TE 250: From Idea to Enterprise
Week 1: Intro & Framework

Mark Karasek
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Safety reminders
Course Objectives

1. Introduce the fundamentals of technology entrepreneurship through hands-on techniques that utilize Lean Startup methodology.

2. Provide an intro to fundamental startup concepts such as formation, financing and building a tech venture.
Course Structure

• Outside of class:
  • Weekly reading and/or videos
  • Occasional discussion board topics
  • Meet with your team
  • Complete stakeholder interviews

• In-class:
  • Work through examples with the tools
  • Guest speakers – entrepreneurs and venture investors
  • Breakouts mostly focused on team project
  • Occasional lectures – mostly interactive

• Office hours:
  • See Calendly link on Canvas
Group Project

• The course is highly interactive. Participation in classroom discussions is strongly encouraged.

• The capstone is a group project that requires teamwork and time outside of the classroom to interact with potential customers.

• Final grade heavily impacted by your support of your team.
Peer Critique

• All team members are expected to demonstrate critical thinking skills and support their conclusions in both written and oral communications.

• Students act as peer reviewers of classmates’ presentations.
Grading

• Individual assignments – relatively easy, just submit them on time
• Team assignments – one submission per team

• Midterm assignments and presentation
  • Team members get same grade for work product
  • Individual team members get grade for team participation

• Final assignments and presentation
  • Team members get same grade for work product
  • Individual team members get grade for team participation since midterm

• Class participation
  • Midterm and final presentation sessions are mandatory.
  • Peer assessment of final presentations are mandatory
What if I miss a mandatory class?

• Excused absence
  • You must request and receive an excused absence letter from the university
  • [https://odos.illinois.edu/community-of-care/resources/students/absence-letters/](https://odos.illinois.edu/community-of-care/resources/students/absence-letters/)
  • Must meet the criteria for an excused absence
  • Will be provided with a makeup assignment

• Unexcused absence
  • No makeup assignment
  • Impacts Engagement & Team Participation grade which is 30% of final grade
Respectfully Direct

IGNORANCE
NO CHANGE

RUINOUS
Empathy

CARE PERSONALLY

CHALLENGE DIRECTLY

MISTRUST
NO CHANGE

Manipulative Insincerity

Obnoxious Aggression

DEFENSIVENESS
LITTLE CHANGE

GROWTH
PROFOUND CHANGE

TWO WAY

Radical Candor, by Kim Scott
...and a bit about me

Mark Karasek (mkarasek@Illinois.edu)
Clinical Assistant Professor, TEC

More than 20 years leading innovation and product development in the consumer and commercial durables space and working with start-ups to identify customer value insights and define business strategy.

• Important: It is Not What you Know but Who You Know…

• So what should you do next?
Graders

• Mahir Thakkar: mahirvt2@Illinois.edu
• Madeline Rodriguez: mgr8@Illinois.edu

Roles
• Share grading responsibilities – I will review all grading
• Facilitate during class
• Additional resources during breakouts - both completed this class last semester.
Discussion: Want will make this class a “5” on the end of semester assessments?

Take 5 minutes to think about it

Open discussion
Week 1: Introduction
An example...

The Facts

99.7% of all documented ideas fail.

75% of all VC backed ideas fail.

1. Why do they fail?
2. What can we do about it?

Share your thoughts
Why?

More startups fail from a lack of customers than from a failure of product development.
What must come first?

Your business idea needs to **solve a problem** your potential customer will **PAY for**.
Finding Your Right Opportunity

A Problem Worth Solving

The Sweet Spot

- Timely
- Solvable
- Important
- Profitable
- Favorable Context

Interests, Passions, Commitment

- Like to do the tasks
- Like the challenge
- Committed to do what is necessary

Capabilities & Skills

- Skilled at the needed tasks

ILLINOIS
### Problem Statement Canvas

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>PROBLEM</th>
<th>ALTERNATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>When does the problem occur?</td>
<td>What is the root cause of the problem?</td>
<td>What do customers do now to fix the problem?</td>
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<tr>
<td>[Type here]</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CUSTOMERS</th>
<th>EMOTIONAL IMPACT</th>
<th>ALTERNATIVE SHORTCOMINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who has the problem most often?</td>
<td>How does the customer feel?</td>
<td>What are the disadvantages of the alternatives?</td>
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<table>
<thead>
<tr>
<th>QUANTIFIABLE IMPACT</th>
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<tbody>
<tr>
<td>What is the measurable impact? (include units)</td>
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<tr>
<td>[Type here]</td>
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Problems Worth Solving

• **Teams:** ~8 teams of 3-5 people (Group formation will happen over the next 7-10 days)

• **Process:**
  - **Step 1 (due Mon Jan 23, 11:59PM)** Discussion Board
    • your ideas: identify “Problems Worth Solving” (at least 1 per student)
  - **Step 2 (due Monday Jan 30, 11:59pm)**
    • Google Form Link with all ideas will be posted on Canvas no later than Tuesday Noon
    • Vote on your top 3 choices.
  - **Step 3 (Class 3, Feb 1)**
    • Submitters of the Top 10 be prepared to present a 2–3-minute pitch on your idea, why it is worth solving, why you are the right person to solve it and who else (skills and values) do you need on your team to help.
    • 2nd half of class will be a breakout where submitters recruit their team members.
  - **Step 4 (due Monday February 6, 11:59 PM)**
    • Meet with your team outside of class to discuss what ground rules and meeting rules you will follow. Determine how you will communicate to each other and what team expectations are for responsiveness and participation.
    • One person on the team submits the list of your team members, your ground rules, and the problem statement you will be addressing.
Strategies for Brainstorming a Topic

Your Personal Experiences and Interests

What Do You Know?
Are you already an expert at something?

Don’t You Hate It When . . .
Have you seen something you wished were fixed!

What Do You Love?
Do you want to help people?
Hobbies?
Identify Problem

Health & Safety
People are hurt or killed by...

Legal Issues
People are suing because...

Technical Problems
People are complaining about...

Economics
Lack of a solution to this problem costs.....

Educational
Education programs exist to prevent...

Strategies for Brainstorming
Five Common Attack Paths to Finding a Justified Problem
Start with:

Who are you and what problems frustrate you and/or your friends/family? (alt: what do you care about?)

- I hate carrying an umbrella
- My grandma fell last month and broke her hip.
- My parents can’t afford to put solar panels on our house.
- I hated having to share a microscope in HS.
- I hate when restaurants use disposable packaging.
Group Project Ground Rules

• This is a venture creation class, not a technology class. We assume the technology works. Tell us “what you do” not “how you do it.”

• Participation on a team is for educational purposes ONLY. It does not give you any right or interest in a company that exists or may later form.

• Company must leverage an innovation-based technology solving a problem that matters. (i.e., a product or service; no consulting)

• Company will require resources beyond your control.
First Deliverable: Midterm Critical Analysis

Team Presentation in-class
1. Market Validation: 1-2 slides
2. Competitive Analysis: 1-2 slides
3. Target Customer Segment(s): 1 slide each
4. Key Value Prop(s): 1 per customer segment
5. Advance/pivot/redirect: 1 slide
Innovation
Small Group Discussion Questions

What is innovation?
Is it the same as invention?
What is innovation?

Innovation “sweet spot”

Innovators translate ideas and IP into customer solutions that generate economic and/or social value.
Week 1
Innovation versus Invention

• **Invention:**
  – ...unleashing the potential of the mind to conceive new ideas...
  – Creating something new in the world...

• **Innovation:**
  – ... apply resources to a solution and reap a return on investment...
    • Solves a real problem
    • Creates value someone will pay for (or derive meaningful benefit from)
Small Group Discussion Questions

Is every new business innovative?
**SME (Small Medium Enterprise)**
Local Market Focus
Restaurants, Dry Cleaners, Services

- $\Delta t$ is short
- Linear growth (capped)
- Less investment required

**IDE (Innovation-Driven Enterprise)**
Global Market Focus
Products w/ Innovation at Core

- $\Delta t$ is long
- Exponential growth (uncapped)
- A lot of investment required
Entrepreneurs and Entrepreneurship

Delivering innovation to the market and getting paid for it
What is entrepreneurship?

Entrepreneurship is the act of identifying and exploiting an opportunity without being limited by resources currently under control.
What is an entrepreneur?

Entrepreneurs are people who identify and pursue:

• solutions among problems
• possibilities among needs
• opportunities among challenges

The entrepreneur provides the creative force that makes free enterprise work.

Entrepreneurs strive to make a difference in our world and contribute to its betterment.

They are also motivated by achievement, independence, and the accumulation of wealth.
So why would anyone do this?

**Entrepreneurship**

Is living a few years of your life like most people won't, so that you can spend the rest of your life like most people can't.
Why does it matter?

• Small firms might be more likely to produce “radical” innovations
  – Henderson (1993)
  – Anderson and Tushman (1990)
  – Tushman and Anderson (1986)

• “… are responsible, since 1945, for:
  – Over 50% of all innovations
  – 67% of inventions
  – 95% of all radical innovations”

  National Commission on Entrepreneurship, 2002 from Timmons
Why does it matter?

Figure 1:
Startups Create Most New Net Jobs in the United States

Source: Business Dynamics Statistics, Tim Kane
Why does it matter?
Innovator’s dilemma

The 5 Laws of Disruptive Technology

- Resources are controlled by customers & investors.
- Big companies need big markets for growth.
- Markets that don’t exist can't be analyzed.
- An organization’s capabilities define its disabilities.
- Technologies can progress faster than market demand.

https://disruptionhub.com/innovators-dilemma/
Why TECH ventures?

Land, natural resources
- Fixed supply
- Not sharable
- Easy to measure

Capital, Money
- Fixed supply
- Not sharable
- Easy to measure

Labor, physical skills
- Fixed supply
- Not sharable
- Easy to measure

Knowledge, Intellectual skills
- Unlimited supply
- Easily sharable
- Difficult to measure
Attributes of E’neurs

- Entrepreneurship is a process: not a single act
- Entrepreneurs are made; *not born*
- Entrepreneurs vary considerably in their *capabilities*, which can be improved significantly through experience and training.
- *Existing organizations* provide an environment that has a major—positive or negative—impact on the creative and entrepreneurial drive of their members.
- Entrepreneurs are *not* risk seekers; they are *risk managers.*
## The entrepreneurship journey: Personas

<table>
<thead>
<tr>
<th>Exploring</th>
<th>Ready-to-Go</th>
<th>RTG - 1</th>
<th>Intrapreneur</th>
<th>Amplifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested but has no driving idea or team; is in exploratory mode; starts here but will migrate to another state or out of entrepreneurship</td>
<td>Chomping at the bit &amp; just wants help to get going – has idea, tech &amp;/or core of team</td>
<td>Wants to be in a start up but does not want to be a lead (at least at this time)</td>
<td>Wants to be an entrepreneur in an existing non-startup organization</td>
<td>Interested in understanding enough to successfully promote in their org (e.g., gov, corp, family business) but is not the direct venture creating entrepreneur</td>
</tr>
</tbody>
</table>
Summary of week 1

• Finding a problem that matters is "table stakes" for building a startup.
• Innovation = solving a problem that matters and getting paid
• Entrepreneurs are made, not born
• Entrepreneurship is a major driver of economic growth
• Entrepreneurs are not risk seekers; they are risk managers
Getting ready for Week 2

• Do the two individual assignments – both are discussion boards
• Do the reading before class next week
Guest speaker

Jeff Carter
General Partner at West Loop Ventures
Co-Founder – Hyde Park Angles
Former Independent Trader – Chicago Mercantile Exchange
1984 BS in Marketing, University of Illinois