

TE 250: Week 3 Problem Statements

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Technology Entrepreneur Center

GRAINGER ENGINEERING



APPLY BY SEPT 10

We're looking for a Social Media Manager, Photographer, Videographer, Peer Entrepreneurship Advisor & Academic Ambassador, and Lead Program & Event Operations Manager.

go.illinois.edu/now-hiring



WED | SEPT 20

Come pitch your ideas, find teammates to scale your startup, or just sit back and check things out at **SocialFuse!**

RSVP | go.illinois.edu/socialfuse



TUES | SEPT 26

Silicon Valley Entrepreneurship Workshop Info Night! Learn about the week-long trip to Silicon Valley where a select group of students learn from entrepreneurs and alums. **Application deadline for the trip is Oct. 1.** go.illinois.edu/sview



WED | SEPT 27

Join us for the **Startup City Scholars Kickoff Event & Info Night**. Learn how you can build a startup with UChicago students and get course credit.

SIGN UP FOR THE TEC NEWSLETTER TO GET UPDATES: go.illinois.edu/sign-up



THURS | SEPT 28

Hear from advisers and current students and learn how the **Innovation, Leadership, and Engineering Entrepreneurship (ILEE) Dual Degree** can help you gain a competitive edge in the job market.

RSVP | go.illinois.edu/ILEE

Another example:

- Zenefits
- <https://www.youtube.com/watch?v=7KmjzfK3f38>

Review what we have discussed so far...

Start with a problem:

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.

Setting up your team for success

Building a winning team

Talented and goal-oriented

Friendly vibe and easy to get along with

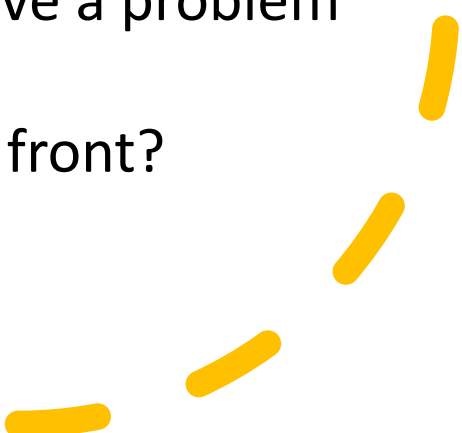
Team players with a shared vision

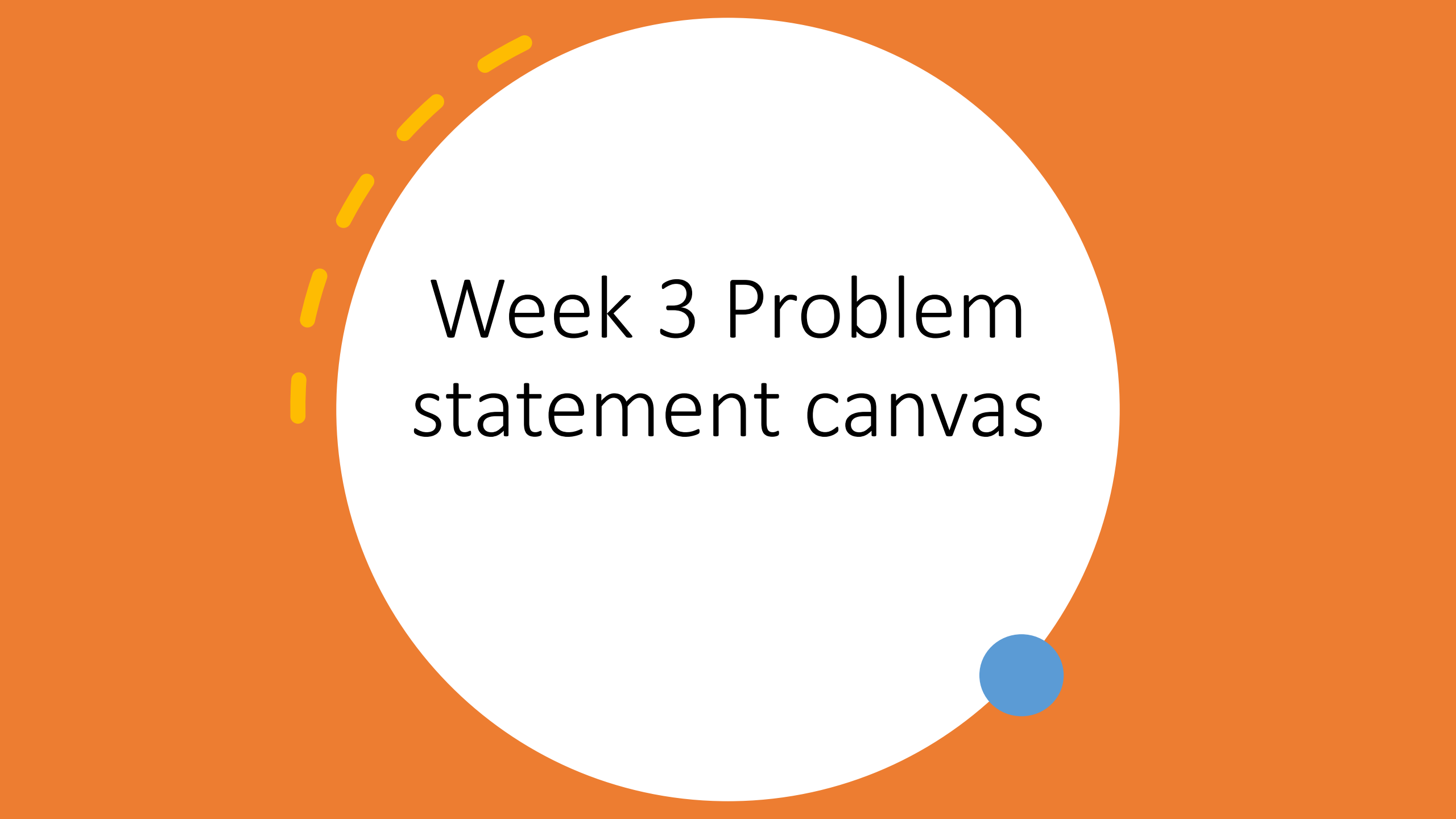
Take responsibility and ownership of tasks

What does this look like for TE250?

A large orange circle on the left side of the slide, partially cut off by the edge.

Getting the work done

- Agree on a set of ground rules
 - Who sets up meetings?
 - When will we meet?
 - Who runs the meetings?
 - How will we interact in meetings?
 - How will we ensure action items are complete before meetings?
 - How will we call out infractions?
 - How will we communicate offline?
 - How quickly will we respond to each other?
 - How will we communicate if we have a problem that interferes with ground rules?
 - Other things we need to define up front?
- 
- A series of yellow dashed line segments in the bottom right corner, forming a curved shape.



Week 3 Problem statement canvas

Problem Statement Canvas

CONTEXT When does the problem occur? [Type here]	PROBLEM What is the root cause of the problem? [Type here]	ALTERNATIVES What do customers do now to fix the problem? [Type here]
CUSTOMERS Who has the problem most often? [Type here]	EMOTIONAL IMPACT How does the customer feel? [Type here] QUANTIFIABLE IMPACT What is the measurable impact? (include units) [Type here]	ALTERNATIVE SHORTCOMINGS What are the disadvantages of the alternatives? [Type here]

Uber

<https://startlean.org/lean-startup-strategy-framing-the-problem/>

<p>CONTEXT When does the problem occur?</p> <p>A commuter traveling a 5 miles to meet friends on an evening</p>	<p>PROBLEM What is the root cause of the problem?</p> <p>The process of hailing a taxi takes a long time and is very inefficient.</p>	<p>ALTERNATIVES What do customers do now to fix the problem?</p> <ul style="list-style-type: none"> • Find and call a local cab company • Hail an available taxi from the street
<p>CUSTOMERS Who has the problem most often?</p> <p>Commuters or passengers</p>	<p>EMOTIONAL IMPACT How does the customer feel?</p> <p>Frustrated</p> <p>QUANTIFIABLE IMPACT What is the measurable impact (include units)?</p> <p>Time in minutes waiting for taxis</p>	<p>ALTERNATIVE SHORTCOMINGS What are the disadvantages of the alternatives?</p> <ul style="list-style-type: none"> • Takes a long time on short notice (30+ minutes) • A lot of forward planning • Call around multiple companies to find the best price. <p>miro</p>

GrowthMentor

<p>CONTEXT When does the problem occur?</p> <p>Everytime a growth challenge occurs and there isn't a clear solution. Usually when there are multiple different ways to proceed, and the pain of failure is greater than the friction of using the solution.</p>	<p>PROBLEM What is the root cause of the problem?</p> <p>T-shaped marketers with deep experience are quite rare and are in high demand making them expensive. This puts them out of reach of earlier stage startups that can't afford +\$100/hour rates.</p>	<p>ALTERNATIVES What do customers do now to fix the problem?</p> <p>Passively consuming content like blog posts, video courses, and workshops. Hiring consultants and/or using services like Clarity.fm. Hiring inhouse roles or freelancers to fill gaps in knowledge.</p>
<p>CUSTOMERS Who has the problem most often?</p> <p>Type A personality types that put extra pressure on themselves to deliver results and become the best versions of themselves. Anyone in growth that doesn't have easy access to mentorship or guidance in their work.</p>	<p>EMOTIONAL IMPACT How does the customer feel?</p> <p>Loneliness, depression, anxiety, imposter syndrome.</p> <p>QUANTIFIABLE IMPACT What is the measurable impact (include units)?</p> <p>90% of startups end up failing and 99.9% wish they could grow faster</p>	<p>ALTERNATIVE SHORTCOMINGS What are the disadvantages of the alternatives?</p> <p>Quality can be hit or miss and many charlatans are taking advantage of the pain of marketers and founders making unrealistic promises (e.g. 10x culture). Consuming content is not as effective as actively learning by doing.</p>

Let's build one...

Example of Problem Statement Canvas

- ***Adam is 37 and lives with his wife and kids in a typical suburb.***
- ***He is unable to find the time to exercise due to work and family time constraints***
- ***He ends up feeling frustrated and groggy and has regular dips in energy***
- ***So he joins the gym and goes at lunchtime***
- ***But there are too many barriers for entry; the gym costs money, requires packing of extra bag for work, if something comes up at work is de-railed from going, gym is too busy and requires travel there and back sucking up time***

Class Exercise

- What is Adam's problem?
- When does it happen and where?
- Who are the people like Adam?
- What impact does the problem have on Adam?
- What current solutions are available to Adam?
- What are the problems with the current solutions?

<p>Context</p> <p>When does the problem occur?</p> <p>Every weekday during the mornings and evenings,</p>	<p>Problem</p> <p>What is the root cause of the problem?</p> <p>Is unable to find the time to exercise due to work and family time constraints</p>	<p>Alternatives</p> <p>What do customers do now to fix the problem?</p> <p>Joins the gym and goes at lunchtime</p>
<p>Customers</p> <p>Who has the problem most often?</p> <p>Adam who is male, 34 and lives with his wife and kids in suburban bristol</p>	<p>Emotional Impact</p> <p>How does the customer feel?</p> <p>Feeling frustrated and groggy</p> <p>Quantifiable Impact</p> <p>Measurable impact (use units)</p> <p>Regular dips in energy</p>	<p>Alternative Shortcomings</p> <p>What are the disadvantages of the alternatives?</p> <p>Too many barriers for entry, the gym costs money, requires packing of extra bag for work, if something comes up at work is de-railed from going, gym is too busy and requires travel there and back sucking up time</p>

Some additional examples

It is hard to pick the right elective courses...

THE PROBLEM STATEMENT CANVAS

STARTUP NAME Free Electives

DATE 2/1/23

VERSION 1

CONTEXT <i>When does the problem occur?</i> UIUC students must fulfill several elective requirements to graduate. They must choose these classes from a very large catalogue.	PROBLEM <i>What is the root cause of the problem?</i> There is a vast selection of elective courses, and it is difficult to find information about these classes and decide whether taking them will be personally valuable experiences.	ALTERNATIVES <i>What do customers do now to fix the problem?</i> Students ask each other about their experiences either in person or on messaging platforms like Reddit.
CUSTOMERS <i>Who has the problem most often?</i> Undergraduate UIUC students	EMOTIONAL IMPACT <i>How does the customer feel?</i> Overwhelmed, uninformed, unsure QUANTIFIABLE IMPACT <i>What is the measurable impact? (include units)</i> Number of students who have enrolled in some number of elective courses at UIUC	ALTERNATIVE SHORTCOMINGS <i>What are the disadvantages of the alternatives?</i> Not everyone has access to testimonials from other students and there is not an organized way to share these testimonials. Online discussion boards are not organized in a way that caters to UIUC students who are trying to

It is hard to find good internships/jobs...

THE PROBLEM STATEMENT CANVAS

STARTUP NAME Eric Business

DATE

2/5/2023

VERSION

1

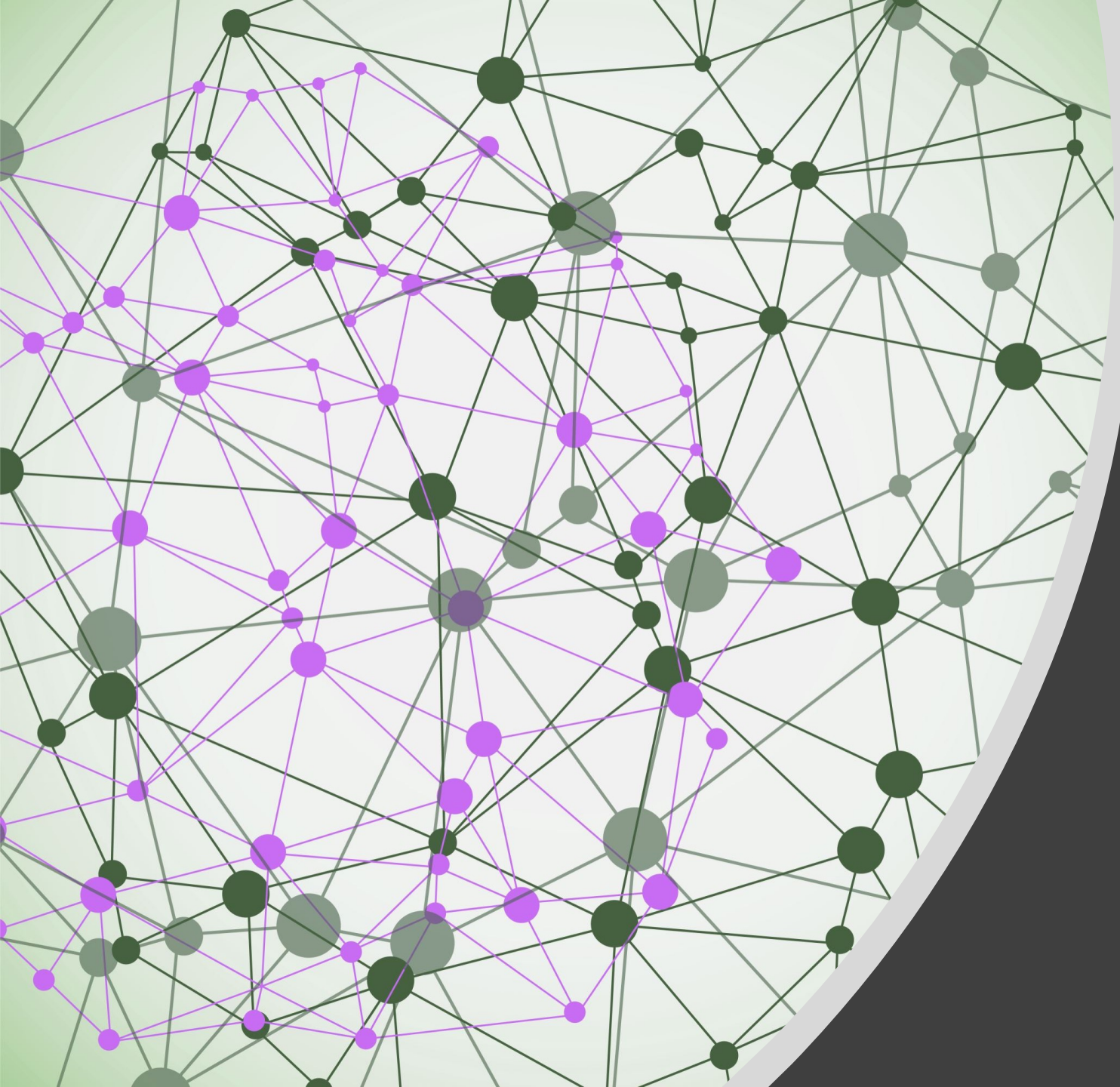
CONTEXT <small>When does the problem occur?</small> When the students are entering the last few years of their education.	PROBLEM <small>What is the root cause of the problem?</small> Not having enough resources beyond a few Google searches, YouTube videos, and Web articles for the job or the position that they are looking for.	ALTERNATIVES <small>What do customers do now to fix the problem?</small> Search and find connection to some professionals on LinkedIn and hope for them to respond.
CUSTOMERS <small>Who has the problem most often?</small> High School and College students (from the age 16 to 26) who are looking for internship and job opportunities.	EMOTIONAL IMPACT <small>How does the customer feel?</small> Ignorant and frustrating QUANTIFIABLE IMPACT <small>What is the measurable impact? (include units)</small> 1/5 of recent grads couldn't find jobs related to their major according to resumebuilder.	ALTERNATIVE SHORTCOMINGS <small>What are the disadvantages of the alternatives?</small> The professionals on LinkedIn were unlikely to reply it back mostly because they don't know you or you (the students) aren't offering any value to them.

Student mental health is a problem...

Mental health programs for college students lack customized self help options for acute lows.

STARTUP NAME Cognify
DATE 2/6/2023
VERSION 1

CONTEXT When does the problem occur? Acute lows in college students can commonly develop in daily situations of constant assessment. Acute lows are also produced by random situations, such as illness or unfortunate news, so it is a constant behavioral problem that students must face.	PROBLEM What is the root cause of the problem? There are several outlets for professional guidance towards serious mental health situations. However, there lacks programs for students who are looking for solutions to their less consequential problems regarding mental health (acute lows).	ALTERNATIVES What do customers do now to fix the problem? Students may seek out academic counselors for mental health stability. These programs are often over-booked which does not provide relief for those who would benefit from quick assistance. Those outcompeted in the scheduling dilemma may be charged expensive costs to find a professional therapist. Ultimately, with regards to acute lows, the before mentioned struggle of finding mental health guidance may deter students facing common problems from obtaining professional guidance, turn students toward ignoring their lows rather than facing them altogether.
CUSTOMERS Who has the problem most often? Everyone faces acute lows, and it is common that these are pushed aside, rather than emotionally investigated. However, our product is specifically integrated for college students. They're constantly being assessed, which promptly notifies an individual of their shortcomings and mistakes. This is why college students are a large part of our future consumer.	EMOTIONAL IMPACT How does the customer feel? Frustrated or Alone QUANTIFIABLE IMPACT What is the measurable impact? (include units) We can measure app activity, to see how students are utilizing self-help tools. With integrated user-feedback, we can measure improvements in mood.	ALTERNATIVE SHORTCOMINGS What are the disadvantages of the alternatives? There is a large market already established in mental health services. Our group does not contain any professional therapists, or psychologists. There exist applications that have sped up the process of finding emotional counseling, which could be direct competition. If all else, it may signify that our brand would have to integrate with professional guidance scheduling. The main part of our app should include self-help instruction, however, I'd feel like we'd be underdeveloped as a therapeutic company if we didn't have some direct connection to psychological counseling within the app.



Business Model Canvas

“A startup is a Temporary organization
designed
to *search* for a *repeatable & scalable*
business model.”



Your Business Model Is Your Destiny!

fea·si·bil·i·ty

/can our startup build it?/

Infrastructure

Key Activities
Key Resources
Key Partners

de·sir·a·bil·i·ty

/do the customers want this?/

Product - Market

Customer Segments
Value Proposition
Channels
Customer Relationships

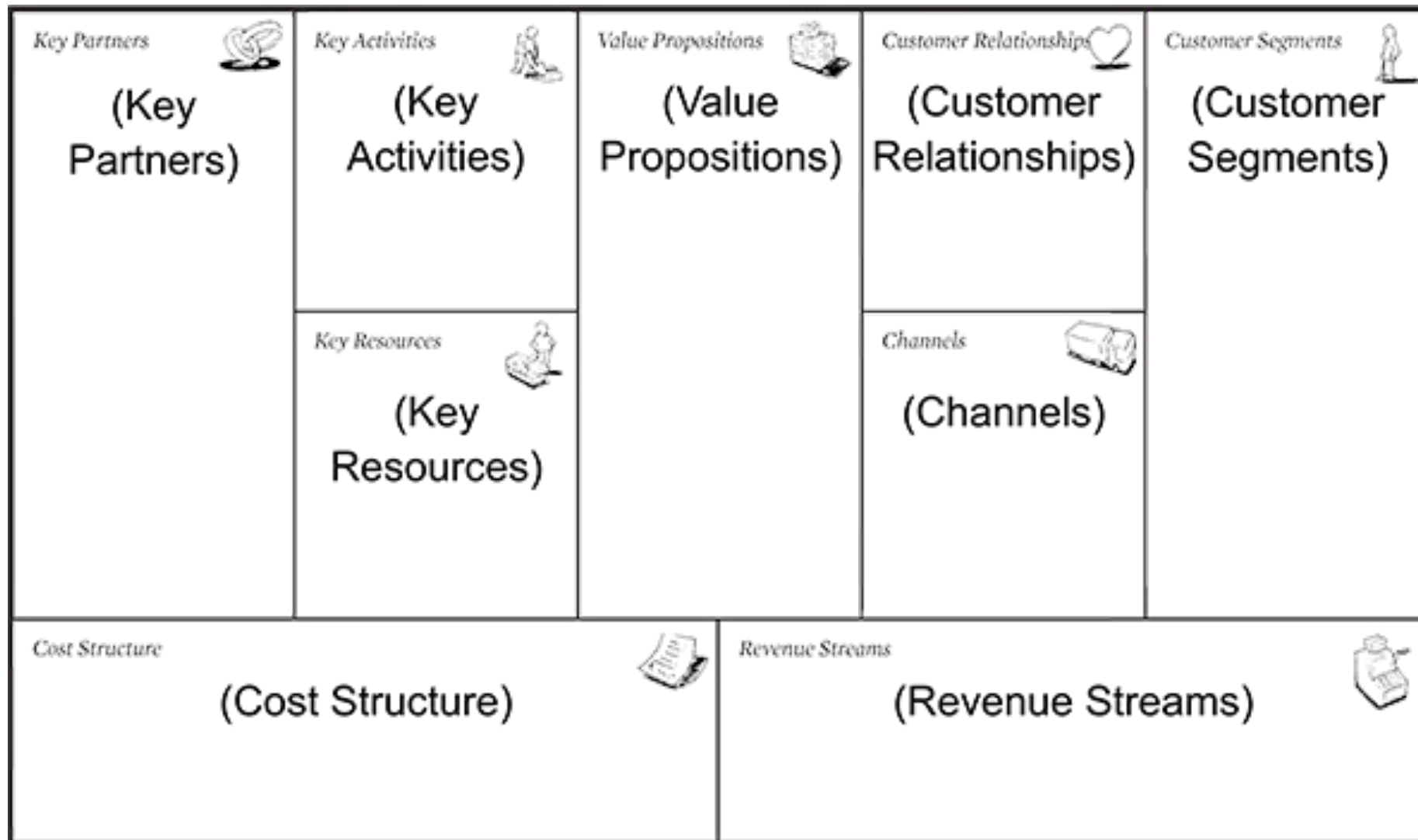
vi·a·bil·i·ty

/can we build a sustainable business?/

Economics

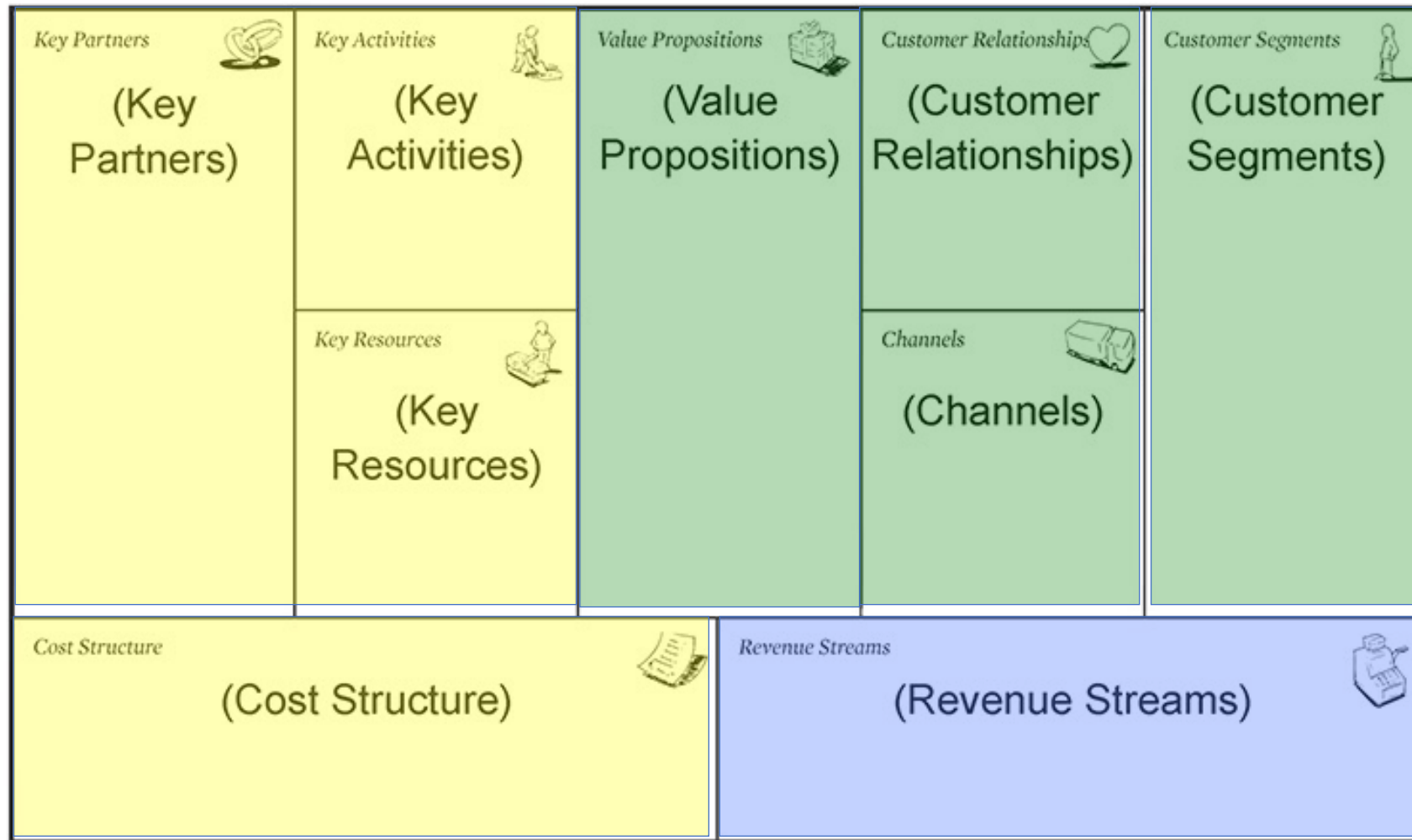
Revenue Streams
Cost Structures

Business model canvas



Week 1

Business model canvas



www.businessmodelgeneration.com

The templates here are made available on the same CC license terms as the original canvas.

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zara



Follow

Message



4,224 posts

58.8M followers

107 following

ZARA Official

For Man collection check @zaraman

Kids collection @zarakids

Discover woman collection

go.zara/newin

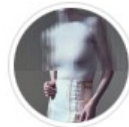
New In



beauty



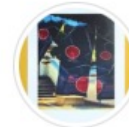
lingerie



atelier



zara srpls



zaraxwallpa...



zara origins

POSTS

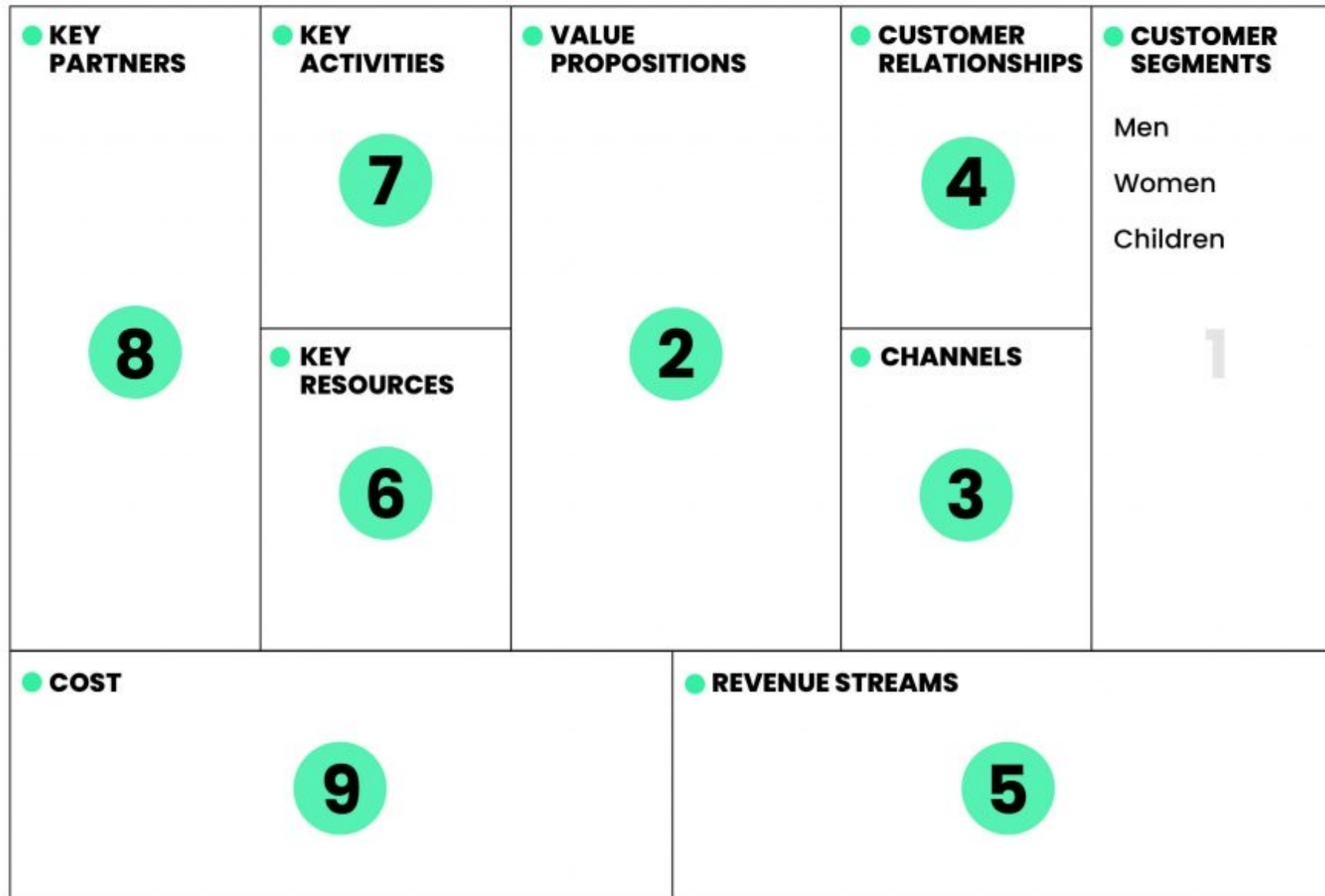
REELS

GUIDES

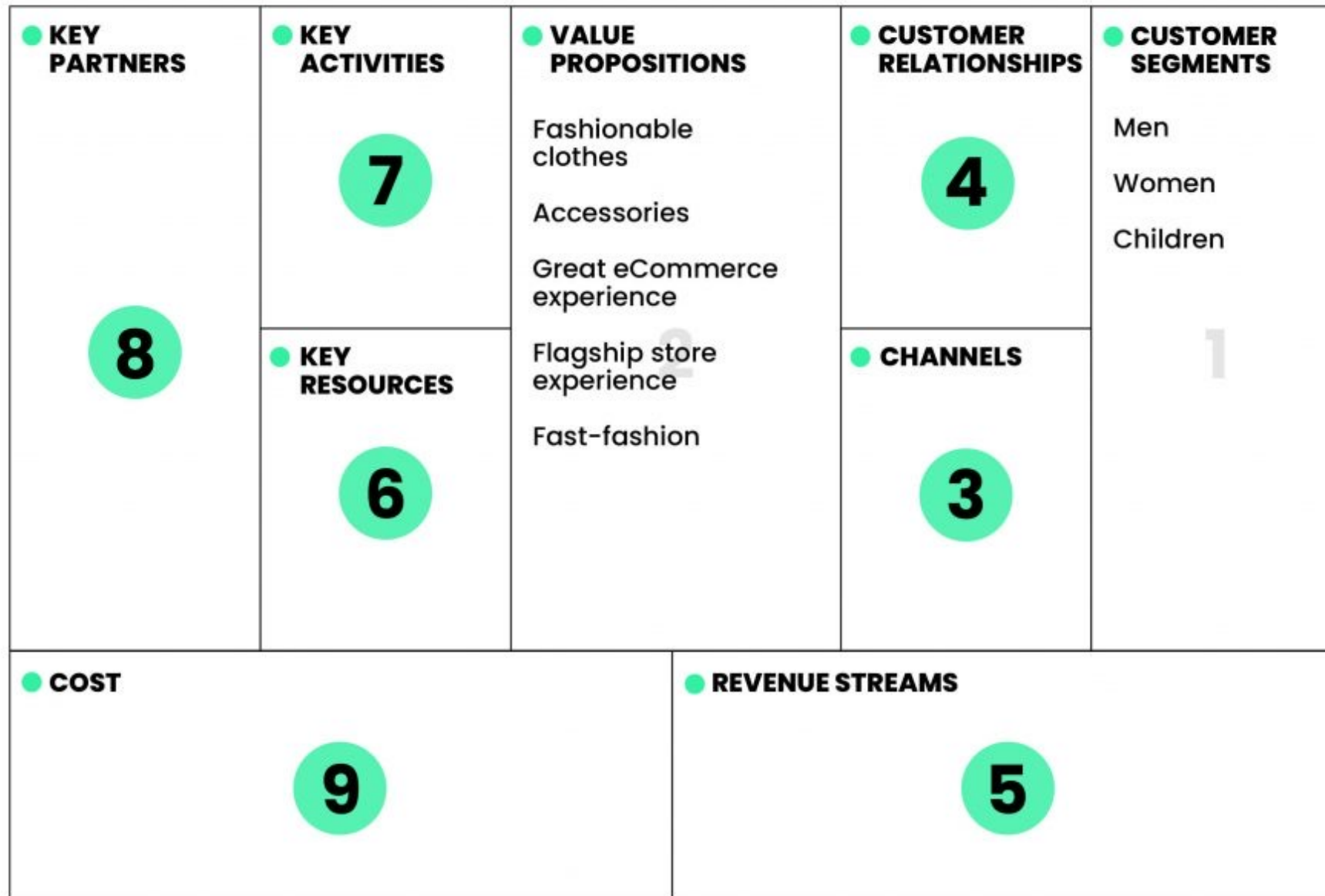
TAGGED



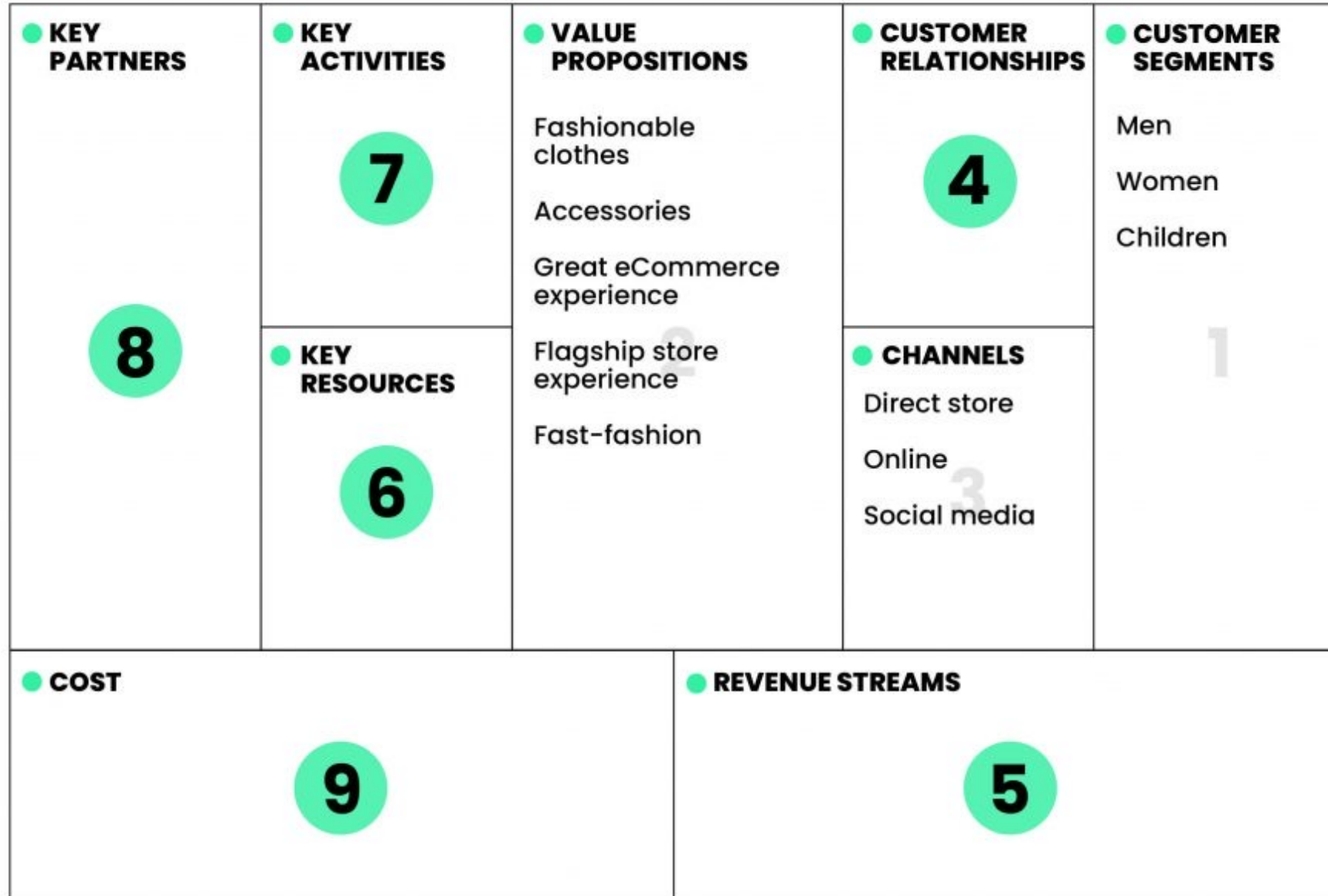
| BUSINESS MODEL CANVAS - ZARA



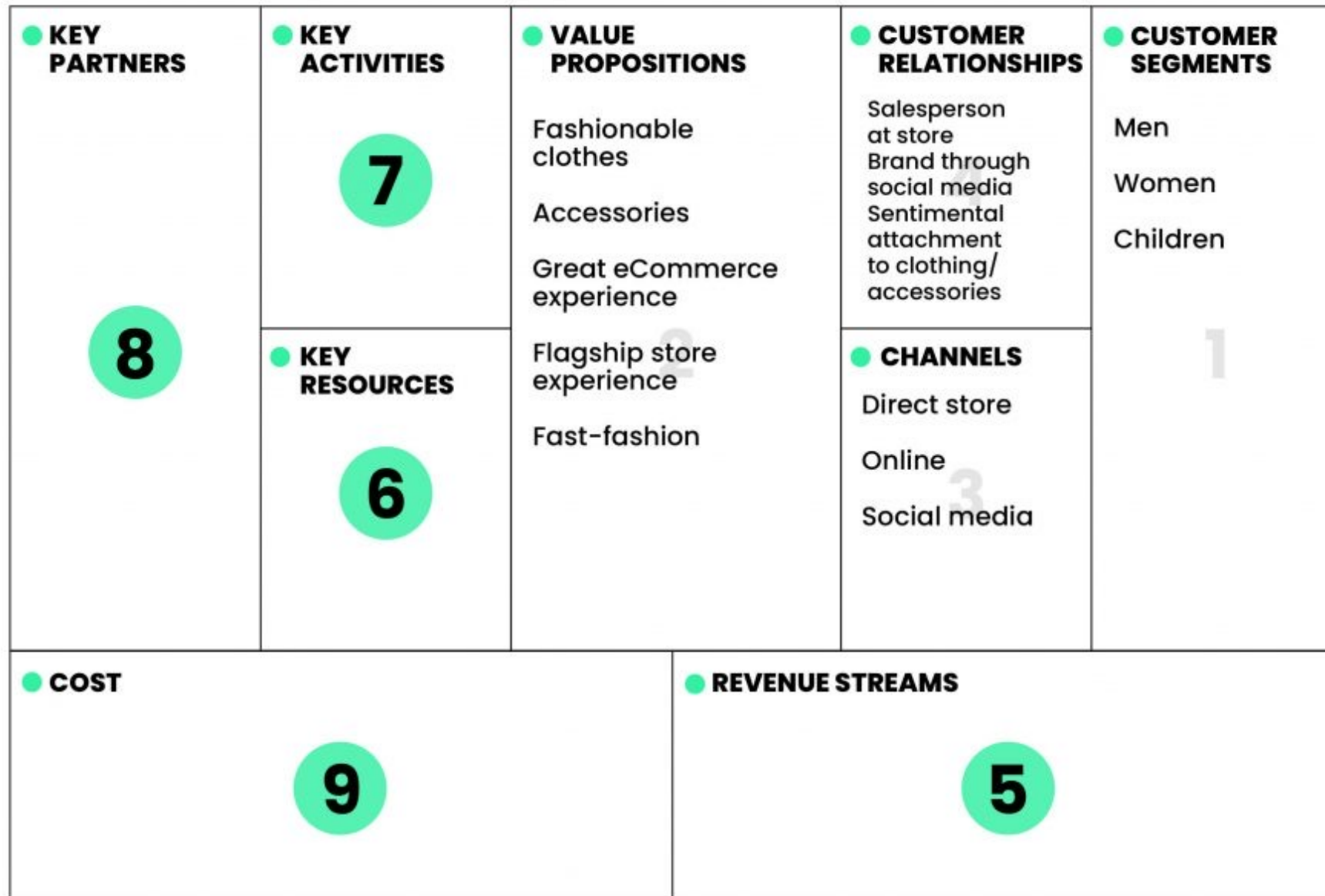
| BUSINESS MODEL CANVAS - ZARA



| BUSINESS MODEL CANVAS - ZARA



| BUSINESS MODEL CANVAS - ZARA



| BUSINESS MODEL CANVAS - ZARA

<p>● KEY PARTNERS</p> <p>Providers</p> <p>Holding company (Inditex)</p> <p>8</p>	<p>● KEY ACTIVITIES</p> <p>Design Manufacturing Retail process (point of sale & 3rd party management) Distribution channels and logistics</p> <p>● KEY RESOURCES</p> <p>Stock</p> <p>Large network of stores</p> <p>Strong brand Logistics and supply chain infrastructure</p> <p>8</p>	<p>● VALUE PROPOSITIONS</p> <p>Fashionable clothes</p> <p>Accessories</p> <p>Great eCommerce experience</p> <p>Flagship store experience</p> <p>Fast-fashion</p> <p>2</p>	<p>● CUSTOMER RELATIONSHIPS</p> <p>Salesperson at store Brand through social media Sentimental attachment to clothing/accessories</p> <p>● CHANNELS</p> <p>Direct store</p> <p>Online</p> <p>Social media</p> <p>3</p>	<p>● CUSTOMER SEGMENTS</p> <p>Men</p> <p>Women</p> <p>Children</p> <p>1</p>
<p>● COST</p> <p>Fixed (rent, payroll, etc.) Variables associated with sale of goods</p> <p>9</p>		<p>● REVENUE STREAMS</p> <p>Sales of clothing and accessories</p> <p>5</p>		

MoviePass

<https://slidemodel.com/business-model-canvas/>



Key Partners



Movie Theatre Chains

Curriers

Payment Processors

Key Activities



Connect audience to theatres

Key Resources



Digital Outreach

Bulk Ticket Deals

Value Proposition



For Customers:
Daily tickets for monthly fee

For Theatres:
Increased Attendance

Increased audience for adverts.

Sales in goods (popcorn, etc.)

Customer Relationships



Website
Social Media
Theatre Adverts

Channels



Online Sales
Box Office

Customer Segments



Movie Goers

Families with Limited Income

Teenagers Groups

Cost Structure



Website Dev

Tickets to Theatres

Customer Acquisition

Revenue Streams



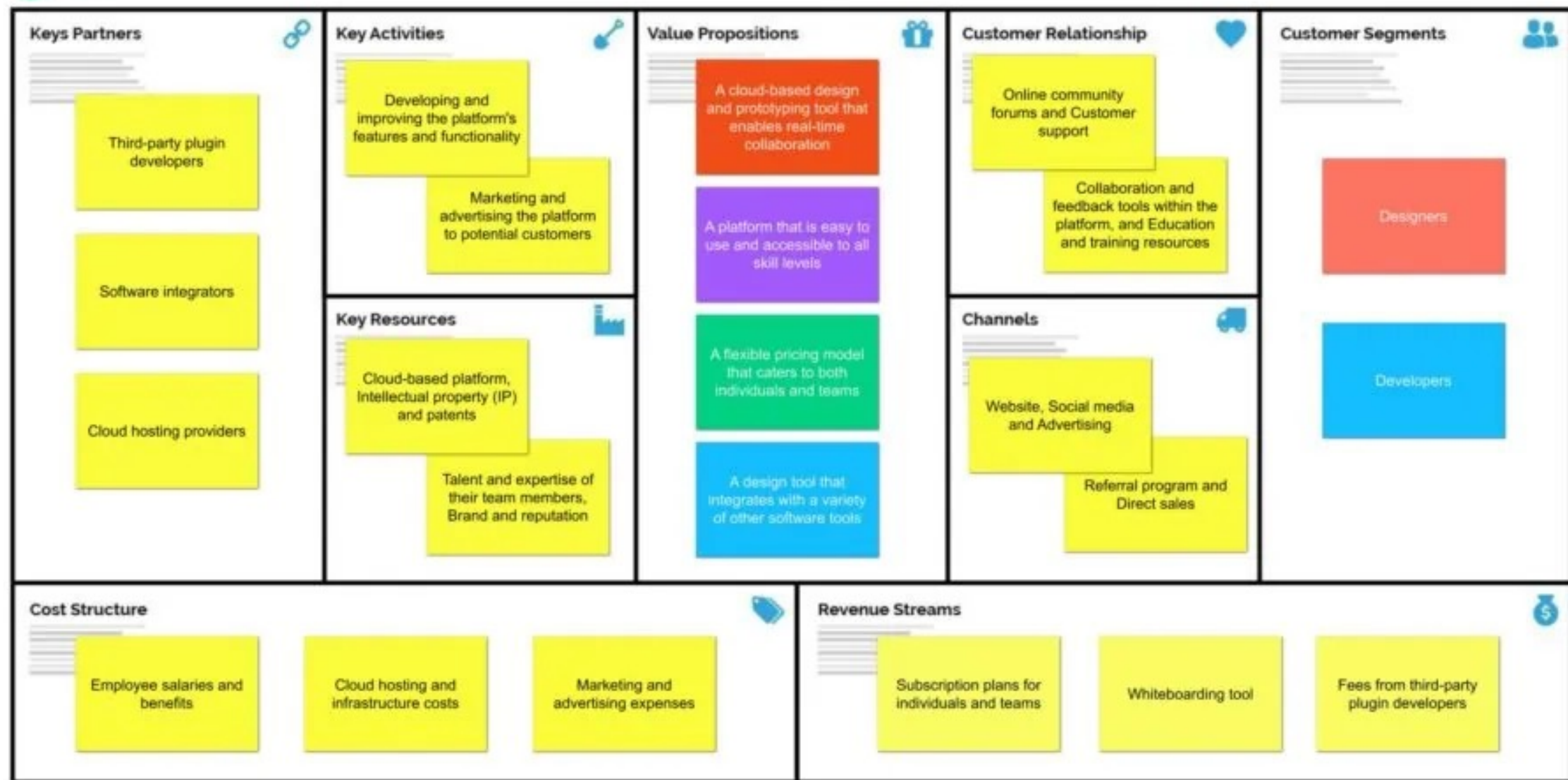
Monthly Memberships

Figma

Collaborative design tool that allows users to create and edit designs in real time.

<https://businessmodelanalyst.com/figma-business-model/>

Figma - Business Model Canvas



Wrapping up Week 3

- **Team Assignment:** Meet outside of class to fill out the Problem Statement Canvas for the problem you selected in the Breakout today.
- **Each student individually** use the problem statement canvas to assess the problem the startup you have been assigned is attempting to solve. (NOT A TEAM ASSIGNMENT!)
- Do reading/viewing for next week.

Week 3

Breakout:

Select top problem statement



Breakout instructions

- Discuss the top three problem statements you agreed on last week.
- After thinking about it for a week, would you like to made edits to how you describe the top 3?
- Decide how you will determine the final problem statement.
- Select the final problem statement.