Technology Start-ups
Lecture 2

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Dept of Computer & Information Sciences
University of Delaware
Startups like Hill Climbing

State space of lean canvases! Pivot and iterate to find global maximum (users, revenue, etc.)
Start Brainstorming

- Distinguish Customer versus Users
  - Customers pay for your product
  - Users don’t pay
- Define a **small** customer segment
  - Early evangelist
  - Want small customer segment that **love** your product
Sketching a Lean Canvas

• Sketch first Lean Canvas in 15 minutes
• Ok to leave sections blank
• Be concise
• Think in the present
  • Technologies and Solutions available today
• Use customer-centric approach
  • It’s all about the customer!
Rest of Lecture

- Describing each Lean Canvas box
- Use an example of the “Lean Canvas” as a product
# Lean Canvas

<table>
<thead>
<tr>
<th>Team Name</th>
<th>Interviews This Week / Total Interviews</th>
<th>MM-DD-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>--- / ---</td>
<td>Iteration #1</td>
</tr>
<tr>
<td>Problem</td>
<td>Solution</td>
<td>Unique Value Proposition</td>
</tr>
<tr>
<td>Key Metrics</td>
<td>Key activities you measure</td>
<td>Channels</td>
</tr>
<tr>
<td>Early Adopters:</td>
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<tr>
<td>Cost Structure</td>
<td></td>
<td>Revenue Streams</td>
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</table>

PRODUCT

MARKET
1. **Problem**

   **1. Problem**
   - Top 3 problems
   - Existing alternatives

   **4. Solution**
   - Top 3 features
   - e.g. AARRR

   **3. Unique value proposition**
   - Clear compelling message. Why makes you different? Why pay attention to you?

   **9. Unfair advantage**
   - Can’t be easily copied or bought

   **2. Customer segments**
   - Target customers
   - Early adopters?

   **7. Cost Structure**
   - Customer acquisition, distribution, people, etc.

   **6. Revenue streams**
   - Revenue model, life time value, revenue, gross margin

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1. Problem

- List most (1-3) important problems
  - Think hard about customer

- List existing alternatives
  - What do early evangelists do now?
  - May not be obvious
  - Viable solution: do nothing!
2. Customer Segments

1. Problem
   - top 3 problems
   - Existing alternatives

2. Customer segments
   - Target customers
   - Early adopters?

3. Unique value proposition
   - Can’t be easily copied or bought
   - Clear compelling message. Why makes you different? Why pay attention to you?

4. Solution
   - top 3 features
   - e.g. AARRR

5. Channels
   - Path to customers

6. Revenue streams
   - Revenue model, life time value, revenue, gross margin

7. Cost Structure
   - Customer acquisition, distribution, people, etc.

8. Key metrics
   - e.g. AARRR

9. Unfair advantage
   - Can’t be easily copied or bought
2. Customer Segments

- Identify possible early adopters
  - Smaller customer segment is better

- Identify other users
  - Who interacts with your customers?
  - Who uses and doesn’t pay for the product
    - Ex: You are users of Google search, advertisers are the customers.
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<td></td>
<td></td>
<td>Startup Founders</td>
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<td></td>
<td></td>
<td>(Creators)</td>
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<td>Intuition, business plan, spreadsheets</td>
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The table outlines the problem and customer segments for a technology startup. The problem sections highlight challenges such as business models needing to be more portable, measuring progress being hard work, and communicating learning being critical. Existing alternatives mentioned include intuition, business plans, and spreadsheets.

The solution section is empty, as is the unfair advantage section. The customer segments include startup founders, advisors/investors, and early adopters.

The key metrics section is also empty, as are the channels and revenue streams sections.
3. Unique Value Proposition

1. Problem
   - top 3 problems

2. Customer segments
   - Target customers
   - Early adopters?

3. Unique value proposition
   - Can’t be easily copied or bought
   - Why makes you different? Why pay attention to you?

4. Solution
   - top 3 features

5. Channels
   - Path to customers

6. Revenue streams
   - Revenue model, life time value, revenue, gross margin

7. Cost Structure
   - Customer acquisition, distribution, people, etc.

8. Key metrics
   - e.g. AARRR

9. Unfair advantage
   - Clear compelling message. Why makes you different? Why pay attention to you?

Lean Canvas, from Ash Maurya: Running Lean. Licensed under Creative Commons-Attribution-Share Alike 3.0
3. Unique Value Proposition

- Get prospect’s attention
- Don’t worry about selling at first.

CISC 879 : Technology Start-ups
3. Unique Value Proposition

- Your UVP needs to be different
  - Is problem worth solving?
  - Is your solution 10x better?
- Target Early Adopters
  - You want few people to love it!
- Study other UVPs
- High-level pitch
  - "X for Y" (Ex: "Uber for Pets")
## Unique Value Proposition

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### Key Metrics
- Cost Structure
- Revenue Streams
Lean Canvas

1. Problem
top 3 problems

2. Customer segments
Target customers

3. Unique value proposition
Can’t be easily copied or bought

4. Solution
top 3 features

5. Channels
Path to customers

6. Revenue streams
Revenue model, life time value, revenue, gross margin

7. Cost Structure
Customer acquisition, distribution, people, etc.

8. Key metrics
e.g. AARRR

9. Unfair advantage
Clear compelling message. Why makes you different? Why pay attention to you?

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4. Solution

- Don’t spend too much time here!
  - Will change after customer interviews

Build **solution** as late as possible.
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| Cost Structure | Revenue Streams |
5. Channels

- Free versus paid
- Inbound versus outbound messages
  - Inbound or “pull messaging”
    - blogs, white papers, webinars
  - Outbound or “push messaging”
    - conferences, email, phone call
- Direct vs automated and indirect
  - Direct means “selling” directly to customers
  - Selling using automation or indirectly by having outside sales-person/partner sell
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Lean Canvas

1. Problem
   - top 3 problems

2. Customer segments
   - Target customers
   - Early adopters?

3. Unique value proposition
   - Can’t be easily copied or bought

4. Solution
   - top 3 features

5. Channels
   - Path to customers

6. Revenue streams
   - Revenue model, life time value, revenue, gross margin

7. Cost Structure
   - Customer acquisition, distribution, people, etc.

8. Key metrics
   - Clear compelling message. Why makes you different? Why pay attention to you?
   - e.g. AARRR

9. Unfair advantage
   - Existing alternatives

---

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6. Revenue Streams

- What will it cost to interview 30 customers?
- What will it cost to build MVP?
- Are there any fixed or variable costs?
  - Cloud costs
  - Website costs
Lean Canvas

1. Problem
   top 3 problems

2. Customer segments
   Target customers

3. Unique value proposition
   Can’t be easily copied or bought

4. Solution
   top 3 features

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   Clear compelling message. Why makes you different? Why pay attention to you?

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7. Cost Structure

- Set a price on Day 1!
  - MVP not ”half-baked” or “buggy” software
- You only need a few good customers to learn
  - This is a form of validation

Reference book on software pricing:
“Don’t Just Roll the Dice: A usefully short guide to software pricing”
## Cost Structure / Revenue

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### Channels
1. Blog/Book/Workshops
2. Startup Accelerators / Investors

### Cost Structure
- Hosting Costs - heroku (currently $0)
- People Costs - 40hrs * $65/hr = $10K/month
- Break-even point: 743 customers

### Revenue Streams
- 30-day Free Trial @ $14/mo (1 private canvas / 3 collaborators)
<table>
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<tr>
<th>1. <strong>Problem</strong></th>
<th>4. <strong>Solution</strong></th>
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<tbody>
<tr>
<td>Customer acquisition, distribution, people, etc.</td>
<td>Path to customers</td>
<td>Revenue model, life time value, revenue, gross margin</td>
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8. **Key metrics**
e.g. AARRR

Existing alternatives

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8. Key Metrics

Metrics that track how business is doing.

- **Acquisition**: How do users find you?
- **Activation**: Do users have a great experience?
- **Retention**: Do users come back?
- **Revenue**: How do you make money?
- **Referral**: Do users tell others?
# Key Metrics

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## Cost Structure

- Hosting Costs - heroku (currently $0)
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Break-even point: 743 customers
## Lean Canvas

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9. Unfair Advantage Notes

- What makes your start-up hard to replicate?
- First mover advantage is not always an advantage
  - All hard work is on you!
  - Fast follower better

Important question to ask: **Would your start-up be alright if someone decided to replicate it?**
9. Unfair Advantage

- Insider information
- Dream team
- Large network effects
  - Think Facebook and Google
- Personal Authority
  - Ex: you are the customer
- Existing customers
- High SEO ranking
## Unfair Advantage

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### Key Metrics
- Create Lean Canvas
- Track Experiment
- Invite Collaborator

### Channels
1. Blog/Book/Workshops
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### Cost Structure
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**Break-even point:** 743 customers

### Revenue Streams
- 30-day Free Trial @ $14/mo
- (1 private canvas / 3 collaborators)
Now It’s your Turn.

- Get into your groups!
- Download Lean Canvas Template from course website