



Course Introduction and Objectives & Viable Business Ideas

Class One

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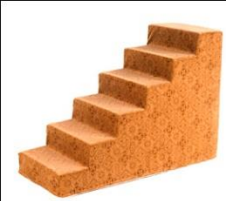


15.390 – Class #1

Course Introduction or

“What is this course really about, why should I take it and what should I expect over the course of the semester?”





Course Objective...

- To learn how to identify, organize and build a new enterprise.
- We don't just study entrepreneurs, we ***become*** entrepreneurs.

This may well be the most important course you will take at MIT



Scenario

Thomas Edison Mini-Case Study

What do you do?

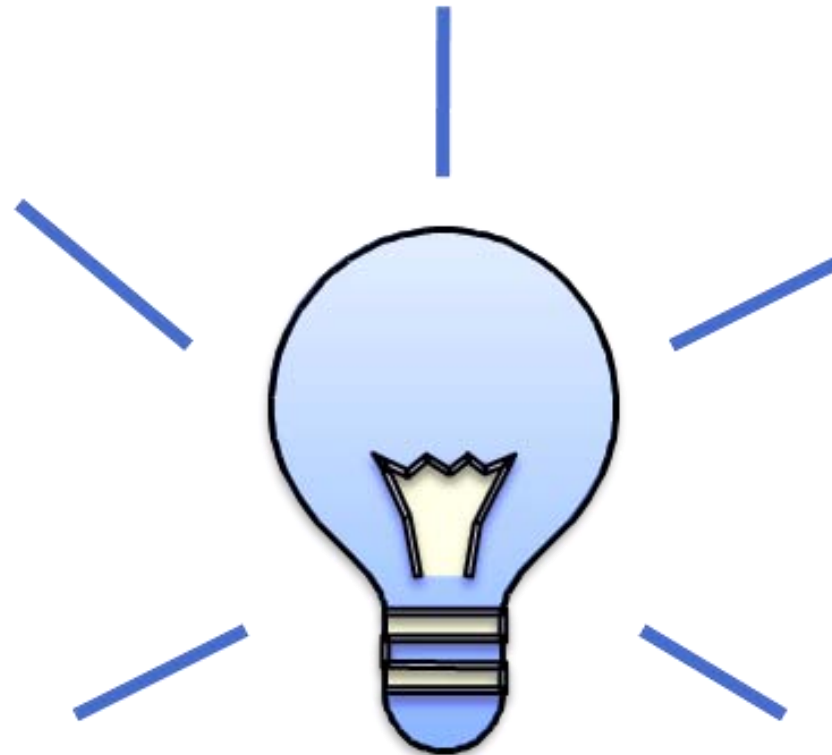
15.390 New Enterprises





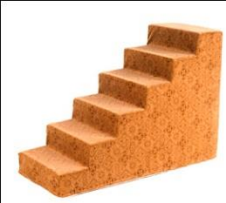
Where do you start? With an idea.

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Let's go back to 1887

- You are Thomas Edison
- Just invented the light bulb
- Now build a plan for a business
- How would you do this?

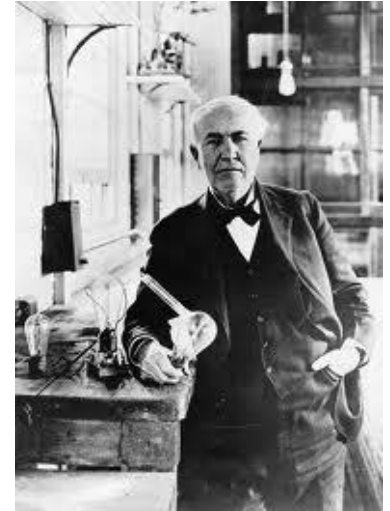
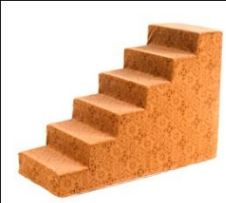
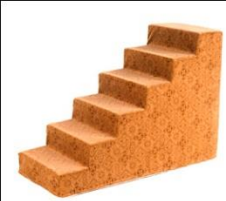


Image of Thomas Edison is in the public domain.



Course of Action

- What would you do first?
- Second?



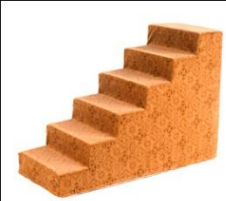
Beginning of Business Plan

- Trying to accomplish? Wiring of America
- To be done? Transmission and distribution
- Protect the IP? Yes & how.
- Market size? 50 million U.S. population/13 million households plus businesses - about the same overseas
- Competition? Kerosene lamps, SOSO, etc. What people will you need? #'s, skills, location
- What's your sales model? SaaS
- Time to ramp up? Years
- How much capital? Millions but start small



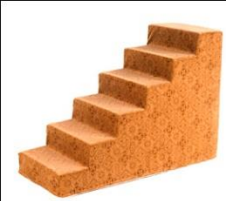
Identify why this is an Exceptional Opportunity

- There are many opportunities within the idea; job is to pick one & focus - explain why & growth strategy.
- Should you go into the transmission business? Distribution? Equipment?
- Must concentrate attack to increase chance of success with limited resources
- Now why is this so interesting & exciting?
- Numbers!



Much More ...

- You would deal with a list of problems that you would have to address. How serious is each problem? When would you have to address the problem?
- You would detail what are the risks in your plan - technological and market - and how you would reduce risks.
- You would detail who the stakeholders would be, and your value proposition to each one.
- You would understand a typical sales call.
- How do you know as quickly as possible if this is a good business?



Analyze the Demand

- What are the sales of whale oil? Natural gas?
- What are the problems of candles?
- What is the size and shape of the existing market?
- What are the problems with the current (joke) way of lighting?
- What are the advantages of your system?



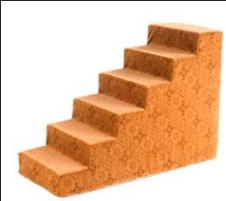
Summarize the Market

- 50 million population/13 million households = \$ for natural gas + \$ for candles/whale oil =
- Total Addressable Market (TAM)
- Market Penetration %
- 1889....1890....1891
- ***You would build a model by making some assumptions!***



Some New Markets You Might Suspect but Can't Quantify

- Is your market “Light” ...or is it “Power”?
Example: Elevators. Small motors for refrigerators, typewriters.
- If you could estimate even a portion of that, you would multiple it by a certainty equivalent... And come to a number that you could feel was in the ballpark.
- ***“Our first market is rich households in New York City within 1 mile of our generating facility”***



Why?

- 1. You have limited resources***
- 2. You want early adopters***
- 3. You want homes that could afford to wire***
- 4. You want homes that afford your price and which could lend “status” to your “value proposition”***
- 5. You want homes that will impress investors.***



Thomas Edison... Never Created Much Personal Wealth

- His works were more impressive than Rockefeller, Ford, Carnegie... Yet he never was one of the leading financial leaders of his time, although he was the father of General Electric.



But Don't Feel Bad for Edison

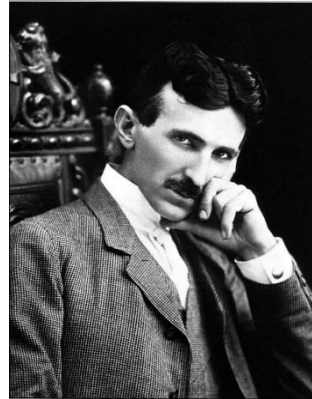
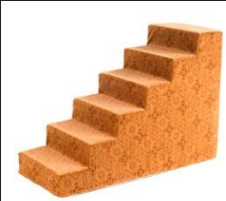


Image of Nikola Tesla is in the public domain.

- Nikola Tesla (1856-1943)
- Tesla's patents formed basis of electrical power
- Also: robotics, remote control, radar
- Expansion of: ballistics, nuclear physics & theoretical physics
- Inventor not innovator
- Died alone and poor – why?
- He didn't take 15.390



Our New Enterprises Class...

- Cram as much experience into 13 weeks as possible.
- Goal: Have a business plan built that will yield a company with a market capitalization of \$30 million within three years of launch/or sales of \$10 million.
- Cases and readings are important, but the idea is to pick up lessons and insights.
- Learn by doing

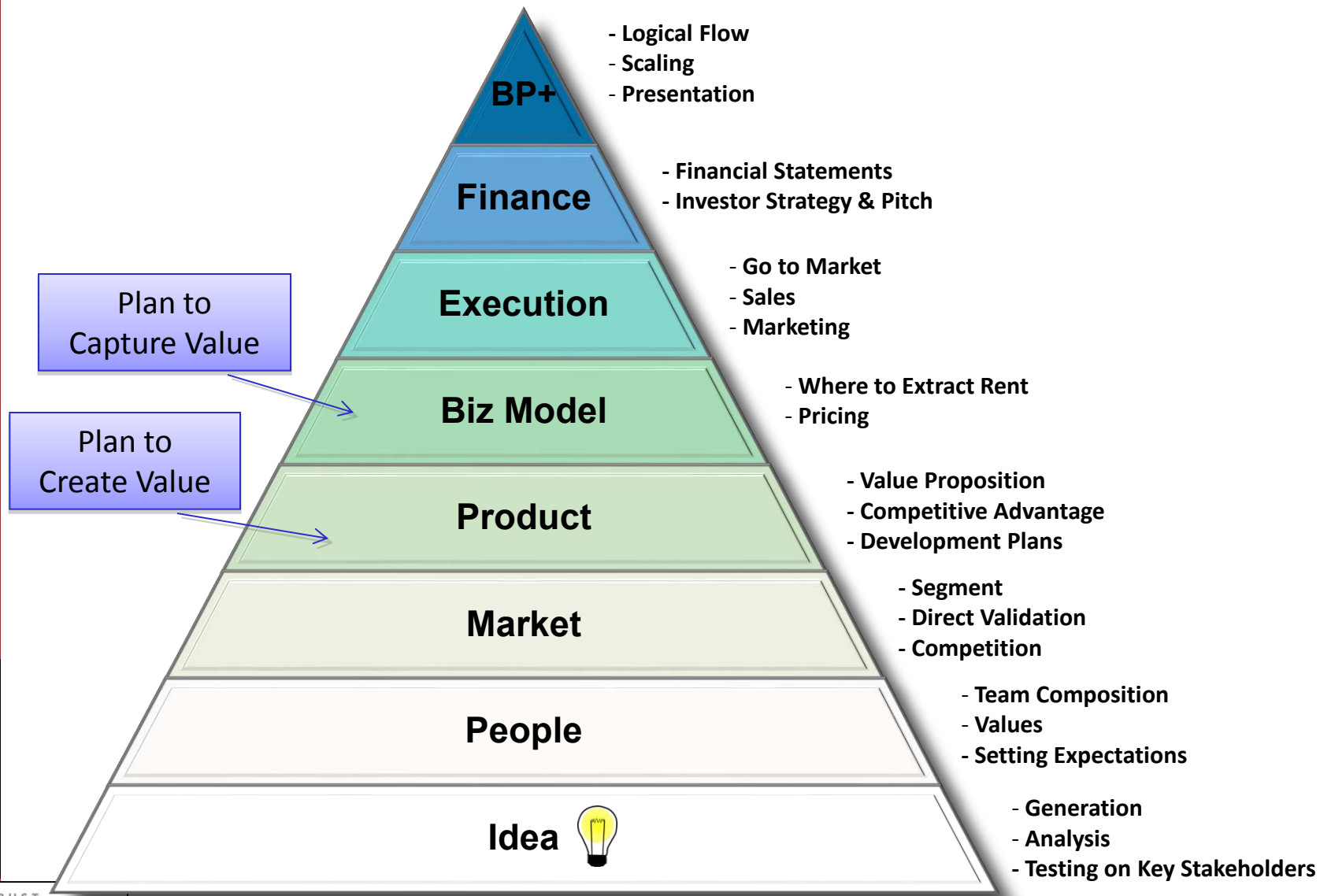
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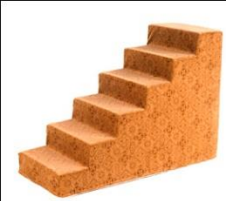




Logical Flow of Course

15.390 New Enterprises





“The Company” You’ll Start For This Class

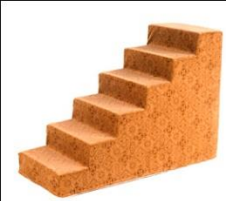
- Rules: Company must be an innovation-based, may not be a “consulting” company (company must have a product or service)
- Company may or may not require resources beyond your control (intellectual and financial)
- An economically sustainable & growing business
- Summarized in a Business Plan
- Extra Credit for Customer Traction & Demo



Business Plans: How Useful?

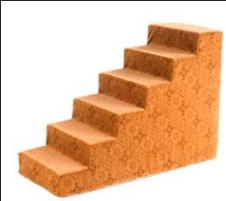
“In preparing for battle, I have found that planning is essential, but plans are useless.”

-- Dwight D. Eisenhower



Why Start a Company?

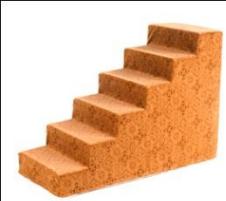
1. Control your own destiny – beg vs. create awesome job
2. Attackers vs. Defenders: Attackers make all the money & have all the fun, e.g., Zuckerberg, Brin, Jobs
3. Starting companies is LESS risky than thought, and so much more rewarding
4. Change the world
5. ***The Best Reason: Nothing will use your talents more than starting a company!***



First Requirement...

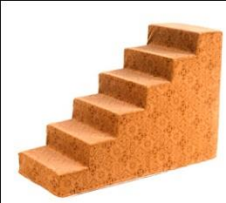
- *Ability to believe in (and get others excited about) something that **does not yet exist.***

Your starting point may be an Idea, a Technology, a Team, or a Market..



The We Run It Thru Our Process

- 24 Step process to get right product and business model as a foundation for your new venture ... and finding out sooner rather than later that your idea is not a good one too.
- Building a team
- Execution considerations
- Fund raising
- Scaling

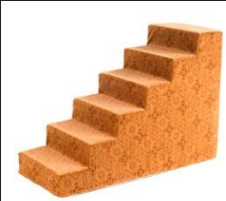


Sea Turtles



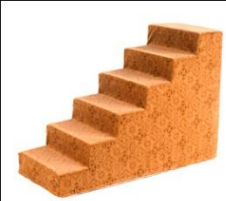
Courtesy of [USFWS/Southeast](#) on Flickr.
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- Hatch eggs on land
- 2% make it to the sea
- The rest are eaten by predators...
- We will thru hard work and hard love, increase your odds
- Time compress the learning curve in a less hostile environment



What is New this Semester?

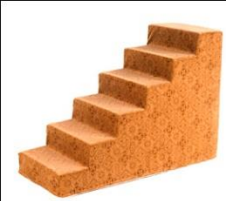
- 24 Step Process to build a strong foundation for your New Enterprise
- Handbook to Help You Through Them
- Substantially increase your odds of success
- Provide more structure to one of the most critical processes in starting a company



Idea Summary & Online Market

THREE BUSINESS IDEAS

- Submit Online Summary:
 - ▶ What is the product/service?
 - ▶ What does it do?
 - ▶ Who are the customers? How many?
 - ▶ How do you believe you will get paid?
 - ▶ Why is this better than the currently available product/services?
- Redo for top idea after February 19th class
- We will post all ideas online for you to read, and you will review, learn and comment on others ideas



What Else?

- Every couple weeks, a different part of the plan is due (market analysis, technology/product, sales/marketing, financing, etc)
- Each part will get a preliminary grade
- Fix the parts that need fixing
- The final plan is the parts put together
- Each team will come pitch their plans to one of the 15.390 Faculty as well as others at simulation day
- Recruit Advisors
- Take an Entrepreneur to Dinner



Grades

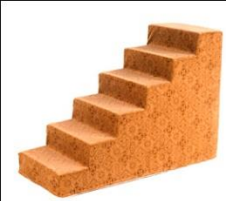
25% Class participation:

- ▶ Attend and be punctual to every class
- ▶ Respond to surveys (within one week of the class)
- ▶ **Display a namecard in front of you**
- ▶ Don't open laptops
- ▶ Read the assignments, study guests' backgrounds
- ▶ Contribute (we will cold-call you)

25% Written assignments (chapters of full plan)

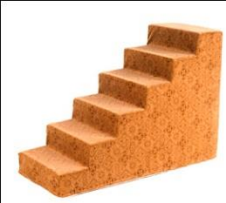
50% Full business plan & presentation at end of semester
(verified customer traction & demo gets extra points)

*Your fellow team members will grade your contribution to the team.
This is important and will be used to determine your final grade.*



Intellectual Property

1. **Submissions constitute “public disclosure”:** if you’ve got an amazing secret, disguise it.
2. **Do not write “confidential” or “proprietary” on your assignments or submitted plans.** This applies to the entire semester.
3. **We will freely distribute submitted plans to your classmates, & will use non-secure email/websites.**
4. **This is an academic environment – information is free.** You have no stake to a claim in a company because of your work in this class. Any companies that start, start after this class with a clean slate.
5. **No Winklevosses/Winklevi here**
6. **Implicit permission to use in future classes/handbook unless you tell us otherwise**



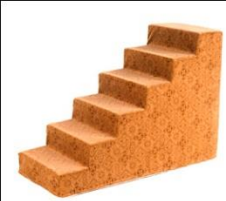
Recruiting Advisors

- Us grading/reading your assignments is not sufficient.
- Students often say, at the end of the semester, “we wish we got more feedback on our assignments”.
- Up to you to be more proactive in seeking guidance (ours & others).
- Assignments will be scanned for the essentials, and randomly checked in-depth.
- Strongly recommend that you use the EIRs at the Trust Center for MIT Entrepreneurship as well (see site)



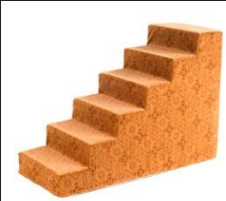
Suggestion: Recruit a Potential User of Your Product

- Example: a radiologist at Mass General
- Example: A sports car fanatic who might want to buy your Stealth Car wax
- Example: A teenager who buys on line music



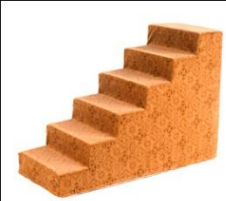
More on the Idea...

- Need not be high-tech; preferably some tech
- Examples of non-obvious previous plans:
 - ▶ put a farm tiller on the back of a motorcycle
 - ▶ devulcanize tires for rubber recycling
 - ▶ golfball with GPS-tracking capability
- Think of an idea that ties in to your background: what are you good at? What have you studied? Who do you know with expertise?
- But it needs to be IBE Entrepreneurship (see paper)



More on the Idea...

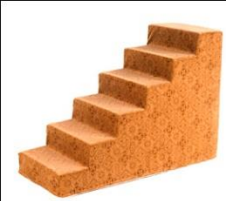
- Needn't be “real,” but needs to be feasible
- We're more interested in seeing your thoughts/plans develop than in whether the product is viable
- More help on generating ideas in the next class & then filtering & refining them in the following class



Survivor: Grades

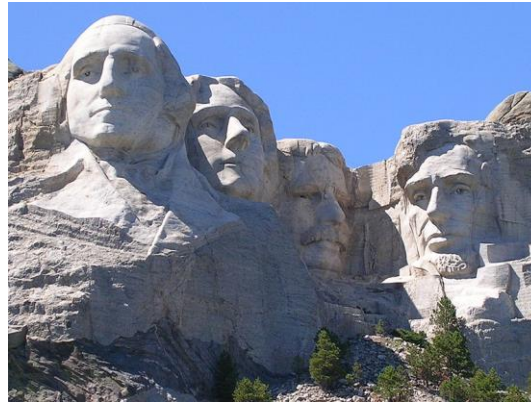
At end of semester, the plan gets a grade.

- A+ = a plan of the quality that an angel investor/venture capitalist would fund
- A = a plan that an angel investor/venture capitalist would at least put on the active list
- A- = a plan where the angel/venture capitalist would take the first meeting
- B = a plan that an investor would refer to a fellow investor who he/she held in minimal high regard
- C = no brainer turndown (NBTD)



Is This a Hard or Easy Course?

- Demands creativity.
- Need to be willing to leave comfort zone and go talk to customer and listen and watch them very carefully
- We don't "study" entrepreneurs, we become entrepreneurs.
- Successful companies have "balance" = technology, marketing, team, finance.



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“It is not the critic who counts; the credit belongs to the man who is **actually in the arena, whose face is marred by dust and sweat and blood..if he fails, at least he fails while daring greatly; so that his place shall never be with those cold and timid souls who know neither victory or defeat,”**

-- Teddy Roosevelt



The Journey Begins: Next Class – “Idea Generation”

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