

# MOBILE APP DEVELOPMENT FOR ENTREPRENEURS

eeecs 441

## Lecture 2: Value Proposition Canvas

## Time and Place

Lecture: MW 8:30-10:00 and 10:00-11:30 in 1311 EECS

Discussion: F 9:30-10:30 in 1006 DOW and

10:30-11:30 in 1018 DOW

Instructor: Sugih Jamin

Office: 4737 BBB

Office hours: M 11:30-12:30, Th 12-12:30 and by appointment

email: [jamin@eeecs.umich.edu](mailto:jamin@eeecs.umich.edu)

Tel: +1 734 763 1583

GSI: Tiberiu Vilcu

username: tiberiu

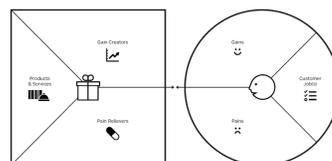
Office hours: Tu 1:30-2:30, W 4:30-5:30 in 1637 BBB and by appt.

## Value Proposition Canvas

The **value of your proposition** is where your product proposition intersects your customer's desires

Why would anyone buy what you sell?

The **value proposition canvas (VPC)** is a **brainstorming tool** to help you think through and **honestly evaluate** what it is your **customers** really **need (pain points)** and how your product meets that need (or not)

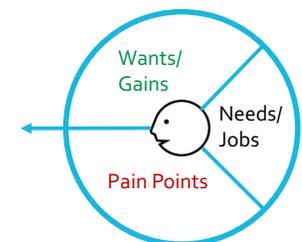


[Thomson, P.J., Value Proposition Canvas Template]

## Value Proposition Canvas

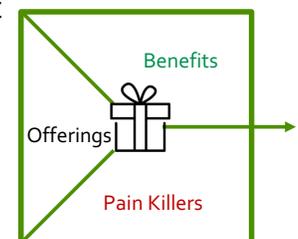
Consists of two parts:

**1. Customer Profile:** things about your customers that can be observed and are outside your direct control



**2. Value Map:** design of your product to address the customers' needs, wants, and pain points

- don't try to address ALL of them, instead, identify and address only the most important ones

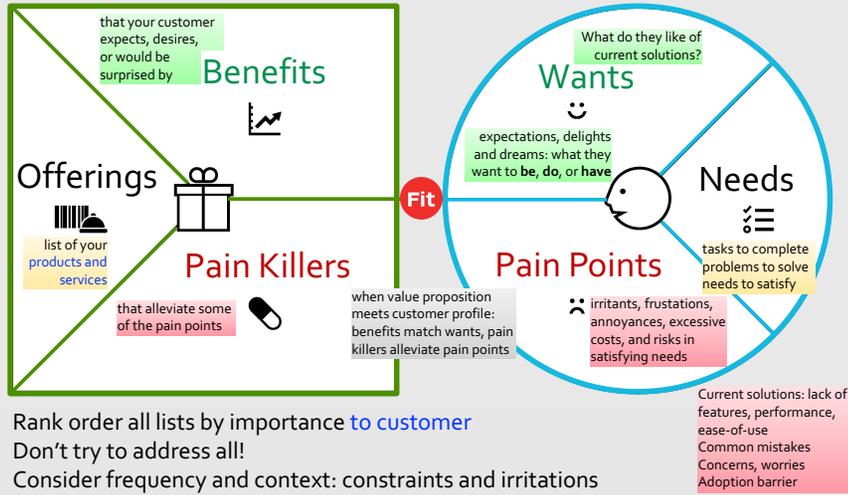


# Value Proposition Canvas

Based on Osterwalder's Value Proposition Canvas

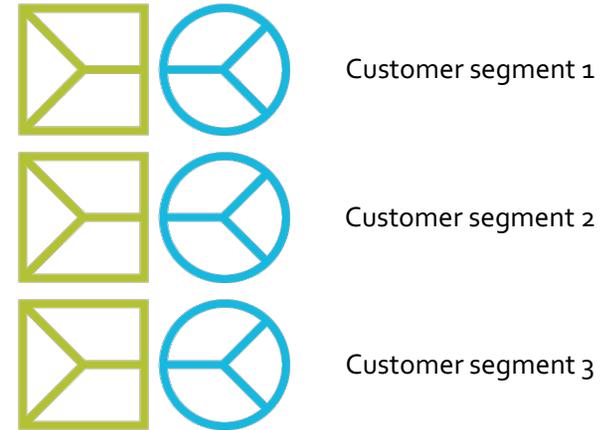
Value Proposition: Design

Customer Segment(s): Observe

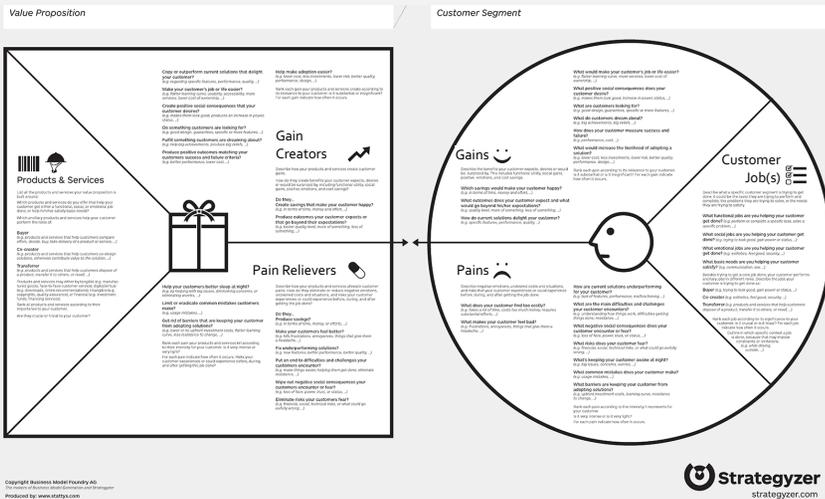


# Multiple Customer Segments

Don't confuse multiple customer segments into one  
Instead, observe and address each one separately

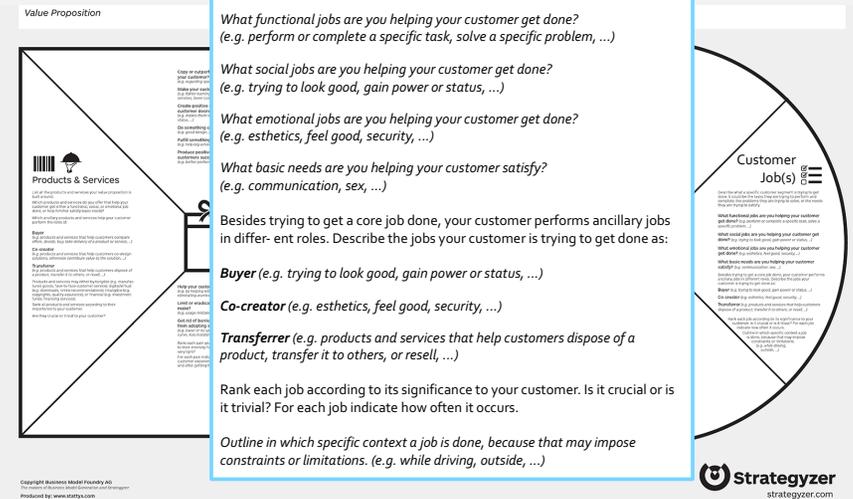


# Osterwalder's Original Value Proposition Canvas



<https://www.innovatecalgary.com/files/public-files/video/value-proposition-canvas.pdf>

# Osterwalder's Original Value Proposition Canvas



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# Osterwalder's Original Value Proposition Canvas

**Value Proposition**

Describe the benefits your customer expects, desires or would be surprised by. This includes functional utility, social gains, positive emotions, and cost savings.

**Which savings would make your customer happy?**  
(e.g. in terms of time, money and effort, ...)

**What outcomes does your customer expect and what would go beyond his/her expectations?**  
(e.g. quality level, more of something, less of something, ...)

**How do current solutions delight your customer?**  
(e.g. specific features, performance, quality, ...)

**What would make your customer's job or life easier?**  
(e.g. flatter learning curve, more services, lower cost of ownership, ...)

**What positive social consequences does your customer desire?**  
(e.g. makes them look good,) increase in power, status, ...)

**What are customers looking for?**  
(e.g. good design, guarantees, specific or more features, ...)

**What do customers dream about?**  
(e.g. big achievements, big reliefs, ...)

**How does your customer measure success and failure?**  
(e.g. performance, cost, ...)

**What would increase the likelihood of adopting a solution?**  
(e.g. lower cost, less investments, lower risk, better quality, performance, design, ...)

Rank each gain according to its relevance to your customer. Is it substantial or is it insignificant? For each gain indicate how often it occurs.



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# Osterwalder's Value Proposition Canvas

**Value Proposition**

Describe negative emotions, undesired costs and situations, and risks that your customer experiences or could experience before, during, and after getting the job done.

**What does your customer find too costly?**  
(e.g. takes a lot of time, costs too much money, requires substantial efforts, ...)

**What makes your customer feel bad?**  
(e.g. frustrations, annoyances, things that give them a headache, ...)

**How are current solutions underperforming for your customer?**  
(e.g. lack of features, performance, malfunctioning, ...)

**What are the main difficulties and challenges your customer encounters?**  
(e.g. understanding how things work, difficulties getting things done, resistance, ...)

**What negative social consequences does your customer encounter or fear?**  
(e.g. loss of face, power, trust, or status, ...)

**What risks does your customer fear?**  
(e.g. financial, social, technical risks, or what could go awfully wrong, ...)

**What's keeping your customer awake at night?**  
(e.g. big issues, concerns, worries, ...)

**What common mistakes does your customer make?**  
(e.g. usage mistakes, ...)

**What barriers are keeping your customer from adopting solutions?**  
(e.g. upfront investment costs, learning curve, resistance to change, ...)

Rank each pain according to the intensity it represents for your customer. Is it very intense or is it very light? For each pain indicate how often it occurs.



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# Osterwalder's Original Value Proposition Canvas

**Value Proposition**

List all the products and services your value proposition is built around.

Which products and services do you offer that help your customer get either a functional, social, or emotional job done, or help him/her satisfy basic needs?

Which ancillary products and services help your customer perform the roles of:

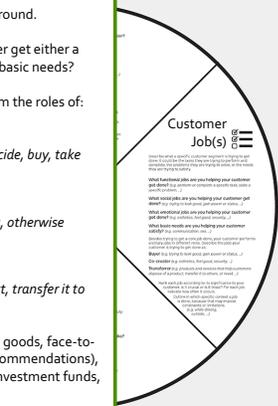
**Buyer**  
(e.g. products and services that help customers compare offers, decide, buy, take delivery of a product or service, ...)

**Co-creator**  
(e.g. products and services that help customers co-design solutions, otherwise contribute value to the solution, ...)

**Transferrer**  
(e.g. products and services that help customers dispose of a product, transfer it to others, or resell, ...)

Products and services may either be tangible (e.g. manufactured goods, face-to-face customer service), digital/virtual (e.g. downloads, online recommendations), intangible (e.g. copyrights, quality assurance), or financial (e.g. investment funds, financing services).

Rank all products and services according to their importance to your customer. Are they crucial or trivial to your customer?



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# Osterwalder's Value Proposition Canvas

**Value Proposition**

Describe how your products and services create customer gains. How do they create benefits your customer expects, desires or would be surprised by, including functional utility, social gains, positive emotions, and cost savings?

**Do they...**

**Create savings that make your customer happy?**  
(e.g. in terms of time, money and effort, ...)

**Produce outcomes your customer expects or that go beyond their expectations?**  
(e.g. better quality level, more of something, less of something, ...)

**Copy or outperform current solutions that delight your customer?**  
(e.g. regarding specific features, performance, quality, ...)

**Make your customer's job or life easier?**  
(e.g. flatter learning curve, usability, accessibility, more services, lower cost of ownership, ...)

**Create positive social consequences that your customer desires?**  
(e.g. makes them look good, produces an increase in power, status, ...)

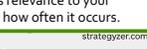
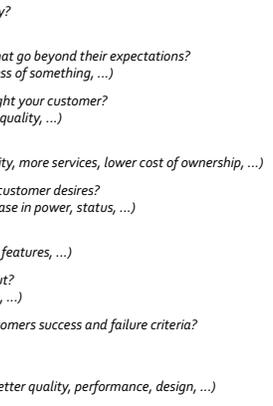
**Do something customers are looking for?**  
(e.g. good design, guarantees, specific or more features, ...)

**Fulfill something customers are dreaming about?**  
(e.g. help big achievements, produce big reliefs, ...)

**Produce positive outcomes matching your customers success and failure criteria?**  
(e.g. better performance, lower cost, ...)

**Help make adoption easier?**  
(e.g. lower cost, less investments, lower risk, better quality, performance, design, ...)

Rank each gain your products and services create according to its relevance to your customer. Is it substantial or insignificant? For each gain indicate how often it occurs.



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# Osterwalder Value Proposition

**Pain Relievers**

Describe how your products and services alleviate customer pains. How do they eliminate or reduce negative emotions, undesired costs and situations, and risks your customer experiences or could experience before, during, and after getting the job done?

*Do they...*

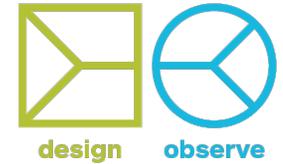
- Produce savings? (e.g. in terms of time, money, or efforts, ...)
- Make your customers feel better? (e.g. kills frustrations, annoyances, things that give them a headache, ...)
- Fix underperforming solutions? (e.g. new features, better performance, better quality, ...)
- Put an end to difficulties and challenges your customers encounter? (e.g. make things easier, helping them get done, eliminate resistance, ...)
- Wipe out negative social consequences your customers encounter or fear? (e.g. loss of face, power, trust, or status, ...)
- Eliminate risks your customers fear? (e.g. financial, social, technical risks, or what could go awfully wrong, ...)
- Help your customers better sleep at night? (e.g. by helping with big issues, diminishing concerns, or eliminating worries, ...)
- Limit or eradicate common mistakes customers make? (e.g. usage mistakes, ...)
- Get rid of barriers that are keeping your customer from adopting solutions? (e.g. lower or no upfront investment costs, flatter learning curve, less resistance to change, ...)

Rank each pain your products and services kill according to their intensity for your customer. Is it very intense or very light?

For each pain indicate how often it occurs. Risks your customer experiences or could experience before, during, and after getting the job done?

<https://www.innovations.com>

## Customer Profiles



How do you know the customer's needs, wants, and fears?

Can't ask customers directly what their problems are or what they want (Why?)

Can't ask whether they'd be willing to pay for your product nor how much they'd be willing to pay (Why?)

## Interview Goals

People want to please

How do you avoid capturing only **good intentions** but actually get to the **hard insights** you need to build your value proposition?

- understand customer's **workflow**: how they work day to day, what tools and services they use to aid their work
- understand their **criteria for making a decision** about the problem or your solution

## Interview "Rules"

1. Approach each interview afresh (not jaded)
  - dig deeper into any unexpected needs, pains, or gains
2. Listen more than you talk
  - avoid interpreting responses too early
  - don't offer your solution/product
  - your goal is to learn, not to sell
3. Get facts, not opinions
  - avoid "would you ... ?" instead ask, "when was the last time you ...?" or "how often do you ...?"
  - understand how they deal with their problems today
4. Ask 5 whys

# Five Whys

**Root cause analysis technique:** asking why a problem exists five times, recursively, to get to the root cause of the problem

Developed as part of Toyota's problem-solving training

Seiter, C., "The 5 Whys Process We Use to Understand the Root of Any Problem," Dec. 2014, (<https://open.buffer.com/5-whys-process/>)

# Five Whys Example

- 1. Why did the robot stop?**  
The circuit has overloaded, causing a fuse to blow
- 2. Why is the circuit overloaded?**  
There was insufficient lubrication on the bearings, so they locked up
- 3. Why was there insufficient lubrication on the bearings?**  
The oil pump on the robot is not circulating sufficient oil
- 4. Why is the pump not circulating sufficient oil?**  
The pump intake is clogged with metal shavings
- 5. Why is the intake clogged with metal shavings?**  
There is no filter on the pump ←————— Root cause!

Seiter, C., "The 5 Whys Process We Use to Understand the Root of Any Problem," Dec. 2014, (<https://open.buffer.com/5-whys-process/>)

# Interview "Rules"

5. Ask to keep contact info for follow up interviews, demo
6. Ask for referrals

## Interview mechanics:

1. In teams of two:
  - don't overwhelm the subject
  - one to lead, one to take notes
  - get two different perspective on the interviews
  - to record or not to record?
2. Not more than 15-30 mins

# Project of Interest

## Pace-to-Trace:

Surveying tool that tracks your steps and automatically draws a correctly-scaled trace of the distance and area covered

Uses GPS, accelerometer, orientation, and step counter sensors on the phone