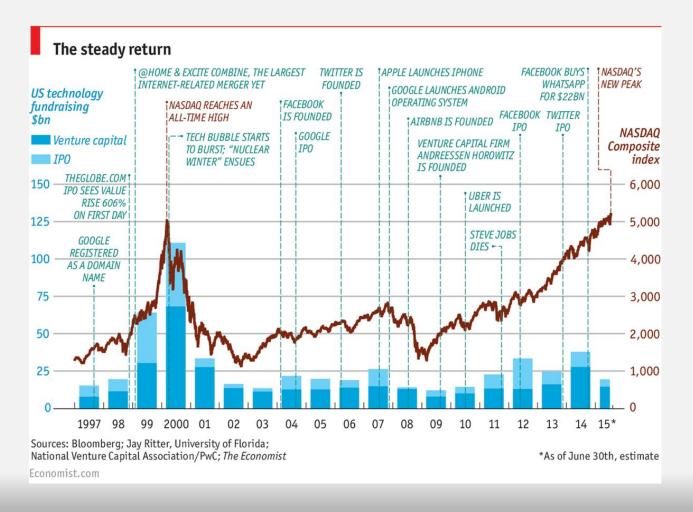
10. Getting Financing or Funding

- Dr. Jack M. Wilson
- Distinguished Professor of Higher Education, Emerging Technologies, and Innovation

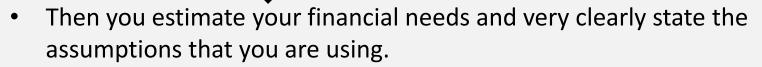


Financial Analysis

- The first step in any effort to fund a startup begins with a careful analysis of the funding that you will need.
- How much money do you need?
 - Capital requirements –Do you need funding for capital items, facilities, or equipment?
 - Operating requirements –How much will you need to have to cover operations until sufficient cash flow begins?
 - Break Even Analysis -At what point, in both time and money, will you begin to break even?
 - Overall attractiveness of the investment -Does the investment look like it will return enough profit to make the risk worthwhile?
- Where to get the money?
 - Much of the rest of this chapter will focus on that!
- Financial Objectives and Ratio Analysis
 - You will need to learn the jargon of financial analysis to be able to speak to funders. We cover that in the chapter on financial analysis

Preparing to raise money

- Step one is to determine the resources that you will need. In general you will do a business plan, a business model canvas, or you may instead focus on the Lean Launchpad model.
- As Steve Blank says, you will get out of the office and talk to potential customers.
- You may use a group of advisors or do brainstorming.



- I promise you that you WILL be using assumptions.
- Prepare a sales forecast and determine your breakeven point.



• Finalize your estimated cash needs.

Identify Required Resources

- Start-up resources include:
 - People (founding team, advisors, independent contractors)
 - Physical assets (equipment, inventory, office or plant space)
 - Financial (emergency fund)
- Complex Resources:
 - Utilitarian (i.e. patents, licenses, other intellectual property)
 - Instrumental (i.e. industry contacts, networks, partners)
 - Intangible (i.e. organizational culture, tacit knowledge)

Narrative Assumptions

- An explanation of the sources of numbers for the forecast and the assumptions used to generate them.
- Example: Some typical assumptions might include
 - The inflation rate is 1%.
 - The cost of main raw materials will be constant over time.
 - You are expecting to hire certain people at assumed salaries.
 - Initial sales in the first year will be X.
 - Annual growth in the first few years will be Y.
 - Growth in expenses is expected to be Z.
 - You really want to see expense growth as less than revenue growth in order to reach profitability and achieve economies of scale.

Estimate expenses and start-up costs

- All costs incurred to get the business off the ground
 - The cost of buying the equipment
 - The cost of buying the long-term assets (office space, etc.)
 - Working capital (the cost of keeping inventory, account receivable etc.)
 - Operational expenses (telephone, fax, travel, advertising etc.)
 - Production costs (material costs, labor costs, etc.)

Expenses & Start-up Costs

- Some expenses are fixed and some are variable.
 - Typical fixed expenses
 - Equipment,
 - office space,
 - other overhead
 - Variable Costs
 - The costs of materials used to make the product
 - The costs of labor used to make the product
 - Commissions or other compensation based on sales volume
 - Shipping and handling charges

Expenses & Start-up Costs (continued)

- Fixed or semi-fixed Costs
 - Utilities
 - Manager Salary
 - Advertising
 - Insurance
 - Interest
 - Rent
 - Depreciation



Startups need funding for all of the previous reasons.

- Three categories of need stand out:
 - 1. Capital Investments: Money is needed to make the capital investments in equipment and (perhaps) facilities and to purchase material and resources and to pay some employees
 - 2. Lengthy Product Development Cycle: Many startups have a long period of product development. This can be particularly long for biotechnology startups that may require billions to be invested before sales can begin. Computer software is usually less demanding.
 - 3. Cash Flow Problems: All of these needs for cash can lead to cash flow problems. I most cases, orders come in in bunches, but expenses like salaries, rents, and materials are a steady outflow. Funding is need to keep the doors open until the orders are paid for after delivery.

Sources of Capital

- Personal Savings
- Friends and family
- Crowdfunding
 - Kickstarter, IndieGogo,
 GoFundMe
- Bootstrapping
- Business angels
- Venture capitalists
- Corporations

- Banks
- The SBA Guaranteed Loan Program
- Leasing
- Government grants
 - SBIR- Small business
 Innovation research
 - STTR-Small business
 Technology Transfer

Sources of Personal Financing

- Savings
- Family and friends
 - (often called "friends, family, and other fools)
- Bootstrapping
 - Bootstrapping is finding ways to avoid the need for external financing or funding through creativity, ingenuity, thriftiness, cost-cutting, or any means necessary.
 - ILINC used this to get started by selling vapor-ware
 - Success Magazine described the bootstrapping model employed by ILinc as the "Wimpy" model –named after Popeye the Sailor Man's friend who was always saying "I'll gladly pay you Tuesday for a Hamburger today."
 - ILinc told IBM, Office Depot, News Corp, Sprint, AT&T, Aetna –United Healthcare, and others that they would deliver a software product next year for a \$300,000 contract today.
 - This is often called "selling vapor ware."

Bootstrapping methods

- Avoiding unnecessary expenses
- Obtaining payments in advance from customers
- Applying for and obtaining grants
- Sharing office space with other businesses
- Coordinating purchases with other businesses
- Buying used instead of new equipment
- Leasing equipment instead of buying
- Minimizing personal expenses

Crowdfunding

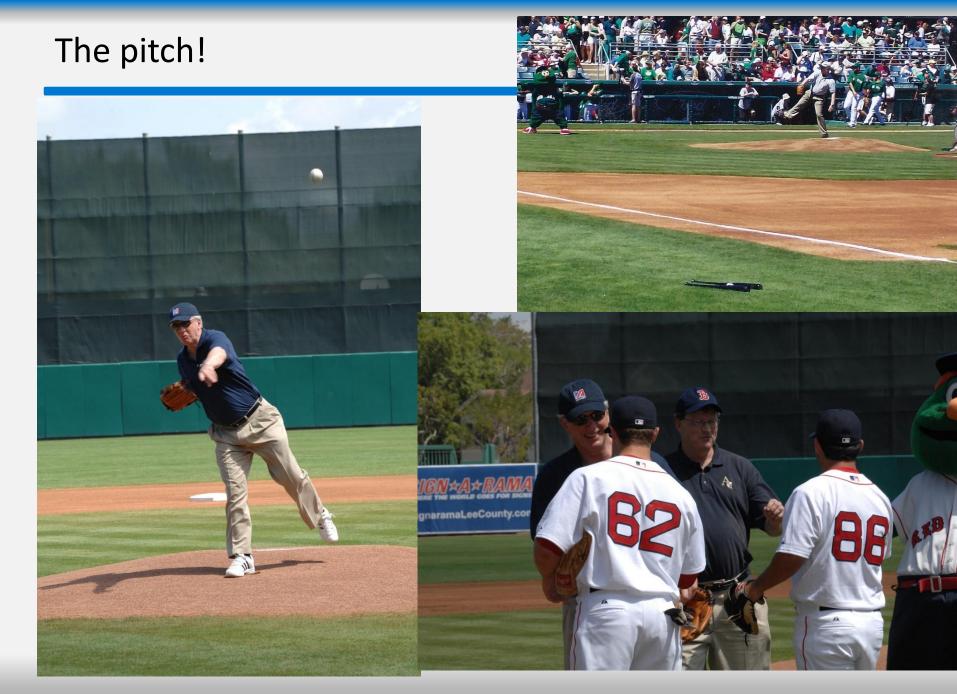
- One of the newest ways to raise money is to do it by making a public appeal to the general public asking them to contribute to your venture.
- Kickstarter was begun to help raise funding for creative ventures.
 - <u>http://www.jackmwilson.net/Entrepreneurship/Cases/Case-KickStarter.pdf</u>
- GoFundMe is often used to raise funding in personally difficult times, but is also used to jumpstart some kinds of ventures.
- IndieGoGo raises funds for an idea, a charity, or a startup business.
- All of these sites fund themselves by charging a commission on the funds raised often about 5%. They can also raise revenues by charging for financial transactions or advertising.

Preparing to Raise Debt or Equity Financing

- Debt—financial obligation to return capital provided plus a scheduled amount of interest
 - Debt guaranteed by the entrepreneur's personal assets or earning power
 - Asset-based financing
 - Supplier credit
- Equity—a portion of ownership receive in an organization in return for money provided
 - New ventures have no way to make scheduled interest payments until they have positive cash flow

Preparing to Raise Debt or Equity Financing-2

- Step 1: Determine precisely how much money the company needs
- Step 2: Determine the most appropriate type of financing or funding
 - Equity financing
 - liquidity event
 - Debt financing
- Step 3: Develop a strategy for engaging potential investors or bankers
 - Elevator pitch
 - Identify and contact the best prospects
 - Personal introduction is best
 - Prepare a complete business plan to close the deal



Technological Entrepreneurship

Elevator Pitch

The elevator pitch is a 60 second explanation of the company for potential investors. Sometimes it is three minutes. Sometimes it is five minutes. You prepare for whatever the investors ask.

- 1. 20 seconds: Describe the Opportunity or Problem that needs to be solved.
- 2. 20 seconds: Describe how your product or service addresses the opportunity or problem.
- 3. 10 seconds: Describe the qualifications of the team and yourself
- 4. 10 seconds: Describe your market

Remember: This is a pitch to INVESTORS not customers. End with a simple ask. "We are looking for an investment of \$1 million for 50% of the company."

60 seconds total

Sources of Equity Funding

- Angel Investors private investors using their own funds and often their own time to help launch a business.
- Venture Capital pooled investment funds that are invested by professionals in anticipation of large returns.
- Initial Public Offering (IPO) –Offering stock for sale to investors.
- Investors are generally looking for an exit strategy. This could occur by doing an IPO or by selling the new venture to a larger firm –being acquired.

Empire of the Geeks- To Fly, to Fall, to Fly Again

http://www.economist.com/news/briefing/21659722-tech-boom-may-get-bumpy-it-will-not-end-repeat-dotcom-crash-fly

The steady return



Economist-Empire of the Geeks in 2014

Legendary startups Biggest American "unicorns" (Date founded)			Unicorn (noun): Any startup wort			h more than \$1bn
		Company valuation, \$bn*, July 2015		Funds raised, \$bn	Revenue, \$m, 2014†	Employees, '000 [†]
U B E R (2009)	Taxi hailing	41		6	800	7.5‡
airbnb (2008)	Accommodation for tourists and millennials	26		2.3	450	3.0
Snapchat [§] (2011)	Ephemeral messaging app	16		1.2	nil	• 0.4
Q Palantir (2004)	Big data	15		1.1	600	1.5
SPACEX ^{\$} (2002)	It is rocket science	12		1.1	825	3.0
Pinterest (2009)	Photo sharing	11		1.3	15	• 0.7
Dropbox (2007)	Cloud-based file sharing	10		1.1	400	1.5
wework [§] (2010)	Office space provision	10		1.0	145	• 0.4
theran @s (2003)	Diagnostics through blood sampling	9		• 0.1	45	• 0.2
Square (2009)	Mobile-payments system	6		0.6	900	1.3

Sources: CB Insights; Mattermark; PrivCo; *The Economist* *Latest post-money [†]Estimate [‡]Drivers are not employees [§]Not in Silicon Valley Economist.com

	Unicorns	https://www.cbinsights.com/research-unicorn-companies		495 Unicorns in 2020 (October)		
		Maluatian				
	Company	Valuation (\$B)	Date Joined	Country	Industry	Select Investors
1	<u>Bytedance</u>	\$140.00	4/7/2017	China	Artificial intelligence	Sequoia Capital China, SIG Asia Investments, Sina Weibo, Softbank Group
2	Didi Chuxing	\$62.00	3/31/2015	China	Auto & transportation	Matrix Partners, Tiger Global Management, Softbank Corp.,
3	<u>SpaceX</u>	\$46.00	12/1/2012	United States	Other	Founders Fund, Draper Fisher Jurvetson, Rothenberg Ventures
4	<u>Stripe</u>	\$36.00	1/23/2014	United States	Fintech	Khosla Ventures, LowercaseCapital, capitalG
5	<u>Airbnb</u>	\$18.00	7/26/2011	United States	Travel	General Catalyst Partners, Andreessen Horowitz, ENIAC Ventures
6	<u>Kuaishou</u>	\$18.00	1/1/2015	China	Mobile & telecommunications	Morningside Venture Capital, Sequoia Capital, Baidu
7	<u>Instacart</u>	\$17.70	12/30/2014	United States	Supply chain, logistics, & delivery	Khosla Ventures, Kleiner Perkins Caufield & Byers, Collaborative Fund
8	Epic Games	\$17.30	10/26/2018	United States	Other	Tencent Holdings, KKR, Smash Ventures
9	<u>One97</u> <u>Communications</u>	\$16.00	5/12/2015	India	Fintech	Intel Capital, Sapphire Ventures, Alibaba Group
10	<u>DoorDash</u>	\$16.00	3/1/2018	United States	Supply chain, logistics, & delivery	Softbank Group, Sequoia Capital, Khosla Ventures
11	<u>Yuanfudao</u>	\$15.50	5/31/2017	China	Edtech	Tencent Holdings, Warbug Pincus, IDG Capital
12	DJI Innovations	\$15.00	1/23/2015	China	Hardware	Accel Partners, Sequoia Capital
13	<u>SHEIN</u>	\$15.00	7/3/2018	China	E-commerce & direct-to- consumer	Tiger Global Management, Sequoia Capital China, Shunwei Capital Partners
14	<u>Chime</u>	\$14.50	3/5/2019	United States	Fintech	Forerunner Ventures, Crosslink Capital, Homebrew
15	<u>Grab</u>	\$14.30	12/4/2014	Singapore	Auto & transportation	GGV Capital, Vertex Venture Holdings, Softbank Group
16	<u>Samumed</u>	\$12.44	8/6/2018	United States	Health	Vickers Venture Partners, IKEA GreenTech
17	JUUL Labs	\$12.00	12/20/2017	United States	Consumer & retail	Tiger Global Management
18	<u>Bitmain</u> Technologies	\$12.00	7/6/2018	China	Hardware	Coatue Management, Sequoia Capital China, IDG Capital
19	Robinhood	\$11.70	4/26/2017	United States	Fintech	Google Ventures, Andreessen Horowitz, DST Global
20	<u>Wish</u>	\$11.20	5/18/2015	United States	E-commerce & direct-to- consumer	Founders Fund, GGV Capital, Digital Sky Technologies

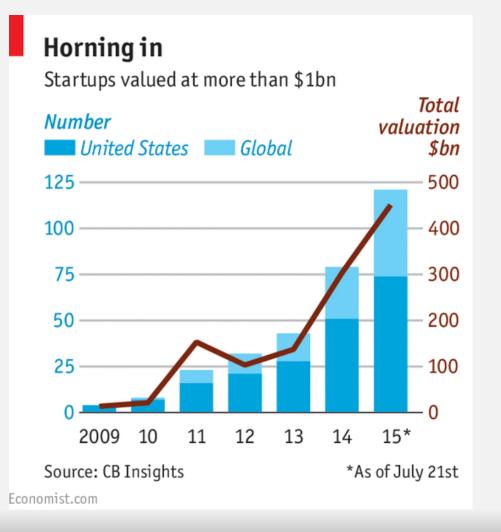
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Technological Entrepreneurship

Financing or Funding

Economist- Empire of the Geeks

• Increasingly a Global Opportunity



Compare the list of Global Unicorns to the list above of US Unicorns

https://www.cbinsights.com/research-unicorn-companies?utm_source=Facebook&utm_medium=Paid&utm_campaign=Unicorn%20Club

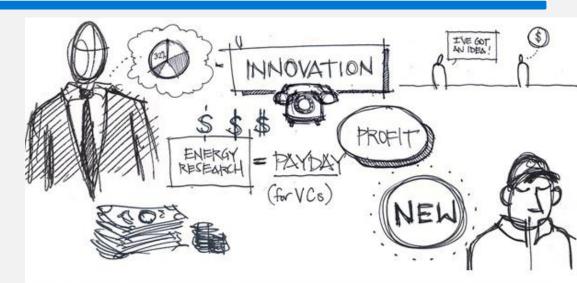
	Name	Value (\$B)	Date Joined	Country
1	<u>Uber</u>	\$68.00	8/23/2013	United States
2	Didi Chuxing	\$50.00	12/31/2014	China
3	<u>Xiaomi</u>	\$46.00	12/21/2011	China
4	Airbnb	\$29.30	7/26/2011	United States
5	<u>SpaceX</u>	\$21.20	12/1/2012	United States
6	Palantir Technologies	\$20.00	5/5/2011	United States
7	WeWork	\$20.00	2/3/2014	United States
8	Lu.com	\$18.50	12/26/2014	China
9	<u>China Internet Plus</u> Holding	\$18.00	12/22/2015	China
10	<u>Pinterest</u>	\$12.30	5/19/2012	United States
11	<u>Flipkart</u>	\$11.60	8/6/2012	India
12	<u>Toutiao</u>	\$11.00	4/7/2017	China
13	DJI Innovations	\$10.00	5/6/2015	China
14	<u>Dropbox</u>	\$10.00	10/5/2011	United States
15	Infor	\$10.00	11/16/2016	United States
16	<u>Stripe</u>	\$9.20	1/23/2014	United States
17	<u>Spotify</u>	\$8.53	6/17/2011	Sweden
18	<u>Snapdeal</u>	\$7.00	5/21/2014	India
19	<u>Lyft</u>	\$6.90	3/12/2015	United States
20	<u>Lianjia</u>	\$6.20	4/8/2016	China
21	Global Switch	\$6.02	12/22/2016	United Kingdom

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Technological Entrepreneurship

What Are Investors Looking For?

- An excellent venture team with
- Motivation
- Passion
- Honesty
- Experience



http://vault.sierraclub.org/sierra/201209/coolschools/investing-venture-capitalists-green-technology-entrepreneurs.aspx

An excellent business opportunity with

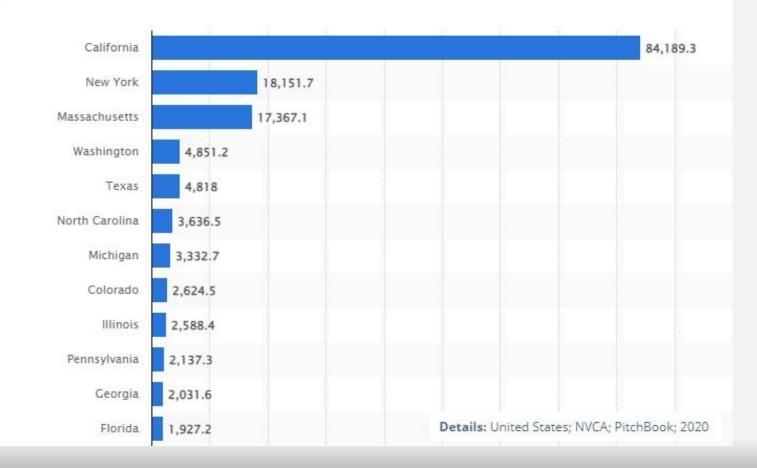
- Large and desirable market
- Appropriate growth strategy
- Compelling product description
- Solving a business or social problem (or both!)
- Competitive advantage

Business Angels

- Are individuals who invest their personal capital directly in start-ups.
- The prototypical business angel is about 50-70 years old, has high income and wealth, is well educated, has succeeded as an entrepreneur, and is interested in the start-up process.
- Business angels are valuable because of their willingness to make relatively small investments.
- The Angels tend to fill the gap between friends and family or bootstrapping and access to formal venture capital. Because of this they often require very high returns on investment –often over 10 times the initial investment in five years.

Venture Capital

- As we saw in the earlier slide, venture capital provides the rocket fuel for most new ventures.
- PitchBook and NVCA have published an initial look at the Venture Monitor Q4 2021. As of Dec. 31, PitchBook had identified \$330 billion invested across more than 15,000 deals, substantial increases over the \$167 billion invested across 12,000 deals in 2020.



Valuation: How do you know what you are worth?

- From the entrepreneur's perspective the driving force my be how much funding you feel that you need to launch the venture. The investor has quite a different perspective. They are trying to figure out how much your venture is worth. They need to understand that if they invest in a new for-profit venture, they need to find a way to make a profit from it. They may do this by asking for equity (stock ownership), a royalty of sales, debt payments or a combination of debt and equity that is often done by offering a loan that can be converted into equity at some particular time in the future. That time could be because of another round of financing, an IPO, a particular date, or some other specific event.
- Negotiating the value is always one of the most challenging parts of the process as we shall see in the case of the founding of Staples mentioned later in this chapter. Of course, fans of the Shark Tank have seen this negotiation play out in each new episode.

Value

- How can one decide on value? That is not easy and there are no rules. There are some general principles, but these are not prescriptive. In the end it comes down to a negotiation in which the entrepreneur tries to make the best case for a high value and the investor (angel, venture capitalist, etc.) tries to keep the value to a lower level where they have some likelihood of getting a good return on their investment.
- For an established public business there is a simple rule of thumb based upon the **price to earnings ratio**. The P/E ratio should be similar to other similar businesses For most of the last century the P/E of the S&P 500 has mostly been between 20 and 40, but has been as low as 4.78 in 1920 and as high as 44.2 in 1999. In late 2020 the ratio was just over 20.
- This would be great except that new ventures rarely are making any money. Zero earnings. That makes the P/E infinite and not helpful at all. New ventures need some other kind of benchmark. One of the best of those is **annual revenues**. Even though the venture may not yet have reached break even, the fact that they have revenues indicates that they might be likely to be able to do that in the future. Investors also like to see a pattern of growth in revenues. The key factor is the multiple of revenues that leads to a value for the company. Slowly growing companies will generally have a multiple in the low single digits. Rapidly growing companies can see a multiple in the high single digits -or even higher in exceptional cases.

Other metrics of value:

- Of course, another metric of interest is customers. This is always important but is particularly important for many online ventures that are using the freemium model. If investors see a lot of customers, particular returning customers, then there is some confidence that the venture may be able to "monetize" those customers -or start to gain revenue from them. This metric has led to high values for new ventures like Facebook, Twitter. Tik Tok, and many others.
- The value of a venture's assets might be another metric that is most useful for more traditional kinds of brick and mortar businesses.
- It is not rocket science. In the end a company will get the multiple that it can negotiate based upon the evidence.

An Entrepreneur and Venture Capitalist –Starting Staples



An Uneasy Start: Staples revolutionized the office supply business, but it success was far from guaranteed.

Boston Globe article on the founding of Staples featuring the CEO Tom Stemberg and the Venture Capitalist, Mitt Romney, who later became Governor of Massachusetts and later ran for the Presidency. -October 31, 2012 <article>

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Technological Entrepreneurship

Boston Globe on the Funding of Staples

- Opening Line: "It was early 1987, and Mitt Romney was shopping. And he was angry. He was walking the aisles of Staples, a little-known retail store his firm had bet \$1.5 million on so far, and picking up office supplies. Then he waited in line at the check-out counter -- for far too long. To Romney, then CEO of Bain Capital, a superstore with low prices was a good idea, but there were big problems."
- Venture Capitalists see their job as driving the entrepreneur to greater heights. They are not usually gentle about it!
- They also describe the difficulty of setting a value for the company -and how the founder always thinks it is much higher than the venture capitalist does!

Boston Globe on the Funding of Staples-2

- "It was a very difficult and painful process," Romney would recall while testifying on Stemberg's behalf. "We found Tom difficult to deal with from a negotiating standpoint."
- Stemberg and his lawyer were driving a tough bargain, trying to keep "a very large portion" of the company for the founder, while Bain and the other investors were "of course thinking we should take a large portion of the company."
- "It was very clearly our intent to [reward] Tom handsomely if the company did spectacularly well. On the other hand, we did not want Tom to receive any reward if he were to turn out to be not an effective chief executive officer," Romney said in his testimony.

Boston Globe on the Funding of Staples-3

- Indeed, such contentious face-offs are common, said Todd Dagres, a Boston venture capitalist whose deals have included Akamai Technologies and Twitter.
- "The one thing that is an absolute rule is, the most successful entrepreneurs I've dealt with have been the most challenging," said Dagres of Spark Capital.
- "Based on how successful Staples and Stemberg were, and Mitt has been, I would be shocked to learn if it was anything different."

Boston Globe on the Funding of Staples-4

- As we discussed in class, it always comes down to this point: The entrepreneur thinks he/she has creating something incredibly valuable.
- The venture capitalist hopes this is correct, but approaches the situation with more skepticism.
- Besides, if the entrepreneur IS correct, then the VCs want to make sure they capture as much of the wealth created as they can!
- In the end, it comes down to making a deal that fairly recognizes the potential value created while providing adequate reward to the investors taking the risks. The only way to do that is through negotiation. It is not a science.

Venture Capital -Staging of financing

- Seed Funding
 - Seed funding occurs very early and often helps to create the prototype or do the feasibility analysis.
- Series A Start-up funding
 - If feasibility and prototyping are complete, a business model is adopted, and a management team is in place one may need funding to begin operation/production even before any or many customers have been found.
- Series B or First Stage Funding
 - In the first stage the company is operating and has customers but needs to expand its operations or production.
- Series C or Second Stage Funding
 - In the second stage the company is further along in production and operation, but needs further expansion of capability.
- Mezzanine Funding
 - This is often the final stage in bringing the company to the point of doing an IPO or being acquired. Mezzanine funding is often a combination of debt and equity and is sometimes used to displace earlier equity investors.

- Buyout funding
 - Funding that allows the acquisition of one company by another.

Venture Capital-specialization

- Specialization- Venture Capitalists often specialize
 - By industry
 - By development stage
 - By Geographically localized investing
- Syndication Venture Capitalists often team up with other firms to
 - Share the risk on investments that are inherently risky.
 - Better investment decision
 - Diversify portfolio

Sources of Debt Financing

Commercial Banks

- Historically, commercial banks have not been viewed as practical sources of financing for start-up firms.
 - Banks are interested in firms that have a strong cash flow, low leverage, audited financials, good management, and a healthy balance sheet.
 - When banks do provide loans to new ventures they often demand that the founders provide personal guarantees –exposing their families and personal finances to potential liability.

Banks like to say "No." Can one get a Bank to Say "Yes"

Things a bank will say:

- Our bank doesn't make small business loans
- I don't know enough about you or your business
- You haven't told me why you need the money
- Your numbers don't support your loan request
- You don't have enough collateral
- You business does not support the loan on its own

You will need to provide good answers to these questions in order to convince the bank to make the loan, you are also likely to have to secure the loan with personal property or personal guarantees.

When I founded ILinc, I was indeed able to convince a bank to give us loans, but I had to make personal guarantees. I was living dangerously!

A personal story of the funding of ILinc

When I became President of the University of Massachusetts it was in the aftermath of a battle between my predecessor, William Bulger and Governor Mitt Romney. The Governor invited me over to his office for a meeting to establish a good initial working relationship. The meeting was very cordial and went quite well. Near the end of the meeting, he asked me "Jack, I think this is a very high stress job. Do you think you are up to enduring that kind of stress?"

"Well Governor, when I was CEO of ILinc in the early years, we were bootstrapping the company with no venture capital. We had orders come in and those took time to collect. In the meantime, I had salaries and other expenses that had to be paid. I took my accounts receivable to the bank and negotiated a loan against those in order to pay our bills. As long as the receivables were paid, I would be able to pay off the loans, but if they were not, I would never have been able to pay the loans and my personal possessions would have been in jeopardy. I don't think my wife and four children understood that if I could not pay the loans we were going to lose everything —including our kids college funds."

"That is stress! The stress of being President cannot compare to that" I said.

SBA Guaranteed Loans

One of the best places to get loans as a small business is from the federal government through the Small Business Administration (SBA)

- The SBA Guaranteed Loan Program <u>https://www.sba.gov/</u>
 - Approximately 50% of the 9,000 banks in the U.S. participate in the SBA Guaranteed Loan Program.
 - The program operates through private-sector lenders who provide loans that are guaranteed by the SBA.
 - The SBA can guarantee as much as 85% on loans up to \$150,000 and 75% on loans over \$150,000.
- The 7(A) Loan Guaranty Program
 - The most notable SBA program available to small businesses.
 - <u>https://www.sba.gov/7a-loan-program</u>

Government Grants

- SBIR and STTR Programs
 - <u>https://www.sba.gov/blogs/getting-know-sbirsttr-programs-11-agencies-one-playlist</u>
 - The Small Business Innovation Research (SBIR) and the Small Business Technology Transfer (STTR) programs are two important sources of early-stage funding for technology firms.
 - SBIR: <u>http://sbir.gov/about/about-sbir</u>
 - STTR: <u>http://sbir.gov/about/about-sttr</u>
 - These programs provide cash grants to entrepreneurs who are working on projects in specific areas.
 - The main difference between the SBIR and the STTR programs is that the STTR program requires the participation of researchers working at universities or other research institutions.

SBIR - <u>http://sbir.gov/about/about-sbir</u>

"The Small Business Innovation Research (SBIR) program is a highly competitive program that encourages domestic small businesses to engage in Federal Research/Research and Development (R/R&D) that has the potential for commercialization. Through a competitive awards-based program, SBIR enables small businesses to explore their technological potential and provides the incentive to profit from its commercialization. By including qualified small businesses in the nation's R&D arena, high-tech innovation is stimulated and the United States gains entrepreneurial spirit as it meets its specific research and development needs."

"The mission of the SBIR program is to support scientific excellence and technological innovation through the investment of Federal research funds in critical American priorities to build a strong national economy.

- The program's goals are four-fold:
 - Stimulate technological innovation
 - Meet Federal research and development needs.
 - Foster and encourage participation in innovation and entrepreneurship by socially and economically disadvantaged persons.
 - Increase private-sector commercialization of innovations derived from Federal research and development funding."

SBIR - Three-Phase Program

The SBIR Program is structured in three phases:

- Phase I. The objective of Phase I is to establish the technical merit, feasibility, and commercial potential of the proposed R/R&D efforts and to determine the quality of performance of the small business awardee organization prior to providing further Federal support in Phase II. SBIR Phase I awards normally do not exceed \$150,000 total costs for 6 months.
- Phase II. The objective of Phase II is to continue the R/R&D efforts initiated in Phase I. Funding is based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the project proposed in Phase II. Only Phase I awardees are eligible for a Phase II award. SBIR Phase II awards normally **do not exceed \$1,000,000 total** costs for 2 years.
- *Phase III.* The objective of Phase III, where appropriate, is for the small business to pursue commercialization objectives resulting from the Phase I/II R/R&D activities. The SBIR program **does not fund Phase III**. Some Federal agencies, Phase III may involve follow-on non-SBIR funded R&D or production contracts for products, processes or services intended for use by the U.S. Government.

STTR - http://sbir.gov/about/about-sttr

"Small Business Technology Transfer (STTR) is another program that expands funding opportunities in the federal innovation research and development (R&D) arena. Central to the program is expansion of the public/private sector partnership to include the joint venture opportunities for small businesses and nonprofit research institutions. The unique feature of the STTR program is the requirement for the small business to formally collaborate with a research institution in Phase I and Phase II. STTR's most important role is to bridge the gap between performance of basic science and commercialization of resulting innovations."

"The mission of the STTR program is to support scientific excellence and technological innovation through the investment of Federal research funds in critical American priorities to build a strong national economy."

- The programs' goals are to:
 - Stimulate technological innovation
 - Foster technology transfer through cooperative R&D between small businesses and research institutions;
 - Increase private sector commercialization of innovations derived from federal R&D

STTR- Three-Phase Program

The STTR Program is structured in three phases

- Phase I. The objective of Phase I is to establish the technical merit, feasibility, and commercial potential of the proposed R/R&D efforts and to determine the quality of performance of the small businesses prior to providing further Federal support in Phase II. STTR Phase I awards normally do not exceed \$100,000 total costs for 1 year.
- Phase II. The objective of Phase II is to continue the R/R&D efforts initiated in Phase I. Funding is based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the Phase II project proposed. Only Phase I awardees are eligible for a Phase II award. STTR Phase II awards normally do not exceed \$750,000 total costs for 2 years.
- *Phase III.* The objective of Phase III, where appropriate, is for the small business to pursue commercialization objectives resulting from the Phase I/II R/R&D activities. The **STTR program does not fund Phase III**. In some Federal agencies, Phase III may involve follow-on non-STTR funded R&D or production contracts for products, processes or services intended for use by the U.S. Government.

Leasing

- Leasing is not a way to raise funds, but it does provide a good way to conserve what funds you have.
 - A lease is a written agreement in which the owner of a piece of property allows an individual or business to use the property for a specified period of time in exchange for payments.
 - The major advantage of leasing is to allow use of assets with little or no down payment. In this way you can get access to expensive assets without large upfront costs.
 - In theory, once your business is thriving you will have the funds coming in to pay the lease costs.

Exiting through an IPO or being acquired.

- Doing an initial public offer (IPO) is often the most desired way to profit from starting a new venture –often called 'going public.". If the company desires to raise capital in another round of stock sales this is termed a secondary offering.
- A new venture will hire an **investment bank** to help with the enormously complicated process of either an IPO or acquisition.
 - In 2002, in the aftermath of the collapse of the technology stock markets, the Sarbanes-Oxley Act was passed that set stringent (and expensive) requirements for public corporations.
 - For an IPO the investment bank will act as an underwriter or agent for the proposed stock offering.
- The next step is the creation of a **preliminary prospectus** while the Securities and Exchange Commission (SEC) is investigating the offering. Once the SEC approves, then a **final prospectus** is issued.
- The new venture's leaders will usually then launch a series of presentations, often called the "road show" to potential investors in various locations. The road show must be available as a video to anyone with an interest.
 - You can see many roadshows at http://www.retailroadshow.com/wp/index.asp

Facebook IPO

- The Facebook IPO on May 18 2012 was a case study in large IPO offerings and what can go wrong!
 - http://www.theatlantic.com/business/archive/2013/05/facebook-one-year-later-what-really-happened-in-the-biggest-ipo-flop-ever/275987/
 - http://en.wikipedia.org/wiki/Initial_public_offering_of_Facebook
- A share price of \$38 valued the company at \$104 billion, the largest valuation ever (at that date) for a newly public company.
- During the roadshow, the leaders had to confess that Facebook was suffering from pressure on earnings due to the mobile platform, and this spooked investors and reduced the demand.
- The price fell precipitously over the following year but has since recovered to more than twice the offering price.



Other interesting IPOs

- Twitter November 7, 2013
 - <u>http://www.forbes.com/sites/hershshefrin/2013/11/08/why-twitters-ipo-was-really-a-failure/</u>
- Alibaba Chinese Internet Sales–September 22, 2014
 - http://www.forbes.com/sites/ryanmac/2014/09/22/alibaba-claims-title-for-largest-global-ipo-ever-with-extra-share-sales/

Funding the non-profit organization

- Those who are creating a new venture in social entrepreneurship may be considering forming a 501 c(3) non-profit organization as we describe in Chapter 13 on the legal structures for new ventures. In a non-profit organization, there is no way to reward investors or distribute profits. That is termed "self inurement" and is prohibited. Thus those who contribute funds to the social enterprise need to take their "profit" in different ways –often by enjoying the feeling of simply contributing to something that they think is important to the world.
- Raising funds for a non-profit organization is thus done quite differently than for a for-profit corporation —although some techniques are similar.
- Usually the largest source of funding is from donations that are given freely because the donor wants to support the organization with no expectation of financial return. Other sources of revenue can include subscription to journals that must relate to the non-profit purpose or fees for attendance at meetings.

Funding the non-profit organization -2

- In some ways starting a non-profit is much like starting a for-profit venture. In order for the organization to be sustainable, it MUST obtain revenues (donations, subscriptions, fees, sales) that exceed its expenses.
 - "No margin = no mission."
- Many founders of new social ventures do not like this or understand it. For that reason, many such ventures fail to fulfill their mission.
- I have often been told: "I'm not interested in finances and money, I am only interested in the mission." I then reply that it is very wonderful to be focused on the mission and not to be driven by finances, but if no attention is paid to finances, then there will be no way to sustain the mission.

Funding the non-profit organization -3

- Because of this need to sustain the mission, many leaders of non-profits spend much of their time helping the organization to raise money.
- For example: the presidents of universities are often described as "living in a big house and begging for money."
 - The President of the University of Massachusetts does not have any university provided house –let alone a big one. But, like most Presidents, public and private, he or she spends a large share of time in meeting donors and asking for donations.
- Many larger non-profits have professional fund raising personnel working full time to help fund the mission.
- The Boston Globe article (March 17, 2015) describes one creative approach:
 - <u>http://www.bostonglobe.com/business/2015/03/17/boston-venture-capitalist-plans-shark-tank-style-competition-for-nonprofits/fbm31tNPXEuqWui5ZckXLN/story.html?p1=Article_InThisSection_Bottom</u>
- It demonstrates one venture capitalist's idea for funding non-profits though a "Shark Tank" like approach. It also uses the usual venture capital approach of putting the VC on the board or advisory committee to the organizations in which they invest.

Funding the non-profit organization -4

- In recent years, there have been a variety of innovative ways to raise money for non-profits.
- Perhaps the most innovative is Kickstarter.
 - <u>http://www.jackmwilson.net/Cases/Case%20-KickStarter.pdf</u>
- They began with a focus on creative projects:
 - films, games, music, art, design, and technology.
- It is an all or nothing approach. You either reach your goal or get nothing.
- Other options:
 - Indiegogo –similar to Kickstarter but allows project to receive funds even if the goal is not met.
 - PeopleFund.it -British
 - SmallKnot –invest in community businesses
 - RocketHub –similar to KickStarter
 - Gambitious –video gaming
 - MedStartr -medical/healthcare
 - Spot.us -Journalism supporter
 - GigFunder support musicians on tour!

Happy Ending



This is the World Series trophy won by the Red Sox.

When your new venture gets funding you may not get a trophy, but you will feel like you won the world series!