

DOE SBIR/STTR Phase I R1 Conference

August 9, Rockville, MD

Funding Founders: Funder's View 3 Truths, 2 Lessons, 1 Advice

Ferey Faridian

Your Presenter: Ferey Faridian



Partner, Newport Board Group - a national firm of CEO advisers and Board Members serving middle market companies and PE/Mutual funds



Larta PA to over 130 SBIR/STTR High-tech CEOs/PIs since 2008



Past DOE Phase I & II grantee

Career: CEO in VC backed companies, VC Partner, PE Principal, investment Banker, Fortune 500 Corporate Strategy Consultant

Investment screening on over 1,000 companies

Engineering and fast-track product development background

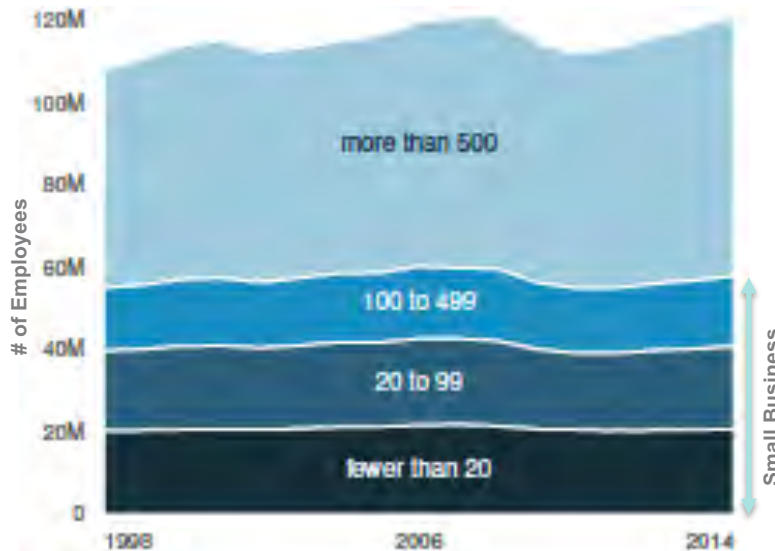
PhD EE University College, London, MBA, Finance Cambridge University



The Challenge for the Small Business Founder *... is to make it Big!*

29.6m Small Businesses in U.S.

99.9% OF U.S. BUSINESSES



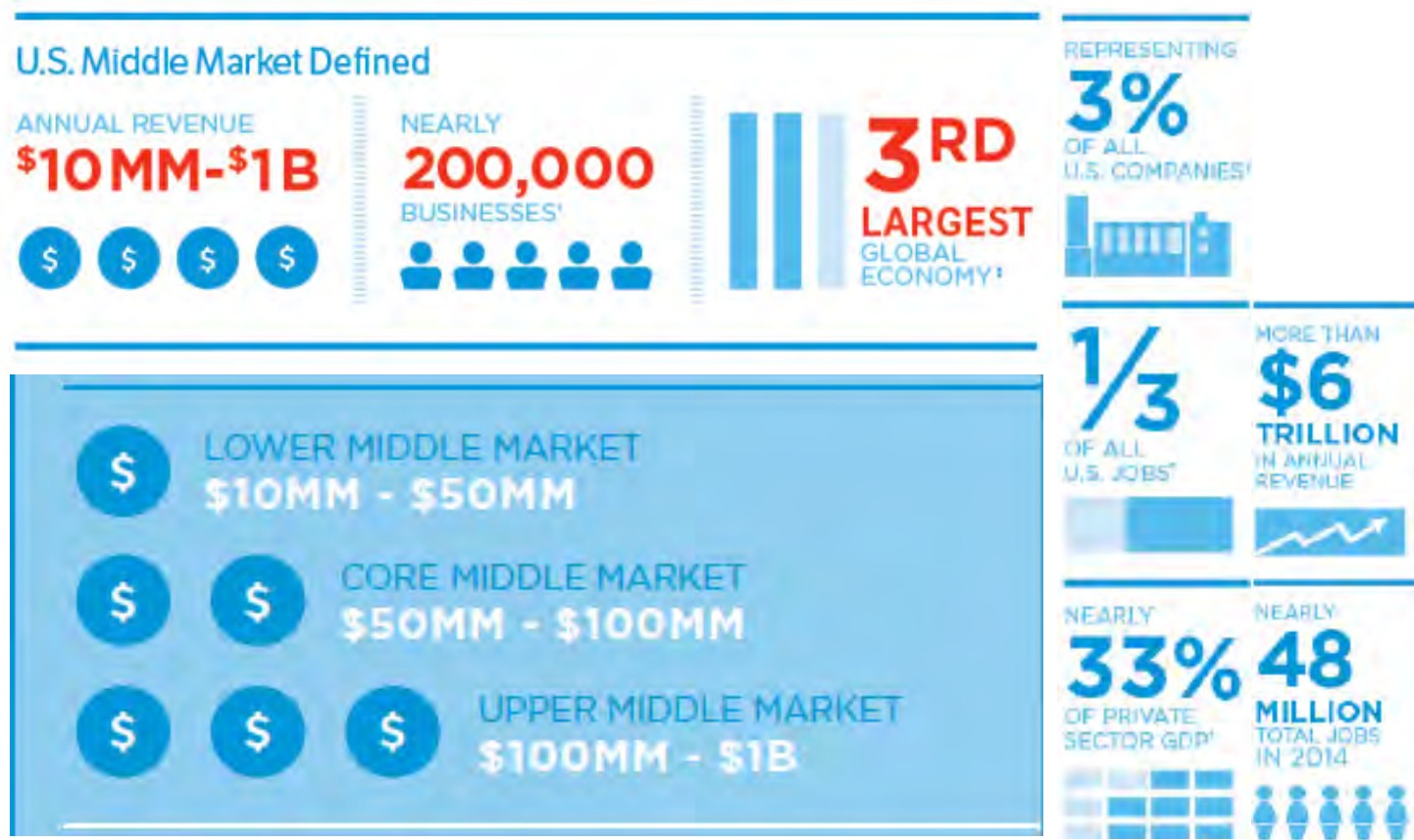
57.9m Employees

47.8% OF ALL U.S. JOBS

**Small Businesses Drive Economic Growth
and Job Creation**

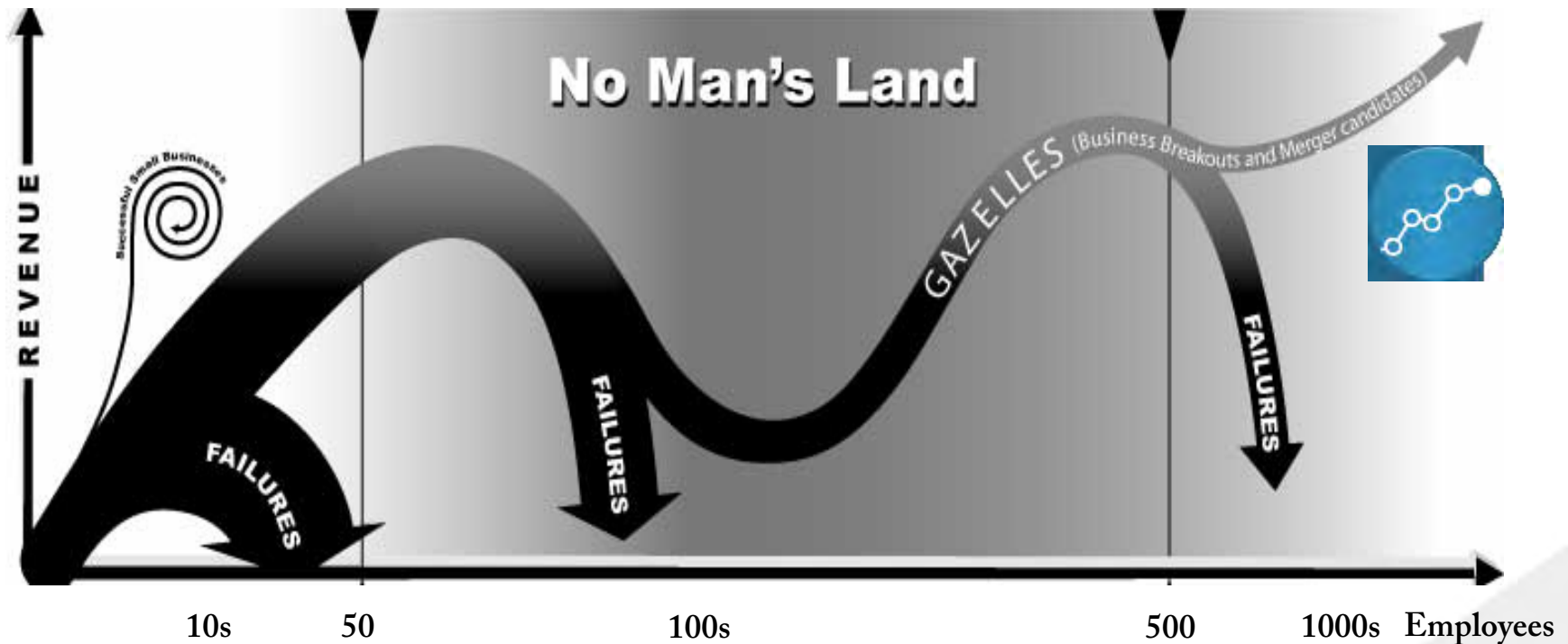
US Small Business Administration, Office of Advocacy - 2017 Profile

The Next Level of Big is ...*The Mighty Middle Market*



The National Center the Middle Market, 2017 Annual Report

The reward for getting out of No Man's Land i.e. over 100 employees is greater than ever



So the Entrepreneur Dreams: Success = Tech. Innovation + Money...

Rename my B School

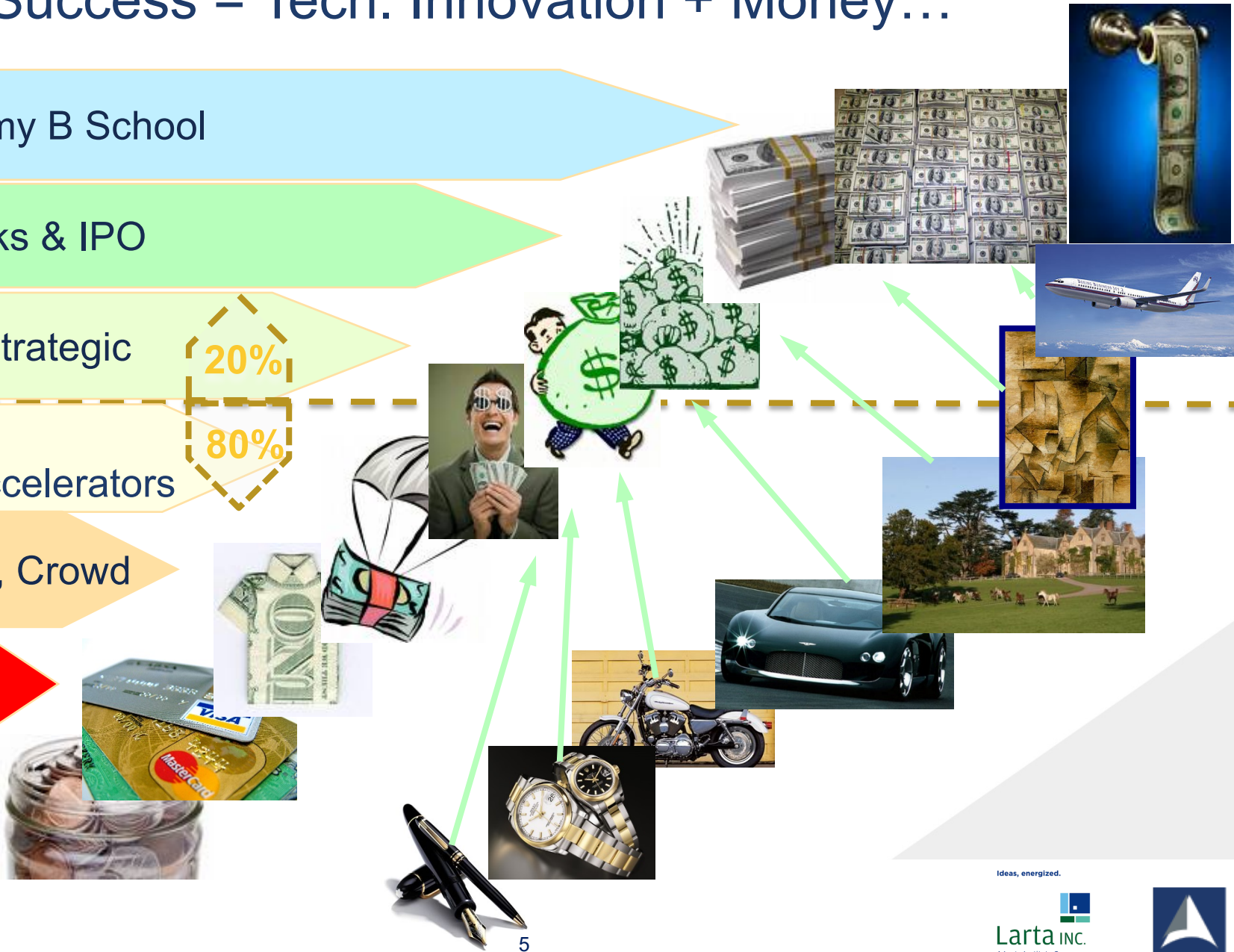
Mez /Banks & IPO

VC/ PE/ Strategic

SBIR/
Angels/Accelerators

Shirt, FFF, Crowd

Piggy &
the Cards





A common claim

...and the Founder Pitcheth

Big market!

Unique offering!

Strong management!

Scalable business!

Great returns!



All we need is Money!

Good presentation!

...but the Funder Thinketh

Claim

Big market!

Unique offering!

Strong management!

Scalable business!

Great returns!

Good presentation!

All we need is Money!

Perception

Zero sales!

No patents!

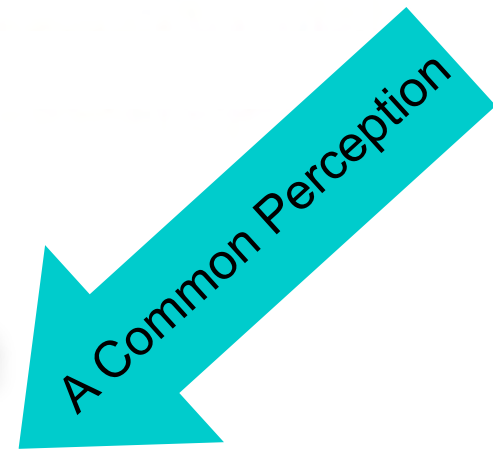
Need our own CEO!

Hockey stick!

High risk!

Hyperbole - Being sold to!

Inexperienced!





The 1st Truth

Investors are reasonable and truth-seeking
They think in terms of Risk/Return in their Portfolio



Portfolio Theory : The Efficient Frontier of Risk/Return



KUNGL.
VETENSKAPSAKADEMIEN
THE ROYAL SWEDISH ACADEMY OF SCIENCES

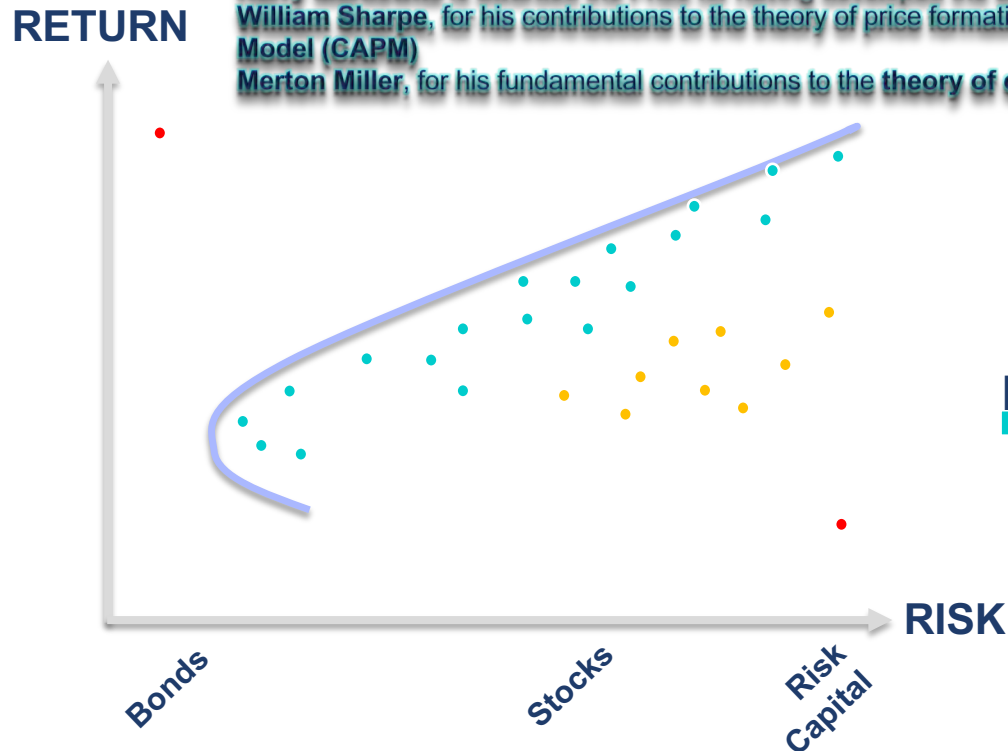


The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1990

Harry Markowitz is awarded the Prize for having developed the **theory of portfolio choice**

William Sharpe, for his contributions to the theory of price formation for financial assets, the so-called, **Capital Asset Pricing Model (CAPM)**

Merton Miller, for his fundamental contributions to the theory of corporate finance



RISK

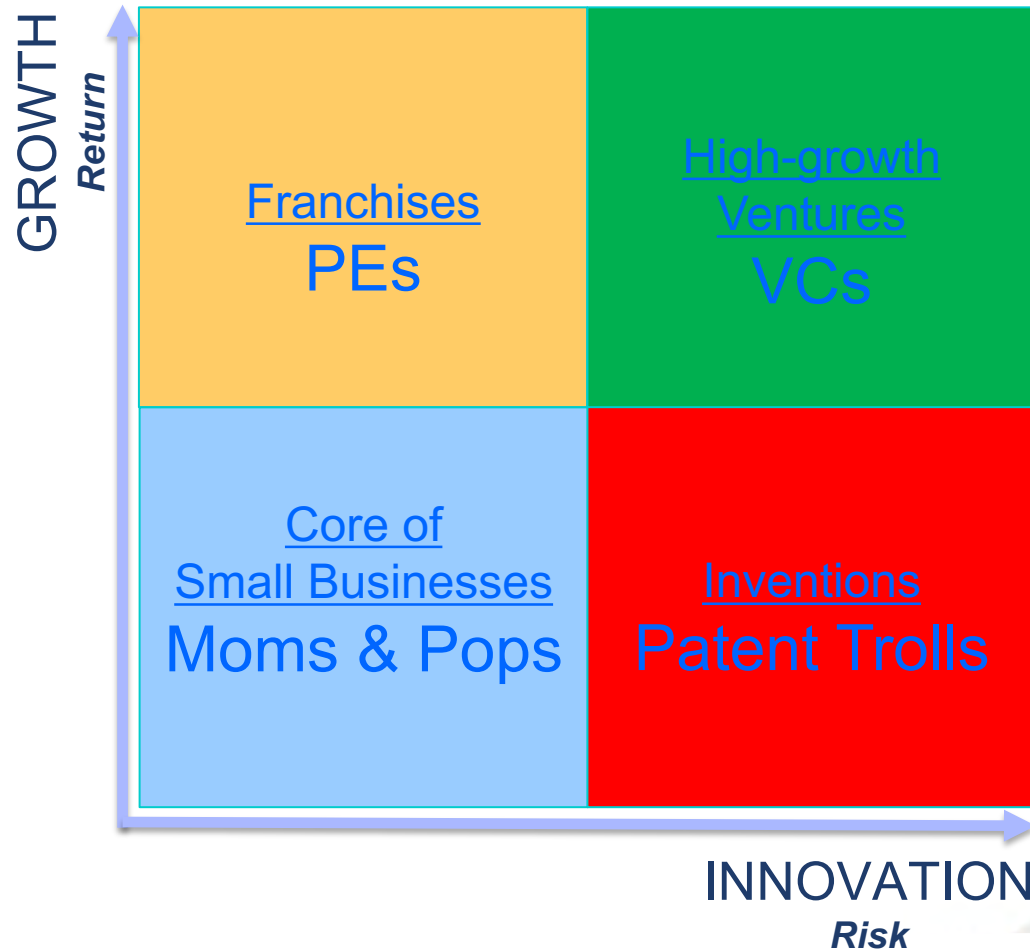
RETURN



Risk/Return is a Basis for the Investment Thesis

Lower for **PE**: Later Rounds, Numbers, Momentum, Growth

Higher for **VC**: Early Rounds, People, Acceleration, Scale



How the VC assesses the attractiveness of an opportunity

Is it True? Is it Reasonable?

Quality Introduction, the team

The story, how it is pitched and due diligence

Risk/return assessment, analysis/mitigation & match to thesis

Market Risk - Selling, Competing and Scaling; Evidence

Management Risk – Mission; Team; Culture; Strategy

Model Risk - Production & IP; Competitive Offering

Money Risk - Funding & Exit; ROI; Sources & Uses

M is for...

Mitigating The 4 Mms

Market

Management

Model

Money

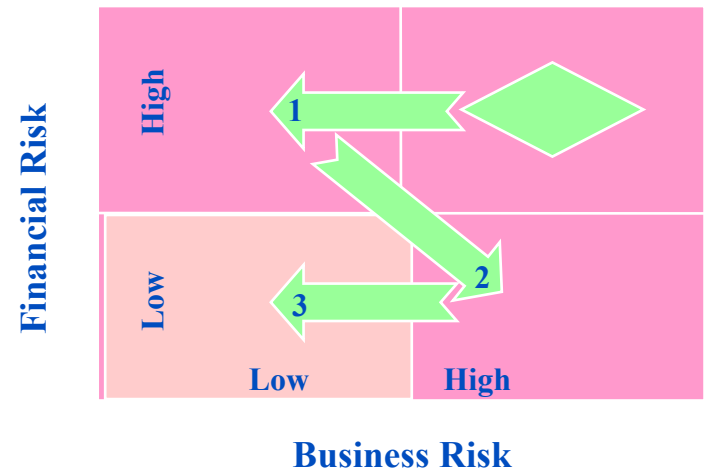
Analysis Risk/Return

Market Risk!

Execution Risk!

Tech. Risk!

Financial Risk!



Background Checks

Market Research (Secondary & primary)

Competitive Analysis, Regulations

Strategy (Assessment, Vision, Mission, Core Competencies, Value Proposition, 5 Forces, SWOT, KSF, Value Chain, Product roadmap, Scorecard, KPIs, Canvas, ...)

Financial Modeling

Syndication



The 2nd Truth

Investors use mathematics to seek truth and reason

*“What is reasonable is true and
what is true is reasonable” - Hegel*



The Investor's Quantum Theory of Success

$$\psi(r) = \frac{-\hbar^2}{2m} \nabla^2 \psi(r) + V(r) \psi(r)$$

↑ ↑ ↑
Total Kinetic Potential
Energy Energy Energy

↘ ↓ ↗

$$E = KE + PE$$

Which is K & Which is P?

Role Reversal

VC

$$E = mc^2$$

Weight and
Acceleration

PE

$$E = pv$$

Momentum
and Speed

The Investor's Simple Math



Annual Returns	5yrs	7yrs
5x	38%	26%
10x	58%	39%

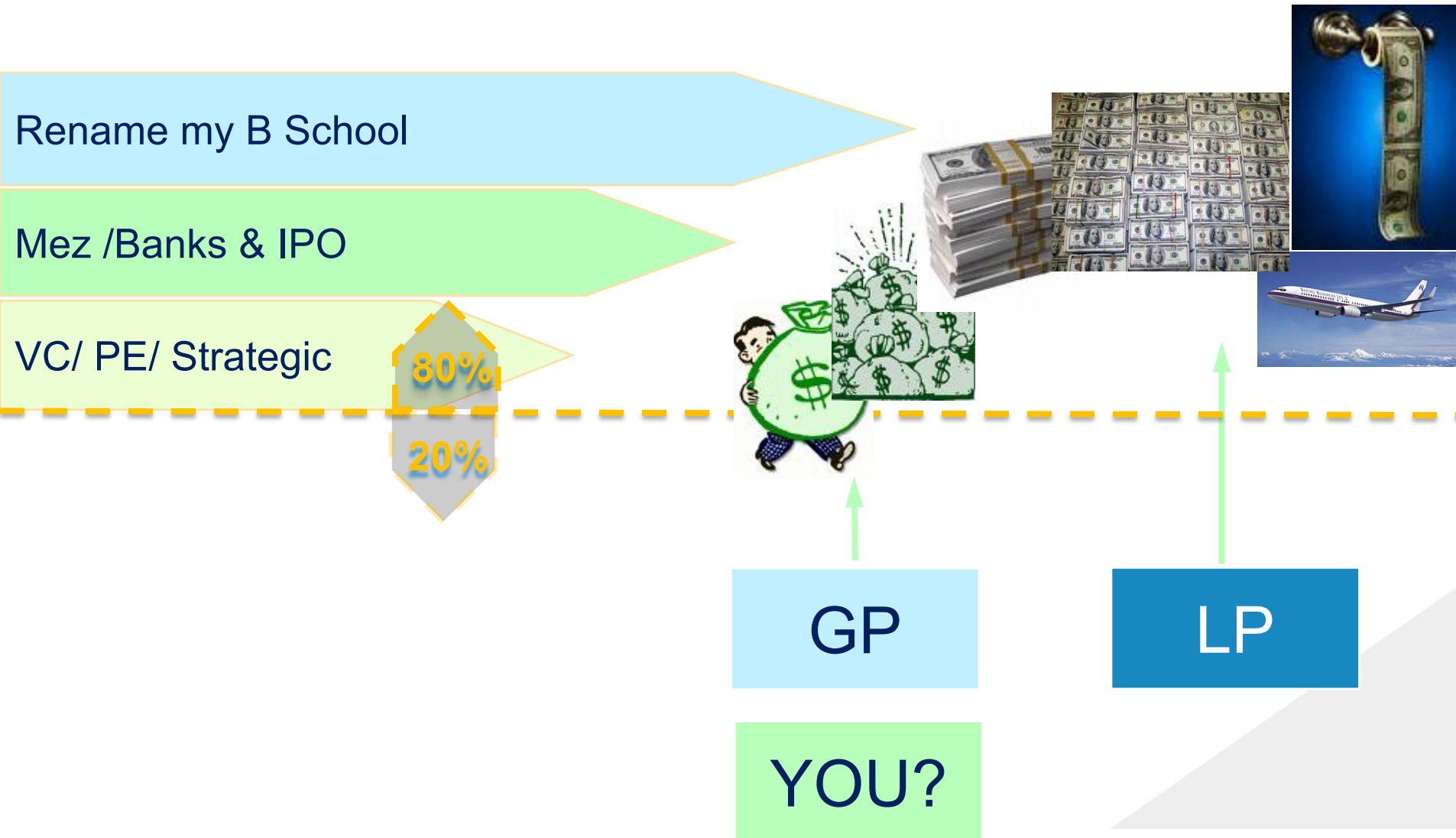


The Ultimate Truth

Investors are human and have dreams
in the pursuit of happiness

Investor's Dream of Success:

Money + Compound Interest + Portfolio Strategy = Geometric Progression



The Lessons

What is the Founder to Do?



Lesson 1. Prepare for Growth and Exit



MARKET



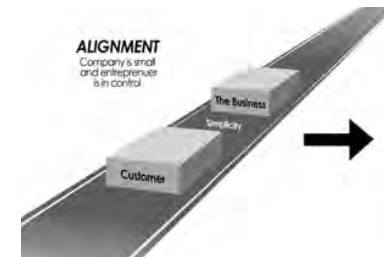
MANAGEMENT



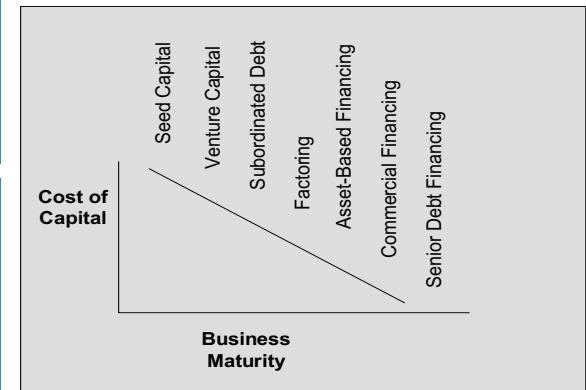
MODEL



MONEY



Meeting the Growth Challenge
A Map through No Man's Land



Ideas, energized.



Lesson 2. Persevere (To Convince have Conviction)

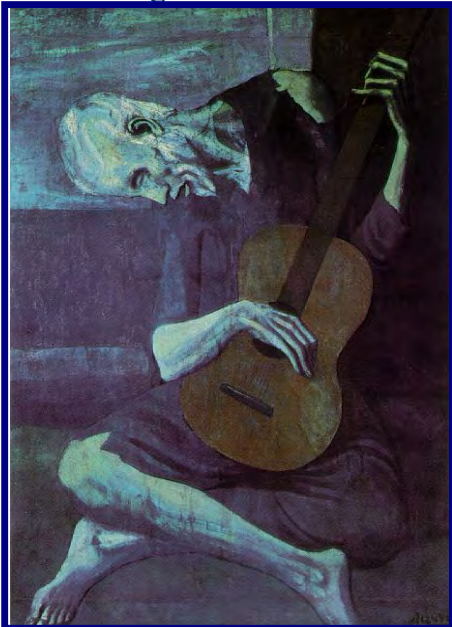
“Be sure of it; give me the ocular proof” — Shakespeare in Othello

BUILD
Product/Service
1,000 lines of Code, IP
System Documentation
Beta customers,
Regulatory

SELL
Accretive Revenues from
Products/ Services
Partnerships, Contracts



SCALE
Profitable Business
Scaling/ Financing
Order Pipeline



Risk

From a Culture of Control to Professionalization & Excellence

The Advice

The merit is not in the funding
but in the longer game...
in achieving the economic and societal impact
of your mission!

*“Charms strike the sight, but
merit wins the soul”* – Alexander Pope

Thank You!

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NEWPORT BOARD GROUP

BOARD DIRECTORS | EXECUTIVE LEADERS | BOARD & CEO ADVISORS

Ideas, energized.



Examples of VC Lists

1. <https://massinvestor.com>
2. <https://www.crunchbase.com/search/principal.investors>
3. <https://www.cbinsights.com/investor-analytics>
4. <https://pitchbook.com>
5. <http://www.whogotfunded.com>
6. <https://www.vcprodatabase.com>
7. <http://www.thefunded.com>
8. https://docs.google.com/spreadsheets/d/1ebGZ6-ivf_3woBGC4Kz_3217DhjGsefoRu_5iP3nuFQ/edit#gid=0
9. https://www.vcgate.com/res_venture_capital_database.asp
10. <https://www.preqin.com/type/venture-capital/1/13>
11. <http://www.ventureintelligence.com/pellogin.php>
12. <https://financial.thomsonreuters.com/en/products/data-analytics/market-data/indices/venture-capital-index.html>
13. <https://angel.co/accelerators/apply>
14. <https://seed-db.com/accelerators>
15. <https://shop.pehub.com/pratts-guide>

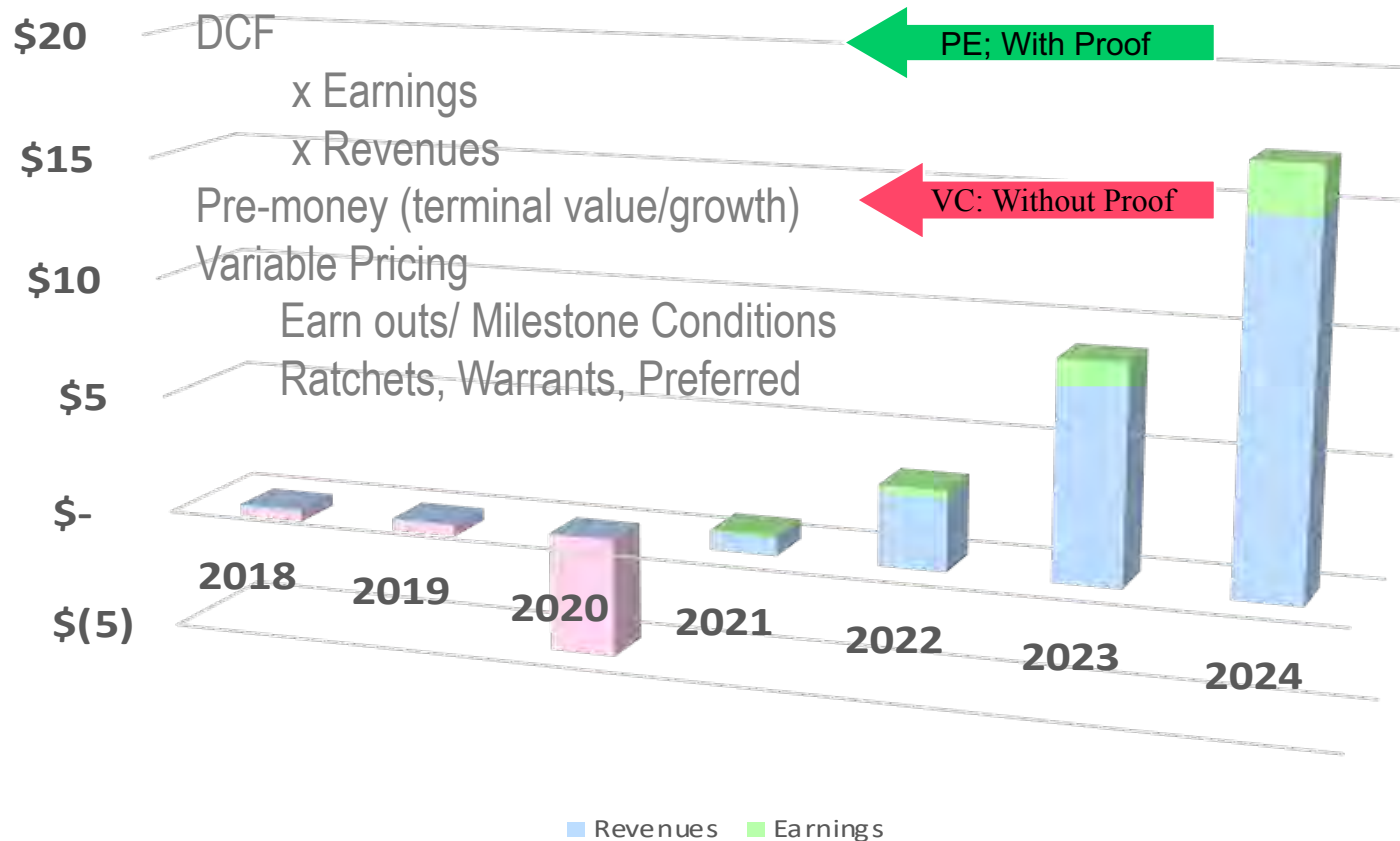


Sources of funds

Options	Cost
➤ Credit Cards	➤ 10-25%
➤ FFF	➤ 10%
➤ Angel Investors	➤ \$250K FOR 25%
➤ Venture Capitalists	➤ \$5M FOR 50%
➤ Venture Debt	➤ 10-13%
➤ Banks and Factoring	➤ 5-7.5%
➤ Crowd Funding & ICOs	➤ 0-100%
➤ Grants	➤ 0%

Valuation is about stages of risk and return: look at profitability factors, growth

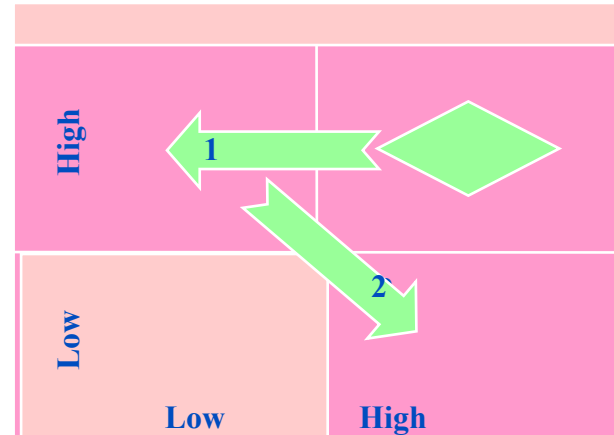
Newco Income Statement



Speed of money: Managing Financial Risk

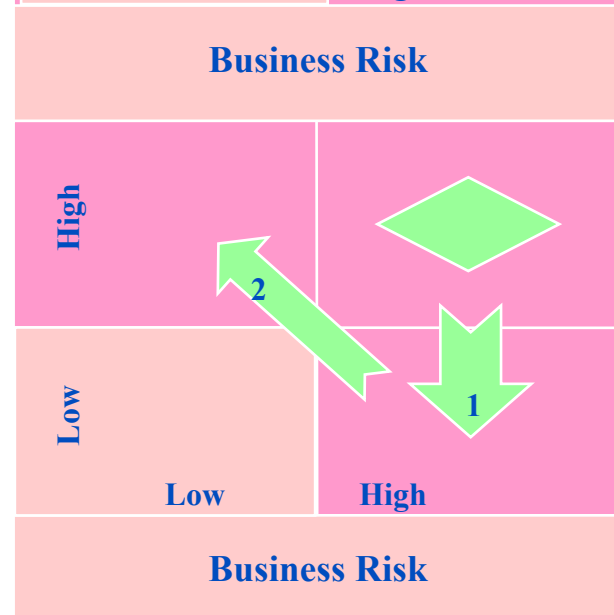
Fully-funded Deal

Financial Risk



Drip-fed Deal

Financial Risk



Which Industries Attract The Most Venture Capital?

Top 10 U.S. industry sectors by share of venture capital investment*



* Based on an analysis of 4,164 VC investments in the United States
Source: Martin Prosperity Institute

statista

<https://www.statista.com/chart/5528/which-industries-attract-the-most-venture-capital/>

Ideas, energized.

Larta Inc.
A Larta Institute Company



Venture Capital

Pros

- Large funding
- Ideal for scalable business
- Value-added services
- Leverageable (venture debt)

Cons

- High dilution
- Board Seat
- Control
- Time consuming
- High-maintenance?



Debt: Term Loans, Revolving Line of Credit, Monthly Recurring Revenues (MRR) line, **Venture debt**, Factoring (Revenues, Order Book, Assets, IP)

Pros

- No equity or control loss
- No personal guarantees
- Great to leverage for scale when the going is good

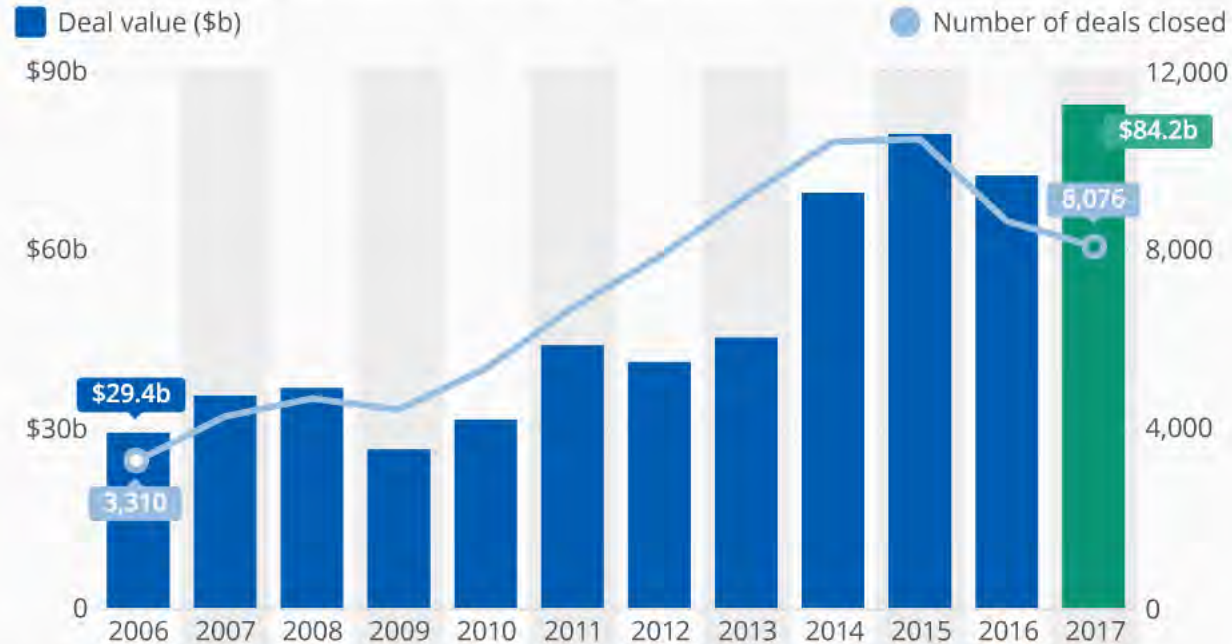
Cons

- Covenants and conditions
- Warrants
- Interest rates 7-15%
- Dangerous when the going is tough
- 10-13%, 4 yrs, fees, warrants, 30%-100% of last round for runway extension



Venture Capital Funding Climbs to Decade High in 2017

Number and aggregate volume of venture capital investments in the United States



@StatistaCharts

Source: PitchBook-NVCA Venture Monitor

statista

<https://www.statista.com/chart/11443/venture-capital-activity-in-the-us/>

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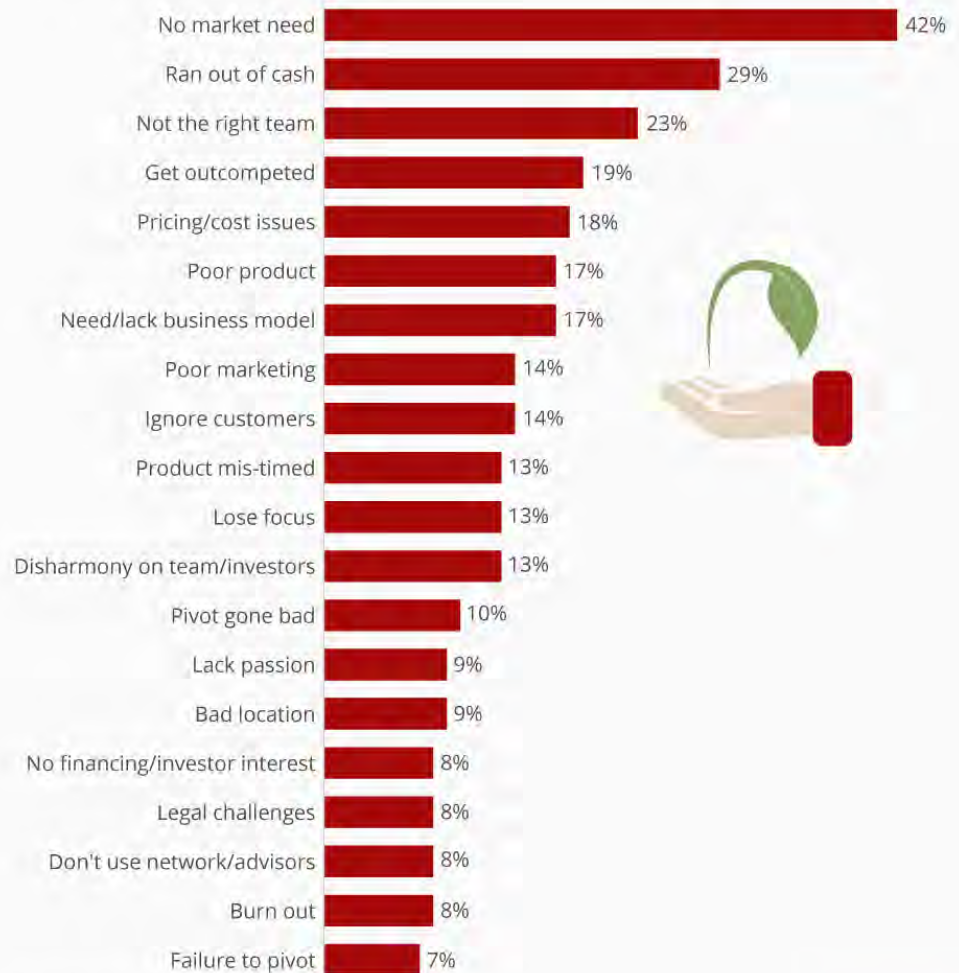


What types of financing has your company used within the past 12 months to meet your capital needs? (Check all that apply)

	Dec. 2017
Earnings of the business	32%
Credit cards	31%
Large Bank Loan	15%
Community Bank Loan	14%
Private loan (friends or family)	13%
Vendor credit	12%
Leasing	5%
Small Business Administration (SBA) loan	4%
Online or non-bank lender	3%
Venture capital/Angel investors	3%
Private placement of debt	3%
Credit Union Loan	2%
Selling/pledging accounts receivable	2%
State/Regional Loan and Incentive Programs	2%
Private placement of stock	1%
Crowdfunding	1%
Public Issuance of stock	0%
Other	7%
Used no financing	31%

The Top Reasons Startups Fail

Most frequently cited reasons for startup failure¹



* Based on an analysis of 101 startup post-mortems.
Source: CB Insights

statista

<https://www.statista.com/chart/11690/the-top-reasons-startups-fail/>

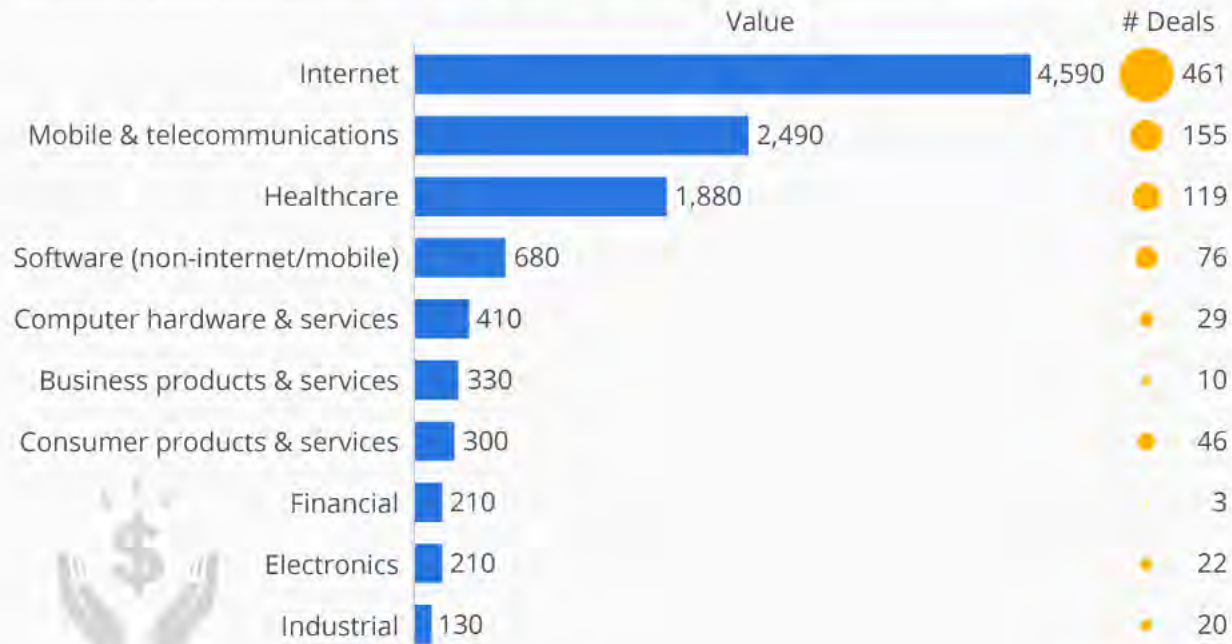
Ideas, energized.

Larta Inc.
A Larta Institute Company



Where the Capital Ventures

Venture capital investment in the U.S. in Q4 2016 by sector (in million U.S. dollars)



In Q4 2016

Source: PwC

statista

<https://www.statista.com/chart/8388/where-the-capital-ventures-in-america/>

Ideas, energized.

The World's Most Valuable Startups

Valuation of the 10 most valuable venture-backed private companies*



* as of October 2015

Source: The Wall Street Journal

statista

<https://www.statista.com/chart/3904/worlds-most-valuable-startups/>

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Number of jobs created by start-up businesses that were less than one year old, United States 1994 to 2017

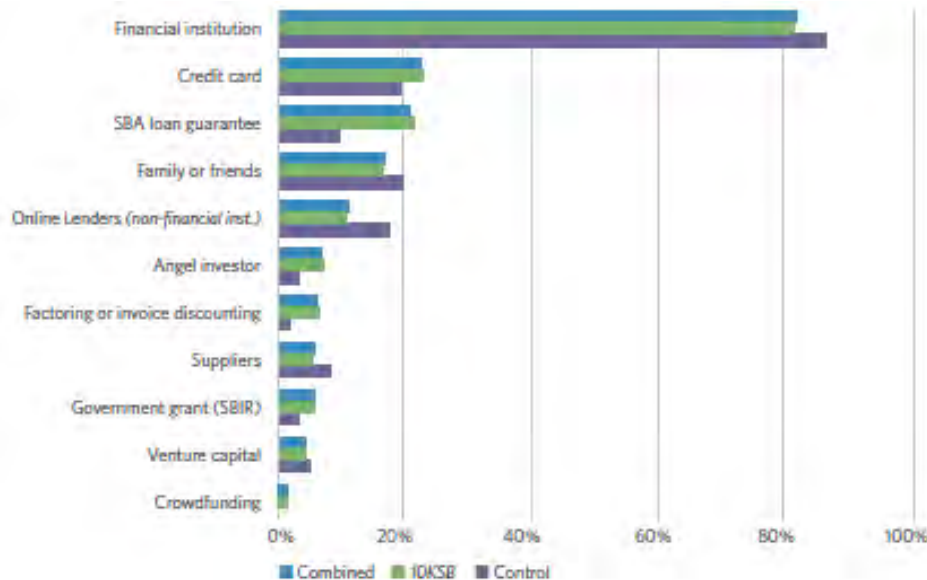


Source: Bureau of Labor Statistics, U.S. Commerce Dept.

Additional information: United States, 1994 to 2017



US Small Business Industry Distribution



Small Business Funding Source Distribution

<https://www.statista.com/statistics/235515/jobs-created-by-start-ups-in-the-us/>

“The State of Small Business in America - 2016”, Babson Study, Goldman Sacks 10,000Small Businesses

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