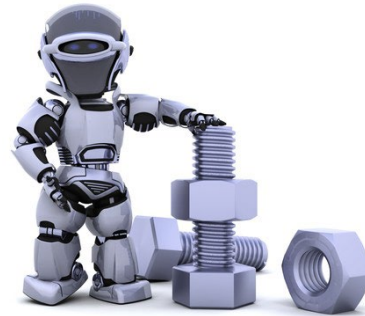
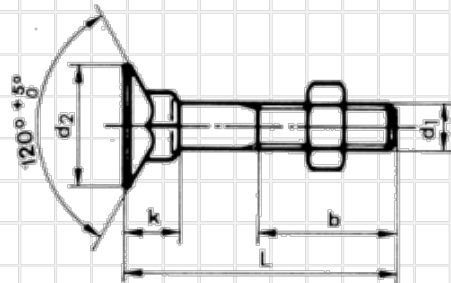


The Nuts and Bolts of New Ventures

MIT Course 15.393 (37th Year)



Joe Hadzima

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Session 1 – Part 1

Introduction to New Ventures

Why Are You Here?

- **You don't know anything about Entrepreneurship and want to understand what it's about**
- **You see something that "Sucks" and want to make it better**
- **You have an Idea or Invention and want to bring it to life in some way – To Change The World**
- **Being an Entrepreneur is Glamorous and I can make a lot of money**

So Many Questions You Need To Answer

- **How Do I Start? What Do I Do?**
- **What is the Problem that I am solving?**
- **How does my Solution Solve that Problem?**
- **"Who Cares About my Idea?" Specifically Who Cares?**
 - **Who is my Customer?**
 - **How do I find these people?**

Questions You Need To Answer

- **How will I make money so I can have a sustainable venture - this is the Business/Venture Model**
- **How long will it take to bring my solution to market? What will it cost? What resources will I need - people, money etc.**
- **Will I need set up some sort of entity to do all this and attract investors, strategic partners and others? Corporation? LLC?**

Questions You Need To Answer

- **How Do I Keep People from Stealing my Ideas?**
- **Will I need co-founders and what will be our relationship with each other and the entity?
Founders Agreement?**
- **How will I negotiate with employees, consultants, investors, strategic partners?**

Questions You Need To Answer

- How do I figure out what I don't know?
- What are the "pot holes" in the road that may come up and how will I recognize them and hopefully avoid or minimize them?
- **There are a lot of moving pieces here - Why Do This? What is the Reward?**

What's The Reward?



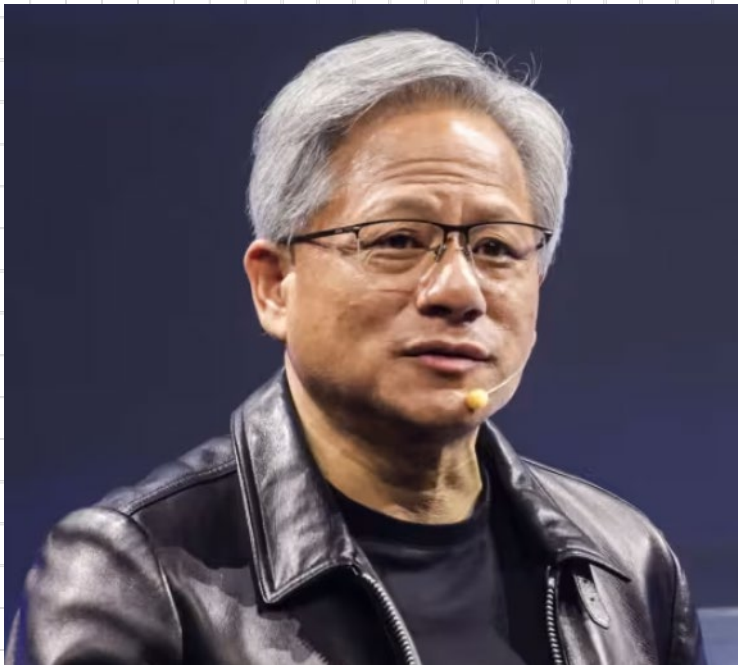
Fame?

Fortune?



The Reality

**He Built a Trillion-Dollar Company.
He Wouldn't Do It Again**



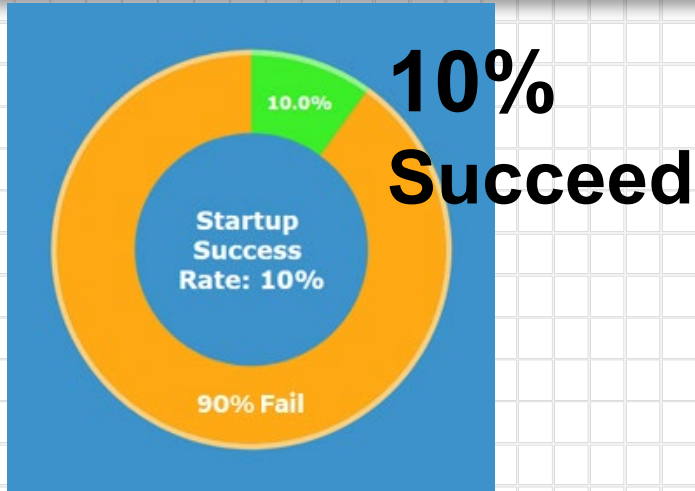
Jensen Huang - Nvidia

THE WALL STREET JOURNAL.

If he had known three decades ago what he knows today, he never would have founded one of the world's most valuable companies.

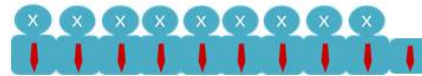
“If we realized the pain and suffering and how vulnerable you're going to feel, the challenges that you're going to endure, the embarrassment and the shame and the list of all the things that go wrong,” he said, “nobody in their right mind would do it.”

The Reality



FAILURE RATES OF STARTUPS

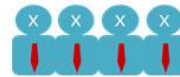
95% FALL SHORT OF MEETING PROJECTIONS



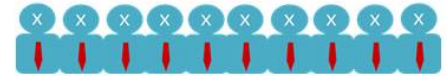
80% FAIL TO SEE PROJECTED RETURN ON INVESTMENT



40% LIQUIDATE AND LOSE MOST OR ALL INVESTMENT

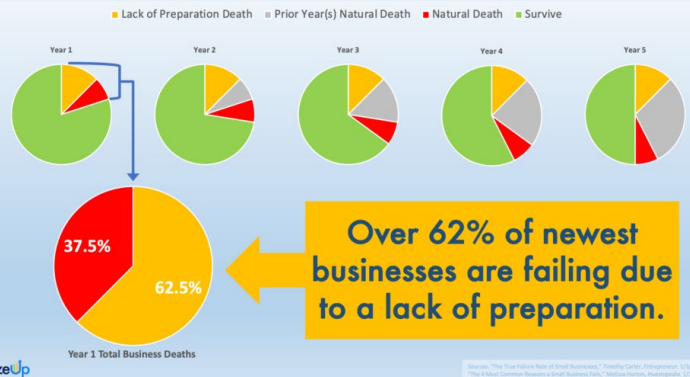


99% OF REASON FOR FAILURE IS LACK OF PLANNING & EXPERIENCE



Data from various sources including Harvard Business School, University of Tennessee Research, StatisticBrain.com, and others.

USA New Business Failure Rate - First Five Years



Perhaps All Is Not Dismal?



Entrepreneurial Impact: The Role of MIT

Edward B. Roberts and Charles Esley
MIT Sloan School of Management

February 2009



KAUFFMAN
The Foundation of Entrepreneurship

- 2009 Kaufman Study
- **25,800** currently active companies founded by MIT alums (120K total)
- Employ about **3.3 million people**
- Annual world revenues of **\$2 trillion**
- equivalent of the **11th largest economy** in the world.

Why This Course?

- **Not About Theory -- It's About DOING**
- **Planning and Executing New Ventures**
 - **Not Just Business – Sloan School of Management**
- **Our Goal – Increase Your Probability of Success so You are in the 10% that Succeed**
- **Entrepreneurship is a Lifetime, Incurable Disease**
 - **Not Fatal, Highly Contagious and Transforming**
 - **A Full Contact Sport**

What Will You Get?

- **You invest 6 evenings in this course**
- **You Get new or enhanced skills:**
 - **How to Evaluate a venture idea from an impact and economic viewpoint**
 - **How to figure out Who is My Customer, Who Wants What I Have?**
 - **Where and How do I get the financial resources to launch and grow my venture?**
 - **How do I Scale my venture and make it Sustainable?**
 - **How do I Build and Retain a top notch Team - employees and advisers?**
 - **How do I Negotiate deals and resolve team conflicts?**
 - **What are the Legal Pitfalls I need to know about?**
 - **How do I Pitch my venture idea?**

Personal Questions For You

There are a lot of moving pieces here:

- **Do I Really Want To Do This?**
- **Should I Do This?**
- **Why Am I Doing This?**
- **Now or Later?**
- **Is This For Me?**

Tonight's Plan

- **Who are You?**
- **Introduce our Teaching Team**
- **New Ventures - Overview**
- **Break – Team Building**
- **Bob Jones – “Finding Your Customer”**

Who Are You?

- **Students (Undergrads, Grads and Post Docs):**

- Engineering
- Science
- Architecture/Planning
- Management/Economics
- Education, Law, Public Health

- **Non-Student Participants:**

- Alums
- Faculty, Staff
- Company Founders, Mentors, Others

- **Organizations**

- MIT
- Babson, BU, Columbia, Georgia Tech, Harvard, Stanford, Wellesley, Yale
- Foreign Universities: Germany, Greece, NTU
- Companies (Startups and Large Companies)

Interest Group	# People
AI/Machine Learning	183
Biotech	75
Cleantech	48
Education	68
Energy	57
Enterprise Hardware/Software	62
Environment	46
Fintech	57
Health Care	77
Medical Devices	58
Internet	69
IoT - Internet of Things	48
Mobile Apps	52
Social Entrepreneurship	84
Developing World Problems	65
Other	6

**H = R
E**

Who Are We?

- **Highly UnPaid Volunteer Speakers Who **Have Done/Are Doing** What They Will Be Talking About**
 - Not Coordinated – They just tell you their experience
 - Listen Carefully – You Will See Patterns that will Save You:
 - Time, \$\$\$, Personal Grief
- **Why Do We Do It?**
 - Course History => Customers
 - Impact

Who Are We?

- **Joe Hadzima**
 - Involved in launching 120+ new ventures
 - Senior Lecturer [MIT Sloan School](#)
 - Former Law Partner, [Sullivan & Worcester LLP](#)
 - Founding Judge, [MIT \\$100K Competition](#)
 - Global Chairman Emeritus, [MIT Enterprise Forum, Inc.](#)
 - Co-Founder and President, [IPVision, Inc.](#) and Neurostim Technologies
 - jgh@mit.edu



Who Are We?

nutsandbolts-ta@mit.edu

- **Taylor Brown**
- CPA
- 2027 MIT Sloan MBA Candidate
- Ernst & Young - AI-enabled finance transformations
- former Colorwave fellow
- B.S. in Accounting, summa cum laude- Loyola Marymount University
- [LinkedIn](#)



Who Are We?

nutsandbolts-ta@mit.edu

- **Eric Youshao**
- 2027 MIT Sloan MBA Candidate
- Getlabs, a health-tech start up
- Clarion, a life sciences consultancy
- Finance Lead of MIT's \$100K Competition
- B.S. Biomedical Engineering and Economics - Yale University
- [LinkedIn](#)



Tonight's Plan

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All You Need To Do Is:

- **It is a Really Simple Concept** (whether you are doing a mobile app, a biotech company or a non-profit social developmental company):
 - **Create Value**
 - **Capture/Harvest some of the Value Created** (so you can do it again)
- **The Questions Are Easy but the Answers are NOT**

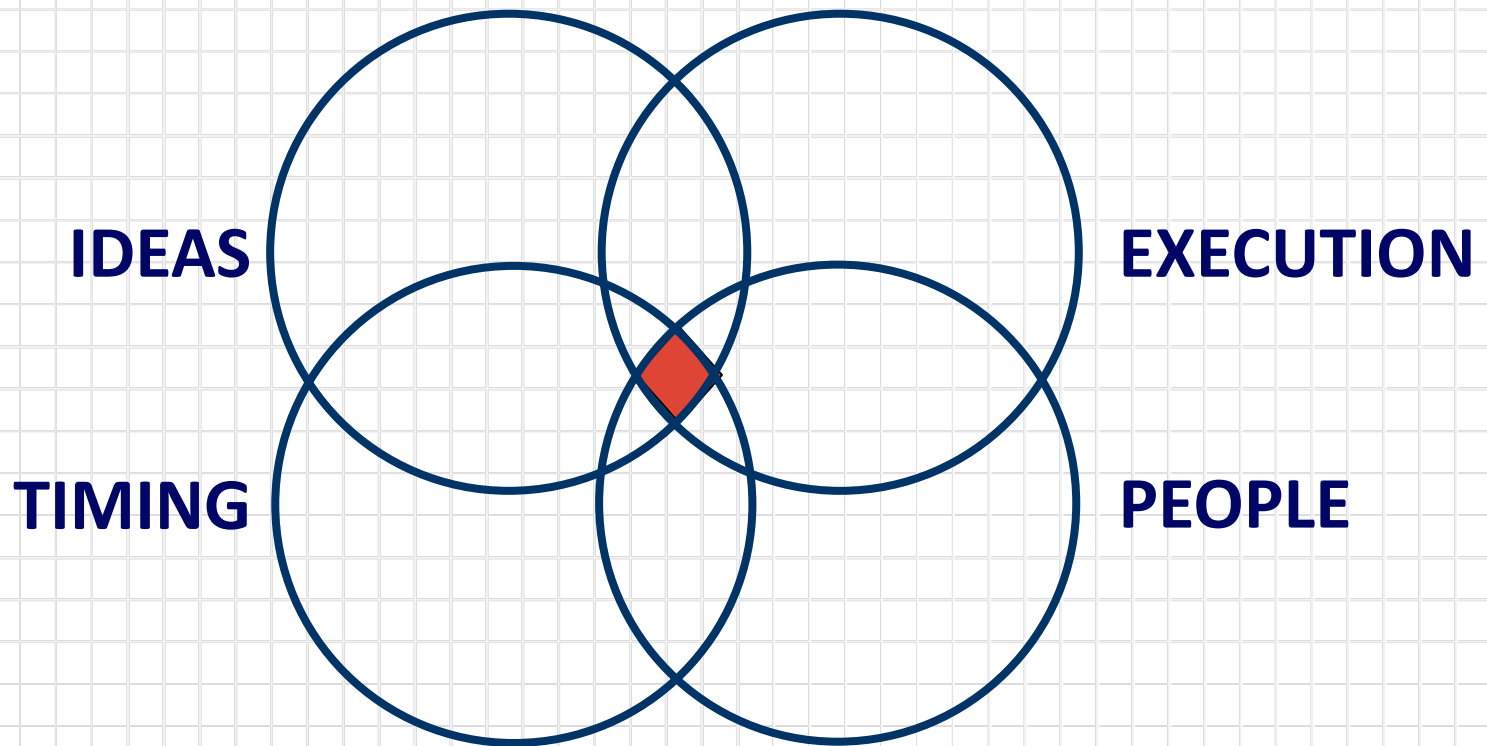
The 3 Whys

- **Why This?**
 - **Why is this Idea Worth Pursuing or Investing In?**
 - **Size of Market? Problem Worth Solving?**
- **Why Now?**
 - **Why is Now the Right Time to Do This?**
 - **Convergence of Opportunity and Solution?**
- **Why This Team?**
 - **Why Do I Think These People Will Win?**
 - **Prior Experience? Compelling Venture Model?**
- **The 4th Why: Why Won't This Work?**

Lessons Learned

- **What Have I Learned and How That Might Help You Succeed?**
- **4 Critical Components for Success**

Lessons Learned



What Makes an Idea Valuable?



IDEAS

- **Ideas are a Dime a Dozen**
- **Value to Someone – Who?**
- **How Much Value?**
 - **Cost to Produce/Deliver**
 - **How to Capture?**
- **Is it Easily Copied?**



IDEAS

***“Vision without Execution is
Hallucination”***

Thomas Edison

***Deals I Passed Up Because of
Execution***

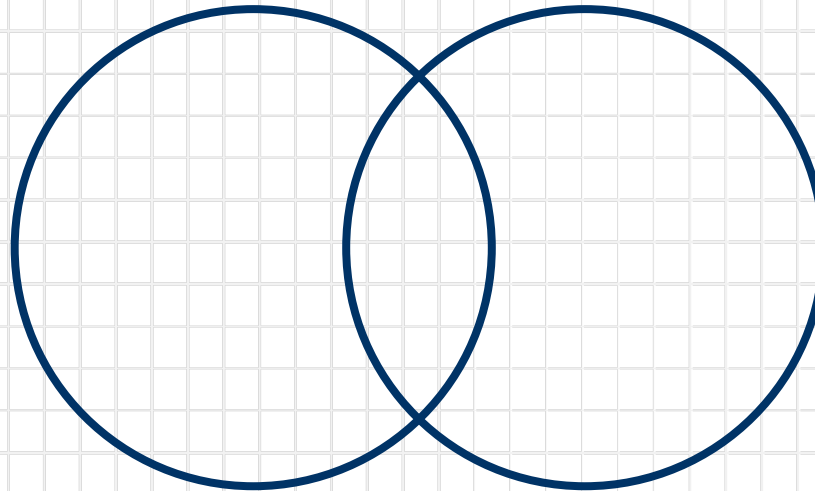
-ZipCar

-Ebay Precursor



EXECUTION

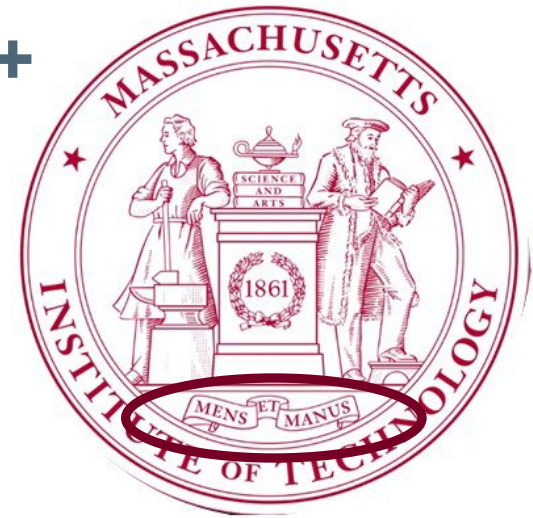
IDEAS



EXECUTION

MIT Ecosystem is about Ideas + Execution: “*Mens et Manus*”

LESSON: Ideas + Execution are Necessary but NOT Sufficient for Success





IDEAS

EXECUTION

“I have lost more money & time being ahead of the curve”

Joe Hadzima

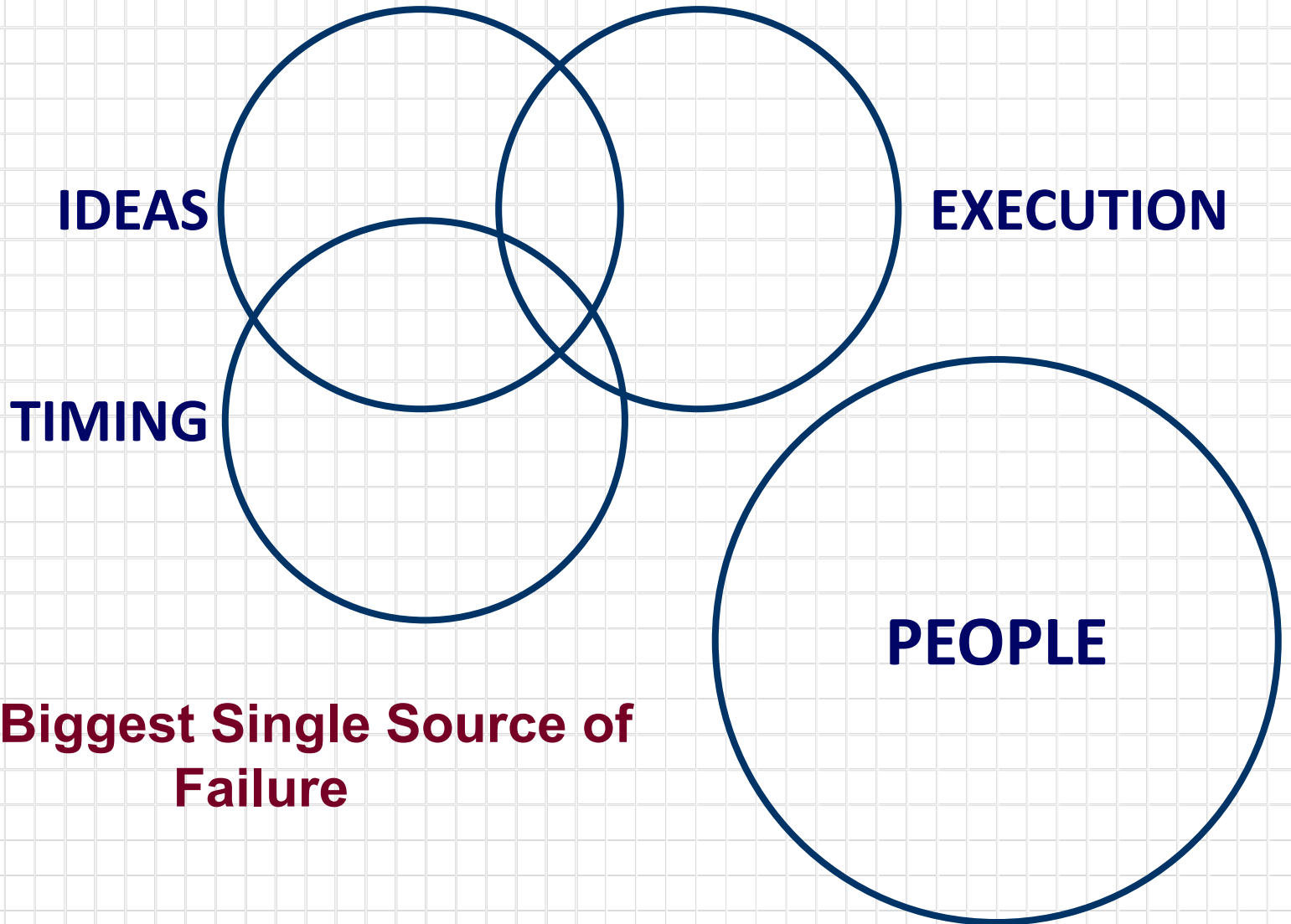
It Can Take a Long Time to be an Overnight Success

-3D Printing =>25 Years

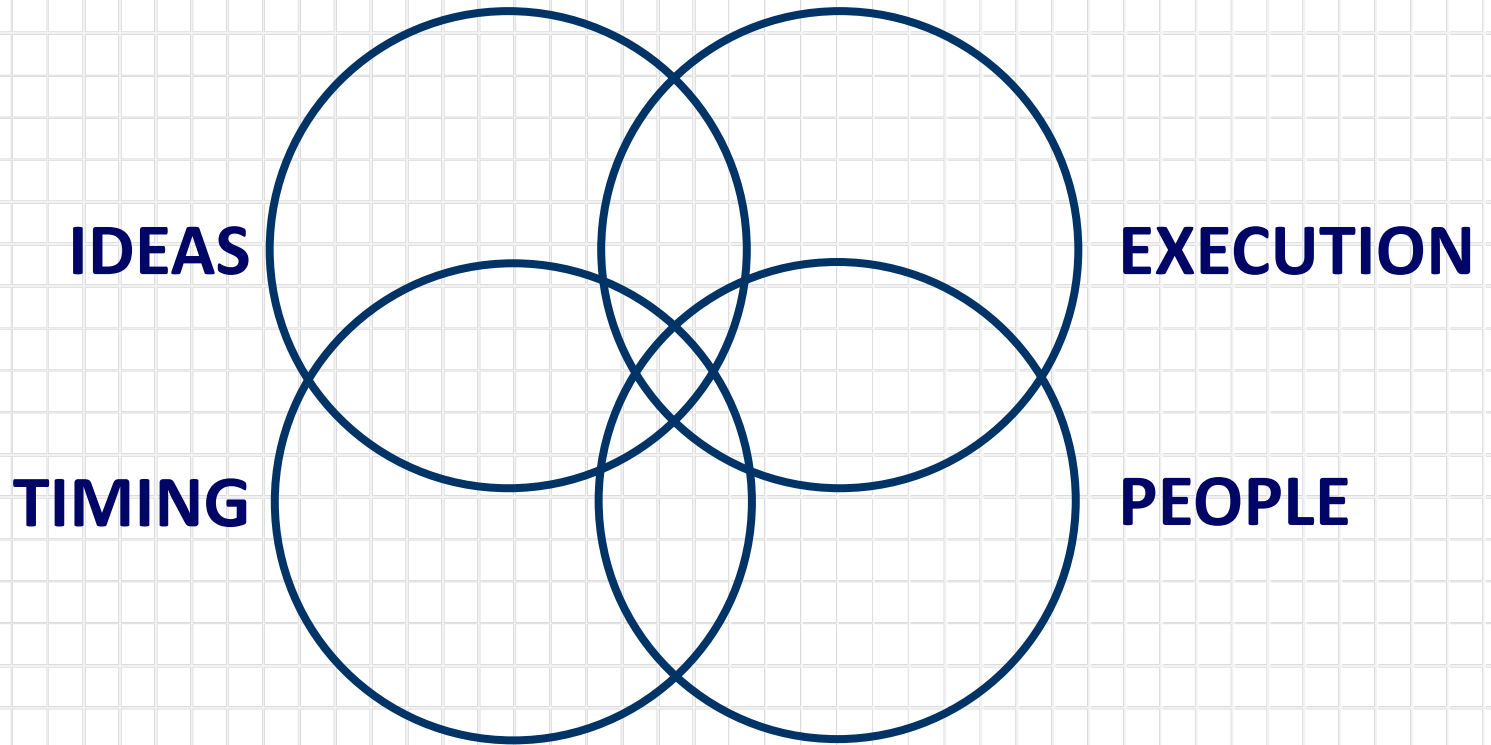
-Prodigy (IBM, Sears, & CBS)- \$1B => Amazon

-Fusion => 70+ years and counting

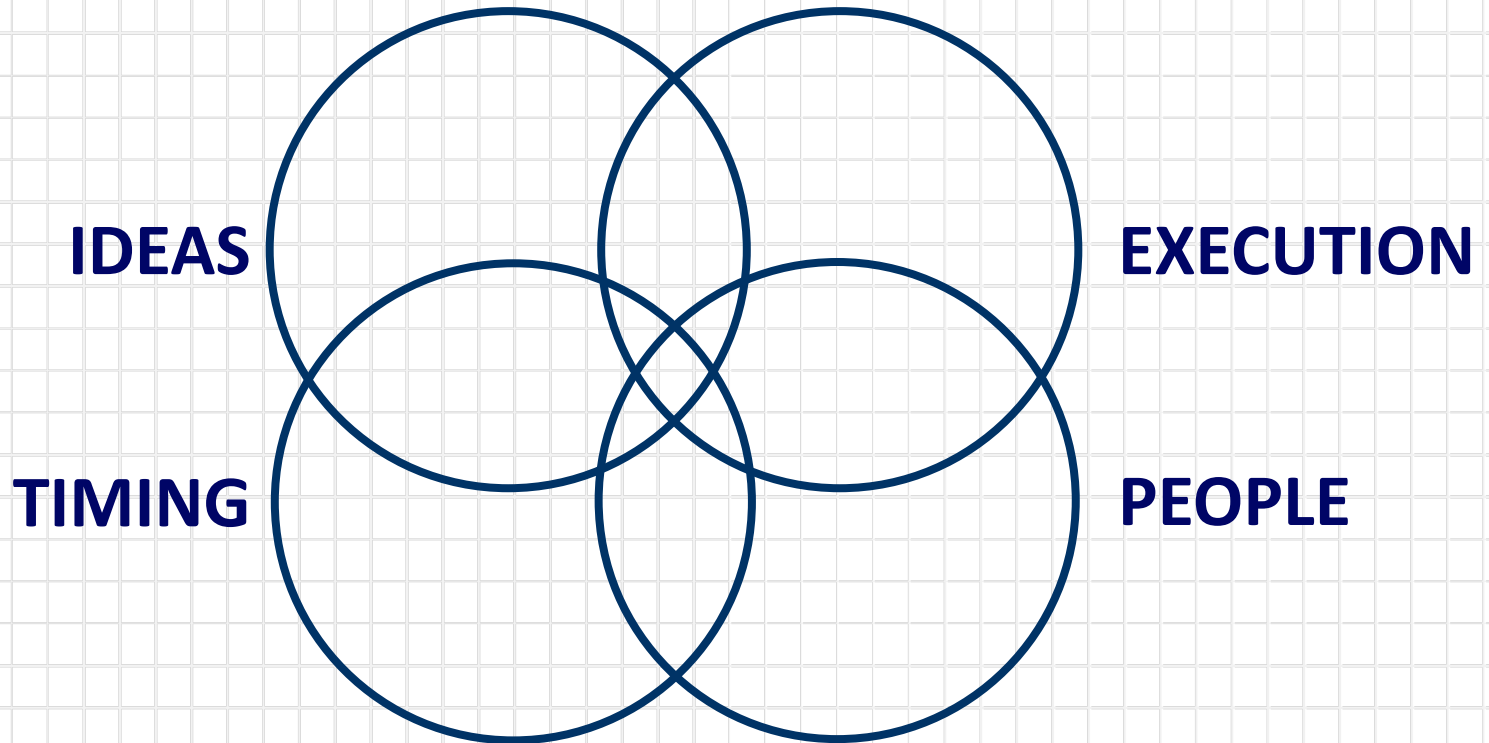
TIMING



The Biggest Single Source of Failure



One day Alice came to a fork in the road and saw a Cheshire cat in a tree. **“Which road do I take?”** she asked. **“Where do you want to go?”** was his response. **“I don't know”** Alice answered. Then, said the cat, **“It doesn't matter.”**



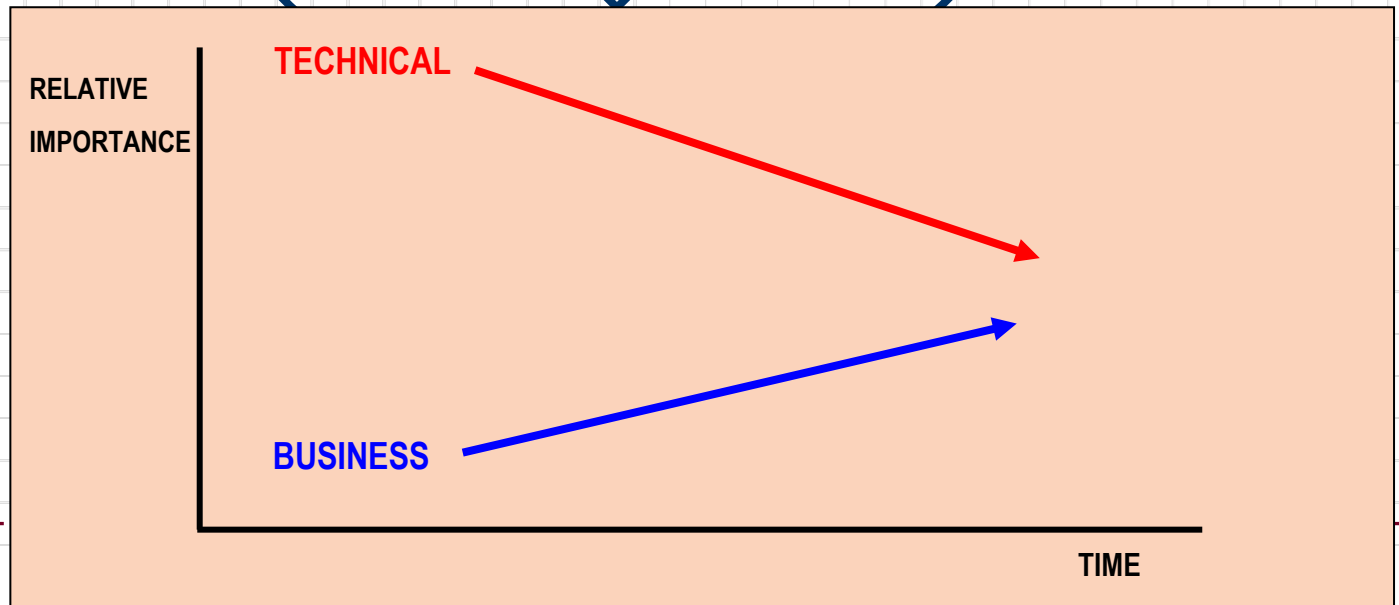
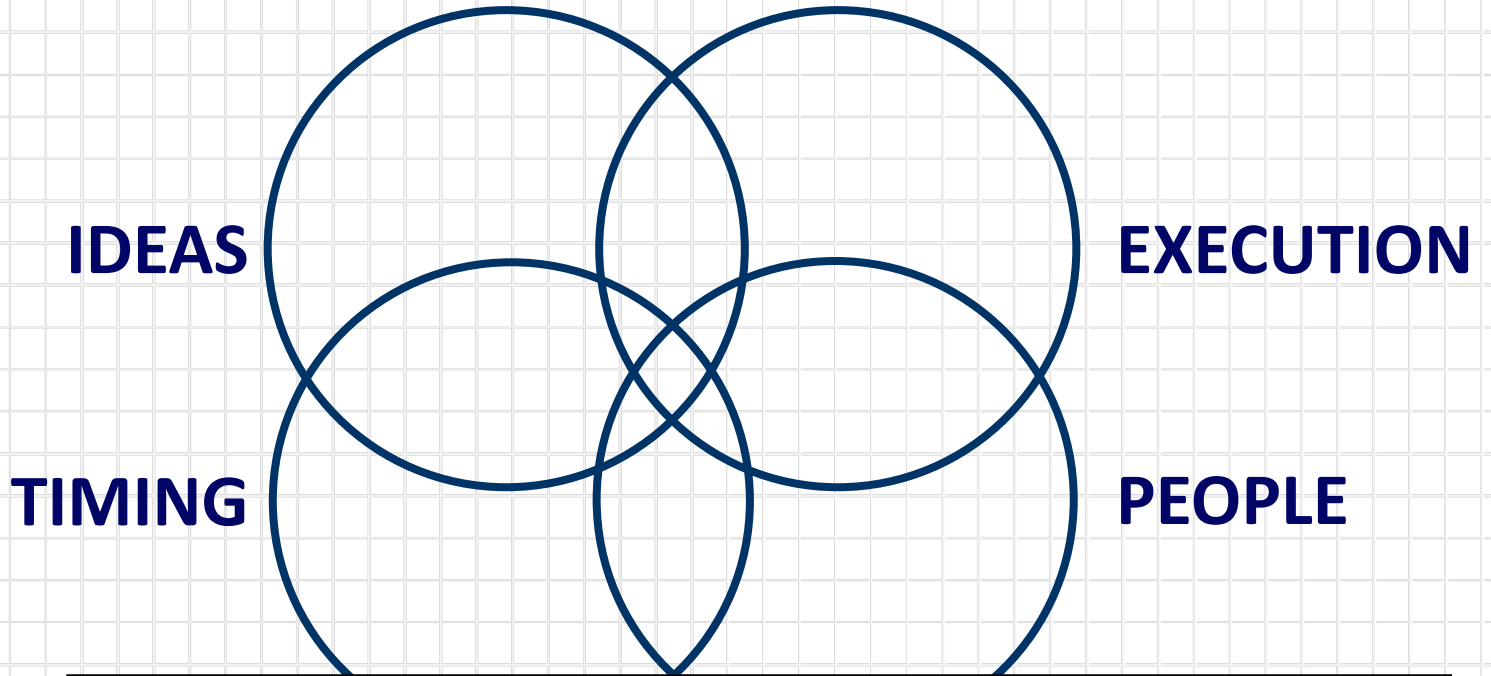
Some People Related Reasons:

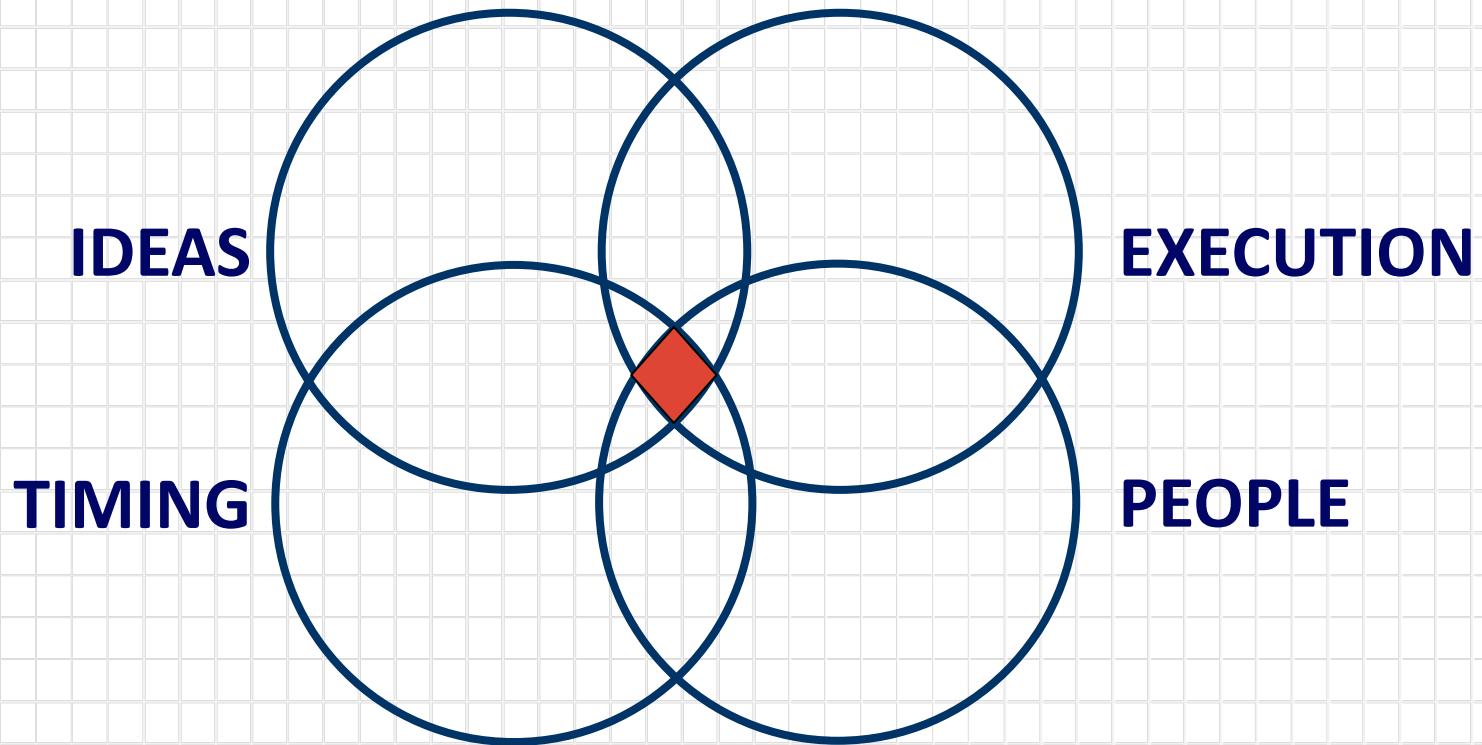
-Building Team Before Understanding Customer/Market

Football Team – Basketball – Painful Pivot

-Not Knowing That You Don't Know

E-Ink: \$15M => \$80M but it took \$160M



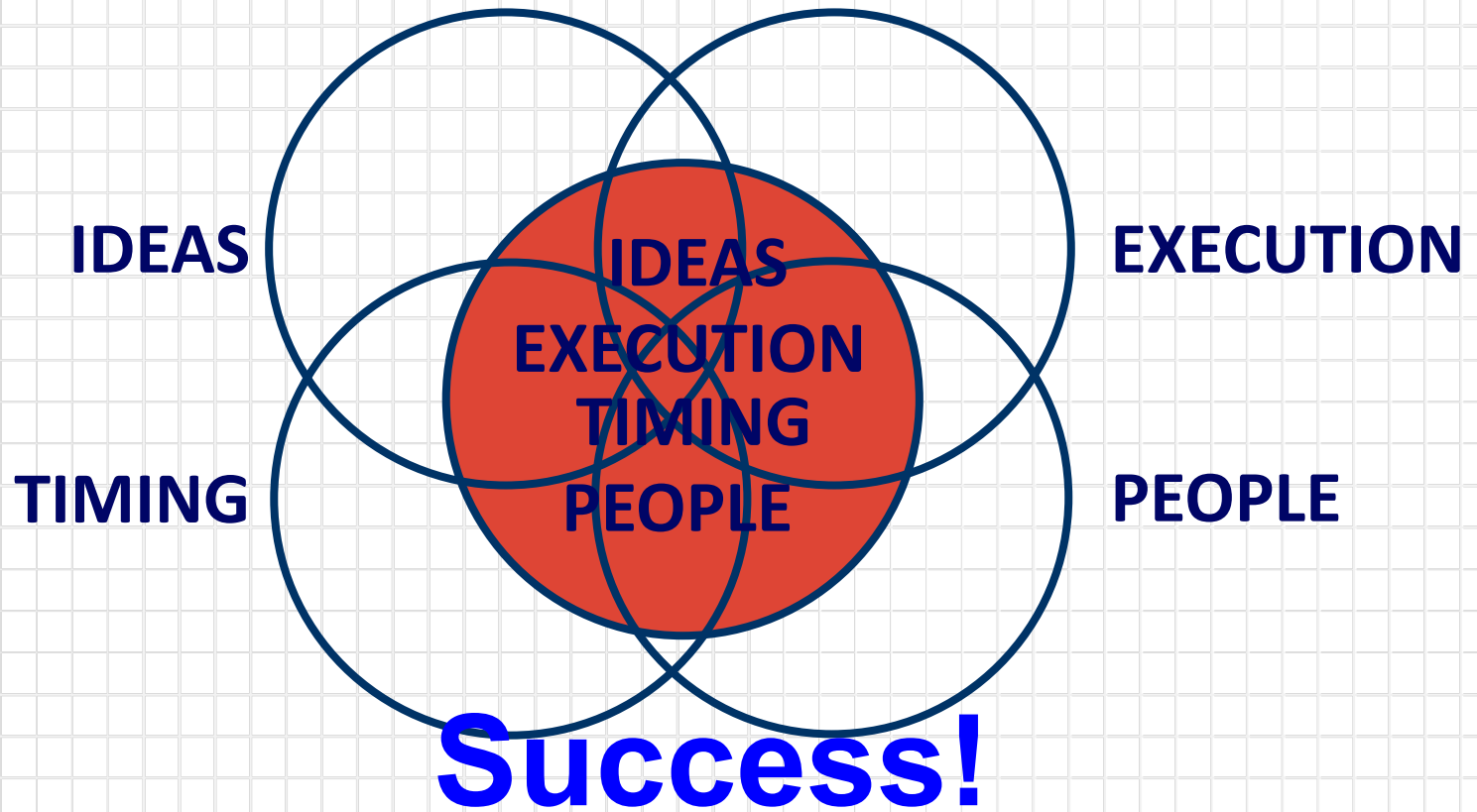


SpeechCo: All 4 Components – IPO, now in your smartphone

VideoCo: All 4 Components – Acquired in 2 years

HIV-Co: I&E&T not P – Almost failed, IPO, modest success - never reached full potential

NanoCo: I&E not T or P – Great potential, failed



Mission / Vision Statement

- Also known as the **Value Proposition**
- One sentence that says what you do
- e.g. “We help **X** do **Y** by doing **Z**”
- **X** = target audience
- **Y** = goal or problem they want to solve
- **Z** = how you do it

Steve Blank's XYZ

*Airbnb: “We help travelers (**X**) find affordable, local accommodations (**Y**) by connecting them with homeowners who have spare rooms (**Z**).”*

Mission / Vision Statement (Two-Sided Model)

Two-sided models (marketplaces or platforms) are unique because they have two distinct customers.

The Rider (Demand Side)

"We help city residents (X) get from point A to B reliably (Y) by matching them with a nearby private driver (Z)."

The Driver (Supply Side)

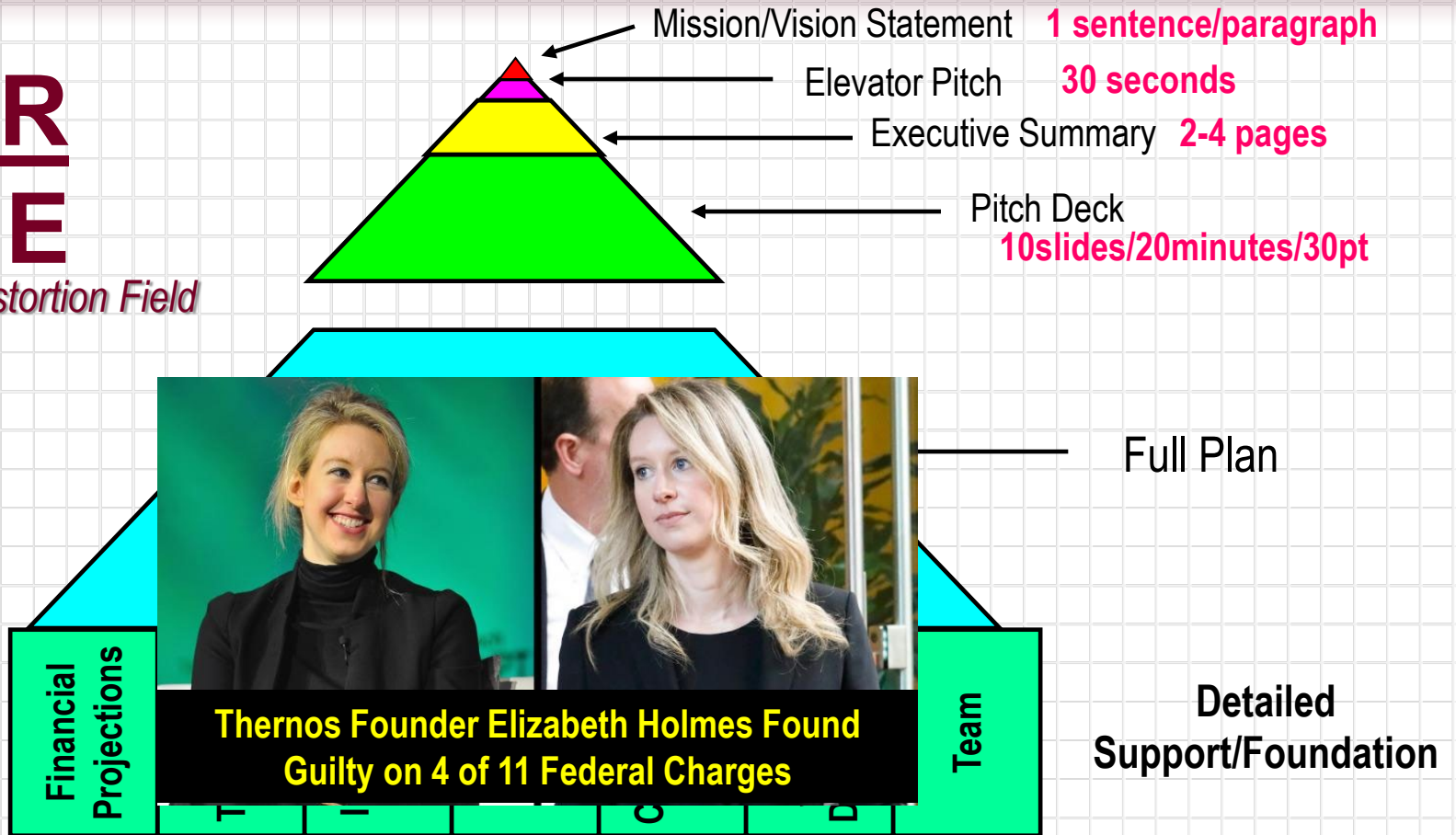
"We help car owners (X) earn flexible income (Y) by connecting them with passengers needing rides (Z)."

Which One Do You Focus on First? Usually **Demand** – to show someone will pay. Unless “Supply” is the biggest challenge.

A Supported Vision

H = R / E

Reality Distortion Field



A Dozen Real Challenges

Vinod Khosla invested in a startup that a Friend of mine co-founded. My friend ask him for guidance/advice. Vinod responded:

But

“Luck Favors the Well Prepared”

We want to help You Be Prepared!

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BREAK Time & Interest Groups

- **Interest Group Meet Ups => 10-15 Minutes**
 - Look for signs around the room
- **When We Come Back**
 - Course Logistics
 - Bob Jones – “Finding Your Customer”

Interest Groups - WhatsApp

- Your Interests from email list signup
- Consider Joining WhatsApp Groups

Interest Group	# People
AI/Machine Learning	169
Biotech	72
Cleantech	46
Education	64
Energy	55
Enterprise Hardware/Software	54
Environment	43
Fintech	54
Health Care	72
Medical Devices	57
Internet	65
IoT - Internet of Things	44
Mobile Apps	47
Social Entrepreneurship	79
Developing World Problems	62
Other	4



The Nuts and Bolts of New Ventures

Course Information

- **MIT Course 15.393**
- <http://nutsandbolts.mit.edu> (link to canvas.mit.edu on bottom of main page)
- **3 Credits Pass/Fail**
- **Class Attendance Required – Canvas Quiz Attendance Codes posted each night at 9pm**
- **Written Requirement**
 - **Executive Summary or Pitch Deck – Due Friday Jan 30 midnight**
 - Of an Idea you are thinking about or a venture you are launching
 - **Team Efforts Encouraged - Team Formation Google Sheet**
 - See link at nutsandbolts.mit.edu/writingreq.php Complete by 1/24

Tonight's Plan

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Tonight's Plan

- **Bob Jones – Founder of the “Consumption Function”**



www.bluesdogsoston.com



Next Time

- **“Founder’s Journey”** with Ken Zolot
- **“Business/Venture Models”** with Rich Kivel
- Check **nutsandbolts.mit.edu** for details and readings – also see the MIT Canvas website for the Course Reader
- The **MIT Canvas link** is on the bottom of the **nutsandbolts.mit.edu** home page.