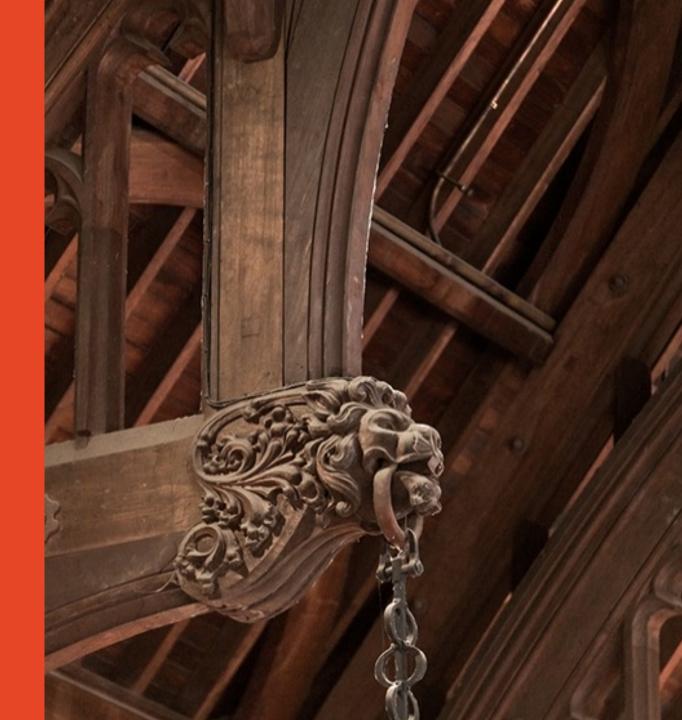
INFO4444 Computing 4 Innovation

Week 8: Commercialisation II

Dr. Anusha Withana School of Computer Science





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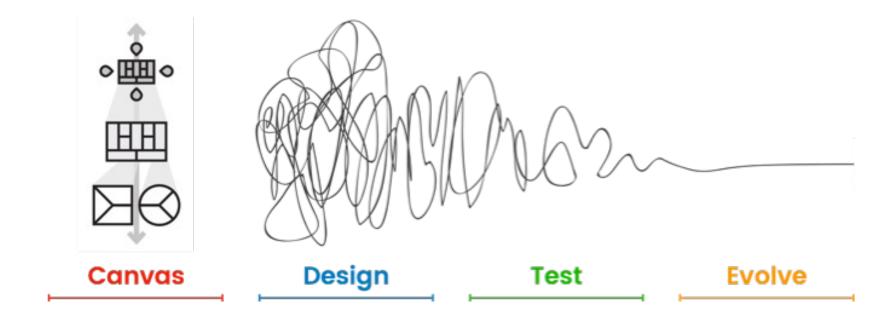
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Innovation Management



20,000 Feet View



- Business Model Canvas
- Value Proposition Canvas
- Value Proposition Pyramid

Lean Startup Methodology;

- Customer Development Process
- Agile Development

 Organisational Culture & Structures Supporting Innovation

Business Model Canvas

The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

Key Partners

Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquairing from partners? Which Key Activities do partners perform?

Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities

Key Activities

What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?

Key Resources

Physical Intellectual (brand patents, copyrights, data) Human Financial

What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships?

Value Propositions

What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?

Performance Customization "Getting the Job Done" Design Brand/Status Price Cost Reduction Risk Reduction Accessibility Convenience/Usability

Customer Relationships

What type of relationship does each of our Customer Segments expect us to establi and maintain with them? Which ones have we established? How are they integrated with the rest of our

How costly are they?

Dedicated Personal Assistance Self-Service Automated Services Communities

Customer Segments

For whom are we creating value?

Through which Channels do our Customer Segments want to be reached?

How are our Channels integrated? Which ones work best? Which ones are most cost-efficient?

Channels

How are we reaching them now?

How are we integrating them with customer routines?

CHANNEL PHANES

1. Americans

2. Evaluation
How do see help customers evaluate our company's products and services?
How do se help customers evaluate our organization's Value Proposition?
A Purchase
A polency
How do se deliver a Value Proposition to outstomers?

4. Deleviny
How do se deliver a Value Proposition to outstomers?

5. After sales
How do se provide post-purchase customer support?

Cost Structure

What are the most important costs inherent in our business model? Which Key Activities are most expensive?

is Your ausiness more
Cost Driven (Wanest structure, low price value proposition, maximum automation, extensive outsourcing)
Value Driven (focused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS
Fixed Costs (salaries, rents, utilities)
Variable costs
Economies of scale
Economies of scope

Revenue Streams

For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying?

How much does each Revenue Stream contribute to overall revenues?

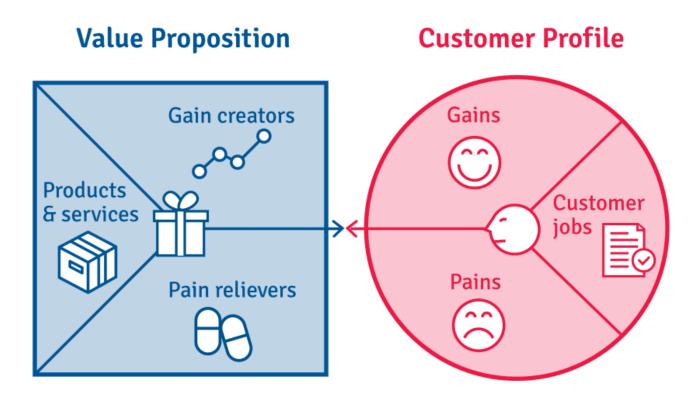








Value Proposition Canvas



SOCIAL IMPACT



Selftranscendence

LIFE CHANGING





Provides hope

actualization







Motivation

Heirloom

Affiliation/ belonging

EMOTIONAL











Reduces anxiety

Rewards

Nostalgia

Design/ aesthetics

Badge value













Wellness

Therapeutic

Fun/ entertainment

Attractiveness

Provides access

FUNCTIONAL















Saves time

Simplifies

hassles

Makes Reduces money

Organizes Integrates

Connects



Reduces effort





cost





Quality



Variety





appeal

Informs

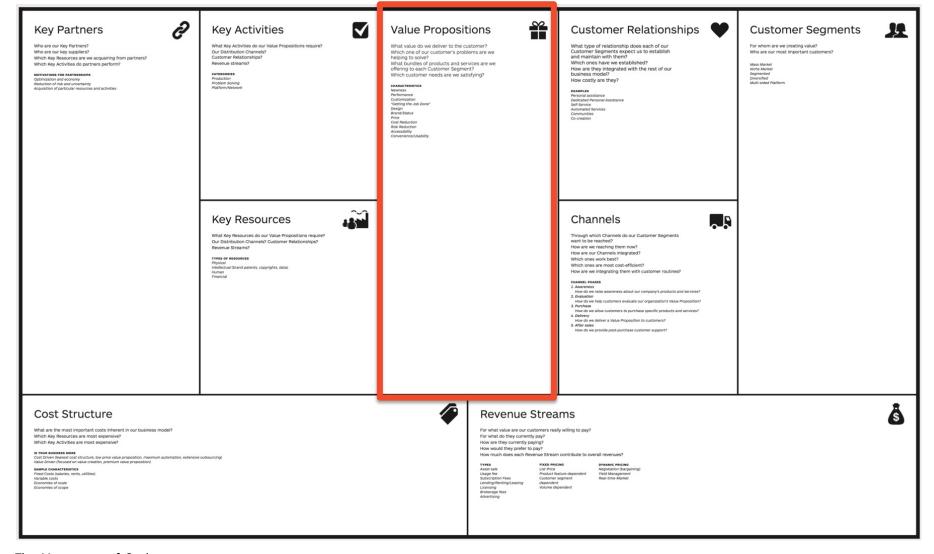
Value Proposition

Pyramid

Value Proposition Canvas

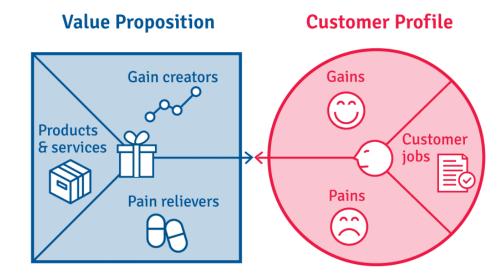


Part of the Business Model Canvas



Value Proposition Canvas

- To design and test great value propositions in an <u>iterative</u> search for what customers want
- To evolve your value proposition(s) constantly to keep it relevant to customers
- Two sides:
 - Customer Profile to clarify customer understanding
 - Value Map to create value for that customer
- Fit: when one meets the other



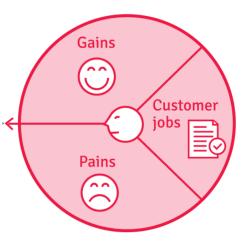
Customer Profile

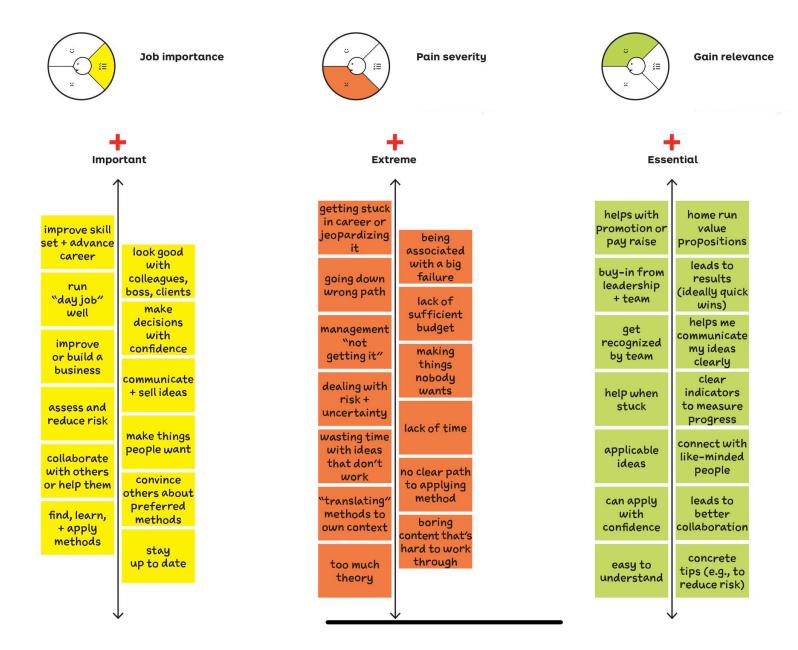


Customer Profile

- 1. Customer Jobs: what customers are trying to get done in their work and in their lives, as expressed in their own words
- 2. Gains: the outcomes customers want to achieve or the concrete benefits they are seeking
- 3. Pains: bad outcomes, risks and obstacles related to the customer jobs







Step into Your Customers' Shoes

OBJECTIVE

Visualize what matters to your customers in a shareable format

OUTCOME

One page actionable customer profile

Instructions

Map the profile of one of your currently existing customer segments to practice using the customer profile. If you are working on a new idea, sketch out the customer segment you intend to create value for.

- 1. Download the Customer Profile Canvas.
- 2. Grab a set of small sticky notes.
- 3. Map out your customer profile.



1

Select customer segment.

Select a customer segment that you want to profile.



2

Identify customer jobs.

Ask what tasks your customers are trying to complete. Map out all of their jobs by writing each one on an individual

sticky note.



3

Identify customer pains.

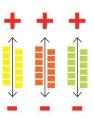
What pains do your customers have? Write down as many as you can come up with, including obstacles and risks.



4

Identify customer gains.

What outcomes and benefits do your customers want to achieve? Write down as many gains as you can come up with.



5

Prioritize jobs, pains, and gains.

Order jobs, pains, and gains in a column, each with the most important jobs, most extreme pains, and essential gains on top and the moderate pains and

Customer Jobs

Functional Jobs	When your customers try to perform or complete a specific task or solve a specific problem		
Social Jobs	When your customers want to look good or gain power or status. These jobs describe how customers want to be perceived by others		
Personal & Emotional Jobs	When your customers seek a specific emotional state, such as feeling good or secure.		

Customer Pains

Undesired outcomes, problems and characteristics	functional pains (e.g. a solution doesn't work), social ("I look bad doing this"), emotional ("I feel bad every time I do this"), or ancillary ("it's annoying to do it"). May involve undesired characteristics customers do not like
Obstacles	Prevent customers from even getting started with a job or that slow them down
Risks (undesired potential outcomes)	What could go wrong and have important negative consequences (e.g. "A security breach would be disastrous for us").

Customer Gains

Required Gains	gains without which a solution wouldn't work		
Expected Gains	gains that we expect from a solution, even if it could work without them		
Desired Gains	gains that go beyond what we expect from a solution but would love to have if we could. Usually gains customers would come up with if you asked them.		
Unexpected Gains	Gains that go beyond customer expectations and desires. They wouldn't even come up with them if you asked them		

Value Map

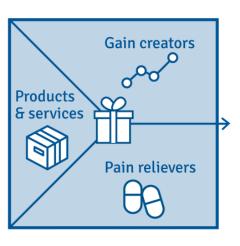


Part 2: Value Map

How to create value for your Customer Segment

- 1. Product offering and its associated features.
- 2. Gain Creators: how the product offering creates customer gains
- 3. Pain Relievers: how the product offering alleviate customer pains

Value Proposition



Product Offering

Digital	Products such as software as-a-service (SaaS), marketplace platforms, music streaming etc.
Physical/ tangible	Goods, such as manufactured products.
Intangible	Products such as copyrights or services such as after-sales assistance.
Financial	Products such as investment funds and insurances or services such as the financing of a purchase.

Pain Relievers

- Explicitly outline how you intend to eliminate or reduce some of the things that annoy your customers before, during or after they are trying to complete a job or that prevent them from doing so
- Great value propositions focus on pains that matter to customers, in particular extreme pains

Gain Creators

- Explicitly outline how you intend to produce outcomes and benefits that your customer expects, desires, or would be surprised by
 - E.g., functional utility, social gains, positive emotions, and cost savings
- Focus on those that are relevant to customers and where your product offering can make a difference

Value Map - How?



1

List products and services.

List all the products and services of your existing value proposition.



2

Outline pain relievers.

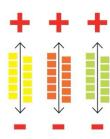
Outline how your products and services currently help customers alleviate pains by eliminating undesired outcomes, obstacles, or risks. Use one sticky note per pain reliever.



3

Outline gain creators.

Explain how your products and services currently create expected or desired outcomes and benefits for customers. Use one sticky note per gain creator.



4

Rank by order of importance.

Rank products and services, pain relievers, and gain creators according to how essential they are to customers.

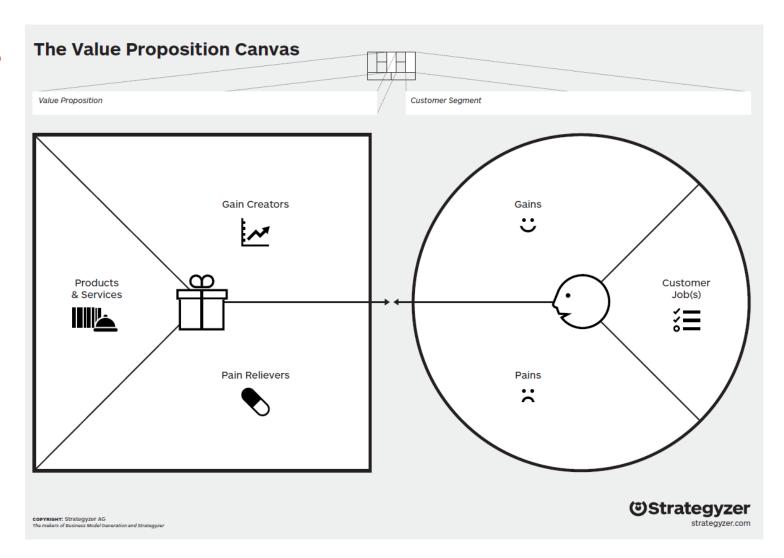
Customer Profile – Value Proposition Fit



Customer profile – value proposition Fit

- Customers get excited when:
 - Address important jobs
 - Alleviate extreme pains, and
 - Create essential gains that customers care about

Value Proposition Canvas - Templates



https://libwww.freelibrary.org/assets/pdf/programs/bric/value-proposition-canvas.pdf

Business Model Canvas



Business Model Canvas (BMC)

Model how an organisation creates, delivers and captures value. Built around an innovation

•	9	buil	ding	b	locks
---	---	------	------	---	-------

1)	Customer Segments	2)	Value Proposition

- 3) Channels 4) Customer Relationships
- 5) Revenue Streams 6) Key Activities
- 7) Key Resources 8) Key Partnerships
- 9) Cost Structure
- The individual building blocks, and the relationships between them are important to ensure that there is alignment within the business model

It may be intuitive to think about it in the sequence provided above (1 to 9)

The Business Model Canvas

Designed for: Designed by:

Customer Segments

Who are our most important customers?

Version:

Block 1

Key Partners

Who are our key suppliers? Which Key Resources are we acquairing from partners? Which Key Activities do partners perform?

Optimization and economy Reduction of risk and uncertainty Acquisition of particular resources and activities

Block 8

Key Activities

Our Distribution Channels? Customer Relationships? Revenue streams?

Key Resources

Physical Intellectual (brand patents, copyrights, data) Human Financial

Revenue Streams?

What Key Resources do our Value Propositions require?

Block 7

Production
Problem Solving
Platform/Network

Block 6

Value Propositions

Which one of our customer's problems are we helping to solve?

What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?

 \checkmark

CHARACTERISTICS
Newness
Performance
Customization
"Getting the Job Done"
Design
Brand/Status
Price
Cost Reduction
Risk Reduction
Accessibility
Convenience/Usability

Block 2

Customer Relationships

Customer Segments expect us to establish and maintain with them?

Which ones have we established? How are they integrated with the rest of our How costly are they?

Block 4

Channels

want to be reached? How are we reaching them now? How are our Channels integrated?

How are we integrating them with customer routines?

Block 3

Through which Channels do our Customer Segments

Which ones work best? Which ones are most cost-efficient?

Cost Structure

What are the most important costs inherent in our business model? Which Key Resources are most expensive?

IS YOUR BURNESS MORE
COST DYNOR Delanest cost structure, low price value proposition, maximum automation, extensive outsourcing/
Value Driver florused on value creation, premium value proposition)

SAMPLE CHARACTERISTICS Föxed Costs (salaries, rents, utilities) Variable costs Economies of scale Economies of scope

Block 9



Revenue Streams

For what value are our customers really willing to pay? For what do they currently pay?

How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?

Block 5



(3) Strategyzer strategyzer.com



The Univers







DESIGNED BY: Business Model Foundry AG

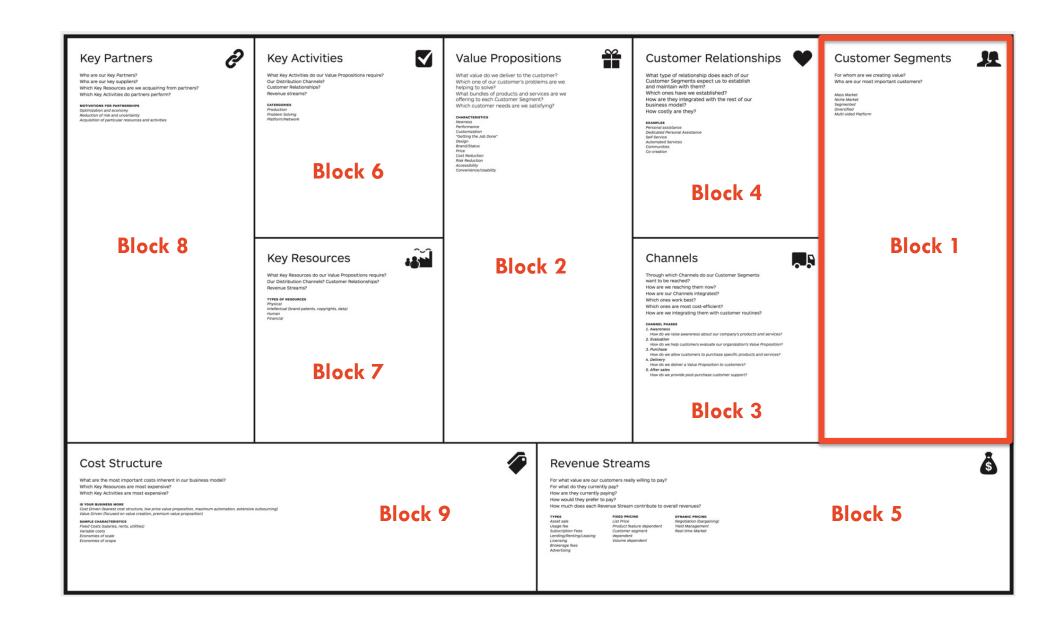
BMC - Overview of the 9 Building Blocks

Customer Segments	Block 1	are the groups of people and/or organisations a company or organisation aims to reach and create value for with a dedicated value proposition.
Value Propositions	Block 2	are the value created and delivered to a Customer Segment in the form of Pain Relievers or Gain Creators.
Channels	Block 3	describe how a value proposition is communicated and delivered to a customer segment through communication, distribution, and sales channels.
Customer Relationships	Block 4	outline what type of relationship is established and maintained with each customer segment, and they explain how customers are acquired and retained.
Revenue Streams	Block 5	result from a value proposition successfully offered to a customer segment. It is how an organisation captures value with a price that customers are willing to pay.
Key Activities	Block 6	are the most important activities an organisation need to do to deliver Value Propositions to a Customer Segment and generate revenue in the process.
Key Resources	Block 7	are the most important assets required to offer and deliver the previously described elements.
Key Partnerships	Block 8	shows the network of suppliers and partners that bring in external Activities and Resources.
Cost Structure	Block 9	outlines all major costs incurred to operate the business model

Customer Segments

Block 1





Block 1: Customer Segments

Defines the different groups of customers (e.g. people or organisations) the company aims to reach and serve with its products

- May group customers into distinct segments with common needs, common behaviours or other attributes.
- May define one or several large or small Customer Segments (which one to serve)
- A business model can be carefully designed around a strong understanding of specific customer needs.

Customers represent separate segments if:

- Their needs require and justify a distinct offer
- They are reached through different distribution channels
- They require different types of relationships
- They have substantially different profitability
- They are willing to pay for different aspects of the offer

5 Types of Customer Segments

Mass Market	The Value Propositions, Distribution Channels, and Customer Relationships all focus on one large group of customers with broadly similar needs and problems. Consumer electronics and automotive sector	
Niche Market	Cater to specific, specialised Customer Segments. The Value Propositions, Distribution Channels, and Customer Relationships are all tailored to the specific requirements of a new niche market. Supplier-buyer relationships, where the supplier depend heavily on purchases from the buyer	
Segmented	Distinguish between market segments with slightly different needs and problems. Apple distinguish between users that want computers with varying mobility, performance and size requirements. As such, Apple offers MacBook Air, MacBook Pro and iMac/ iMac Pro.	
Diversified	Serves two unrelated Customer Segments with very different needs and problems. Amazon.com decided to diversify its retail business by selling "cloud computing" services for organisations requiring cloud computing)	
Multi-sided platforms (or multi-sided markets)	Some organisations serve two or more interdependent Customer Segments. A data annotation platform needs a large base of Al companies that require labelling services, and a base of annotators that can label data.	

Customer Segments – Case Studies

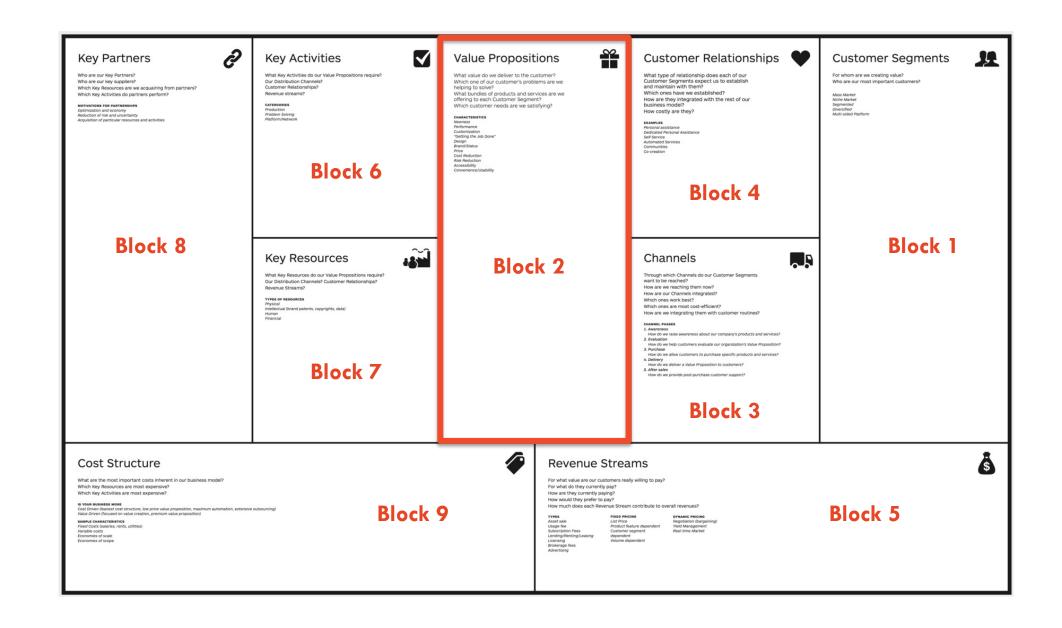
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Value Propositions

Block 2





Block 2: Value Propositions

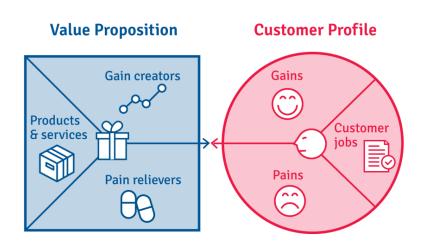
Describes the bundle of products and services that create value for a specific Customer Segment

It solves a customer problem or satisfies a customer need. Each Value Proposition consists of an offering that caters to the requirements of a specific Customer Segment.

- What is the organisation's offering?
- What are the Gain Creators and Pain Relievers?
- What Value Propositions are offered to the Customer Segment?

Value Proposition Canvas

 To design and test great value propositions in an iterative search for what customers want



Value Proposition Map

- Product & Services represent your offering
- How your products and services create customer gains
- Describes how your products and services alleviate customer pains

Customer Profile

- What your customers are trying to get done in their work and in their lives, as expressed in their own words.
- The outcomes customers want to achieve or the concrete benefits they are seeking
- Bad outcomes, risks, and obstacles related to customer jobs.

Fit

Product offering produce pain relievers and gain creators that match one or more of the jobs, pains, and gains that are important to your customer

Value Proposition Pyramid

Product offering deliver fundamental elements of value that address four kinds of needs:

- **Functional**
- **Emotional**
- Life Changing
- Social Impact

In general, the more elements provided, the greater customers' loyalty and the higher the company's sustained revenue growth.

SOCIAL IMPACT



LIFE CHANGING











Motivation

Heirloom

belonging

EMOTIONAL











anxiety

Rewards

Nostalgia

Design/ aesthetics











Therapeutic

Fun/ entertainment

Attractiveness

Provides

access

FUNCTIONAL



00 0











Saves

Simplifies

Reduces



Variety





Reduces effort



Avoids hassles



Reduces



Quality





appeal



Informs

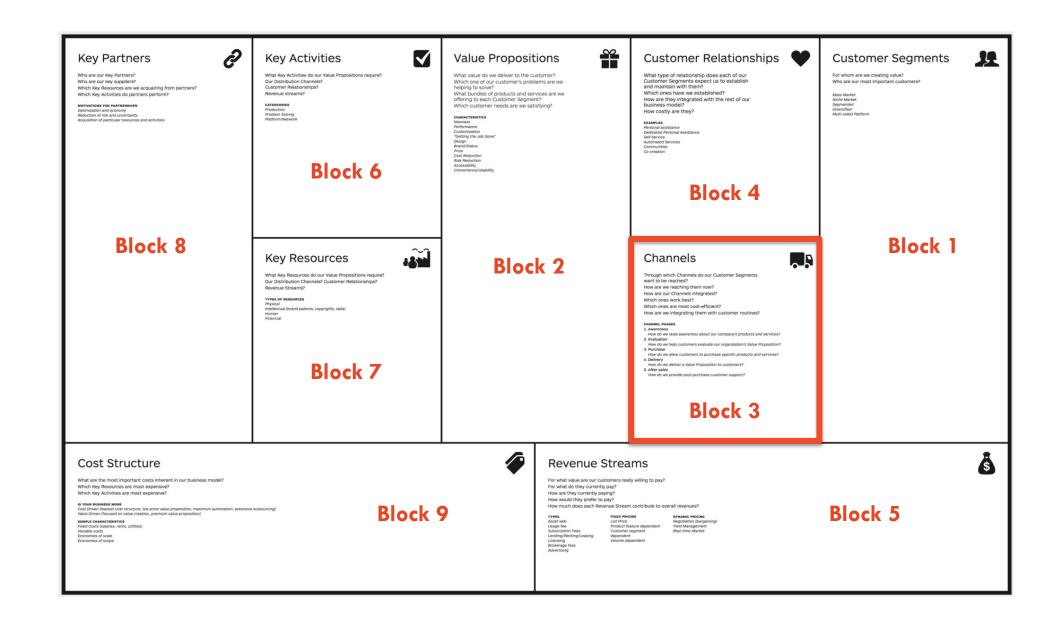
Value Proposition Pyramid – Case Studies

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Channels





Block 3: Channels

How a company communicates with and reaches it Customer Segments to deliver a Value Proposition

Customer touch points that play an important role in the customer experience A few questions to be considered here are, "through which Channels do our Customer Segments want to be reached? How are we reaching them now? Which ones work best?"

Channels serve several functions, including:

- Raising awareness among customers about a company's product offerings
- Helping customers evaluate a company's Value Proposition
- Allowing customers to purchase specific products and services
- Delivering a Value Proposition to customers
- Providing post-purchase customer support

Channel Types

Channels include:

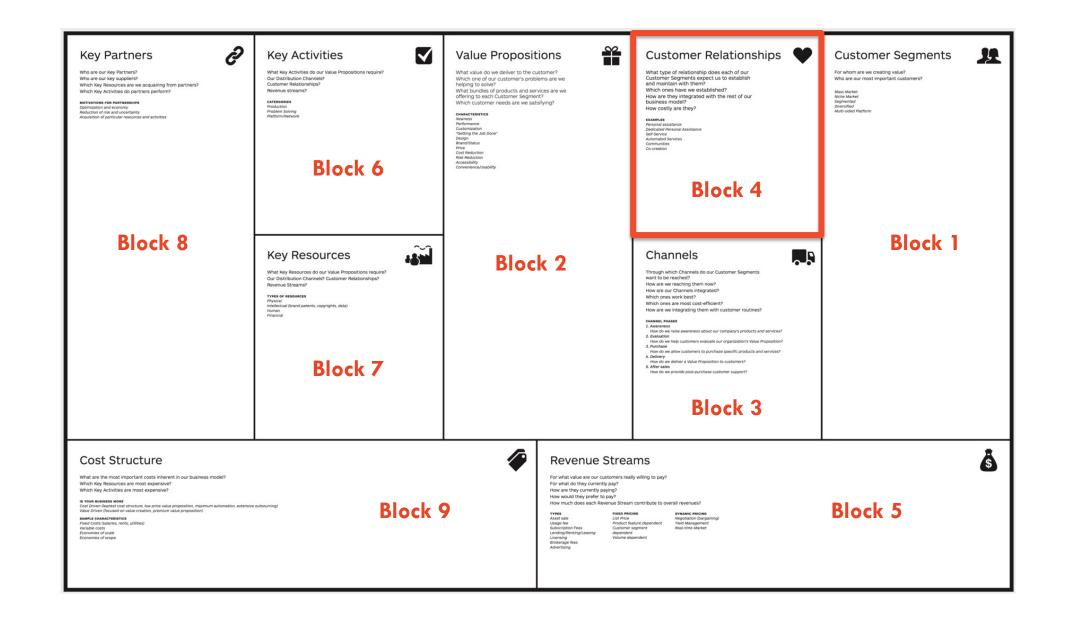
- Web: This include self-service sign-ups, logins and documentation; and live chats with a real person or Al (chatbot)
- Phone calls: With a real person or chatbot.
- Emails: Replied by a real person, or via pre-determined logic pathways
- Advertisements: Social media and search
- Payment
- Direct channels
 - Selling directly to consumers through different means
- Indirect channels
 - Selling indirectly through other channels (retailers, wholesaler)

Channel Phases

Phase 1- Awareness	Phase 2 – Evaluation	Phase 3 - Purchase	Phase 4 - Delivery	Phase 5 — After Sales
How do we raise awareness about our company's product offering?	how do we help customers evaluate our organization's Value Prop?	How do we allow customers to purchase specific product offerings?	How do we deliver a Value Proposition to customers?	How do we provide post-purchase customer support?

Customer Relationships





Block 4: Customer Relationships

Describes the types of relationships a company establishes with specific Customer Segments

Range from personal to automated. Customer May be driven by the following motivation:

- Customer acquisition (Onboarding new customers);
- Customer retention (Retaining repeat customers);
- Upselling and cross-selling (Selling higher priced product offerings, or selling other complementary products)

Types of Customer Relationships

Personal Assistance	The customer can communicate with a real customer representative to get help during the sales process or after the purchase is complete (on-site at the point of sale, through call centres)
Dedicated Personal Assistance	Dedicating a customer representative specifically to an individual client. It represents the deepest and most intimate type of relationship and normally develops over a long period of time. Examples, private banking services and key account managers in enterprises
Self-Service	No direct relationship with customers. Companies provide all the necessary means for customers to help themselves.
Automated Services	Mixes a more sophisticated form of customer self-service with automated processes. For example, personal online profiles give customers access to customised services. Automated services can simulate a personal relationship (e.g. offering book or movie recommendations).
Communities	User communities to become more involved with customers/prospects and to facilitate connections between community members. It allows users to exchange knowledge and solve each other's problems and it help companies better understand their customers.
Co-Creation	Amazon.com invites customers to write reviews and thus create value for other book lovers. YouTube, rely on their content producers to develop and maintain relationships with their followers and supporters

Case Studies











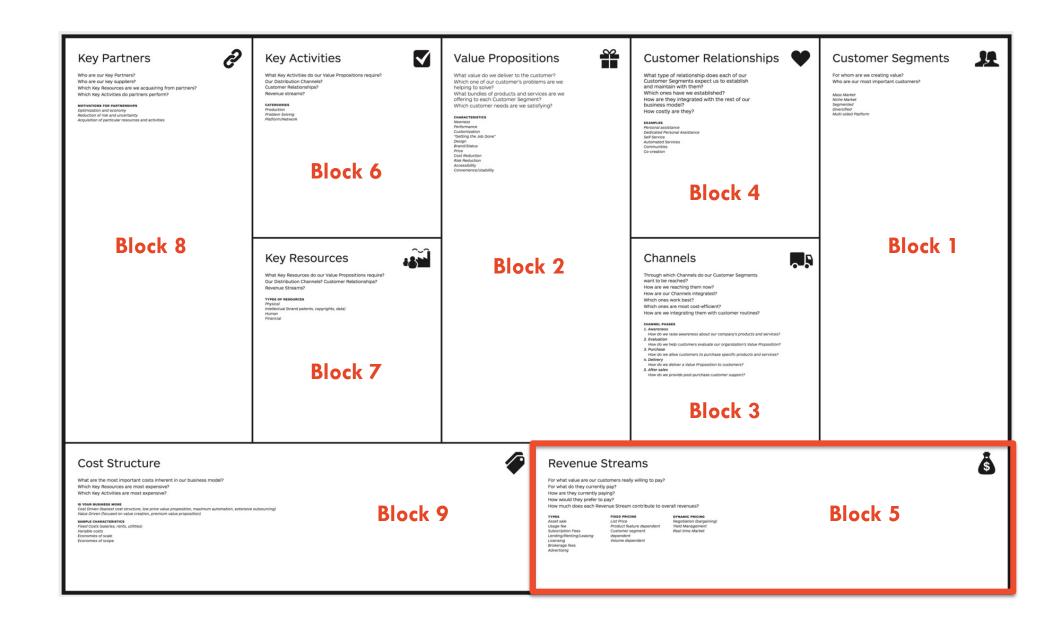
Personal Assistance

Dedicated Personal Assistance Self-Service

Automated Services (e.g. Recommendations) Communities

Revenue Streams





Block 5: Revenue Streams

The cash a company generates from each Customer Segment

- How to quantify the financial value of the Value Proposition that delivers to Customer Segment?
- How much of that financial value can be captured?
- What methods can it capture that financial value?
- Example:
 - \$1 million per year saving for a customer segment
 - Capture \$200,000 through yearly subscription

Types of Revenue Streams

Asset Sale	Selling ownership rights to a physical product. Amazom.com sells books, music, consumer electronics, and more online.
Usage Fee	Use of a particular service, the more a service is used, the more the customer pays. Cloud computing services (VM usage per hour)
Subscription Fee	Selling continuous access to a service. A SaaS platform like Asana sells its members monthly or yearly subscriptions in exchange for access and usage of its project management tool
Lending, Renting or Leasing	Temporarily granting customer the exclusive right to use a particular asset for a fixed period in return for a fee. For the lender, this provides the advantage of recurring revenues. Renters or lessees, on the other hand, enjoy the benefits of incurring expenses for only a limited time rather than bearing the full costs of ownership. Zipcar.com allows customers to rent cars by the hour
Licensing	Giving customers permission to use protected IP (patent) in exchange for licensing fees. Generate revenues from their IP commercialising an invention.
Transaction or Brokerage Fees	Derives from intermediation services performed between or on behalf of two or more parties. Example, Stripe get percentage of the value of the transaction executed between the merchant and the buyer
Advertising	Fees for advertising a particular product. Example, Google Adwords has a "pay-per-click" model.

Case Studies - Sample Answers











Asset Sale

Usage Fee

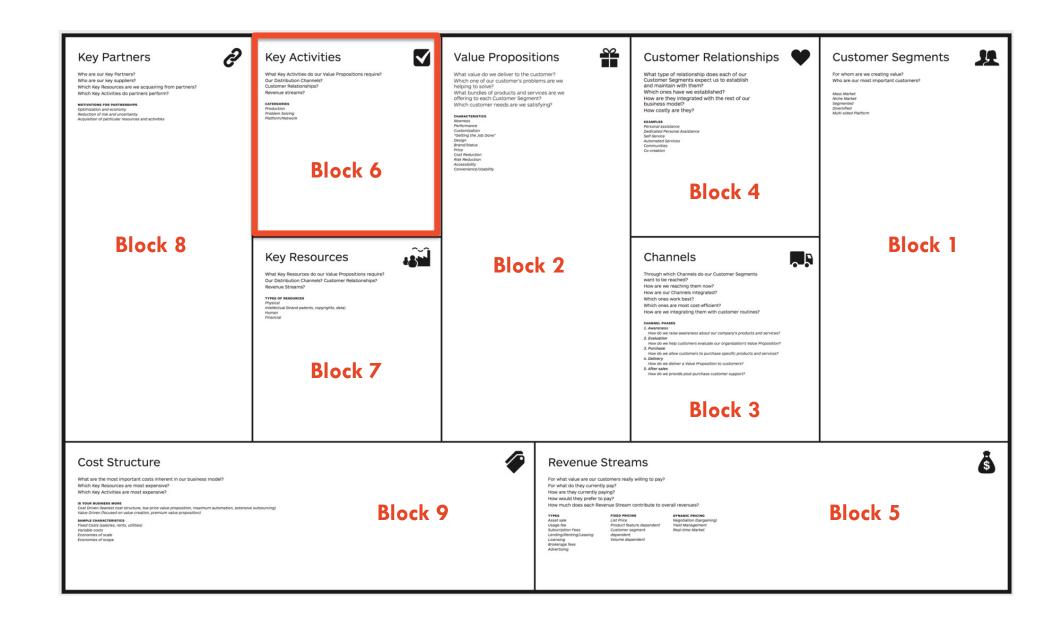
Subscription Fee

Lending, Renting or Leasing

Transaction or Brokerage Fee

Key Activities





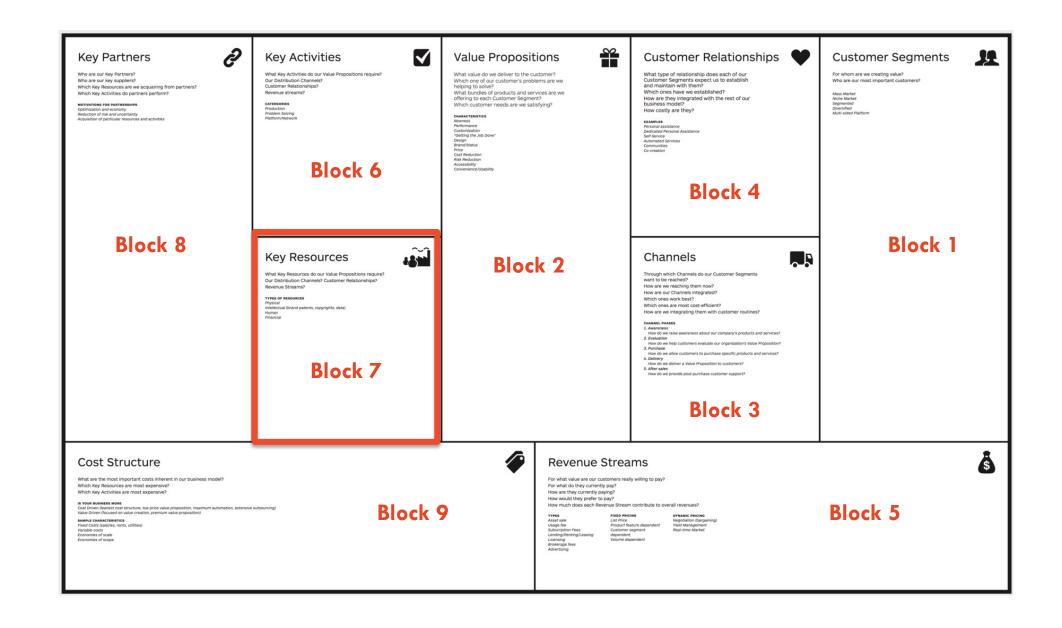
Block 6: Key Activities

Describes the most important things a company must do to make its business model work

- Key Activities enable other building blocks (Value Propositions, Channels... etc)
- Key Activities differ depending on the business model of the organisation
- For example, the key activities for Microsoft would be software development, whereas for Dell (PC manufacturer), it would be supply chain management.

Key Resources





Block 7: Key Resources

Describes the most important assets required to make the business model work

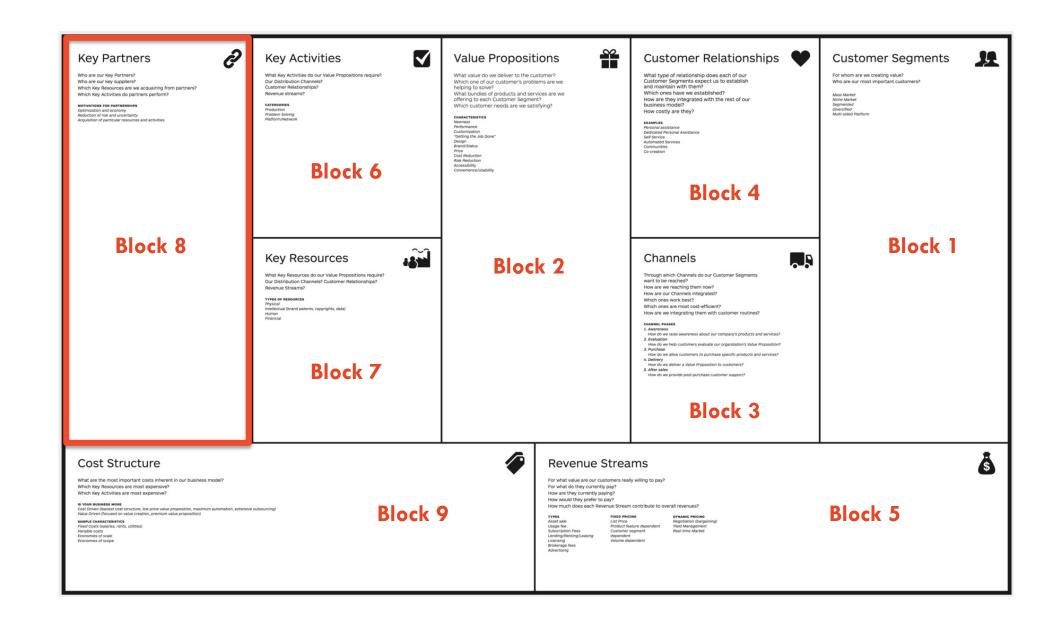
- Resources allow an enterprise to create and offer a Value Proposition, reach markets,
 maintain relationships with Customer Segments, and earn revenues
- Different Key Resources are needed depending on the type of business model
- An self-driving car start-up requires large volumes of training data to develop their computer vision model, whereas Wikipedia requires the underlying open-source software (Media Wiki).

Types of Key Resources

Technology	proprietary or open-sourced software used in the development of products and services.		
Data	open data or proprietary data. Example, training data for building Al models		
Human	Every enterprise requires human resources, but people are particularly prominent in certain business models. For example, human resources are crucial in knowledge-intensive and creative industries.		
Intellectual	Intellectual resources such as proprietary knowledge, patents and copyrights, insights of technical and business problems. Huawei several patents on 5G, enabled it to achieve its dominant position in 5G globally.		
Physical	This category includes physical assets such as manufacturing facilities, buildings, vehicles machines, systems, point-of-sales systems and distribution networks. eCommerce platforms like Amazon rely heavily on physical resources for its logistics and fulfillment functions.		
Financial	financial resources, such as cash, debt or stock options for hiring key employees.		

Key Partnerships





Block 8: Key Partnerships

Describes the network of suppliers and partners that make the business model work

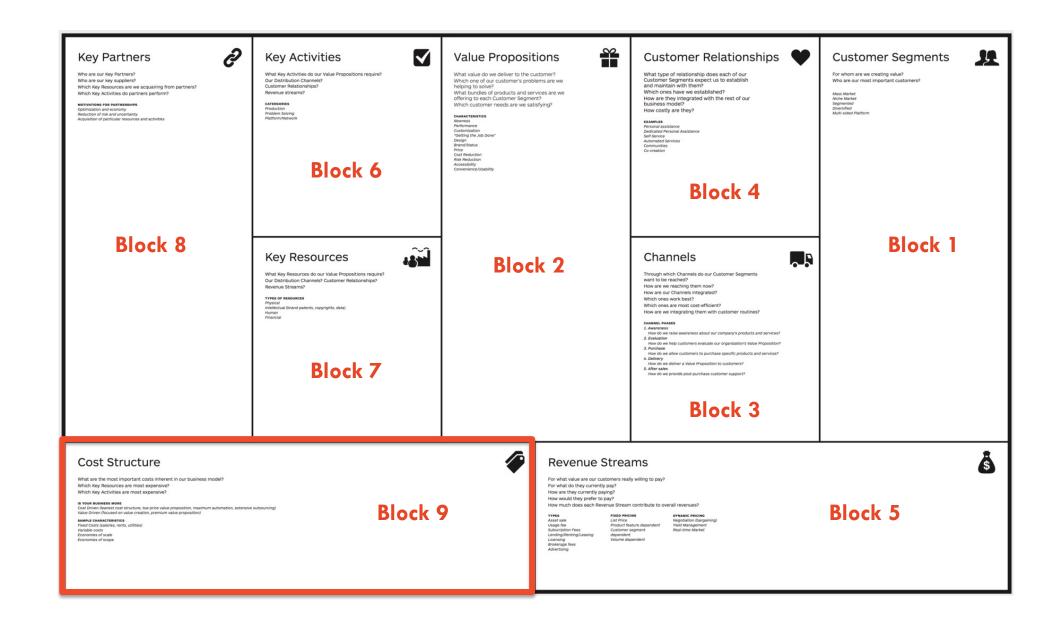
Companies create alliances to optimise their business models, reduce risk, or acquire resources.

Four different types of partnerships:

- Strategic alliances between non-competitors
- Cooperation: Strategic partnerships between competitors
- Joint ventures to develop new businesses
- Buyer-supplier relationships to assure reliable supplies

Cost Structure





Block 9: Cost Structure

Describes all costs incurred to operate a business model

- Costs incurred by creating and delivering value, maintaining Customer Relationships, and generating revenue all incur costs
- Can be calculated after defining Key Resources, Key Activities, and Key Partnerships
- Business models enabled by technology are more cost efficient than others

Fixed Costs	Costs that remain the same despite the volume of goods or services produced. Examples include salaries, rent, and physical manufacturing facilities
Variable Costs	Costs that vary proportionally with the volume of goods or services produced. Examples SaaS companies

Good sources of tips for startups

- Osterwalder, A., Pigneur, Y., Bernarda, G., Smith, A. (2014) Value
 Proposition Design: How to Create Products and Services Customers Want,
 John Wiley & Sons.
- The 30 Elements of Consumer Value: A Hierarchy (hbr.org)