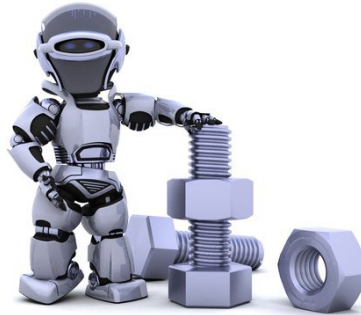
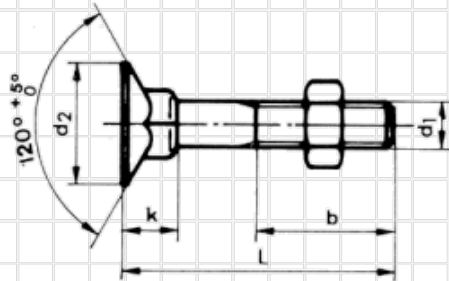


The Nuts and Bolts of New Ventures

MIT Course 15.393 (35th Year)



Joe Hadzima

(MIT S.B., M.S. in Management; J.D. Harvard Law)
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Managing Director, Main Street Partners
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Teaching Assistants:
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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?

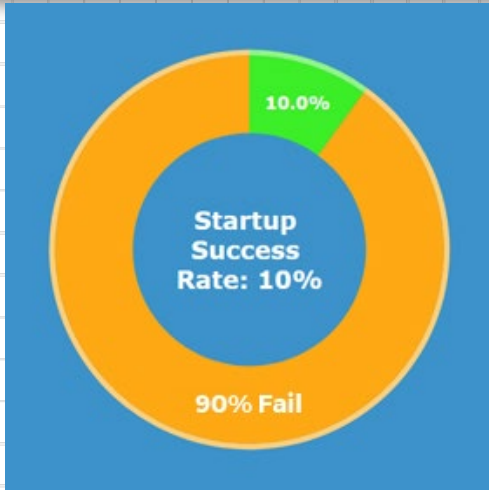


Fame?

Fortune?

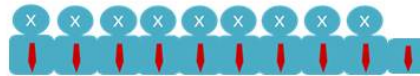


The Reality



FAILURE RATES OF STARTUPS

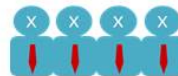
95% FALL SHORT OF MEETING PROJECTIONS



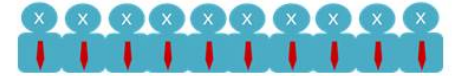
80% FAIL TO SEE PROJECTED RETURN ON INVESTMENT



40% LIQUIDATE AND LOSE MOST OR ALL INVESTMENT

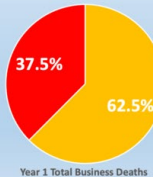


99% OF REASON FOR FAILURE IS LACK OF PLANNING & EXPERIENCE



USA New Business Failure Rate - First Five Years

■ Lack of Preparation Death ■ Prior Year(s) Natural Death ■ Natural Death ■ Survive



Over 62% of newest businesses are failing due to a lack of preparation.

SizeUp

Sources: "The True Failure Rate of Small Businesses," Franchise Center, Entrepreneur, 1/2016; "The 4 Most Common Reasons a Small Business Fails," Melissa Horne, Entrepreneur, 1/2016.

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

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:**
 - Engineering
 - Science
 - Architecture/Planning
 - Management/Economics
 - Other
- **Non-Student Participants:**
 - Alums
 - Staff
 - Others

Interest Group	# People
AI/Machine Learning	153
Biotech	66
Cleantech	50
Education	60
Energy	40
Enterprise Hardware/Software	55
Environment	48
Fintech	59
Health Care	68
Medical Devices	50
Internet	68
IoT - Internet of Things	56
Mobile Apps	44
Social Entrepreneurship	87
Developing World Problems	63
Other	3

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

Who Are We?

- Highly UnPaid Volunteer Speakers Who **Have Done/Are Doing** What They Will Be Talking About
- Teaching Assistants
 - Week 1: Sam Oppenheimer
 - Week 2: Aaron Thornton

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



Who Are We?

nutsandbolts-ta@mit.edu

- **Sam Oppenheimer**
- 2025 MIT Sloan MBA Candidate
- Co-founder of Dooka, an African B2B marketplace
- Masters in Physics from Oxford University
- Co-Managing Director MIT \$100K Competition
- [LinkedIn](#)



Who Are We?

nutsandbolts-ta@mit.edu

- **Aaron Thornton**
- 2025 MIT Sloan MBA Candidate
- Deputy Cybersecurity Department Head at the U.S. Navy, Hopper Information Services Center in Washington DC
- S.B Mech Eng, George Washington University; M.S. Mech Eng, Penn State
- [LinkedIn](#)



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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)**

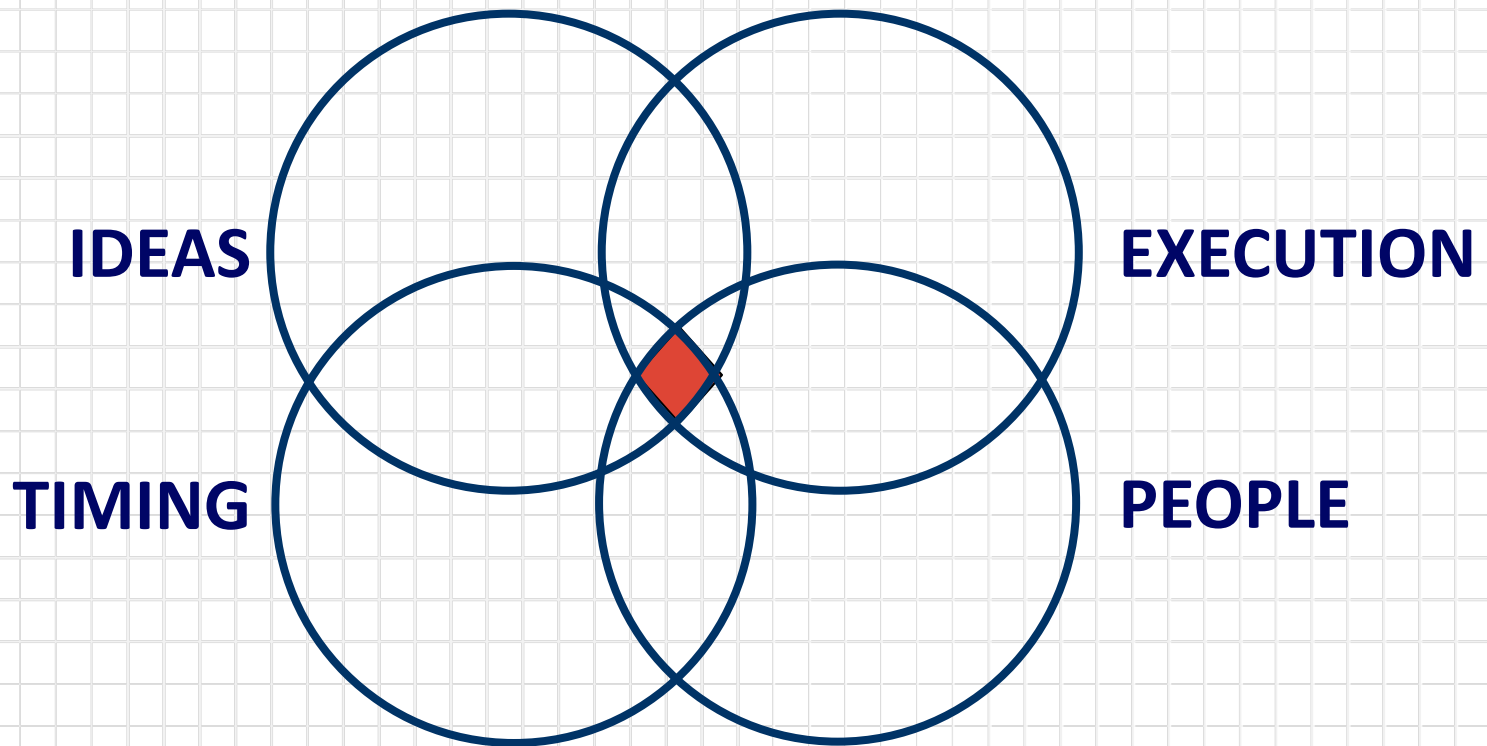
The 3 Whys

- **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 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”*

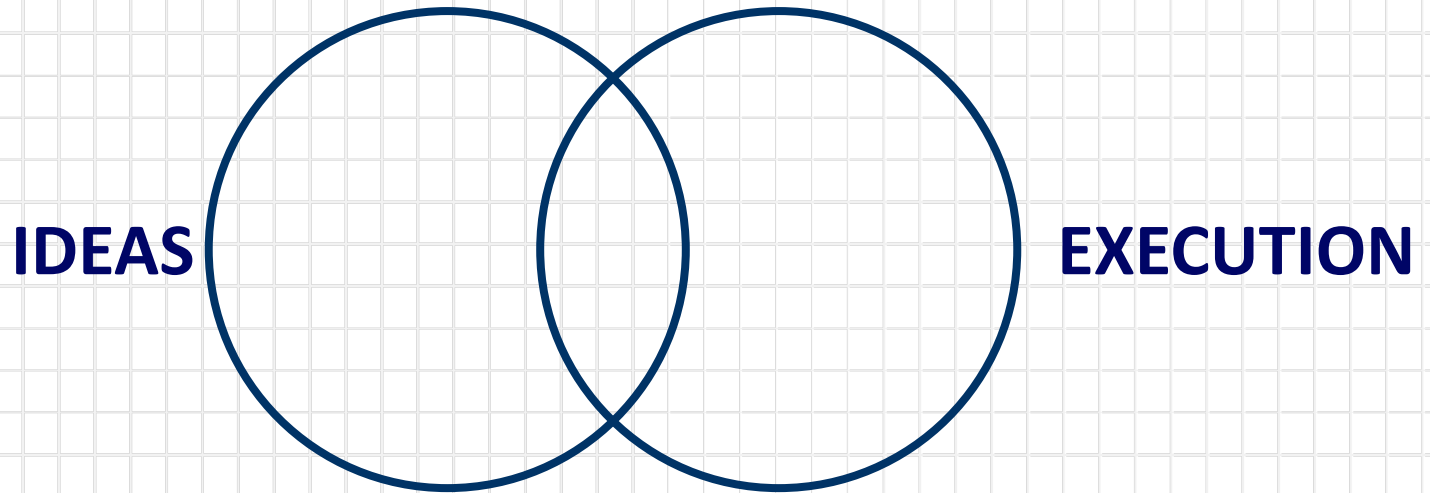
Thomas Edison

*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

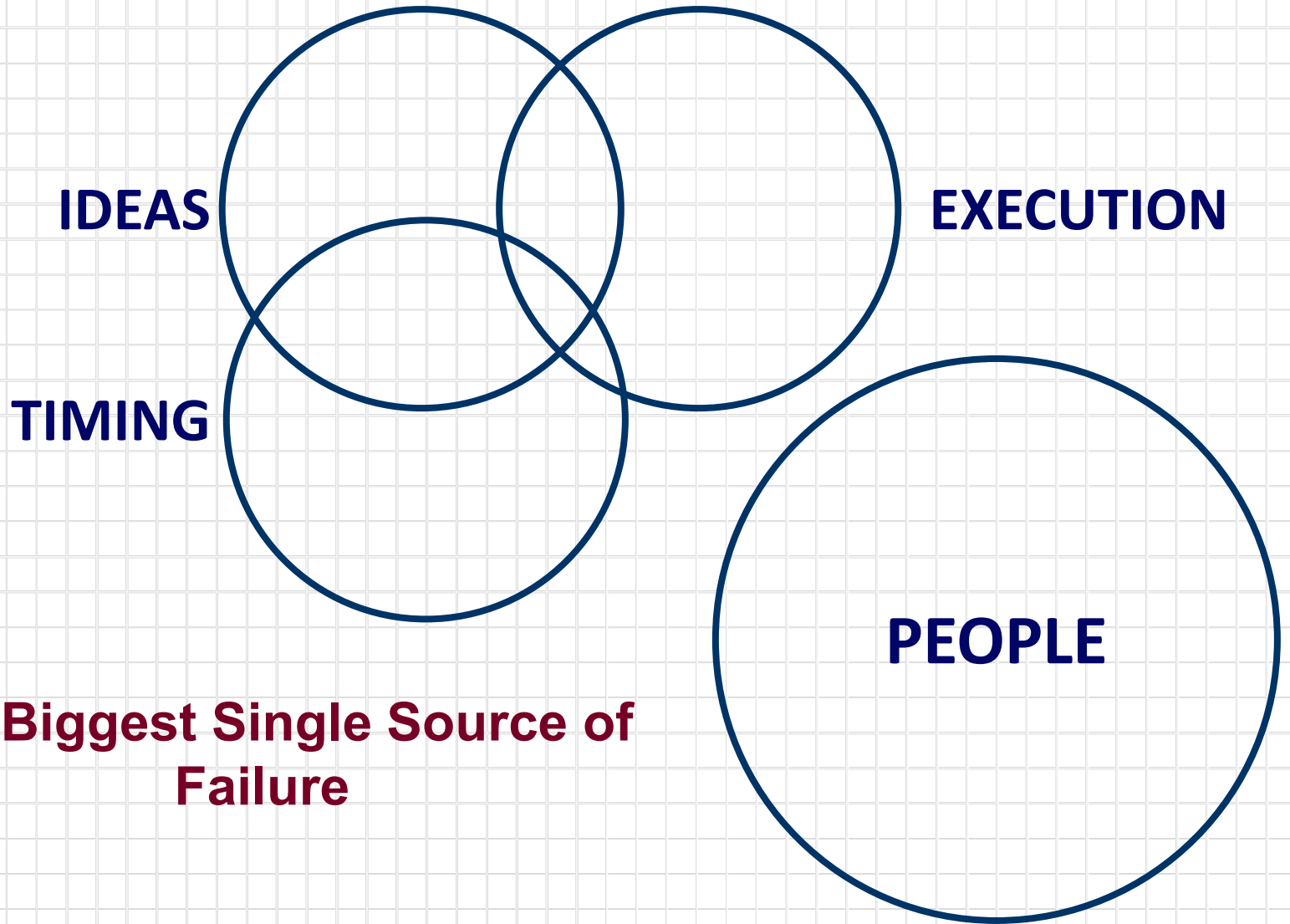
TIMING

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

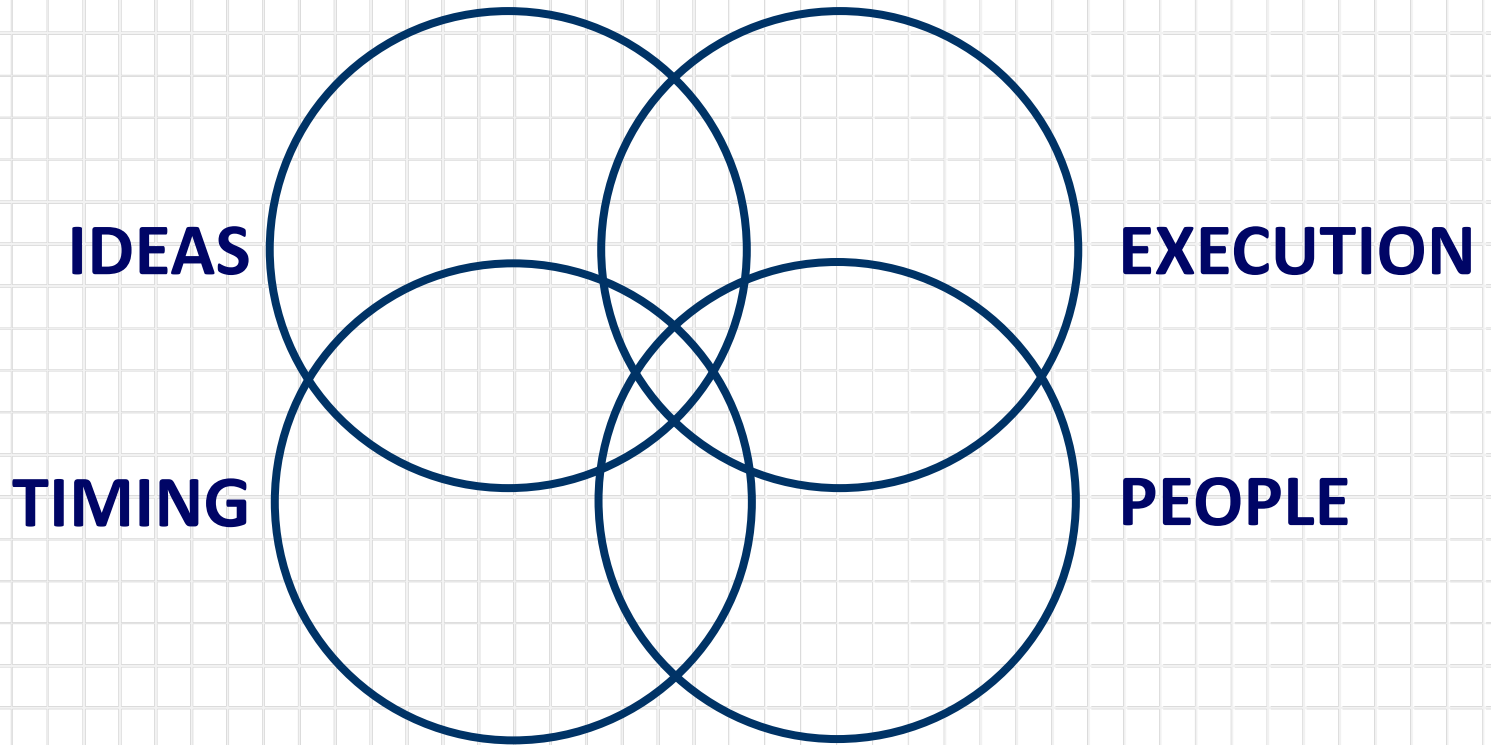
Joe Hadzima

It Can Take a Long Time to be an Overnight Success

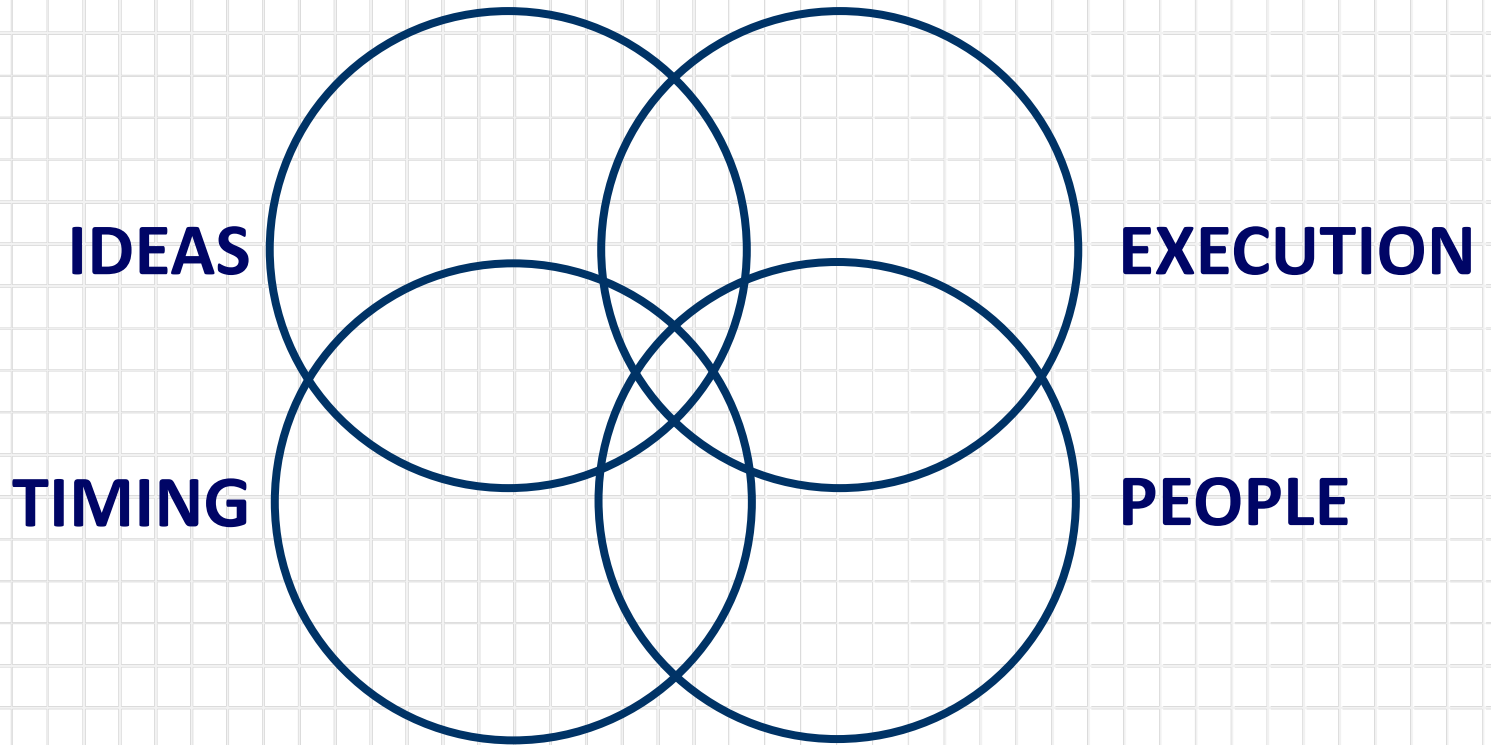
- 3D Printing => 25 Years
- Prodigy - \$1B => Amazon
- Fusion => 50+ years and counting



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.”**



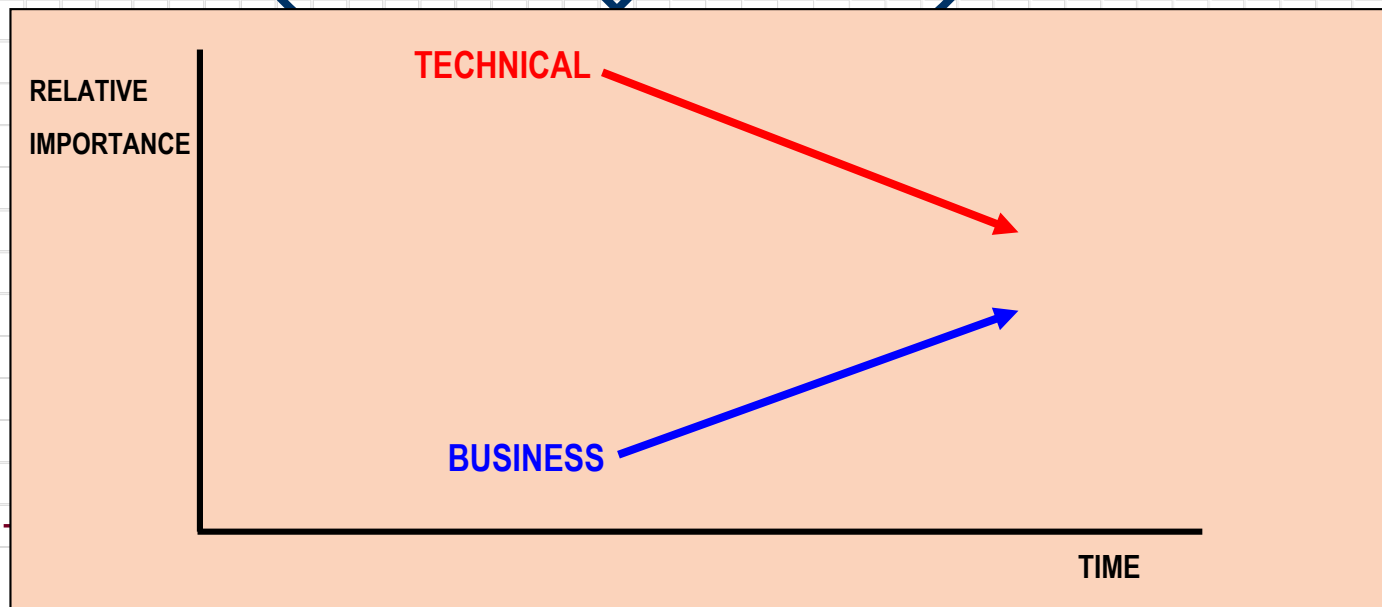
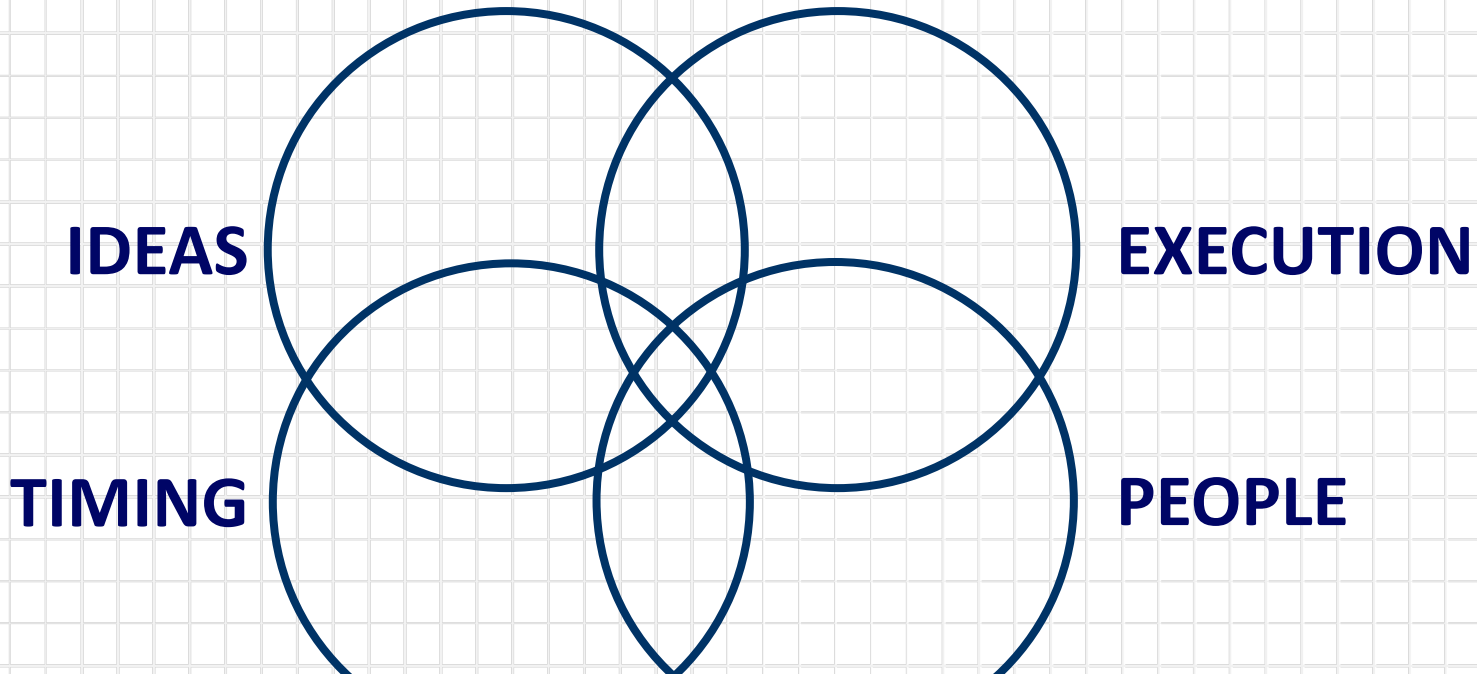
Other People Related Reasons:

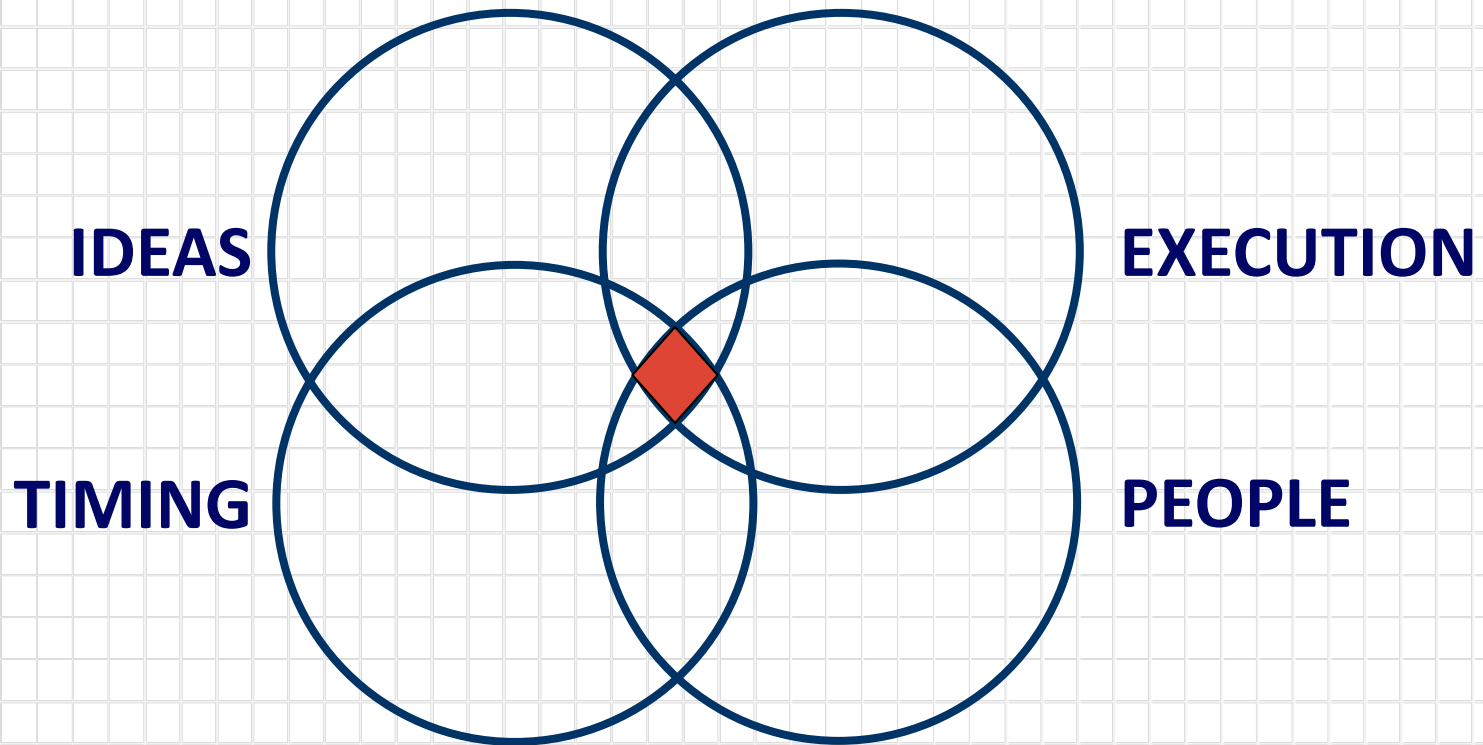
-Building Team Before Understanding Customer/Market

Football Team – Basketball – Painful Pivot

-Not Knowing That You Don't Know

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



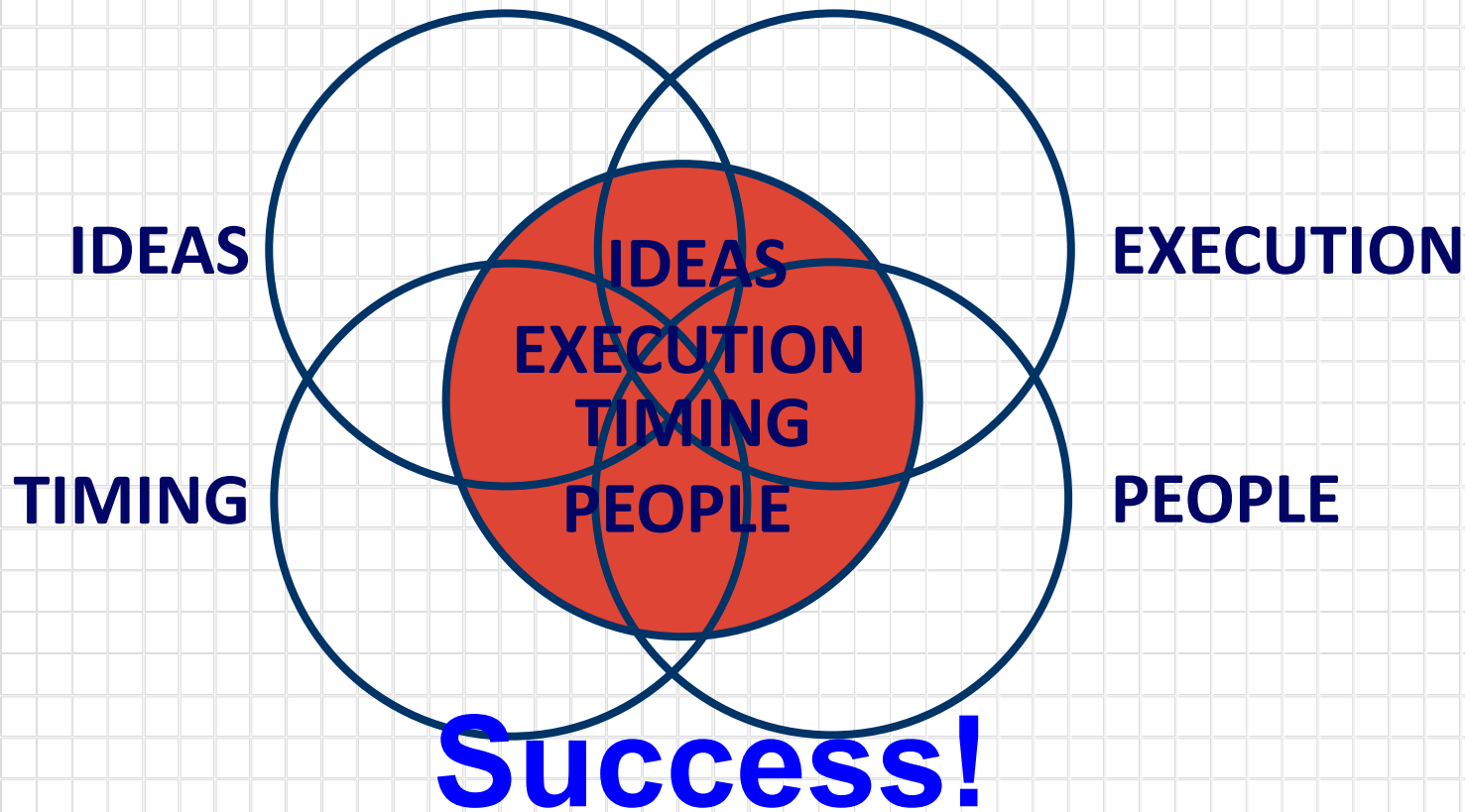


SpeechCo: All 4 Components – IPO, now in your smartphone

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**

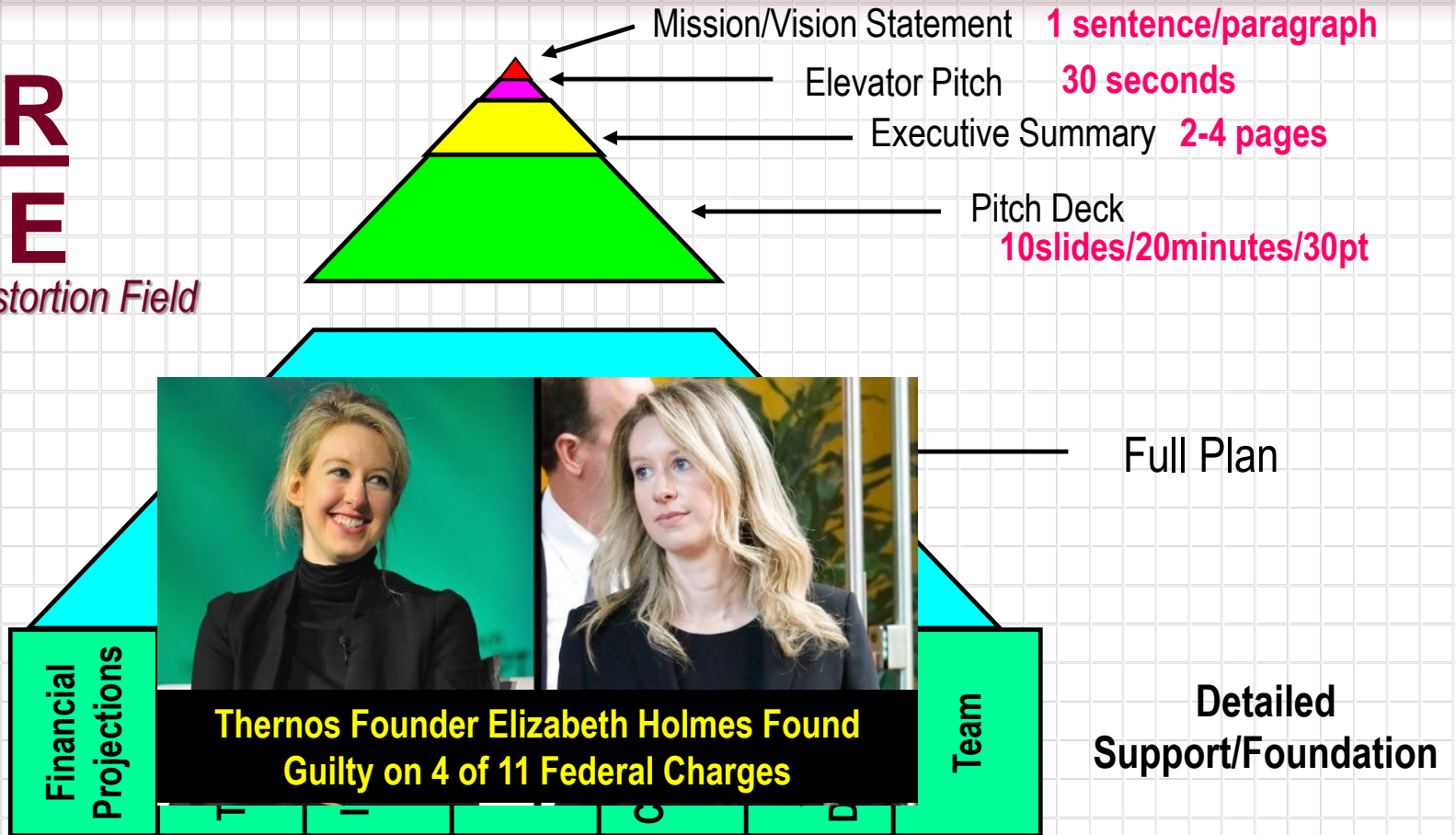
We help people without 3D printers **bring their ideas to life** by providing 3D printing services and a marketplace for 3D-printed products.

Steve Blank's XYZ

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 – 15 Minutes**
 - Look for signs around the room
- **When We Come Back**
 - Course Logistics
 - Bob Jones – “Finding Your Customer”

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 each night by 10am the following day**
- **Written Requirement**
 - **Executive Summary or Pitch Deck – Due Friday Feb 2 midnight**
 - Of an Idea you are thinking about
 - **Team Efforts Encouraged - Team Formation Google Sheet**
 - See link at nutsandbolts.mit.edu/writingreq.php Complete by 1/27

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Tonight's Plan

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



www.bluesdogsboston.com



Next Time

- **“Negotiation Skills”** with Mindy Garber
- **“Organizational and People Issues”** with Vivian Vitale and Panel
- 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.