

# The Hackers Toolkit

---

Brought to you by **Prescribe Design Boston**  
and the broader design community

# Purpose

A “minimum viable product” framework for rapidly solving problems and turning ideas into compelling business models.

# Contents

This guide contains the following,  
ready to use tools, templates and frameworks

---

<i>Discover</i>	<i>Design</i>	<i>Prototype</i>	<i>Pitch</i>
UNDERSTAND THE CUSTOMER	DIVERGENT THINKING	DEVELOP THE BUSINESS MODEL	PITCH YOUR IDEA
<i>Empathy Mapping</i> 5	<i>Orthodoxy Challenge</i> 10	<i>Business Model Canvas</i> 17	<i>Pitch Deck Do's</i> 21
<i>Journey Mapping</i> 6		<i>Product Feature Tree</i> 18	<i>Pitch Deck Dont's</i> 22
DEFINE THE PROBLEM	CONVERGENT THINKING	TEST THE SOLUTION	
<i>Point of View Template</i> 7	<i>BJ Foggs Behavioral Change Model</i> 11	<i>Seven Questions to Assess Your Business Model Design</i> 19	
<i>"How Might We..." Template</i> 8	<i>The Elements of Value Pyramid</i> 12		
	<i>10 Types of Innovation</i> 13		
	<i>Value Proposition Canvas &amp; Template</i> 14,15		

# *Discover*

UNDERSTAND THE CUSTOMER

*Empathy Mapping* 5

*Journey Mapping* 6

DEFINE THE PROBLEM

*Point of View Template* 7

*“How Might We...” Template* 8

# Empathy Mapping

The first step in understanding the problem, is articulating what we know about a particular type of user. Empathy mapping externalizes knowledge about users in order to 1) create a shared understanding of user needs, and 2) aid in decision making.

The diagram is a central circle with six lines radiating outwards to different sections. The central circle contains the text: "Image", "Name", and "Demographics". The six sections are: "Tasks" (top), "Influences" (top-right), "Overall Goal" (bottom-right), "Pain Points" (bottom-left), "Emotions" (left), and "Stakeholder Questions" (right, in a large box). Each section has a title and a set of guiding questions.

**Tasks**  
What tasks is this person trying to complete?  
What questions do they need answered?

**Emotions**  
How is this person feeling about their experience?  
What really matters to them?

**Influences**  
What people, things or places may influence how the person acts?

**Overall Goal**  
What is this person ultimate goal?  
What are they trying to achieve?

**Pain Points**  
What pain points might this person be experiencing that they hope to overcome?  
What are their perceived barriers?


**Stakeholder Questions:**  
What do you not yet know about your customers / stakeholders?

This customer needs a better way to: \_\_\_\_\_  
because: \_\_\_\_\_



# Journey Mapping

Map your customer's journey to understand their pain points build a set of touchpoints that improve the customer's experience.

BUYER PERSONA						
 Name	Demographics	Professional Role	Buying Decisions	Resources and Influences	Values and Goals	Challenges
BUYER'S JOURNEY						
	Awareness	Engagement	Evaluation	Purchase	Post-Purchase	
Actions						
Questions and Thoughts						
Touchpoints						
Opportunities						



# *Point of View Template*

Synthesize users research findings into insights that inform your solution.

User	Need	Insight



INTERACTION DESIGN  
FOUNDATION

INTERACTION-DESIGN.ORG

# ***“How Might We...” Template***

For an idea to be relevant, we need to understand the problem it is attempting to solve.  
How Might We (HMW) Questions recognise the potential in user problems to highlight a plethora of potential opportunities.

**How might we**

\_\_\_\_\_

action

\_\_\_\_\_

what

**for**

\_\_\_\_\_

customer

**in order to**

\_\_\_\_\_

what change?





# *Design*

## DIVERGENT THINKING

*Orthodoxy Challenge 10*

## CONVERGENT THINKING

*BJ Foggs Behavioral Change Model 11*

*The Elements of Value Pyramid 12*

*10 Types of Innovation 13*

*Value Proposition Canvas & Template 14,15*

# Orthodoxy Challenge

Orthodoxies are deeply held beliefs about what drives success in a company or industry. If left unchallenged these beliefs can blind us to new opportunities. Breakdown your own orthodoxies by imagining your company was bought by a successful company in a different industry.

---

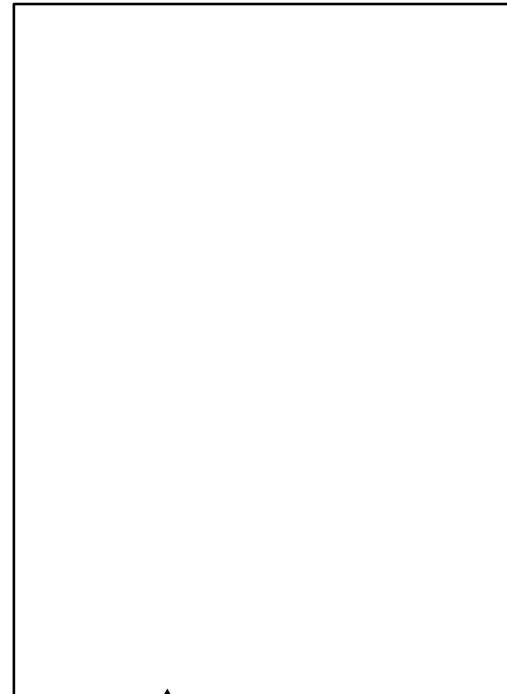
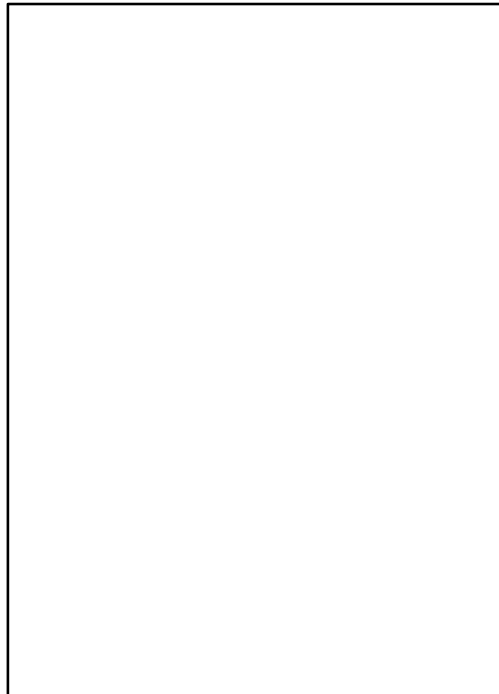
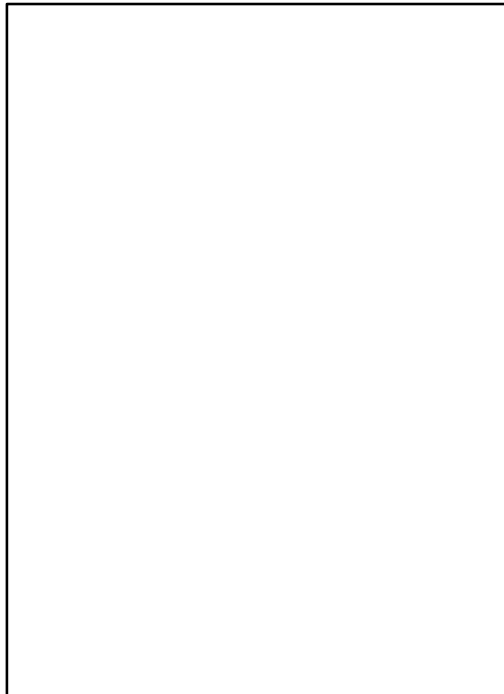
Yesterday your company was acquired by (circle one):  
Apple / Google / Southwest airlines / other:

---

What would they change? Consider strategy, business model, target customers, values, offerings, structure, and process.

Why would they make these changes?

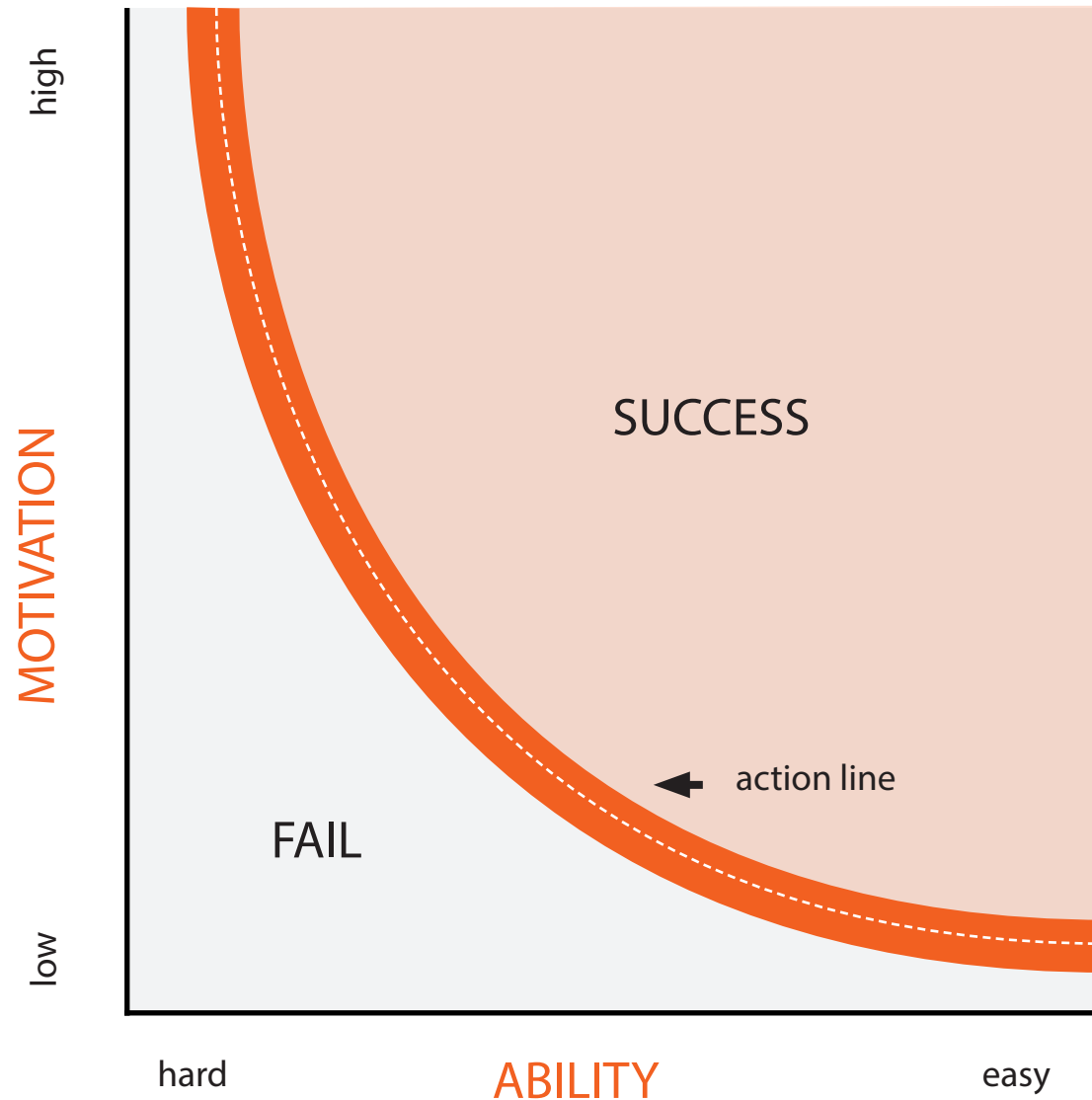
What rules / beliefs / policies / misconceptions were responsible for us acting in this way?



↑ These are your orthodoxies; circle the ones you think can / should be challenged

# *BJ Foggs Behavioral Change Model*

Three elements must converge at the same moment for behavior to occur: motivation, ability and trigger. When a desired behavior does not occur, one of these is missing.



# The Elements of Value Pyramid

What kind of value am I trying to provide?

The Harvard Review study shows that the higher the elements you choose and deliver, the faster you'll be able to grow and have profit. But it's important to understand that to be able to deliver on these higher-order elements, you first need to have a strong foundation and provide at least some of the functional elements.

## SOCIAL IMPACT



Self-transcendence

## LIFE CHANGING



Provides hope



Self-actualization



Motivation



Heirloom



Affiliation/belonging

## EMOTIONAL



Reduces anxiety



Rewards me



Nostalgia



Design/aesthetics



Badge value



Wellness



Therapeutic value



Fun/entertainment



Attractiveness



Provides access

## FUNCTIONAL



Saves time



Simplifies



Makes money



Reduces risk



Organizes



Integrates



Connects



Reduces effort



Avoids hassles



Reduces cost



Quality



Variety



Sensory appeal



Informs

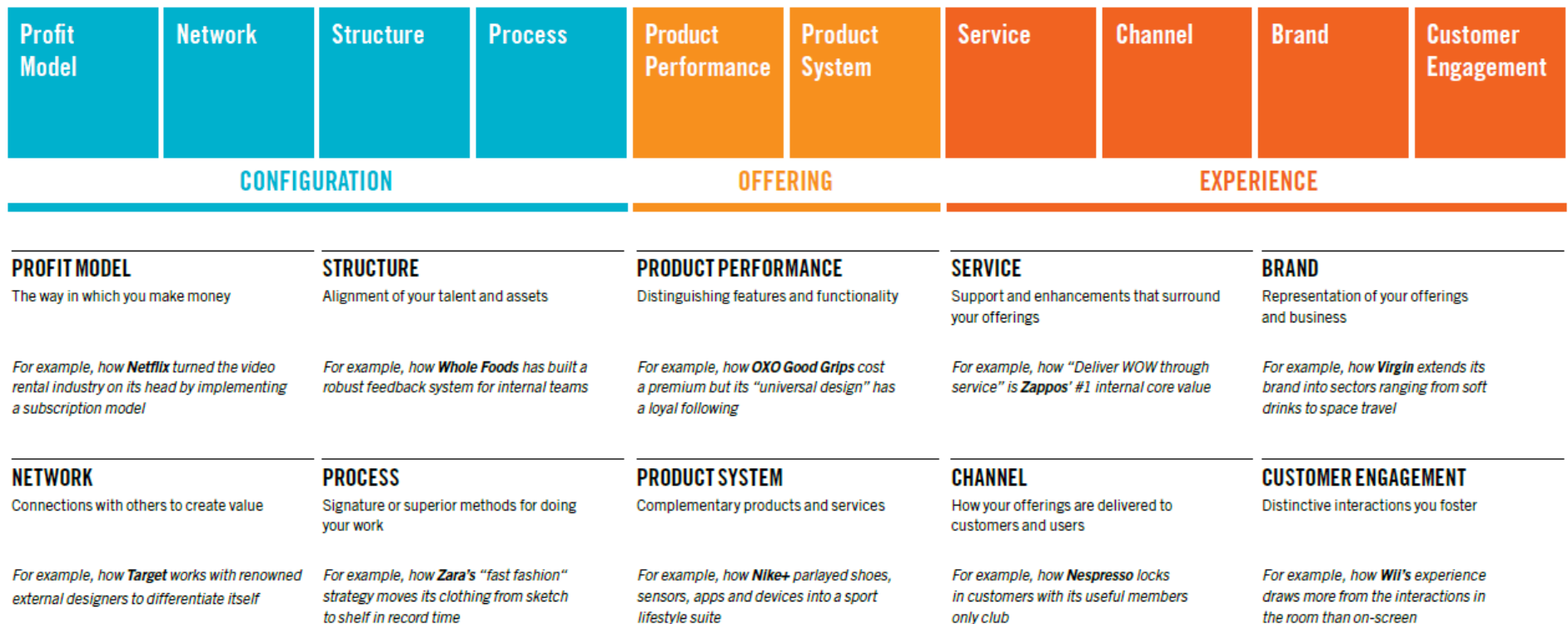
<https://hbr.org/2016/09/the-elements-of-value>

SOURCE © 2015 BAIN & COMPANY INC.  
FROM "THE ELEMENTS OF VALUE," SEPTEMBER 2016

© HBR.ORG

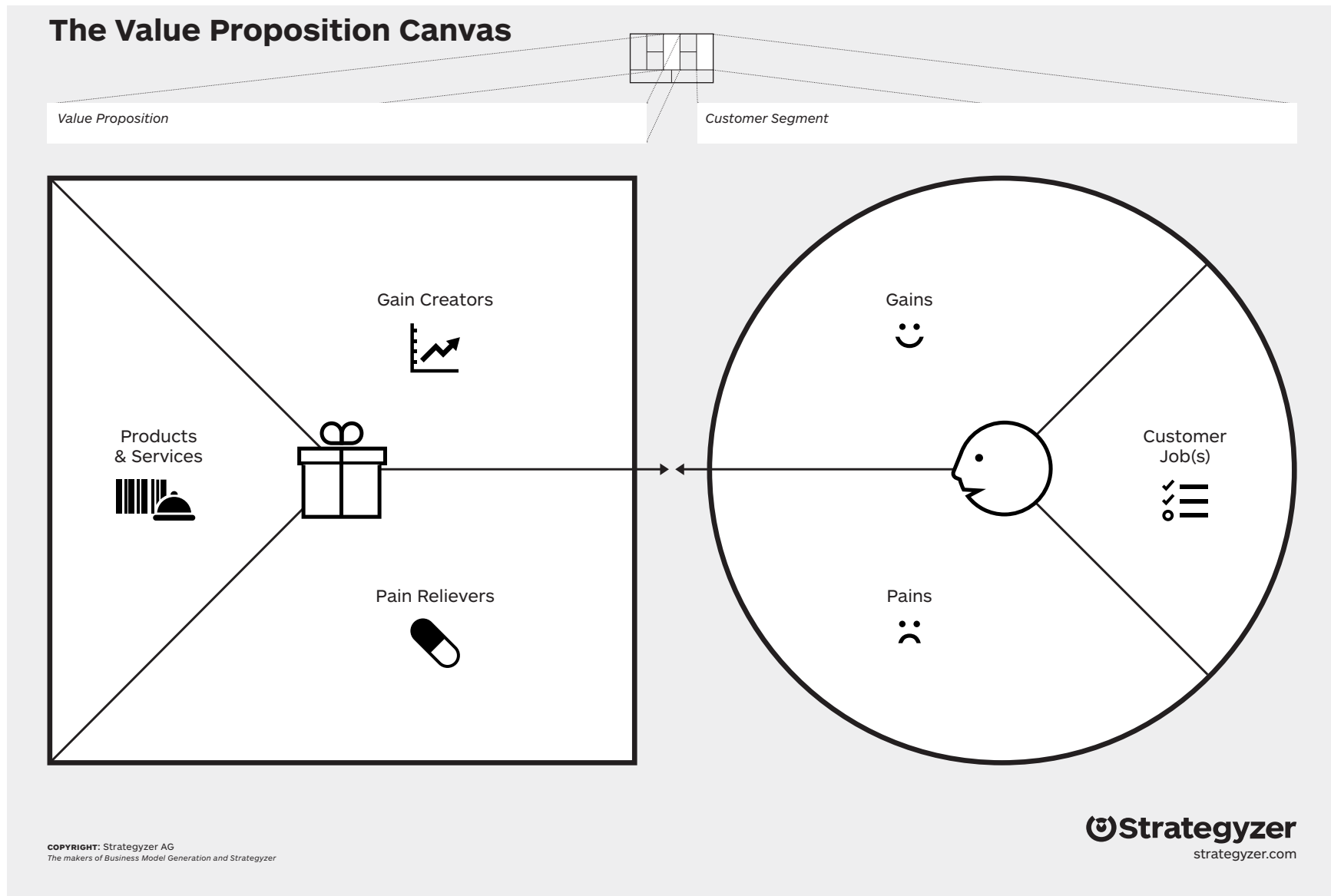
# 10 Types of Innovation

Creating new products is only one way to innovate, and on its own, it provides the lowest return on investment and the least competitive advantage. The Ten Types of Innovation® framework provides a way to identify new opportunities beyond products and develop viable innovations.




# Value Proposition Canvas


The Value Proposition Canvas is a tool which can help ensure that a product or service is positioned around what the customer values and needs. It is a detailed look at the relationship between two parts of the Osterwalder's broader Business Model Canvas; customer segments and value propositions.




# Value Proposition Template



Ad-libs are a great way to quickly shape alternative directions for your value proposition. They force you to pinpoint how exactly you are going to creating value. Prototype three to five different directions by filling out the blanks in the ad-lib below



**Our** \_\_\_\_\_  
 *Products and Services*


**help(s)** \_\_\_\_\_  
 *Customer Segment*

**who want to** \_\_\_\_\_

\_\_\_\_\_  *jobs to be done*

**by** \_\_\_\_\_  
 *verb (e.g., reducing, avoiding)* \_\_\_\_\_  
 *and a customer pain*

**and** \_\_\_\_\_  
 *verb (e.g., increasing, enabling)* \_\_\_\_\_  
 *and a customer gain*

**(unlike** \_\_\_\_\_ **)**  
 *competing value proposition*

# *Prototype*

## DEVELOP THE BUSINESS MODEL

*Business Model Canvas 17*

*Product Feature Tree 18*

## TEST THE SOLUTION










*Seven Questions to Assess Your*


*Business Model Design 19*



# Business Model Canvas


A quick way to experiment with and defining a business idea or concept. It is a one page document which works through the fundamental elements of a business or product, structuring an idea in a coherent way.

The Business Model Canvas		Designed for:	Designed by:	Date:	Version:
Key Partners 	Key Activities 	Value Propositions 	Customer Relationships 	Customer Segments 	
	Key Resources 		Channels 		
Cost Structure 		Revenue Streams 			



DESIGNED BY: Strategyzer AG  
The makers of Business Model Generation and Strategyzer

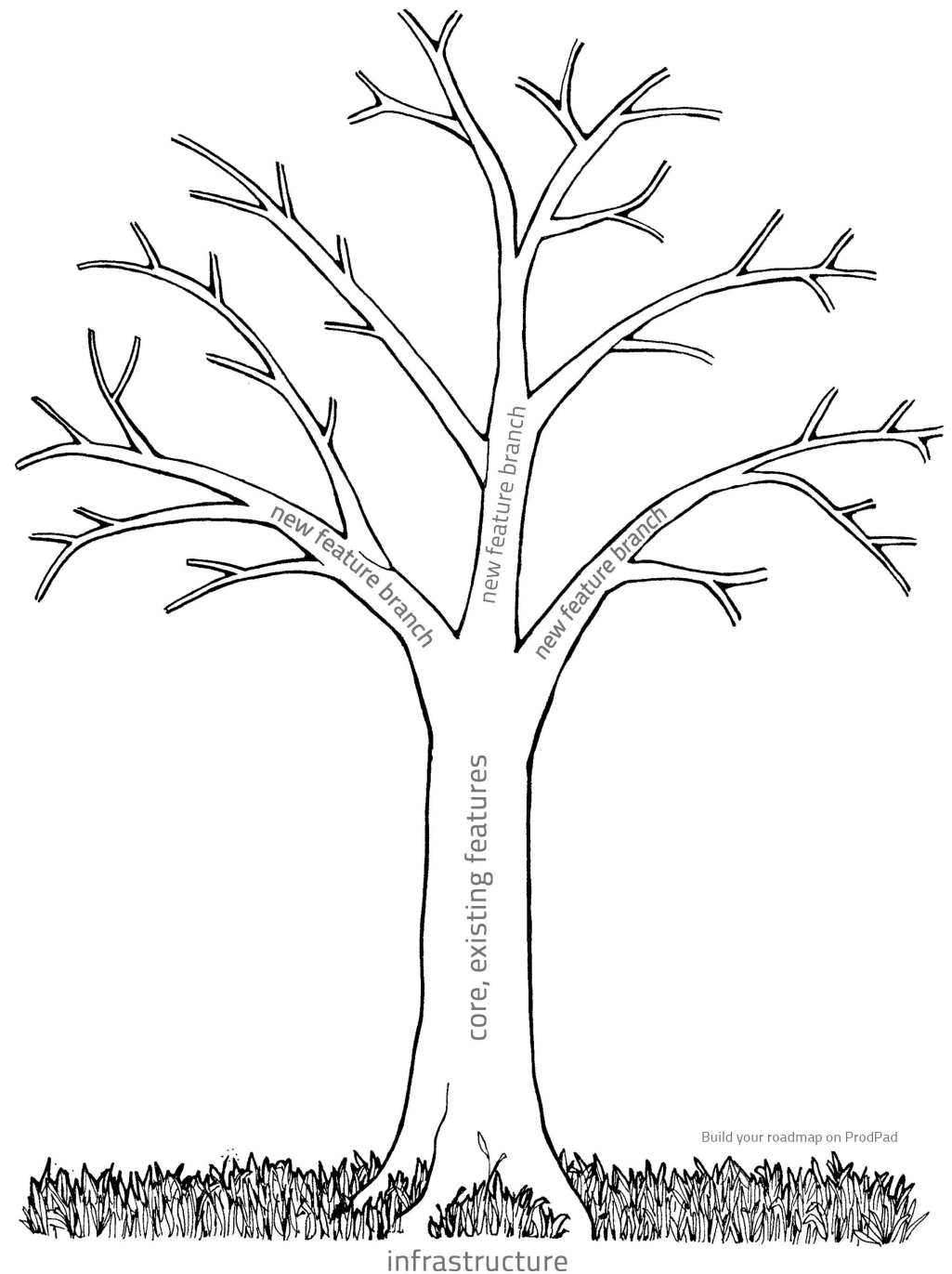
This work is licensed under the Creative Commons Attribution-Share Alike 3.0 Unported License. To view a copy of this license, visit: <http://creativecommons.org/licenses/by-sa/3.0/> or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA.



**Strategyzer**  
strategyzer.com

# Product Feature Tree

Using the metaphor of a gardener pruning a tree, this exercise helps teams to map out the minimum viable product offerings by determining which features are critical infrastructure and core features versus those that may be added to the product overtime. This game can be played as an internal team to develop feature or with end-users as a means of gathering feedback.



# Seven Questions to Assess Your Business Model Design

Assess your business model design, circle how to perform on a scale of 0 - 10.

	<b>1. Switching Costs</b> 0 ————— 10 Nothing holds my customers back from leaving me My customers are locked in for several years
	<b>2. Recurring Revenues</b> 0 ————— 10 100% of my sales are transactional 100% of my sales lead to automatically recurring revenues
	<b>3. Earning vs. Spending</b> 0 ————— 10 I incur 100% of my costs of COGs before earning revenues I earn 100% of my revenues before incurring costs of goods & services sold (COGs)
	<b>4. Game-changing Cost Structure</b> 0 ————— 10 My cost structure is at least 30% higher than my competitors My cost structure is at least 30% lower than my competitors
	<b>5. Others Who Do the Work</b> 0 ————— 10 I incur costs for all the value created in my business model All the value created in my business model is created for free by external parties
	<b>6. Scalability</b> 0 ————— 10 Growing my business model requires substantial resources and effort My business model has virtually no limits to growth
	<b>7. Protection from Competition</b> 0 ————— 10 My business model has no moats, and I'm vulnerable to competition. My business model provides substantial moats that are hard to overcome

# *Pitch*

PITCH YOUR IDEA

*Pitch Deck Do's 21*

*Pitch Deck Dont's 22*

# Pitch Deck Do's

## 1. TELL A STORY & ENGAGE PEOPLE EMOTIONALLY

Everyone loves to hear stories, even the investors. So tell an exciting story about your startup.



## 2. LIMIT EACH SLIDE TO EXPRESSING ONE IDEA

You want to keep your entire audience on the same page



## 3. PREPARE TO MAKE A GREAT FIRST IMPRESSION

First impressions are powerful. Believe it. The first 2-3 minutes are the most important

## 4. SHOW THE PEOPLE BEHIND YOUR IDEA

Focus on a significant, relevant accomplishment for each person in a team that identifies that person as a winner



## 5. KEEP A CONSISTENT LOOK IN PRESENTATION

Use the same font, size, color and capitalization format across all slides of your investment pitch deck.



## 6. KNOW YOUR METRICS BETTER THAN ANYONE

Traction speaks louder than words.

# Pitch Deck Dont's

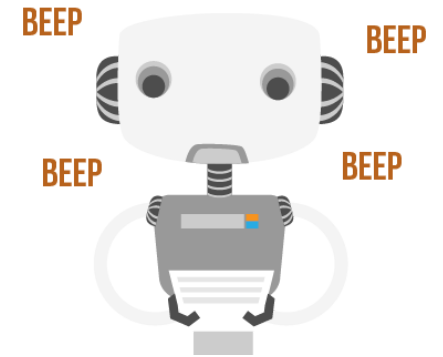
## 1. DON'T USE TOO MANY BULLET POINTS

Limit the bullets. Too many bullet points will kill a presentation.



## 2. DON'T MAKE IT TOO LONG

Average entrepreneur pitch: 38 slides. Average VC attention span/cranial capacity: 10 slides. Do



## 3. DON'T READ WORD BY WORD FROM YOUR SCRIPT.

You will sound like a robot and miss the all-important eye contact with the audience.

## 4. DON'T CREATE A TEXT-RICH, PICTURE-POOR PRESENTATION.

People cannot read and listen at the same time. Great visual inspire and engage people emotionally.



## 5. DON'T COME UNPREPARED

Try to anticipate the kinds of questions they might have and be prepared with answers.



## 6. DON'T USE SMALL FONTS

Always use a font large enough to be seen by all audience members. Use 32- to 44-point for titles and no smaller than 28-point for the text or bulleted items.