Starting Up: Some of the Basics

Doug Collom

Adjunct Professor of Management

The Wharton School

collom@wharton.upenn.edu

Sponsored by the Lawrence Berkeley
National Laboratory

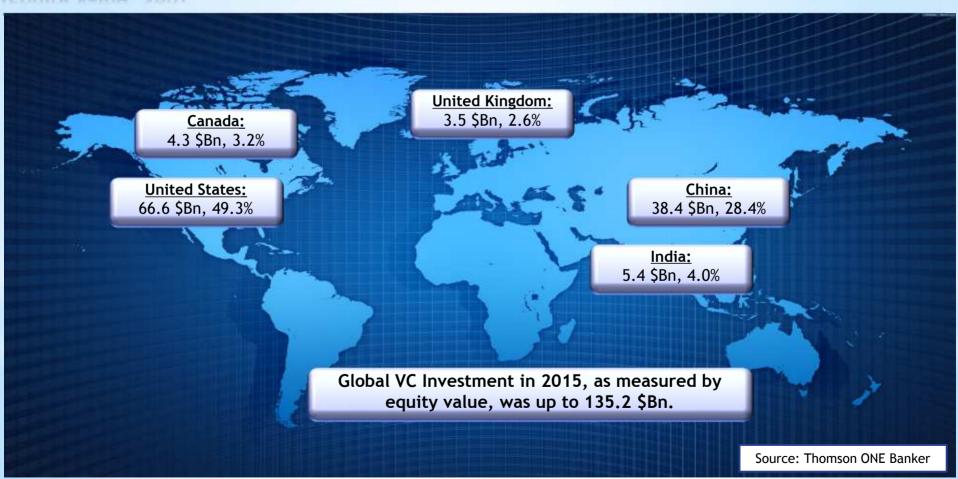
March 2, 2016

Industry Snapshot*

^{*}Caveat to this presentation: Observations and insights are framed exclusively in the context of a U.S. venture-backed startup company.

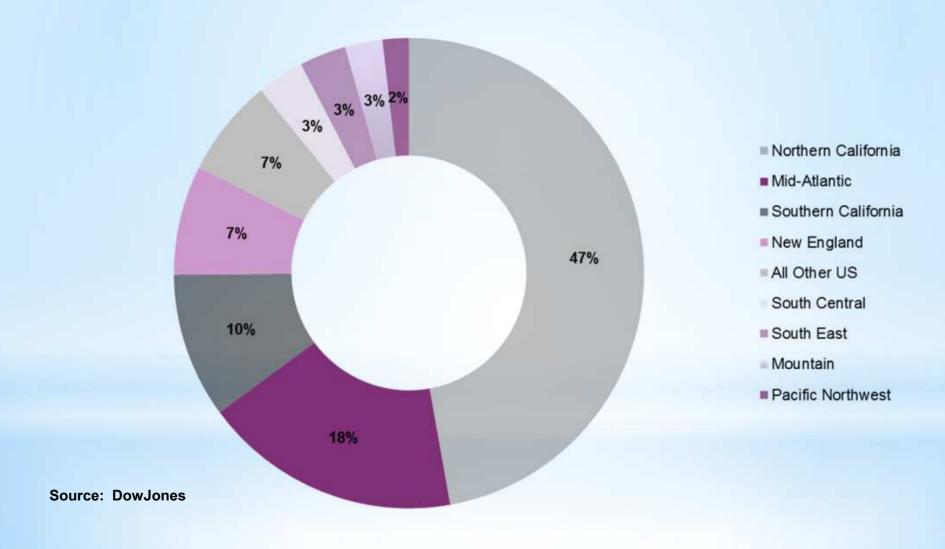
Global VC Investment In World Nations In 2015

(Equity Value, \$Bn)



VC Industry In The U.S Today

Regional Investment Dollars In The United States Q4 2015



Limited Partners

Liquidity to VC Shareholders

<u>hareholders</u>

ROI for the asset class

VC Firms

ROI

Supply of funds

Number of VC Firms

Interest rates

Number of professionals

Money invested

Working Capital to Companies

Financing alternatives

Sector growth

Seed Stage Investments

Number of deals

Valuation levels

Private Secondary Market Exit

Emergence of secondary funds

Industry Cycle Q4 of 2015

Series A Rounds

Number of deals

Valuation levels

Number of failed companies

Series A crunch

M&A Exit

Number of deals

Time to exit

Valuation levels

Organic buyers

"Private IPO" Exit

Megadeals (\$40m +) IPO Exit

Number of IPO's

Time to IPO

Valuation levels

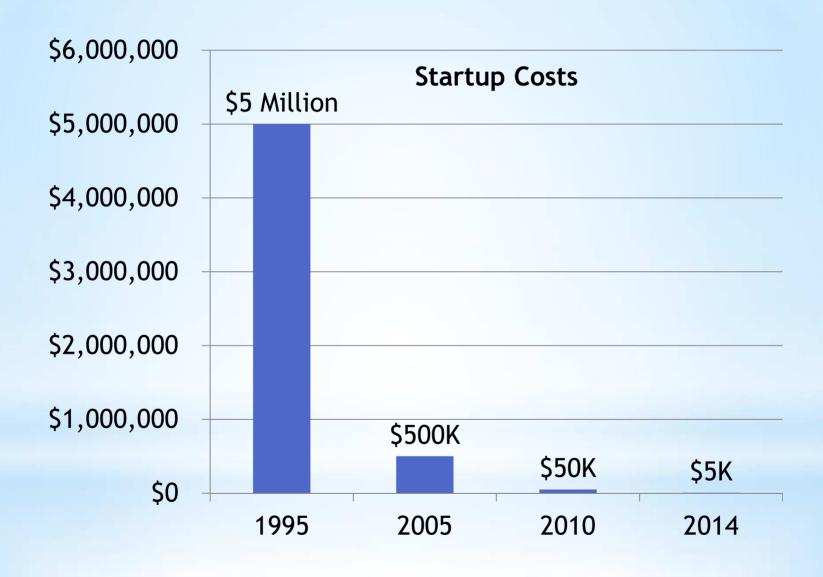
Later Stage Rounds (Series B+)

Number of deals

Valuation levels

Series B crunch

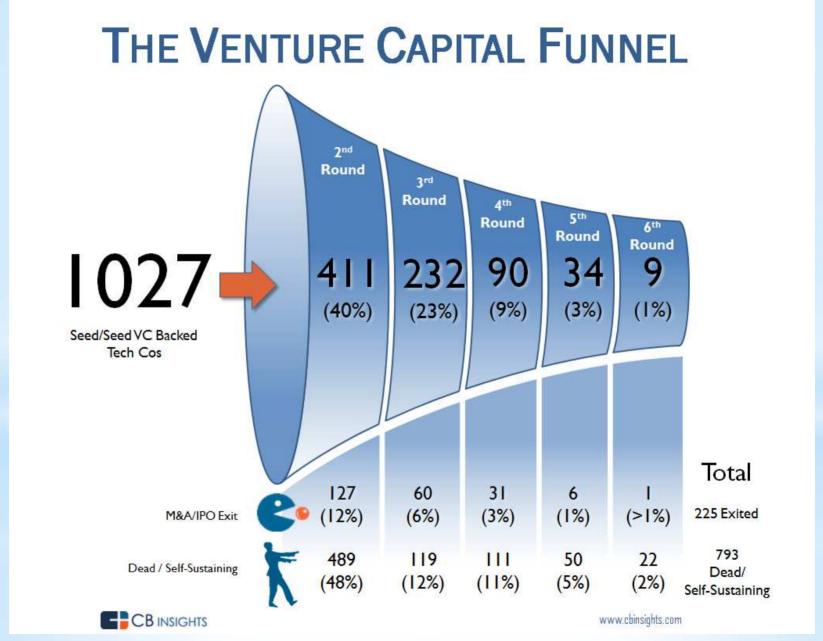
Some Good News: The Cost To Start A Company 1995 To Present



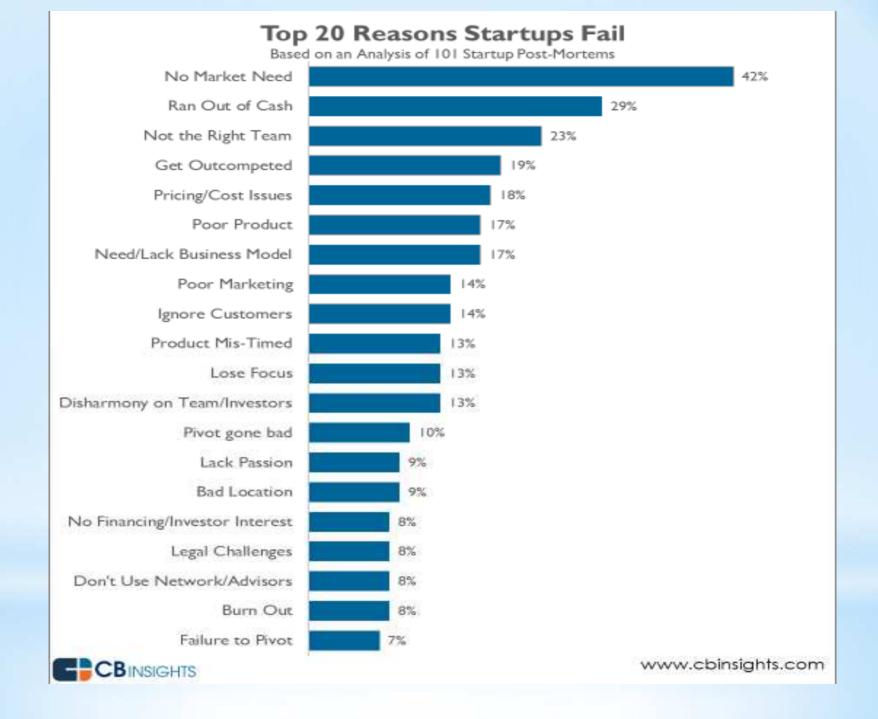
And the Bad News: The VC Financing— Getting Through The Funnel



Source: Goldman Sachs Merchant Banking



Source: CBInsights



Fundraising

Financing Options for First Financing

Before:



Friends and family



Angels

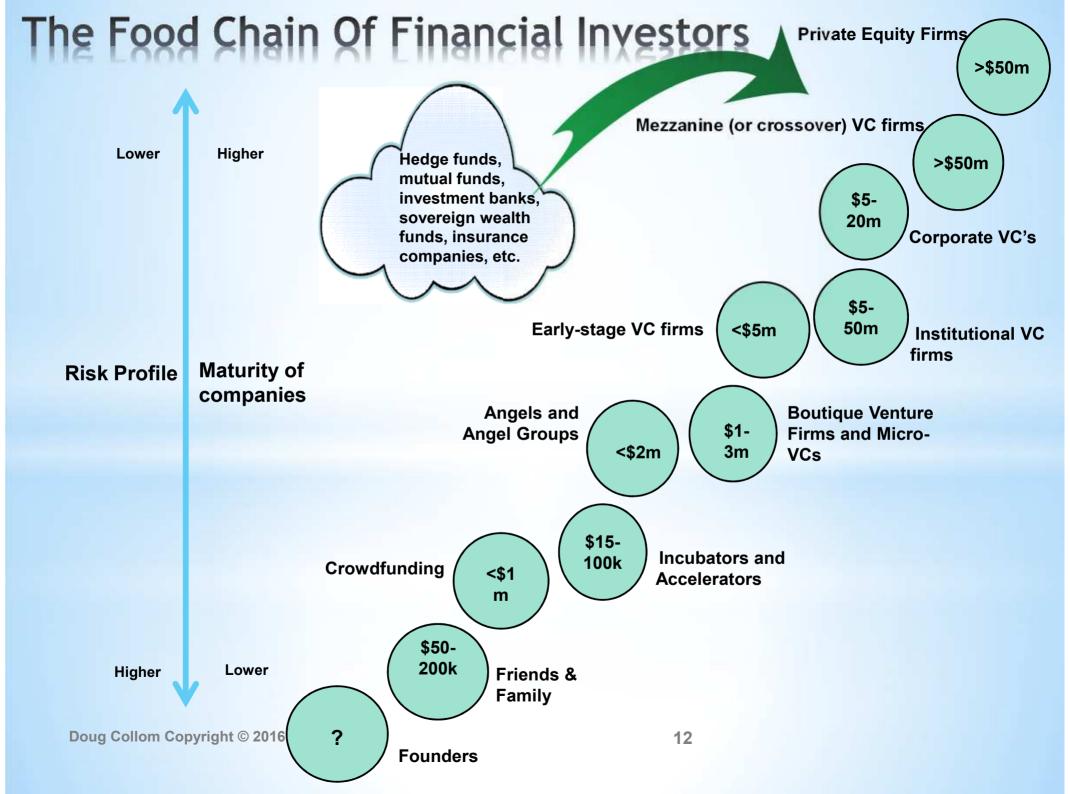


VC firm

Now:

- Friends and family
- Angels
- Super Angels
- Micro VCs
- Incubators
- Accelerators
- Stage-agnostic VC firms
- Corporate investors

- Crowdfunding
- "Demo Day" pitch competitions
- Cross-over firms
- Investment banks
- Hedge funds, mutual funds
- Private equity firms
- Government business development centers



Do you expect it to get harder or easier to raise venture capital in the next 12 months?



How many venture firms did you pitch when raising your last round of capital?



Sources of Early Capital: Angels

- * Angel Groups
 - * Behave like institutional VCs in many dimensions (e.g. criteria for investment, operational and market diligence or marketing for deal flow)
 - * However, angel groups have different organizational and governance structures and different investment philosophies
 - * Examples:









- * "Super Angels" or "Micro VC's"
 - * Individuals who build funds with small groups of limited partners
 - * Examples:











Sources of Early Capital: Incubators and Accelerators

* There are hundreds of incubators/accelerators in the SF Bay Area alone; more than 2,000 in the United States



- Distinction
 - * Incubators: Founders with an idea and a PPT. Most companies are at the planning, team-building and pre-funding stage
 - * Accelerators: Companies that have some level of funding and some product development in motion
- Examples:











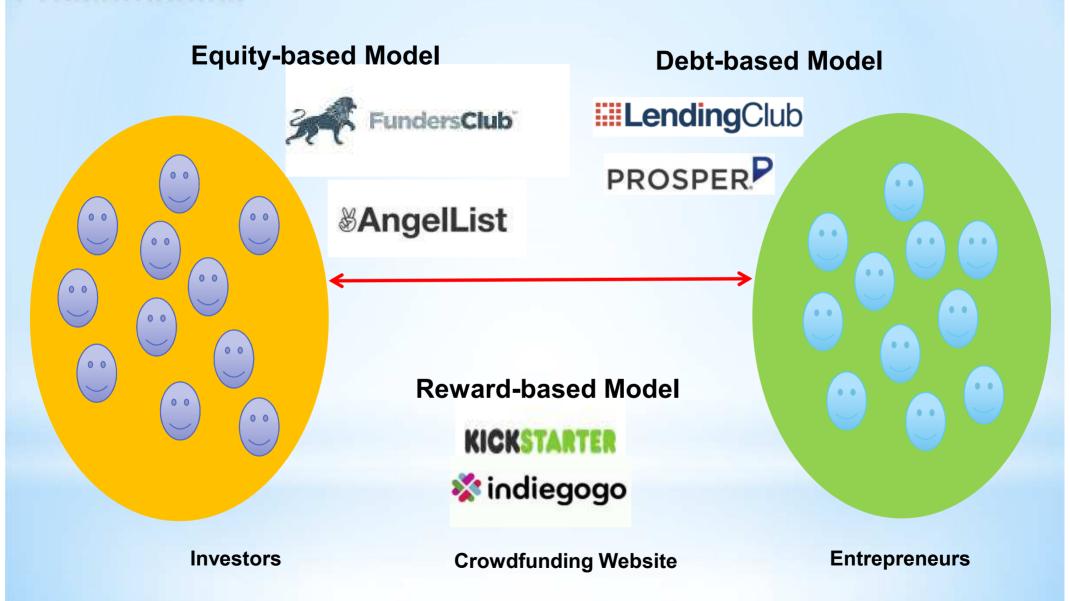


The Tradeoffs Of Using Incubators And Accelerators



| What you get | What you give up |
|---|---|
| Space (desks, lights, office equipment, security) | "Real estate model" (rent): Usually tied to the amount of space taken up by the company. |
| Mentorship (coaching, speakers, panel events) | "Equity model": 2-10%, with the median in the 3-6% range (where equity is required at all). (e.g., YC wants 7% for \$120K—with conditions) |
| Cohort environment (rubbing shoulders, sharing ideas with other founders) | Loyalty of employees: Employees may leave for greener pastures within the same incubator or accelerator |
| Access (programmers, co-founders, vendors, consultants, etc.) | Autonomy and performance requirements: Usually subject |
| Money: Sometimes seed money is given as an outright grant, other times it is structured as payment for equity | to progress requirements, growth constraints, time boundaries imposed by the incubator |
| Prestige: Tied to the prestige of the incubator, e.g., Y-Combinator, 500Startups, etc. | Loyalty of the incubator: Little diligence on participant |
| VC introductions: Many incubators have partnerships with institutional VC firms (e.g., Y-Combinator and Sequoia Capital, SV Angel and DST Global) | companies; modest capital investment; no commitment for follow-on capital; little reason to keep startup in the incubator absent business traction. |

Sources of Early Capital Crowdfunding



The Up- And Down-side Of Equity-based Crowdfunding

* Up-side

- **AngelList**
- * Cheap capital
- * Hypothesis testing and proof of concept
- * Marketing
- * Down-side
 - * Regulatory uncertainties
 - * Know your investors?
 - * Signaling to institutional investors?



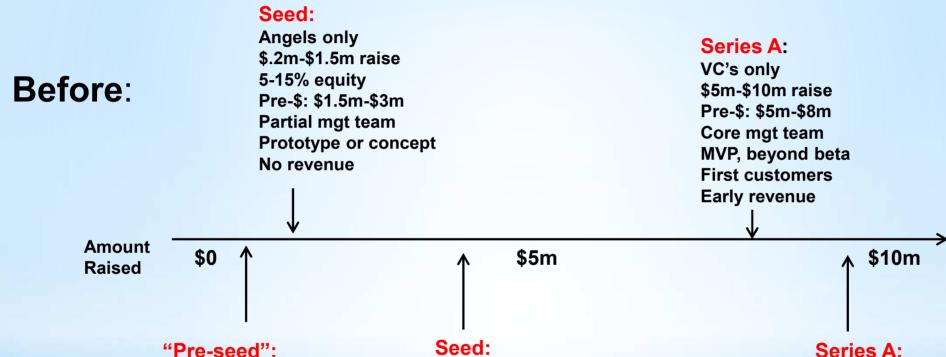
Pebble "Smart Watch"



Ouya Videogame Console



Evolution of the Financing Model for Early Stage Companies



Today:

Angels only \$100k-\$500k raise Co-founders Prototype or concept VC's and select angels \$1m-\$5m raise 15-20% equity Pre-\$: up to \$5m Core mgt team MVP, beyond beta

Customers, revenue

VC's only \$8m-\$10m raise 25-40% equity Pre-\$: \$10m-\$15m Core mgt team Repeatable revenue Growing customers

RAISING SEED MONEY

CONVERTIBLE NOTES OR SERIES A PREFERRED STOCK?

The founder's perspective — The benefits of a convertible note:

Benefits

- Relatively easy documentation (15 pages of legal documents vs. 100 pages for equity financing)
- Faster to put in place (2 days vs. 2 weeks+)
- Sometimes only a single counsel is required to "represent" both sides
- Little negotiation required (convertible debt terms are mostly standard)
- Cheaper (legal fees < \$10k vs. > \$25k+)*
- No valuation required (nor other equity-type deal terms); except for the cap
- No impact on common stock pricing for employees/consultants

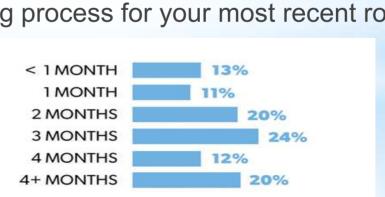
□ Anecdotally, most seed financings (i.e., 80% or so where the seed is less than around \$1m) are structured through the sale of convertible notes, not as preferred stock financings.

^{*}Company always pays its own legal costs <u>plus</u> legal costs for investors' counsel.

Fundraising: The Process

- * What is the general process?
 - * Introduction and initial contact with the VC
 - * Initial due diligence by VC
 - * A meeting with the VC
 - * VC follow-up diligence: Contacts with consultants, customers, market research firms, etc.
 - * Term sheet issued
 - * 30-90 days of extensive DD
 - First Closing

*How long was your entire fundraising process for your most recent round?

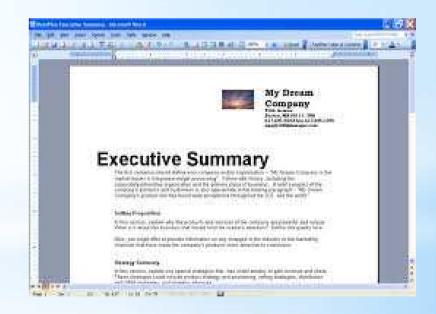


Source: First Round Review, December 2, 2015; survey of 500 CEOs



Importance of the Executive Summary

- Executive Summary
 - * Opening paragraph: The one-minute test
 - * Content: The ten minute test
 - * Not to exceed 2 pages! (better if 1 page)
- Must provoke immediate interest
 - * Currently unsolved industry problem
 - * Size of market
 - * Solution to problem
 - * Execution strategy
 - * Competition
 - * Financial projection
 - * Management team credentials



Valuation

How the game is played:

Sequoia Capital will provide you with **\$4 million** in exchange for Series A Preferred stock.

How much is your company worth before the financing transaction (i.e., the pre-money valuation)? I.e., how much equity in your company do you have to give up to get the \$4 million?

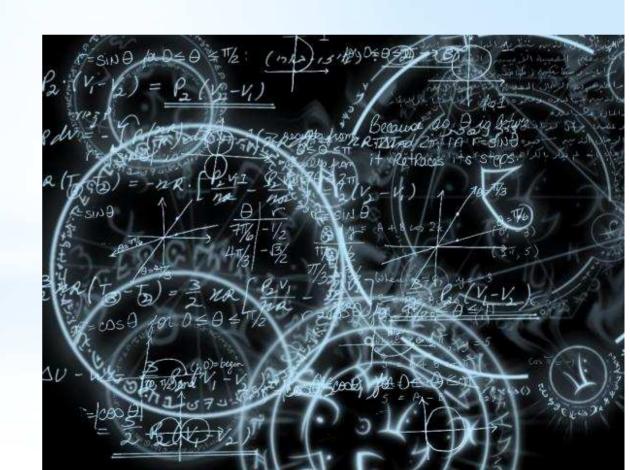
You think your company is worth \$8 million in pre-money valuation.

Sequoia thinks \$6 million.

Now what?

Valuation of Start-up Companies

- * Valuing Start-up Companies: Methodologies
 - * The Venture Capital Method
 - *Comparable Company Method



Venture Capital Method Visualization Of The Series A Financing

VC required IRR: 50% **Amount of investment:** \$3.5m = \$26.6m required payback **Term of investment:** 5 years Value in 5 Years **Projected net income:** \$2.5m $2.5m \times 15 =$ P/E multiple: 15x \$37.5m **Outstanding shares:** 1,000,000 29% 71% Management discount rate = 50% and **Employees Net income** VC \$2.5m P/E multiple 15x

Comparable Company Method

- * Look for other firms with similar "value characteristics"
 - * Risk
 - * Growth rate
 - * Capital structure
 - * Size and timing of cash flows
- * Select an appropriate comparable
 - * P/E multiples
 - * EBIT & EBITDA multiples
 - * Revenue multiples
 - * Book value multiples
- * Databases
 - * Crunchbase
 - * CB Insights



VC Industry In The U.S Today Median Pre-money Valuations By Round Class (\$M) (Annual)



Elemental Thoughts

Will You Be My Co-Founder?

- "Co-Founder" or "Early Employee"
 - Qualities: What does it take to be a co-founder?
 - Differences in roles and capabilities
 - Present vs. future capabilities: Scaling with growth
- Composition and size of the founding team
 - Who cares? What's the difference between a co-founder and an early employee?

Stock Ownership By Employees

A very general rule of thumb for non-founder employees in a "mid-stage" technology start-up (i.e., post-Series A)

| Position | No. of Ees | % of Capital | Aggregate Equity |
|------------------|------------|--------------|-------------------------|
| * CEO | (1): | 5-10% | 7% |
| * CFO | (1): | 1 - 2% | 1% |
| * VPs | (3): | 1 - 3% | 8% |
| * Director-level | (6): | <1/2% | 3% |
| * Others | (?): | <1/4% | <u>6%</u> |
| | | Total | 25% |

Entity Selection: Delaware Subchapter C Corporation



* You have a choice: general partnership, limited partnership, limited liability corporation, benefit corporation, Subchapter S corporation, Subchapter C corporation

- * From an Entrepreneur's Perspective
 - * Both an LLC and a Subchapter S corporation can be used when (i) the entity will have very few owners in the first phase; (ii) the company will generate operating losses; and (iii) the owners uniformly want tax benefits associated with the losses
- * From a VC's Perspective
 - * VC firms will rarely invest in an LLC!
 - * VC firms by definition cannot invest in a Subchapter S corporation
- * VC-backed companies are almost invariably (98% of the time?) Subchapter C corporations
 - * Mainstream practice is to incorporate in Delaware as a Sub C at the start

The Standard Capital Structure

- Common stock is typically used for compensatory purposes (i.e., employees, consultants, board members, etc.)
- Preferred stock is typically set aside as the vehicle for investment

Founders,
Management and
Employees

Common Stock

Compensatory Low price Residual Rights



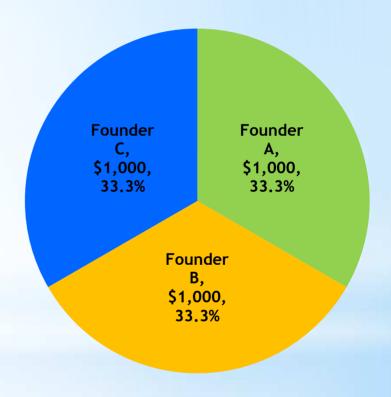
Investors

Preferred Stock

Investment
High Price
Senior Rights

I. Formation of a Start-up Company

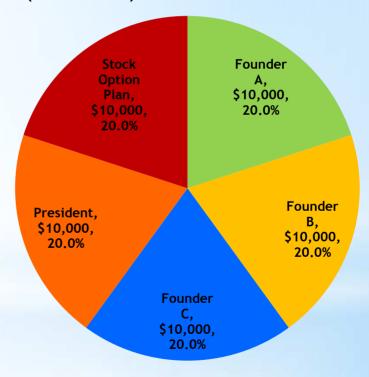
| Person | No. of Shares | % of Shares | Value |
|---------------------------------------|---------------|-------------|---------|
| Founder A | 1,000,000 | 33.33% | \$1,000 |
| Founder B | 1,000,000 | 33.33% | \$1,000 |
| Founder C | 1,000,000 | 33.33% | \$1,000 |
| Total Post- Financing Valuation | 3,000,000 | 100.0% | \$3,000 |



II. Hiring of Chief Executive Officer & Establishment of Option Plan

- Reason for Dilution: Stock incentive provision.
- Price (Pre-financing Valuation): \$0.01/share (\$30,000)

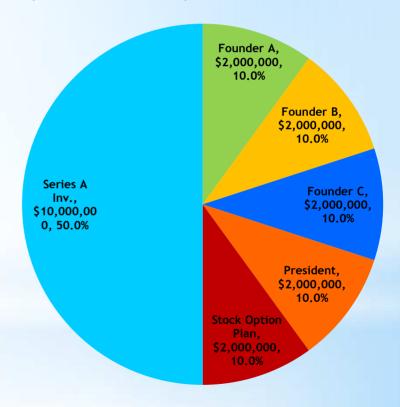
| Person | No. of Shares | % of Shares | Value |
|---------------------------------------|------------------|-------------|----------|
| Founder A | 1,000,000 | 20.0% | \$10,000 |
| Founder B | 1,000,000 | 20.0% | \$10,000 |
| Founder C | 1,000,000 | 20.0% | \$10,000 |
| President | 1,000,000 | 20.0% | \$10,000 |
| Stock Opt. Plan | 1,000,000 | 20.0% | \$10,000 |
| Total Post- Financing Valuation | 5,000,000 | 100.0% | \$50,000 |



III. Initial Venture Financing Round

- Reason for Dilution: First round fundraising for product development.
- Price (Pre-financing Valuation): \$2.00/share (\$10,000,000)

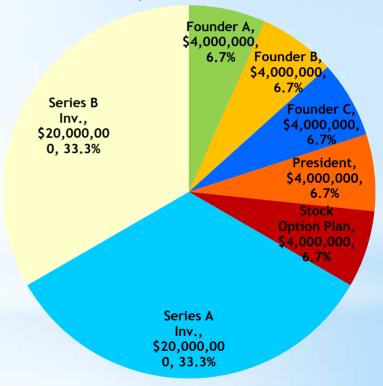
| Person | No. of Shares | % of Shares | Value |
|---------------------------------------|---------------|-------------|--------------|
| Founder A | 1,000,000 | 10.0% | \$2,000,000 |
| Founder B | 1,000,000 | 10.0% | \$2,000,000 |
| Founder C | 1,000,000 | 10.0% | \$2,000,000 |
| President | 1,000,000 | 10.0% | \$2,000,000 |
| Stock Opt. Plan | 1,000,000 | 10.0% | \$2,000,000 |
| Series A Investor | 5,000,000 | 50.0% | \$10,000,000 |
| Total Post- Financing Valuation | 10,000,000 | 100.0% | \$20,000,000 |



IV. Series B Preferred Stock Financing

- Reason for Dilution: Second round fundraising for product development.
- Price (Pre-financing Valuation): \$4.00/share (\$40,000,000)

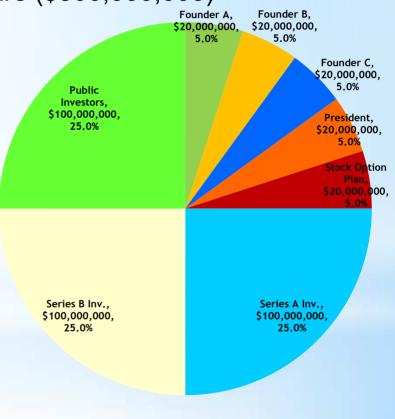
| Person | No. of Shares | % of Shares | Value |
|---------------------------------------|---------------|-------------|--------------|
| Founder A | 1,000,000 | 6.66% | \$4,000,000 |
| Founder B | 1,000,000 | 6.66% | \$4,000,000 |
| Founder C | 1,000,000 | 6.66% | \$4,000,000 |
| President | 1,000,000 | 6.66% | \$4,000,000 |
| Stock Opt. Plan | 1,000,000 | 6.66% | \$4,000,000 |
| Series A Investor | 5,000,000 | 33.33% | \$20,000,000 |
| Series B Investor | 5,000,000 | 33.33% | \$20,000,000 |
| Total Post- Financing Valuation | 15,000,000 | 100.0% | \$60,000,000 |



V. Initial Public Offering

- Reason for Dilution: IPO for expansion of manufacturing and marketing.
- Price (Pre-financing Valuation): \$20.00/share (\$300,000,000)

| Person | No. of Shares | % of Shares | Value |
|---------------------------------------|------------------|-------------|---------------|
| Founder A | 1,000,000 | 5% | \$20,000,000 |
| Founder B | 1,000,000 | 5% | \$20,000,000 |
| Founder C | 1,000,000 | 5% | \$20,000,000 |
| President | 1,000,000 | 5% | \$20,000,000 |
| Stock Opt. Plan | 1,000,000 | 5% | \$20,000,000 |
| Series A Investor | 5,000,000 | 25% | \$100,000,000 |
| Series B Investor | 5,000,000 | 25% | \$100,000,000 |
| Public Investors | 5,000,000 | 25% | \$100,000,000 |
| Total Post- Financing Valuation | 20,000,000 | 100.0% | \$400,000,000 |



Last thoughts:

Circulate

Educate

Triangulate