Idea Generation

Class Two

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15.390 – Class #2

Idea Generation

or

“How do I get a good idea to start a company ... and how much does it really matter?”
Mini-Case Study

• Idea Generation
• Susie S will be ______________
• Tommy T will be ______________
• Bonnie B will be _____________
• Freddie P will be _____________
Profiles

- **Susie S (S=Suit)**
  - Represents personal & financial drive
  - Good later but need much more for idea generation

- **Tommy T (T=Technology)**
  - Represents “technology push”
  - Good or bad depends on how handled & specific scenario
  - Can you find a good match?

- **Bonnie B (B=Balance)**
  - Looking for customer need to meet
  - Domain expertise is important
  - Passion matters
  - Looking at trends

- **Freddy P (P=Propulsion)**
  - You must iterate an idea
Susie Suit

- You must have passion about the idea
- You must be able to execute it
- You must see a path to make money to justify the effort and make it sustainable
- Because you want it & you have succeeded in class room setting, does not mean you will succeed no matter what the idea
- The market is a tough & unrelenting place
- “Chance favors only the prepared mind,” Louis Pasteur
Tommy Tech

- Innovation = Invention + Commercialization
- 90% of companies started by MIT alum are not from technology in the labs
- You have to find a customer who can use your technology to make substantially more money
- Technology Push has its advantages but it is a higher risk exercise
- To optimize success, need to have a systematic way to evaluate markets & then choose one to start and focus on it
Bonnie Balance

• Empathizes with customer
• Market pull
• Looking for trends as well to anticipate new opportunities
• Google/Travel Company example raises question of timing
• Considering personal fit
• Lack of focus is concerning but can come
In Summary ...

- Three ways to start a new venture
  - *I have a technological breakthrough!*
  - *I have an idea!*
  - *I have a strong desire and drive!*
Freddy Propulsion

- Bias to Action – “JFDI”
- Represents the need to iterate on idea to determine viability
- Engage directly with customers
- Show them prototype, screen shots & discuss value proposition
- Thomas Edison’s measure of success – how many times he could iterate on an idea in first 24 hours
- “Ideas are cheap, implementation is expensive,” Michael Schrage
Getting Started

Images removed due to copyright restrictions.
Seeing the Future Opportunity
## Technology Push vs. Market Pull

<table>
<thead>
<tr>
<th></th>
<th>Technology Push</th>
<th>Market Pull</th>
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<tbody>
<tr>
<td>Risk</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Unit Profitability</td>
<td>+</td>
<td>-</td>
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- **Technology Push**: Low risk, high unit profitability
- **Market Pull**: High risk, low unit profitability
# Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Market Pull - Personal</th>
<th>Market Pull - General</th>
<th>Tech Push - Personal</th>
<th>Tech Push - General</th>
<th>Megatrends</th>
<th>Other</th>
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</thead>
<tbody>
<tr>
<td>How You Can Tell</td>
<td>“I have this problem”</td>
<td>“I have seen this problem”</td>
<td>“I have this tech”</td>
<td>“I have found/seen this tech”</td>
<td>“There is a huge wave coming &amp; I want to have a surfboard”</td>
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<tr>
<td>Examples</td>
<td>Julia Hu</td>
<td>Kevin &amp; Gihan</td>
<td>Thomas Massie</td>
<td>Vanessa Green</td>
<td>Pedro Santos - OsComp</td>
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<td></td>
<td>Fatma Yalcin - Curisma</td>
<td>Student Microloans/F B</td>
<td>Tony Sagneri, Justin, George</td>
<td>Fan Fuser</td>
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<td></td>
<td>Tim Fu – Home Team Therapy</td>
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<td>New Dog Grooming Tool</td>
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Well, Are Ideas Important Then?
Company Success

Horse
Technology or Innovative Idea
10-15%

Jockey
Management Team
65-75%

Race
Market Selected
15-20%

Source: David Morgenthaler, Morgenthaler Ventures
The Importance of a Good Idea to Start a Company

• Is this important?

• Yes
  ▶ If you are not over a good target, your efforts are much, much less effective
  ▶ Your ability to recruit & motivate people
  ▶ Your ability to put your head down & focus on execution
  ▶ Credibility in the longer term with customers & others
  ▶ Build your expertise that makes you unique

• No
  ▶ It will change; the concept of pivoting
  ▶ You get 1-2 major adjustments (e.g., A123)
  ▶ Don’t use as an excuse not to do the job properly up front
Homework

• Watch video on how to do Improvisation and take notes
  • http://www.youtube.com/watch?v=MUO-pWJ0riQ
• Then watch the IDEO video "Deep Dive" parts 1 & 2 on YouTube and especially focus on the beginning of part 2 - the brainstorming part
  ▸ Part 1: http://www.youtube.com/watch?v=JkHOxyafGpE
  ▸ Part 2: http://www.youtube.com/watch?v=pVZ8pmkg1do&feature=related
But How Do We Generate New Ideas?

- Brainstorming
- Open Environment – Flat & Heterogeneous
- Flexible & Environment Matters
- Medium Sized Group (3-6)
- But Still Important to Have a Process
- IDEO is a Master at This …
The Key Rule of Improv

YES, and …

- We can make it better by …
- I see it and this person will want it because …
- I can add my perspective to make it real by …
IDEO’s Process

• Time bracketed
• Stages
• Facilitator
• Brainstormers
• At Some Point, Adult Supervision
• Prototyping
• Fail Often so We Can Succeed Sooner
• Funnel
IDEO’s Culture

• Failure and Trust
• Sharing and Respecting
• Simple Rules
  ‣ Enlightened trial and error
  ‣ Fail often to succeed sooner
  ‣ If a picture is worth a thousand words, a prototype is worth ten thousand
IDEO’s Rules in Brainstorming

• One conversation at a time
• Stay focused on topic
• Encourage wild ideas
• Build on the ideas of others
• Defer judgment
IdeaStorm Commandments I

• Thou shalt love thy neighbor and her ideas
• Thou shalt not crap on others’ ideas
• Thou shalt not hog the floor
Rules of MIT IdeaStorm

1. Withhold judgment of ideas
2. Encourage wild and exaggerated ideas
3. Quantity counts, NOT quality
4. Build on the ideas of others
5. Every person and every idea has equal worth
Today: IdeaStorm

• Focus on the process – that is what we are trying to teach you
• Like Improv …
Potential Topics

- Megatrend: Smart phones
- Megatrend: Mobility
- Megatrend: Social Media
- Megatrend: Big Data
- Tech Push – Sensors
- Tech Push – GPS
- Tech Push – Voice Recognition
- Tech Push – Graphene
- Market Pull – Personal: Fitness
- Market Pull – Education
- Market Pull – Personal: Aging Population
- Market Pull – Arts
- Market Pull -- Sports
Exercise Now ("Ideastorm")

- Now going to form teams based on them
- No more than 10 per team
- Everyone should be involved but you need to appoint a facilitator immediately for the group
- Prize for the most ideas & the craziest idea
- Facilitator should set up a schedule, rules and a process
  - Suggest you discuss topic for 5 minutes
  - Generate lots of ideas for 25 minutes
  - Return to class room
- Remember the Improv lesson and the IDEO lessons
Summary

1. The Idea for the Company is Important – Even if it Will Morph Over Time
2. Personal Drive is Not Enough
3. Tech Push is One Option to Start
4. Market Pull is Another
5. Each Move Towards Each Other Quickly
6. Let the Ideas Flow Now & Don’t Get Too Hung Up on How Great They Are to Start
   - Quantity over quality to start and encourage crazy ones
7. Suggest You Revisit the Videos to Fully Grasp Process
8. Brainstorm with a Heterogeneous Group
9. Consider If You Have Some Special Advantages
10. Look for Personal Impedance Match & Diverse Team
Wednesday

• Analyzing Ideas and Inspirations
• Systematic Way to Sort Out Good from Bad
Logical Flow of Course

- Logical Flow
- Presentation
- BP+

- Financial Statements
- Investor Strategy & Pitch
- Execution

- Go to Market
- Sales
- Marketing
- Biz Model

- Where to Extract Rent
- Pricing
- Product

- Value Proposition
- Competitive Advantage
- Development Plans
- Market

- Segment
- Direct Validation
- Competition
- People

- Team Composition
- Values
- Setting Expectations
- Idea

- Generation
- Analysis
- Testing on Key Stakeholders

Plan to Create Value

Plan to Capture Value
The Turtle Analogy?

To start, we need to produce some eggs that could grow into big turtles

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