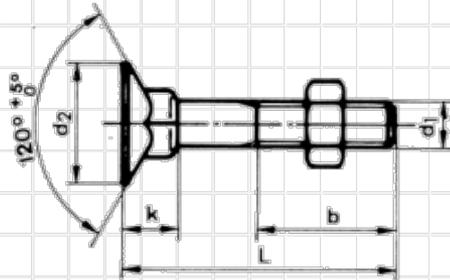


# The Nuts and Bolts of New Ventures

## MIT Course 15.393 (36th 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 and people? 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's The Reward?



**Fame?**

**Fortune?**



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# The Reality

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



Image by [European Union](#) on Wikimedia. CC BY.

**Jensen Huang - Nvidia**

## THE WALL STREET JOURNAL.

If he had known 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.”

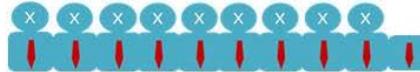
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# The Reality



## FAILURE RATES OF STARTUPS

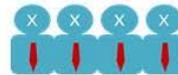
**95%** FALL SHORT OF MEETING PROJECTIONS



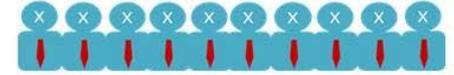
**80%** FAIL TO SEE PROJECTED RETURN ON INVESTMENT



**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.

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# Perhaps All Is Not Dismal?

- 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 **11<sup>th</sup>** 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:**
  - Engineering
  - Science
  - Architecture/Planning
  - Management/Economics
  - Other
- **Non-Student Participants:**
  - Alums
  - Staff
  - Others

Interest Group	# People
AI/Machine Learning	233
Biotech	83
Cleantech	64
Education	102
Energy	82
Enterprise Hardware/Software	90
Environment	73
Fintech	76
Health Care	107
Medical Devices	71
Internet	102
IoT - Internet of Things	74
Mobile Apps	80
Social Entrepreneurship	125
Developing World Problems	94
Other	4

**H = R  
E**

# Who Are We?

- Highly UnPaid Volunteer Speakers Who **Have Done/Are Doing** What They Will Be Talking About
- Teaching Assistants
  - Janet Chang
  - Supriya Sanjay

# 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.](#)
  - Managing Director, Main Street Partners
  - Co-Founder and President, [IPVision, Inc.](#) and Neurostim Technologies
  - [jgh@mit.edu](mailto:jgh@mit.edu)

# Who Are We?

nutsandbolts-ta@mit.edu

- **Janet Chang**
- 2026 MIT Sloan MBA Candidate
- Deloitte Consulting - Tech, Media, and Entertainment sectors
- Psychobiology, UCLA
- Head of Operations MIT \$100K Competition
- [LinkedIn](#)

# Who Are We?

nutsandbolts-ta@mit.edu

- **Supriya Sanjay**
- 2026 MIT Sloan MBA Candidate
- Software engineer at Amazon Web Services - game-based learning tools
- Fulbright-Nehru scholarship in India - co-founded talentboard.io
- Incoming Managing Director of MIT's \$100K Competition
- [LinkedIn](#)

# Tonight's Plan

- Introduce our Teaching Team
- **New Ventures - Overview**
- **Break – Team Building**
- **Bob Jones – Finding Your Customer**

# 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)**

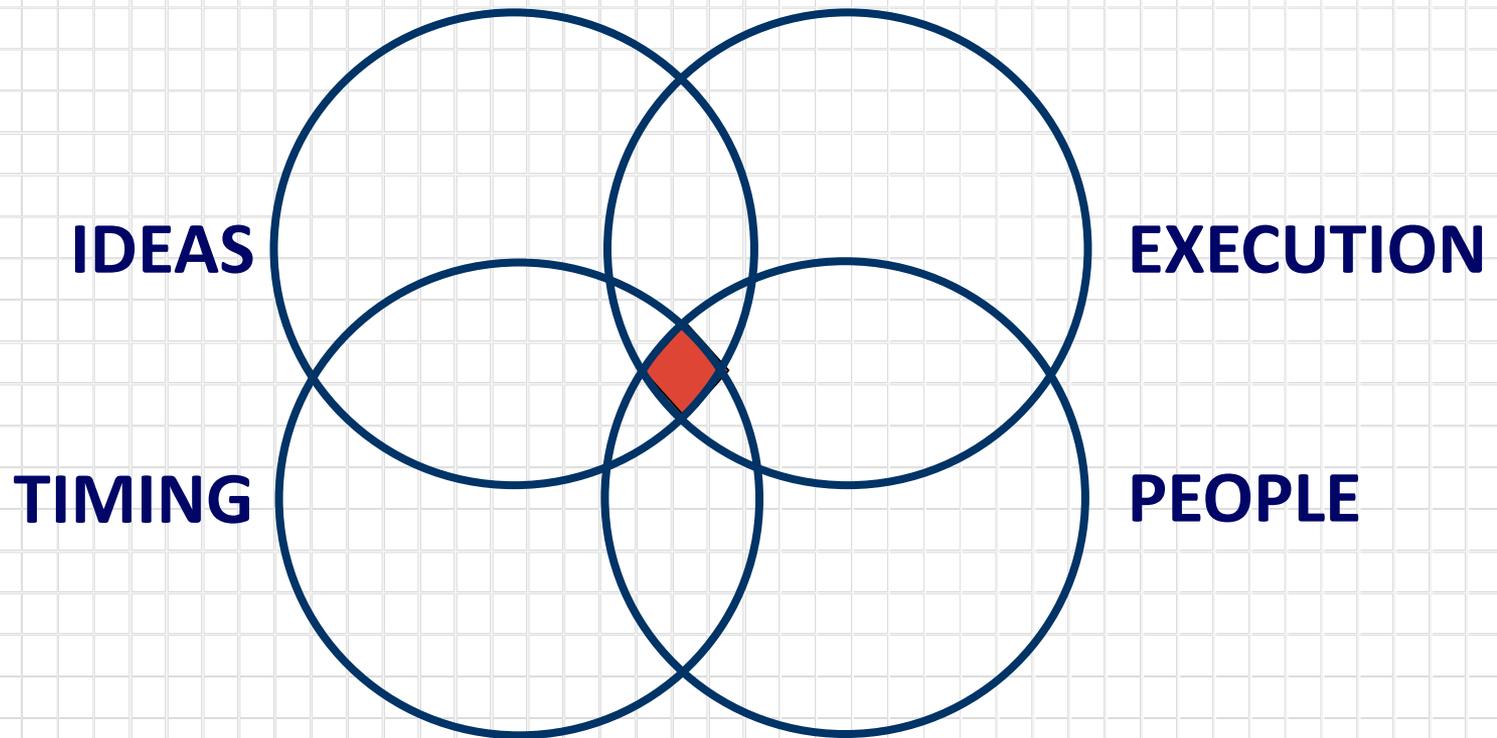
# The 3 Whys

- **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 4<sup>th</sup> Why: Why Won't This Work?**

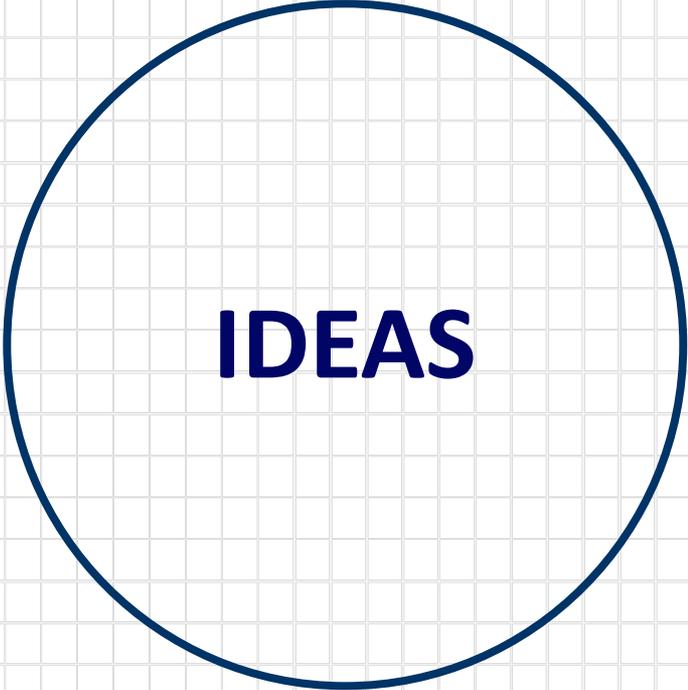
# Lessons Learned

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

# Lessons Learned

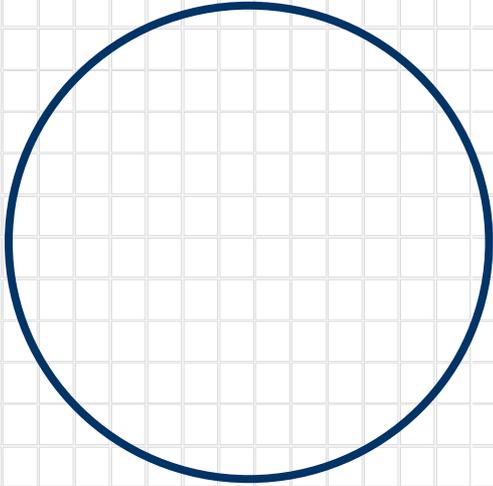


# What Makes an Idea Valuable?



**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**

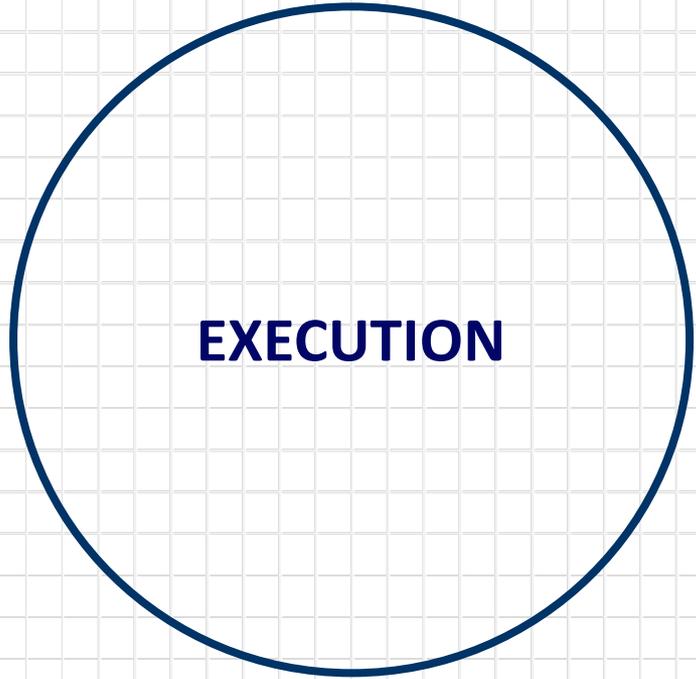
*“Vision without Execution is  
Hallucination”*

**Thomas Edison**

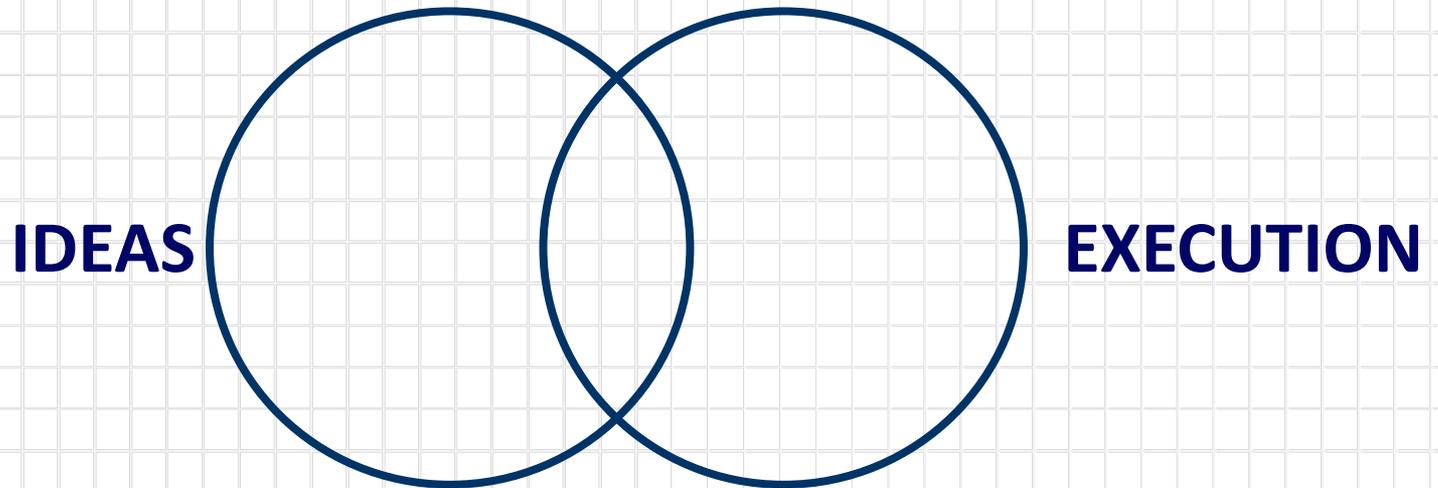
*Deals I Passed Up Because of  
Execution*

**-ZipCar**

**-Ebay Precursor**



**EXECUTION**



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

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



IDEAS

EXECUTION

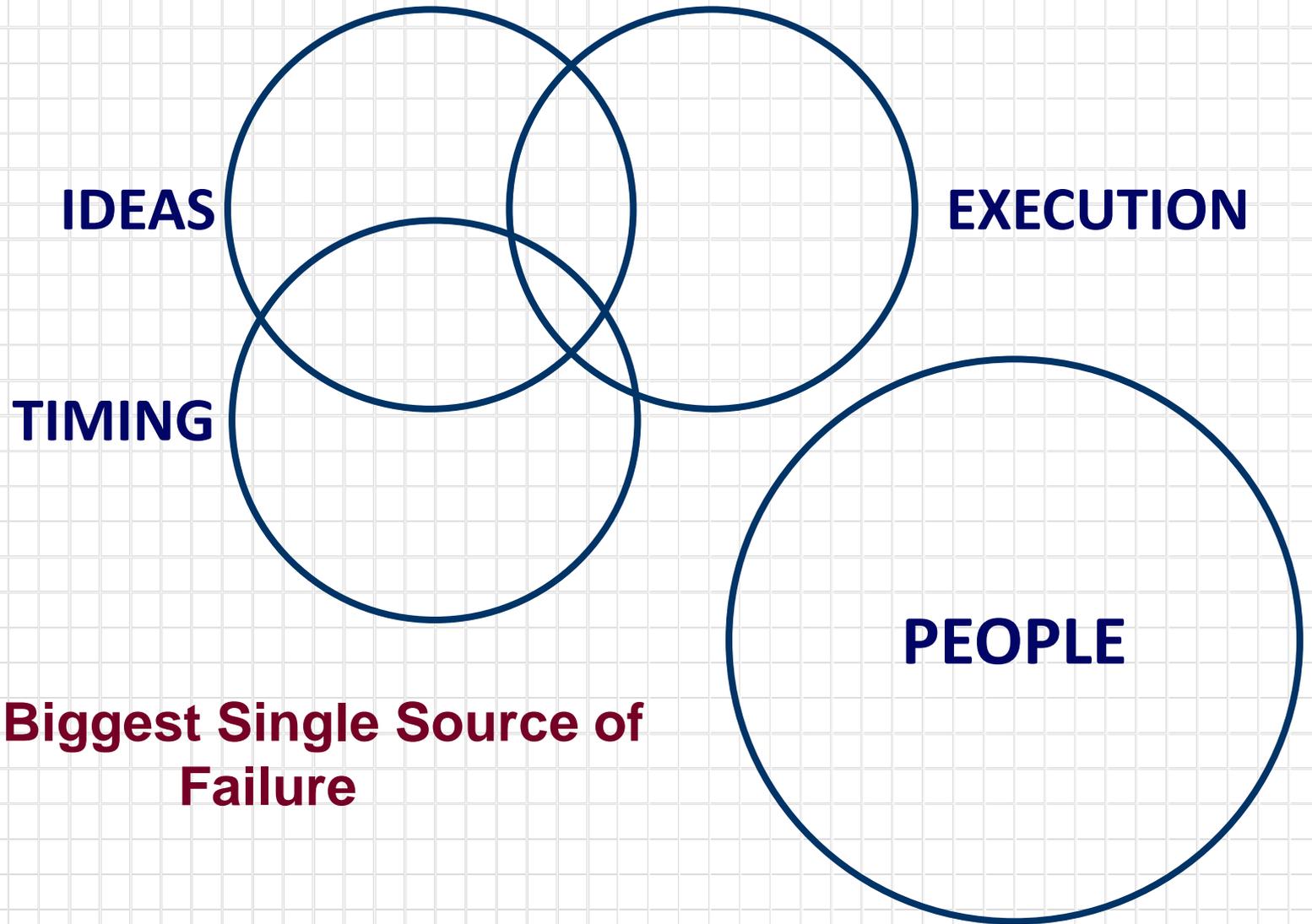
*“I have lost more money & time being ahead of the curve”*

**Joe Hadzima**

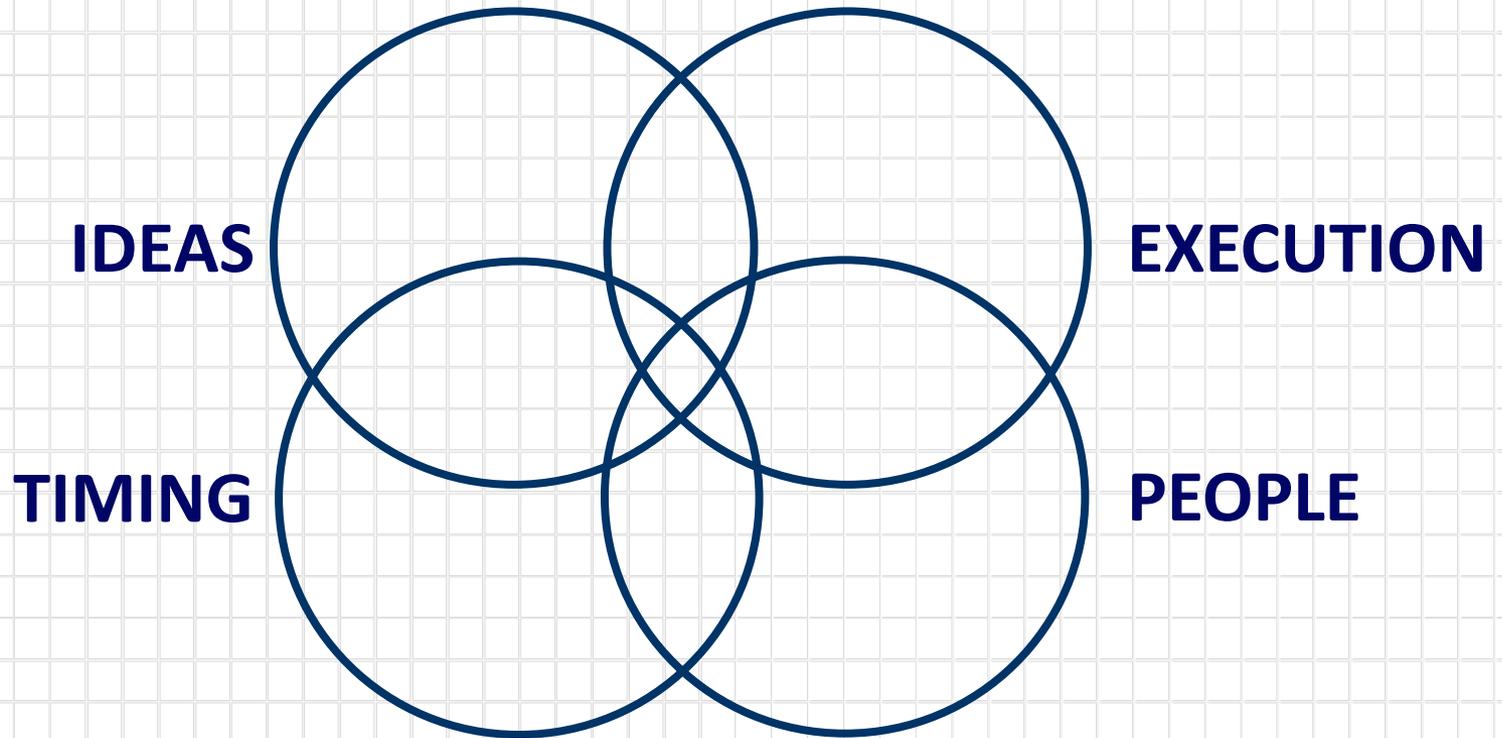
It Can Take a Long Time to be an Overnight Success

- 3D Printing => 25 Years
- Prodigy - \$1B => Amazon
- Fusion => 50+ years and counting

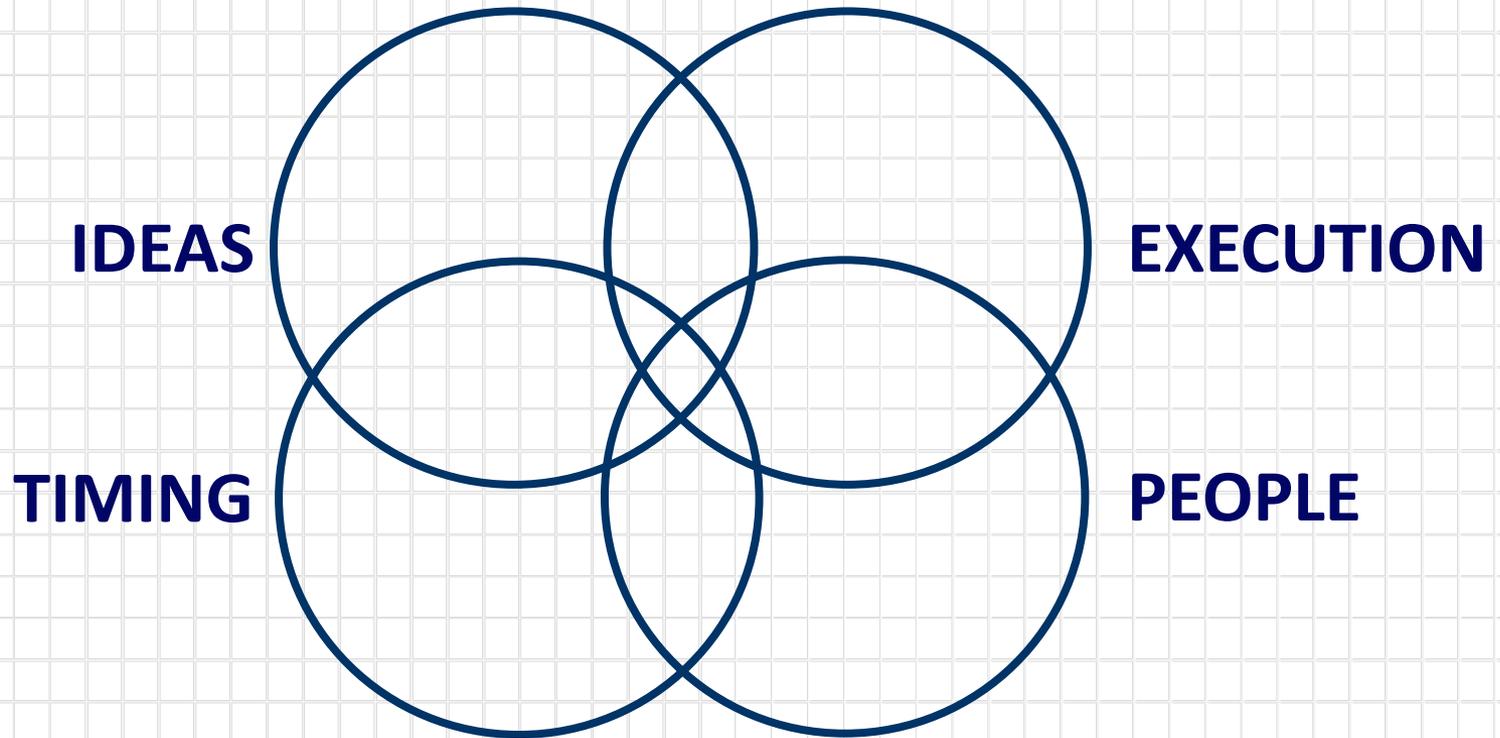
TIMING



**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.”**



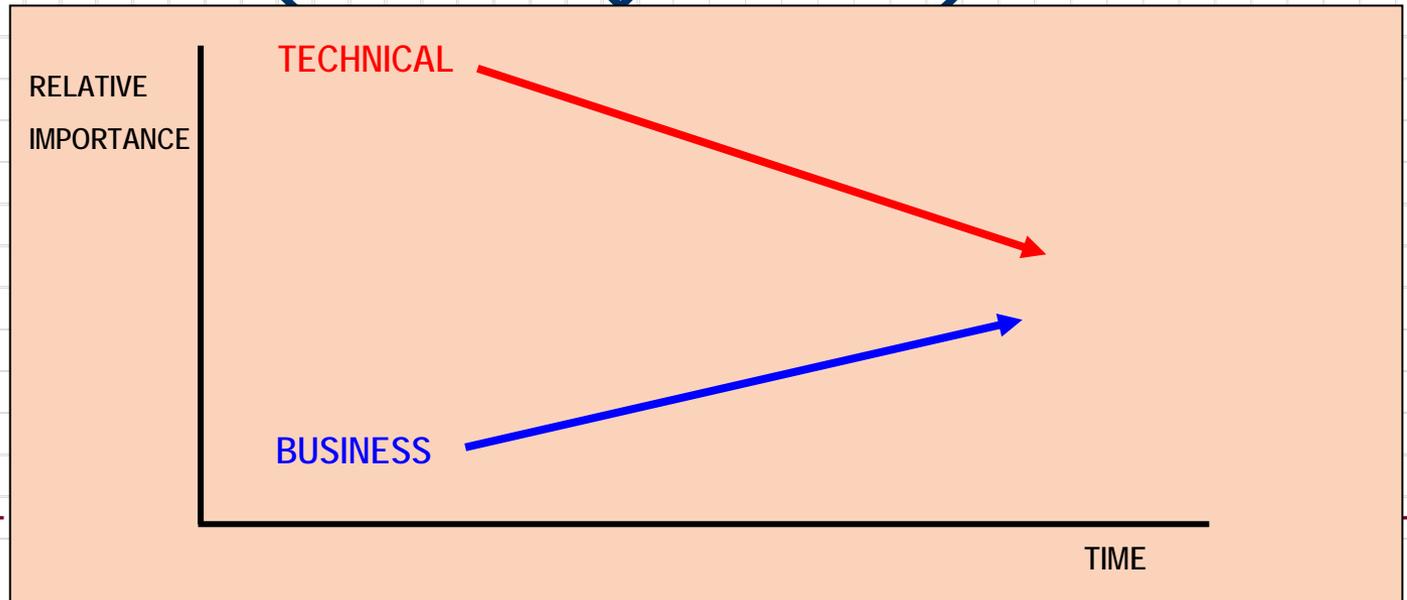
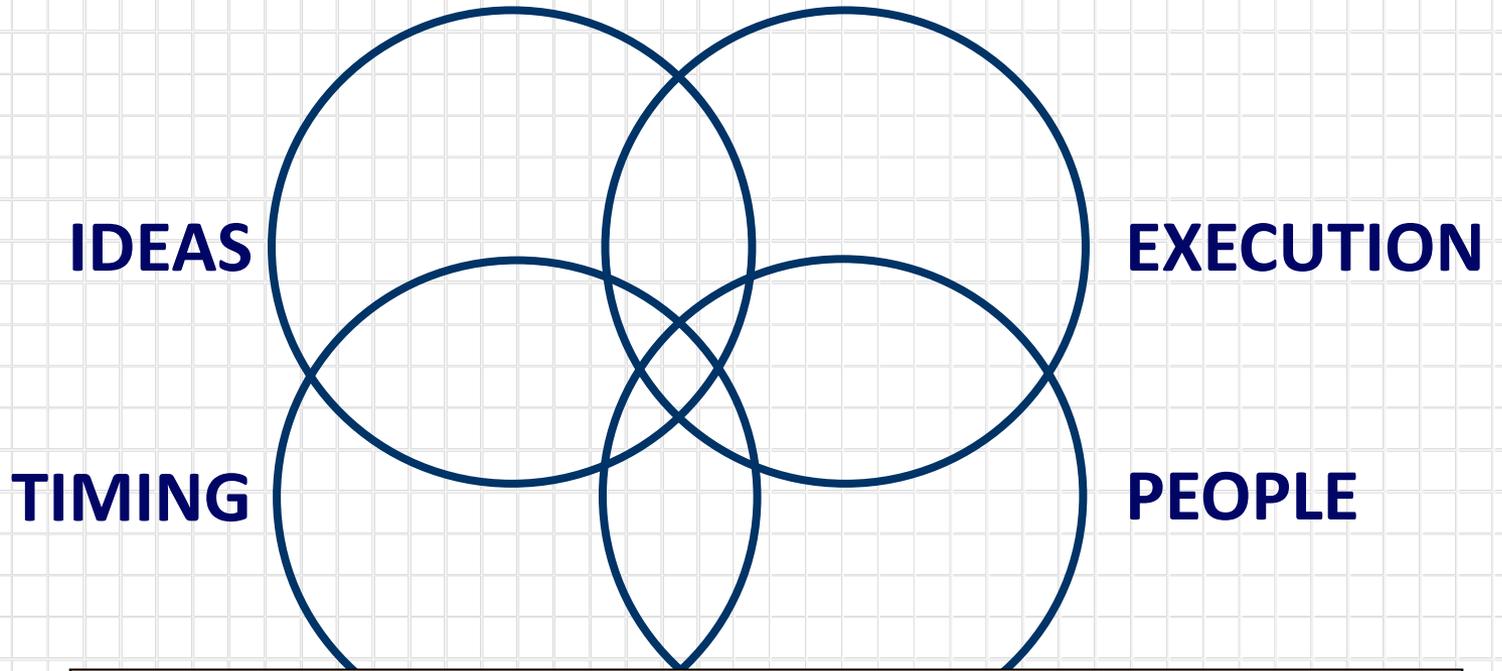
### Other People Related Reasons:

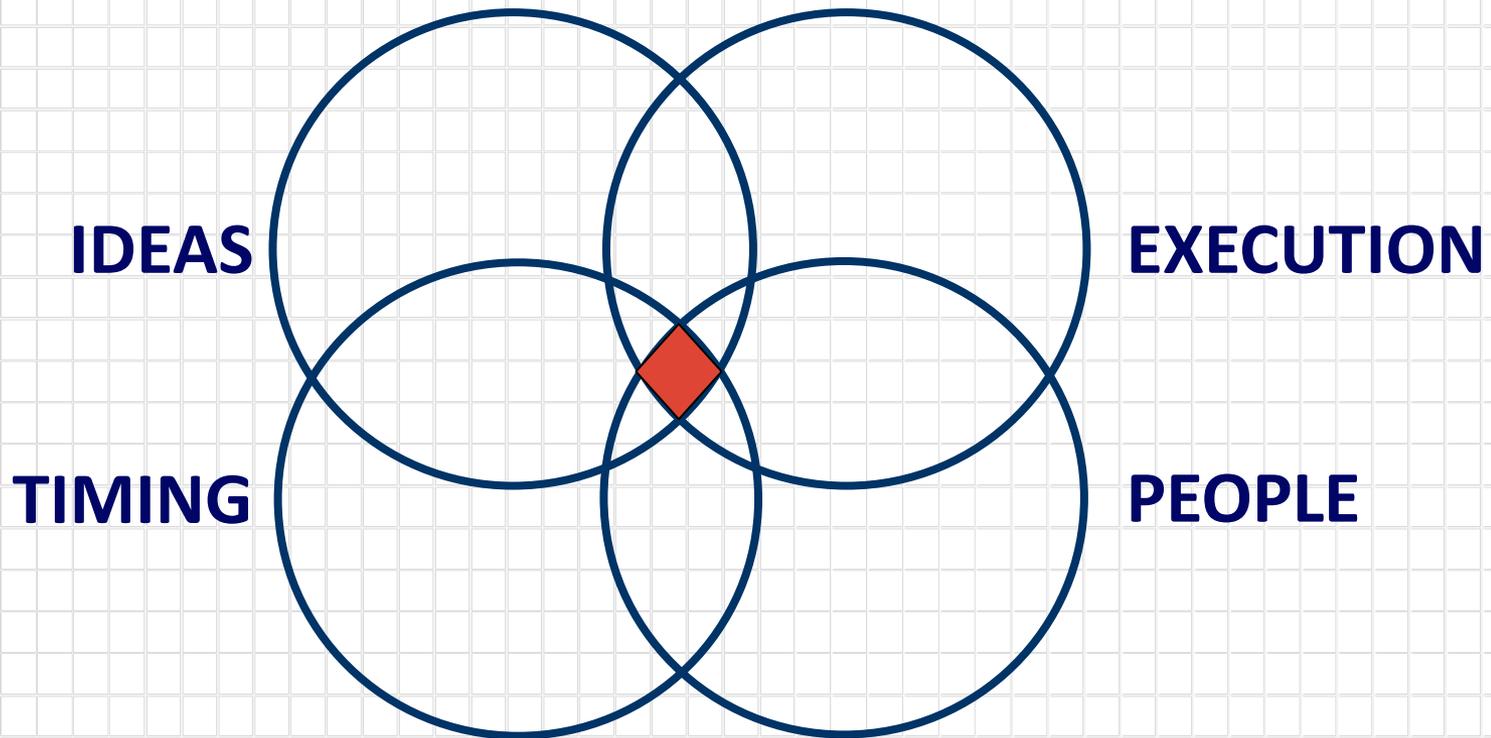
**-Building Team Before Understanding Customer/Market**

Football Team – Basketball – Painful Pivot

**-Not Knowing That You Don't Know**

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



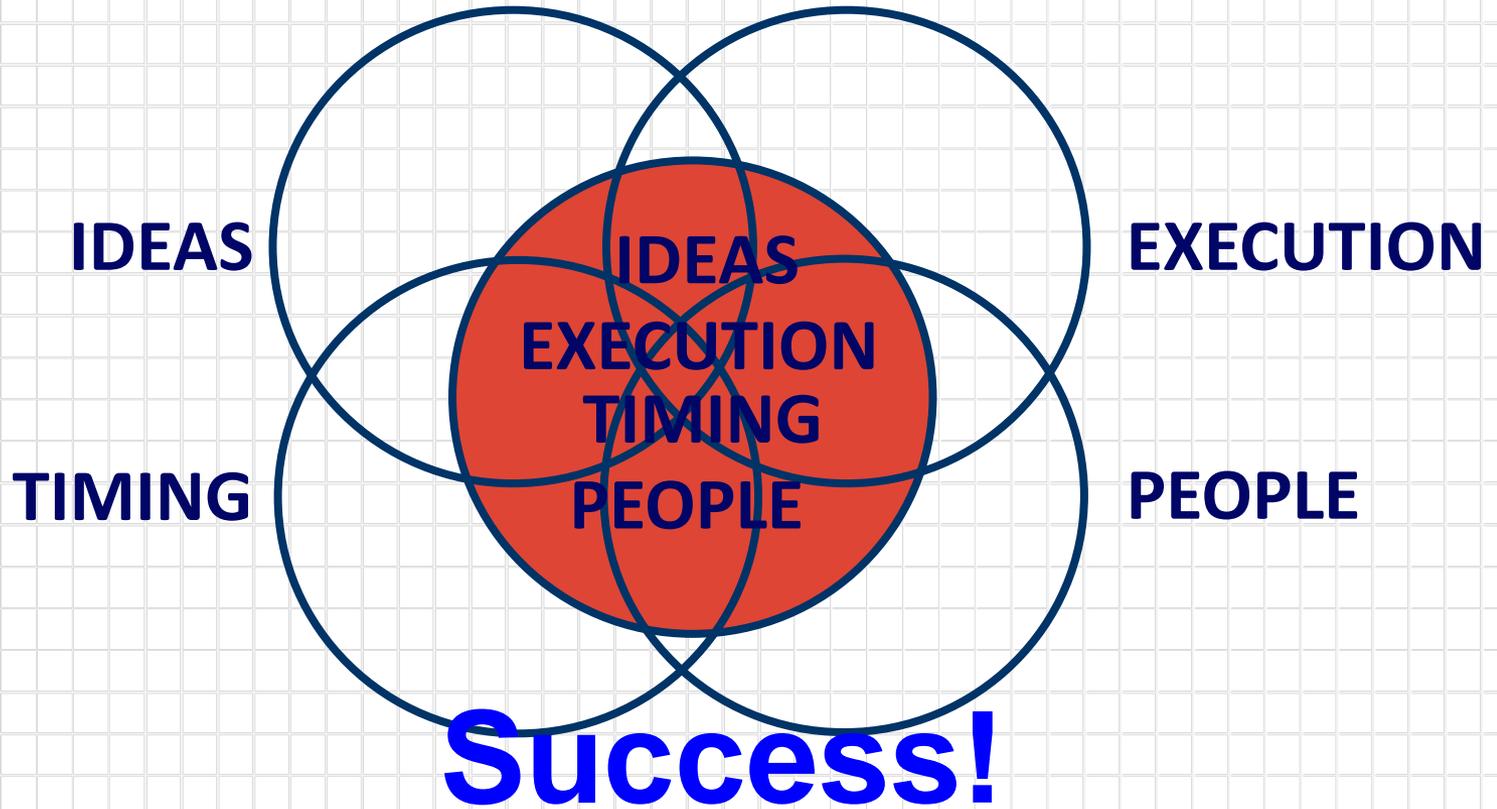


**SpeechCo:** All 4 Components – IPO, now in your smartphone

**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

We help X do Y doing Z

We help people without 3D printers bring their ideas to life by providing 3D printing services and a marketplace for 3D-printed products.

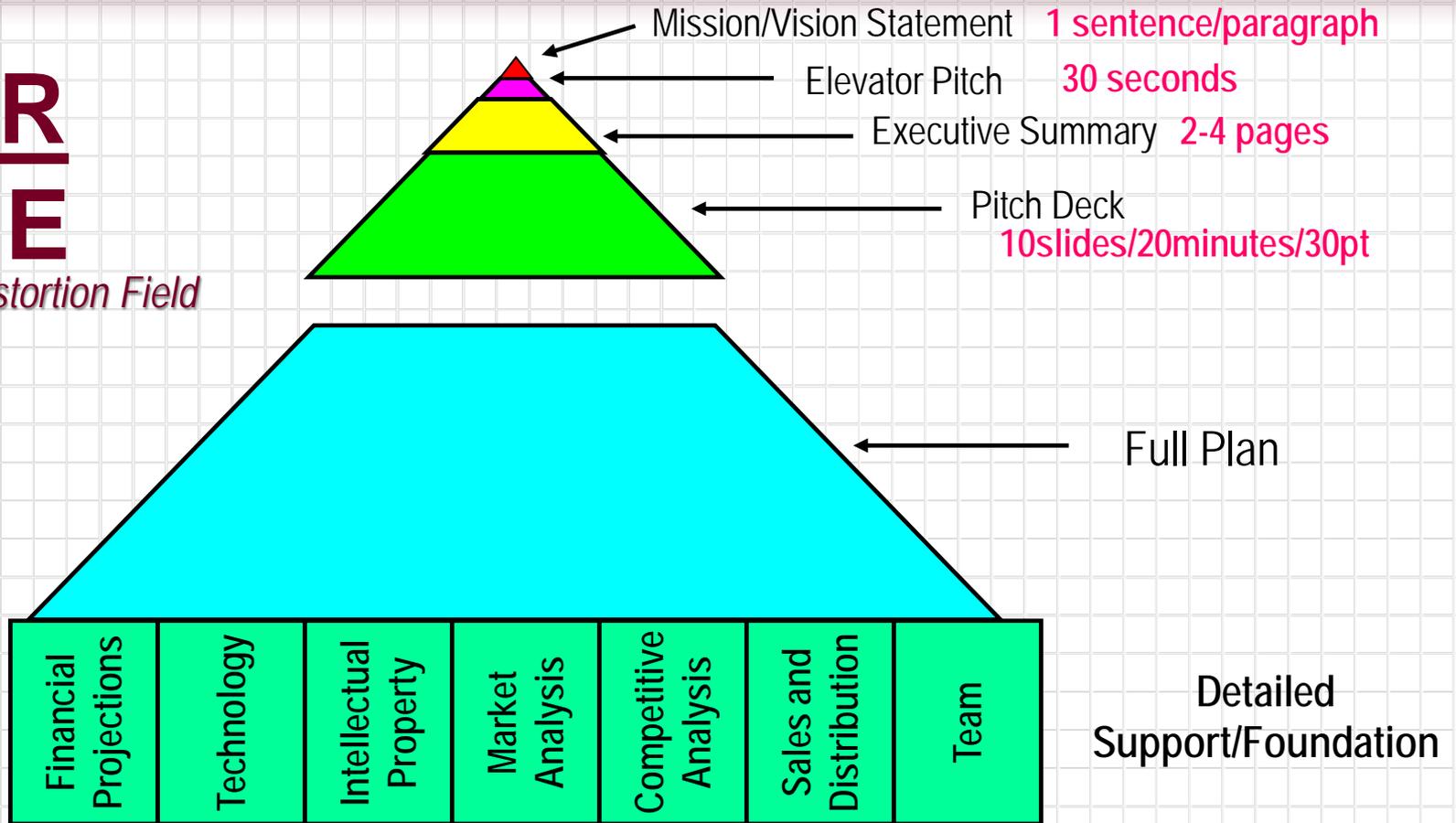
Steve Blank's XYZ

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# A Supported Vision

$$H = \frac{R}{E}$$

*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!**

# Tonight's Plan

- Introduce our Teaching Team
- New Ventures - Overview
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- Bob Jones – “Finding Your Customer”

# 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

Interest Group	# People
AI/Machine Learning	233
Biotech	83
Cleantech	64
Education	102
Energy	82
Enterprise Hardware/Software	90
Environment	73
Fintech	76
Health Care	107
Medical Devices	71
Internet	102
IoT - Internet of Things	74
Mobile Apps	80
Social Entrepreneurship	125
Developing World Problems	94
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 31 midnight
    - Of an Idea you are thinking about
  - **Team Efforts Encouraged - Team Formation Google Sheet**
    - See link at [nutsandbolts.mit.edu/writingreq.php](http://nutsandbolts.mit.edu/writingreq.php) Complete by 1/25

# Tonight's Plan

- Introduce our Teaching Team
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# Next Time

- **“Founder’s Journey”** with Ken Zolot
- **“Business/Venture Models”** with Rich Kivel
- Check **[nutsandbolts.mit.edu](https://nutsandbolts.mit.edu)** for details and readings – also see the MIT Canvas website for the Course Reader

MIT OpenCourseWare

<https://ocw.mit.edu/>

15.393 Nuts and Bolts of New Ventures  
IAP 2025

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