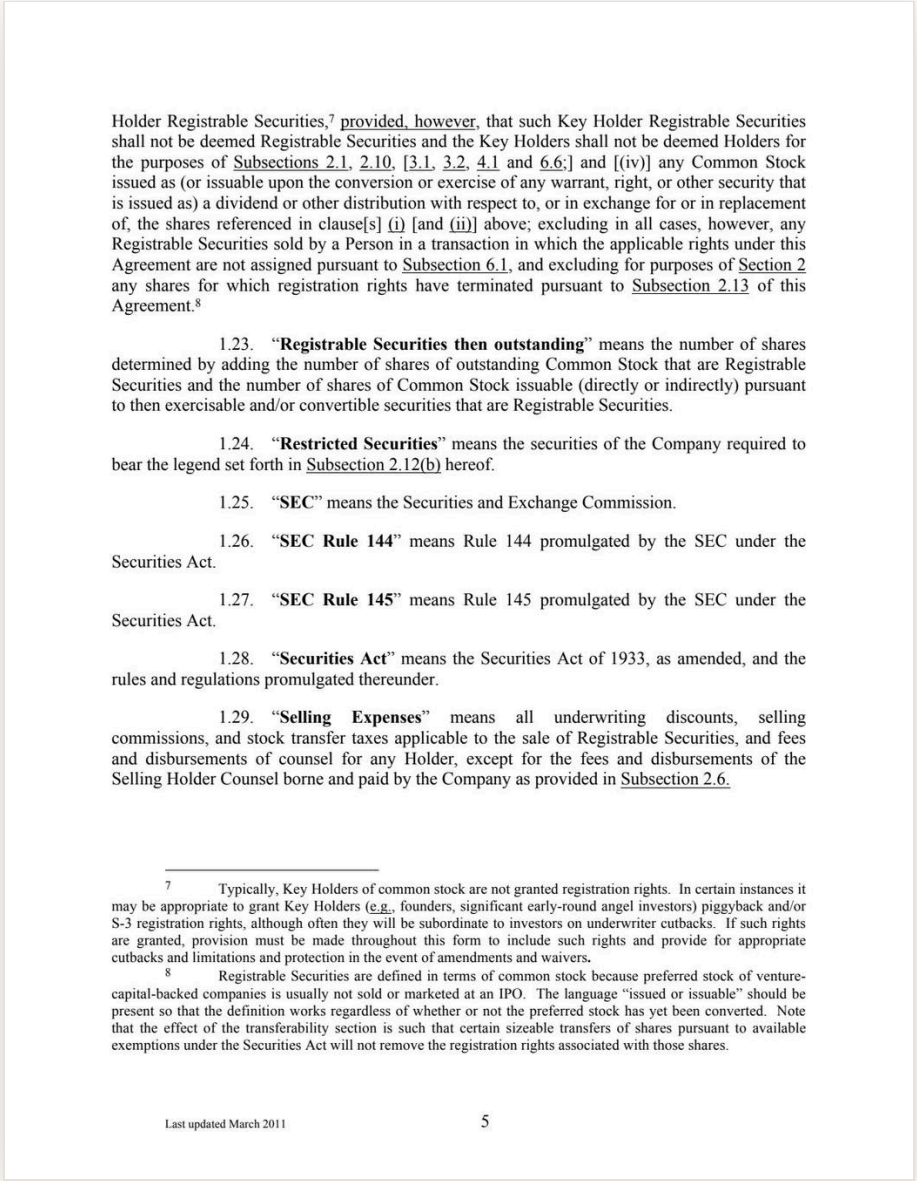
5 Note that this definition is unnecessary unless there are multiple series of preferred stock.

6 If the Company's Certificate of Incorporation contains a "pay-to-play" provision, consider whether shares issued upon a "Special Mandatory Conversion" pursuant thereto should lose their status as Registrable Securities. See Section 5A of Part C of Article Fourth of the Model Certificate of Incorporation.

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Holder Registrable Securities,[7] provided, however, that such Key Holder Registrable Securities shall not be deemed Registrable Securities and the Key Holders shall not be deemed Holders for the purposes of Subsections 2.1, 2.10, [3.1, 3.2, 4.1 and 6.6;] and [(iv)] any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause[s] (i) [and (ii)] above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.[8]

1.23. "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.24. "**Restricted Securities**" means the securities of the Company required to bear the legend set forth in Subsection 2.12(b) hereof.

1.25. "**SEC**" means the Securities and Exchange Commission.

1.26. "**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

1.27. "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

1.28. "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.29. "**Selling Expenses**" means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

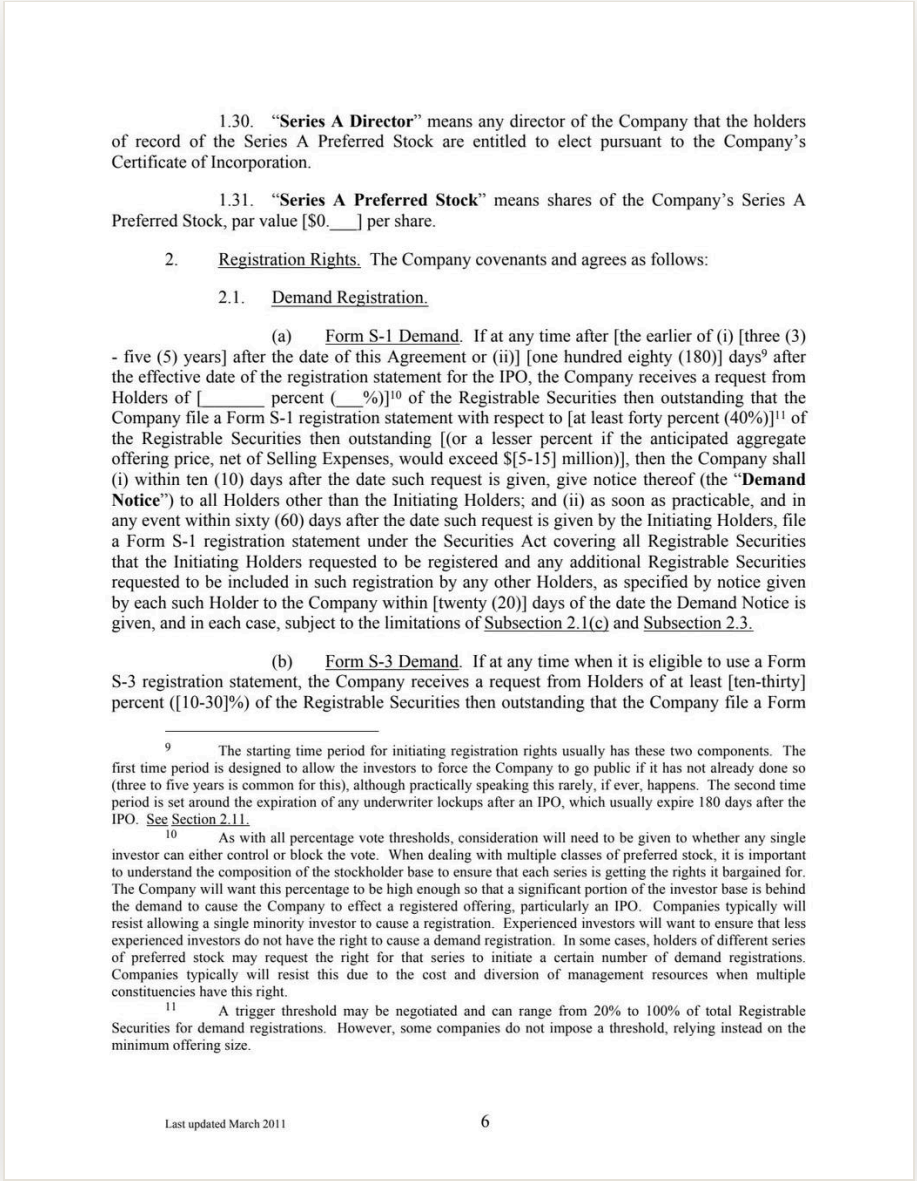
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[7] Typically, Key Holders of common stock are not granted registration rights. In certain instances it may be appropriate to grant Key Holders (e.g., founders, significant early-round angel investors) piggyback and/or S-3 registration rights, although often they will be subordinate to investors on underwriter cutbacks. If such rights are granted, provision must be made throughout this form to include such rights and provide for appropriate cutbacks and limitations and protection in the event of amendments and waivers.

[8] Registrable Securities are defined in terms of common stock because preferred stock of venture-capital-backed companies is usually not sold or marketed at an IPO. The language "issued or issuable" should be present so that the definition works regardless of whether or not the preferred stock has yet been converted. Note that the effect of the transferability section is such that certain sizeable transfers of shares pursuant to available exemptions under the Securities Act will not remove the registration rights associated with those shares.

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1.30. "**Series A Director**" means any director of the Company that the holders of record of the Series A Preferred Stock are entitled to elect pursuant to the Company's Certificate of Incorporation.

1.31. "**Series A Preferred Stock**" means shares of the Company's Series A Preferred Stock, par value [$0.___] per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1. Demand Registration.

(a) Form S-1 Demand. If at any time after [the earlier of (i) [three (3) - five (5) years] after the date of this Agreement or (ii)] [one hundred eighty (180)] days[9] after the effective date of the registration statement for the IPO, the Company receives a request from Holders of [_____ percent (___%)][10] of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to [at least forty percent (40%)][11] of the Registrable Securities then outstanding [(or a lesser percent if the anticipated aggregate offering price, net of Selling Expenses, would exceed $[5-15] million)], then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within [twenty (20)] days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsection 2.1(c) and Subsection 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least [ten-thirty] percent ([10-30]%) of the Registrable Securities then outstanding that the Company file a Form

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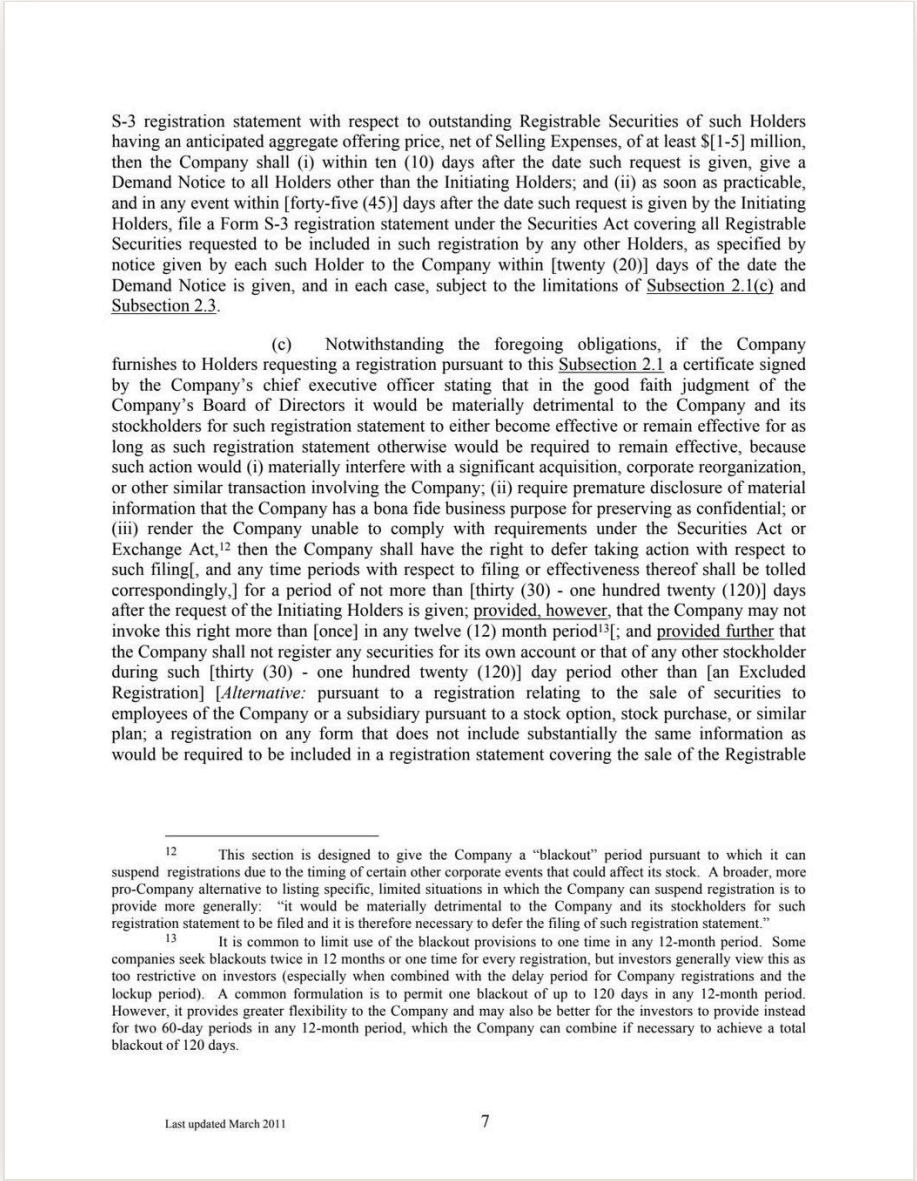
[9] The starting time period for initiating registration rights usually has these two components. The first time period is designed to allow the investors to force the Company to go public if it has not already done so (three to five years is common for this), although practically speaking this rarely, if ever, happens. The second time period is set around the expiration of any underwriter lockups after an IPO, which usually expire 180 days after the IPO. See Section 2.11.

[10] As with all percentage vote thresholds, consideration will need to be given to whether any single investor can either control or block the vote. When dealing with multiple classes of preferred stock, it is important to understand the composition of the stockholder base to ensure that each series is getting the rights it bargained for. The Company will want this percentage to be high enough so that a significant portion of the investor base is behind the demand to cause the Company to effect a registered offering, particularly an IPO. Companies typically will resist allowing a single minority investor to cause a registration. Experienced investors will want to ensure that less experienced investors do not have the right to cause a demand registration. In some cases, holders of different series of preferred stock may request the right for that series to initiate a certain number of demand registrations. Companies typically will resist this due to the cost and diversion of management resources when multiple constituencies have this right.

[11] A trigger threshold may be negotiated and can range from 20% to 100% of total Registrable Securities for demand registrations. However, some companies do not impose a threshold, relying instead on the minimum offering size.

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S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least $[1-5] million, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within [forty-five (45)] days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within [twenty (20)] days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsection 2.1(c) and Subsection 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act,[12] then the Company shall have the right to defer taking action with respect to such filing[, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly,] for a period of not more than [thirty (30) - one hundred twenty (120)] days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than [once] in any twelve (12) month period[13][; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such [thirty (30) - one hundred twenty (120)] day period other than [an Excluded Registration] [*Alternative:* pursuant to a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable

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12 This section is designed to give the Company a "blackout" period pursuant to which it can suspend registrations due to the timing of certain other corporate events that could affect its stock. A broader, more pro-Company alternative to listing specific, limited situations in which the Company can suspend registration is to provide more generally: "it would be materially detrimental to the Company and its stockholders for such registration statement to be filed and it is therefore necessary to defer the filing of such registration statement."

13 It is common to limit use of the blackout provisions to one time in any 12-month period. Some companies seek blackouts twice in 12 months or one time for every registration, but investors generally view this as too restrictive on investors (especially when combined with the delay period for Company registrations and the lockup period). A common formulation is to permit one blackout of up to 120 days in any 12-month period. However, it provides greater flexibility to the Company and may also be better for the investors to provide instead for two 60-day periods in any 12-month period, which the Company can combine if necessary to achieve a total blackout of 120 days.

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Securities; or a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered].[14]

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(a)(i) during the period that is [sixty (60)] days before the Company's good faith estimate of the date of filing of, and ending on a date that is [one hundred eighty (180)] days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected [one-two] registration[s] pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is [thirty (30)] days before the Company's good faith estimate of the date of filing of, and ending on a date that is [ninety (90)] days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected [two] registration[s] pursuant to Subsection 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d).

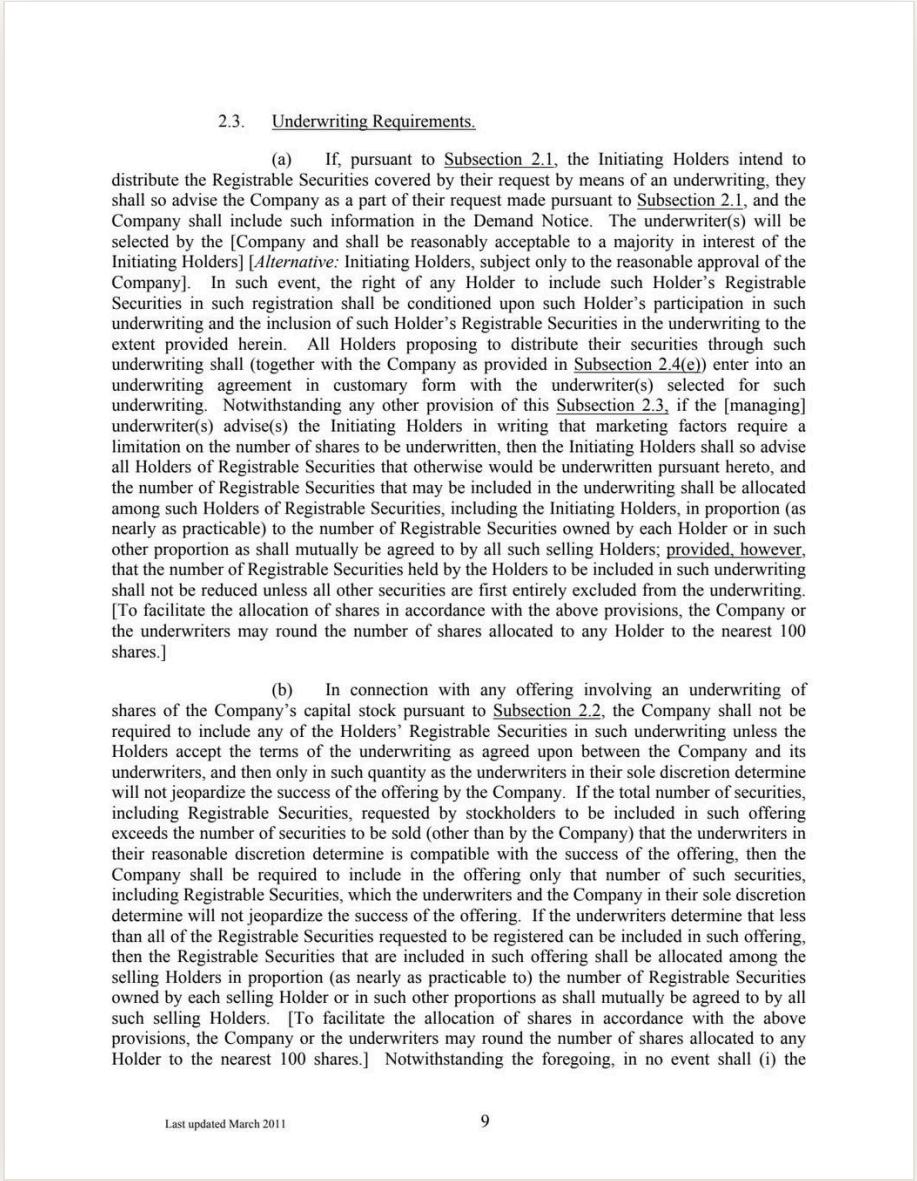
2.2. Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its [Common Stock][securities] under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

[14] Note that the alternative carve-out provision from the limitation on the Company's right to register securities for its own account during a blackout period does not include a carve-out for a registration relating to a Rule 145 transaction. From the investors' perspective, although it may be acceptable for the Company to delay a resale registration in the circumstances set forth in this provision, those circumstances should not entitle the Company to file, e.g., a Form S-4 for a Rule 145 transaction, in priority to a registration requested by the Holders of Registrable Securities. However, from the Company's perspective, the inability to file the S-4 could be a hindrance to an acquisition.

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2.3. Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the [Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders] [*Alternative:* Initiating Holders, subject only to the reasonable approval of the Company]. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the [managing] underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. [To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.]

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. [To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.] Notwithstanding the foregoing, in no event shall (i) the

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number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, [or] (ii) the number of Registrable Securities included in the offering be reduced below [twenty-thirty] percent ([20-30]%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering [or (iii) notwithstanding (ii) above, any Registrable Securities which are not Key Holder Registrable Securities be excluded from such underwriting unless all Key Holder Registrable Securities are first excluded from such offering.][15] For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) [For purposes of Subsection 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Subsection 2.3(a), fewer than [fifty percent (50%)] of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.]

2.4. Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:[16]

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts[17] to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company,

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15 This language is commonly referred to as the "underwriter cutback" section. In some offerings, an underwriter may determine it can successfully market only a certain number of securities and must therefore reduce the size of the overall registration. When this happens, the holders of Registrable Securities are generally entitled to include their shares before anybody else (consider whether later series may want priority over earlier series). If there is not enough room for these holders, the cutback should be pro rata based on shares held and not "shares requested to be included" (which only creates a race to request and an incentive to request all amounts held every time). Also, if Key Holders have been given registration rights, consider priority of cutback for such Key Holders.

16 This section simply lists the undertakings of the Company in the event of a registration. As a practical matter, this language will be superseded by any underwriting agreement as part of an underwritten offering.

17 Much ink has been spilled addressing the distinctions, or lack thereof, among the "best efforts," "commercially reasonable efforts," "reasonable efforts," and similar performance standards. This Agreement uses "commercially reasonable efforts" as the default performance standard.

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from selling any securities included in such registration[, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred twenty (120) day period shall be extended for up to [_____] days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold];

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions,[18] unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

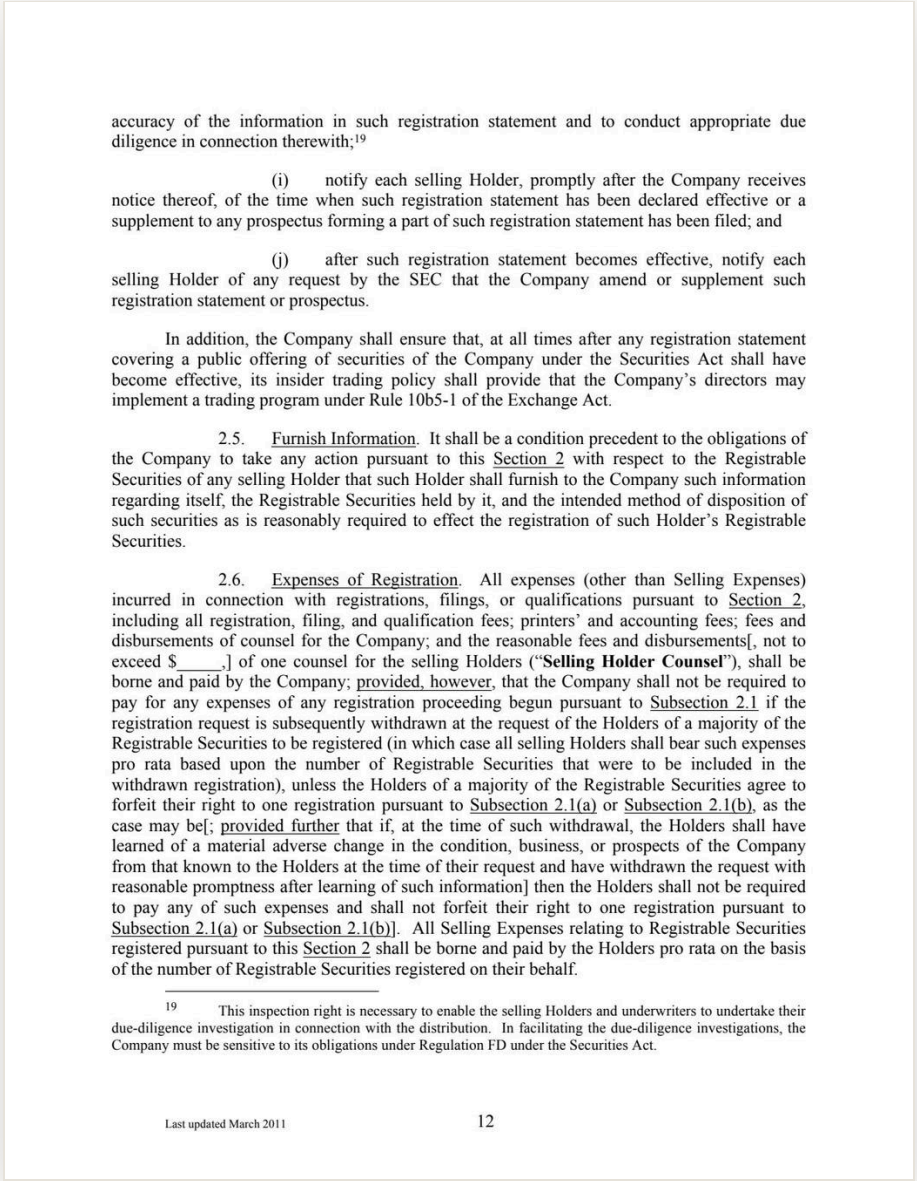
(h) promptly make available for inspection by the selling Holders, any [managing] underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the

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18 This is generally viewed as a burdensome requirement for a Company, so it is often carved out of required registrations.

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accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;[19]

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5. Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

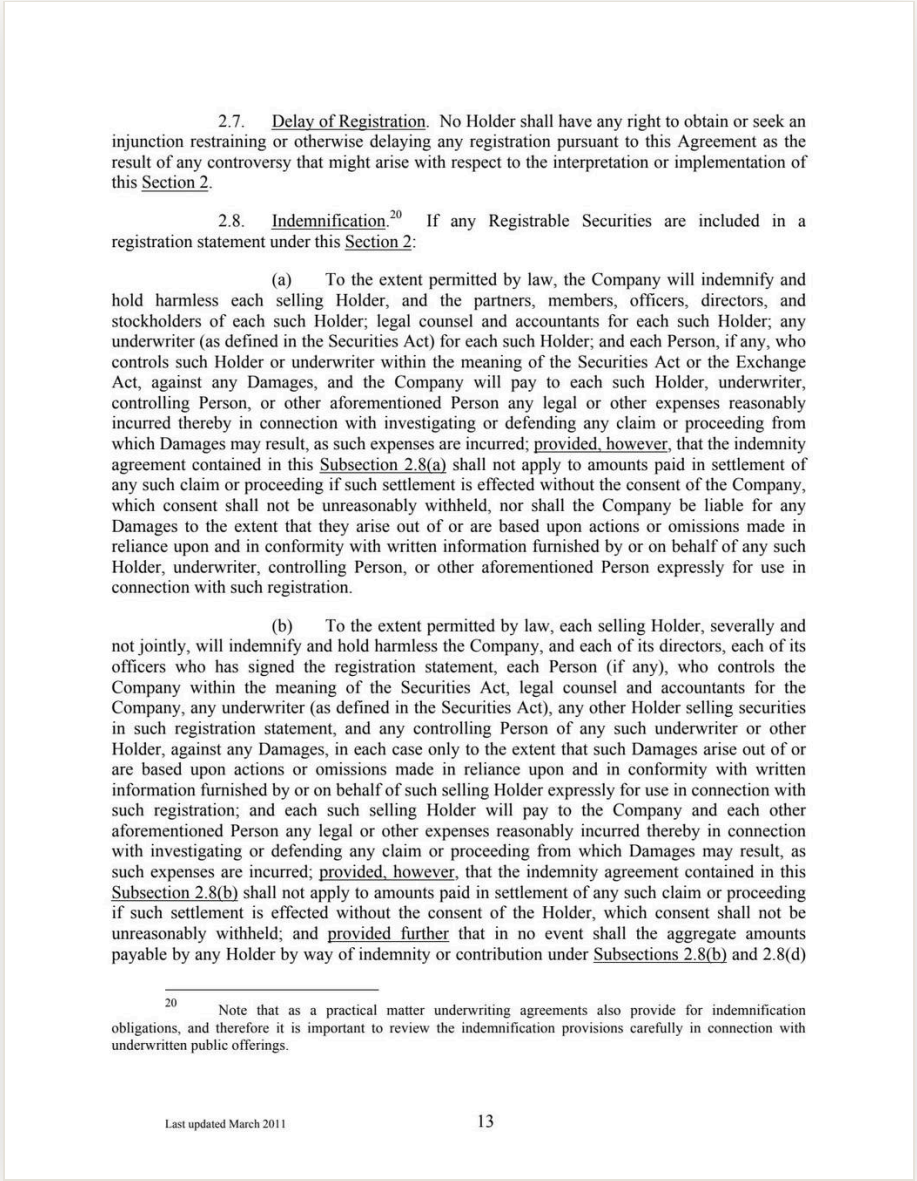
2.6. Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements[, not to exceed $_____,] of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsection 2.1(a) or Subsection 2.1(b), as the case may be[; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information] then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsection 2.1(a) or Subsection 2.1(b)]. All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

[19] This inspection right is necessary to enable the selling Holders and underwriters to undertake their due-diligence investigation in connection with the distribution. In facilitating the due-diligence investigations, the Company must be sensitive to its obligations under Regulation FD under the Securities Act.

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2.7. Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8. Indemnification.[20] If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d)

[20] Note that as a practical matter underwriting agreements also provide for indemnification obligations, and therefore it is important to review the indemnification provisions carefully in connection with underwritten public offerings.

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exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. [The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.]

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such

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fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) [Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.]

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9. Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

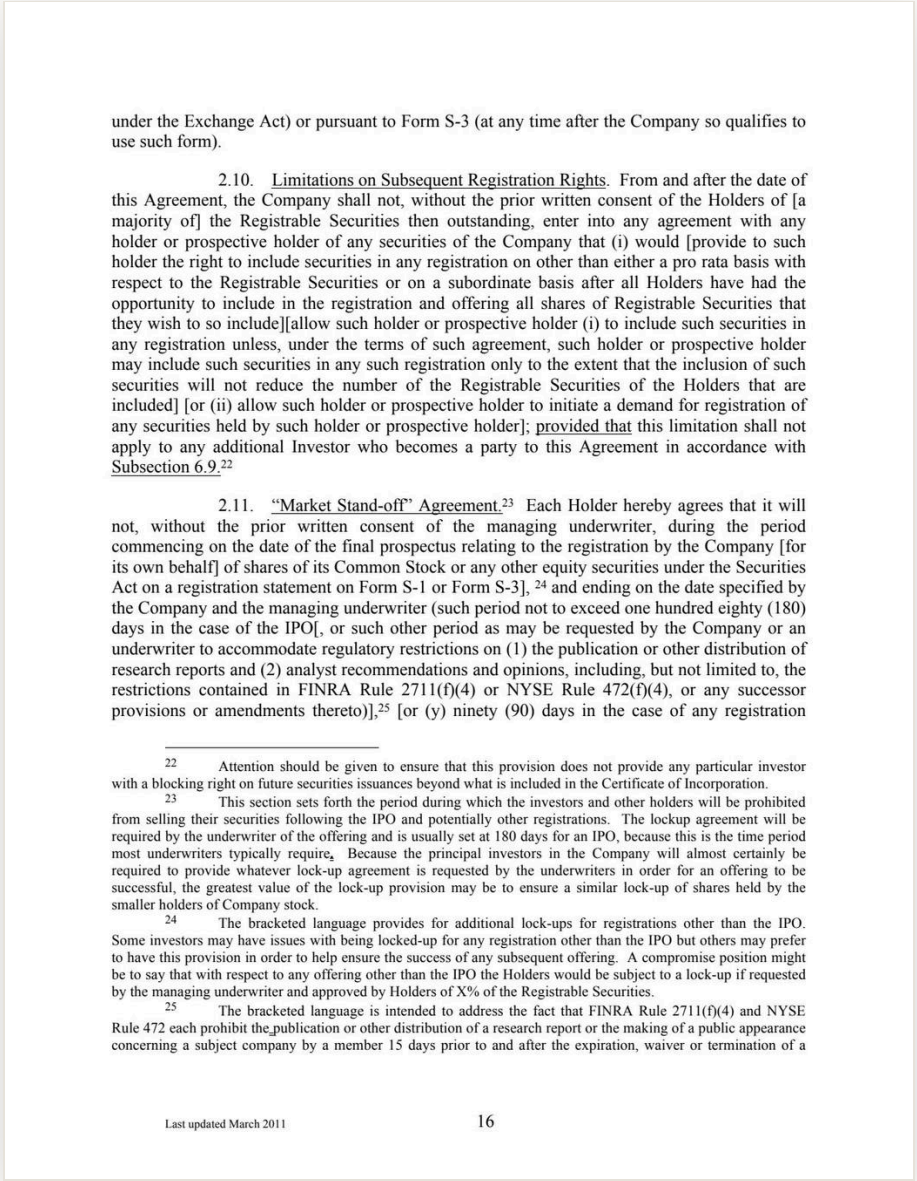
(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); [(ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company;][21] and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements

[21] The value and necessity of obligations to provide copies of SEC filed documents is questionable given the availability of all such documents on EDGAR.

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under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10. Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of [a majority of] the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would [provide to such holder the right to include securities in any registration on other than either a pro rata basis with respect to the Registrable Securities or on a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include][allow such holder or prospective holder (i) to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included] [or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder]; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.9.[22]

2.11. "Market Stand-off" Agreement.[23] Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company [for its own behalf] of shares of its Common Stock or any other equity securities under the Securities Act on a registration statement on Form S-1 or Form S-3], [24] and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days in the case of the IPO[, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto)],[25] [or (y) ninety (90) days in the case of any registration

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22 Attention should be given to ensure that this provision does not provide any particular investor with a blocking right on future securities issuances beyond what is included in the Certificate of Incorporation.

23 This section sets forth the period during which the investors and other holders will be prohibited from selling their securities following the IPO and potentially other registrations. The lockup agreement will be required by the underwriter of the offering and is usually set at 180 days for an IPO, because this is the time period most underwriters typically require. Because the principal investors in the Company will almost certainly be required to provide whatever lock-up agreement is requested by the underwriters in order for an offering to be successful, the greatest value of the lock-up provision may be to ensure a similar lock-up of shares held by the smaller holders of Company stock.

24 The bracketed language provides for additional lock-ups for registrations other than the IPO. Some investors may have issues with being locked-up for any registration other than the IPO but others may prefer to have this provision in order to help ensure the success of any subsequent offering. A compromise position might be to say that with respect to any offering other than the IPO the Holders would be subject to a lock-up if requested by the managing underwriter and approved by Holders of X% of the Registrable Securities.

25 The bracketed language is intended to address the fact that FINRA Rule 2711(f)(4) and NYSE Rule 472 each prohibit the publication or other distribution of a research report or the making of a public appearance concerning a subject company by a member 15 days prior to and after the expiration, waiver or termination of a

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other than the IPO[, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto)], (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock [(whether such shares or any such securities are then owned by the Holder or are thereafter acquired)] [*Alternative:* held immediately before the effective date of the registration statement for such offering][26] or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 [shall apply only to the IPO,] shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, [or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value,] and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions [and the Company uses commercially reasonable efforts to obtain a similar agreement from all stockholders individually owning more than [one-five] percent ([1-5]%) of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding [Series A] Preferred Stock)[27]]. The underwriters in connection with such registration are intended third-party beneficiaries of this Subsection 2.11 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto. [Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements[, except that, notwithstanding the foregoing, the Company and the underwriters may,

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lock-up agreement or any other agreement that the member has entered into with a subject company or its shareholders that restricts or prohibits the sale of securities held by the subject company or its shareholders after the completion of a securities offering, unless the securities are "actively traded" within the meaning of Rule 101(c)(1) of Regulation M under the Exchange Act. Some underwriters are actually going farther and requiring that lockup periods be extended to up to a total of 210 days in order to give them sufficient leeway.

26 Investors typically request that common stock acquired in the IPO or in the public market after the IPO should not be subject to the lockup provisions.

27 An alternative, commonly used provision requires the Company to obtain a lock-up from all directors and officers and all stockholders individually owning more than [one-five] percent ([1-5]%) of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock. A potential problem with such formulation is that if not all larger stockholders are parties to this agreement or otherwise subject to the same restrictions then the failure to obtain a lock-up from even a single one of those stockholders would invalidate the entire provision. Consider also including a covenant requiring all future stockholders to sign a similar market stand-off provision. Compare Subsection 5.3, which applies only to employees.

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in their sole discretion, waive or terminate these restrictions with respect to up to [_____] shares of the Common Stock].][28]

2.12. Restrictions on Transfer.[29]

(a) The [Series A] Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the [Series A] [Preferred Stock] and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate or instrument representing (i) the [Series A] Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be stamped or otherwise imprinted with a legend substantially in the following form:

> THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.
>
> THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

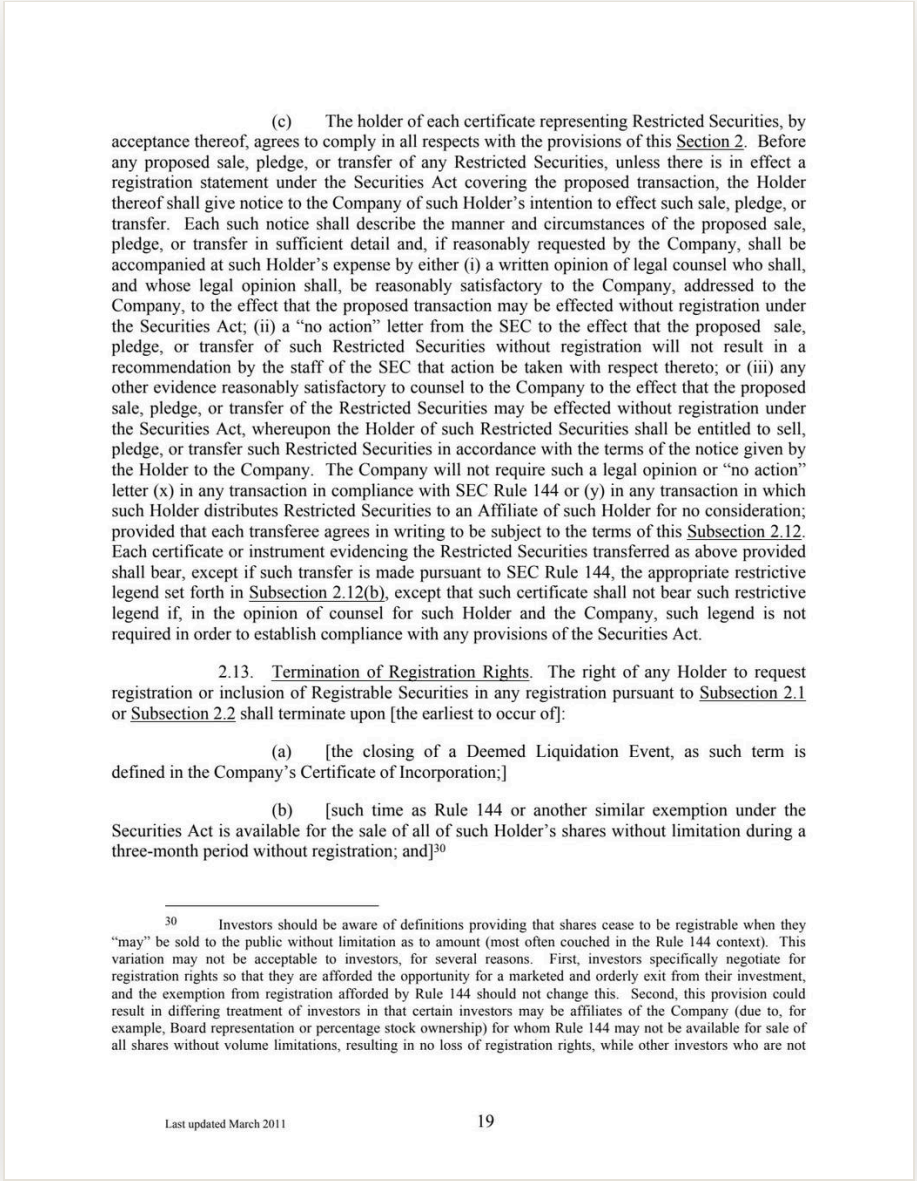
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[28] Sometimes de minimis thresholds are negotiated so that smaller employee stockholders in need of liquidity can be released without destroying all of the lockups and the offering. Note, however, that based on very recent experience with dealing with IPO underwriters, who are objecting to small holders not being subject to lock-ups, some funds are requiring that all stockholders be subject to lock-ups.

[29] This Agreement does not prohibit the transfer of Registrable Securities to competitors. Some companies insist on providing for a flat prohibition on transfers to competitors; a less restrictive alternative would be to provide for a "right of first refusal" in favor of the Company, other investors, or Key Holders in the event of a proposed sale or transfer to a competitor. See also Subsection 3.1, 3.2 and 3.3.

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(c) The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13. Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsection 2.1 or Subsection 2.2 shall terminate upon [the earliest to occur of]:

(a) [the closing of a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation;]

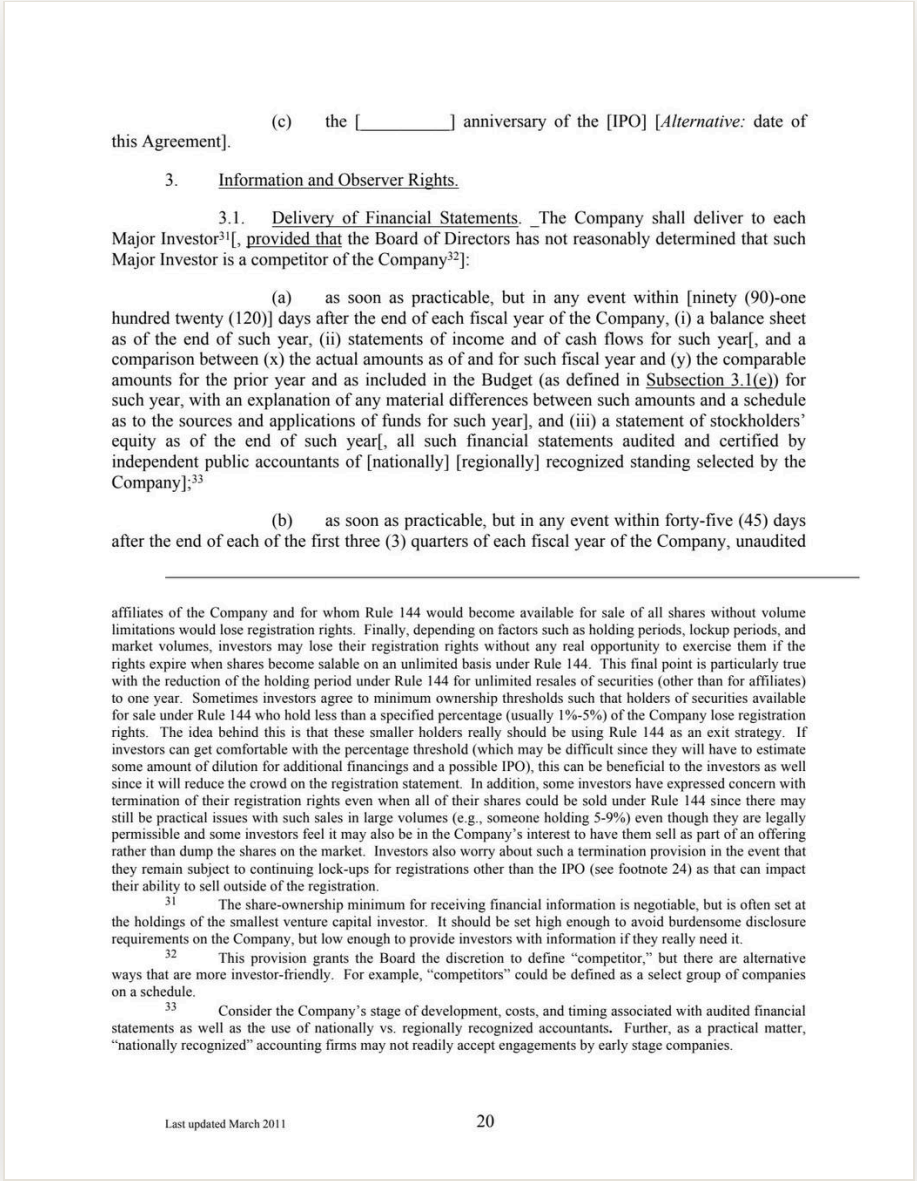
(b) [such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration; and][30]

[30] Investors should be aware of definitions providing that shares cease to be registrable when they "may" be sold to the public without limitation as to amount (most often couched in the Rule 144 context). This variation may not be acceptable to investors, for several reasons. First, investors specifically negotiate for registration rights so that they are afforded the opportunity for a marketed and orderly exit from their investment, and the exemption from registration afforded by Rule 144 should not change this. Second, this provision could result in differing treatment of investors in that certain investors may be affiliates of the Company (due to, for example, Board representation or percentage stock ownership) for whom Rule 144 may not be available for sale of all shares without volume limitations, resulting in no loss of registration rights, while other investors who are not

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(c) the [_____] anniversary of the [IPO] [*Alternative:* date of this Agreement].

3. Information and Observer Rights.

3.1. Delivery of Financial Statements. The Company shall deliver to each Major Investor[31][, provided that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company[32]]:

(a) as soon as practicable, but in any event within [ninety (90)-one hundred twenty (120)] days after the end of each fiscal year of the Company, (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year[, and a comparison between (x) the actual amounts as of and for such fiscal year and (y) the comparable amounts for the prior year and as included in the Budget (as defined in Subsection 3.1(e)) for such year, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such year], and (iii) a statement of stockholders' equity as of the end of such year[, all such financial statements audited and certified by independent public accountants of [nationally] [regionally] recognized standing selected by the Company];[33]

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited

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affiliates of the Company and for whom Rule 144 would become available for sale of all shares without volume limitations would lose registration rights. Finally, depending on factors such as holding periods, lockup periods, and market volumes, investors may lose their registration rights without any real opportunity to exercise them if the rights expire when shares become salable on an unlimited basis under Rule 144. This final point is particularly true with the reduction of the holding period under Rule 144 for unlimited resales of securities (other than for affiliates) to one year. Sometimes investors agree to minimum ownership thresholds such that holders of securities available for sale under Rule 144 who hold less than a specified percentage (usually 1%-5%) of the Company lose registration rights. The idea behind this is that these smaller holders really should be using Rule 144 as an exit strategy. If investors can get comfortable with the percentage threshold (which may be difficult since they will have to estimate some amount of dilution for additional financings and a possible IPO), this can be beneficial to the investors as well since it will reduce the crowd on the registration statement. In addition, some investors have expressed concern with termination of their registration rights even when all of their shares could be sold under Rule 144 since there may still be practical issues with such sales in large volumes (e.g., someone holding 5-9%) even though they are legally permissible and some investors feel it may also be in the Company's interest to have them sell as part of an offering rather than dump the shares on the market. Investors also worry about such a termination provision in the event that they remain subject to continuing lock-ups for registrations other than the IPO (see footnote 24) as that can impact their ability to sell outside of the registration.

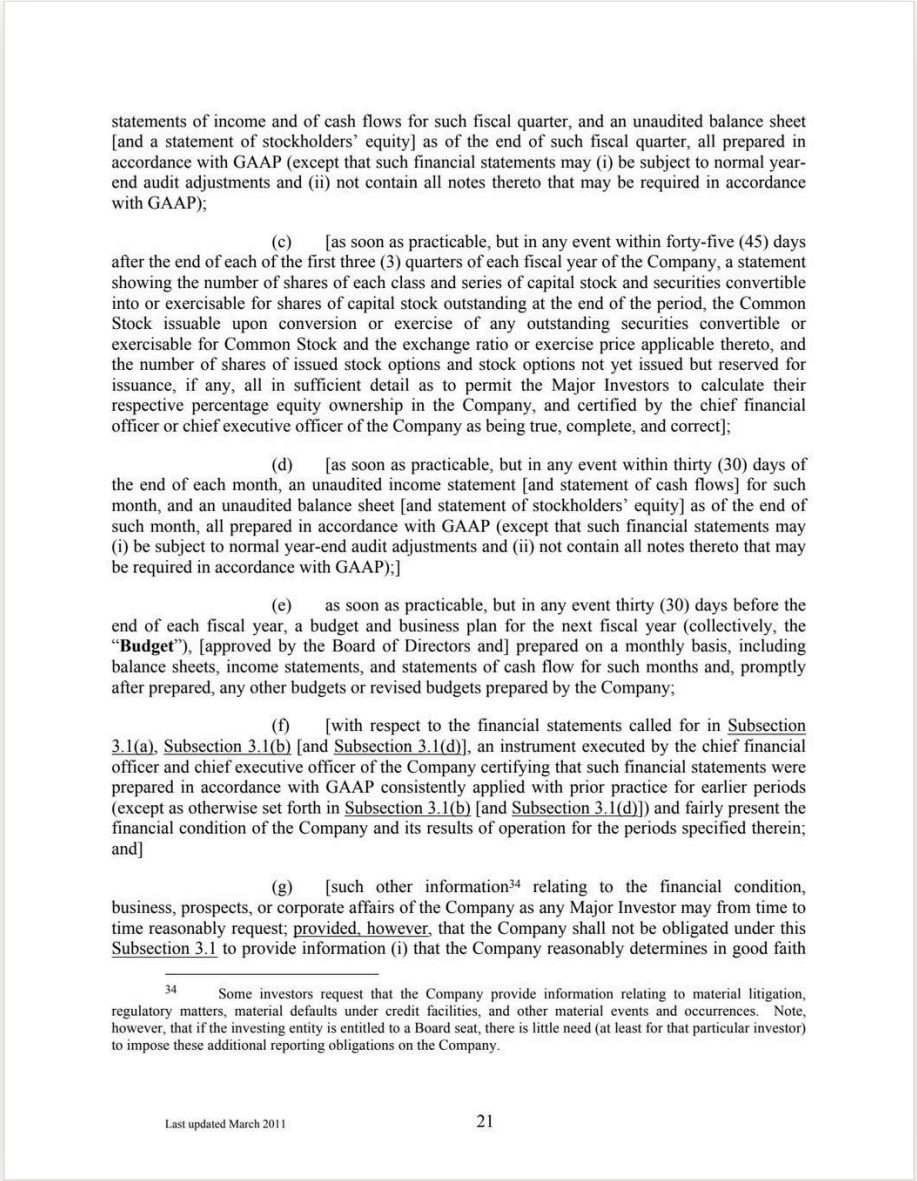
31 The share-ownership minimum for receiving financial information is negotiable, but is often set at the holdings of the smallest venture capital investor. It should be set high enough to avoid burdensome disclosure requirements on the Company, but low enough to provide investors with information if they really need it.

32 This provision grants the Board the discretion to define "competitor," but there are alternative ways that are more investor-friendly. For example, "competitors" could be defined as a select group of companies on a schedule.

33 Consider the Company's stage of development, costs, and timing associated with audited financial statements as well as the use of nationally vs. regionally recognized accountants. Further, as a practical matter, "nationally recognized" accounting firms may not readily accept engagements by early stage companies.

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statements of income and of cash flows for such fiscal quarter, and an unaudited balance sheet [and a statement of stockholders' equity] as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) [as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct];

(d) [as soon as practicable, but in any event within thirty (30) days of the end of each month, an unaudited income statement [and statement of cash flows] for such month, and an unaudited balance sheet [and statement of stockholders' equity] as of the end of such month, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);]

(e) as soon as practicable, but in any event thirty (30) days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the "**Budget**"), [approved by the Board of Directors and] prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company;

(f) [with respect to the financial statements called for in Subsection 3.1(a), Subsection 3.1(b) [and Subsection 3.1(d)], an instrument executed by the chief financial officer and chief executive officer of the Company certifying that such financial statements were prepared in accordance with GAAP consistently applied with prior practice for earlier periods (except as otherwise set forth in Subsection 3.1(b) [and Subsection 3.1(d)]) and fairly present the financial condition of the Company and its results of operation for the periods specified therein; and]

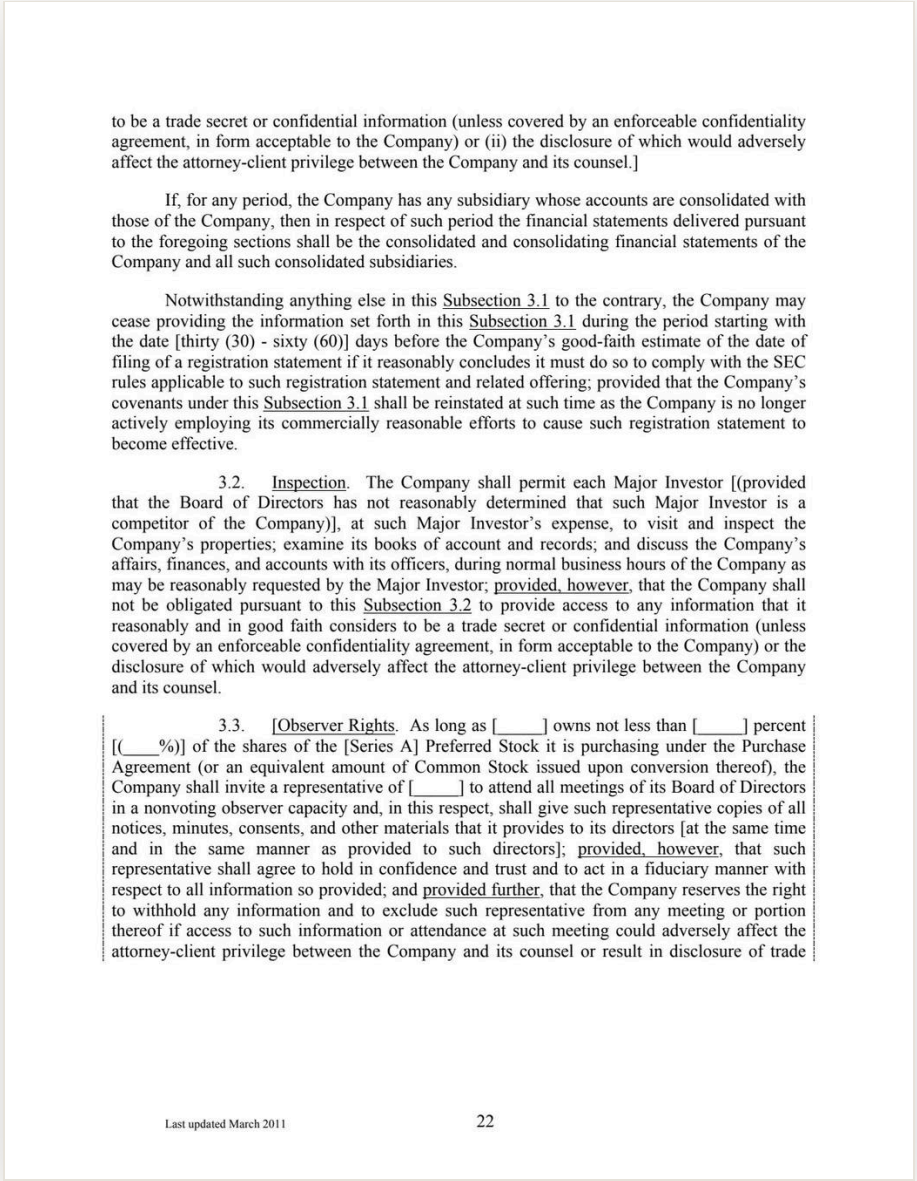
(g) [such other information[34] relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1 to provide information (i) that the Company reasonably determines in good faith

[34] Some investors request that the Company provide information relating to material litigation, regulatory matters, material defaults under credit facilities, and other material events and occurrences. Note, however, that if the investing entity is entitled to a Board seat, there is little need (at least for that particular investor) to impose these additional reporting obligations on the Company.

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to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.]

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date [thirty (30) - sixty (60)] days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

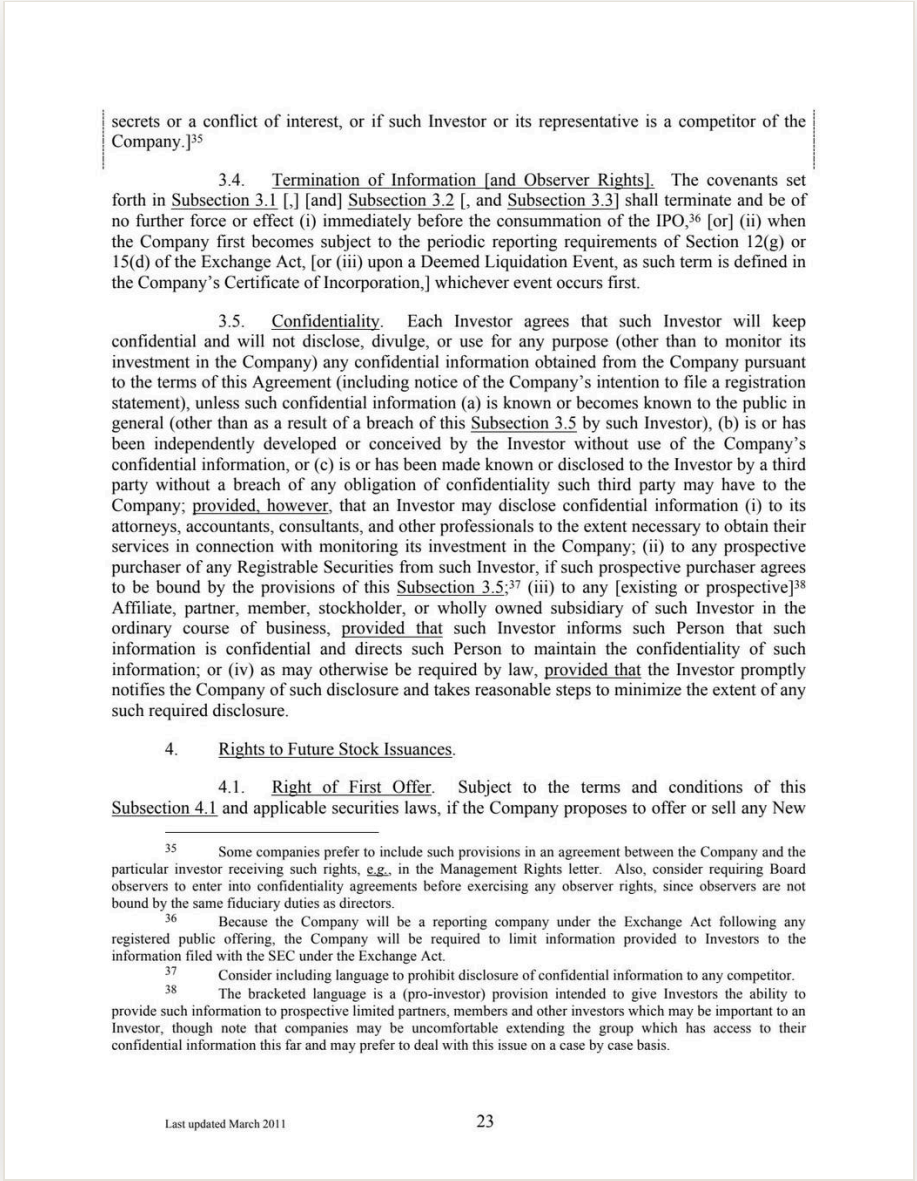
3.2. Inspection. The Company shall permit each Major Investor [(provided that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company)], at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3. [Observer Rights. As long as [_____] owns not less than [_____] percent [(____%)] of the shares of the [Series A] Preferred Stock it is purchasing under the Purchase Agreement (or an equivalent amount of Common Stock issued upon conversion thereof), the Company shall invite a representative of [_____] to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors [at the same time and in the same manner as provided to such directors]; provided, however, that such representative shall agree to hold in confidence and trust and to act in a fiduciary manner with respect to all information so provided; and provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade

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secrets or a conflict of interest, or if such Investor or its representative is a competitor of the Company.][35]

3.4. Termination of Information [and Observer Rights]. The covenants set forth in Subsection 3.1 [,] [and] Subsection 3.2 [, and Subsection 3.3] shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO,[36] [or] (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, [or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation,] whichever event occurs first.

3.5. Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.5 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.5;[37] (iii) to any [existing or prospective][38] Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1. Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New

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35 Some companies prefer to include such provisions in an agreement between the Company and the particular investor receiving such rights, e.g., in the Management Rights letter. Also, consider requiring Board observers to enter into confidentiality agreements before exercising any observer rights, since observers are not bound by the same fiduciary duties as directors.

36 Because the Company will be a reporting company under the Exchange Act following any registered public offering, the Company will be required to limit information provided to Investors to the information filed with the SEC under the Exchange Act.

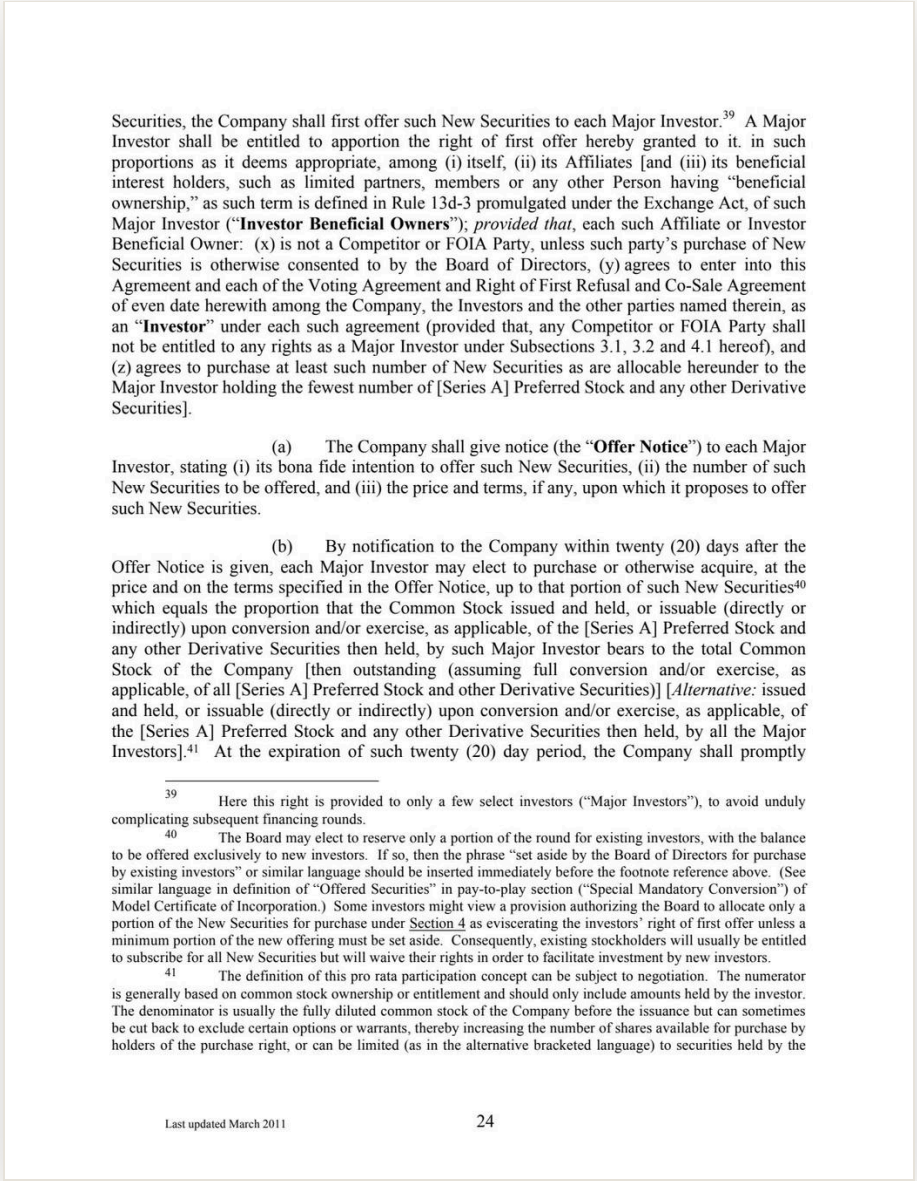
37 Consider including language to prohibit disclosure of confidential information to any competitor.

38 The bracketed language is a (pro-investor) provision intended to give Investors the ability to provide such information to prospective limited partners, members and other investors which may be important to an Investor, though note that companies may be uncomfortable extending the group which has access to their confidential information this far and may prefer to deal with this issue on a case by case basis.

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Securities, the Company shall first offer such New Securities to each Major Investor.[39] A Major Investor shall be entitled to apportion the right of first offer hereby granted to it. in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates [and (iii) its beneficial interest holders, such as limited partners, members or any other Person having "beneficial ownership," as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Major Investor ("**Investor Beneficial Owners**"); *provided that*, each such Affiliate or Investor Beneficial Owner: (x) is not a Competitor or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agremeent and each of the Voting Agreement and Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an "**Investor**" under each such agreement (provided that, any Competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Subsections 3.1, 3.2 and 4.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the Major Investor holding the fewest number of [Series A] Preferred Stock and any other Derivative Securities].

(a) The Company shall give notice (the "**Offer Notice**") to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities[40] which equals the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the [Series A] Preferred Stock and any other Derivative Securities then held, by such Major Investor bears to the total Common Stock of the Company [then outstanding (assuming full conversion and/or exercise, as applicable, of all [Series A] Preferred Stock and other Derivative Securities)] [*Alternative:* issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the [Series A] Preferred Stock and any other Derivative Securities then held, by all the Major Investors].[41] At the expiration of such twenty (20) day period, the Company shall promptly

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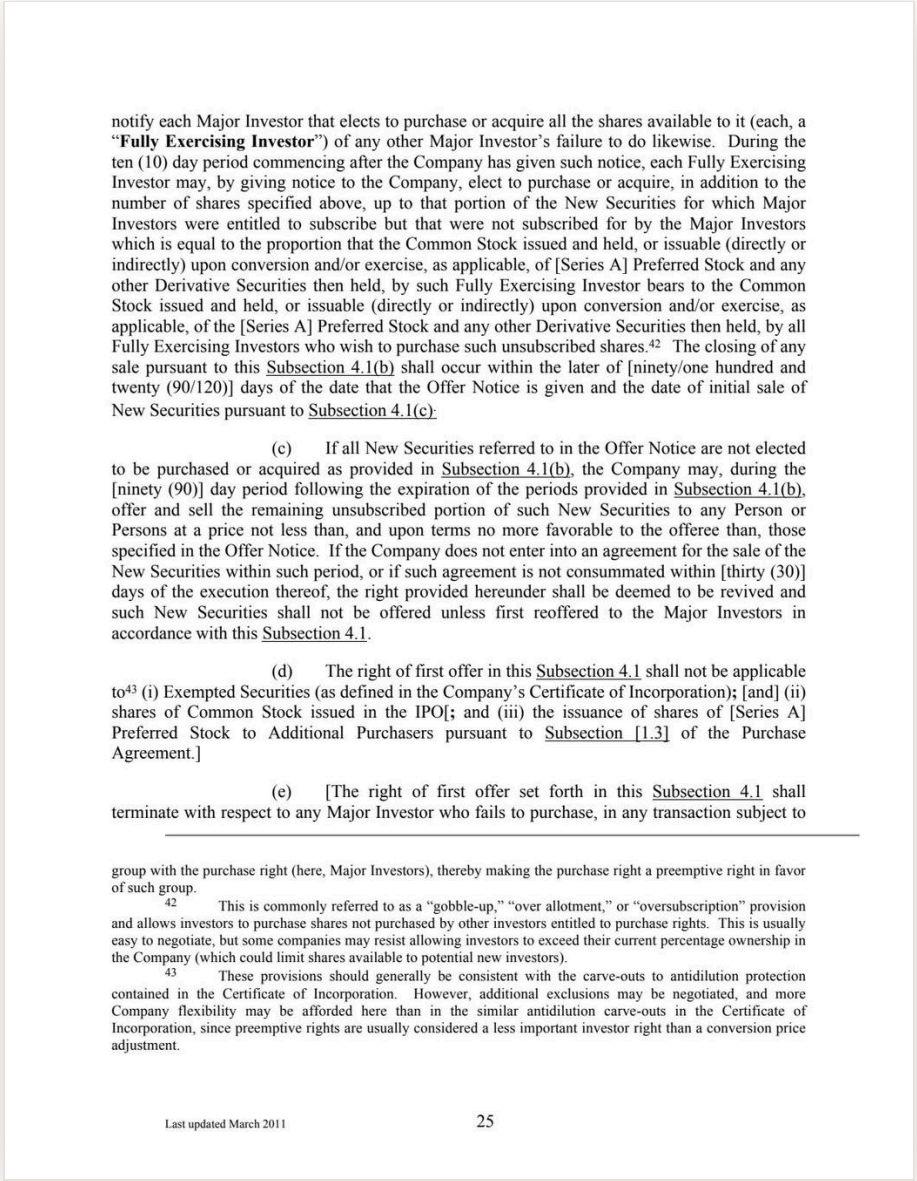
[39] Here this right is provided to only a few select investors ("Major Investors"), to avoid unduly complicating subsequent financing rounds.

[40] The Board may elect to reserve only a portion of the round for existing investors, with the balance to be offered exclusively to new investors. If so, then the phrase "set aside by the Board of Directors for purchase by existing investors" or similar language should be inserted immediately before the footnote reference above. (See similar language in definition of "Offered Securities" in pay-to-play section ("Special Mandatory Conversion") of Model Certificate of Incorporation.) Some investors might view a provision authorizing the Board to allocate only a portion of the New Securities for purchase under Section 4 as eviscerating the investors' right of first offer unless a minimum portion of the new offering must be set aside. Consequently, existing stockholders will usually be entitled to subscribe for all New Securities but will waive their rights in order to facilitate investment by new investors.

[41] The definition of this pro rata participation concept can be subject to negotiation. The numerator is generally based on common stock ownership or entitlement and should only include amounts held by the investor. The denominator is usually the fully diluted common stock of the Company before the issuance but can sometimes be cut back to exclude certain options or warrants, thereby increasing the number of shares available for purchase by holders of the purchase right, or can be limited (as in the alternative bracketed language) to securities held by the

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notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a "**Fully Exercising Investor**") of any other Major Investor's failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of [Series A] Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the [Series A] Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares.[42] The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of [ninety/one hundred and twenty (90/120)] days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the [ninety (90)] day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within [thirty (30)] days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to[43] (i) Exempted Securities (as defined in the Company's Certificate of Incorporation)**;** [and] (ii) shares of Common Stock issued in the IPO[**;** and (iii) the issuance of shares of [Series A] Preferred Stock to Additional Purchasers pursuant to Subsection [1.3] of the Purchase Agreement.]

(e) [The right of first offer set forth in this Subsection 4.1 shall terminate with respect to any Major Investor who fails to purchase, in any transaction subject to

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group with the purchase right (here, Major Investors), thereby making the purchase right a preemptive right in favor of such group.

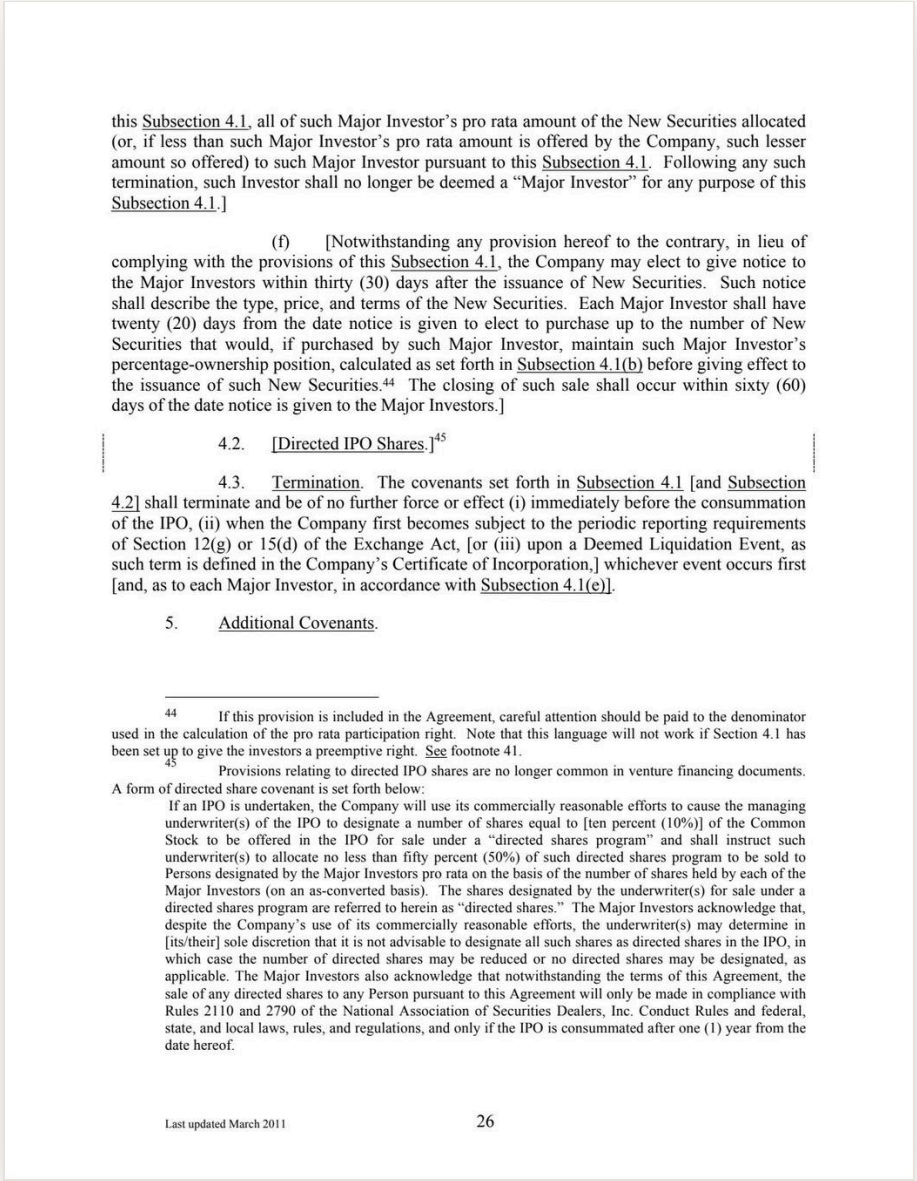
[42] This is commonly referred to as a "gobble-up," "over allotment," or "oversubscription" provision and allows investors to purchase shares not purchased by other investors entitled to purchase rights. This is usually easy to negotiate, but some companies may resist allowing investors to exceed their current percentage ownership in the Company (which could limit shares available to potential new investors).

[43] These provisions should generally be consistent with the carve-outs to antidilution protection contained in the Certificate of Incorporation. However, additional exclusions may be negotiated, and more Company flexibility may be afforded here than in the similar antidilution carve-outs in the Certificate of Incorporation, since preemptive rights are usually considered a less important investor right than a conversion price adjustment.

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this Subsection 4.1, all of such Major Investor's pro rata amount of the New Securities allocated (or, if less than such Major Investor's pro rata amount is offered by the Company, such lesser amount so offered) to such Major Investor pursuant to this Subsection 4.1. Following any such termination, such Investor shall no longer be deemed a "Major Investor" for any purpose of this Subsection 4.1.]

(f) [Notwithstanding any provision hereof to the contrary, in lieu of complying with the provisions of this Subsection 4.1, the Company may elect to give notice to the Major Investors within thirty (30) days after the issuance of New Securities. Such notice shall describe the type, price, and terms of the New Securities. Each Major Investor shall have twenty (20) days from the date notice is given to elect to purchase up to the number of New Securities that would, if purchased by such Major Investor, maintain such Major Investor's percentage-ownership position, calculated as set forth in Subsection 4.1(b) before giving effect to the issuance of such New Securities.[44] The closing of such sale shall occur within sixty (60) days of the date notice is given to the Major Investors.]

4.2. [Directed IPO Shares.][45]

4.3. Termination. The covenants set forth in Subsection 4.1 [and Subsection 4.2] shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, [or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation,] whichever event occurs first [and, as to each Major Investor, in accordance with Subsection 4.1(e)].

5. Additional Covenants.

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[44] If this provision is included in the Agreement, careful attention should be paid to the denominator used in the calculation of the pro rata participation right. Note that this language will not work if Section 4.1 has been set up to give the investors a preemptive right. See footnote 41.

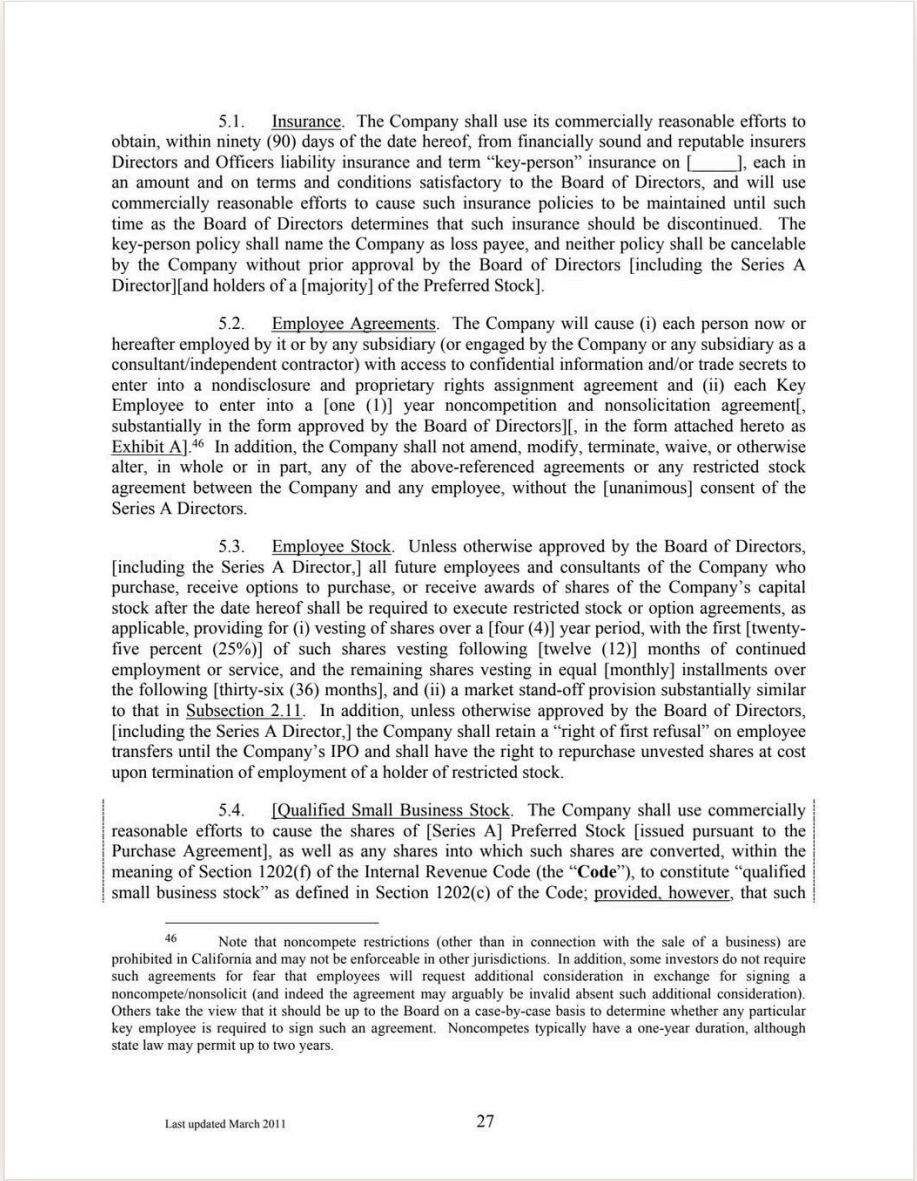
[45] Provisions relating to directed IPO shares are no longer common in venture financing documents. A form of directed share covenant is set forth below:

If an IPO is undertaken, the Company will use its commercially reasonable efforts to cause the managing underwriter(s) of the IPO to designate a number of shares equal to [ten percent (10%)] of the Common Stock to be offered in the IPO for sale under a "directed shares program" and shall instruct such underwriter(s) to allocate no less than fifty percent (50%) of such directed shares program to be sold to Persons designated by the Major Investors pro rata on the basis of the number of shares held by each of the Major Investors (on an as-converted basis). The shares designated by the underwriter(s) for sale under a directed shares program are referred to herein as "directed shares." The Major Investors acknowledge that, despite the Company's use of its commercially reasonable efforts, the underwriter(s) may determine in [its/their] sole discretion that it is not advisable to designate all such shares as directed shares in the IPO, in which case the number of directed shares may be reduced or no directed shares may be designated, as applicable. The Major Investors also acknowledge that notwithstanding the terms of this Agreement, the sale of any directed shares to any Person pursuant to this Agreement will only be made in compliance with Rules 2110 and 2790 of the National Association of Securities Dealers, Inc. Conduct Rules and federal, state, and local laws, rules, and regulations, and only if the IPO is consummated after one (1) year from the date hereof.

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5.1. Insurance. The Company shall use its commercially reasonable efforts to obtain, within ninety (90) days of the date hereof, from financially sound and reputable insurers Directors and Officers liability insurance and term "key-person" insurance on [_____], each in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. The key-person policy shall name the Company as loss payee, and neither policy shall be cancelable by the Company without prior approval by the Board of Directors [including the Series A Director][and holders of a [majority] of the Preferred Stock].

5.2. Employee Agreements. The Company will cause (i) each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement and (ii) each Key Employee to enter into a [one (1)] year noncompetition and nonsolicitation agreement[, substantially in the form approved by the Board of Directors][, in the form attached hereto as Exhibit A].[46] In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the [unanimous] consent of the Series A Directors.

5.3. Employee Stock. Unless otherwise approved by the Board of Directors, [including the Series A Director,] all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a [four (4)] year period, with the first [twenty-five percent (25%)] of such shares vesting following [twelve (12)] months of continued employment or service, and the remaining shares vesting in equal [monthly] installments over the following [thirty-six (36) months], and (ii) a market stand-off provision substantially similar to that in Subsection 2.11. In addition, unless otherwise approved by the Board of Directors, [including the Series A Director,] the Company shall retain a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4. [Qualified Small Business Stock. The Company shall use commercially reasonable efforts to cause the shares of [Series A] Preferred Stock [issued pursuant to the Purchase Agreement], as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the Internal Revenue Code (the "**Code**"), to constitute "qualified small business stock" as defined in Section 1202(c) of the Code; provided, however, that such

46 Note that noncompete restrictions (other than in connection with the sale of a business) are prohibited in California and may not be enforceable in other jurisdictions. In addition, some investors do not require such agreements for fear that employees will request additional consideration in exchange for signing a noncompete/nonsolicit (and indeed the agreement may arguably be invalid absent such additional consideration). Others take the view that it should be up to the Board on a case-by-case basis to determine whether any particular key employee is required to sign such an agreement. Noncompetes typically have a one-year duration, although state law may permit up to two years.

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requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor's written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company's possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code.]

5.5. Matters Requiring Investor Director Approval.[47] So long as the holders of Series A Preferred Stock are entitled to elect a Series A Director, the Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors, which approval must include the affirmative vote of [one/both] of the Series A Directors: [48]

(a) make, or permit any subsidiary to make, any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company;

(b) make, or permit any subsidiary to make, any loan or advance to any Person, including, without limitation, any employee or director of the Company or any subsidiary, except advances and similar expenditures in the ordinary course of business or under the terms of an employee stock or option plan approved by the Board of Directors;

(c) guarantee, directly or indirectly, or permit any subsidiary to guarantee, directly or indirectly, any indebtedness except for trade accounts of the Company or any subsidiary arising in the ordinary course of business;

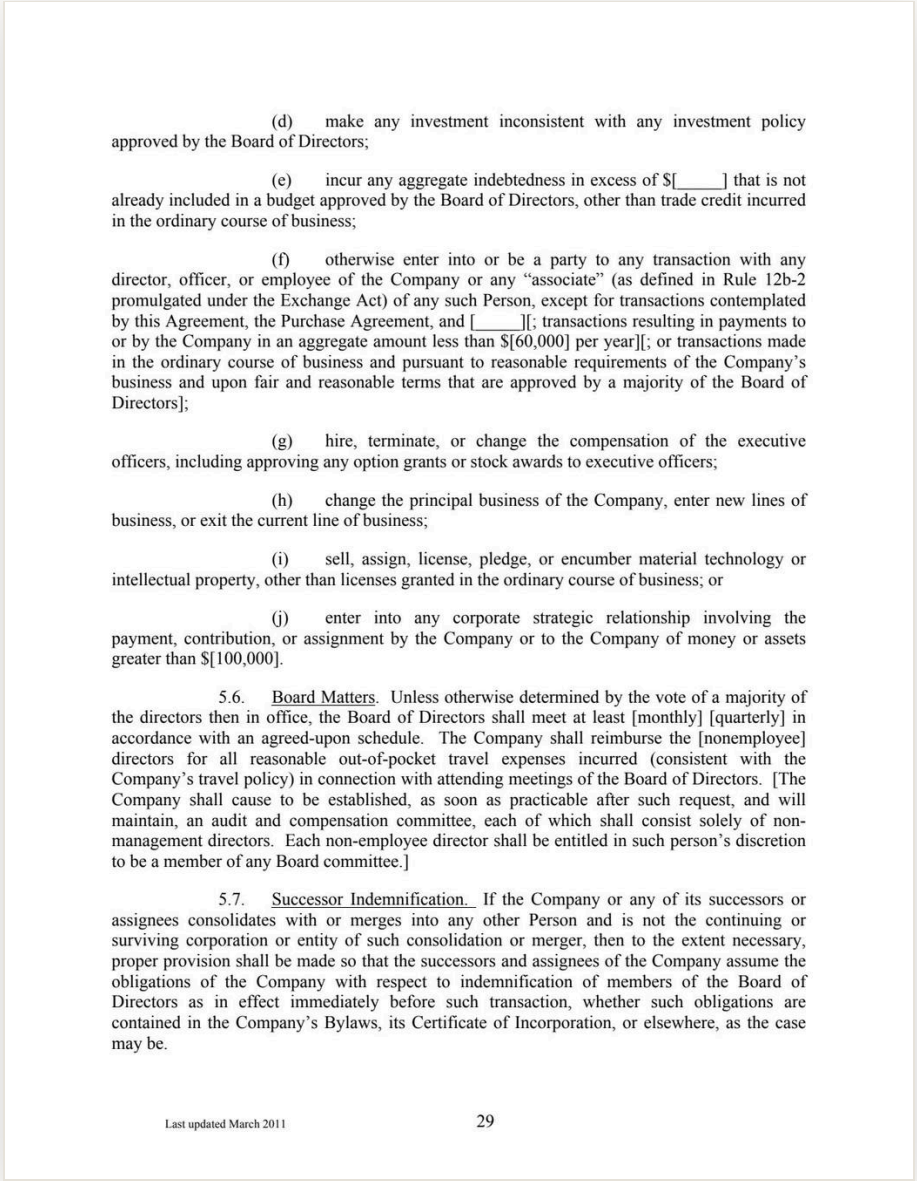
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[47] There is a divergence of interest between the company and the investors with respect to whether specified corporate acts may be subject to approval by the investors' designee to the Board. In many cases, the investors won't go forward without this provision. In other cases, the topics of concern would otherwise be added to the Certificate of Incorporation and require a stockholder vote. The Company generally would find the director approval approach preferable, as the director representative on the Board has a fiduciary duty to the corporation when acting in the capacity of a director. Other formulations could be: requiring the vote of a supermajority of the Board, or a majority of the non-management directors.

[48] There may be other deal-specific provisions to include in this section. Also, there may be provisions herein that are not appropriate for every transaction. In general, parties should be mindful of balancing investor control with the duty of the Board to act in accordance with its fiduciary duties. These provisions should also be harmonized with the special investor approval rights (so-called "protective provisions") in the Certificate of Incorporation, to avoid overlap. Also, in determining whether stockholder approval or director approval is appropriate, consider (1) that the directors, unlike investors, have fiduciary duties; (2) that, as a practical matter, Board approval is easier to obtain than stockholder approval; and (3) the proportion of preferred shares held by funds whose partners sit on the Board. Also, consider adding protections similar to those contained in the Certificate of Incorporation.

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(d) make any investment inconsistent with any investment policy approved by the Board of Directors;

(e) incur any aggregate indebtedness in excess of $[_____] that is not already included in a budget approved by the Board of Directors, other than trade credit incurred in the ordinary course of business;

(f) otherwise enter into or be a party to any transaction with any director, officer, or employee of the Company or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, except for transactions contemplated by this Agreement, the Purchase Agreement, and [_____][; transactions resulting in payments to or by the Company in an aggregate amount less than $[60,000] per year][; or transactions made in the ordinary course of business and pursuant to reasonable requirements of the Company's business and upon fair and reasonable terms that are approved by a majority of the Board of Directors];

(g) hire, terminate, or change the compensation of the executive officers, including approving any option grants or stock awards to executive officers;

(h) change the principal business of the Company, enter new lines of business, or exit the current line of business;

(i) sell, assign, license, pledge, or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business; or

(j) enter into any corporate strategic relationship involving the payment, contribution, or assignment by the Company or to the Company of money or assets greater than $[100,000].

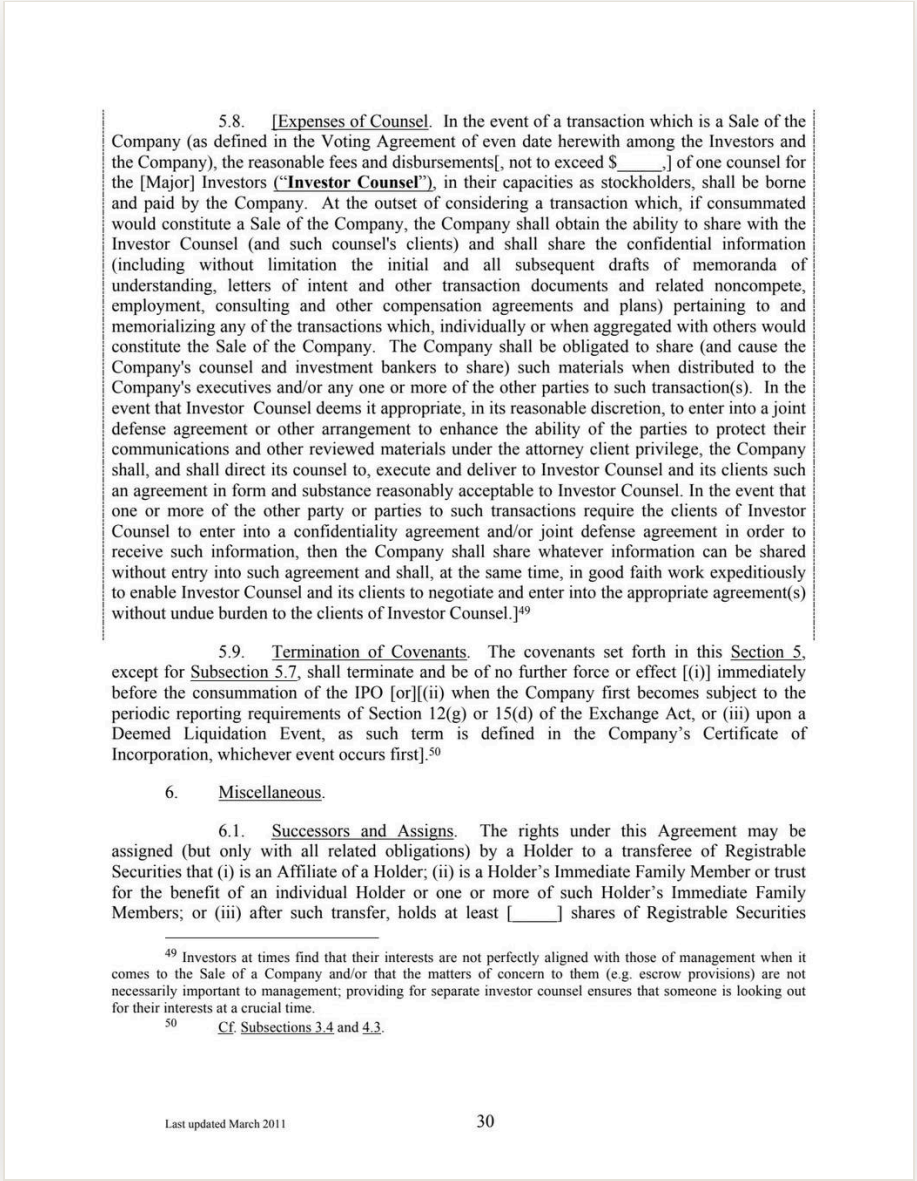
5.6. Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least [monthly] [quarterly] in accordance with an agreed-upon schedule. The Company shall reimburse the [nonemployee] directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors. [The Company shall cause to be established, as soon as practicable after such request, and will maintain, an audit and compensation committee, each of which shall consist solely of non-management directors. Each non-employee director shall be entitled in such person's discretion to be a member of any Board committee.]

5.7. Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, its Certificate of Incorporation, or elsewhere, as the case may be.

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5.8. [Expenses of Counsel. In the event of a transaction which is a Sale of the Company (as defined in the Voting Agreement of even date herewith among the Investors and the Company), the reasonable fees and disbursements[, not to exceed $_____,] of one counsel for the [Major] Investors ("**Investor Counsel**"), in their capacities as stockholders, shall be borne and paid by the Company. At the outset of considering a transaction which, if consummated would constitute a Sale of the Company, the Company shall obtain the ability to share with the Investor Counsel (and such counsel's clients) and shall share the confidential information (including without limitation the initial and all subsequent drafts of memoranda of understanding, letters of intent and other transaction documents and related noncompete, employment, consulting and other compensation agreements and plans) pertaining to and memorializing any of the transactions which, individually or when aggregated with others would constitute the Sale of the Company. The Company shall be obligated to share (and cause the Company's counsel and investment bankers to share) such materials when distributed to the Company's executives and/or any one or more of the other parties to such transaction(s). In the event that Investor Counsel deems it appropriate, in its reasonable discretion, to enter into a joint defense agreement or other arrangement to enhance the ability of the parties to protect their communications and other reviewed materials under the attorney client privilege, the Company shall, and shall direct its counsel to, execute and deliver to Investor Counsel and its clients such an agreement in form and substance reasonably acceptable to Investor Counsel. In the event that one or more of the other party or parties to such transactions require the clients of Investor Counsel to enter into a confidentiality agreement and/or joint defense agreement in order to receive such information, then the Company shall share whatever information can be shared without entry into such agreement and shall, at the same time, in good faith work expeditiously to enable Investor Counsel and its clients to negotiate and enter into the appropriate agreement(s) without undue burden to the clients of Investor Counsel.][49]

5.9. Termination of Covenants. The covenants set forth in this Section 5, except for Subsection 5.7, shall terminate and be of no further force or effect [(i)] immediately before the consummation of the IPO [or][(ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Company's Certificate of Incorporation, whichever event occurs first].[50]

6. Miscellaneous.

6.1. Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least [_____] shares of Registrable Securities

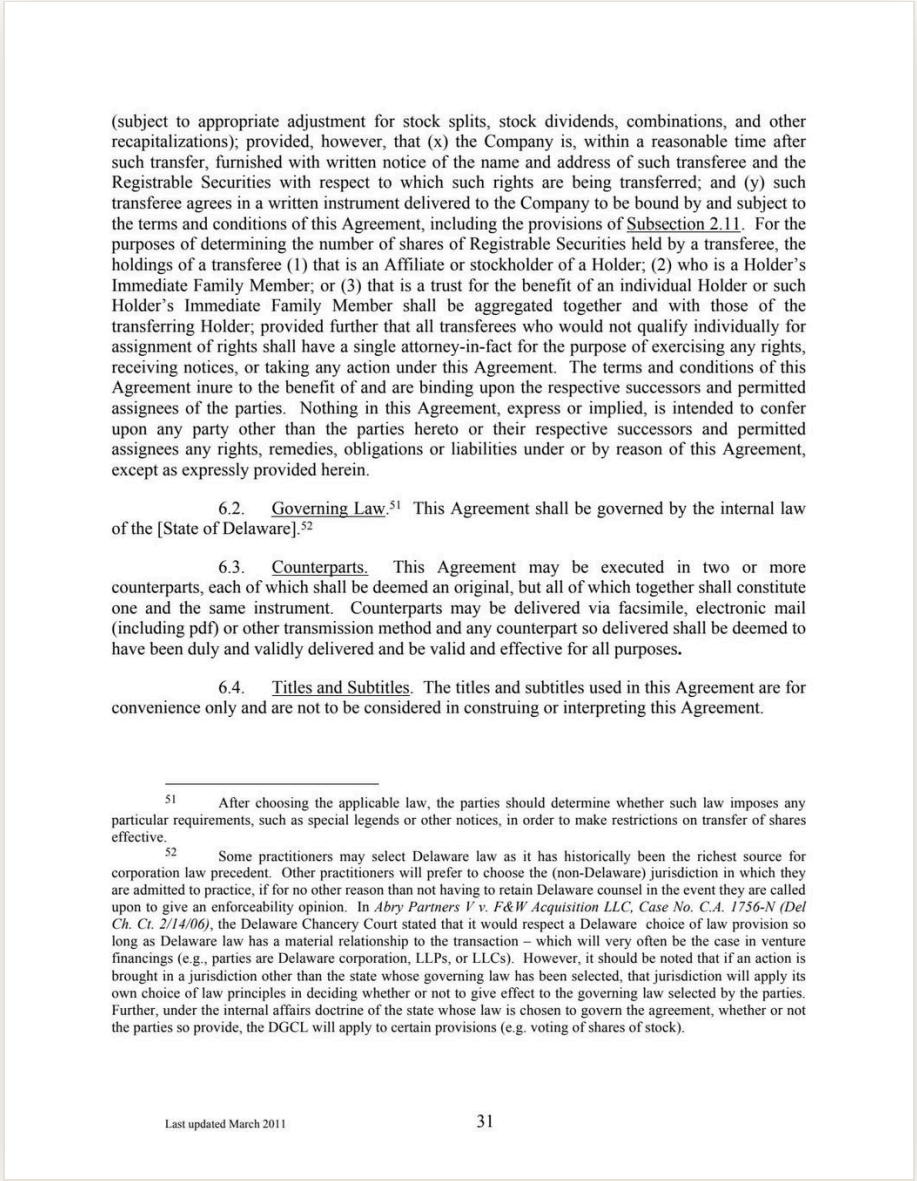
[49] Investors at times find that their interests are not perfectly aligned with those of management when it comes to the Sale of a Company and/or that the matters of concern to them (e.g. escrow provisions) are not necessarily important to management; providing for separate investor counsel ensures that someone is looking out for their interests at a crucial time.

[50] Cf. Subsections 3.4 and 4.3.

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(subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2. Governing Law.[51] This Agreement shall be governed by the internal law of the [State of Delaware].[52]

6.3. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4. Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

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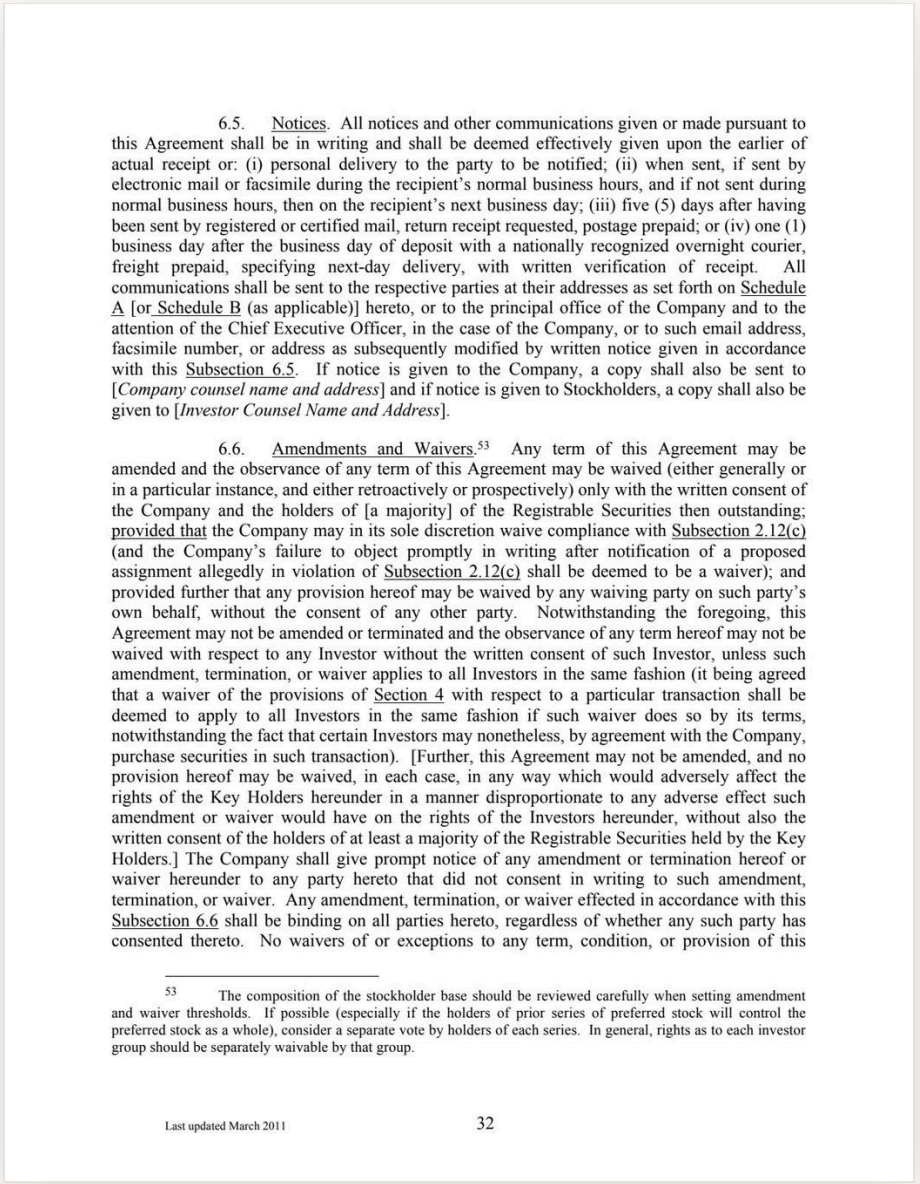
[51] After choosing the applicable law, the parties should determine whether such law imposes any particular requirements, such as special legends or other notices, in order to make restrictions on transfer of shares effective.

[52] Some practitioners may select Delaware law as it has historically been the richest source for corporation law precedent. Other practitioners will prefer to choose the (non-Delaware) jurisdiction in which they are admitted to practice, if for no other reason than not having to retain Delaware counsel in the event they are called upon to give an enforceability opinion. In *Abry Partners V v. F&W Acquisition LLC, Case No. C.A. 1756-N (Del Ch. Ct. 2/14/06)*, the Delaware Chancery Court stated that it would respect a Delaware choice of law provision so long as Delaware law has a material relationship to the transaction – which will very often be the case in venture financings (e.g., parties are Delaware corporation, LLPs, or LLCs). However, it should be noted that if an action is brought in a jurisdiction other than the state whose governing law has been selected, that jurisdiction will apply its own choice of law principles in deciding whether or not to give effect to the governing law selected by the parties. Further, under the internal affairs doctrine of the state whose law is chosen to govern the agreement, whether or not the parties so provide, the DGCL will apply to certain provisions (e.g. voting of shares of stock).

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6.5. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A [or Schedule B (as applicable)] hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Subsection 6.5. If notice is given to the Company, a copy shall also be sent to [*Company counsel name and address*] and if notice is given to Stockholders, a copy shall also be given to [*Investor Counsel Name and Address*].

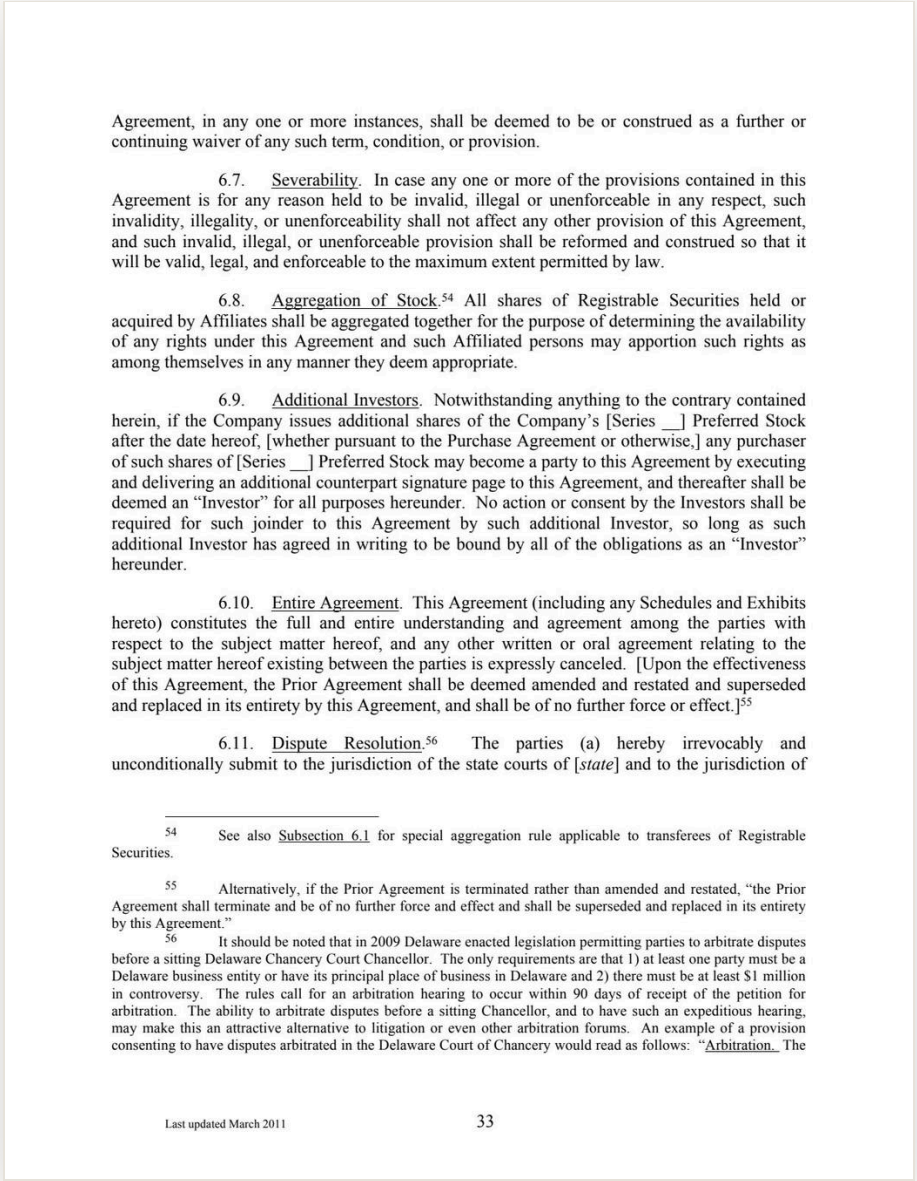
6.6. Amendments and Waivers.[53] Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of [a majority] of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction). [Further, this Agreement may not be amended, and no provision hereof may be waived, in each case, in any way which would adversely affect the rights of the Key Holders hereunder in a manner disproportionate to any adverse effect such amendment or waiver would have on the rights of the Investors hereunder, without also the written consent of the holders of at least a majority of the Registrable Securities held by the Key Holders.] The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this

[53] The composition of the stockholder base should be reviewed carefully when setting amendment and waiver thresholds. If possible (especially if the holders of prior series of preferred stock will control the preferred stock as a whole), consider a separate vote by holders of each series. In general, rights as to each investor group should be separately waivable by that group.

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Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7. Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8. Aggregation of Stock.[54] All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9. Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's [Series __] Preferred Stock after the date hereof, [whether pursuant to the Purchase Agreement or otherwise,] any purchaser of such shares of [Series __] Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10. Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. [Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.][55]

6.11. Dispute Resolution.[56] The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of [*state*] and to the jurisdiction of

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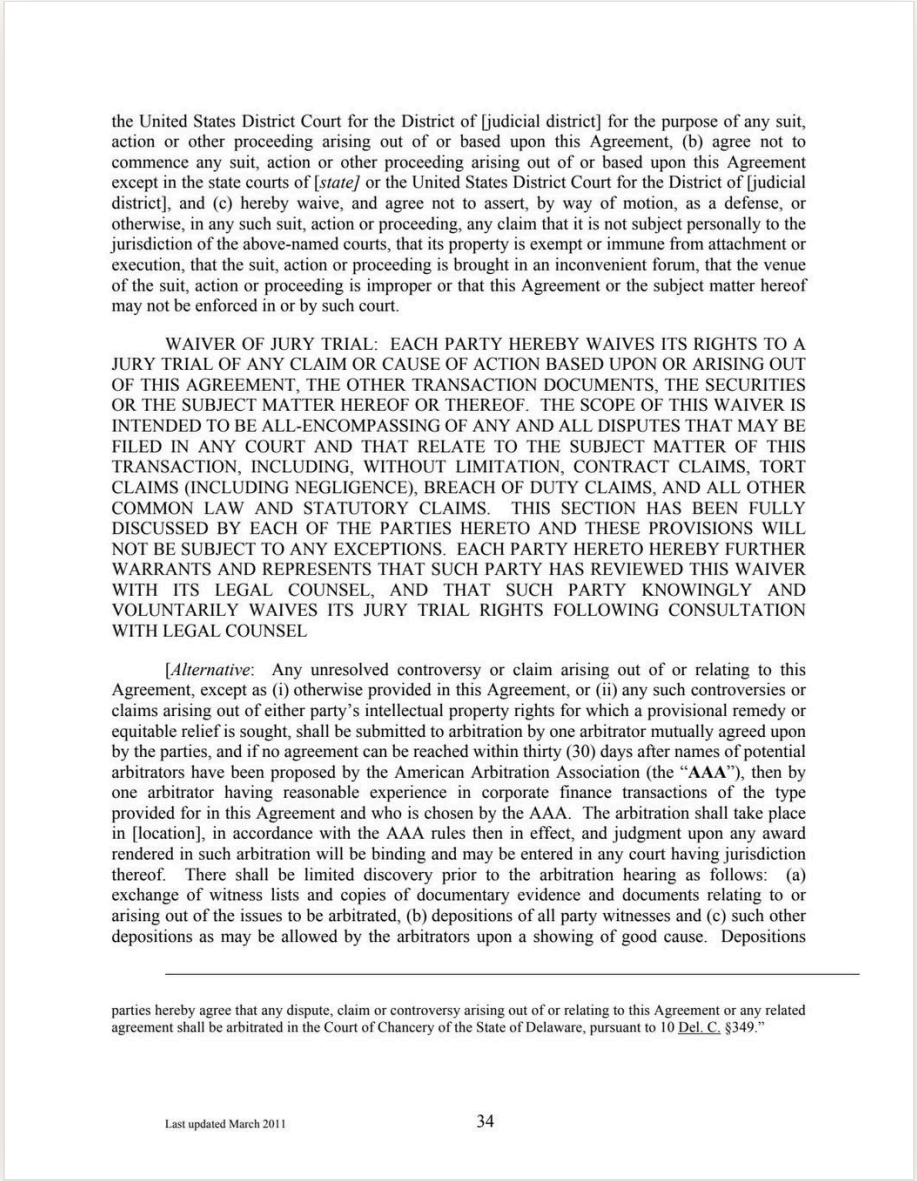
[54] See also Subsection 6.1 for special aggregation rule applicable to transferees of Registrable Securities.

[55] Alternatively, if the Prior Agreement is terminated rather than amended and restated, "the Prior Agreement shall terminate and be of no further force and effect and shall be superseded and replaced in its entirety by this Agreement."

[56] It should be noted that in 2009 Delaware enacted legislation permitting parties to arbitrate disputes before a sitting Delaware Chancery Court Chancellor. The only requirements are that 1) at least one party must be a Delaware business entity or have its principal place of business in Delaware and 2) there must be at least $1 million in controversy. The rules call for an arbitration hearing to occur within 90 days of receipt of the petition for arbitration. The ability to arbitrate disputes before a sitting Chancellor, and to have such an expeditious hearing, may make this an attractive alternative to litigation or even other arbitration forums. An example of a provision consenting to have disputes arbitrated in the Delaware Court of Chancery would read as follows: "Arbitration. The

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the United States District Court for the District of [judicial district] for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of [*state]* or the United States District Court for the District of [judicial district], and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL

[*Alternative*: Any unresolved controversy or claim arising out of or relating to this Agreement, except as (i) otherwise provided in this Agreement, or (ii) any such controversies or claims arising out of either party's intellectual property rights for which a provisional remedy or equitable relief is sought, shall be submitted to arbitration by one arbitrator mutually agreed upon by the parties, and if no agreement can be reached within thirty (30) days after names of potential arbitrators have been proposed by the American Arbitration Association (the "**AAA**"), then by one arbitrator having reasonable experience in corporate finance transactions of the type provided for in this Agreement and who is chosen by the AAA. The arbitration shall take place in [location], in accordance with the AAA rules then in effect, and judgment upon any award rendered in such arbitration will be binding and may be entered in any court having jurisdiction thereof. There shall be limited discovery prior to the arbitration hearing as follows: (a) exchange of witness lists and copies of documentary evidence and documents relating to or arising out of the issues to be arbitrated, (b) depositions of all party witnesses and (c) such other depositions as may be allowed by the arbitrators upon a showing of good cause. Depositions

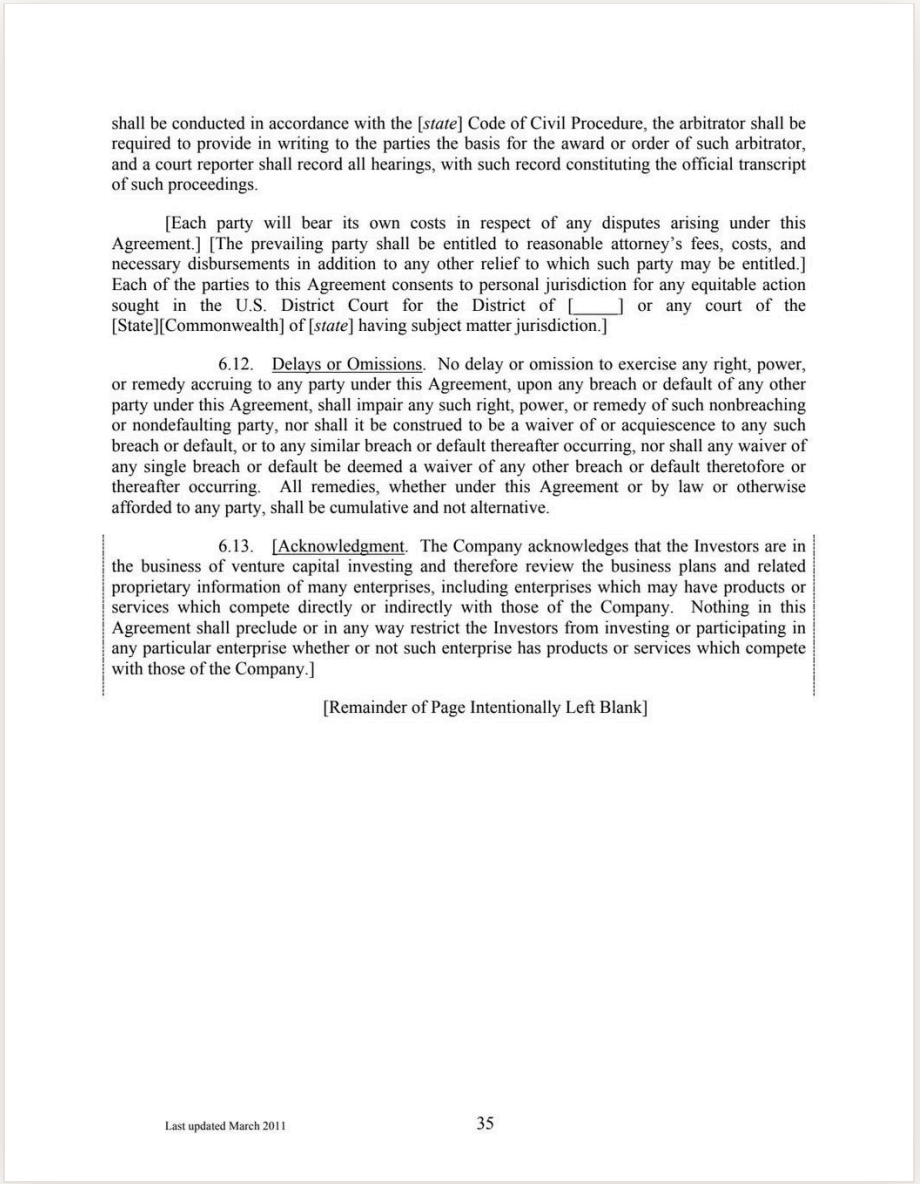
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parties hereby agree that any dispute, claim or controversy arising out of or relating to this Agreement or any related agreement shall be arbitrated in the Court of Chancery of the State of Delaware, pursuant to 10 Del. C. §349."

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shall be conducted in accordance with the [*state*] Code of Civil Procedure, the arbitrator shall be required to provide in writing to the parties the basis for the award or order of such arbitrator, and a court reporter shall record all hearings, with such record constituting the official transcript of such proceedings.

[Each party will bear its own costs in respect of any disputes arising under this Agreement.] [The prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.] Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in the U.S. District Court for the District of [_____] or any court of the [State][Commonwealth] of [*state*] having subject matter jurisdiction.]

6.12. Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

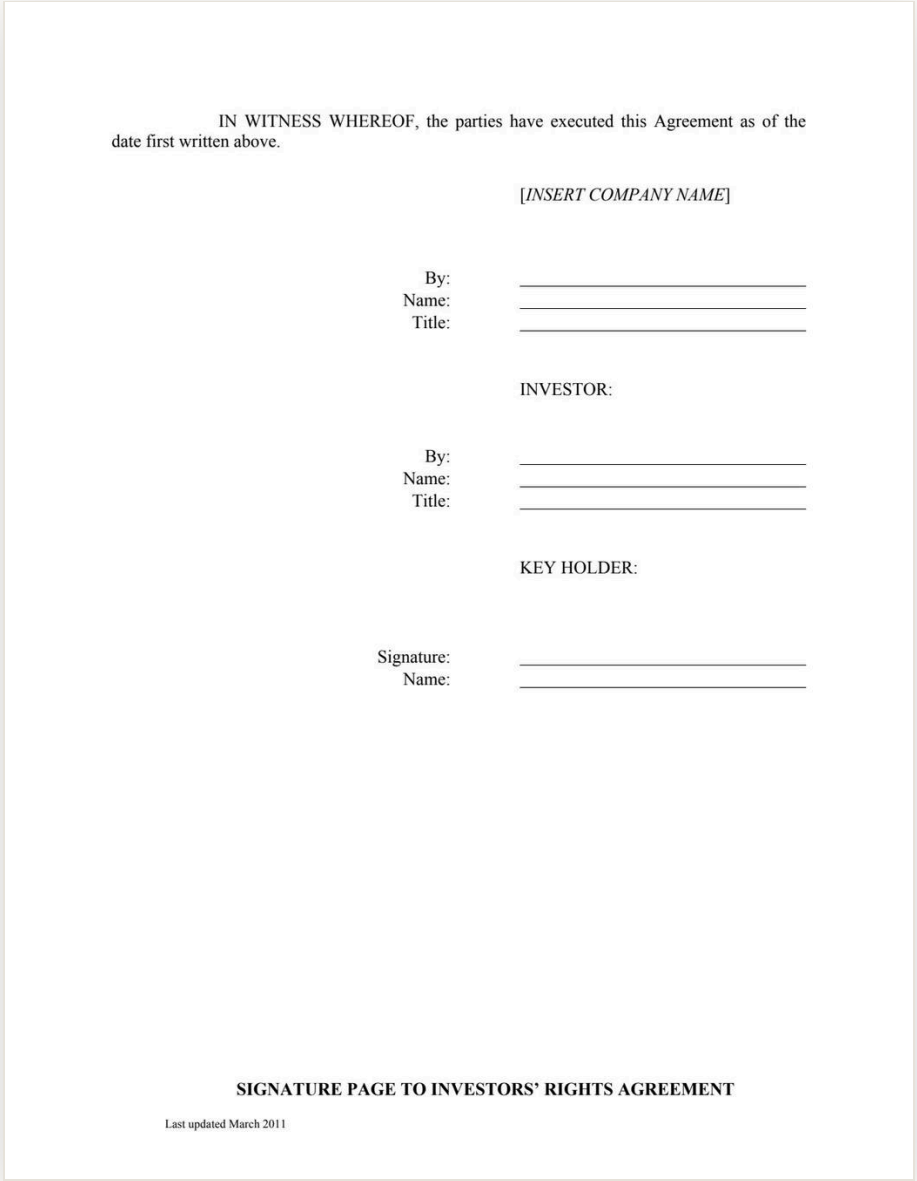
6.13. [Acknowledgment. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict the Investors from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.]

[Remainder of Page Intentionally Left Blank]

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Investors' Rights Agreement — Page 40 of 43



IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

[*INSERT COMPANY NAME*]

By: _____
Name: _____
Title: _____

INVESTOR:

By: _____
Name: _____
Title: _____

KEY HOLDER:

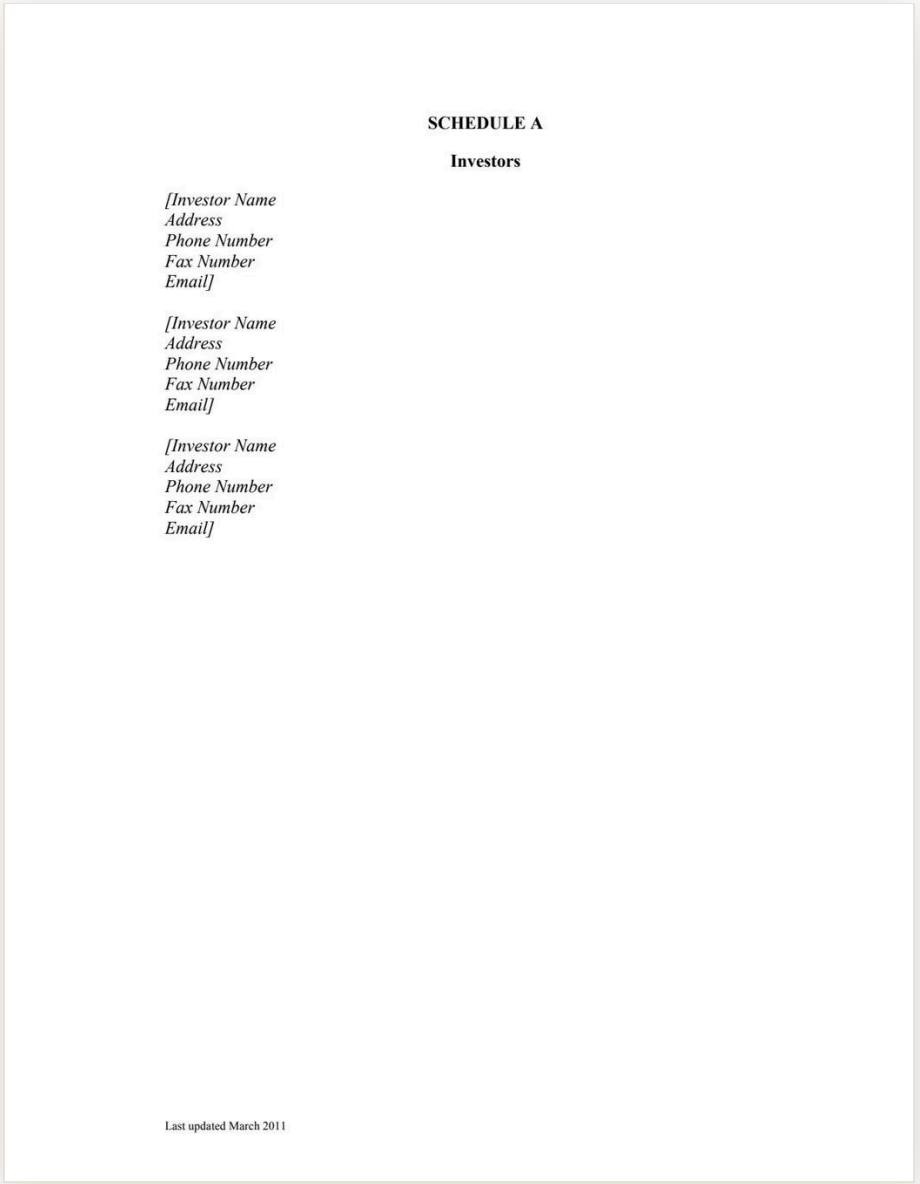
Signature: _____
Name: _____

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

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SCHEDULE A

Investors

[Investor Name
Address
Phone Number
Fax Number
Email]

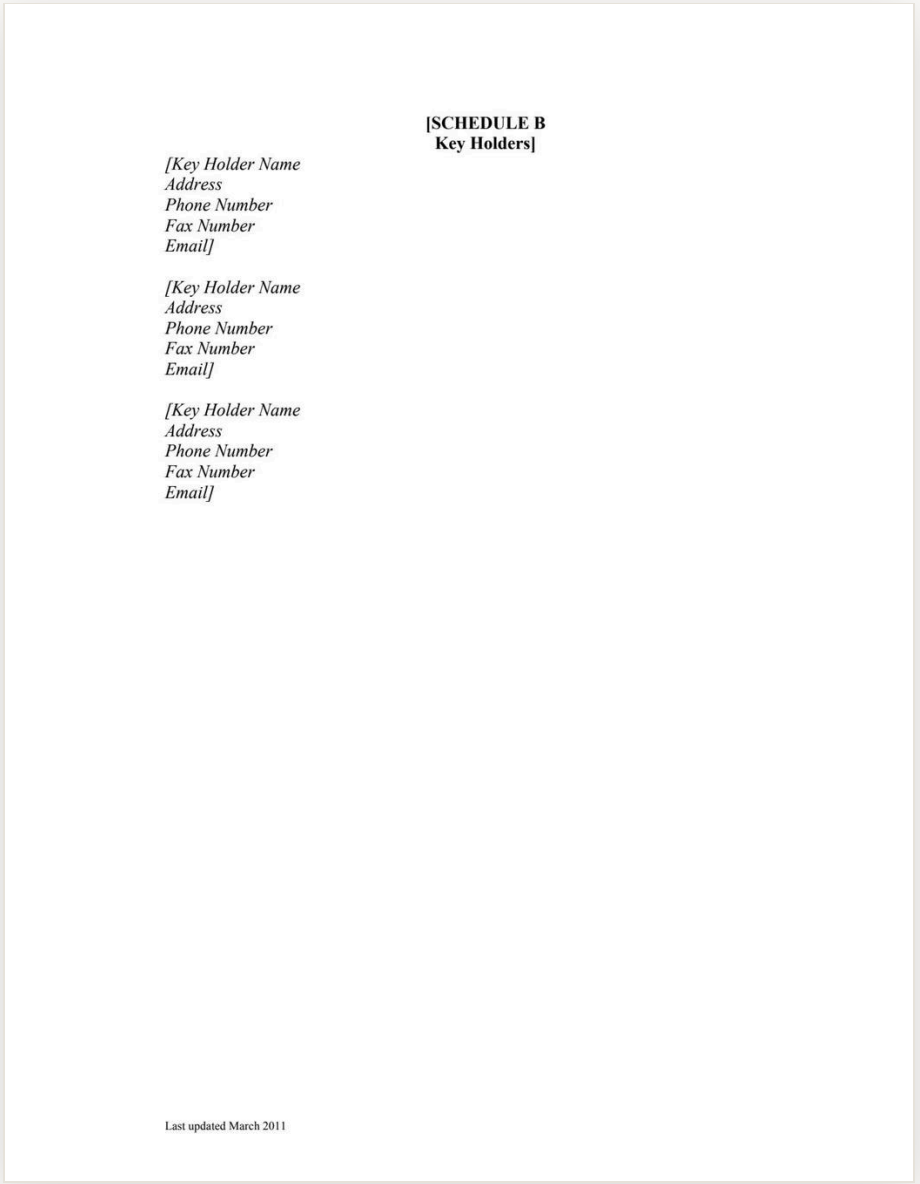
[Investor Name
Address
Phone Number
Fax Number
Email]

[Investor Name
Address
Phone Number
Fax Number
Email]

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[SCHEDULE B
Key Holders]

[Key Holder Name
Address
Phone Number
Fax Number
Email]

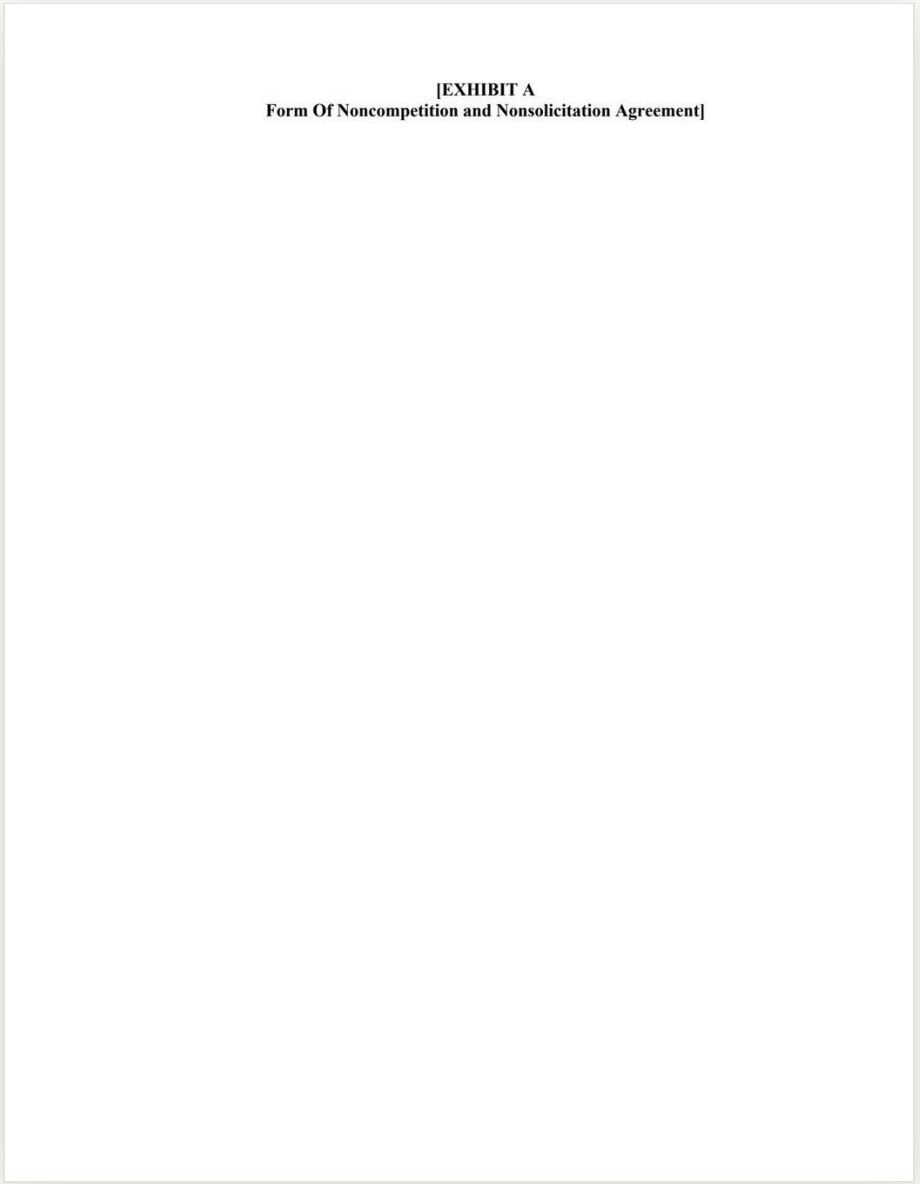
[Key Holder Name
Address
Phone Number
Fax Number
Email]

[Key Holder Name
Address
Phone Number
Fax Number
Email]

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[EXHIBIT A
Form Of Noncompetition and Nonsolicitation Agreement]

Right of First Refusal and Co-Sale Agreement

- If a founder wants to sell shares, the company and then the investors can buy them first (right of first refusal).
- Investors who don't buy can sell alongside the founder on the same terms (co-sale / tag-along).

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Right of First Refusal and Co-Sale Agreement — Page 1 of 24

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This sample document is the work product of a national coalition of attorneys who specialize in venture capital financings, working under the auspices of the NVCA. This document is intended to serve as a starting point only, and should be tailored to meet your specific requirements. This document should not be construed as legal advice for any particular facts or circumstances. Note that this sample document presents an array of (often mutually exclusive) options with respect to particular deal provisions.

[AMENDED AND RESTATED]
RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT

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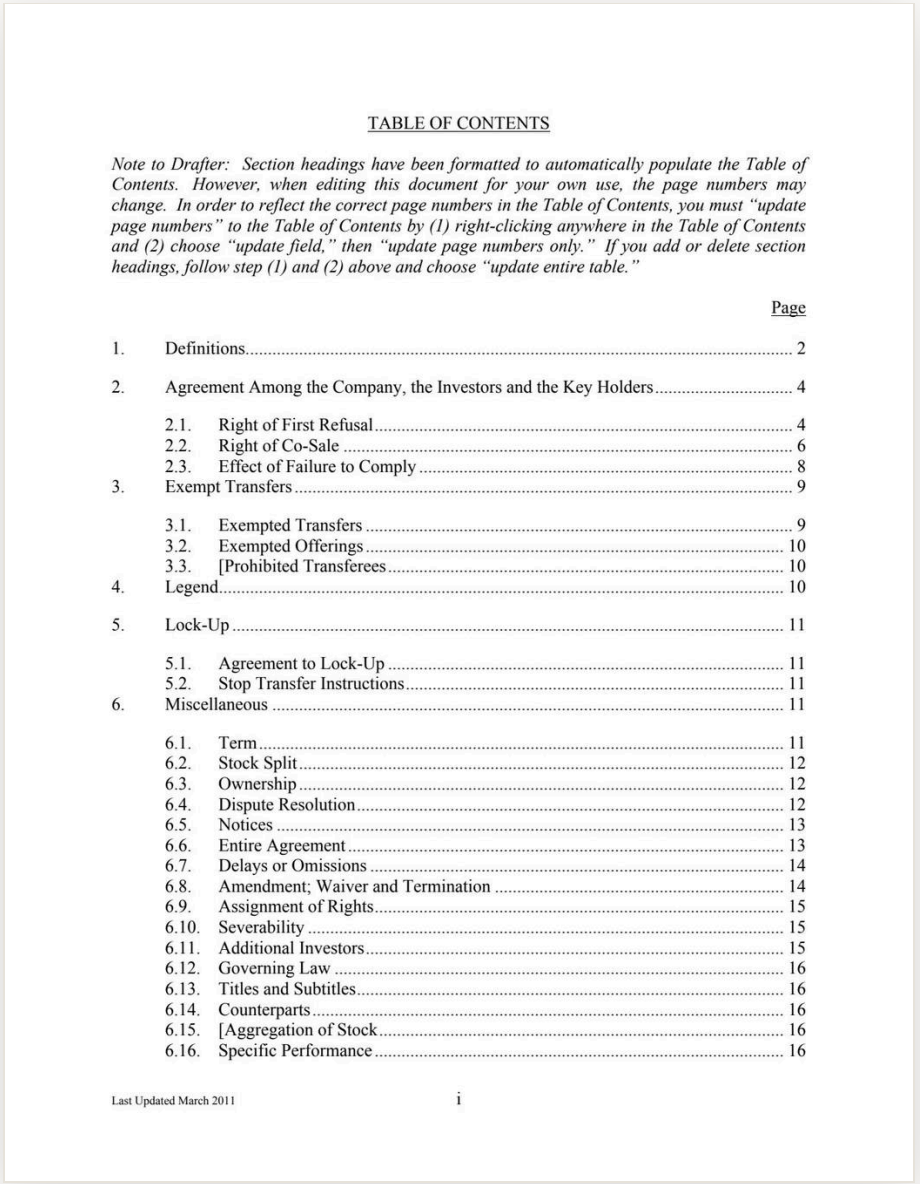


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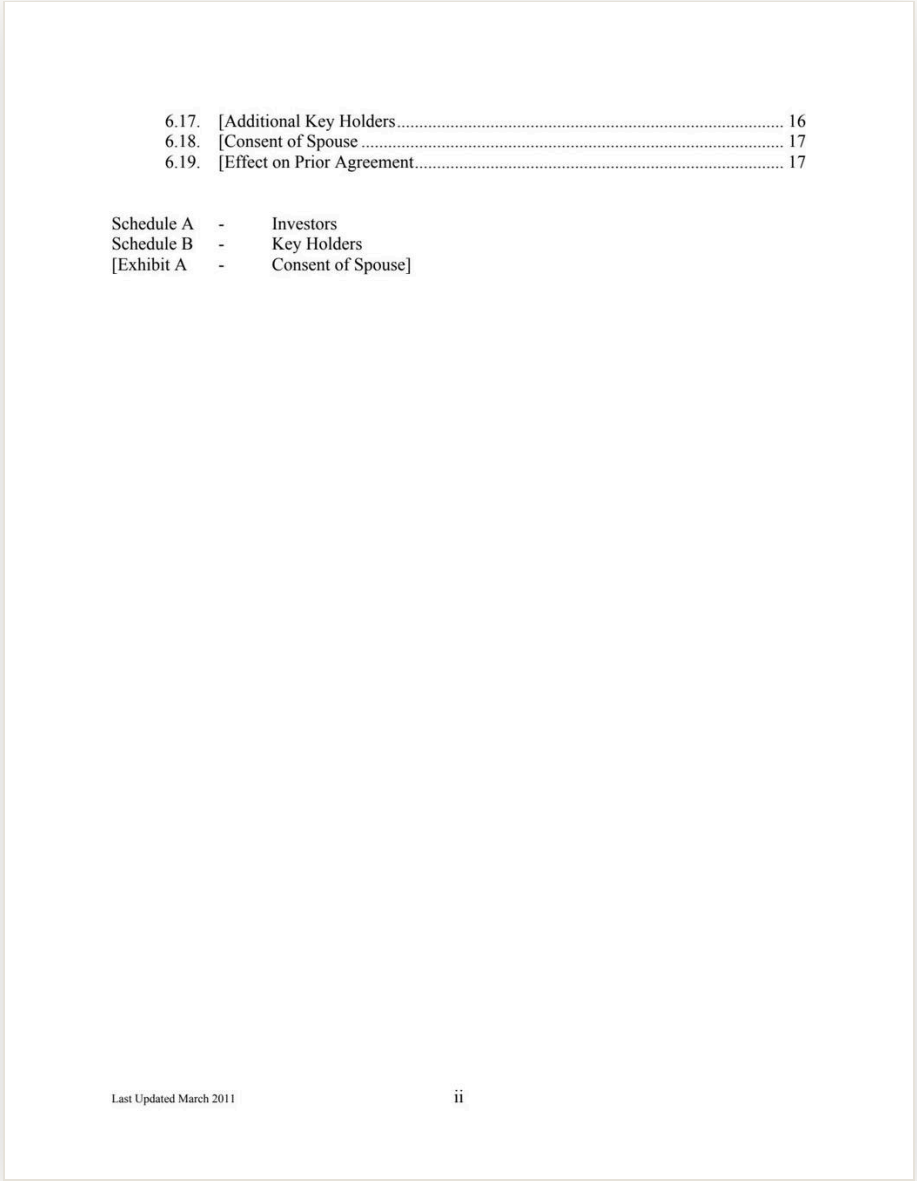
Note to Drafter: Section headings have been formatted to automatically populate the Table of Contents. However, when editing this document for your own use, the page numbers may change. In order to reflect the correct page numbers in the Table of Contents, you must "update page numbers" to the Table of Contents by (1) right-clicking anywhere in the Table of Contents and (2) choose "update field," then "update page numbers only." If you add or delete section headings, follow step (1) and (2) above and choose "update entire table."

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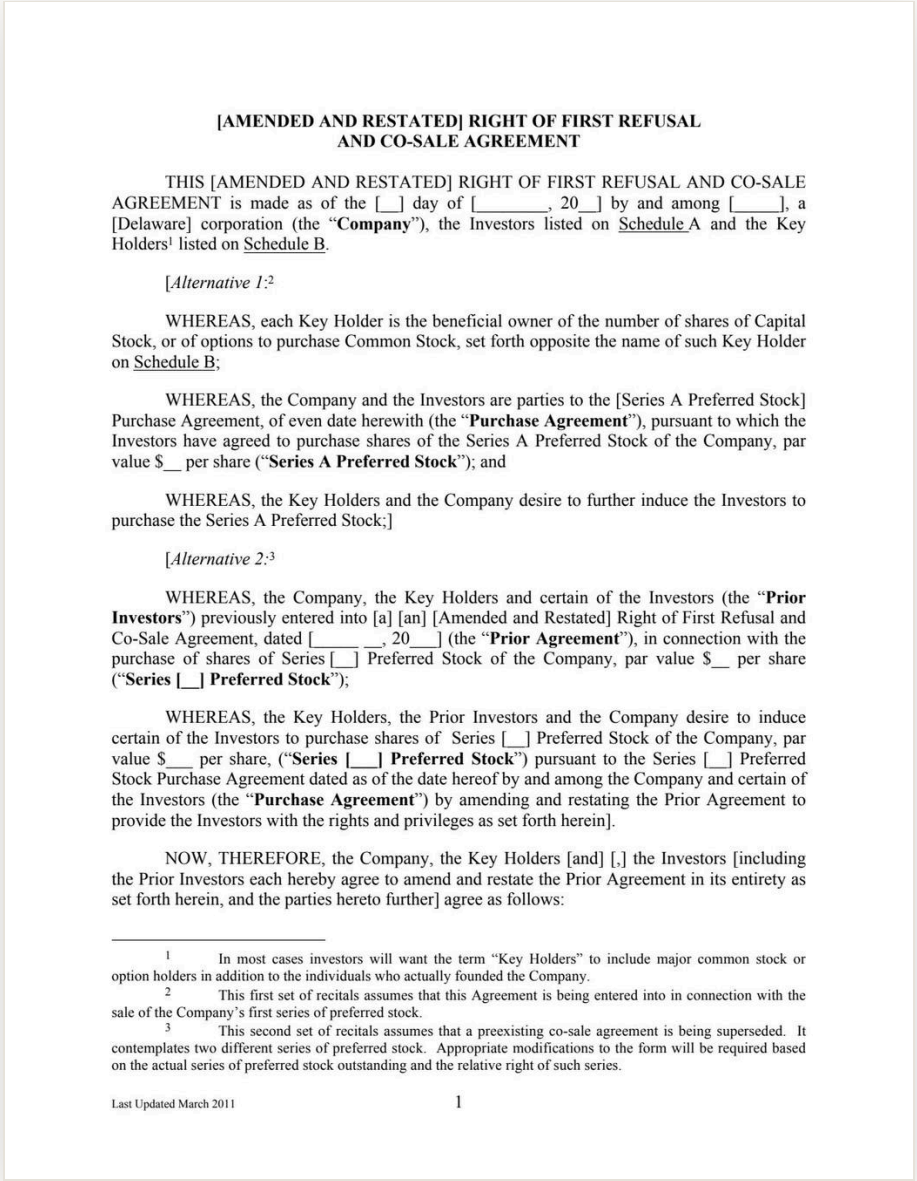


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Right of First Refusal and Co-Sale Agreement — Page 4 of 24



[AMENDED AND RESTATED] RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT

THIS [AMENDED AND RESTATED] RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT is made as of the [__] day of [_____, 20__] by and among [_____], a [Delaware] corporation (the "**Company**"), the Investors listed on Schedule A and the Key Holders[1] listed on Schedule B.

[*Alternative 1*:[2]

WHEREAS, each Key Holder is the beneficial owner of the number of shares of Capital Stock, or of options to purchase Common Stock, set forth opposite the name of such Key Holder on Schedule B;

WHEREAS, the Company and the Investors are parties to the [Series A Preferred Stock] Purchase Agreement, of even date herewith (the "**Purchase Agreement**"), pursuant to which the Investors have agreed to purchase shares of the Series A Preferred Stock of the Company, par value $__ per share ("**Series A Preferred Stock**"); and

WHEREAS, the Key Holders and the Company desire to further induce the Investors to purchase the Series A Preferred Stock;]

[*Alternative 2*:[3]

WHEREAS, the Company, the Key Holders and certain of the Investors (the "**Prior Investors**") previously entered into [a] [an] [Amended and Restated] Right of First Refusal and Co-Sale Agreement, dated [_____ __, 20___] (the "**Prior Agreement**"), in connection with the purchase of shares of Series [__] Preferred Stock of the Company, par value $__ per share ("**Series [__] Preferred Stock**");

WHEREAS, the Key Holders, the Prior Investors and the Company desire to induce certain of the Investors to purchase shares of Series [__] Preferred Stock of the Company, par value $___ per share, ("**Series [___] Preferred Stock**") pursuant to the Series [__] Preferred Stock Purchase Agreement dated as of the date hereof by and among the Company and certain of the Investors (the "**Purchase Agreement**") by amending and restating the Prior Agreement to provide the Investors with the rights and privileges as set forth herein].

NOW, THEREFORE, the Company, the Key Holders [and] [,] the Investors [including the Prior Investors each hereby agree to amend and restate the Prior Agreement in its entirety as set forth herein, and the parties hereto further] agree as follows:

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[1] In most cases investors will want the term "Key Holders" to include major common stock or option holders in addition to the individuals who actually founded the Company.

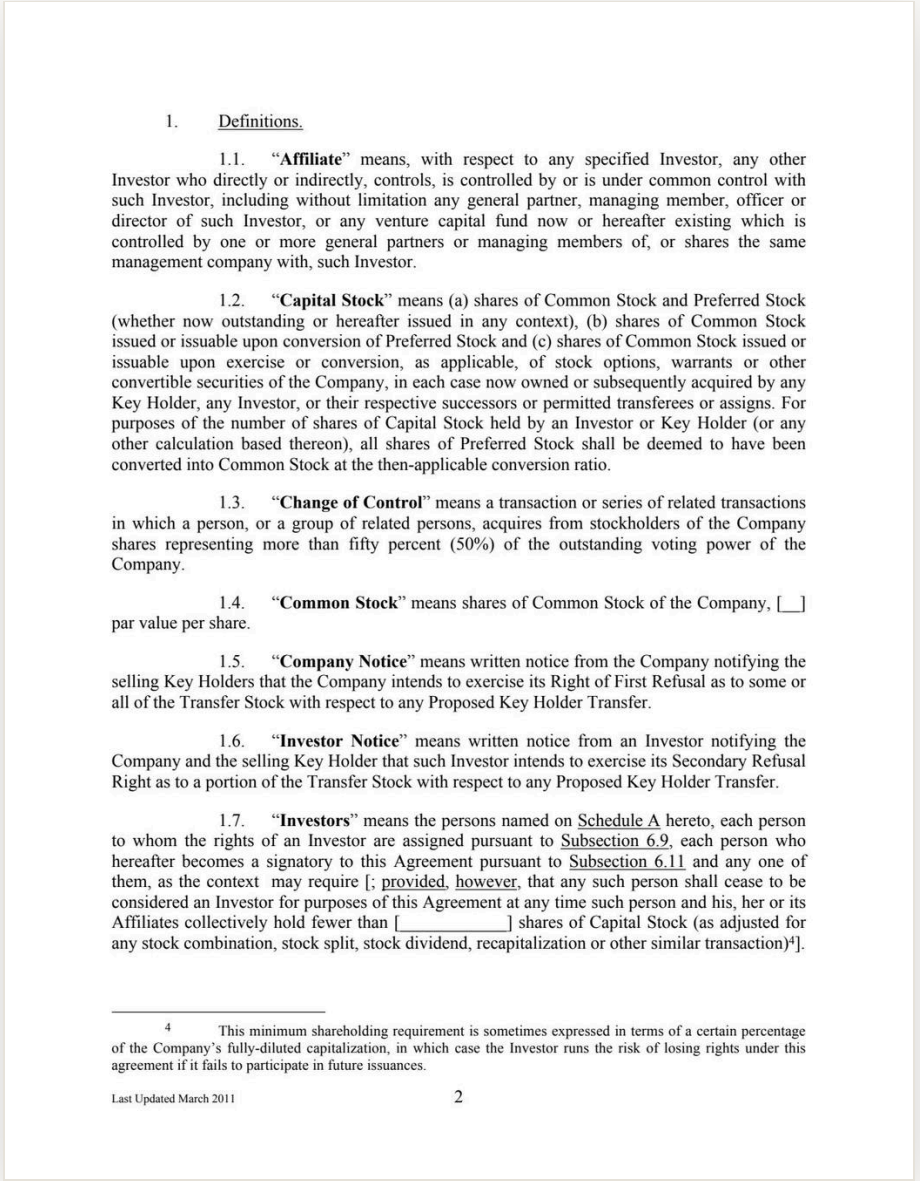
[2] This first set of recitals assumes that this Agreement is being entered into in connection with the sale of the Company's first series of preferred stock.

[3] This second set of recitals assumes that a preexisting co-sale agreement is being superseded. It contemplates two different series of preferred stock. Appropriate modifications to the form will be required based on the actual series of preferred stock outstanding and the relative right of such series.

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1. Definitions.

1.1. "**Affiliate**" means, with respect to any specified Investor, any other Investor who directly or indirectly, controls, is controlled by or is under common control with such Investor, including without limitation any general partner, managing member, officer or director of such Investor, or any venture capital fund now or hereafter existing which is controlled by one or more general partners or managing members of, or shares the same management company with, such Investor.

1.2. "**Capital Stock**" means (a) shares of Common Stock and Preferred Stock (whether now outstanding or hereafter issued in any context), (b) shares of Common Stock issued or issuable upon conversion of Preferred Stock and (c) shares of Common Stock issued or issuable upon exercise or conversion, as applicable, of stock options, warrants or other convertible securities of the Company, in each case now owned or subsequently acquired by any Key Holder, any Investor, or their respective successors or permitted transferees or assigns. For purposes of the number of shares of Capital Stock held by an Investor or Key Holder (or any other calculation based thereon), all shares of Preferred Stock shall be deemed to have been converted into Common Stock at the then-applicable conversion ratio.

1.3. "**Change of Control**" means a transaction or series of related transactions in which a person, or a group of related persons, acquires from stockholders of the Company shares representing more than fifty percent (50%) of the outstanding voting power of the Company.

1.4. "**Common Stock**" means shares of Common Stock of the Company, [__] par value per share.

1.5. "**Company Notice**" means written notice from the Company notifying the selling Key Holders that the Company intends to exercise its Right of First Refusal as to some or all of the Transfer Stock with respect to any Proposed Key Holder Transfer.

1.6. "**Investor Notice**" means written notice from an Investor notifying the Company and the selling Key Holder that such Investor intends to exercise its Secondary Refusal Right as to a portion of the Transfer Stock with respect to any Proposed Key Holder Transfer.

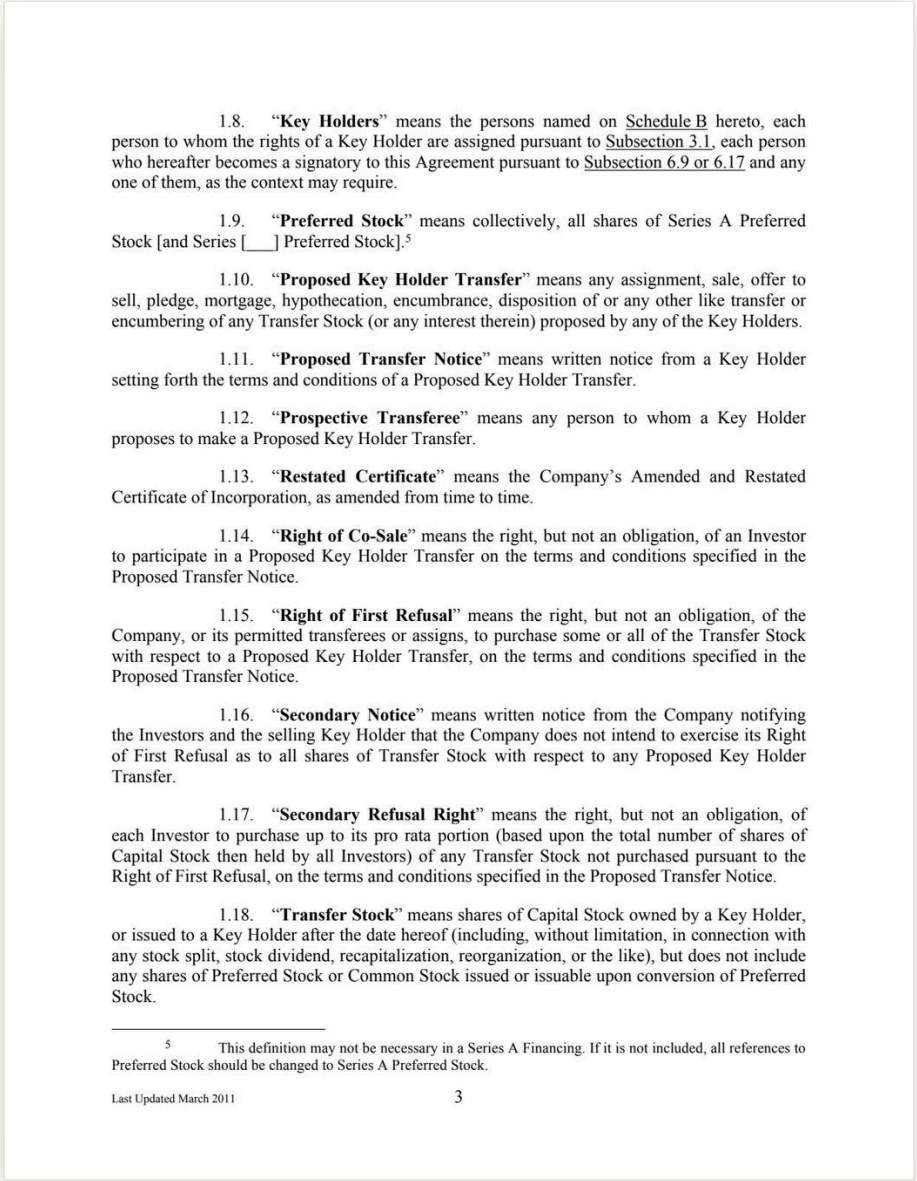
1.7. "**Investors**" means the persons named on Schedule A hereto, each person to whom the rights of an Investor are assigned pursuant to Subsection 6.9, each person who hereafter becomes a signatory to this Agreement pursuant to Subsection 6.11 and any one of them, as the context may require [; provided, however, that any such person shall cease to be considered an Investor for purposes of this Agreement at any time such person and his, her or its Affiliates collectively hold fewer than [_____] shares of Capital Stock (as adjusted for any stock combination, stock split, stock dividend, recapitalization or other similar transaction)[4]].

[4] This minimum shareholding requirement is sometimes expressed in terms of a certain percentage of the Company's fully-diluted capitalization, in which case the Investor runs the risk of losing rights under this agreement if it fails to participate in future issuances.

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Right of First Refusal and Co-Sale Agreement — Page 6 of 24



1.8. "**Key Holders**" means the persons named on Schedule B hereto, each person to whom the rights of a Key Holder are assigned pursuant to Subsection 3.1, each person who hereafter becomes a signatory to this Agreement pursuant to Subsection 6.9 or 6.17 and any one of them, as the context may require.

1.9. "**Preferred Stock**" means collectively, all shares of Series A Preferred Stock [and Series [___] Preferred Stock].[5]

1.10. "**Proposed Key Holder Transfer**" means any assignment, sale, offer to sell, pledge, mortgage, hypothecation, encumbrance, disposition of or any other like transfer or encumbering of any Transfer Stock (or any interest therein) proposed by any of the Key Holders.

1.11. "**Proposed Transfer Notice**" means written notice from a Key Holder setting forth the terms and conditions of a Proposed Key Holder Transfer.

1.12. "**Prospective Transferee**" means any person to whom a Key Holder proposes to make a Proposed Key Holder Transfer.

1.13. "**Restated Certificate**" means the Company's Amended and Restated Certificate of Incorporation, as amended from time to time.

1.14. "**Right of Co-Sale**" means the right, but not an obligation, of an Investor to participate in a Proposed Key Holder Transfer on the terms and conditions specified in the Proposed Transfer Notice.

1.15. "**Right of First Refusal**" means the right, but not an obligation, of the Company, or its permitted transferees or assigns, to purchase some or all of the Transfer Stock with respect to a Proposed Key Holder Transfer, on the terms and conditions specified in the Proposed Transfer Notice.

1.16. "**Secondary Notice**" means written notice from the Company notifying the Investors and the selling Key Holder that the Company does not intend to exercise its Right of First Refusal as to all shares of Transfer Stock with respect to any Proposed Key Holder Transfer.

1.17. "**Secondary Refusal Right**" means the right, but not an obligation, of each Investor to purchase up to its pro rata portion (based upon the total number of shares of Capital Stock then held by all Investors) of any Transfer Stock not purchased pursuant to the Right of First Refusal, on the terms and conditions specified in the Proposed Transfer Notice.

1.18. "**Transfer Stock**" means shares of Capital Stock owned by a Key Holder, or issued to a Key Holder after the date hereof (including, without limitation, in connection with any stock split, stock dividend, recapitalization, reorganization, or the like), but does not include any shares of Preferred Stock or Common Stock issued or issuable upon conversion of Preferred Stock.

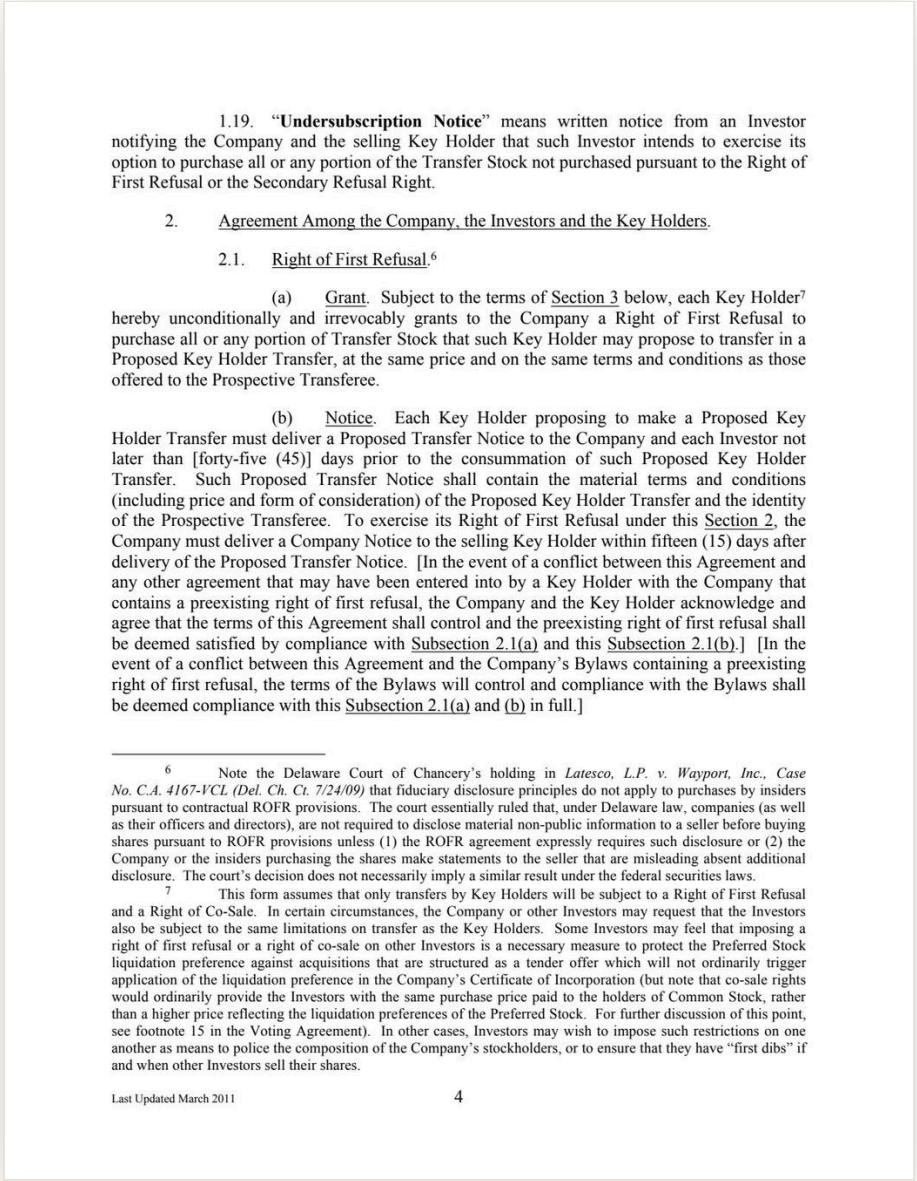
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[5] This definition may not be necessary in a Series A Financing. If it is not included, all references to Preferred Stock should be changed to Series A Preferred Stock.

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1.19. "**Undersubscription Notice**" means written notice from an Investor notifying the Company and the selling Key Holder that such Investor intends to exercise its option to purchase all or any portion of the Transfer Stock not purchased pursuant to the Right of First Refusal or the Secondary Refusal Right.

2. Agreement Among the Company, the Investors and the Key Holders.

2.1. Right of First Refusal.[6]

(a) Grant. Subject to the terms of Section 3 below, each Key Holder[7] hereby unconditionally and irrevocably grants to the Company a Right of First Refusal to purchase all or any portion of Transfer Stock that such Key Holder may propose to transfer in a Proposed Key Holder Transfer, at the same price and on the same terms and conditions as those offered to the Prospective Transferee.

(b) Notice. Each Key Holder proposing to make a Proposed Key Holder Transfer must deliver a Proposed Transfer Notice to the Company and each Investor not later than [forty-five (45)] days prior to the consummation of such Proposed Key Holder Transfer. Such Proposed Transfer Notice shall contain the material terms and conditions (including price and form of consideration) of the Proposed Key Holder Transfer and the identity of the Prospective Transferee. To exercise its Right of First Refusal under this Section 2, the Company must deliver a Company Notice to the selling Key Holder within fifteen (15) days after delivery of the Proposed Transfer Notice. [In the event of a conflict between this Agreement and any other agreement that may have been entered into by a Key Holder with the Company that contains a preexisting right of first refusal, the Company and the Key Holder acknowledge and agree that the terms of this Agreement shall control and the preexisting right of first refusal shall be deemed satisfied by compliance with Subsection 2.1(a) and this Subsection 2.1(b).] [In the event of a conflict between this Agreement and the Company's Bylaws containing a preexisting right of first refusal, the terms of the Bylaws will control and compliance with the Bylaws shall be deemed compliance with this Subsection 2.1(a) and (b) in full.]

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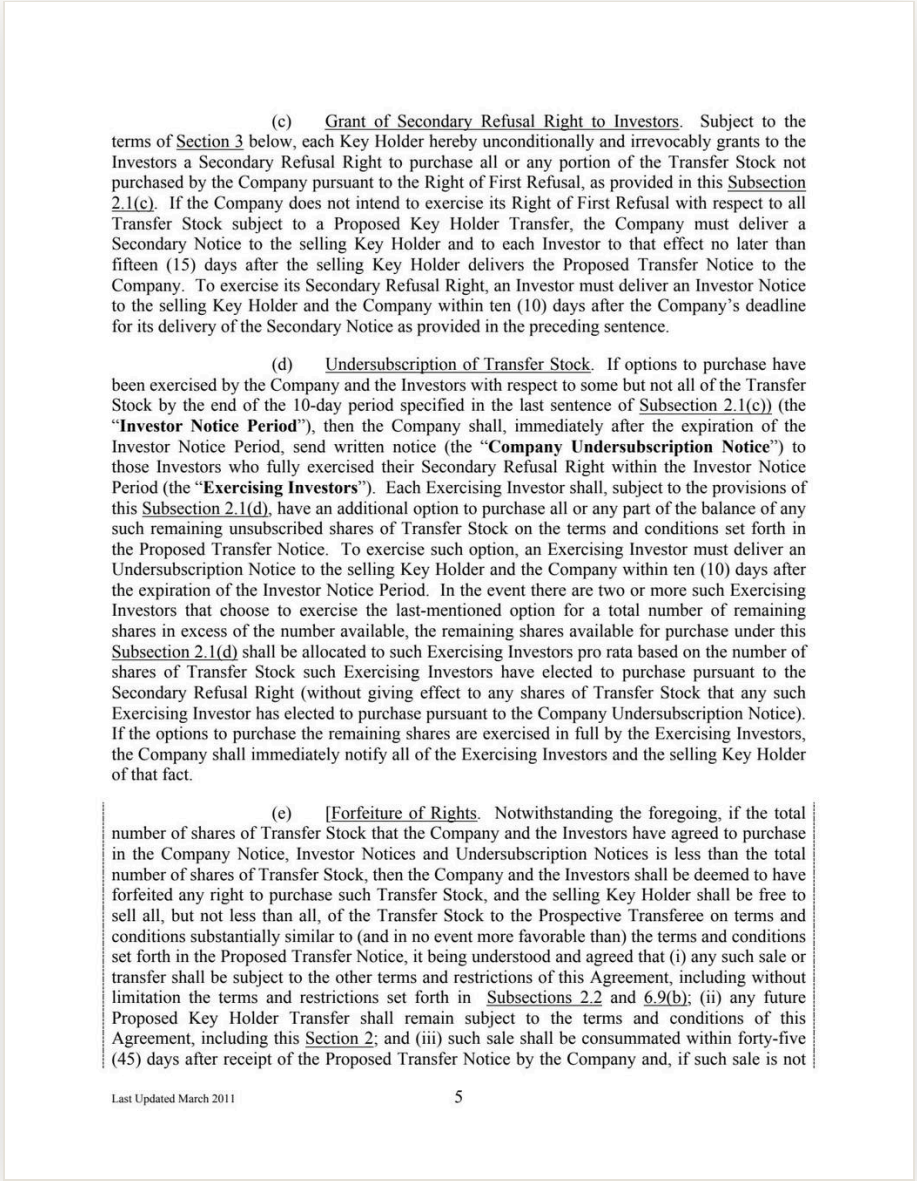
[6] Note the Delaware Court of Chancery's holding in *Latesco, L.P. v. Wayport, Inc., Case No. C.A. 4167-VCL (Del. Ch. Ct. 7/24/09)* that fiduciary disclosure principles do not apply to purchases by insiders pursuant to contractual ROFR provisions. The court essentially ruled that, under Delaware law, companies (as well as their officers and directors), are not required to disclose material non-public information to a seller before buying shares pursuant to ROFR provisions unless (1) the ROFR agreement expressly requires such disclosure or (2) the Company or the insiders purchasing the shares make statements to the seller that are misleading absent additional disclosure. The court's decision does not necessarily imply a similar result under the federal securities laws.

[7] This form assumes that only transfers by Key Holders will be subject to a Right of First Refusal and a Right of Co-Sale. In certain circumstances, the Company or other Investors may request that the Investors also be subject to the same limitations on transfer as the Key Holders. Some Investors may feel that imposing a right of first refusal or a right of co-sale on other Investors is a necessary measure to protect the Preferred Stock liquidation preference against acquisitions that are structured as a tender offer which will not ordinarily trigger application of the liquidation preference in the Company's Certificate of Incorporation (but note that co-sale rights would ordinarily provide the Investors with the same purchase price paid to the holders of Common Stock, rather than a higher price reflecting the liquidation preferences of the Preferred Stock. For further discussion of this point, see footnote 15 in the Voting Agreement). In other cases, Investors may wish to impose such restrictions on one another as means to police the composition of the Company's stockholders, or to ensure that they have "first dibs" if and when other Investors sell their shares.

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(c) Grant of Secondary Refusal Right to Investors. Subject to the terms of Section 3 below, each Key Holder hereby unconditionally and irrevocably grants to the Investors a Secondary Refusal Right to purchase all or any portion of the Transfer Stock not purchased by the Company pursuant to the Right of First Refusal, as provided in this Subsection 2.1(c). If the Company does not intend to exercise its Right of First Refusal with respect to all Transfer Stock subject to a Proposed Key Holder Transfer, the Company must deliver a Secondary Notice to the selling Key Holder and to each Investor to that effect no later than fifteen (15) days after the selling Key Holder delivers the Proposed Transfer Notice to the Company. To exercise its Secondary Refusal Right, an Investor must deliver an Investor Notice to the selling Key Holder and the Company within ten (10) days after the Company's deadline for its delivery of the Secondary Notice as provided in the preceding sentence.

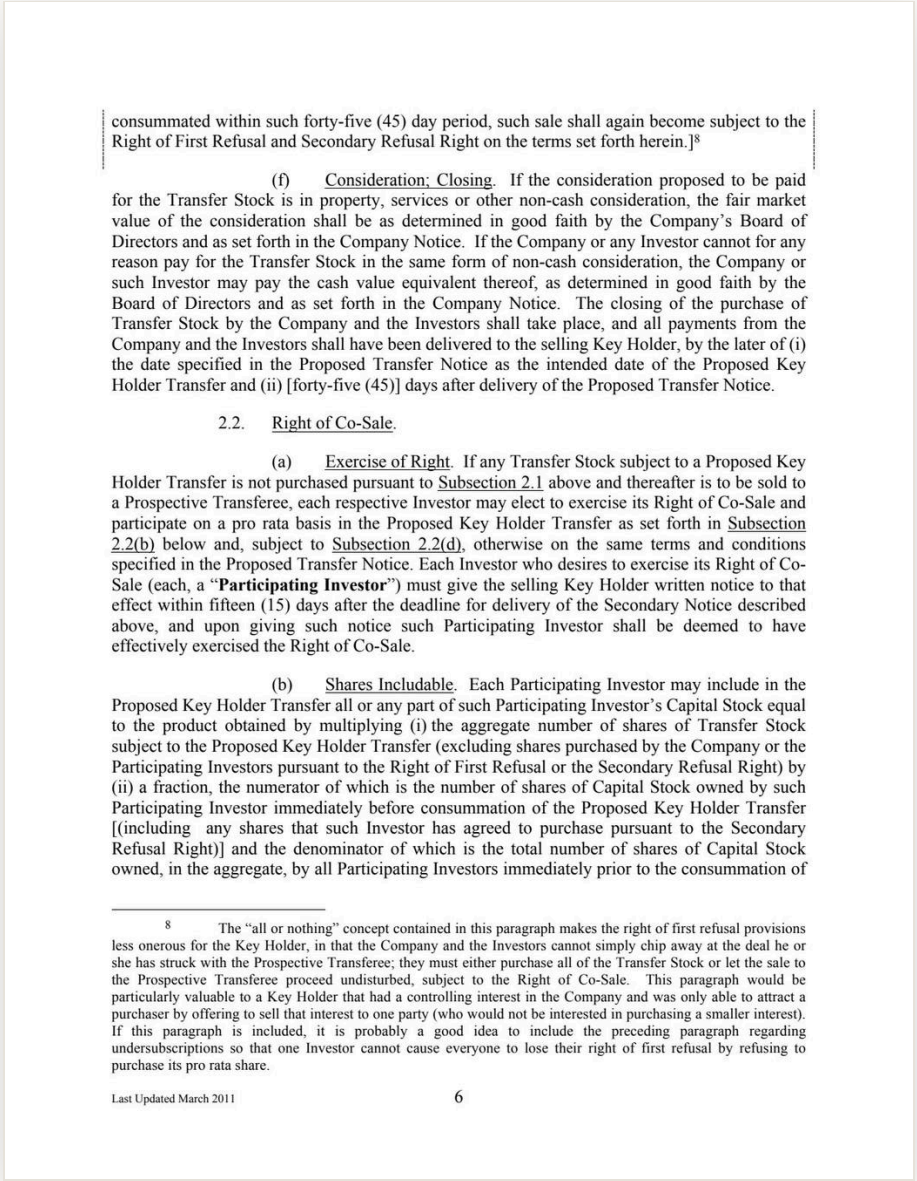
(d) Undersubscription of Transfer Stock. If options to purchase have been exercised by the Company and the Investors with respect to some but not all of the Transfer Stock by the end of the 10-day period specified in the last sentence of Subsection 2.1(c)) (the "**Investor Notice Period**"), then the Company shall, immediately after the expiration of the Investor Notice Period, send written notice (the "**Company Undersubscription Notice**") to those Investors who fully exercised their Secondary Refusal Right within the Investor Notice Period (the "**Exercising Investors**"). Each Exercising Investor shall, subject to the provisions of this Subsection 2.1(d), have an additional option to purchase all or any part of the balance of any such remaining unsubscribed shares of Transfer Stock on the terms and conditions set forth in the Proposed Transfer Notice. To exercise such option, an Exercising Investor must deliver an Undersubscription Notice to the selling Key Holder and the Company within ten (10) days after the expiration of the Investor Notice Period. In the event there are two or more such Exercising Investors that choose to exercise the last-mentioned option for a total number of remaining shares in excess of the number available, the remaining shares available for purchase under this Subsection 2.1(d) shall be allocated to such Exercising Investors pro rata based on the number of shares of Transfer Stock such Exercising Investors have elected to purchase pursuant to the Secondary Refusal Right (without giving effect to any shares of Transfer Stock that any such Exercising Investor has elected to purchase pursuant to the Company Undersubscription Notice). If the options to purchase the remaining shares are exercised in full by the Exercising Investors, the Company shall immediately notify all of the Exercising Investors and the selling Key Holder of that fact.

(e) [Forfeiture of Rights. Notwithstanding the foregoing, if the total number of shares of Transfer Stock that the Company and the Investors have agreed to purchase in the Company Notice, Investor Notices and Undersubscription Notices is less than the total number of shares of Transfer Stock, then the Company and the Investors shall be deemed to have forfeited any right to purchase such Transfer Stock, and the selling Key Holder shall be free to sell all, but not less than all, of the Transfer Stock to the Prospective Transferee on terms and conditions substantially similar to (and in no event more favorable than) the terms and conditions set forth in the Proposed Transfer Notice, it being understood and agreed that (i) any such sale or transfer shall be subject to the other terms and restrictions of this Agreement, including without limitation the terms and restrictions set forth in Subsections 2.2 and 6.9(b); (ii) any future Proposed Key Holder Transfer shall remain subject to the terms and conditions of this Agreement, including this Section 2; and (iii) such sale shall be consummated within forty-five (45) days after receipt of the Proposed Transfer Notice by the Company and, if such sale is not

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Right of First Refusal and Co-Sale Agreement — Page 9 of 24



consummated within such forty-five (45) day period, such sale shall again become subject to the Right of First Refusal and Secondary Refusal Right on the terms set forth herein.][8]

(f) Consideration; Closing. If the consideration proposed to be paid for the Transfer Stock is in property, services or other non-cash consideration, the fair market value of the consideration shall be as determined in good faith by the Company's Board of Directors and as set forth in the Company Notice. If the Company or any Investor cannot for any reason pay for the Transfer Stock in the same form of non-cash consideration, the Company or such Investor may pay the cash value equivalent thereof, as determined in good faith by the Board of Directors and as set forth in the Company Notice. The closing of the purchase of Transfer Stock by the Company and the Investors shall take place, and all payments from the Company and the Investors shall have been delivered to the selling Key Holder, by the later of (i) the date specified in the Proposed Transfer Notice as the intended date of the Proposed Key Holder Transfer and (ii) [forty-five (45)] days after delivery of the Proposed Transfer Notice.

2.2. Right of Co-Sale.

(a) Exercise of Right. If any Transfer Stock subject to a Proposed Key Holder Transfer is not purchased pursuant to Subsection 2.1 above and thereafter is to be sold to a Prospective Transferee, each respective Investor may elect to exercise its Right of Co-Sale and participate on a pro rata basis in the Proposed Key Holder Transfer as set forth in Subsection 2.2(b) below and, subject to Subsection 2.2(d), otherwise on the same terms and conditions specified in the Proposed Transfer Notice. Each Investor who desires to exercise its Right of Co-Sale (each, a "**Participating Investor**") must give the selling Key Holder written notice to that effect within fifteen (15) days after the deadline for delivery of the Secondary Notice described above, and upon giving such notice such Participating Investor shall be deemed to have effectively exercised the Right of Co-Sale.

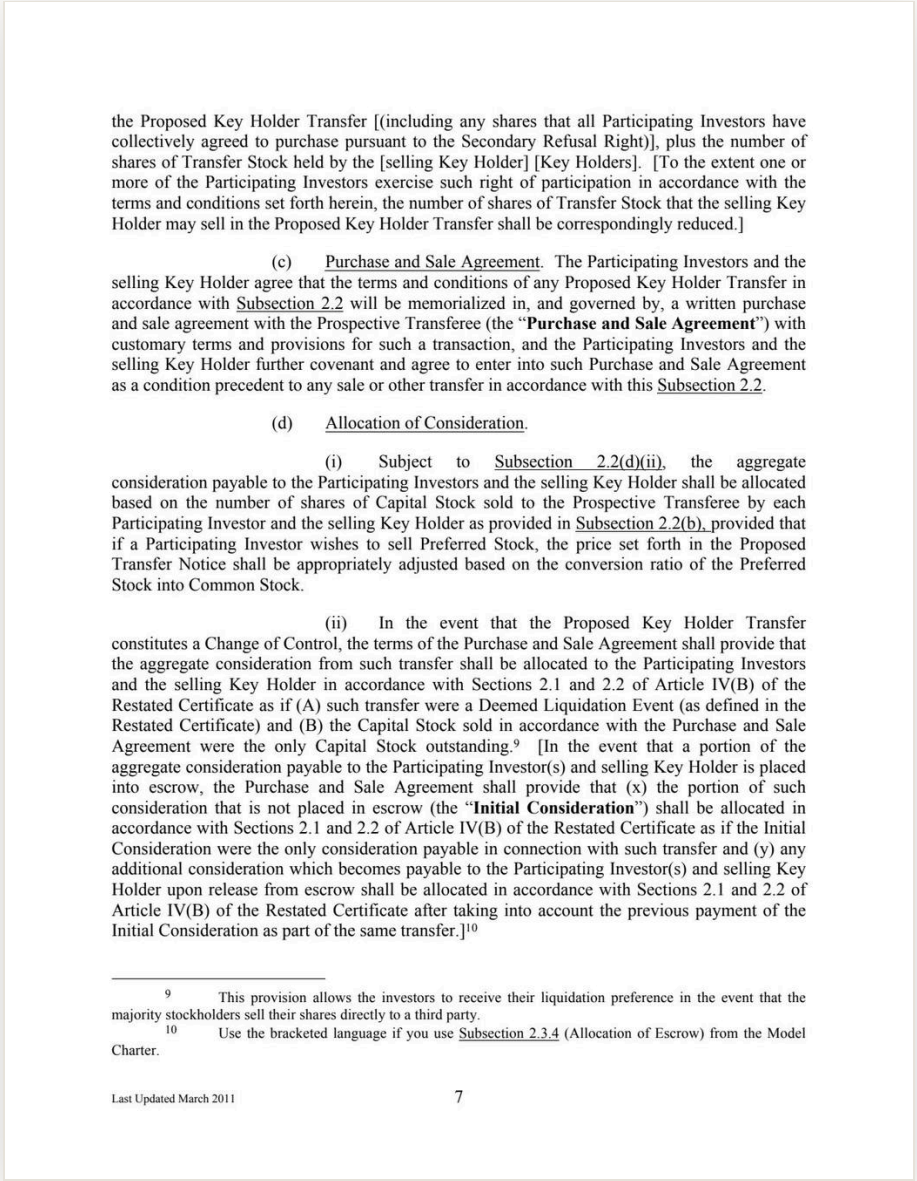
(b) Shares Includable. Each Participating Investor may include in the Proposed Key Holder Transfer all or any part of such Participating Investor's Capital Stock equal to the product obtained by multiplying (i) the aggregate number of shares of Transfer Stock subject to the Proposed Key Holder Transfer (excluding shares purchased by the Company or the Participating Investors pursuant to the Right of First Refusal or the Secondary Refusal Right) by (ii) a fraction, the numerator of which is the number of shares of Capital Stock owned by such Participating Investor immediately before consummation of the Proposed Key Holder Transfer [(including any shares that such Investor has agreed to purchase pursuant to the Secondary Refusal Right)] and the denominator of which is the total number of shares of Capital Stock owned, in the aggregate, by all Participating Investors immediately prior to the consummation of

[8] The "all or nothing" concept contained in this paragraph makes the right of first refusal provisions less onerous for the Key Holder, in that the Company and the Investors cannot simply chip away at the deal he or she has struck with the Prospective Transferee; they must either purchase all of the Transfer Stock or let the sale to the Prospective Transferee proceed undisturbed, subject to the Right of Co-Sale. This paragraph would be particularly valuable to a Key Holder that had a controlling interest in the Company and was only able to attract a purchaser by offering to sell that interest to one party (who would not be interested in purchasing a smaller interest). If this paragraph is included, it is probably a good idea to include the preceding paragraph regarding undersubscriptions so that one Investor cannot cause everyone to lose their right of first refusal by refusing to purchase its pro rata share.

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the Proposed Key Holder Transfer [(including any shares that all Participating Investors have collectively agreed to purchase pursuant to the Secondary Refusal Right)], plus the number of shares of Transfer Stock held by the [selling Key Holder] [Key Holders]. [To the extent one or more of the Participating Investors exercise such right of participation in accordance with the terms and conditions set forth herein, the number of shares of Transfer Stock that the selling Key Holder may sell in the Proposed Key Holder Transfer shall be correspondingly reduced.]

(c) Purchase and Sale Agreement. The Participating Investors and the selling Key Holder agree that the terms and conditions of any Proposed Key Holder Transfer in accordance with Subsection 2.2 will be memorialized in, and governed by, a written purchase and sale agreement with the Prospective Transferee (the "**Purchase and Sale Agreement**") with customary terms and provisions for such a transaction, and the Participating Investors and the selling Key Holder further covenant and agree to enter into such Purchase and Sale Agreement as a condition precedent to any sale or other transfer in accordance with this Subsection 2.2.

(d) Allocation of Consideration.

(i) Subject to Subsection 2.2(d)(ii), the aggregate consideration payable to the Participating Investors and the selling Key Holder shall be allocated based on the number of shares of Capital Stock sold to the Prospective Transferee by each Participating Investor and the selling Key Holder as provided in Subsection 2.2(b), provided that if a Participating Investor wishes to sell Preferred Stock, the price set forth in the Proposed Transfer Notice shall be appropriately adjusted based on the conversion ratio of the Preferred Stock into Common Stock.

(ii) In the event that the Proposed Key Holder Transfer constitutes a Change of Control, the terms of the Purchase and Sale Agreement shall provide that the aggregate consideration from such transfer shall be allocated to the Participating Investors and the selling Key Holder in accordance with Sections 2.1 and 2.2 of Article IV(B) of the Restated Certificate as if (A) such transfer were a Deemed Liquidation Event (as defined in the Restated Certificate) and (B) the Capital Stock sold in accordance with the Purchase and Sale Agreement were the only Capital Stock outstanding.[9] [In the event that a portion of the aggregate consideration payable to the Participating Investor(s) and selling Key Holder is placed into escrow, the Purchase and Sale Agreement shall provide that (x) the portion of such consideration that is not placed in escrow (the "**Initial Consideration**") shall be allocated in accordance with Sections 2.1 and 2.2 of Article IV(B) of the Restated Certificate as if the Initial Consideration were the only consideration payable in connection with such transfer and (y) any additional consideration which becomes payable to the Participating Investor(s) and selling Key Holder upon release from escrow shall be allocated in accordance with Sections 2.1 and 2.2 of Article IV(B) of the Restated Certificate after taking into account the previous payment of the Initial Consideration as part of the same transfer.][10]

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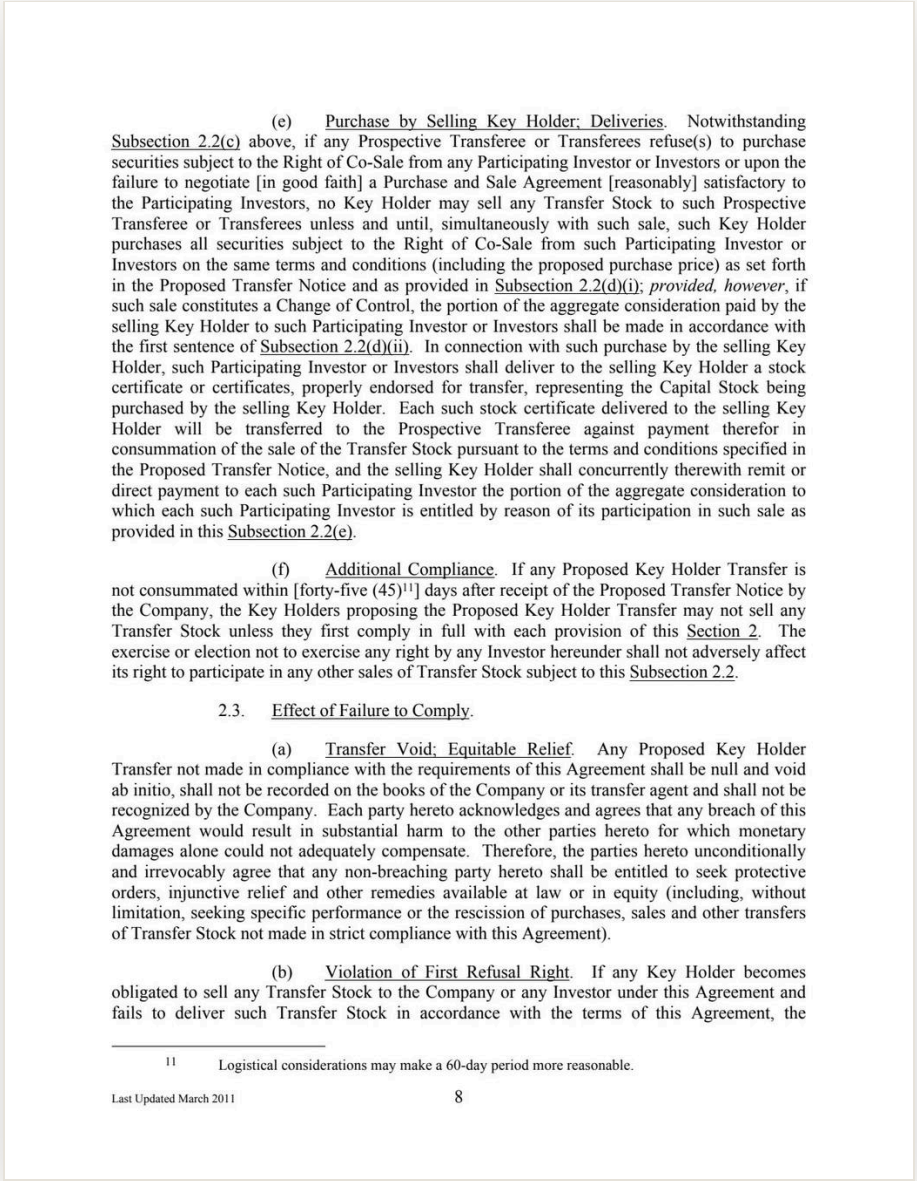
[9] This provision allows the investors to receive their liquidation preference in the event that the majority stockholders sell their shares directly to a third party.

[10] Use the bracketed language if you use Subsection 2.3.4 (Allocation of Escrow) from the Model Charter.

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(e) Purchase by Selling Key Holder; Deliveries. Notwithstanding Subsection 2.2(c) above, if any Prospective Transferee or Transferees refuse(s) to purchase securities subject to the Right of Co-Sale from any Participating Investor or Investors or upon the failure to negotiate [in good faith] a Purchase and Sale Agreement [reasonably] satisfactory to the Participating Investors, no Key Holder may sell any Transfer Stock to such Prospective Transferee or Transferees unless and until, simultaneously with such sale, such Key Holder purchases all securities subject to the Right of Co-Sale from such Participating Investor or Investors on the same terms and conditions (including the proposed purchase price) as set forth in the Proposed Transfer Notice and as provided in Subsection 2.2(d)(i); *provided, however*, if such sale constitutes a Change of Control, the portion of the aggregate consideration paid by the selling Key Holder to such Participating Investor or Investors shall be made in accordance with the first sentence of Subsection 2.2(d)(ii). In connection with such purchase by the selling Key Holder, such Participating Investor or Investors shall deliver to the selling Key Holder a stock certificate or certificates, properly endorsed for transfer, representing the Capital Stock being purchased by the selling Key Holder. Each such stock certificate delivered to the selling Key Holder will be transferred to the Prospective Transferee against payment therefor in consummation of the sale of the Transfer Stock pursuant to the terms and conditions specified in the Proposed Transfer Notice, and the selling Key Holder shall concurrently therewith remit or direct payment to each such Participating Investor the portion of the aggregate consideration to which each such Participating Investor is entitled by reason of its participation in such sale as provided in this Subsection 2.2(e).

(f) Additional Compliance. If any Proposed Key Holder Transfer is not consummated within [forty-five (45)[11]] days after receipt of the Proposed Transfer Notice by the Company, the Key Holders proposing the Proposed Key Holder Transfer may not sell any Transfer Stock unless they first comply in full with each provision of this Section 2. The exercise or election not to exercise any right by any Investor hereunder shall not adversely affect its right to participate in any other sales of Transfer Stock subject to this Subsection 2.2.

2.3. Effect of Failure to Comply.

(a) Transfer Void; Equitable Relief. Any Proposed Key Holder Transfer not made in compliance with the requirements of this Agreement shall be null and void ab initio, shall not be recorded on the books of the Company or its transfer agent and shall not be recognized by the Company. Each party hereto acknowledges and agrees that any breach of this Agreement would result in substantial harm to the other parties hereto for which monetary damages alone could not adequately compensate. Therefore, the parties hereto unconditionally and irrevocably agree that any non-breaching party hereto shall be entitled to seek protective orders, injunctive relief and other remedies available at law or in equity (including, without limitation, seeking specific performance or the rescission of purchases, sales and other transfers of Transfer Stock not made in strict compliance with this Agreement).

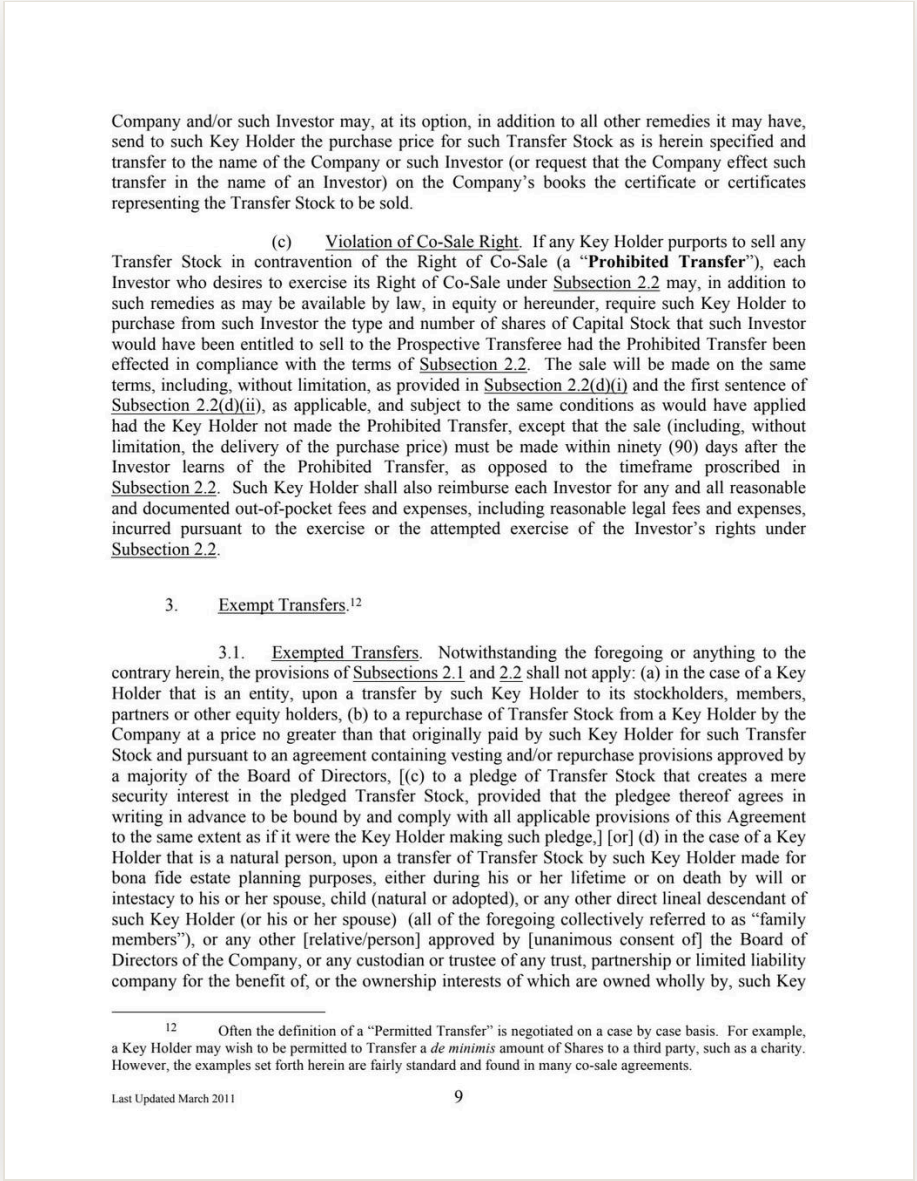
(b) Violation of First Refusal Right. If any Key Holder becomes obligated to sell any Transfer Stock to the Company or any Investor under this Agreement and fails to deliver such Transfer Stock in accordance with the terms of this Agreement, the

[11] Logistical considerations may make a 60-day period more reasonable.

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Company and/or such Investor may, at its option, in addition to all other remedies it may have, send to such Key Holder the purchase price for such Transfer Stock as is herein specified and transfer to the name of the Company or such Investor (or request that the Company effect such transfer in the name of an Investor) on the Company's books the certificate or certificates representing the Transfer Stock to be sold.

(c) Violation of Co-Sale Right. If any Key Holder purports to sell any Transfer Stock in contravention of the Right of Co-Sale (a "**Prohibited Transfer**"), each Investor who desires to exercise its Right of Co-Sale under Subsection 2.2 may, in addition to such remedies as may be available by law, in equity or hereunder, require such Key Holder to purchase from such Investor the type and number of shares of Capital Stock that such Investor would have been entitled to sell to the Prospective Transferee had the Prohibited Transfer been effected in compliance with the terms of Subsection 2.2. The sale will be made on the same terms, including, without limitation, as provided in Subsection 2.2(d)(i) and the first sentence of Subsection 2.2(d)(ii), as applicable, and subject to the same conditions as would have applied had the Key Holder not made the Prohibited Transfer, except that the sale (including, without limitation, the delivery of the purchase price) must be made within ninety (90) days after the Investor learns of the Prohibited Transfer, as opposed to the timeframe proscribed in Subsection 2.2. Such Key Holder shall also reimburse each Investor for any and all reasonable and documented out-of-pocket fees and expenses, including reasonable legal fees and expenses, incurred pursuant to the exercise or the attempted exercise of the Investor's rights under Subsection 2.2.

3. Exempt Transfers.[12]

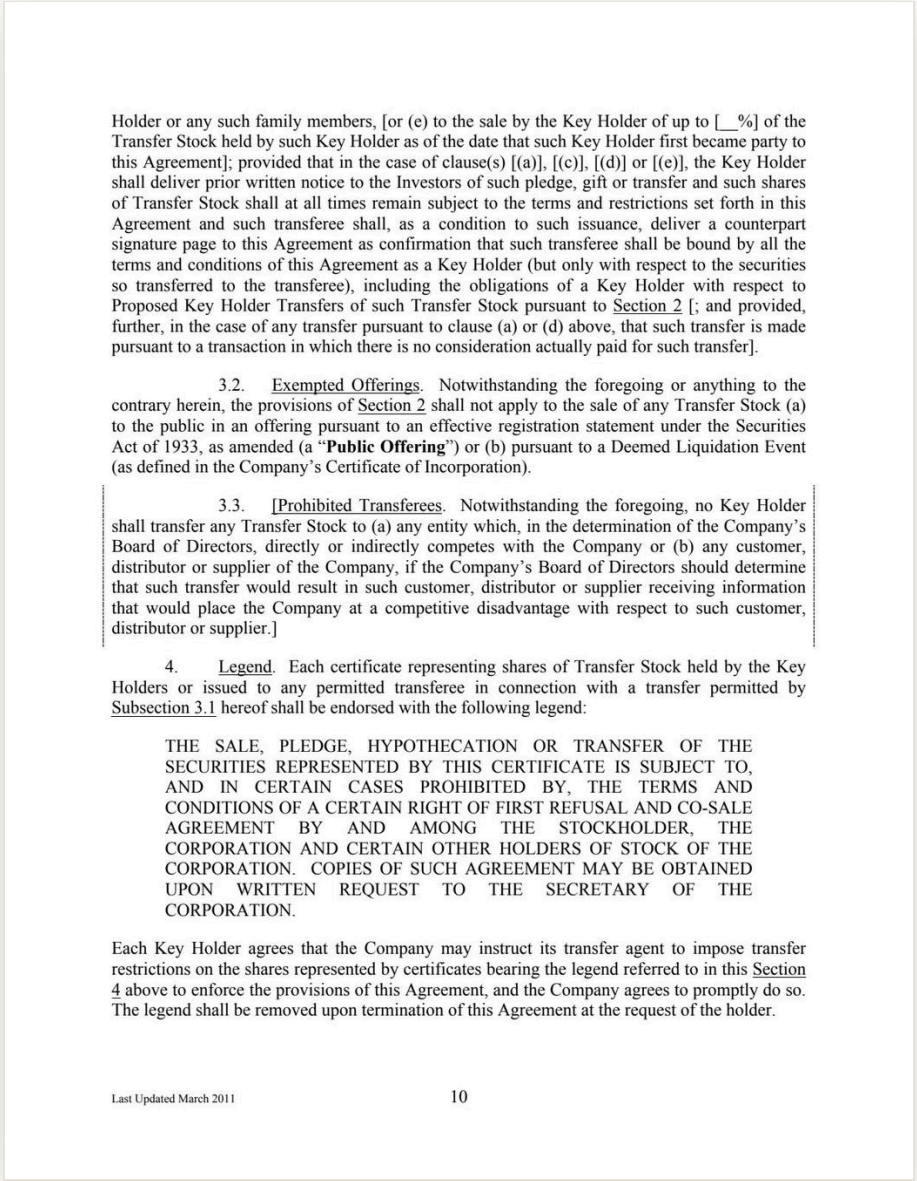
3.1. Exempted Transfers. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Subsections 2.1 and 2.2 shall not apply: (a) in the case of a Key Holder that is an entity, upon a transfer by such Key Holder to its stockholders, members, partners or other equity holders, (b) to a repurchase of Transfer Stock from a Key Holder by the Company at a price no greater than that originally paid by such Key Holder for such Transfer Stock and pursuant to an agreement containing vesting and/or repurchase provisions approved by a majority of the Board of Directors, [(c) to a pledge of Transfer Stock that creates a mere security interest in the pledged Transfer Stock, provided that the pledgee thereof agrees in writing in advance to be bound by and comply with all applicable provisions of this Agreement to the same extent as if it were the Key Holder making such pledge,] [or] (d) in the case of a Key Holder that is a natural person, upon a transfer of Transfer Stock by such Key Holder made for bona fide estate planning purposes, either during his or her lifetime or on death by will or intestacy to his or her spouse, child (natural or adopted), or any other direct lineal descendant of such Key Holder (or his or her spouse) (all of the foregoing collectively referred to as "family members"), or any other [relative/person] approved by [unanimous consent of] the Board of Directors of the Company, or any custodian or trustee of any trust, partnership or limited liability company for the benefit of, or the ownership interests of which are owned wholly by, such Key

[12] Often the definition of a "Permitted Transfer" is negotiated on a case by case basis. For example, a Key Holder may wish to be permitted to Transfer a *de minimis* amount of Shares to a third party, such as a charity. However, the examples set forth herein are fairly standard and found in many co-sale agreements.

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Holder or any such family members, [or (e) to the sale by the Key Holder of up to [__%] of the Transfer Stock held by such Key Holder as of the date that such Key Holder first became party to this Agreement]; provided that in the case of clause(s) [(a)], [(c)], [(d)] or [(e)], the Key Holder shall deliver prior written notice to the Investors of such pledge, gift or transfer and such shares of Transfer Stock shall at all times remain subject to the terms and restrictions set forth in this Agreement and such transferee shall, as a condition to such issuance, deliver a counterpart signature page to this Agreement as confirmation that such transferee shall be bound by all the terms and conditions of this Agreement as a Key Holder (but only with respect to the securities so transferred to the transferee), including the obligations of a Key Holder with respect to Proposed Key Holder Transfers of such Transfer Stock pursuant to Section 2 [; and provided, further, in the case of any transfer pursuant to clause (a) or (d) above, that such transfer is made pursuant to a transaction in which there is no consideration actually paid for such transfer].

3.2. Exempted Offerings. Notwithstanding the foregoing or anything to the contrary herein, the provisions of Section 2 shall not apply to the sale of any Transfer Stock (a) to the public in an offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (a "**Public Offering**") or (b) pursuant to a Deemed Liquidation Event (as defined in the Company's Certificate of Incorporation).

3.3. [Prohibited Transferees. Notwithstanding the foregoing, no Key Holder shall transfer any Transfer Stock to (a) any entity which, in the determination of the Company's Board of Directors, directly or indirectly competes with the Company or (b) any customer, distributor or supplier of the Company, if the Company's Board of Directors should determine that such transfer would result in such customer, distributor or supplier receiving information that would place the Company at a competitive disadvantage with respect to such customer, distributor or supplier.]

4. Legend. Each certificate representing shares of Transfer Stock held by the Key Holders or issued to any permitted transferee in connection with a transfer permitted by Subsection 3.1 hereof shall be endorsed with the following legend:

THE SALE, PLEDGE, HYPOTHECATION OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO, AND IN CERTAIN CASES PROHIBITED BY, THE TERMS AND CONDITIONS OF A CERTAIN RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT BY AND AMONG THE STOCKHOLDER, THE CORPORATION AND CERTAIN OTHER HOLDERS OF STOCK OF THE CORPORATION. COPIES OF SUCH AGREEMENT MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE CORPORATION.

Each Key Holder agrees that the Company may instruct its transfer agent to impose transfer restrictions on the shares represented by certificates bearing the legend referred to in this Section 4 above to enforce the provisions of this Agreement, and the Company agrees to promptly do so. The legend shall be removed upon termination of this Agreement at the request of the holder.

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5. Lock-Up.

5.1. Agreement to Lock-Up. Each Key Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Company's initial public offering (the "**IPO**") and ending on the date specified by the Company and the managing underwriter [(such period not to exceed l80 days)] [, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto)],[13] (a) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Capital Stock held immediately prior to the effectiveness of the registration statement for the IPO or (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Capital Stock, whether any such transaction described in clause (a) or (b) above is to be settled by delivery of Capital Stock or other securities, in cash or otherwise. The foregoing provisions of this Section 5 shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, and shall only be applicable to the Key Holders if all officers, directors and holders of more than one percent (1%) of the outstanding Common Stock (after giving effect to the conversion into Common Stock of all outstanding [Series A] Preferred Stock) enter into similar agreements. The underwriters in connection with the IPO are intended third-party beneficiaries of this Section 5 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Key Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in the IPO that are consistent with this Section 5 or that are necessary to give further effect thereto.

5.2. Stop Transfer Instructions. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the shares of Capital Stock of each Key Holder (and transferees and assignees thereof) until the end of such restricted period.

6. Miscellaneous.

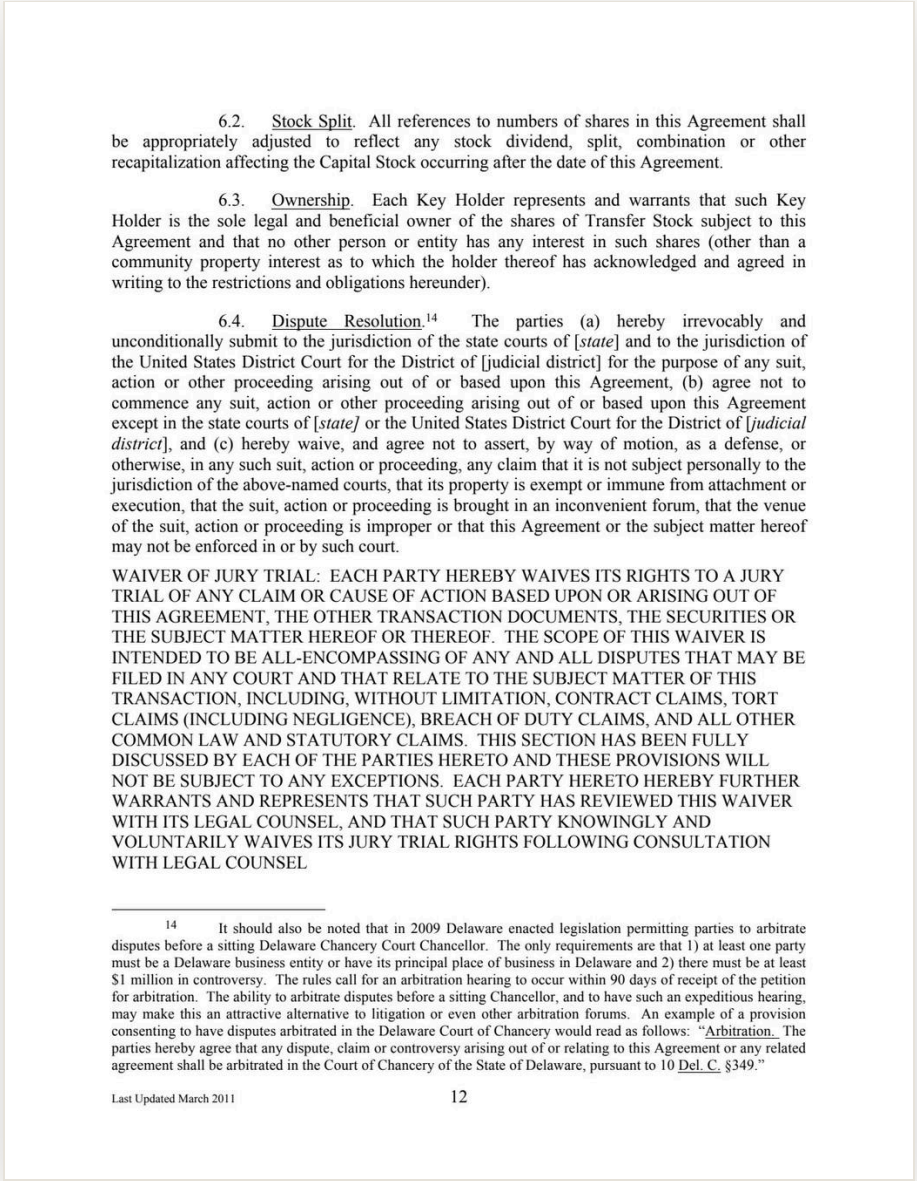
6.1. Term. This Agreement shall automatically terminate upon the earlier of (a) immediately prior to the consummation of the Company's IPO and (b) the consummation of a Deemed Liquidation Event (as defined in the Restated Certificate).

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[13] The bracketed language is intended to address the fact that FINRA Rule 2711(f)(4) and NYSE Rule 472 each prohibit the publication or other distribution of a research report or the making of a public appearance concerning a subject company by a member 15 days prior to and after the expiration, waiver or termination of a lock-up agreement or any other agreement that the member has entered into with a subject company or its shareholders that restricts or prohibits the sale of securities held by the subject company or its shareholders after the completion of a securities offering, unless the securities are "actively traded" within the meaning of Rule 101(c)(1) of Regulation M under the Exchange Act. Some underwriters are actually going farther and requiring that lockup periods be extended to up to a total of 210 days in order to give them sufficient leeway.

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6.2. Stock Split. All references to numbers of shares in this Agreement shall be appropriately adjusted to reflect any stock dividend, split, combination or other recapitalization affecting the Capital Stock occurring after the date of this Agreement.

6.3. Ownership. Each Key Holder represents and warrants that such Key Holder is the sole legal and beneficial owner of the shares of Transfer Stock subject to this Agreement and that no other person or entity has any interest in such shares (other than a community property interest as to which the holder thereof has acknowledged and agreed in writing to the restrictions and obligations hereunder).

6.4. Dispute Resolution.[14] The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of [*state*] and to the jurisdiction of the United States District Court for the District of [judicial district] for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of [*state]* or the United States District Court for the District of [*judicial district*], and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL

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[14] It should also be noted that in 2009 Delaware enacted legislation permitting parties to arbitrate disputes before a sitting Delaware Chancery Court Chancellor. The only requirements are that 1) at least one party must be a Delaware business entity or have its principal place of business in Delaware and 2) there must be at least $1 million in controversy. The rules call for an arbitration hearing to occur within 90 days of receipt of the petition for arbitration. The ability to arbitrate disputes before a sitting Chancellor, and to have such an expeditious hearing, may make this an attractive alternative to litigation or even other arbitration forums. An example of a provision consenting to have disputes arbitrated in the Delaware Court of Chancery would read as follows: "Arbitration. The parties hereby agree that any dispute, claim or controversy arising out of or relating to this Agreement or any related agreement shall be arbitrated in the Court of Chancery of the State of Delaware, pursuant to 10 Del. C. §349."

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[*Alternative*: Any unresolved controversy or claim arising out of or relating to this Agreement, except as (i) otherwise provided in this Agreement, or (ii) any such controversies or claims arising out of either party's intellectual property rights for which a provisional remedy or equitable relief is sought, shall be submitted to arbitration by one arbitrator mutually agreed upon by the parties, and if no agreement can be reached within thirty (30) days after names of potential arbitrators have been proposed by the American Arbitration Association (the "**AAA**"), then by one arbitrator having reasonable experience in corporate finance transactions of the type provided for in this Agreement and who is chosen by the AAA. The arbitration shall take place in [*location*], in accordance with the AAA rules then in effect, and judgment upon any award rendered in such arbitration will be binding and may be entered in any court having jurisdiction thereof. There shall be limited discovery prior to the arbitration hearing as follows: (a) exchange of witness lists and copies of documentary evidence and documents relating to or arising out of the issues to be arbitrated, (b) depositions of all party witnesses and (c) such other depositions as may be allowed by the arbitrators upon a showing of good cause. Depositions shall be conducted in accordance with the [*State*] Code of Civil Procedure, the arbitrator shall be required to provide in writing to the parties the basis for the award or order of such arbitrator, and a court reporter shall record all hearings, with such record constituting the official transcript of such proceedings.

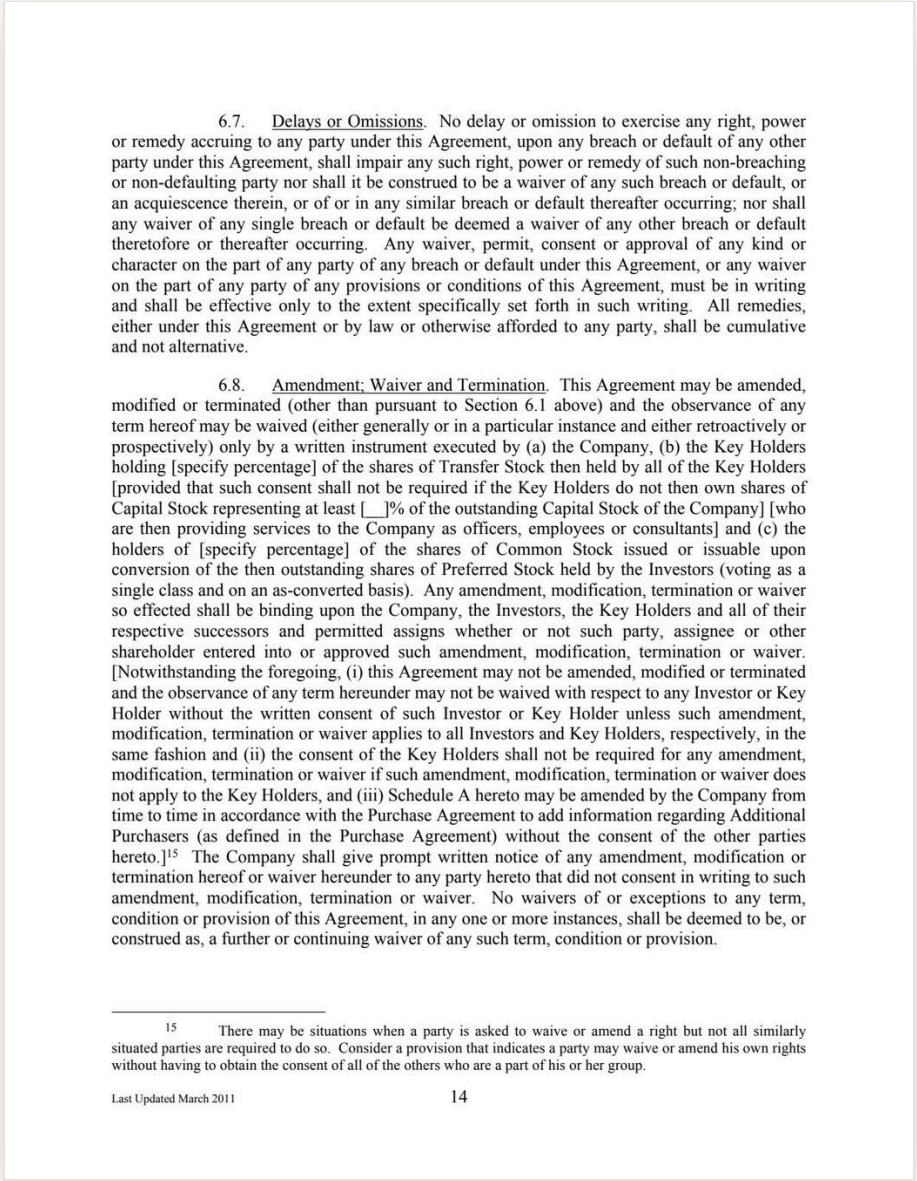
[Each party will bear its own costs in respect of any disputes arising under this Agreement.] [The prevailing party shall be entitled to reasonable attorney's fees, costs, and necessary disbursements in addition to any other relief to which such party may be entitled.] Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in the U.S. District Court for the District of [_____] or any court of the [State][Commonwealth] of [*state*] having subject matter jurisdiction.]

6.5. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) business day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their address as set forth on Schedule A or Schedule B hereof, as the case may be, or to such email address, facsimile number or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, it shall be sent to [Company Address, Attention:_____]; and a copy (which shall not constitute notice) shall also be sent to [Company Counsel Name and Address]; and if notice is given to the Investors, a copy shall also be given to [Investor Counsel Name and Address].

6.6. Entire Agreement. This Agreement (including the Exhibits and Schedules hereto) constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties are expressly canceled.

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6.7. Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Agreement, or any waiver on the part of any party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.8. Amendment; Waiver and Termination. This Agreement may be amended, modified or terminated (other than pursuant to Section 6.1 above) and the observance of any term hereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only by a written instrument executed by (a) the Company, (b) the Key Holders holding [specify percentage] of the shares of Transfer Stock then held by all of the Key Holders [provided that such consent shall not be required if the Key Holders do not then own shares of Capital Stock representing at least [__]% of the outstanding Capital Stock of the Company] [who are then providing services to the Company as officers, employees or consultants] and (c) the holders of [specify percentage] of the shares of Common Stock issued or issuable upon conversion of the then outstanding shares of Preferred Stock held by the Investors (voting as a single class and on an as-converted basis). Any amendment, modification, termination or waiver so effected shall be binding upon the Company, the Investors, the Key Holders and all of their respective successors and permitted assigns whether or not such party, assignee or other shareholder entered into or approved such amendment, modification, termination or waiver. [Notwithstanding the foregoing, (i) this Agreement may not be amended, modified or terminated and the observance of any term hereunder may not be waived with respect to any Investor or Key Holder without the written consent of such Investor or Key Holder unless such amendment, modification, termination or waiver applies to all Investors and Key Holders, respectively, in the same fashion and (ii) the consent of the Key Holders shall not be required for any amendment, modification, termination or waiver if such amendment, modification, termination or waiver does not apply to the Key Holders, and (iii) Schedule A hereto may be amended by the Company from time to time in accordance with the Purchase Agreement to add information regarding Additional Purchasers (as defined in the Purchase Agreement) without the consent of the other parties hereto.][15] The Company shall give prompt written notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination or waiver. No waivers of or exceptions to any term, condition or provision of this Agreement, in any one or more instances, shall be deemed to be, or construed as, a further or continuing waiver of any such term, condition or provision.

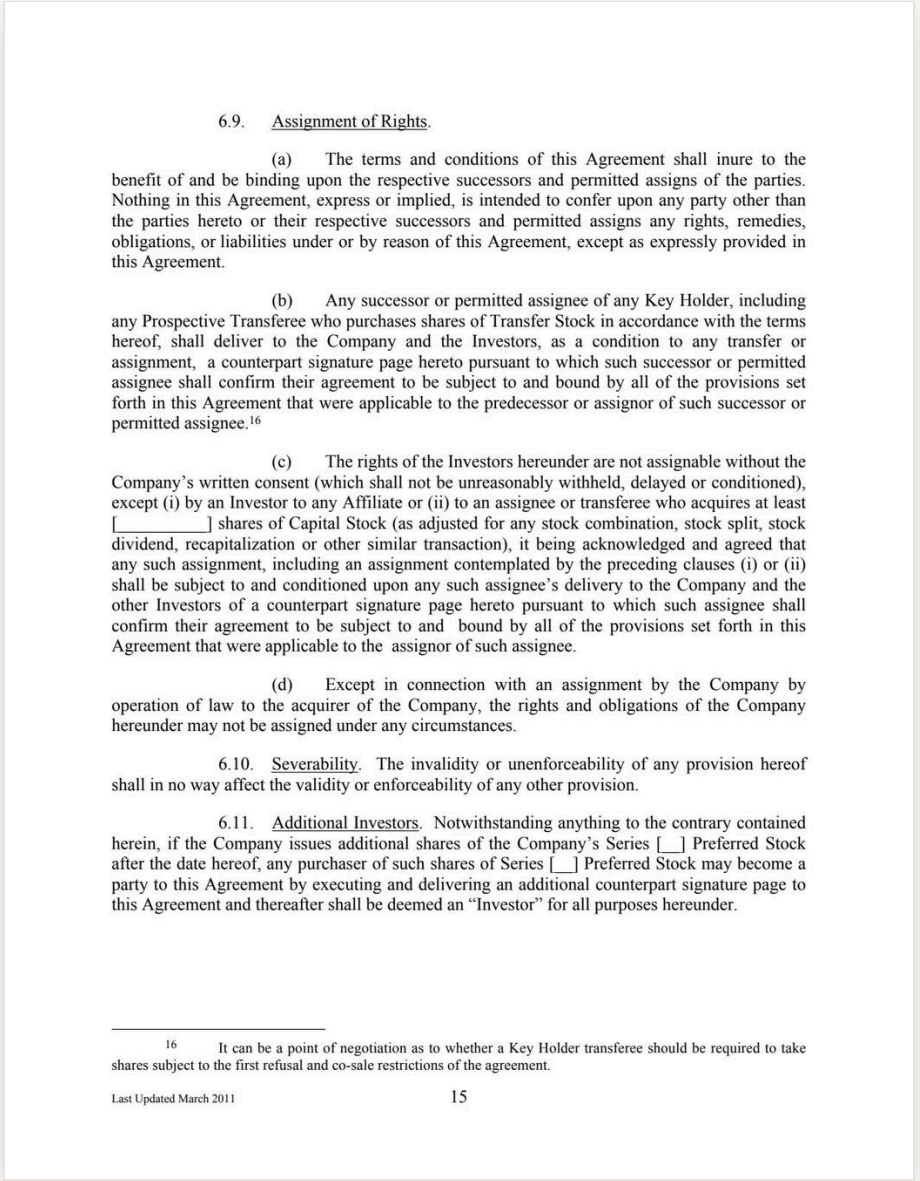
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[15] There may be situations when a party is asked to waive or amend a right but not all similarly situated parties are required to do so. Consider a provision that indicates a party may waive or amend his own rights without having to obtain the consent of all of the others who are a part of his or her group.

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6.9. Assignment of Rights.

(a) The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

(b) Any successor or permitted assignee of any Key Holder, including any Prospective Transferee who purchases shares of Transfer Stock in accordance with the terms hereof, shall deliver to the Company and the Investors, as a condition to any transfer or assignment, a counterpart signature page hereto pursuant to which such successor or permitted assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the predecessor or assignor of such successor or permitted assignee.[16]

(c) The rights of the Investors hereunder are not assignable without the Company's written consent (which shall not be unreasonably withheld, delayed or conditioned), except (i) by an Investor to any Affiliate or (ii) to an assignee or transferee who acquires at least [_____] shares of Capital Stock (as adjusted for any stock combination, stock split, stock dividend, recapitalization or other similar transaction), it being acknowledged and agreed that any such assignment, including an assignment contemplated by the preceding clauses (i) or (ii) shall be subject to and conditioned upon any such assignee's delivery to the Company and the other Investors of a counterpart signature page hereto pursuant to which such assignee shall confirm their agreement to be subject to and bound by all of the provisions set forth in this Agreement that were applicable to the assignor of such assignee.

(d) Except in connection with an assignment by the Company by operation of law to the acquirer of the Company, the rights and obligations of the Company hereunder may not be assigned under any circumstances.

6.10. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision.

6.11. Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Series [__] Preferred Stock after the date hereof, any purchaser of such shares of Series [__] Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement and thereafter shall be deemed an "Investor" for all purposes hereunder.

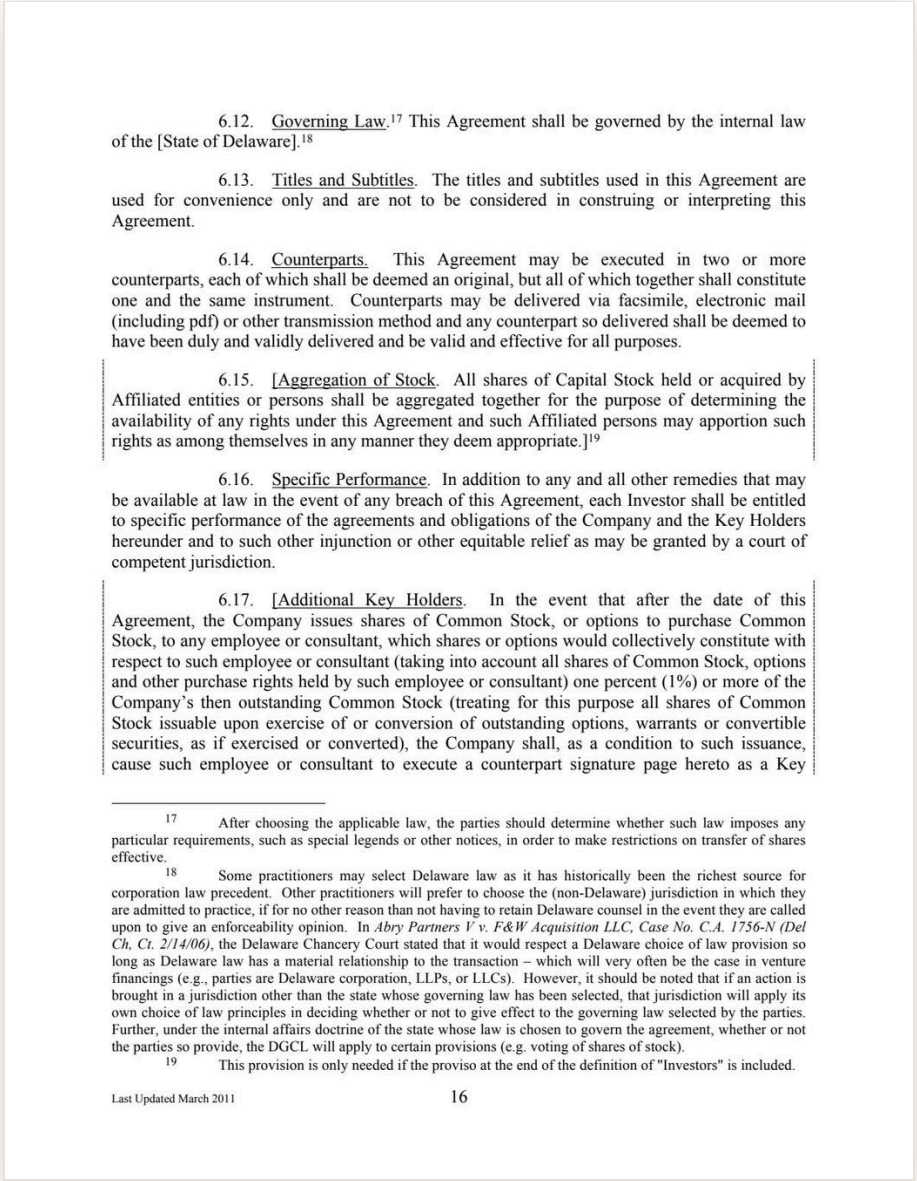
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16 It can be a point of negotiation as to whether a Key Holder transferee should be required to take shares subject to the first refusal and co-sale restrictions of the agreement.

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Right of First Refusal and Co-Sale Agreement — Page 19 of 24



6.12. Governing Law.[17] This Agreement shall be governed by the internal law of the [State of Delaware].[18]

6.13. Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.14. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.15. [Aggregation of Stock. All shares of Capital Stock held or acquired by Affiliated entities or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.][19]

6.16. Specific Performance. In addition to any and all other remedies that may be available at law in the event of any breach of this Agreement, each Investor shall be entitled to specific performance of the agreements and obligations of the Company and the Key Holders hereunder and to such other injunction or other equitable relief as may be granted by a court of competent jurisdiction.

6.17. [Additional Key Holders. In the event that after the date of this Agreement, the Company issues shares of Common Stock, or options to purchase Common Stock, to any employee or consultant, which shares or options would collectively constitute with respect to such employee or consultant (taking into account all shares of Common Stock, options and other purchase rights held by such employee or consultant) one percent (1%) or more of the Company's then outstanding Common Stock (treating for this purpose all shares of Common Stock issuable upon exercise of or conversion of outstanding options, warrants or convertible securities, as if exercised or converted), the Company shall, as a condition to such issuance, cause such employee or consultant to execute a counterpart signature page hereto as a Key

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[17] After choosing the applicable law, the parties should determine whether such law imposes any particular requirements, such as special legends or other notices, in order to make restrictions on transfer of shares effective.

[18] Some practitioners may select Delaware law as it has historically been the richest source for corporation law precedent. Other practitioners will prefer to choose the (non-Delaware) jurisdiction in which they are admitted to practice, if for no other reason than not having to retain Delaware counsel in the event they are called upon to give an enforceability opinion. In *Abry Partners V v. F&W Acquisition LLC, Case No. C.A. 1756-N (Del Ch, Ct. 2/14/06)*, the Delaware Chancery Court stated that it would respect a Delaware choice of law provision so long as Delaware law has a material relationship to the transaction – which will very often be the case in venture financings (e.g., parties are Delaware corporation, LLPs, or LLCs). However, it should be noted that if an action is brought in a jurisdiction other than the state whose governing law has been selected, that jurisdiction will apply its own choice of law principles in deciding whether or not to give effect to the governing law selected by the parties. Further, under the internal affairs doctrine of the state whose law is chosen to govern the agreement, whether or not the parties so provide, the DGCL will apply to certain provisions (e.g. voting of shares of stock).

[19] This provision is only needed if the proviso at the end of the definition of "Investors" is included.

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Holder, and such person shall thereby be bound by, and subject to, all the terms and provisions of this Agreement applicable to a Key Holder.]

6.18. [Consent of Spouse. If any Key Holder is married on the date of this Agreement, such Key Holder's spouse shall execute and deliver to the Company a consent of spouse in the form of Exhibit A hereto ("Consent of Spouse"), effective on the date hereof. Notwithstanding the execution and delivery thereof, such consent shall not be deemed to confer or convey to the spouse any rights in such Key Holder's shares of Transfer Stock that do not otherwise exist by operation of law or the agreement of the parties. If any Key Holder should marry or remarry subsequent to the date of this Agreement, such Key Holder shall within thirty (30) days thereafter obtain his/her new spouse's acknowledgement of and consent to the existence and binding effect of all restrictions contained in this Agreement by causing such spouse to execute and deliver a Consent of Spouse acknowledging the restrictions and obligations contained in this Agreement and agreeing and consenting to the same.][20]

6.19. [Effect on Prior Agreement. Upon the execution and delivery of this Agreement by the Company, the Key Holders holding a majority in interest of the Transfer Stock and the holders of at least a majority in interest of the Capital Stock held by those Investors who are party to the Prior Agreement (measured before giving effect to any purchase of shares of Series [__] Preferred Stock by such Investors), the Prior Agreement automatically shall terminate and be of no further force and effect and shall be amended and restated in its entirety as set forth in this Agreement.][21]

[Remainder of Page Intentionally Left Blank]

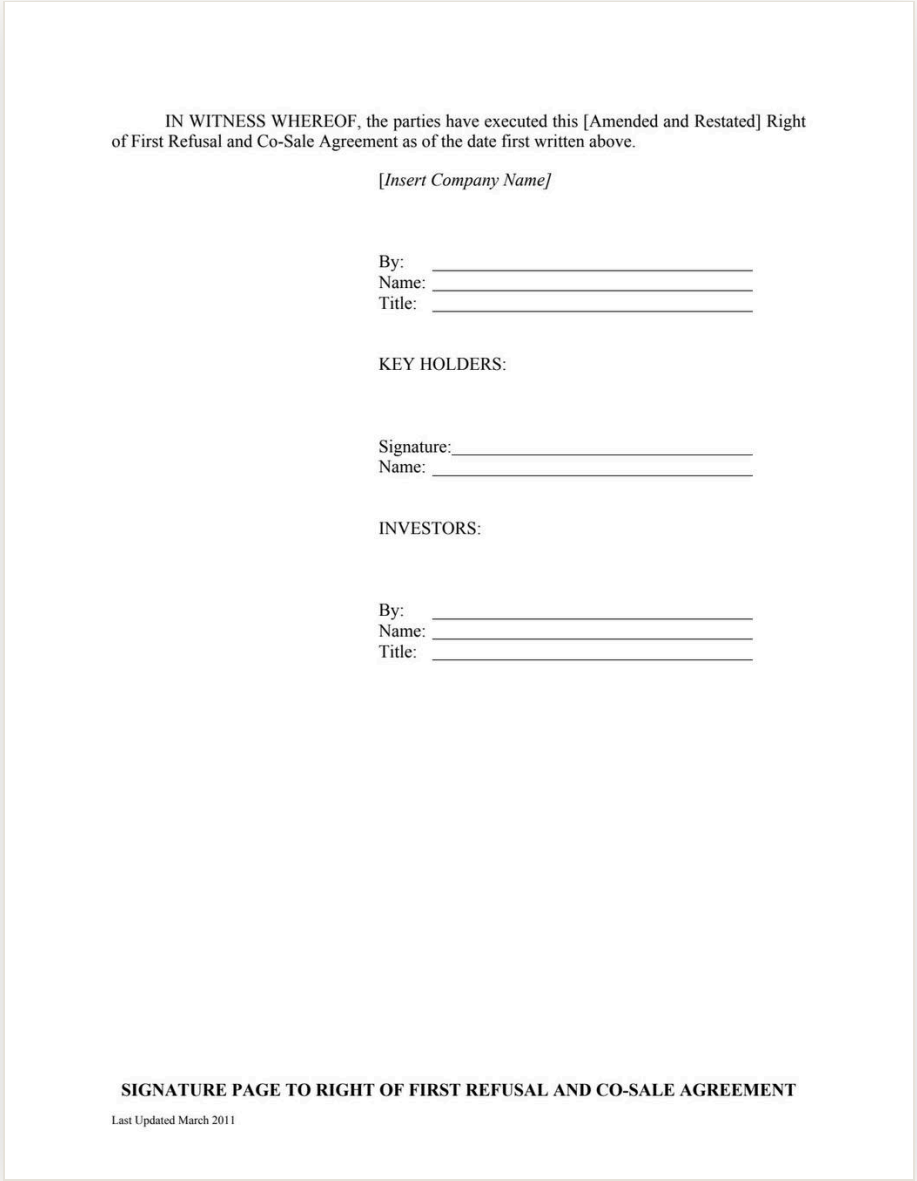
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[20] To the extent any Key Holder or spouse thereof is a resident of Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, Washington, or Wisconsin, or the Commonwealth of Puerto Rico, a spousal consent may need to be executed. See Exhibit A. The necessity of such a consent should be researched carefully, as including this provision where the law is unclear may imply the existence of rights that would not otherwise exist.

[21] The drafter should ensure that the relevant signatories to the current agreement have authority to terminate the prior agreement under the terms of the prior agreement.

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Right of First Refusal and Co-Sale Agreement — Page 21 of 24



IN WITNESS WHEREOF, the parties have executed this [Amended and Restated] Right of First Refusal and Co-Sale Agreement as of the date first written above.

[Insert Company Name]

By: _____
Name: _____
Title: _____

KEY HOLDERS:

Signature: _____
Name: _____

INVESTORS:

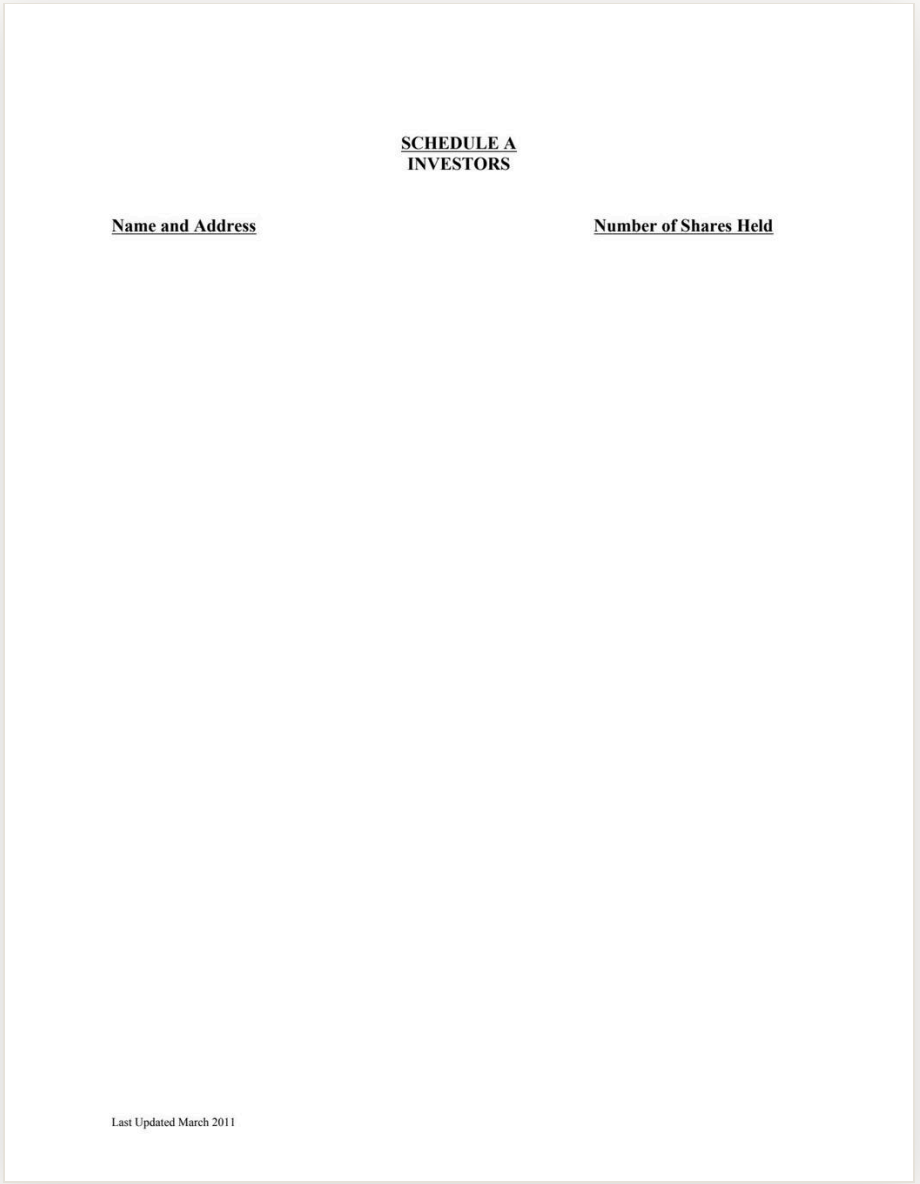
By: _____
Name: _____
Title: _____

SIGNATURE PAGE TO RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT

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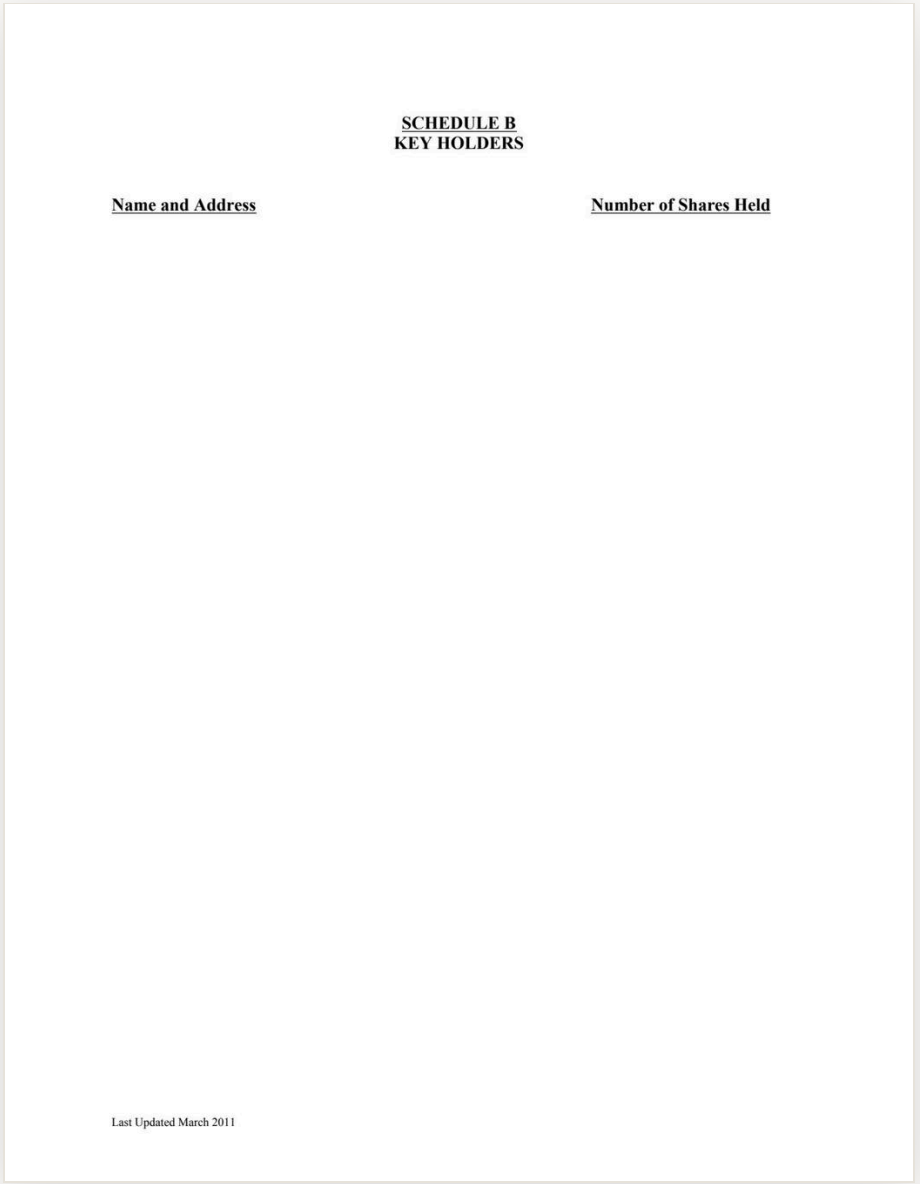
SCHEDULE A
INVESTORS

Name and Address	Number of Shares Held

Last Updated March 2011

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Right of First Refusal and Co-Sale Agreement — Page 23 of 24



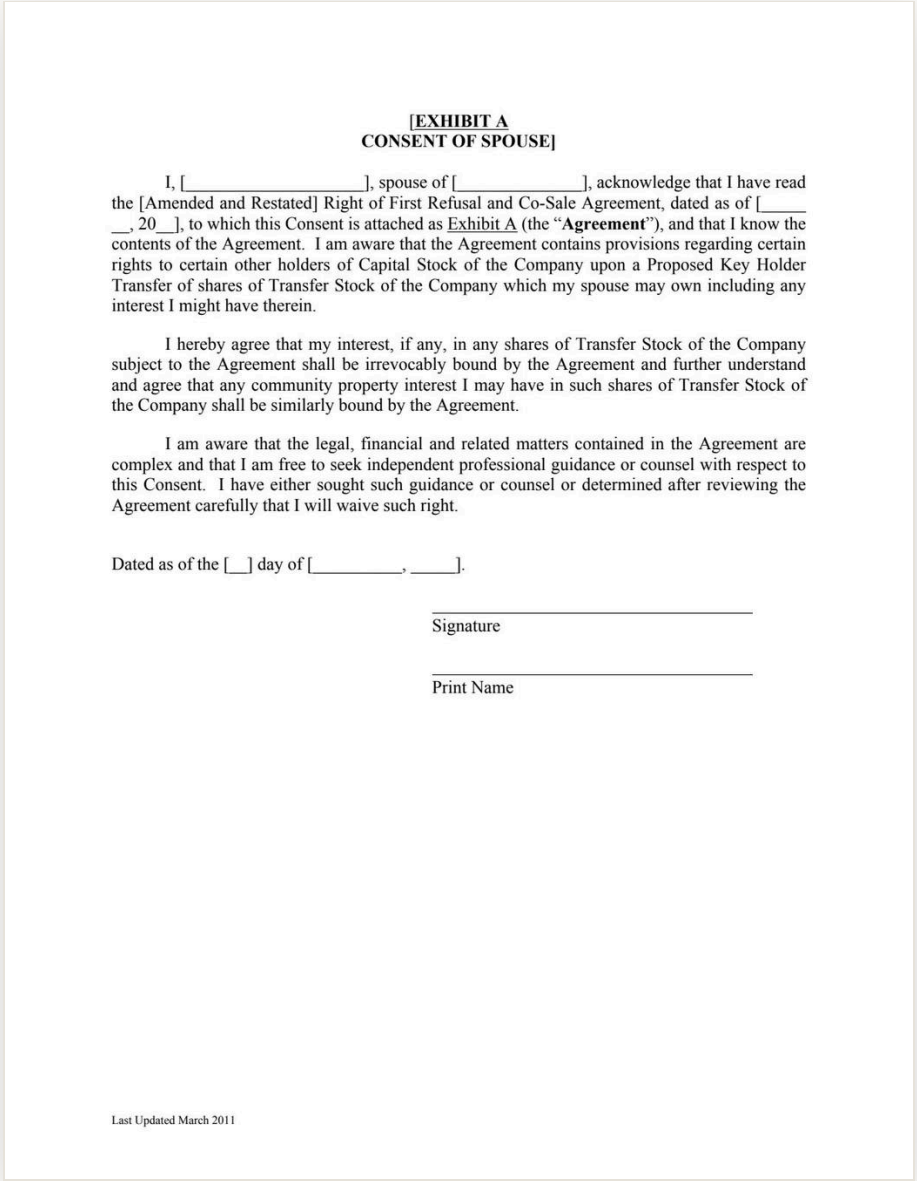
SCHEDULE B
KEY HOLDERS

Name and Address	Number of Shares Held

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[EXHIBIT A
CONSENT OF SPOUSE]

I, [_____], spouse of [_____], acknowledge that I have read the [Amended and Restated] Right of First Refusal and Co-Sale Agreement, dated as of [_____, 20__], to which this Consent is attached as Exhibit A (the "**Agreement**"), and that I know the contents of the Agreement. I am aware that the Agreement contains provisions regarding certain rights to certain other holders of Capital Stock of the Company upon a Proposed Key Holder Transfer of shares of Transfer Stock of the Company which my spouse may own including any interest I might have therein.

I hereby agree that my interest, if any, in any shares of Transfer Stock of the Company subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in such shares of Transfer Stock of the Company shall be similarly bound by the Agreement.

I am aware that the legal, financial and related matters contained in the Agreement are complex and that I am free to seek independent professional guidance or counsel with respect to this Consent. I have either sought such guidance or counsel or determined after reviewing the Agreement carefully that I will waive such right.

Dated as of the [__] day of [_____, _____].

_____
Signature

_____
Print Name

Last Updated March 2011

Model Indemnification Agreement

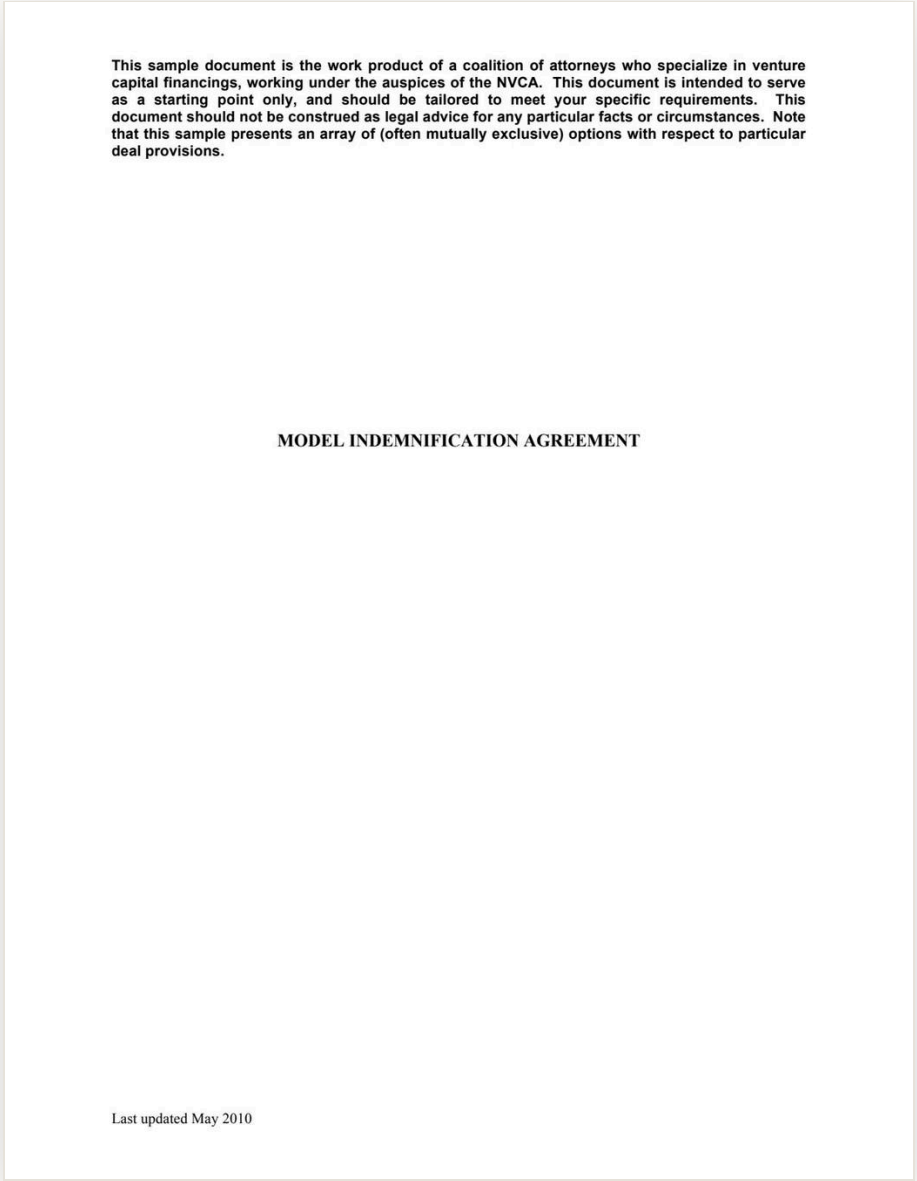
- The company agrees to indemnify its directors and officers for claims arising from their service, and to advance legal expenses.
- Protects investor-appointed directors; often extended to the venture fund itself.

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Model Indemnification Agreement — Page 1 of 28

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This sample document is the work product of a coalition of attorneys who specialize in venture capital financings, working under the auspices of the NVCA. This document is intended to serve as a starting point only, and should be tailored to meet your specific requirements. This document should not be construed as legal advice for any particular facts or circumstances. Note that this sample presents an array of (often mutually exclusive) options with respect to particular deal provisions.

MODEL INDEMNIFICATION AGREEMENT

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INTRODUCTION

This agreement can be used for both officers and directors of the corporation. In some cases, a director will serve as a nominee of one or a group of investors (e.g., an individual venture capitalist serving as a nominee of a venture capital fund). Some venture capital funds will request that the fund, and not just their director representative, be covered by the indemnification agreement. Often that takes the form of indemnification rights covering liability arising by virtue of "corporate status" (where the investor is acting as an agent of the corporation). See Fasciana v. Electronic Data Systems, No. 19753 (Del. Ch. Feb. 27, 2003). To the extent an venture capital fund seeks indemnification for the fund itself, we have provided bracketed language in Section 1(d) for the draftsperson to consider. The working group has not taken a position as to whether investor indemnification is "market."

Section 145 of the Delaware General Corporation Law ("Section 145") is the statutory authority for indemnification of directors, officers, employees and agents of the corporation. Section 145(a) permits (but does not require) indemnification of expenses (including attorneys' fees) as well as judgments and amounts paid in settlement in third-party actions (i.e., actions not brought by or in the right of the corporation) if the applicable standard is met. Section 145(b) permits (but does not require) indemnification of expenses (including attorneys' fees) but not judgments and amounts paid in settlement in derivative actions (i.e., actions brought by or in the right of the corporation) if the applicable standard is met. Thus, Section 145 draws a basic distinction between third-party and derivative actions. Section 145(c) requires indemnification of expenses (including attorneys' fees) if the indemnitee is successful on the merits or otherwise in a proceeding referred to in Section 145(a) or (b). Section 145(d) sets forth requirements for determining whether indemnification is permitted under Section 145(a) or (b). Section 145(e) permits advancement of expenses before final disposition of a proceeding subject to certain conditions. Section 145(f) provides that the statutory rights and procedures regarding indemnification are not exclusive, thus permitting indemnification under bylaws, agreements and other circumstances beyond the limits specified in Section 145. Section 145(g) allows a corporation to obtain directors' and officers' liability insurance ("D&O insurance"). Sections 145(h) through (k) address various other aspects of indemnification, including provisions relating to survivorship of the obligations of the indemnifying corporation, survivorship of rights to indemnification upon ceasing to be a director, officer, employee or agent and the exclusive jurisdiction of the Delaware Court of Chancery over indemnification proceedings.

Section 102(b)(7) of the Delaware General Corporation Law is the other relevant statutory authority relating to the protection of directors from monetary liability. Section 102(b)(7) allows inclusion of a provision in the certificate of incorporation that eliminates or limits (i.e., caps) the personal liability of directors to the corporation or its stockholders for monetary damages for breach of fiduciary duty. The statute, however, prohibits limitations on director liability (i) for breach of a director's duty of loyalty, (ii) for acts or omissions not in good faith or involving intentional misconduct or knowing violation of law, (iii) for willful or negligent conduct in paying dividends or repurchasing stock out of other than lawfully available funds, or (iv) for any transaction from which a director derives an improper personal benefit. In essence, Section 102(b)(7) allows a corporation to protect its directors from monetary liability for duty of care violations

As noted above, Section 145(f) provides that statutory indemnification rights are not exclusive of indemnification rights that may be provided by a bylaw provision, agreement or otherwise. As

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discussed below, although Section 145(f) could be read broadly to allow a corporation to grant by contract indemnification rights beyond those permitted by Section 145, cases and commentators suggest that contractual indemnification rights may be held unenforceable if they violate other statutes (including Section 145), court decisions or public policy. As a result, the enforceability of contracts that purport to grant indemnification rights beyond those permitted by Section 145 is at best unclear. (For further discussion, see comment under Section 2 below.)

An indemnification agreement may serve several purposes. First, and most importantly, it may provide more secure protection than a provision in a certificate of incorporation or bylaw because it cannot be amended without the approval of the indemnitee. Second, it can be used to make mandatory indemnification that is permissive under Section 145, to specify various procedures and presumptions that make indemnification more favorable to the indemnitee than is provided by Section 145 and to perhaps provide for indemnification rights that go beyond those that are expressly provided by Section 145. While such provisions could also be included in the Certificate of Incorporation or bylaws, an agreement permits different rights to be granted to specific directors, officers, employees and agents, rather than in a one size fits all approach.

Some companies choose to provide mandatory indemnification for directors (i.e., the company is required to indemnify a director if the applicable conditions are met) and discretionary indemnification for officers (i.e., indemnification is at the discretion of the company even if the applicable conditions are met). With respect to indemnification of directors, as discussed in the comment under Section 6(b), there may be no disinterested directors to consider approval of discretionary indemnification for directors. Accordingly, absent mandatory indemnification a board decision to indemnify itself may not be subject to the court deference under the business judgment rule. With respect to indemnification of officers, there may be situations (e.g., termination of employment, sexual harassment) where mandatory indemnification of officers would expose the Company to the possibility of funding the defense of litigation either brought by the Company or in which the Company wants to distance itself from the activities of the officer in question. Care should be taken to anticipate such situations.

Also note that if the company decides to indemnify directors but not officers, the indemnification agreement should make it clear that an employee director is indemnified only in his or her capacity as a director.

Section 145(g) specifically authorizes a corporation to obtain D&O insurance for directors and officers for liability asserted against them in such capacity or arising out of such status whether or not the corporation has the power to indemnify such persons against such liability under Section 145.

D&O insurance coverage is important for several reasons. First, even though indemnification may be permitted under Section 145, the corporation may be unwilling or unable to indemnify the individual. The former situation may arise after a change in corporate control where the corporation is unwilling to indemnify the individual. This may be the case, for example, if the director is the subject of litigation resulting from efforts to prevent the change in control. Alternative, a corporation may be unable to provide indemnification because it is insolvent. Under Chapter 11 of the Bankruptcy Code, for example, indemnification claims by directors or officers would generally be treated as unsecured claims payable only to the extent that other unsecured claims are payable as part of an approved plan of reorganization.

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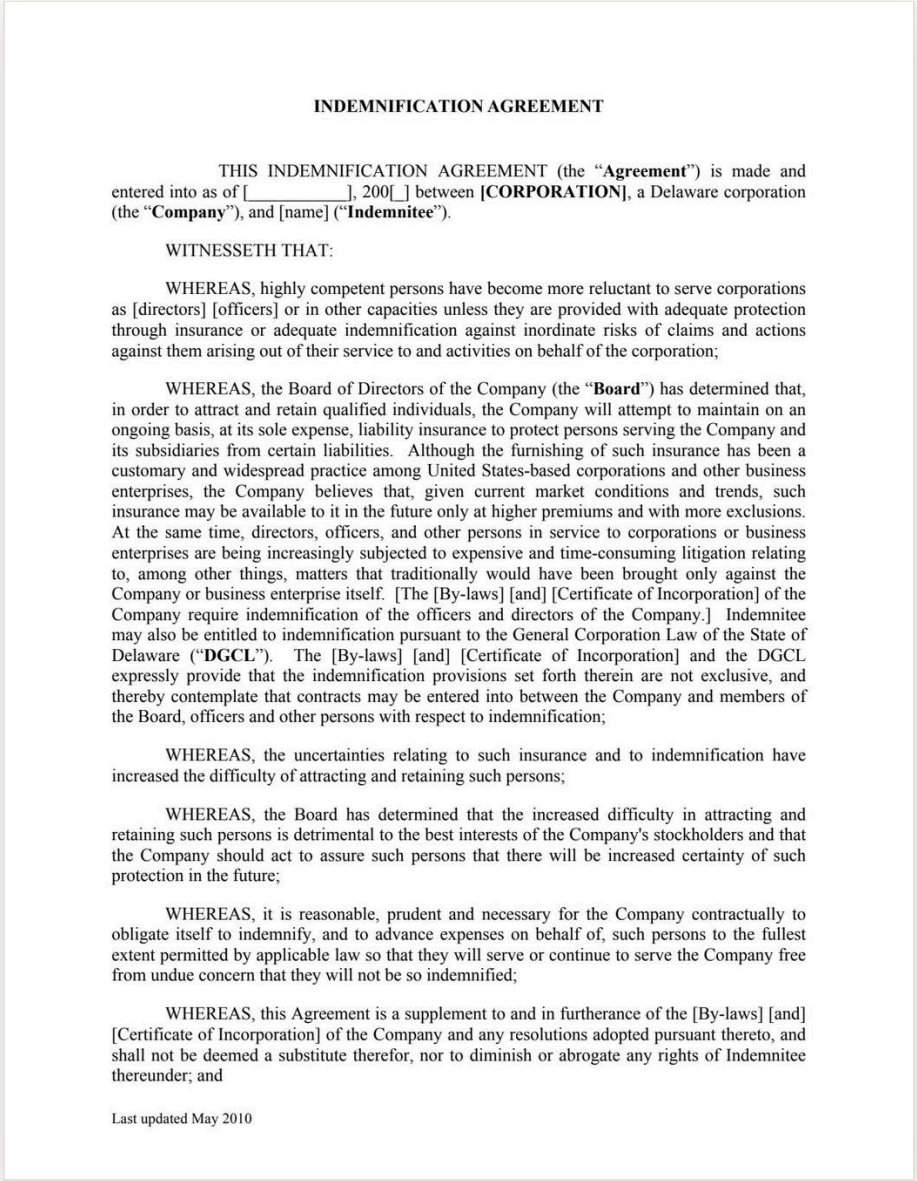
Second, D&O insurance may insure against liabilities where indemnification is not allowed under Section 145. This occurs most frequently in the context of derivative actions and securities law actions. In particular, Section 145(g) permits a corporation to obtain insurance for (i) judgments or amounts paid in settlement in derivative actions and (ii) for expenses incurred when a director has been adjudged liable in some respects, even though indemnification under such circumstances would not be allowed under Section 145(b). In addition, a D&O insurance policy may insure against liabilities under the Securities Act of 1933, as amended (the "1933 Act") and the Securities Exchange Act of 1934, as amended (the "1934 Act"), even though the Securities and Exchange Commission ("SEC") has taken the position that indemnification for liabilities under Section 11 of the 1933 Act are against public policy and courts have held that indemnification for violations of the 1933 and the 1934 Act are contrary to the public policy in certain circumstances. (See comment under Section 1(a) of the Agreement.) As a result, D&O insurance may be particularly important for publicly held companies where there is greater risk of liability for derivative actions and securities law claims.

However, D&O insurance policies generally contain a number of qualifications and limitations that narrow the scope of coverage. In particular, D&O insurance coverage is limited by applicable insurance law as well as public policy considerations. In addition, D&O insurance polices generally exclude certain conduct from coverage, including short-swing profit liability under Section 16(b) of the 1934 Act, unauthorized remuneration, personal profit to which the insured individual is not legally entitled, claims arising out of contests for corporate control and claims brought by corporations against their own directors and officers.

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INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT (the "**Agreement**") is made and entered into as of [_____], 200[_] between **[CORPORATION]**, a Delaware corporation (the "**Company**"), and [name] ("**Indemnitee**").

WITNESSETH THAT:

WHEREAS, highly competent persons have become more reluctant to serve corporations as [directors] [officers] or in other capacities unless they are provided with adequate protection through insurance or adequate indemnification against inordinate risks of claims and actions against them arising out of their service to and activities on behalf of the corporation;

WHEREAS, the Board of Directors of the Company (the "**Board**") has determined that, in order to attract and retain qualified individuals, the Company will attempt to maintain on an ongoing basis, at its sole expense, liability insurance to protect persons serving the Company and its subsidiaries from certain liabilities. Although the furnishing of such insurance has been a customary and widespread practice among United States-based corporations and other business enterprises, the Company believes that, given current market conditions and trends, such insurance may be available to it in the future only at higher premiums and with more exclusions. At the same time, directors, officers, and other persons in service to corporations or business enterprises are being increasingly subjected to expensive and time-consuming litigation relating to, among other things, matters that traditionally would have been brought only against the Company or business enterprise itself. [The [By-laws] [and] [Certificate of Incorporation] of the Company require indemnification of the officers and directors of the Company.] Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware ("**DGCL**"). The [By-laws] [and] [Certificate of Incorporation] and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the Board, officers and other persons with respect to indemnification;

WHEREAS, the uncertainties relating to such insurance and to indemnification have increased the difficulty of attracting and retaining such persons;

WHEREAS, the Board has determined that the increased difficulty in attracting and retaining such persons is detrimental to the best interests of the Company's stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future;

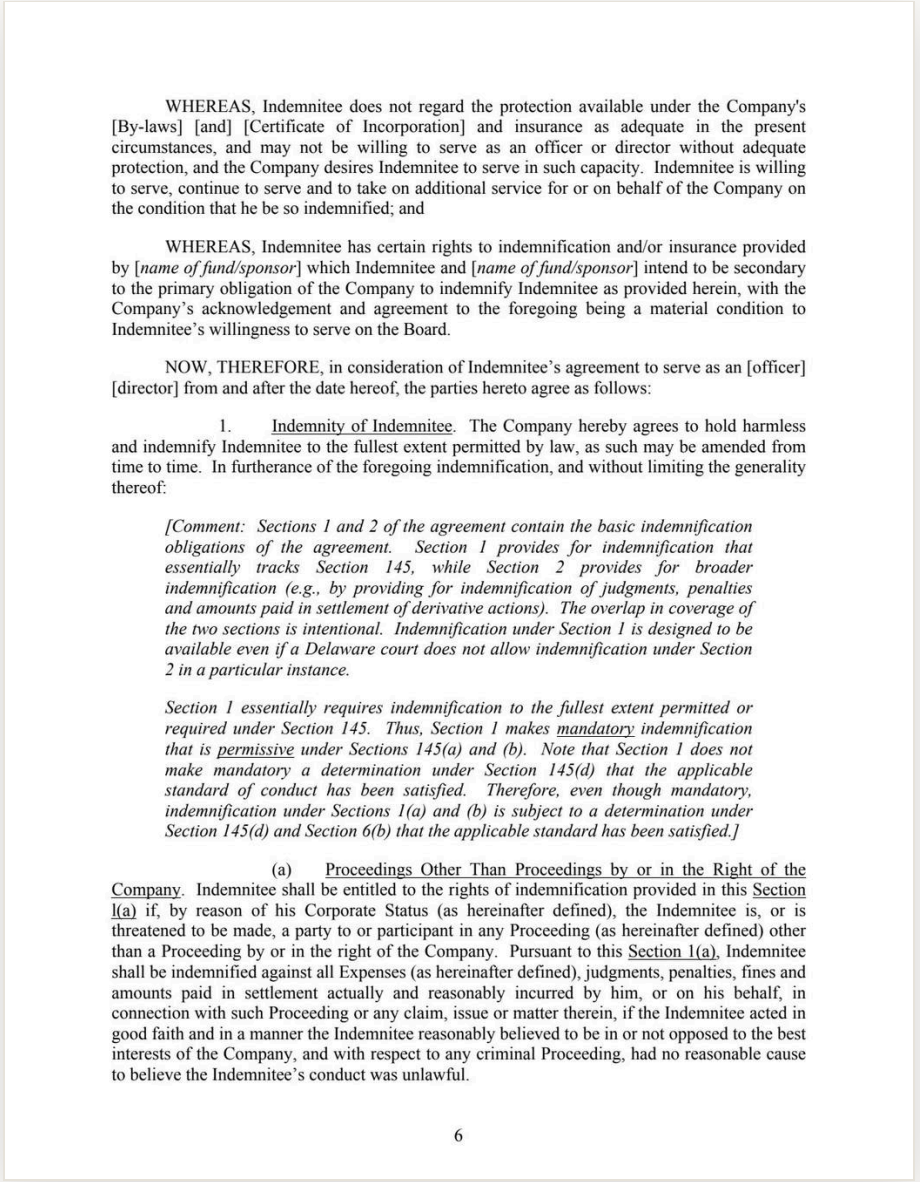
WHEREAS, it is reasonable, prudent and necessary for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified;

WHEREAS, this Agreement is a supplement to and in furtherance of the [By-laws] [and] [Certificate of Incorporation] of the Company and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and

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WHEREAS, Indemnitee does not regard the protection available under the Company's [By-laws] [and] [Certificate of Incorporation] and insurance as adequate in the present circumstances, and may not be willing to serve as an officer or director without adequate protection, and the Company desires Indemnitee to serve in such capacity. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that he be so indemnified; and

WHEREAS, Indemnitee has certain rights to indemnification and/or insurance provided by [*name of fund/sponsor*] which Indemnitee and [*name of fund/sponsor*] intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company's acknowledgement and agreement to the foregoing being a material condition to Indemnitee's willingness to serve on the Board.

NOW, THEREFORE, in consideration of Indemnitee's agreement to serve as an [officer] [director] from and after the date hereof, the parties hereto agree as follows:

1. Indemnity of Indemnitee. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent permitted by law, as such may be amended from time to time. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

[Comment: Sections 1 and 2 of the agreement contain the basic indemnification obligations of the agreement. Section 1 provides for indemnification that essentially tracks Section 145, while Section 2 provides for broader indemnification (e.g., by providing for indemnification of judgments, penalties and amounts paid in settlement of derivative actions). The overlap in coverage of the two sections is intentional. Indemnification under Section 1 is designed to be available even if a Delaware court does not allow indemnification under Section 2 in a particular instance.

Section 1 essentially requires indemnification to the fullest extent permitted or required under Section 145. Thus, Section 1 makes mandatory indemnification that is permissive under Sections 145(a) and (b). Note that Section 1 does not make mandatory a determination under Section 145(d) that the applicable standard of conduct has been satisfied. Therefore, even though mandatory, indemnification under Sections 1(a) and (b) is subject to a determination under Section 145(d) and Section 6(b) that the applicable standard has been satisfied.]

(a) Proceedings Other Than Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(a) if, by reason of his Corporate Status (as hereinafter defined), the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as hereinafter defined) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as hereinafter defined), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him, or on his behalf, in connection with such Proceeding or any claim, issue or matter therein, if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful.

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[Comment: Section 145(a) permits indemnification of officers, directors, employees or agents for attorneys' fees and other expenses as well as for judgments or amounts paid in settlement in civil cases. As noted above, Section 145(a) applies only to third-party actions and not to derivative actions. The person seeking indemnification must have acted in good faith and in a manner reasonably believed to be in the best interests of, or not opposed to the best interests of, the corporation in connection with the claim made against such person. In criminal cases, the indemnitee may be indemnified for fines and costs provided that, in addition to the foregoing standard of conduct, the indemnitee must not have had reasonable cause to believe that indemnitee's conduct was unlawful. Section 1(a) of the Agreement essentially tracks Section 145(a), except that it makes indemnification mandatory rather than permissive.

The distinction between third-party and derivative actions is critical to understanding the statutory framework. A derivative action is an action brought by a stockholder on behalf of the corporation to redress a wrong done by someone to the corporation. Therefore, the derivative action must be based upon an alleged injury to the corporation which caused harm to the corporation itself, and to the stockholder only derivatively through their ownership of stock in the corporation. In some cases, there can be uncertainty as to whether a particular action constitutes a derivative action (i.e., to address a breach of a duty to the corporation) or a third-party action (i.e., a direct harm to the third party plaintiff).

Proceedings that allege breach of fiduciary duties of officers and directors to the corporation often are derivative actions, and actions against officers and directors for violations of federal securities laws (e.g., actions alleging a violation of Section 11 of the 1933 Act in connection with a public offering of securities or Rule 10b-5 in connection with an offer or sale of securities) would normally be third-party actions. Therefore, absent public policy concerns, an action against a director or officer alleging federal securities law liability would fall within the relatively favorable third-party indemnification provisions of Section 145(a). As noted above, Section 145(a) permits indemnity even if the director or officer loses the case, so long as the indemnitee meets the applicable standard following a determination pursuant to Section 145(d).

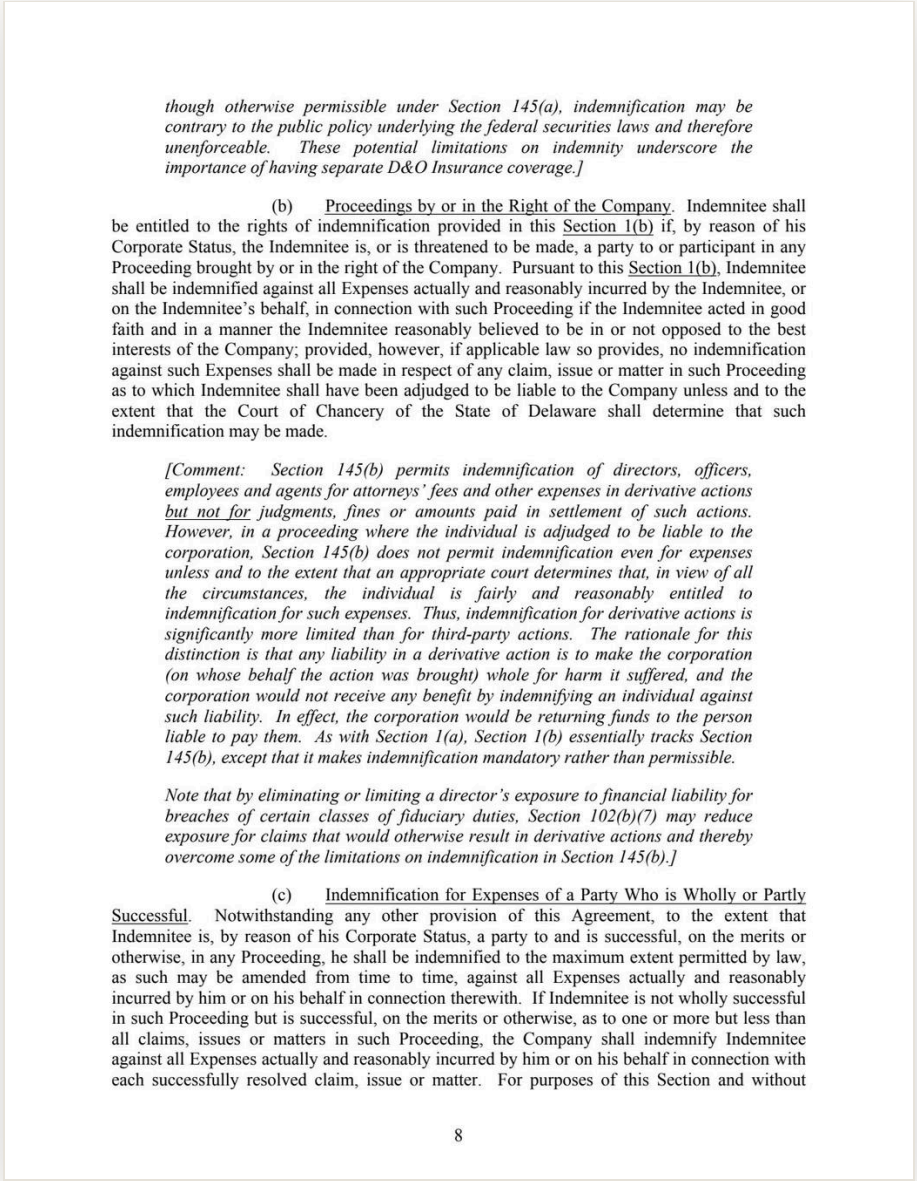
The SEC has taken the position, however, that even if a director or officer meets the relevant standard of conduct for indemnification under corporate law, corporate indemnification for liabilities arising under the 1933 Act is against public policy. In addition, courts have held that indemnification for violations of either the 1933 Act or the 1934 Act is contrary to public policy, at least for violations based upon culpable behavior greater than ordinary negligence.

These public policy limitations may apply to a variety of sources of liability under the 1933 Act and 1934 Act, including (i) Section 12 of the 1933 Act for offers and sales of securities, (ii) Rule 10b-5 of the 1934 Act for violation of antifraud provisions, (iii) Section 16(b) of the 1934 Act for short–swing trading profits, (iv) Section 15 of the 1933 Act and Section 20 of the 1934 Act for liability of control persons and Section 18 of the 1934 Act for misleading statements. Thus, even

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though otherwise permissible under Section 145(a), indemnification may be contrary to the public policy underlying the federal securities laws and therefore unenforceable. These potential limitations on indemnity underscore the importance of having separate D&O Insurance coverage.]

(b) Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of his Corporate Status, the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by the Indemnitee, or on the Indemnitee's behalf, in connection with such Proceeding if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

[Comment: Section 145(b) permits indemnification of directors, officers, employees and agents for attorneys' fees and other expenses in derivative actions but not for judgments, fines or amounts paid in settlement of such actions. However, in a proceeding where the individual is adjudged to be liable to the corporation, Section 145(b) does not permit indemnification even for expenses unless and to the extent that an appropriate court determines that, in view of all the circumstances, the individual is fairly and reasonably entitled to indemnification for such expenses. Thus, indemnification for derivative actions is significantly more limited than for third-party actions. The rationale for this distinction is that any liability in a derivative action is to make the corporation (on whose behalf the action was brought) whole for harm it suffered, and the corporation would not receive any benefit by indemnifying an individual against such liability. In effect, the corporation would be returning funds to the person liable to pay them. As with Section 1(a), Section 1(b) essentially tracks Section 145(b), except that it makes indemnification mandatory rather than permissible.

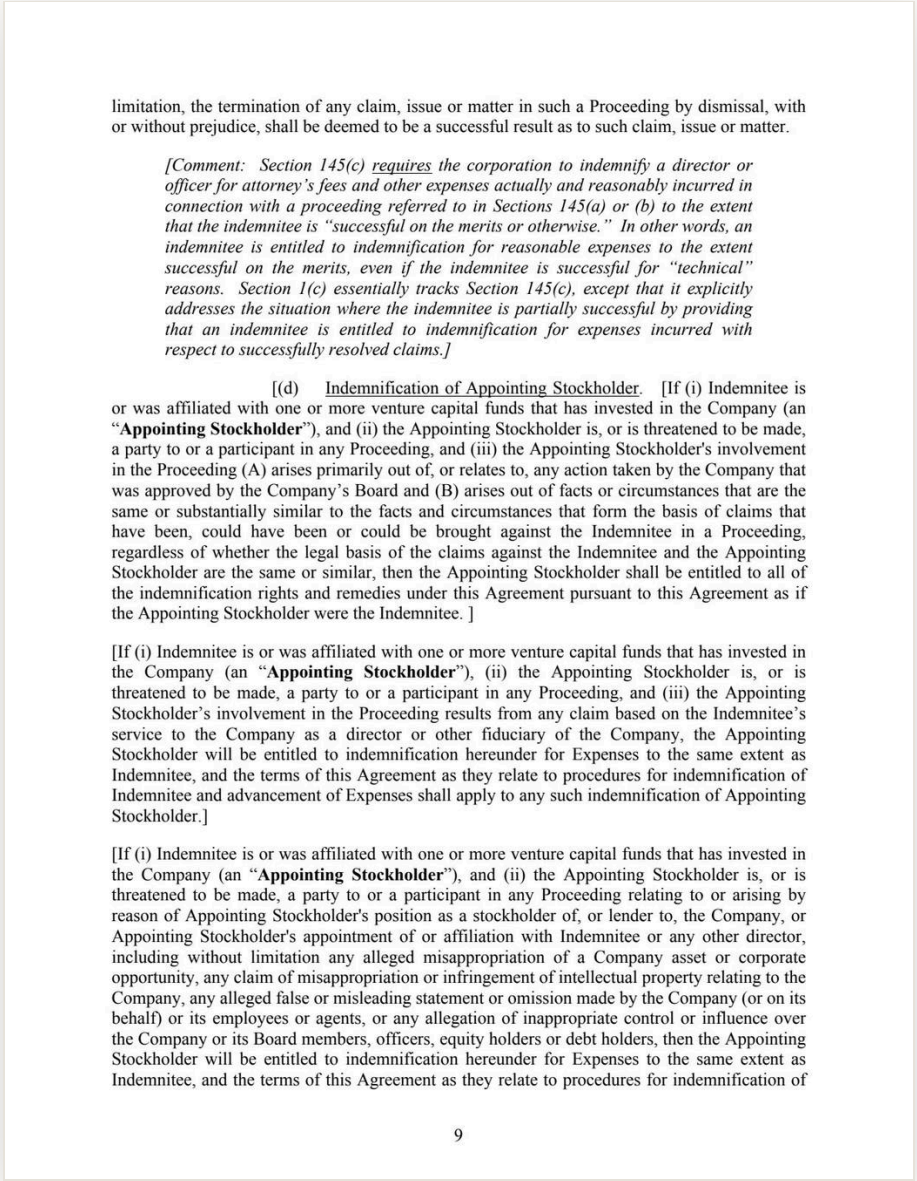
Note that by eliminating or limiting a director's exposure to financial liability for breaches of certain classes of fiduciary duties, Section 102(b)(7) may reduce exposure for claims that would otherwise result in derivative actions and thereby overcome some of the limitations on indemnification in Section 145(b).]

(c) Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or on his behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section and without

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limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

[Comment: Section 145(c) requires the corporation to indemnify a director or officer for attorney's fees and other expenses actually and reasonably incurred in connection with a proceeding referred to in Sections 145(a) or (b) to the extent that the indemnitee is "successful on the merits or otherwise." In other words, an indemnitee is entitled to indemnification for reasonable expenses to the extent successful on the merits, even if the indemnitee is successful for "technical" reasons. Section 1(c) essentially tracks Section 145(c), except that it explicitly addresses the situation where the indemnitee is partially successful by providing that an indemnitee is entitled to indemnification for expenses incurred with respect to successfully resolved claims.]

[(d) Indemnification of Appointing Stockholder. [If (i) Indemnitee is or was affiliated with one or more venture capital funds that has invested in the Company (an "**Appointing Stockholder**"), and (ii) the Appointing Stockholder is, or is threatened to be made, a party to or a participant in any Proceeding, and (iii) the Appointing Stockholder's involvement in the Proceeding (A) arises primarily out of, or relates to, any action taken by the Company that was approved by the Company's Board and (B) arises out of facts or circumstances that are the same or substantially similar to the facts and circumstances that form the basis of claims that have been, could have been or could be brought against the Indemnitee in a Proceeding, regardless of whether the legal basis of the claims against the Indemnitee and the Appointing Stockholder are the same or similar, then the Appointing Stockholder shall be entitled to all of the indemnification rights and remedies under this Agreement pursuant to this Agreement as if the Appointing Stockholder were the Indemnitee.]

[If (i) Indemnitee is or was affiliated with one or more venture capital funds that has invested in the Company (an "**Appointing Stockholder**"), (ii) the Appointing Stockholder is, or is threatened to be made, a party to or a participant in any Proceeding, and (iii) the Appointing Stockholder's involvement in the Proceeding results from any claim based on the Indemnitee's service to the Company as a director or other fiduciary of the Company, the Appointing Stockholder will be entitled to indemnification hereunder for Expenses to the same extent as Indemnitee, and the terms of this Agreement as they relate to procedures for indemnification of Indemnitee and advancement of Expenses shall apply to any such indemnification of Appointing Stockholder.]

[If (i) Indemnitee is or was affiliated with one or more venture capital funds that has invested in the Company (an "**Appointing Stockholder**"), and (ii) the Appointing Stockholder is, or is threatened to be made, a party to or a participant in any Proceeding relating to or arising by reason of Appointing Stockholder's position as a stockholder of, or lender to, the Company, or Appointing Stockholder's appointment of or affiliation with Indemnitee or any other director, including without limitation any alleged misappropriation of a Company asset or corporate opportunity, any claim of misappropriation or infringement of intellectual property relating to the Company, any alleged false or misleading statement or omission made by the Company (or on its behalf) or its employees or agents, or any allegation of inappropriate control or influence over the Company or its Board members, officers, equity holders or debt holders, then the Appointing Stockholder will be entitled to indemnification hereunder for Expenses to the same extent as Indemnitee, and the terms of this Agreement as they relate to procedures for indemnification of

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Indemnitee and advancement of Expenses shall apply to any such indemnification of Appointing Stockholder.]

[The rights provided to the Appointing Stockholder under this Section 2 shall (i) be suspended during any period during which the Appointing Stockholder does not have a representative on the Company's Board and (ii) terminate on an initial public offering of the Company's Common Stock; provided, however, that in the event of any such suspension or termination, the Appointing Stockholder's rights to indemnification will not be suspended or terminated with respect to any Proceeding based in whole or in part on facts and circumstances occurring at any time prior to such suspension or termination regardless of whether the Proceeding arises before or after such suspension or termination.] The Company and Indemnitee agree that the Appointing Stockholder is an express third party beneficiary of the terms of this Section 1(d).]

[The above language presents three alternatives, with the third providing the broadest indemnification of the venture capital fund.]

2. Additional Indemnity. In addition to, and without regard to any limitations on, the indemnification provided for in Section 1 of this Agreement, the Company shall and hereby does indemnify and hold harmless Indemnitee against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf if, by reason of his Corporate Status, he is, or is threatened to be made, a party to or participant in any Proceeding (including a Proceeding by or in the right of the Company), including, without limitation, all liability arising out of the negligence or active or passive wrongdoing of Indemnitee. The only limitation that shall exist upon the Company's obligations pursuant to this Agreement shall be that the Company shall not be obligated to make any payment to Indemnitee that is finally determined (under the procedures, and subject to the presumptions, set forth in Sections 6 and 7 hereof) to be unlawful.

[Comment: Section 2 provides for additional indemnification beyond the scope of indemnification provided by Section 1. For example, Section 2 provides for mandatory indemnification of judgments, penalties, fines and amounts paid in settlement of derivative actions. The only limitation is that no indemnification is required to the extent that it is finally determined to be unlawful in accordance with procedures and presumptions set forth in the agreement.

The scope of additional protection provided by Section 2 is unclear. As noted above, although Section 145(f) expressly permits contractual indemnification rights beyond the statutory rights provided for in Section 145, the enforceability of such contractual rights may be limited by statute, court decision and public policy.

Contractual indemnification rights beyond Section 145 can be classified into different categories that may be helpful in assessing their enforceability. Some contractual rights make indemnification which is permissive under Section 145 mandatory (e.g., a provision requiring indemnification relating to third-party actions to the extent permitted under Section 145(a)). Other contractual rights attempt to clarify or supplement statutory rights without significantly altering those rights (e.g., a procedural requirement that a corporation advance expenses within a certain period of time following a proper undertaking from the

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indemnitee or defining "independent legal counsel" for purposes of making a determination under Section 145(d)). Still other contractual rights specify policies, procedures and presumptions that have the purpose or effect of enhancing indemnification rights beyond the provisions of Section 145 (e.g., a presumption that an individual has met the applicable standard of care or a provision that a determination that the applicable standard of care is deemed to be met if no such determination is made within a specified period). Finally, some contractual indemnification rights appear to be inconsistent with the limits on indemnification specified in Section 145 (e.g., a provision indemnifying for judgments in derivative actions even if the indemnitee has engaged in clearly culpable behavior).

One commentator has noted: "There is no case which spells out the precise perimeters of the extent to which an indemnification agreement . . . may go in providing indemnification rights . . . under Section 145(f) . . . Although there is no case law on point, it is probable that a Delaware court would not allow indemnification under a . . . contract when the proposed indemnification is prohibited by law or public policy. . . . Nevertheless, Section 145(f) does provide support for wide-ranging agreements which broaden or enlarge upon indemnification rights granted in the various other subsections of Section 145, although provisions in such a[n] . . . agreement which are contrary to limitations or prohibitions set forth in other subsections may be held unenforceable if they violate other statutes, court decisions or public policies. . . . For example, because of the limitations of Section 145(b), a corporation may not be able to indemnify under the authority of Section 145(f) for judgments or amounts paid in settlements in derivative suits. . . . On the other hand, Section 145(f) may authorize the adoption of various procedures and presumptions to make the process of indemnification more favorable to the indemnitee without violating that statute." See Balotti and Finkelstein, Delaware Law of Corporation and Business Organizations, § 4.16 at 4-345 to 4-350.

Sometimes a contract providing for indemnification beyond Section 145 will itself contain limitations on the scope of additional indemnification. These limitations might include prohibitions on indemnification for (i) violations of insider trading laws such as Section 16(b) of the 1934 Act, (ii) conduct that is determined to be knowingly fraudulent or deliberately dishonest or to constitute willful misconduct, (iii) actions brought by the corporation, (iv) actions brought by the indemnitee without board approval and (v) actions relating to proxy contests in opposition to the board. See Section 9 below.]

3. Contribution.

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[Comment: The provisions regarding contribution are primarily intended to provide an alternative means of protecting individuals from liability for some types of federal securities law violations where indemnification is unenforceable for public policy reasons. For example, Section 11(f) of the 1933 Act explicitly recognizes contribution in cases where one or more persons are or may be subject to the same liability under Section 11, even though the SEC takes the position that indemnification for Section 11 violations is contrary to public policy.]

(a) Whether or not the indemnification provided in Sections 1 and 2 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such action, suit or proceeding without requiring Indemnitee to contribute to such payment and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not enter into any settlement of any action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding) unless such settlement provides for a full and final release of all claims asserted against Indemnitee.

[Comment: Section 3(a), in effect, provides that where the corporation and the individual are jointly liable (or if joined, would be), the corporation shall contribute 100% of the liability, and the individual would not be required to contribute anything. Section 3(a) also prohibits the corporation from entering into any settlement that does not completely release the individual.]

(b) Without diminishing or impairing the obligations of the Company set forth in the preceding subparagraph, if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction or events from which such action, suit or proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the transaction or events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which applicable law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

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[Comment: Section 3(b) provides an alternative method of allocating the amount contributed by the corporation and the individual in the event that the method of allocation in Section 3(a) (i.e., 100% payment by the corporation) is not enforceable. In particular, Section 3(b) provides for allocation based on the relative benefits received from the transaction giving rise to liability, and if required to conform to law, the relative fault of the parties.]

(c) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution which may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

[Comment: Section 3(c) attempts to indemnify the indemnitee against contribution sought from other third parties.]

(d) To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

[Comment: Section 3(d) provides for contribution by the Company even if the Company is not held jointly liable based on the relative benefit to the Company of the conduct of the indemnitee giving rise to the loss or expenses incurred by the indemnitee and /or the relative fault of the Company and the indemnitee in connection with the matter in question.]

3. Indemnification for Expenses of a Witness. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a witness, or is made (or asked) to respond to discovery requests, in any Proceeding to which Indemnitee is not a party, he shall be indemnified against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith.

[Comment: Section 4 indemnifies individuals for costs and expenses in serving as a witness in any proceeding relating to such person's service to the corporation.]

4. Advancement of Expenses. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within thirty (30) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that

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Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 5 shall be unsecured and interest free.

[Comment: As noted above, Section 145(e) provides for the advancement of attorney's fees and other expenses to officers and directors in connection with any civil, criminal, administrative or investigative proceeding. Section 145(e) conditions any advance upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it is ultimately determined that such individual is not entitled to be indemnified by the corporation.

Section 5 is modeled after Section 145(e), except that it makes the corporation's duty to advance expenses mandatory rather than permissive. Section 5 also supplements Section 145(e) in various respects. Section 5 requires payment within 30 days after receipt of a request for advancement (provided the request includes a statement of the expenses and an undertaking to repay any advance expenses if it is determined that the indemnitee is not entitled to indemnification against such expenses).

5. Procedures and Presumptions for Determination of Entitlement to Indemnification. It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under the DGCL and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

[Comment: Section 6 specifies policies and procedures to be applied in determining whether an individual is entitled to indemnification under the Agreement. As with other provisions of the agreement, these policies and procedures are not specifically authorized by Section 145. As a result, the rights and procedures specified in Section 6 may be unenforceable. See the comment under Section 2 of the Agreement above. Note, however, that unlike indemnification agreements customarily entered into in financings (e.g., between the issuer and underwriters in an underwritten public offering), this Agreement (and most indemnification agreements) do not delineate defense procedures.]

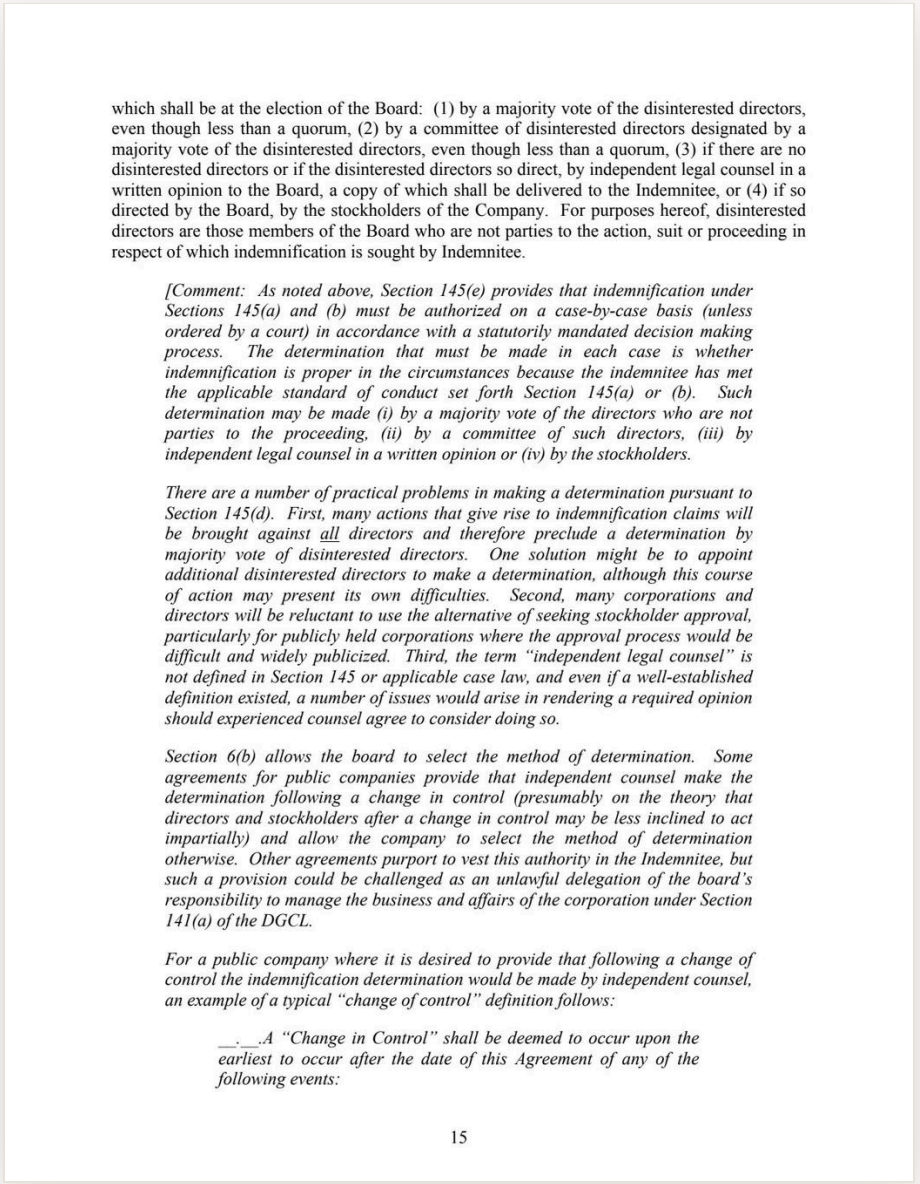
(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. Notwithstanding the foregoing, any failure of Indemnitee to provide such a request to the Company, or to provide such a request in a timely fashion, shall not relieve the Company of any liability that it may have to Indemnitee unless, and to the extent that, such failure actually and materially prejudices the interests of the Company.

(b) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 6(a) hereof, a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following four methods,

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which shall be at the election of the Board: (1) by a majority vote of the disinterested directors, even though less than a quorum, (2) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum, (3) if there are no disinterested directors or if the disinterested directors so direct, by independent legal counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee, or (4) if so directed by the Board, by the stockholders of the Company. For purposes hereof, disinterested directors are those members of the Board who are not parties to the action, suit or proceeding in respect of which indemnification is sought by Indemnitee.

[Comment: As noted above, Section 145(e) provides that indemnification under Sections 145(a) and (b) must be authorized on a case-by-case basis (unless ordered by a court) in accordance with a statutorily mandated decision making process. The determination that must be made in each case is whether indemnification is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth Section 145(a) or (b). Such determination may be made (i) by a majority vote of the directors who are not parties to the proceeding, (ii) by a committee of such directors, (iii) by independent legal counsel in a written opinion or (iv) by the stockholders.

There are a number of practical problems in making a determination pursuant to Section 145(d). First, many actions that give rise to indemnification claims will be brought against all directors and therefore preclude a determination by majority vote of disinterested directors. One solution might be to appoint additional disinterested directors to make a determination, although this course of action may present its own difficulties. Second, many corporations and directors will be reluctant to use the alternative of seeking stockholder approval, particularly for publicly held corporations where the approval process would be difficult and widely publicized. Third, the term "independent legal counsel" is not defined in Section 145 or applicable case law, and even if a well-established definition existed, a number of issues would arise in rendering a required opinion should experienced counsel agree to consider doing so.

Section 6(b) allows the board to select the method of determination. Some agreements for public companies provide that independent counsel make the determination following a change in control (presumably on the theory that directors and stockholders after a change in control may be less inclined to act impartially) and allow the company to select the method of determination otherwise. Other agreements purport to vest this authority in the Indemnitee, but such a provision could be challenged as an unlawful delegation of the board's responsibility to manage the business and affairs of the corporation under Section 141(a) of the DGCL.

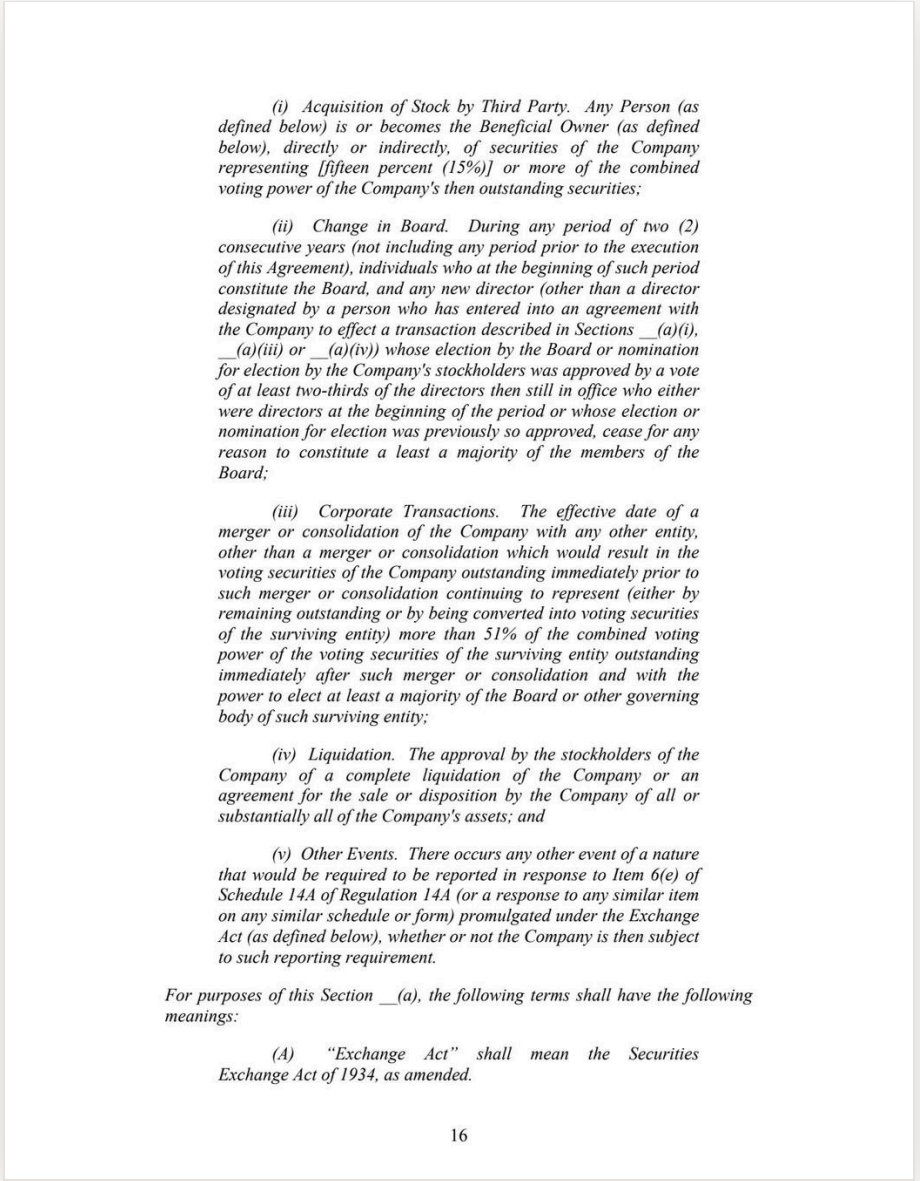
For a public company where it is desired to provide that following a change of control the indemnification determination would be made by independent counsel, an example of a typical "change of control" definition follows:

__.__.A "Change in Control" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

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(i) Acquisition of Stock by Third Party. Any Person (as defined below) is or becomes the Beneficial Owner (as defined below), directly or indirectly, of securities of the Company representing [fifteen percent (15%)] or more of the combined voting power of the Company's then outstanding securities;

(ii) Change in Board. During any period of two (2) consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections __(a)(i), __(a)(iii) or __(a)(iv)) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a least a majority of the members of the Board;

(iii) Corporate Transactions. The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 51% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the Board or other governing body of such surviving entity;

(iv) Liquidation. The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; and

(v) Other Events. There occurs any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or a response to any similar item on any similar schedule or form) promulgated under the Exchange Act (as defined below), whether or not the Company is then subject to such reporting requirement.

For purposes of this Section __(a), the following terms shall have the following meanings:

(A) "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended.

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(B) "Person" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Exchange Act; provided, however, that Person shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(C) "Beneficial Owner" shall have the meaning given to such term in Rule 13d-3 under the Exchange Act; provided, however, that Beneficial Owner shall exclude any Person otherwise becoming a Beneficial Owner by reason of the stockholders of the Company approving a merger of the Company with another entity.]

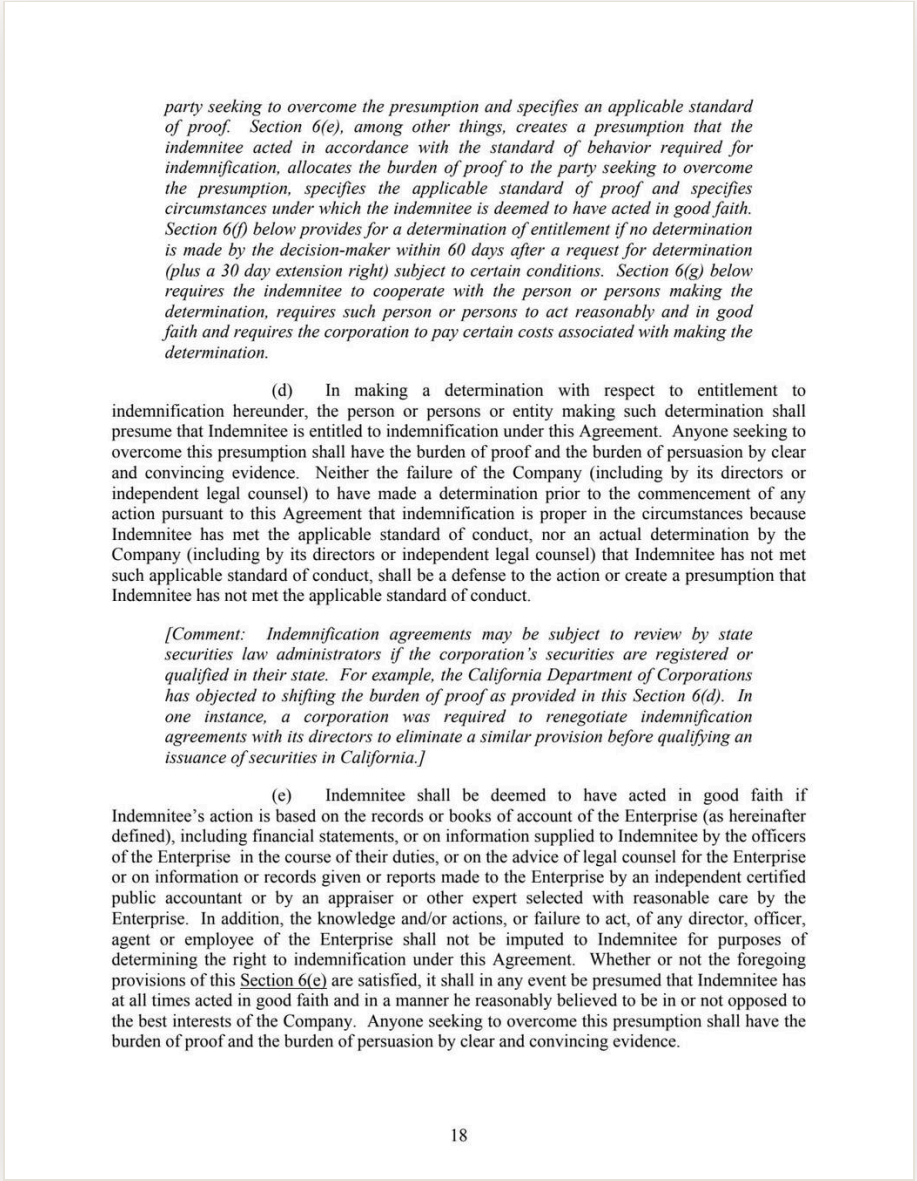
(c) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 6(b) hereof, the Independent Counsel shall be selected as provided in this Section 6(c). The Independent Counsel shall be selected by the Board. Indemnitee may, within 10 days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "**Independent Counsel**" as defined in Section 13 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after submission by Indemnitee of a written request for indemnification pursuant to Section 6(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of competent jurisdiction for resolution of any objection which shall have been made by the Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 6(b) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 6(b) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 6(c), regardless of the manner in which such Independent Counsel was selected or appointed.

[Comment: Sections 6(c) through (g) specify procedures and presumptions that apply in making a determination of entitlement to indemnification. Section 6(c) gives the Board the right to select independent legal counsel, subject to an objection procedure. Some public company agreements vest the ability to select the Independent Counsel in the Indemnitee after a change of control; but such a provision could be challenged as an unlawful delegation of the board's responsibility to manage the business and affairs of the corporation under Section 141(a) of the DGCL. Section 6(d) below creates a presumption that the indemnitee is entitled to indemnification, allocates the burden of proof to the

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party seeking to overcome the presumption and specifies an applicable standard of proof. Section 6(e), among other things, creates a presumption that the indemnitee acted in accordance with the standard of behavior required for indemnification, allocates the burden of proof to the party seeking to overcome the presumption, specifies the applicable standard of proof and specifies circumstances under which the indemnitee is deemed to have acted in good faith. Section 6(f) below provides for a determination of entitlement if no determination is made by the decision-maker within 60 days after a request for determination (plus a 30 day extension right) subject to certain conditions. Section 6(g) below requires the indemnitee to cooperate with the person or persons making the determination, requires such person or persons to act reasonably and in good faith and requires the corporation to pay certain costs associated with making the determination.

(d) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence. Neither the failure of the Company (including by its directors or independent legal counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its directors or independent legal counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

[Comment: Indemnification agreements may be subject to review by state securities law administrators if the corporation's securities are registered or qualified in their state. For example, the California Department of Corporations has objected to shifting the burden of proof as provided in this Section 6(d). In one instance, a corporation was required to renegotiate indemnification agreements with its directors to eliminate a similar provision before qualifying an issuance of securities in California.]

(e) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise (as hereinafter defined), including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 6(e) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

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(f) If the person, persons or entity empowered or selected under Section 6 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within sixty (60) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; provided, however, that such 60-day period may be extended for a reasonable time, not to exceed an additional thirty (30) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided, further, that the foregoing provisions of this Section 6(g) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 6(b) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five (75) days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(g) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board or stockholder of the Company shall act reasonably and in good faith in making a determination regarding the Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(h) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

[Comment: Section 6(h) creates a presumption that any resolution of a claim other than by adverse judgment against the Indemnitee (including a settlement, regardless of whether money is paid) constitutes being "successful on the merits or otherwise" for purposes of Section 145(c). Section 6(h) also allocates the

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burden of proof to the party seeking to overcome the presumption and specifies the standard of proof in overcoming the presumption. If enforceable, this provision is particularly helpful because it would allow for mandatory indemnification pursuant to Section 145(c).]

(i) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his conduct was unlawful.

6. Remedies of Indemnitee.

(a) In the event that (i) a determination is made pursuant to Section 6 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 5 of this Agreement, (iii) no determination of entitlement to indemnification is made pursuant to Section 6(b) of this Agreement within 90 days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within ten (10) days after receipt by the Company of a written request therefor or (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 6 of this Agreement, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, of Indemnitee's entitlement to such indemnification. Indemnitee shall commence such proceeding seeking an adjudication within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 7(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.

[Comment: Section 7(a) provides for a right of adjudication before a Delaware court in the event of certain adverse results under the Agreement.]

(b) In the event that a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 7 shall be conducted in all respects as a de novo trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 6(b).

[Comment: Sections 7(b) through 7(e) seek to extend statutory indemnification rights pursuant to Section 145(f).]

(c) If a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 7, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification, or (ii) a prohibition of such indemnification under applicable law.

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(d) In the event that Indemnitee, pursuant to this Section 7, seeks a judicial adjudication of his rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on his behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 13 of this Agreement) actually and reasonably incurred by him in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 7 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. The Company shall indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within ten (10) days after receipt by the Company of a written request therefore) advance, to the extent not prohibited by law, such expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advance of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

7. Non-Exclusivity; Survival of Rights; Insurance; Primacy of Indemnification; Subrogation.

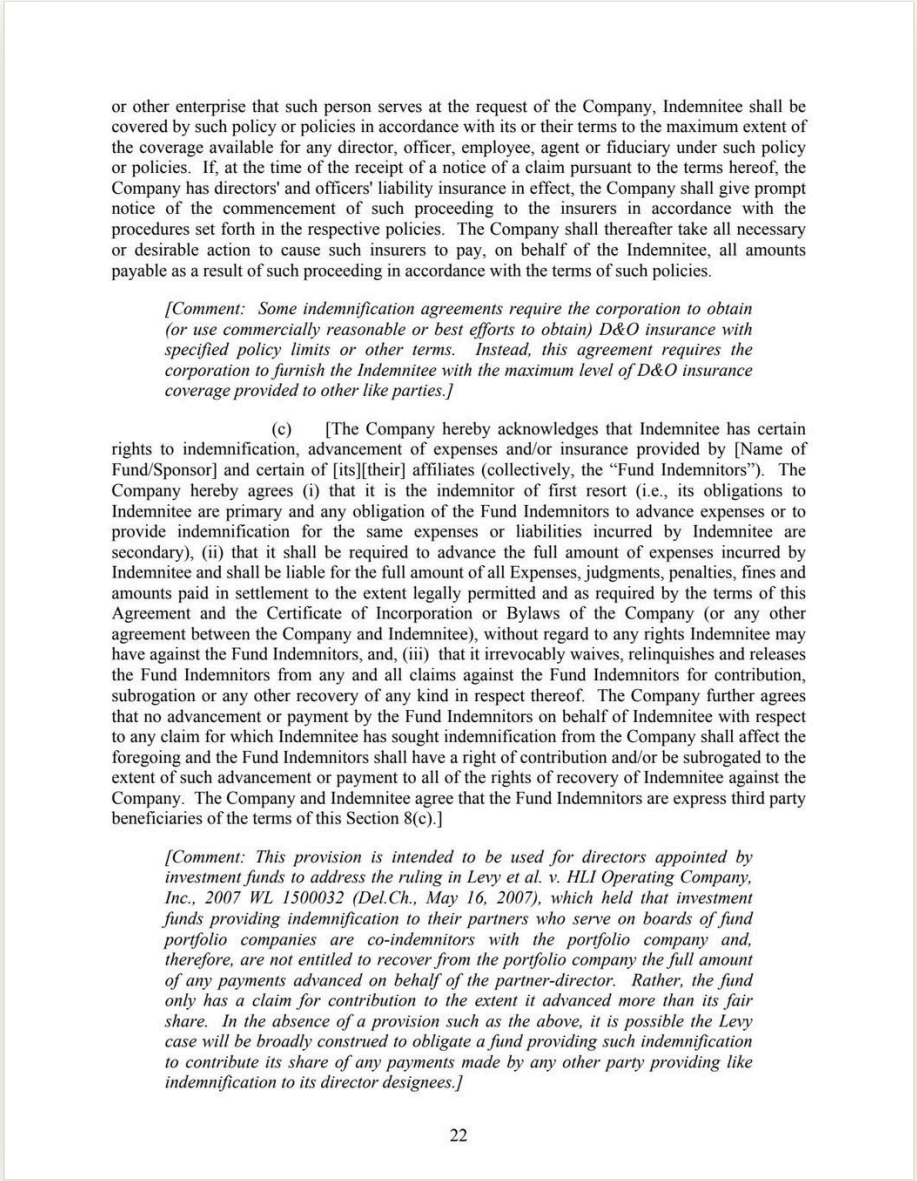
(a) The rights of indemnification as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation, the By-laws, any agreement, a vote of stockholders, a resolution of directors of the Company, or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the DGCL, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Certificate of Incorporation, By-laws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents or fiduciaries of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan

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or other enterprise that such person serves at the request of the Company, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any director, officer, employee, agent or fiduciary under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

[Comment: Some indemnification agreements require the corporation to obtain (or use commercially reasonable or best efforts to obtain) D&O insurance with specified policy limits or other terms. Instead, this agreement requires the corporation to furnish the Indemnitee with the maximum level of D&O insurance coverage provided to other like parties.]

(c) [The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by [Name of Fund/Sponsor] and certain of [its][their] affiliates (collectively, the "Fund Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Certificate of Incorporation or Bylaws of the Company (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors, and, (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 8(c).]

[Comment: This provision is intended to be used for directors appointed by investment funds to address the ruling in Levy et al. v. HLI Operating Company, Inc., 2007 WL 1500032 (Del.Ch., May 16, 2007), which held that investment funds providing indemnification to their partners who serve on boards of fund portfolio companies are co-indemnitors with the portfolio company and, therefore, are not entitled to recover from the portfolio company the full amount of any payments advanced on behalf of the partner-director. Rather, the fund only has a claim for contribution to the extent it advanced more than its fair share. In the absence of a provision such as the above, it is possible the Levy case will be broadly construed to obligate a fund providing such indemnification to contribute its share of any payments made by any other party providing like indemnification to its director designees.]

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(d) Except as provided in paragraph (c) above, in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee (other than against the Fund Indemnitors), who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e) Except as provided in paragraph (c) above, the Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

[Comment: This provision integrates indemnification under the agreement with indemnification from other sources by providing that payments under the agreement shall be offset by payments from other sources, other than from the Fund Indemnitors as provided in paragraph (c).]

(f) Except as provided in paragraph (c) above, the Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise.

8. Exception to Right of Indemnification. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any claim made against Indemnitee:

(a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision, provided, that the foregoing shall not affect the rights of Indemnitee or the Fund Indemnitors set forth in Section 8(c) above; or

(b) for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of state statutory law or common law; or

(c) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (i) the Board authorized the Proceeding (or any part of any Proceeding) prior to its initiation or (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law.

[Comment: This provision is designed to prevent the indemnitee from being indemnified for actions brought by the indemnitee except as otherwise provided.

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as well as for liability under Section 16(b) of the 1934 Act and where payment has already been made under an insurance policy.]

9. Duration of Agreement. All agreements and obligations of the Company contained herein shall continue during the period Indemnitee is an officer or director of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) [consider extending for several years after term of service, even if claim has not yet been paid] and shall continue thereafter so long as Indemnitee shall be subject to any Proceeding (or any proceeding commenced under Section 7 hereof) by reason of his Corporate Status, whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement. [This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), assigns, spouses, heirs, executors and personal and legal representatives.]

10. Security. To the extent requested by Indemnitee and approved by the Board, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of the Indemnitee.

11. Enforcement.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as an officer or director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as an officer or director of the Company.

(b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

(c) The Company shall not seek from a court, or agree to, a "bar order" which would have the effect of prohibiting or limiting the Indemnitee's rights to receive advancement of expenses under this Agreement.

[Comment: See In re HealthSouth Corp. Securities Litigation, 572 F.3d 854 (11th Cir. 2009).]

12. Definitions. For purposes of this Agreement:

(a) "**Corporate Status**" describes the status of a person who is or was a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.

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(b) "**Disinterested Director**" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(c) "**Enterprise**" shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.

(d) "**Expenses**" shall include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding, or responding to, or objecting to, a request to provide discovery in any Proceeding. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding [and any federal, state, local or foreign taxes imposed on the Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement], including without limitation the premium, security for, and other costs relating to any cost bond, supersede as bond, or other appeal bond or its equivalent. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(e) "**Independent Counsel**" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(f) "**Proceeding**" includes any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of his or her Corporate Status, by reason of any action taken by him or of any inaction on his part while acting in his or her Corporate Status; in each case whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to Section 7 of this Agreement to enforce his rights under this Agreement.

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13. Severability. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision. [Further, the invalidity or unenforceability of any provision hereof as to either Indemitee or Appointing Stockholder shall in no way affect the validity or enforceability of any provision hereof as to the other.] Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee [and Appointing Stockholder] indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.

[Comment: Use the bracketed language in Section 14 if a version of the indemnification of Appointing Stockholder language is used in Section 1(d)]

14. Modification and Waiver. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

15. Notice By Indemnitee. Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter which may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.

16. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent:

(a) To Indemnitee at the address set forth below Indemnitee signature hereto.

(b) To the Company at:

_____

_____

_____

Attention:_____

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

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17. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

18. Headings. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

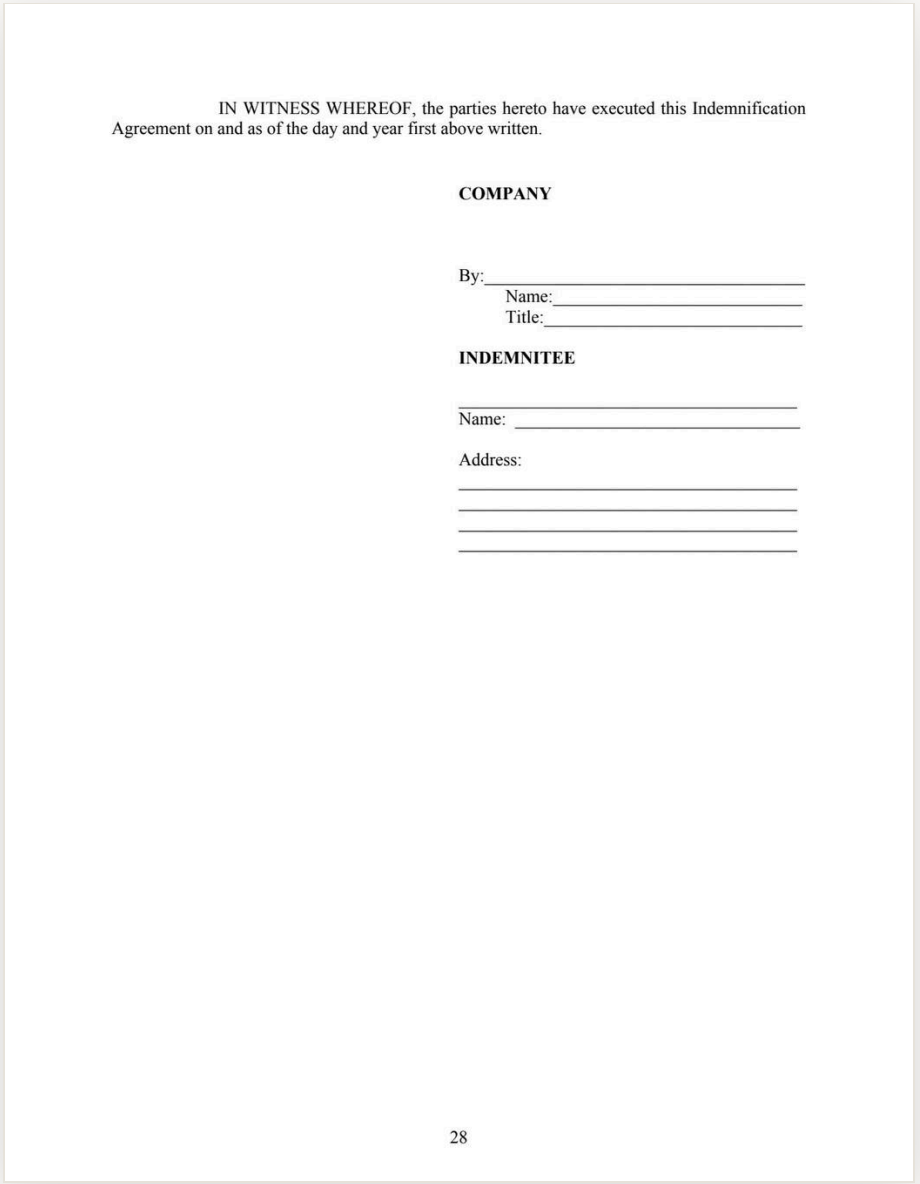
19. Governing Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. The Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Chancery Court of the State of Delaware (the "**Delaware Court**"), and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, [(iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, irrevocably [name] [address] as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware,] [*NOTE: as the Delaware-incorporated Company is already subject to service of process in Delaware, this really only applies to the individual director.*] (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

SIGNATURE PAGE TO FOLLOW

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IN WITNESS WHEREOF, the parties hereto have executed this Indemnification Agreement on and as of the day and year first above written.

COMPANY

By:_____
Name:_____
Title:_____

INDEMNITEE

_____
Name: _____

Address:
_____
_____
_____
_____

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Venture Capital Organizations

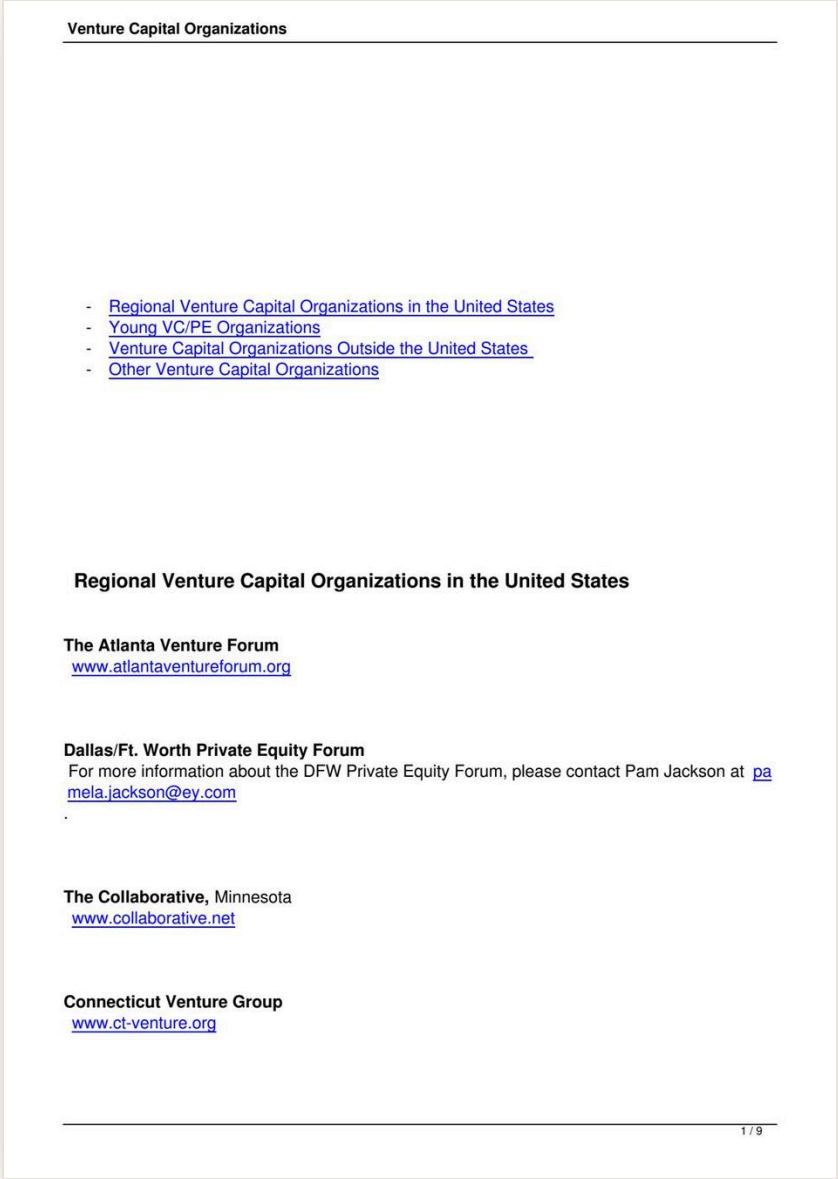
- 2011 list of venture capital associations: regional US organizations, young VC/PE groups and associations outside the United States.
- Many have since merged or renamed; the main national bodies today include NVCA (US), Invest Europe and BVCA (UK).

Original NVCA sample document, reproduced as published (2011). The current version is at nvca.org/model-legal-documents (updated October 2025).

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Venture Capital Organizations

- Regional Venture Capital Organizations in the United States
- Young VC/PE Organizations
- Venture Capital Organizations Outside the United States
- Other Venture Capital Organizations

Regional Venture Capital Organizations in the United States

The Atlanta Venture Forum
www.atlantaventureforum.org

Dallas/Ft. Worth Private Equity Forum
For more information about the DFW Private Equity Forum, please contact Pam Jackson at pamela.jackson@ey.com

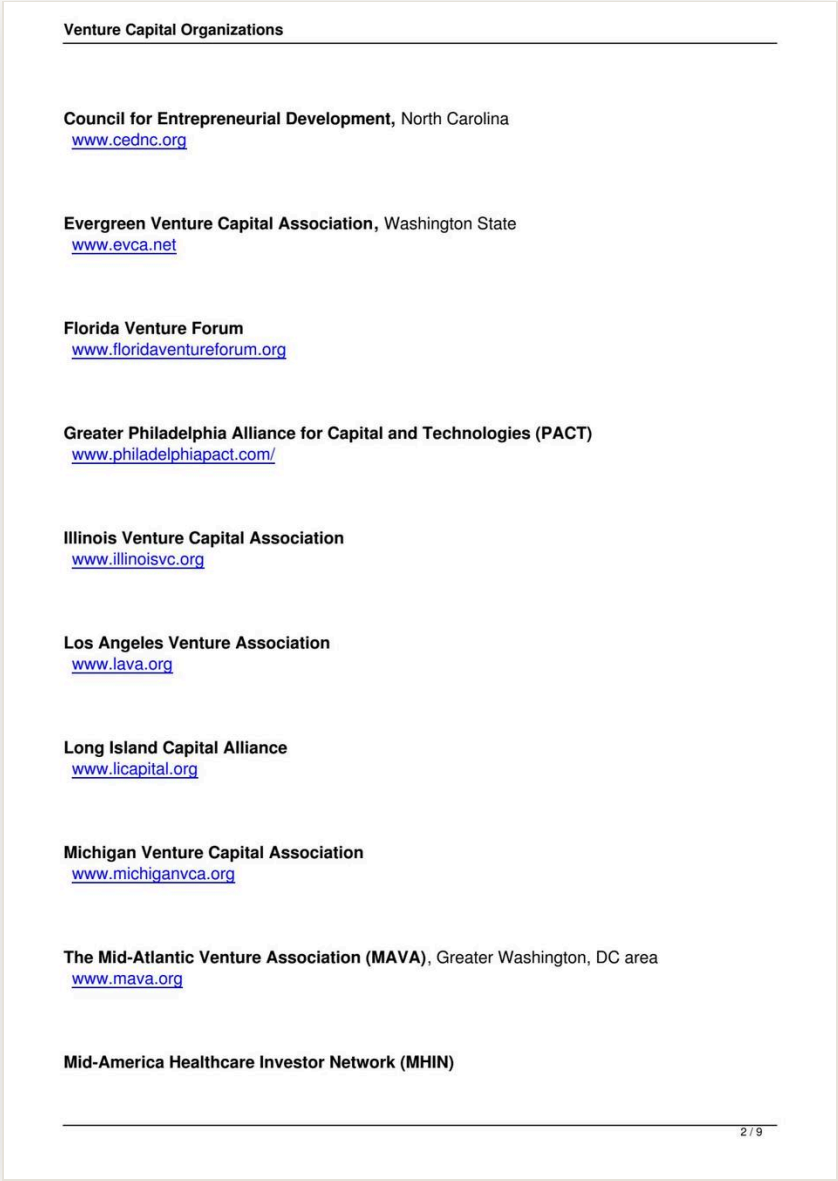
The Collaborative, Minnesota
www.collaborative.net

Connecticut Venture Group
www.ct-venture.org

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Venture Capital Organizations

Council for Entrepreneurial Development, North Carolina
www.cednc.org

Evergreen Venture Capital Association, Washington State
www.evca.net

Florida Venture Forum
www.floridaventureforum.org

Greater Philadelphia Alliance for Capital and Technologies (PACT)
www.philadelphiapact.com/

Illinois Venture Capital Association
www.illinoisvc.org

Los Angeles Venture Association
www.lava.org

Long Island Capital Alliance
www.licapital.org

Michigan Venture Capital Association
www.michiganvca.org

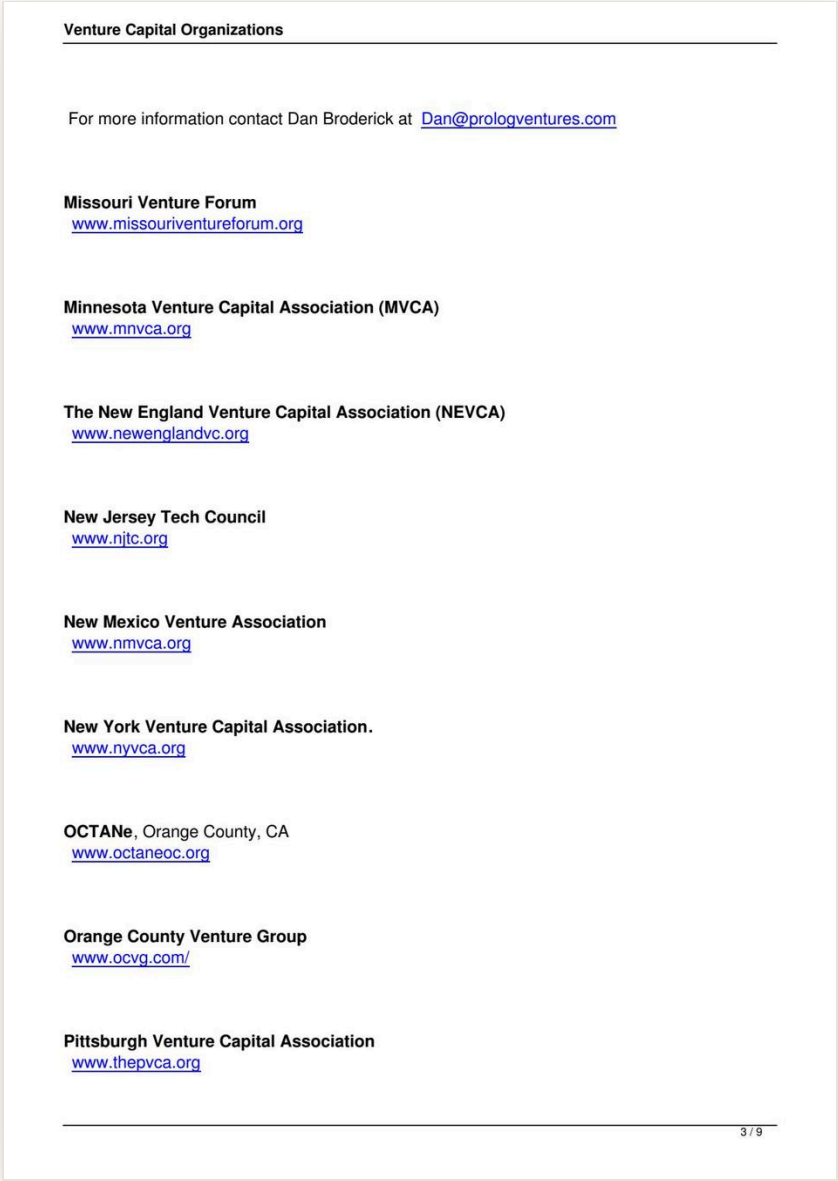
The Mid-Atlantic Venture Association (MAVA), Greater Washington, DC area
www.mava.org

Mid-America Healthcare Investor Network (MHIN)

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Venture Capital Organizations

For more information contact Dan Broderick at Dan@prologventures.com

Missouri Venture Forum
www.missouriventureforum.org

Minnesota Venture Capital Association (MVCA)
www.mnvca.org

The New England Venture Capital Association (NEVCA)
www.newenglandvc.org

New Jersey Tech Council
www.njtc.org

New Mexico Venture Association
www.nmvca.org

New York Venture Capital Association.
www.nyvca.org

OCTANe, Orange County, CA
www.octaneoc.org

Orange County Venture Group
www.ocvg.com/

Pittsburgh Venture Capital Association
www.thepvca.org

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Venture Capital Organizations

Rocky Mountain Venture Capital Association
www.rockymountainVCA.com

San Diego Venture Group
www.sdvg.org

Texas Venture Capital Association
www.txvca.org

Upstate Venture Association of New York (UVANY)
www.uvany.com

Venture Club of Indiana
www.ventureclub.org

Venture Club of Louisville
www.ventureclub-louisville.org

The Western Association of Venture Capitalists (WAVC)
www.wavc.net

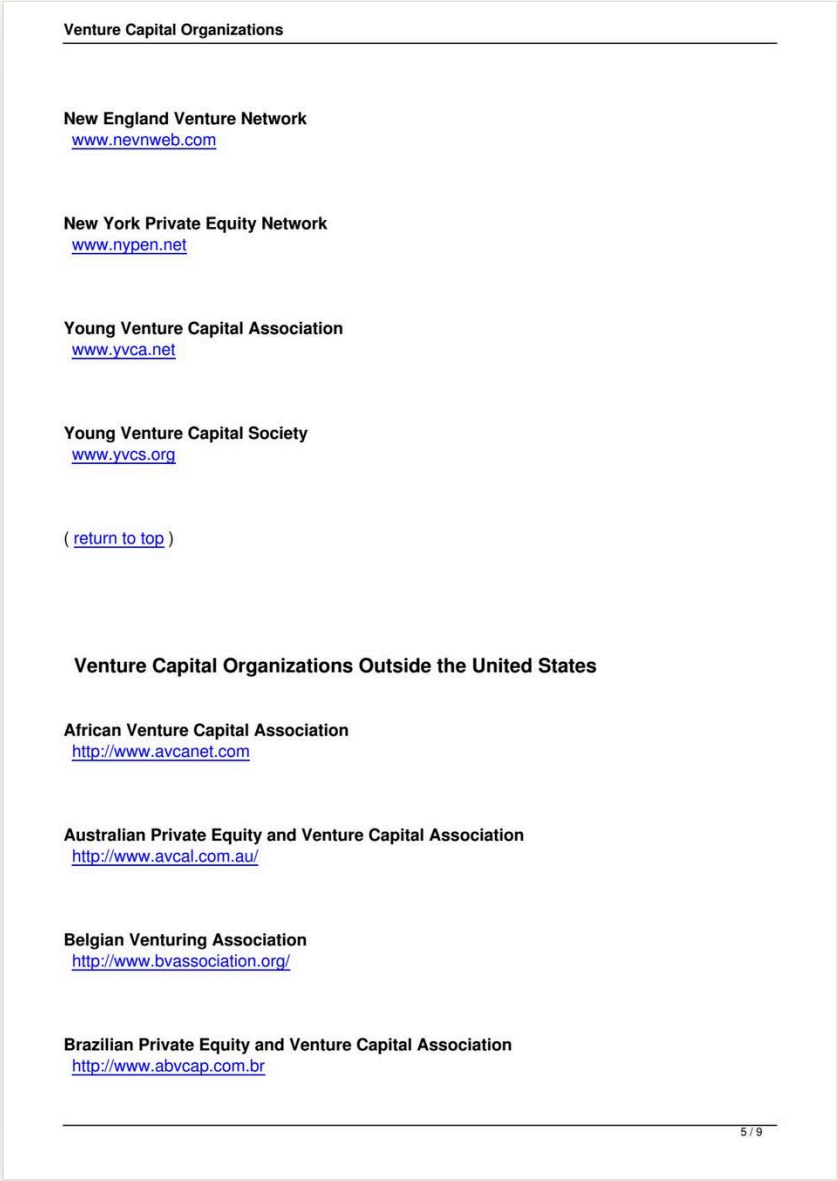
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Young Venture Capital Organizations

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Venture Capital Organizations

New England Venture Network
www.nevnweb.com

New York Private Equity Network
www.nypen.net

Young Venture Capital Association
www.yvca.net

Young Venture Capital Society
www.yvcs.org

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Venture Capital Organizations Outside the United States

African Venture Capital Association
http://www.avcanet.com

Australian Private Equity and Venture Capital Association
http://www.avcal.com.au/

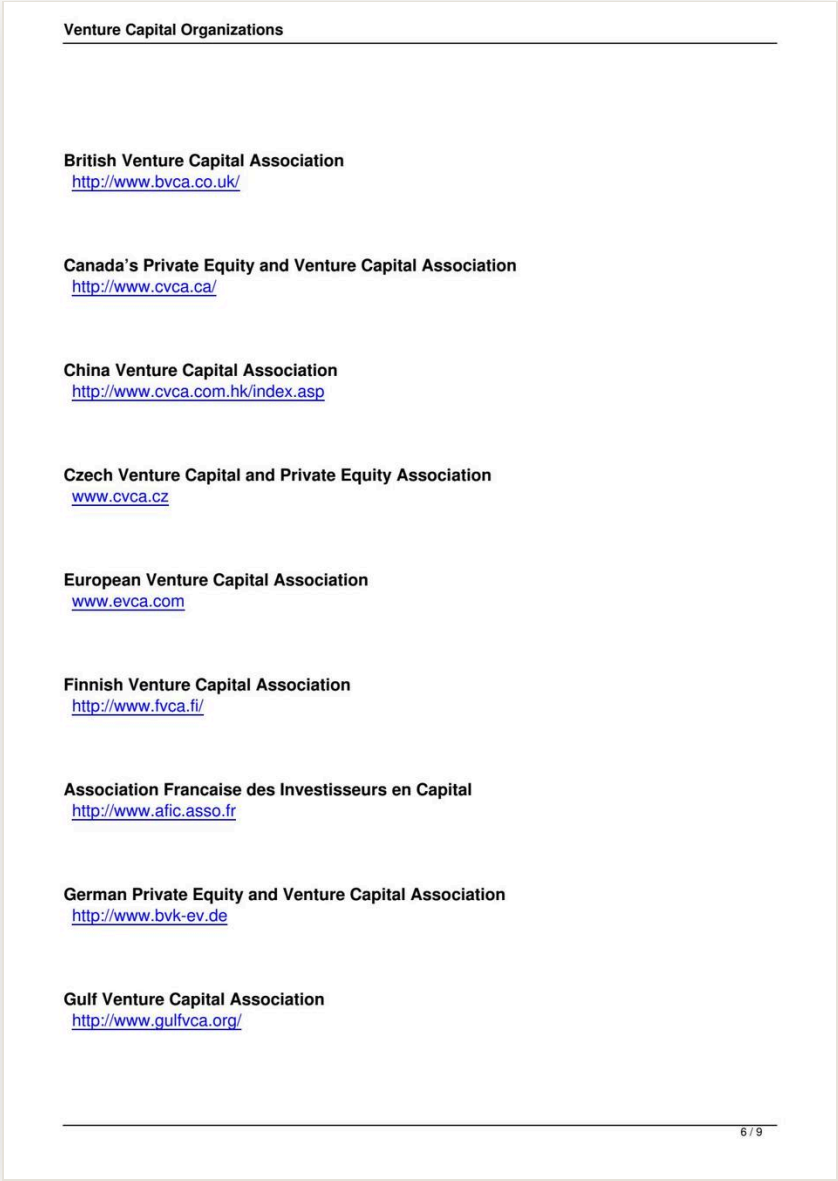
Belgian Venturing Association
http://www.bvassociation.org/

Brazilian Private Equity and Venture Capital Association
http://www.abvcap.com.br

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Venture Capital Organizations

British Venture Capital Association
http://www.bvca.co.uk/

Canada's Private Equity and Venture Capital Association
http://www.cvca.ca/

China Venture Capital Association
http://www.cvca.com.hk/index.asp

Czech Venture Capital and Private Equity Association
www.cvca.cz

European Venture Capital Association
www.evca.com

Finnish Venture Capital Association
http://www.fvca.fi/

Association Francaise des Investisseurs en Capital
http://www.afic.asso.fr

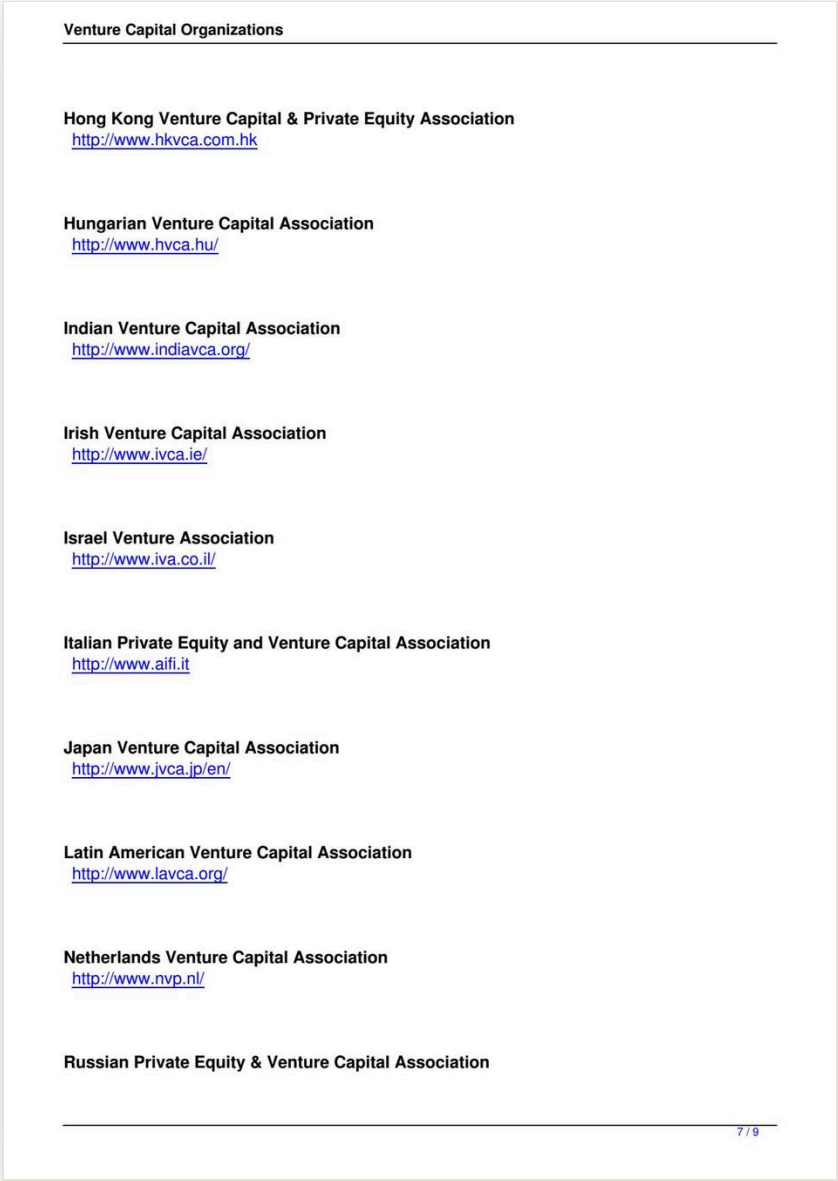
German Private Equity and Venture Capital Association
http://www.bvk-ev.de

Gulf Venture Capital Association
http://www.gulfvca.org/

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Venture Capital Organizations

Hong Kong Venture Capital & Private Equity Association
http://www.hkvca.com.hk

Hungarian Venture Capital Association
http://www.hvca.hu/

Indian Venture Capital Association
http://www.indiavca.org/

Irish Venture Capital Association
http://www.ivca.ie/

Israel Venture Association
http://www.iva.co.il/

Italian Private Equity and Venture Capital Association
http://www.aifi.it

Japan Venture Capital Association
http://www.jvca.jp/en/

Latin American Venture Capital Association
http://www.lavca.org/

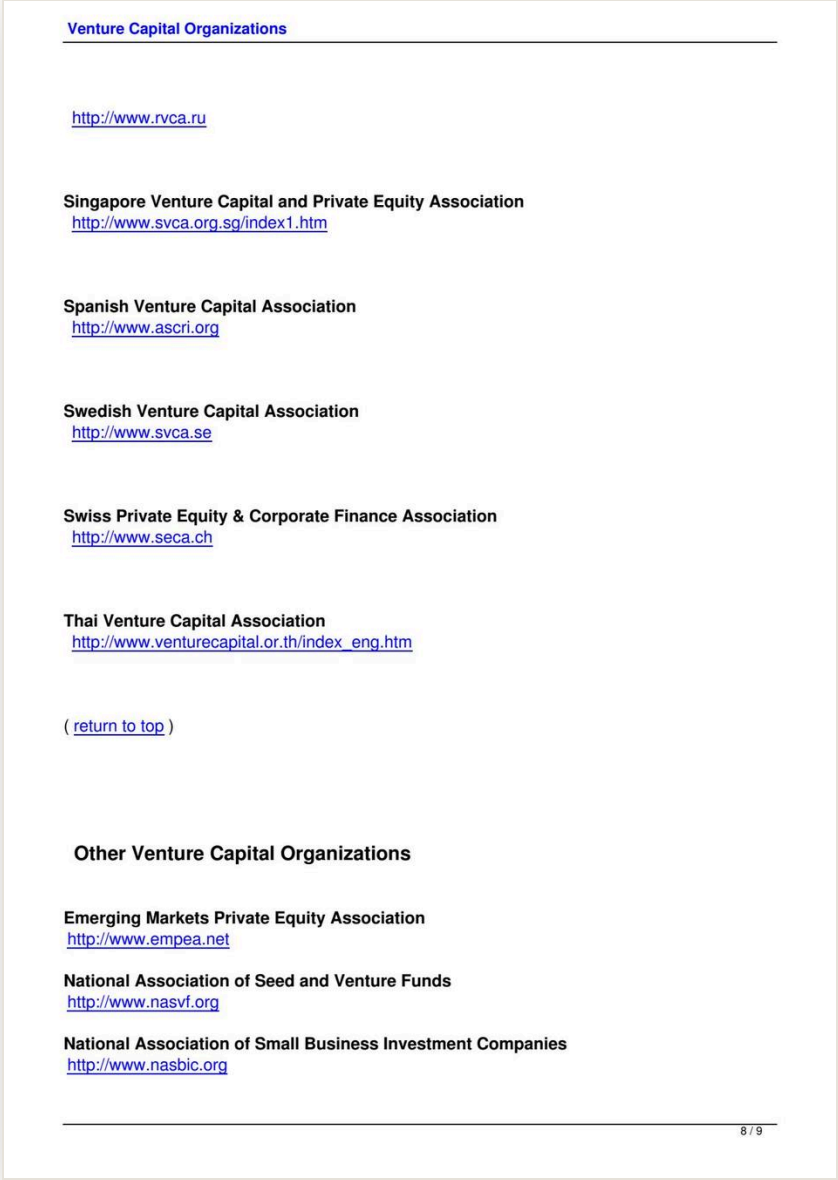
Netherlands Venture Capital Association
http://www.nvp.nl/

Russian Private Equity & Venture Capital Association

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Venture Capital Organizations

http://www.rvca.ru

Singapore Venture Capital and Private Equity Association
http://www.svca.org.sg/index1.htm

Spanish Venture Capital Association
http://www.ascri.org

Swedish Venture Capital Association
http://www.svca.se

Swiss Private Equity & Corporate Finance Association
http://www.seca.ch

Thai Venture Capital Association
http://www.venturecapital.or.th/index_eng.htm

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Other Venture Capital Organizations

Emerging Markets Private Equity Association
http://www.empea.net

National Association of Seed and Venture Funds
http://www.nasvf.org

National Association of Small Business Investment Companies
http://www.nasbic.org

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