



# Lecture 5

Funding & Venture Capital

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# Funding



# The “Secrets” to 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 have to be as creative in their searches for capital as they are in developing their business ideas.



# Three Types of Capital

- Fixed - used to purchase the permanent or fixed assets of the business (e.g., buildings, land, equipment, etc.)
- Working - used to support the small company's normal short-term operations (e.g., buy inventory, pay bills, wages, salaries, etc.)
- Growth - used to help 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 assume the risk of losing their money if the business fails.
- Does *not* have to be repaid with interest like a loan does.
- Means that an entrepreneur must give up some ownership in 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* investing theirs.
- Sweat equity and personal risk equity (non-monetary)



## 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/friendly business deals, *especially* those that flop.





# Friends and Family Members

- 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 - private investors who back emerging entrepreneurial companies with their own money.
- Fastest growing segment of the small business capital market.
- An excellent source of “patient money” for investors needing relatively small amounts of capital – often less than \$500,000.



# Some links for Angel Based Funding

- <http://www.usangelinvestors.com/>
- <http://ycombinator.com/>
- <http://www.foundersden.com/>
- <http://dogpatchlabs.com/>
- <http://techcrunch.com/>
- <http://www.etoHum.com/>
- <http://www.nvca.org/>



# Angels

- Key: finding them!
- Angels almost always invest their money locally and can be found through “networks.”
- The typical angel accepts 30% of the proposals presented to him 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 across the globe invest in start-up companies.
- Capital infusions are just one benefit; corporate partners may share marketing and technical expertise.



# Venture Capitalist

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



# Venture Capitalist Companies

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



# Going Public

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





## 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 founder’s 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 (sells the stock)
- Negotiate a letter of intent (\$)
- Prepare the registration statement (risks)
- File with the SEC
- Wait to “go effective” (limit information)
- Meet state requirements



# Simplified Registrations and Exemptions

- Regulation S-B (small US business only)
- Regulation D: Rule 504 - Small Company Offering Registration (SCOR)
  - Limited legal help required
  - No SEC filing
  - Marketing the offering is OK
  - \$1 million max in 12 month period
- Regulation D: Rule 505 and 506
  - Private placements to max of 35 nonaccredited investors
  - Some limitations on total amount to be raised
- Section 4 (6) – Accredited investors



# Simplified Registrations and Exemptions (continued)

- Rule 147 (Intrastate offerings)
- Regulation A (few restrictions but expensive)
- Direct Stock Offering on the World Wide Web (WWW)
  - Direct Public Offering (DPO)
  - 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 tradeoff.
- Convertible loans (very popular if IPO might be used as an exit strategy)



# Sources of Debt Capital

- Commercial banks



# Internal Methods of Financing

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





# Venture Capitalist



# A Passion for Innovation

- Not all venture capitalists start out as business people. In fact, 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 experiences as entrepreneurs to identify the most promising innovations in their fields and then build companies around them.



# What is Venture Capital?

- Venture capital funds build companies from the simplest form – perhaps just the entrepreneur and an idea expressed as a business plan to freestanding, mature organizations.

Venture capital has enabled the United States to support its entrepreneurial talent and appetite by turning ideas and basic science into products and services that are the envy of the world.

### 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



# Risk Capital

- Venture capital 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 with traditional bank financing, that threaten established products and services in a corporation, and that typically require five to eight years to be launched.
- Venture capital is quite unique as an institutional investor asset class. When an investment is made in a company, it is an equity investment in a company whose stock is essentially illiquid and worthless until a company matures five to eight years down the road.
- Follow-on investment provides additional funding as the company grows.
- These “**rounds**,” typically occurring every year or two, are also equity investment, with the shares allocated among the investors and management team based on an agreed “**valuation**.” But, unless a company is acquired or goes public, there is little actual value. Venture capital is a long-term investment.





# More than money

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

For every 100 business plans that come to a venture capital firm for funding, usually only 10 or so get a serious look, and only one ends up being funded.



# One Part Nature, Two Parts Nurture

- Unlike most other investors, venture capitalists provide more than just money.
- As part of this process, the venture capitalist guides the company through multiple rounds of financing.
- At each point, the company must meet certain milestones to receive fresh funds for continued growth. If the company fails to meet these goals, or if the risk profile changes significantly due to market conditions or regulatory policy, the VC's responsibility to their limited partners will require them to walk away.
- These elements – the patience, the hands-on guidance, the willingness to take on risk and fail – make venture capital unique as an asset class.
- In no other ecosystem are all of the stakeholders aligned around one simple objective: company growth.
- **This alignment drives economic growth and generates more jobs than other asset classes, and it has set for example set U.S. economy apart from those of other countries.**

Typically, VCs take seats on the boards of their portfolio companies and participate actively in firm management. This often includes connecting the company with resources and expertise for development and production, providing counsel and contacts for marketing and assisting in hiring management. In this way, they remain partners with the entrepreneurs in growing the company to a point where it can stand on its own.



# Why Venture Capital?

- Many technologies currently under development by venture capital firms are truly disruptive technologies that do not lend themselves to being embraced by larger companies whose current products could be cannibalized by this.
- With the increased emphasis on public company quarterly results, many larger organizations tend to reduce spending on research and development and product development when things get tight.
- Many talented teams have come to the venture capital process when their projects were turned down by their companies.



# Venture Capital Firm

- In most cases, venture capitalists partner with other like-minded professionals with complementary backgrounds and sector expertise to establish venture capital firms.
- Generally, these firms function as small, tight-knit teams in which risks and responsibilities are shared. In 2008, the average venture firm consisted of nine investing professionals.
- Through their firms, venture capitalists pool their money with additional funds from institutional investors such as pension funds, endowments and foundations. These investors become “limited partners” in the firm’s funds, which are typically designated for investment in specific industries (e.g. information technology, life sciences, clean technology).

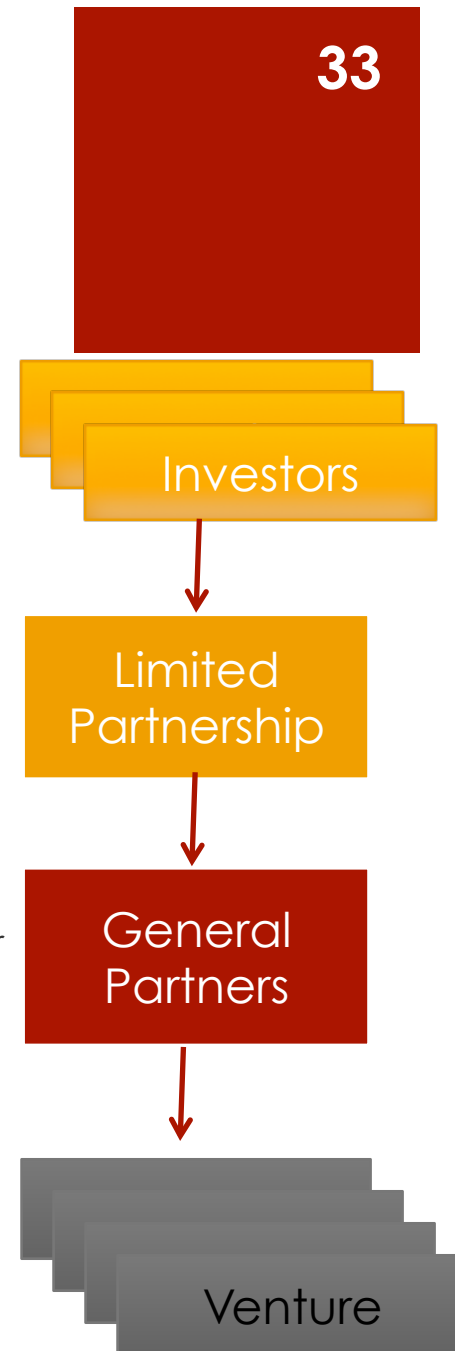
Limited Partners??





# Structure

- **Typically, a venture capital firm will create a Limited Partnership with the investors as LPs and the firm itself as the General Partner.**
- Each “fund,” or portfolio, is a separate partnership. A new fund is established when the venture capital firm obtains necessary commitments from its investors, say \$100 million.
- The money is taken from investors as the investments are made. Typically, an initial funding of a company will cause the venture fund to reserve three or four times that first investment for follow-on financing.
- Over the next three to eight or so years, the venture firm works with the founding entrepreneur to grow the company. The pay-off comes after the company is acquired or goes public.
- Although the investor has high hopes for any company getting funded, only one in six ever goes public and one in three is acquired.





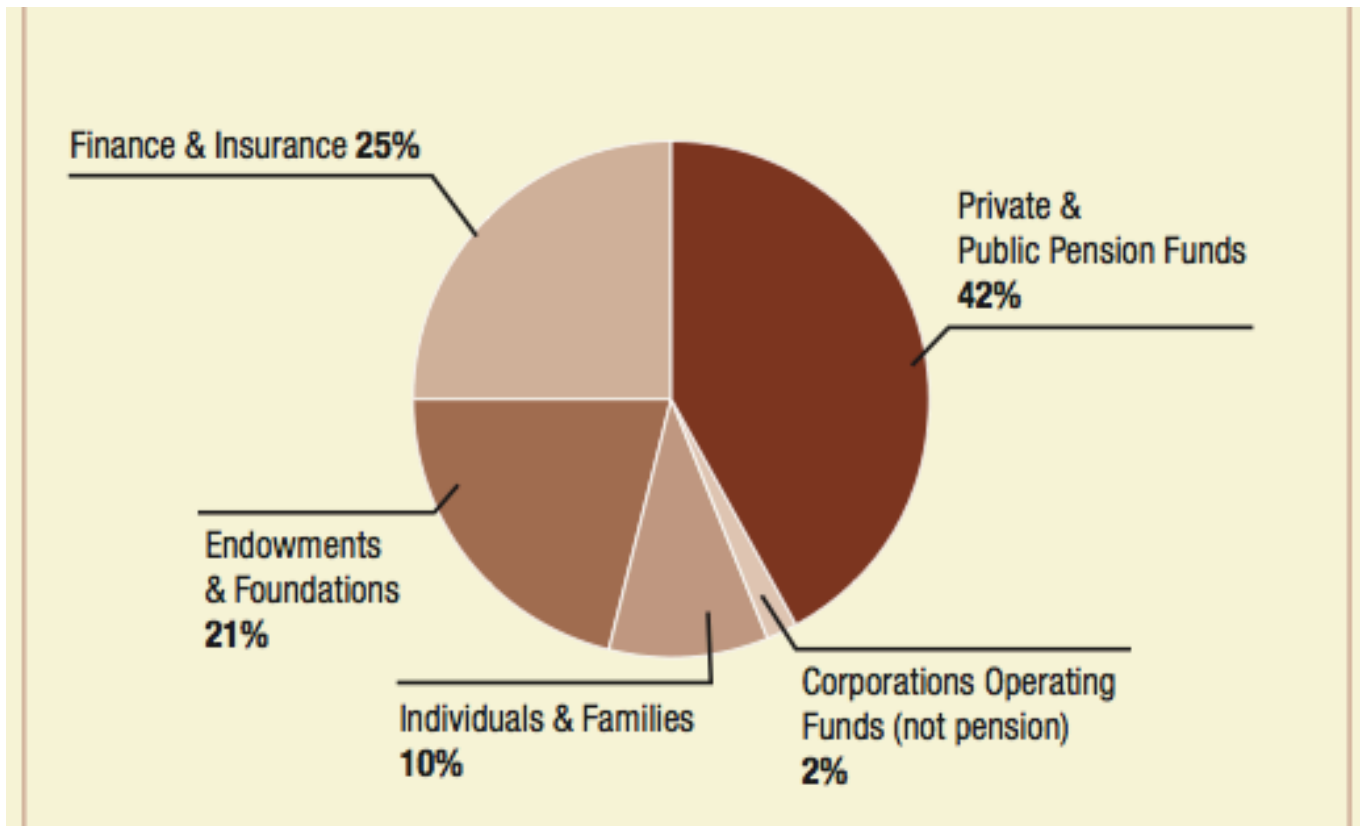
# Venture Funds

- Venture funds have a life span of approximately 10 years. During the first several years, venture capitalists invest in promising new companies that then become part of the firm's portfolio.
- Over the course of the fund's life, these companies are nurtured with the hope that they will be acquired or go public at a premium to the total amount invested. This process is called an exit.
- Neither the venture capitalists nor the limited partners see a return on their total investment unless the fund's successful exits outnumber its losses.
- Approximately one-third of portfolio companies fail, so those that do succeed must do so in a big way. Because venture capital is considered to be a high-risk investment, investors expect a higher rate of return than they would receive in other asset classes. Collectively, the venture industry has delivered on this criterion and typically outperforms the public markets over the long-term.

In most VC portfolios, a significant portion of investments simply don't work out. In fact, historical data from one of significant limited partners shows that 58 percent of invested capital returns less than 1x capital. Another 33 percent of investments yield modest returns (about 20 percent of the total return value). The magic comes from 9 percent of the fund's invested capital, which produce outsized returns — 5x to 50x (or more) the original investment. These outliers make the VC asset class work.



# Where does the money come from? Investors





# What you give to employee? Stock options

**Start-up companies give their employees stock options for a variety of reasons.**

**The central reason is to attract bright, talented and experienced engineers to a venture that might fail and leave them unemployed.**

**The issue of failure is one that is not discussed much in Silicon Valley mythology.**

**The other reason that start-up companies award stock options is to compensate their staff for long hours and stress.**

- **What are those employee stock options worth?**

- There are three reasons to work for a start-up company:

- You get to work on interesting leading edge projects.

- You get to work with smart, motivated and interesting people.

- You might make some real money on your stock options.

- There are two related reasons to think twice before joining a start-up:

- The start-up may fail.

- You may become unemployed and have a hard time finding a new job.

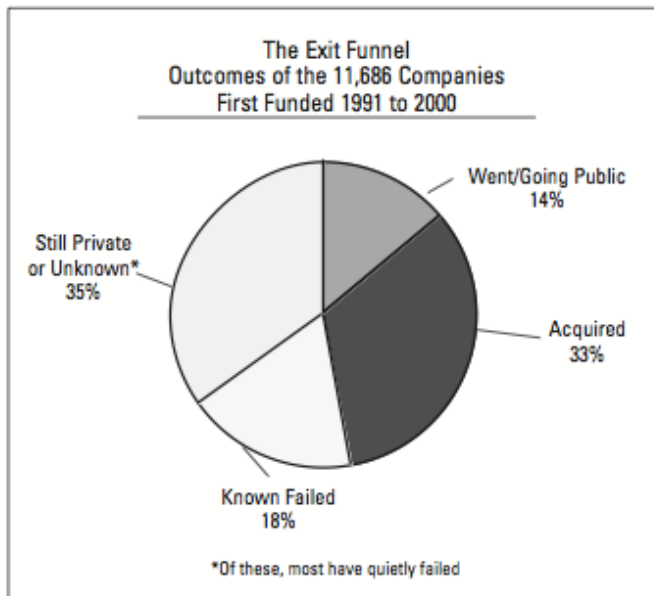


# Organization Example

- The venture capitalists provide the funding for the start-up. In return the first round of venture capital usually takes around 60% of the company stock.
- Of the 40% that is allocated for employees.
- At least half (20%) is usually reserved for future employees (e.g., engineers, VP of marketing, VP of sales).
- A serious startup company will have a CEO, a CFO/VP Operations, and at least one VP of engineering, plus one or two senior engineers.
- In many cases these are people who joined the company before it had funding and may have worked for a time without salary.
- This founding group will split the remaining 20%, with the CEO getting around 5% and the rest of the founding group getting between 2% and 4%.
- If you are a senior engineer with skills that the start-up really needs and they are having a hard time hiring people like you, the start-up may offer you around 1%. Most engineers are offered stock options that accounts for 0.5% or less of the outstanding first round stock.



# Economic Alignment of all Stakeholders



- Venture capital is rare among asset classes in that success is truly shared.
- It is not driven by quick returns or transaction fees.
- Economic success occurs when the stock price increases above the purchase price.
- When a company is successful and has a strong public stock offering, or is acquired, the stock price of the company reflects its success.
- The entrepreneur benefits from appreciated stock and stock options.
- The rank and file employees throughout the organization historically also do well with their stock options.



# Venture capital controls the start-up

- The critical part capital plays in the development of technology also reflects the balance of power in the computer industry.
- Most start-up companies are controlled by the board members that represent venture capital.
- The can, and do, fire the start-up founders.
- The idea that capital has most of the power is not something that engineers like much.
- **In some cases the venture capital board members are MBAs who have not accomplished as much as the company founders.**
- **The start-up founders have the insight and the hard work to found the company, yet it is controlled by shallow capitalists.**
- **Engineers tend to discount the power and importance of capital.**



## Outside U.S.

- The nascent deployment of venture capital in other countries is gated by a country's or region's
  - cultural fit,
  - tolerance for failure,
  - services infrastructure that supports developing companies,
  - intellectual property protection,
  - efficient capital markets,
  - and the willingness of big business to purchase from small companies.





# VC Participates

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

These tenets drive companies during their formative years with venture backers and remain integral parts of **their DNA** long after – often enabling them to grow faster and longer than their non-venture counterparts.



# Impacts Entire Industries

## Venture Capital Nourishes Entire Industries

- Throughout its history, venture capital has developed numerous life-changing innovations into entirely new industries in just this way.
- In the 1970s, VCs helped found the biotechnology industry through their investments in pioneering companies like Genentech and Amgen.
- A decade later, venture funding was growing the software development and semiconductor industries into prime drivers of the U.S. economy.
- Online retailing (Amazon, eBay) followed in the 1990s and clean technology is poised to extend this legacy today.



# Penchants for Prescience and Risk

- Given the high incidence of failure, venture capitalists focus only on innovations that have the potential to revolutionize existing industries or give birth to new ones.
- Venture capital's role in creating the biotechnology sector through its investments in Genentech and Amgen is a good example of the latter.
- Other areas of venture innovation include semiconductors, software and the Internet.
- In the 21st century, venture capitalists are poised to create a new sector – clean technology – that holds the same tremendous promise for job creation and economic growth as those ground-breaking sectors that have preceded it.
- Ironically, finding innovative ideas isn't the hard part.
- Government- and university-funded research produces startling new discoveries all the time.
- The challenge lies in determining which innovations can be translated into commercially viable products and services and then building companies from scratch to market them.



# How VC thinks and works?

- While tales of crumpled cocktail napkins scribbled with formulas and diagrams may exaggerate the point, VCs often have little more to go on initially than an entrepreneur's idea expressed in a rudimentary business plan.
- For this reason, VCs employ a rigorous vetting process. For every 100 plans, it is estimated that only 10 make it to the due diligence phase and only one gets funded.
- Making investments at the earliest stages of a company's development involves extraordinary risk. Young companies have little or no collateral to secure bank loans, no assets or track records to attract financing from private equity firms and no opportunities for short term gain to interest hedge funds.
- Venture capitalists step in and assume this risk by providing capital in exchange for an equity stake in the company.
- The VC's goal is to grow the company to a point where it can go public or be acquired by a larger corporation – at which time the firm and its limited partners may capture their return if the exit is worth more than the total investment.



# Changing the World

- For decades, the U.S. venture capital industry has garnered the envy of the world.
- It has spurred the development of many high-tech industries and has helped to build innovative powerhouse companies that are now household names: Amazon, Google, Apple, Cisco, Staples and eBay. These successes have made the U.S. a magnet for the globe's best and brightest scientists and entrepreneurs.
- Today, countries around the world have begun to emulate the U.S. model by adjusting their tax and regulatory policies and by strengthening intellectual property protection.
- This will inevitably lead to more innovation worldwide – but also to increased competition for venture capital dollars and the benefits they produce. The primacy of the U.S. industry is no longer the given that it once was.
- For this reason, U.S. policymakers must evaluate the potential impacts and consequences of new rules and regulations with great care.
- They must also weigh the benefits of such policies against the risk of hobbling what has been one of America's most decisive competitive advantages over the past half century.
- With a supportive public policy environment, venture capital promises to provide for the efficient distribution of capital and expertise to the most promising ideas in the U.S.
- It remains a key ingredient—along with entrepreneurial spirit, support for scientific discovery and an appetite for risk—for ongoing innovation.



# 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



# VC Evolution

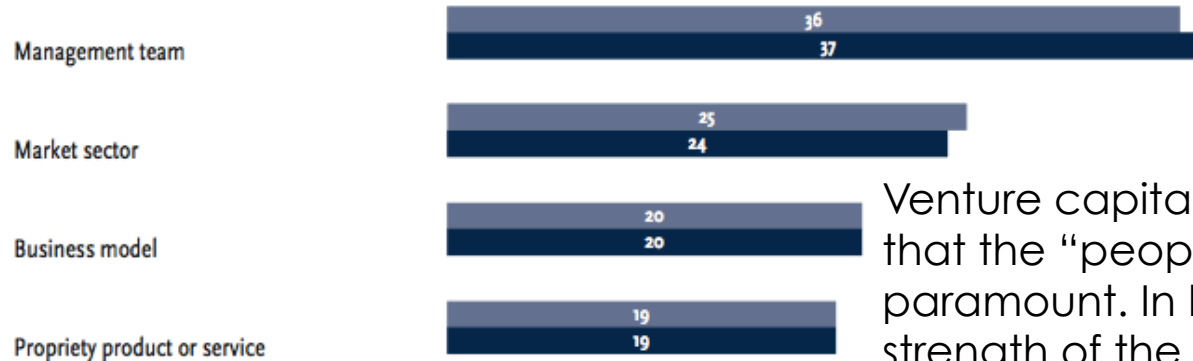
VCs evaluate potential company investments based on:

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



# Decision

The most important factors in your decision to fund a venture (total = 100)



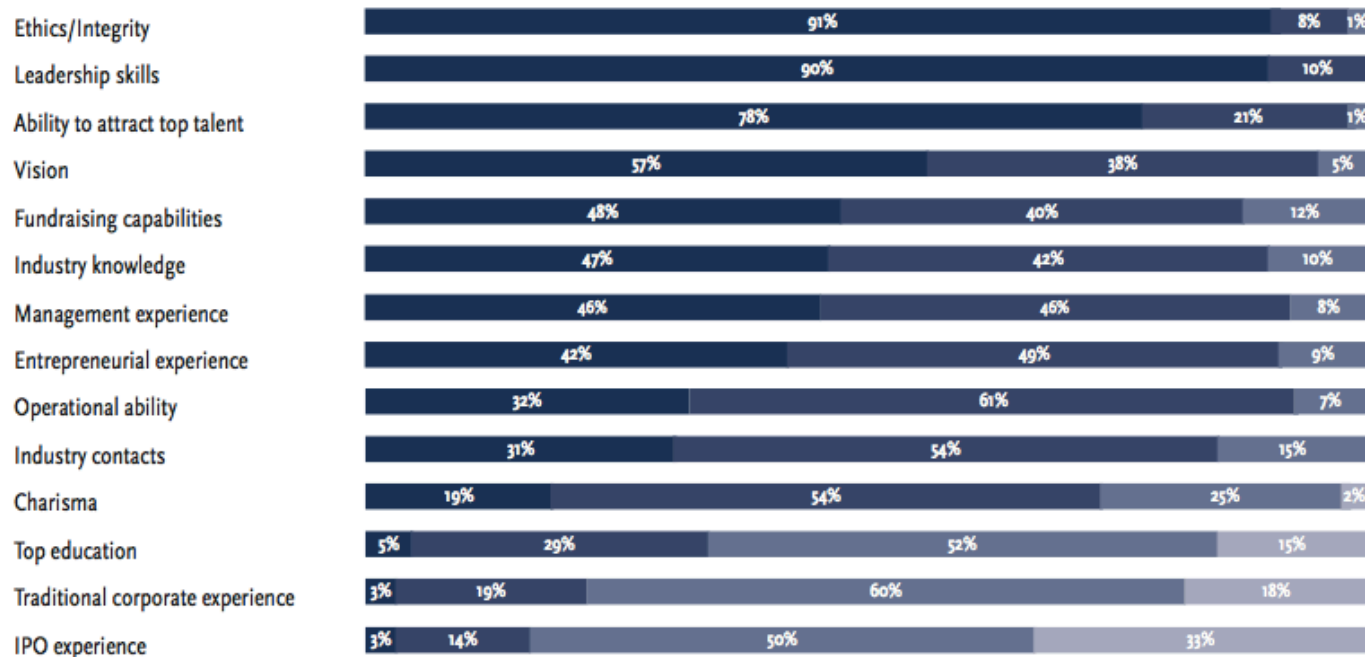
Venture capitalists consistently believe that the “people” factor is paramount. In both 2001 and 2010, strength of the management team was considered the most important factor, followed by market sector, when deciding whether to fund a venture. Proprietary product or service and business model both trailed slightly behind market sector.





# Traits

## Most important characteristics for VC-backed CEO candidates in 2010\*



\*Totals may not equal 100% due to rounding.

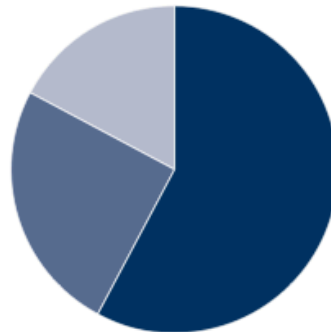
- Very Important
- Important
- Somewhat Important
- Not Important

The traits most commonly identified as “very important” for VC-backed CEOs are traits that are universally acknowledged as desirable qualities for any leader: ethics/integrity, leadership skills and the ability to attract top talent. However, vision and fundraising skills are more important than they were a decade ago. Vision, for instance, was fourth-most-commonly ranked “very important” in 2010, but only ranked seventh in 2001. Fundraising, which ranked fifth in 2010, ranked only eighth in 2001.



How hard is it to attract and retain top CEO talent to your portfolio companies today compared to 2001?

- Equally as difficult 58%
- Less difficult 25%
- More difficult 17%



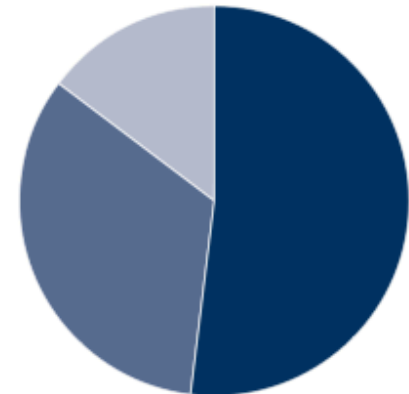
Finding the right CEO and judging people in general is the toughest part of our job



# Candidates

## Preferred leadership profile for emerging sectors lacking an established CEO candidate pool

- Experienced and proven venture-backed CEOs with experience in unrelated sectors 53%
- Promising entrepreneurs with strong sector and technical knowledge but no prior CEO experience 34%
- CEO candidates from large companies who have sector knowledge but no prior experience managing in an entrepreneurial environment 13%



In many firms, however, a greater attention to ongoing assessment after the hire could represent the greatest potential area of improvement for talent management in the industry.



# Liquidity

## A longer path to liquidity



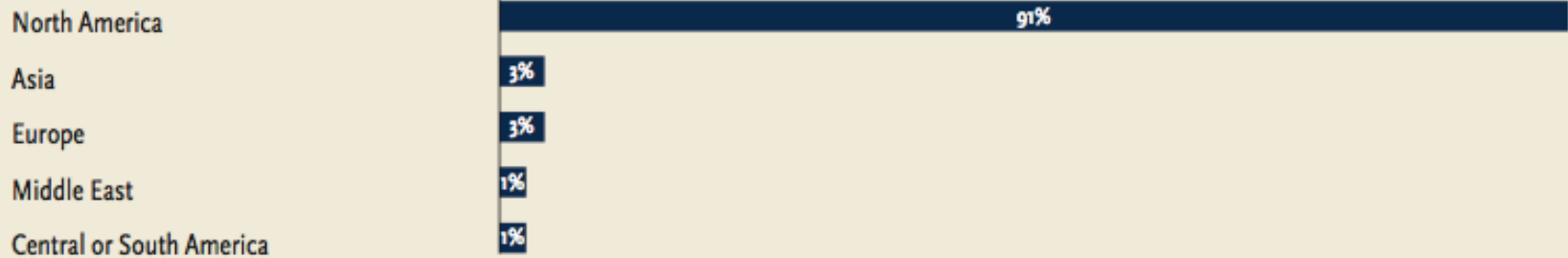
Source: National Venture Capital Association

● 2009  
● 2001



# Investment Regions

What percentage\* of your firm's investments are in the following regions?

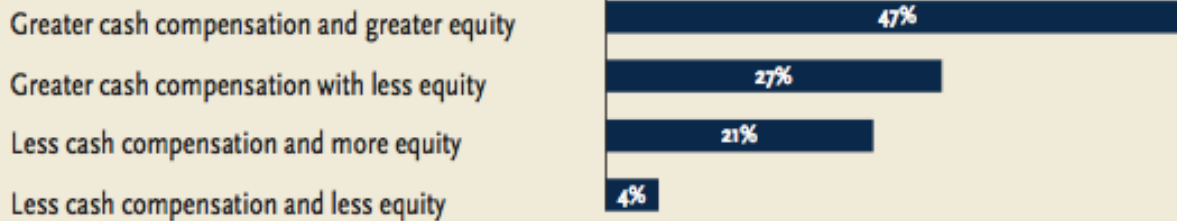


\*Totals do not equal 100% due to rounding.



# CEO compensation

**In the past 10 years, how has your portfolio company CEO compensation changed?\***



*\*\*Totals do not equal 100% due to rounding.*



# New Trends


- While certain characteristics or attitudes of venture capital investors have remained stable over time, there are some interesting new trends as the industry adapts to the changing environment.
- Venture capital firms to take a more structured approach to building strong, independent and diverse boards of directors for their companies, and to approach management assessment of their portfolio companies in a more rigorous, ongoing fashion in response to the longer average tenure of their management teams.

To learn more about the implications of this transformed environment on the characteristics, skill set and experience required of VC-backed CEOs, Spencer Stuart and the National Venture Capital Association (NVCA) launched a study in March 2010. It consisted of in-depth interviews with VC firm leaders across a variety of sectors, along with a quantitative survey completed by more than 200 NVCA members. This year's study follows up on a similar study conducted in 2001.



# How VCs EXIT?

- Merger & Acquisitions
- IPO – Going Public

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- “Merger & Acquisitions can be an enormously powerful strategy, but it must be used in the right way. “
  - “There are a great number of nuances that need to be understood in order to execute the strategy. “
  - “Equally, there are a great many pitfalls that can destroy huge value.”
  - “Companies that shy away from acquisitions because of the fear of failure could be missing massive opportunity. “
  - “But, for those more daring ones, following the principles by Mike Volpi, outlined above could really help in realizing the potential.”





# Mergers & Acquisitions

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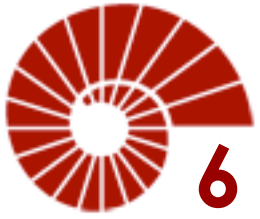
- Cisco Case Study: Cisco has started the mergers-and-acquisitions journey at Cisco in 1993.
  - There was clear that there was a new category of products called “switches” that was threatening their leadership position in routing at the time.
  - Their engineering team felt that they could build a better switching product based on Cisco's existing technology foundation.
  - But the venture community had funded a number of switching companies that were months if not years ahead of Cisco in the race to market.
  - Instead of developing their technology, they decided to buy Crescendo Communications, which turned out to be a huge success.
  - The descendants of that Crescendo product line provide Cisco with in excess of \$10 billion in revenue and rich profits today.
  - They were lucky. Historical data shows that the majority of acquisitions fail. The Crescendo acquisition didn't.
  - They were encouraged that eventually lead to 75 acquisitions over the next seven years.

At its peak, these acquisitions collectively represented 50 percent of Cisco's revenue.



# Successful acquisition strategy

- The first and perhaps most important principle of a scalable and repeatable M&A is that an acquisition is not an event but a *process*.
  - Companies are like human beings. When trained in a given discipline, they perform incredibly well.
  - If you ask them to do tasks they have not done before, the probability of a successful outcome is fleetingly small.



## 6 principles

- To avoid that pitfall in M&A, companies have to make a long-term commitment to *many* acquisitions.
  - That way, the entire organization can learn and adapt to the strains of the process and eventually make it a core competence.
  - Why not just hire experienced acquisition professionals? Prior experience undeniably helps, but since a company – and its DNA – are highly organic, an outsider will have difficulty engaging with the various parts of the organization.
  - It is critical to develop a company-wide process over a series of transactions rather than relying on hired help.

Assuming that the company is committed to the multi-M&A process, Mike Volpi – ex-Cisco- introduces six extremely important principles that underlie a successful acquisition strategy.



# 1. Keep principal objectives consistent

- Companies acquire for a hodge-podge of reasons: gaining market share, economies of scale, entering new markets, accumulating critical assets, fortifying weak product lines, ingesting talented etc.
  - Each one of these motives implies a different acquisition criteria, deal structure and integration process.
- Cisco's objectives for M&A;
  - They have broad distribution channel
  - They bought lots of young companies with promising technologies or products, adjacent to the existing Cisco product lines, the sales teams were quickly able to expand to push the new additions to customers.
  - Cisco had an advantage of a 10x or more distribution scale over the acquired company, the revenue from acquired sources would quickly increase post-integration.



## 2. Understand probability

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- There is a probability that acquisition could not be successful.
  - Fundamentally, companies are not created to be bought or integrated. And, people — who are the core assets of most technology companies — often “review” their loyalty to an acquirer since it’s not the company they had originally chosen to join.
  - At the same time, acquisitions can be enormously transformative when they work out correctly.
- Acquirers tend to be risk-averse about the companies they buy and what they pay for them.
  - Rather than looking at acquisitions as a portfolio, acquirers look at them as individual events. So long as that perspective is applied, the technology acquisition game doesn’t work well.
    - **It’s only when you assume a certain failure rate to be the norm and believe in the occasional massive success that the probability and expected value equation begin to work in your favor.**

Simply put, 10-15 percent of the capital deployed via acquisition yields 70-90 percent of the value creation.

A significant number of acquisitions don't directly contribute to the value creation. But the ones that do have huge impact.

Andy Rachleff, who was a founder of Benchmark Capital and is now the CEO of Wealthfront and teaches at the Stanford Graduate School of Business, has collected a set of data that reveals the similarities between the hit-driven returns of the VC business and the serial acquisition strategies of eBay and Cisco in the '90s and 2000s.



## 3. Option value

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- Acquisition is an option for big acquirers that are actually purchasing options in the future success of the acquired entity. These options tend to be worthless, but about 20 percent of the time, they produce a huge outcome.
- This brings the point of valuation. If an acquirer is hunting for those 2-out-of-10 outsized returns, then the precise valuation of the two magical companies doesn't really matter too much.
  - Cisco's rule of thumb was that plus or minus 30 percent was not terribly significant.
  - This is anathema to most corporate development executives who are motivated to get "the best deal."
  - But, if you apply the probabilistic logic, one shouldn't look for "best deal," but make sure one buy the "best fit." The valuation is a secondary consideration.

**The key message here is to worry less about what you pay and worry more about what the market is saying about the products and the company's fit with your organization.**



## 4. Aligning Incentives

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- Often companies structure deals without considering the key concept of aligned incentives. The most common pitfall in deal structure is earn-outs.
  - The problem with earn-outs is that they create a schism right at the starting point of the two companies' relationship.
  - Earn-outs are typically structured with a set of metrics that create a sliding scale for the price paid for the acquired company.
  - Post-sale, however, there is no longer an objective value metric (like stock price) for the acquired company, other key performance indicators are used to determine the achievement of milestones.
  - These are metrics like revenue, earnings, market share, key customer wins, etc.
  - The problem with all of these metrics is that they can all be gamed by both the acquirer and the seller.
  - As a result, the incentives for the buyer and seller are not the same in the long term. This creates big problems in the long term.

**Whenever possible, simple acquisitions using stock rather than cash are much more effective. Of course, they help retain the acquired employees. But most importantly, this aligns the incentives of both parties: Everyone involved wants the acquirer's stock price to increase in value.**



## 5. Buying market leaders

- Corporate Development professionals as dealmakers want to cut a “good deal.” **What is a “good deal”?**
  - The challenge Corp Dev professionals often face is choice.
    - There are several companies that they can acquire: the market leader, the number two player, and then a series of tier-two competitors in the market.
    - At first blush, they assume that given the acquirer’s distribution, if the technologies contained in the potential acquisitions are about the same, the cheaper one — maybe the number two player or the tier-two competitors — seems like the “good deal.”
    - All too often, however, buying the lesser players is not the right answer. Given Internet valuations, the market leader often trades at a significant premium – sometimes 5-10x the value of the number two player. So, it seems awfully expensive.

**The right way to frame the question is not “how much are you paying for an equivalent asset,” but rather “how much better can the market leader perform when combined with the assets of the larger company.”**

**Think back to Google’s acquisition of YouTube. There were many YouTube wannabes in the market. Google could have acquired any one of them for 1/10 YouTube’s value. Instead, it paid \$1.75 billion for the market leader, a seemingly enormous amount of value for a young company. But few today would suggest that it was not a good deal. Through that bold move, Google closed out that market. YouTube with Google behind it was the winner — no one could catch them.**





## 6. Synergies, synergies, synergies

- When paying top dollar, acquirers must ensure that there are synergies in the combination. Just exchanging stock owned by founders, employees and VCs for the acquirers stock creates no incremental value. In fact, it often detracts value because the acquired employees lose the motivation that they had as an independent company.

What are these synergies?

- **DISTRIBUTION:** Smaller companies typically don't have the distribution muscle of a larger player. However, they often do have the best product. By placing the best product into a large distribution channel, massive synergies can be created.
- **OPERATIONAL:** Larger companies typically have scale economies that smaller companies can't dream of achieving. These leverage points can exist in procurement of services (bandwidth, server, storage) or production scale.

**COST REDUCTION:** Cost reduction – especially through cost cutting and staffing. While cost reduction-based value can be extracted, in a fast growing environment, expense cuts are often much less relevant than the growth-accelerating synergies like revenue and operational scale. When acquisitions are justified by cost-cutting in the acquired company, that should always raise a skeptical eyebrow.

There needs to be a  
“1+1=11”  
factor in the  
acquisition  
process.



# Venture Capital History



# Technology, Politics and Capital Markets

- Computer science professor and science fiction writer Vernor Vinge has written about what he refers to a technological singularity where technological acceleration is moving so rapidly that it moves in entirely unexpected directions.
- What engineers and computer scientists sometimes forget is that technological evolution does not spring from information and ideas alone.
- **Technological progress is built on a foundation of political and financial systems. These have taken hundreds of years to evolve. Social and financial systems reflect accepted thought by a broad group of people. The evolution and understanding of social and financial ideas is much slower than thinking in 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 has been waged to make cryptography research and engineering publicly available.
- This has enabled a variety of technologies, including secure financial transactions across computer networks.



# Capital

- Technology consumes capital as well as ideas and information. Liquid, transparent capital markets are critical for the development of technology.
- **Every piece of technology that we use has 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 related technology that we use exists because of the strong capital markets in the United States.



# Venture Capital

- Commercial venture capital, where a wealthy individual provided capital for an enterprise has probably existed since the middle ages (e.g., 1400s) in industries like the British manufacture of wool cloth.



# Maritime trade and piracy

- The first high risk, high reward commercial enterprise was **maritime trade and piracy**.
- In the Renaissance era maritime trade in spices, tea and coffee produced huge profits.
- But there were huge risks as well. Ships could be lost to weather, navigation error or piracy.
- Groups of wealthy merchants and investors formed syndicates that would lease a ship (if they did not already own ships), hire the Captain and finance the cargo. Fortunes were made or lost as a result of a trading voyage.
- Huge profits and risks were associated with piracy as well, especially when gold started flowing from the new world to Spain and Portugal. The political and religious conflict between Spain and England provided legitimacy for British pirates. The huge profits realized from successful raids attracted venture capital, which purchased and provisioned ships in return for a share of any Spanish gold captured. Venture backed pirates included Sir Francis Drake, who also had the political backing of Elizabeth I



# Mass market

- Wealth and energy have always been directly related. Humans and animals powered the world until the end of eighteenth century, when the steam engine produced the first industrial revolution in human history.
- The explosion of technology produced vast wealth. Deep mining of gold, coal and diamonds was made possible by steam driven air and water pumps.
- Blast furnaces driven by steam engines allowed steel production on a level that was never before possible. Industries fed by the power of the steam engine had an appetite for capital like the steam engine had for coal.
- Capital markets evolved along with the new technology.





# Steam engine -> Inventor

- The steam engine also introduced the era of the inventor
- Inventors had dreams and, they hoped, a profitable innovation. The problem was funding. In the nineteenth century and the first half of the twentieth century venture capital came from three sources:
  - Wealthy individuals
  - Banks
  - Existing enterprise
- These three sources of funding are all conservative and tend to provide funding for proven ventures (e.g., mining and manufacturing).
- For example, in the 1930s and 1940s none of these sources would provide funding for Chester Carlson, the inventor of Xerography.
- His initial funding was provided by the Battelle Memorial Institute, which is a research institute originally established to fund innovation in metallurgy.



# Modern venture fund

- Modern venture funds did not start to appear until the 1960s. One of the first was Davis and Rock, founded by Arthur Rock, who was a lead investor in Intel. Ironically, Rock was also instrumental in arranging funding for Fairchild Semiconductor, which spun off Intel, National Semiconductor and Advanced Micro Devices.
- The huge returns from successful venture capital funding encouraged the formation of new venture funding groups.
- The wealth created in the computer industry was also plowed back into new companies.
- Eugene Kleiner, one of the founders of Fairchild Semiconductor, later became a founding partner of Kleiner Perkins, one of the pioneering venture firms in Silicon Valley.
- In a bit of historical irony, Robert Noyce, one of the founders of Intel, provided funding for Intel's arch competitor, AMD.



# Founders -> Venture Capitalists

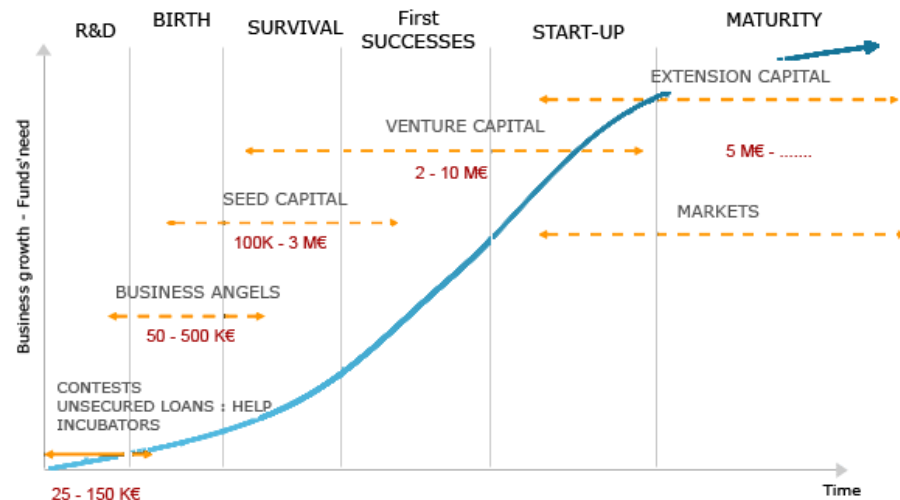
- Venture capital investment has allowed people who became wealthy in the computer industry to not only increase their wealth but to remain a part of the fast moving industry.
- Paul Allen, who founded Microsoft along with Bill Gates, invests in start-up companies through his Vulcan Ventures.
- Anne Winblad, who made a small fortune through the sale of her software company, founded Hummer Winblad, a venture capital firm that invests in software companies.
- Venture capital investing is no long limited to Silicon Valley insiders. Venrock Associates, founded by the Rockefeller family, has invested in a number of technology companies, including Intel and Apple.
- Many pension funds and University endowments invest a portion of their holding in venture capital. For example, Harvard University invested \$1 million in MasPar Computer Corp.



# Before Internet

- Before the Internet madness, the classic model for a venture funded company was three funding rounds:
  - an initial round to build the basic product,
  - a follow on round to provide capital for building the product,
  - and funding marketing and sales.
- A final third round would fund a second generation product and take the company to an IPO.
- Each round dilutes the percentage held by employees as a percentage of the total number of shares outstanding.

The financing "chain", throughout the innovative company life cycle





# Example

round	funding	Total shares	Employee Percentage	Valuation
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

When the company goes to an IPO the stock is valued at \$2.0/share.

The underwriters want to bring the company public at a price of \$10/share, so there is a reverse stock split to adjust the number of outstanding shares.

Your share in the company is worth \$800,000.

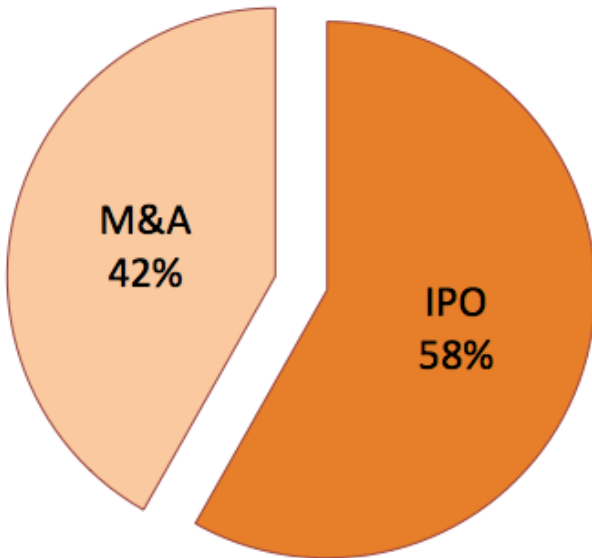


# Venture Capital Statistics

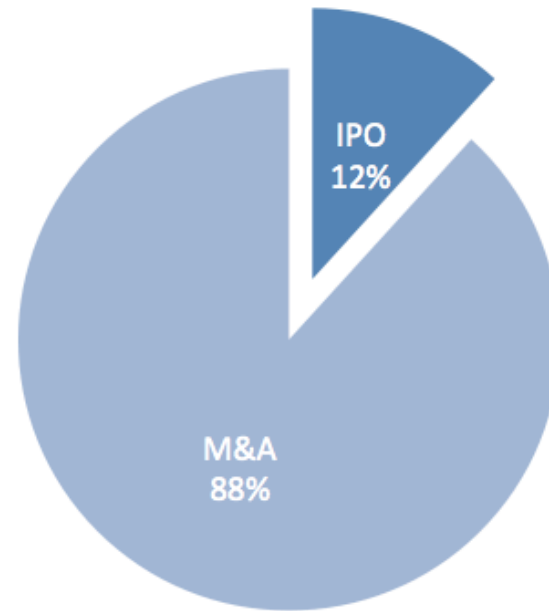


# VC Exits

**VC Exits: '91 – '00**



**VC Exits: '01 – '09**



	<b>2000 / 2001</b>	<b>Trend Direction...</b>
Valuations	Very high	Falling
Capital availability	Substantial	Beginning to tighten
Fund commitments	\$83B & Big Overhang	Shrinking
# of Active Firms	1338	At a high but going down
Tracking index – NASDAQ	4000	Falling rapidly
Technology spending	Historically High	Dropping quickly





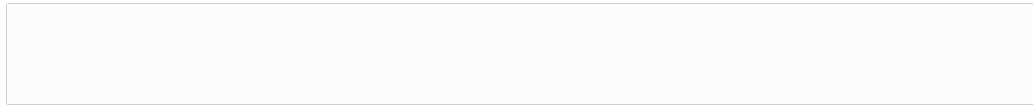
# Current Trend

## Economic Situation

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



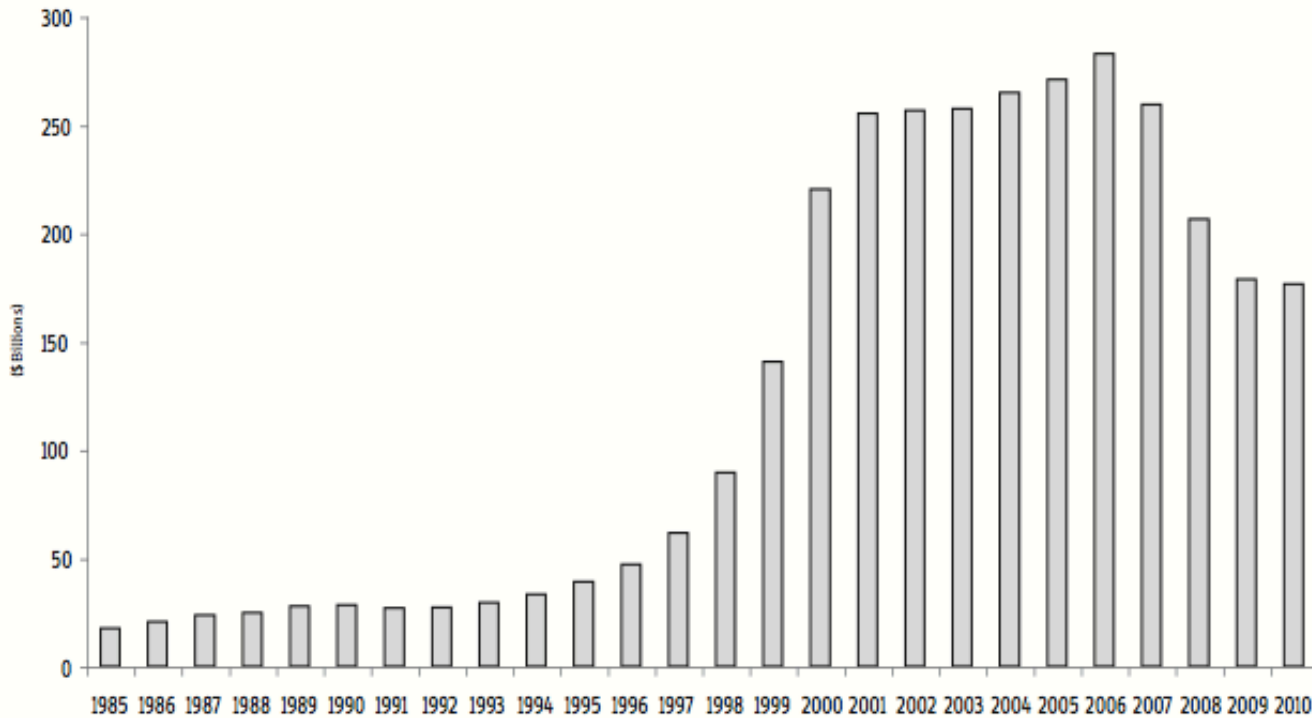
# Current Trends



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

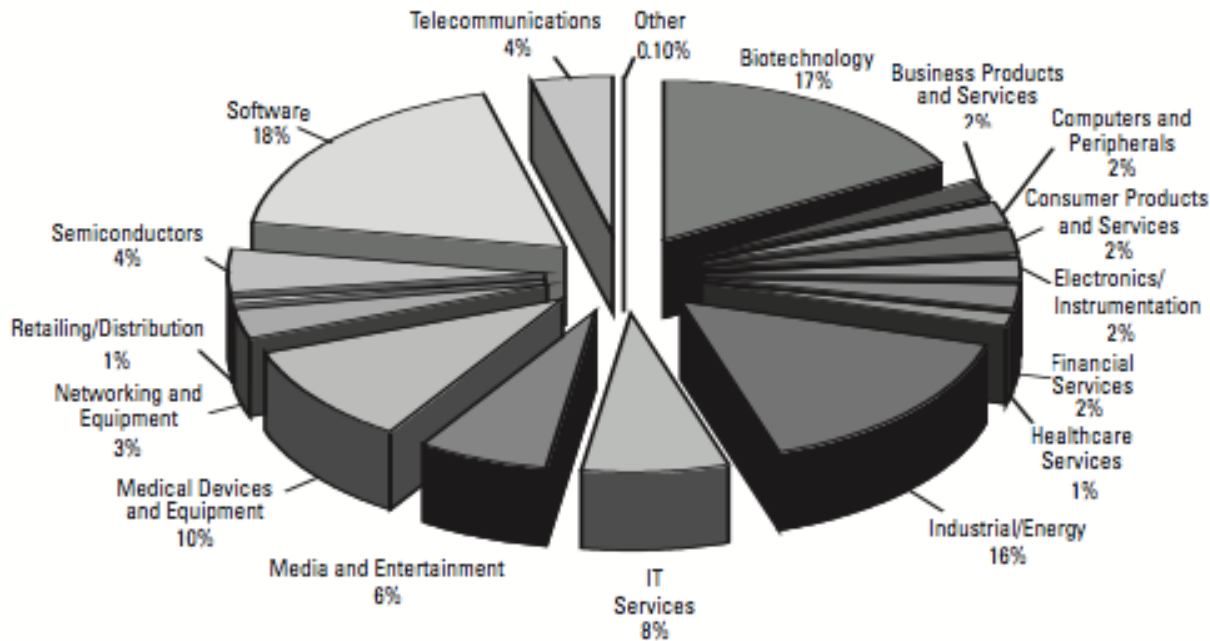


# U.S. Venture Funds (\$ Billions)





# Venture Capital Investments in 2010



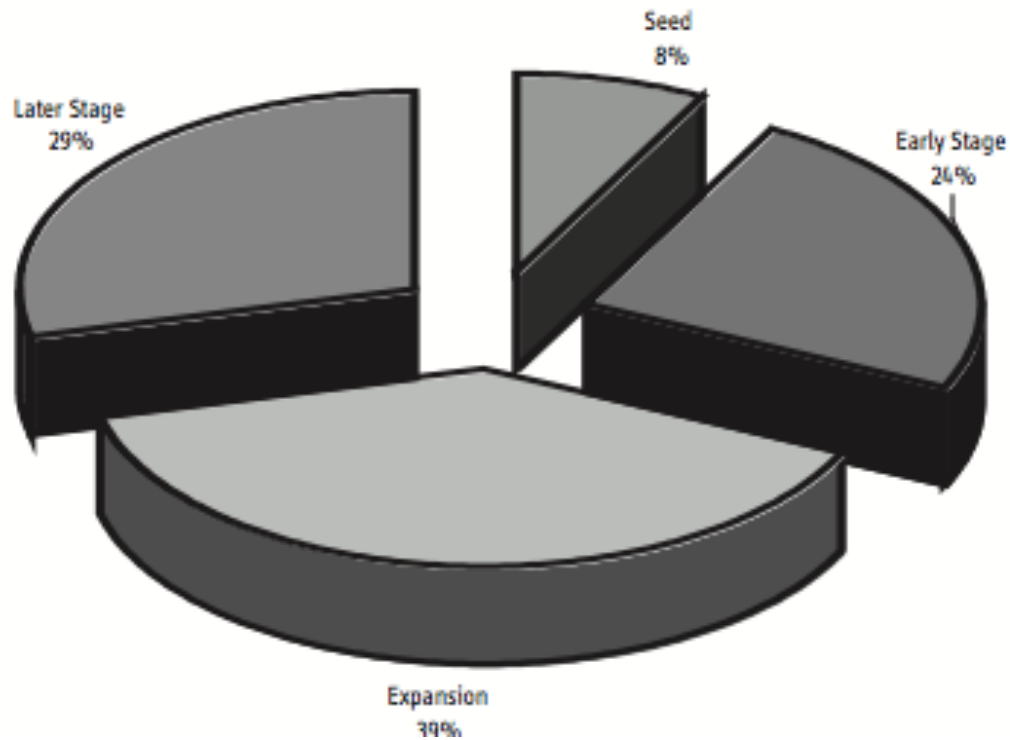


## 2010 Investments by State

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%
<b>Total</b>	<b>3,294</b>		<b>21,974.8</b>	

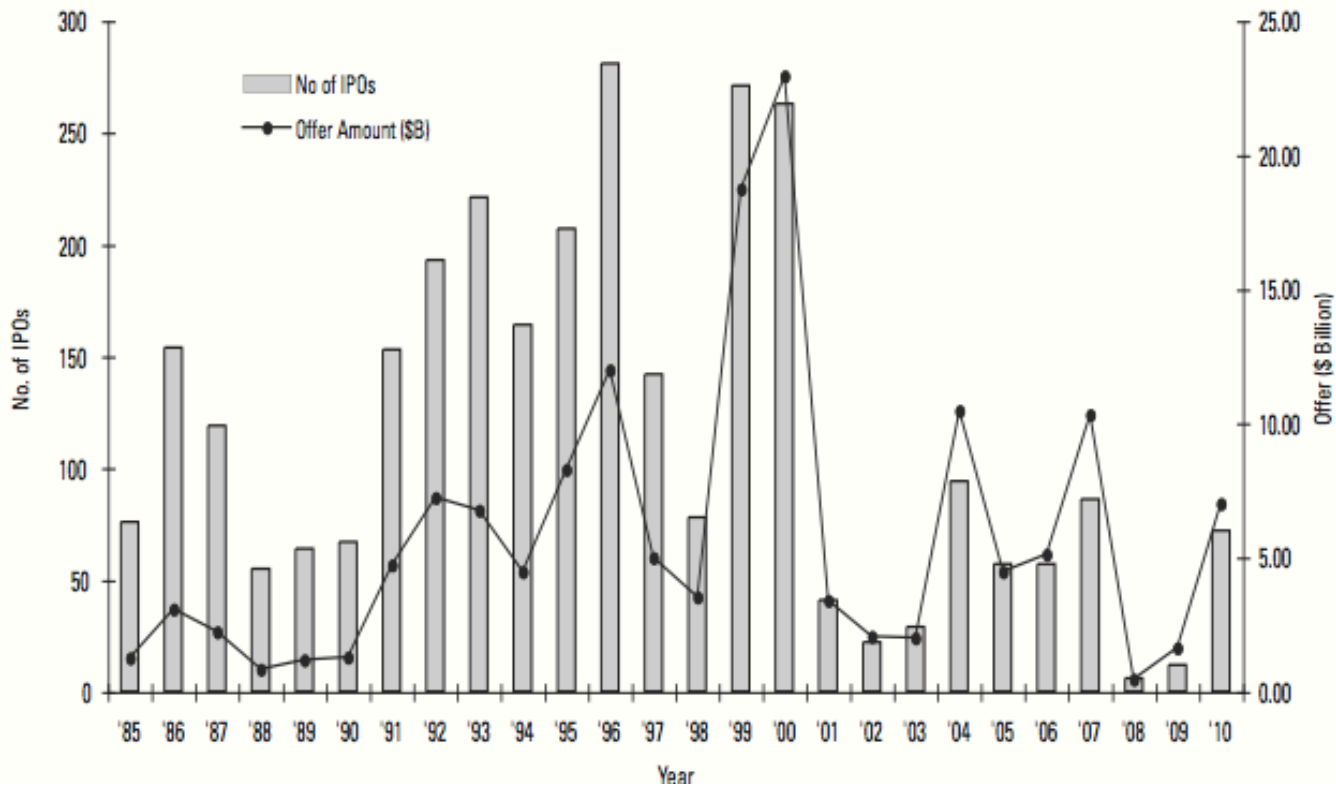


# Funding stages



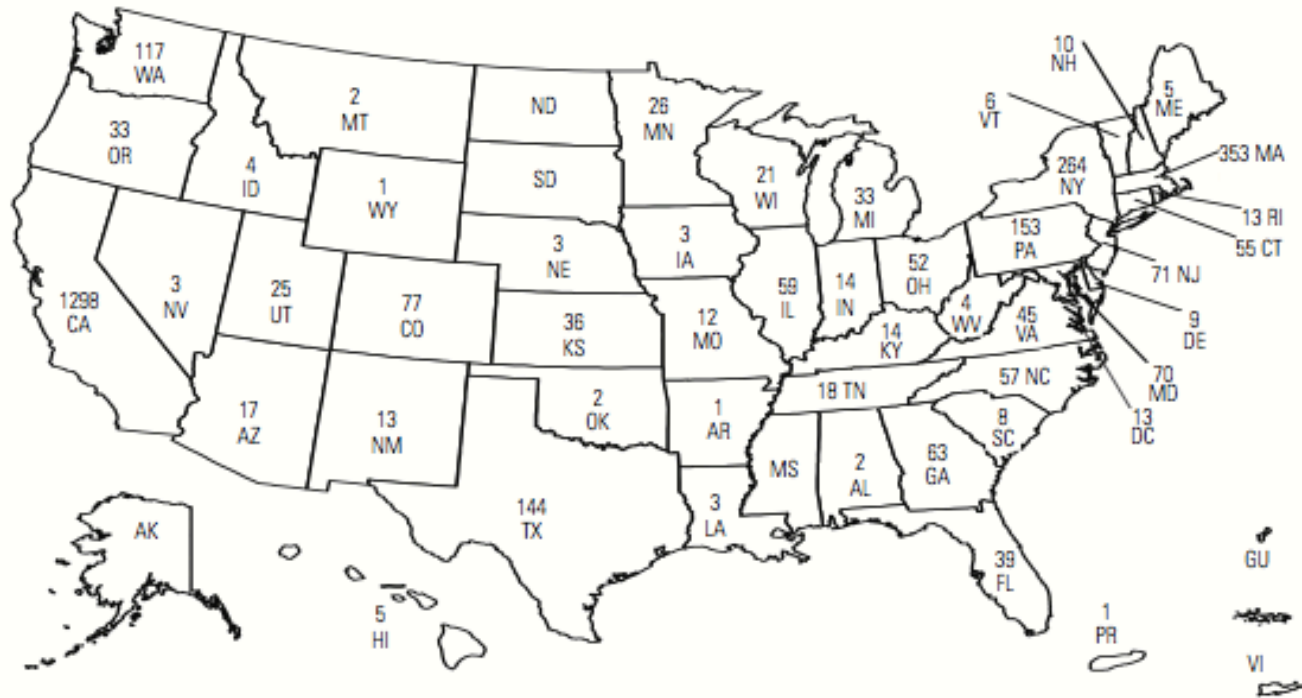


# IPOs





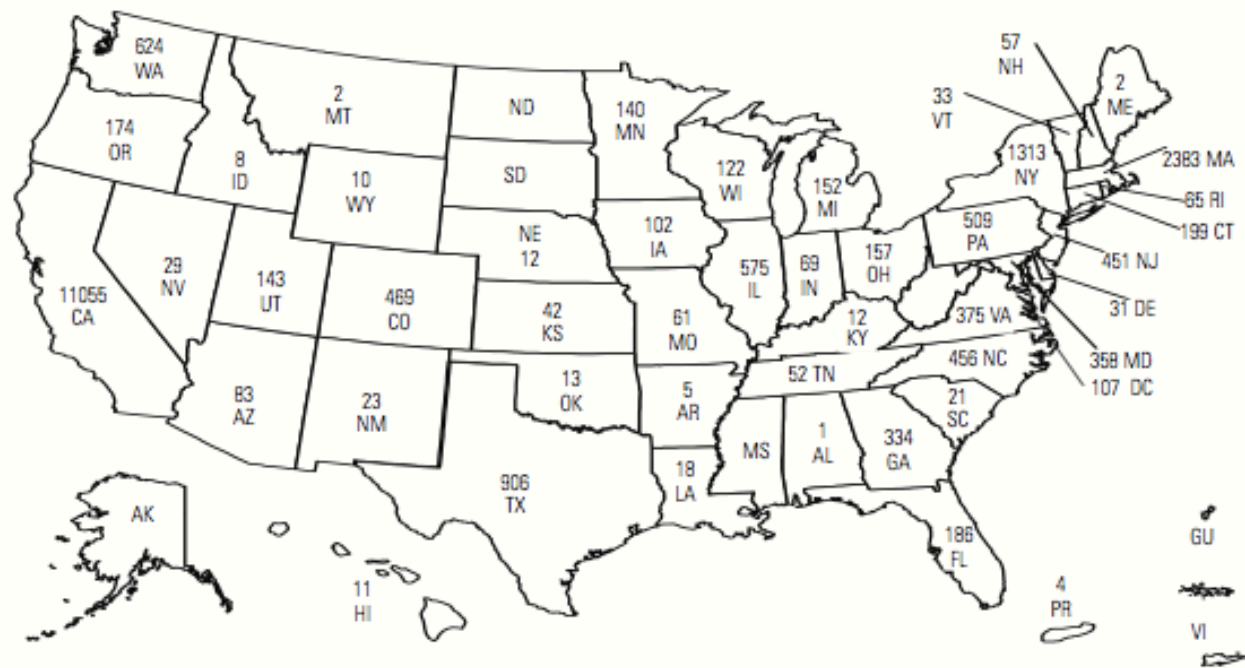
# North America – Investment numbers in 2010







# North America- Capital Invested in 2010 (\$ Millions)





# Sectors in 2010

**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
<b>Total</b>	<b>1,403</b>	<b>1,346</b>	<b>2,749</b>



# Sectors

**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
<b>Total</b>	<b>8,952.9</b>	<b>13,022.0</b>	<b>21,974.8</b>



# IPO breakdown

**Venture-Backed IPO Industry Breakdown**

		Q1 2011	
Industry		*Number of Venture-Backed IPO's in the U.S.	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
			<b>7</b>
Life Sciences	Biotechnology	4	292.3
	Medical/Health	2	82.0
		<b>6</b>	<b>374.3</b>
	Consumer Related	1	42.0
		<b>1</b>	<b>42.0</b>
<b>TOTAL</b>		<b>14</b>	<b>1,375.8</b>

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



# Industry breakdown 2011

**Venture-Backed M&A Industry Breakdown**

		Q1 2011		
Industry		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)
<b>Information Technology</b>	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
		<b>74</b>	<b>23</b>	<b>3,307.8</b>
<b>Life Sciences</b>	Medical/Health	17	12	1,524.9
	Biotechnology	6	5	650.5
		<b>23</b>	<b>17</b>	<b>2,175.3</b>
<b>Non-High Technology</b>	Consumer Related	3	2	248.0
	Other Products	5	1	115.0
	Industrial/Energy	4	2	45.0
		<b>12</b>	<b>5</b>	<b>408.0</b>
<b>TOTAL</b>		<b>109</b>	<b>45</b>	<b>5,891.2</b>

Source: Thomson Reuters & National Venture Capital Association



# Related Venture Capital Literature

- **Mastering the VC Game** written by Jeffrey Bussgang
- **The Masters of Private Equity and Venture Capital** written by Robert Finkel
- **Digging for Disclosure** written by Kenneth Springer and Joelle Scott
- **The Start-Up Game** written by William H. Draper
- **Private Equity as An Asset Class** written by Guy Fraser-Sampson
- **Creative Capital: Georges Doriot and the Birth of Venture Capital** written by Spencer Ante
- **The Venture Capital Cycle**, 2nd Edition written by Paul Gompers and Josh Lerner
- **The Money of Invention** written by Paul Gompers
- **The First Venture Capitalist: Georges Doriot on Leadership, Capital and Business Organization** written by Udayan Gupta Published in 2004
- **Done Deals: Venture Capitalists Tell Their Stories** written by Udayan Gupta Published in 2000
- **EBoys: The First Inside Account of Venture Capitalists at Work** written by Randall Stross Published in 2000
- **Venture Capital at the Crossroads** written by William Bygrave and Jeffry Timmons Published in 1992



# Angels & Venture Capital in Turkey

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- INNOVENT
- YOUNG TURK VENTURES
- TEKNOLOJI YATIRIM A.S.
- GOLDEN HORN & TIMAR VENTURES
- GALATA BUSINESS ANGELS
- LAB-X
- iLAB
- 212 VENTURE CAPITAL



# Turkish Venture Capital

- BIG BAND VENTURES
- KOBI GIRISIM
- IS GIRISIM SERMAYESI
- RHEA VENTURE CAPITAL INVESTMENT TRUST
- ESAS HOLDING
- FIBA KAPITAL HOLDING
- SEDES HOLDING
- TURKVEN PRIVATE EQUITY





# Turkish Venture Capital

- BRIGHTWELL HOLDING
- ABRAAJ CAPITAL
- ACTERA
- ADVENT
- CARLYLE
- NBGI
- NBK
- EGESEA



# Turkish Venture Capital

- TEMPLETON DARBY
- GLOBAL INVESTMENT HOUSE
- INVENTRAM
- ENDEAVOR
- ETOHUM
- METUTECH-BAN
- OZYEGIN GIRISIM FACTORY



# Some VC Investments in Turkey

- Mynet by Tiger
- Yemeksepeti by EFF
- Cember.net by EFF, Xing
- Gittigidiyor by Ebay
- Nokta by Intel Capital
- Befunky.com by Golden Horn Ventures
- Grou.ps by Golden Horn Ventures
- Yoghurt by Golden Horn Ventures
- Trendyol by Tiger
- PeakGames by Hummingbird Ventures
- Markafonu by Trayas
- Selp, NanoTeco, Maxima by Innovent
- Airties by Ziya Boyacigiller, GBA
- Groupanya by Young Turk Ventures
- Markafoni by Galata Business Angels
- PI Works by Abraaj Capital
- Kariyer.net by iLab
- Pegasus Air by Esas Holding
- Digiturk by TurkVen, Providence Conc.



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- Emerging best practices for building the next generation of venture-backed leadership, NVCA
- A Venture Capital! Revival! Is upon us,, William Quigley, Clearstone
- <http://gigaom.com/2011/05/22/six-key-principles-of-a-successful-acquisition-strategy-part-1&2/>

