

INFO4444 Computing 4 Innovation

Week 9: Commercialisation II

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Innovation Management

20,000 Feet View



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

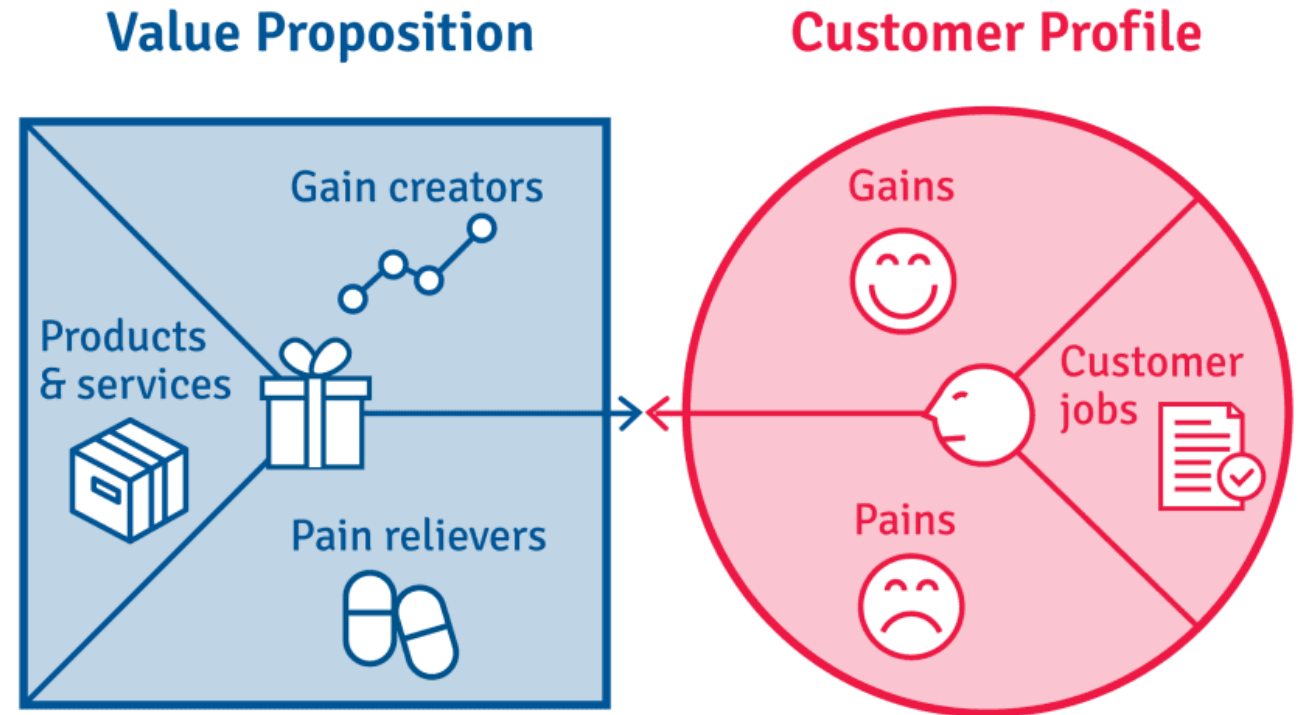
- Lean Startup Methodology;
- Customer Development Process
- Agile Development

- Organisational Culture & Structures Supporting Innovation

The Business Model Canvas

Version:

Value Proposition Canvas



Value Proposition Pyramid

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



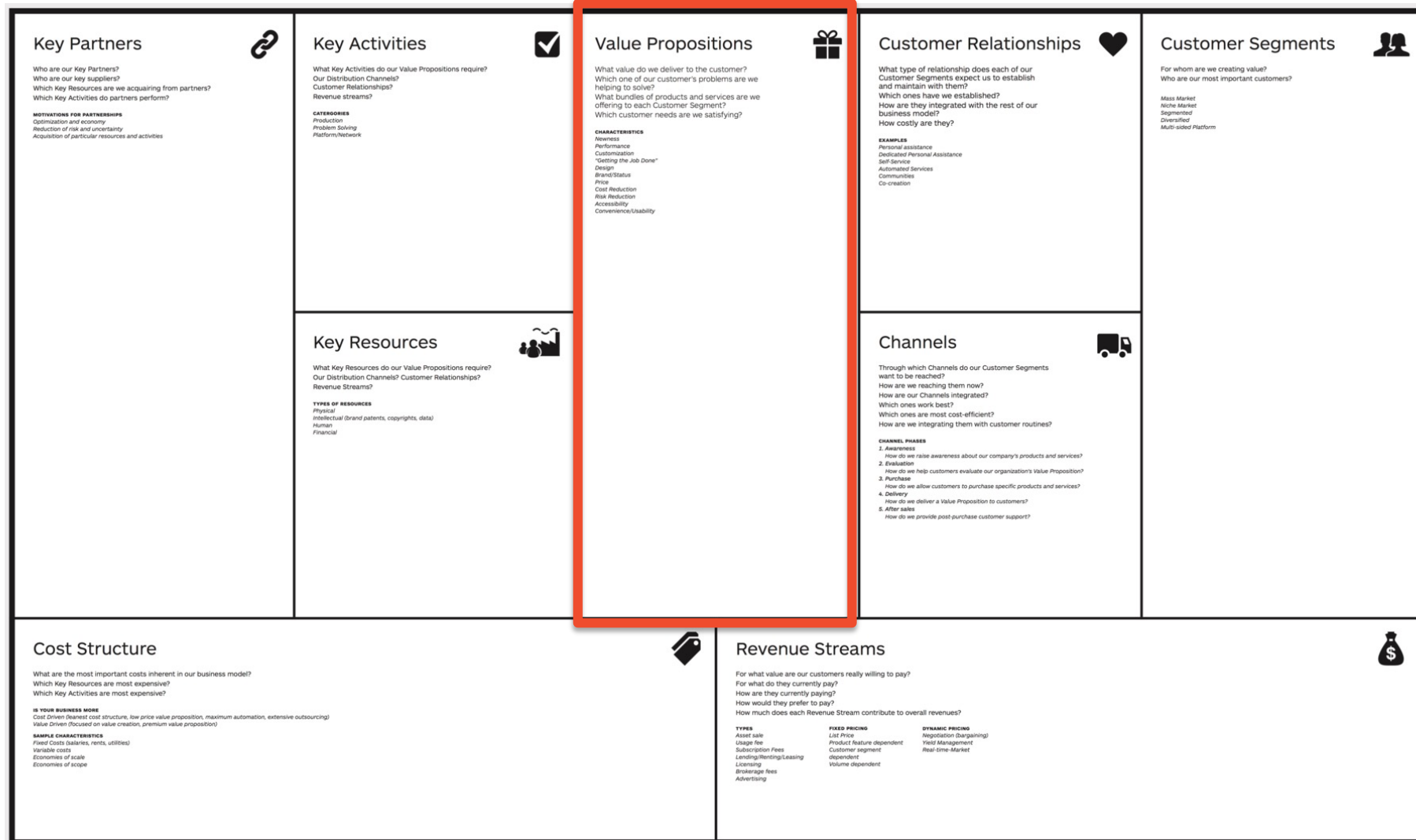
Sensory appeal



Informs

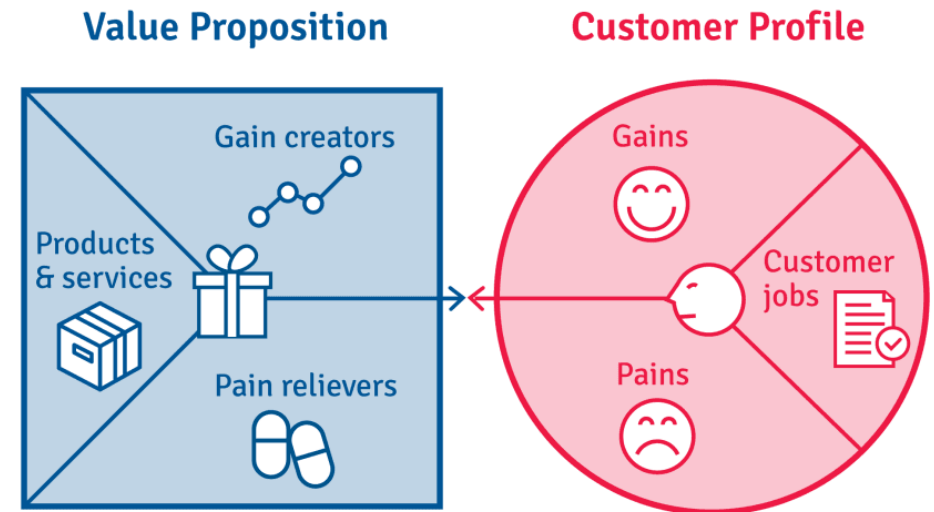
Value Proposition Canvas

Part of the Business Model Canvas



Value Proposition Canvas

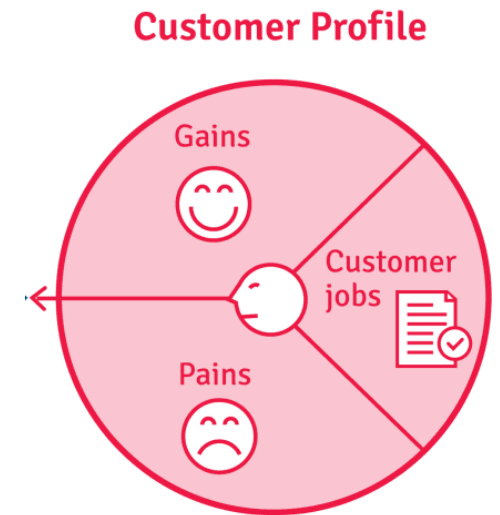
- To design and test great value propositions in an iterative search for what customers want
- To evolve your value proposition(s) constantly to keep it relevant to customers
- Two sides:
 - Customer Profile to clarify customer understanding
 - Value Map to create value for that customer
- Fit: when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

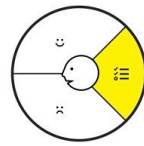


Customer Profile

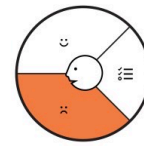
Customer Profile

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

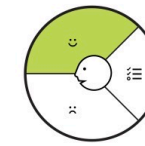




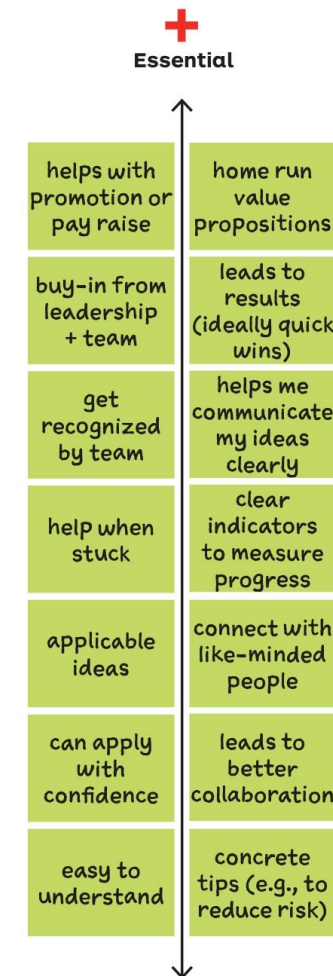
Job importance



Pain severity



Gain relevance



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.

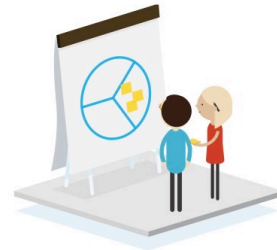
1. Download the Customer Profile Canvas.
2. Grab a set of small sticky notes.
3. Map out your customer profile.



1

Select customer segment.

Select a customer segment that you want to profile.



2

Identify customer jobs.

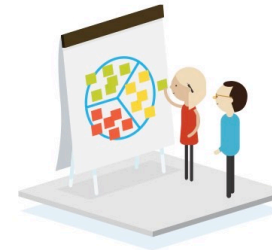
Ask what tasks your customers are trying to complete. Map out all of their jobs by writing each one on an individual sticky note.



3

Identify customer pains.

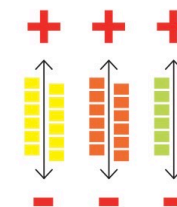
What pains do your customers have? Write down as many as you can come up with, including obstacles and risks.



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

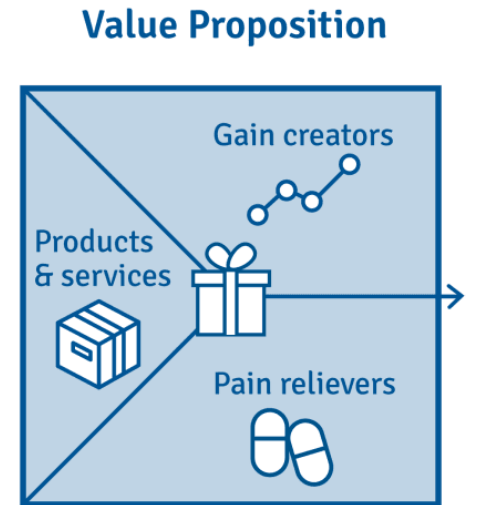
Required Gains	gains without which a solution wouldn't work
Expected Gains	gains that we expect from a solution, even if it could work without them
Desired Gains	gains that go beyond what we expect from a solution but would love to have if we could. Usually gains customers would come up with if you asked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



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.

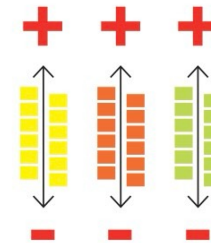
Outline how your products and services currently help customers alleviate pains by eliminating undesired outcomes, obstacles, or risks. Use one sticky note per pain reliever.



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.

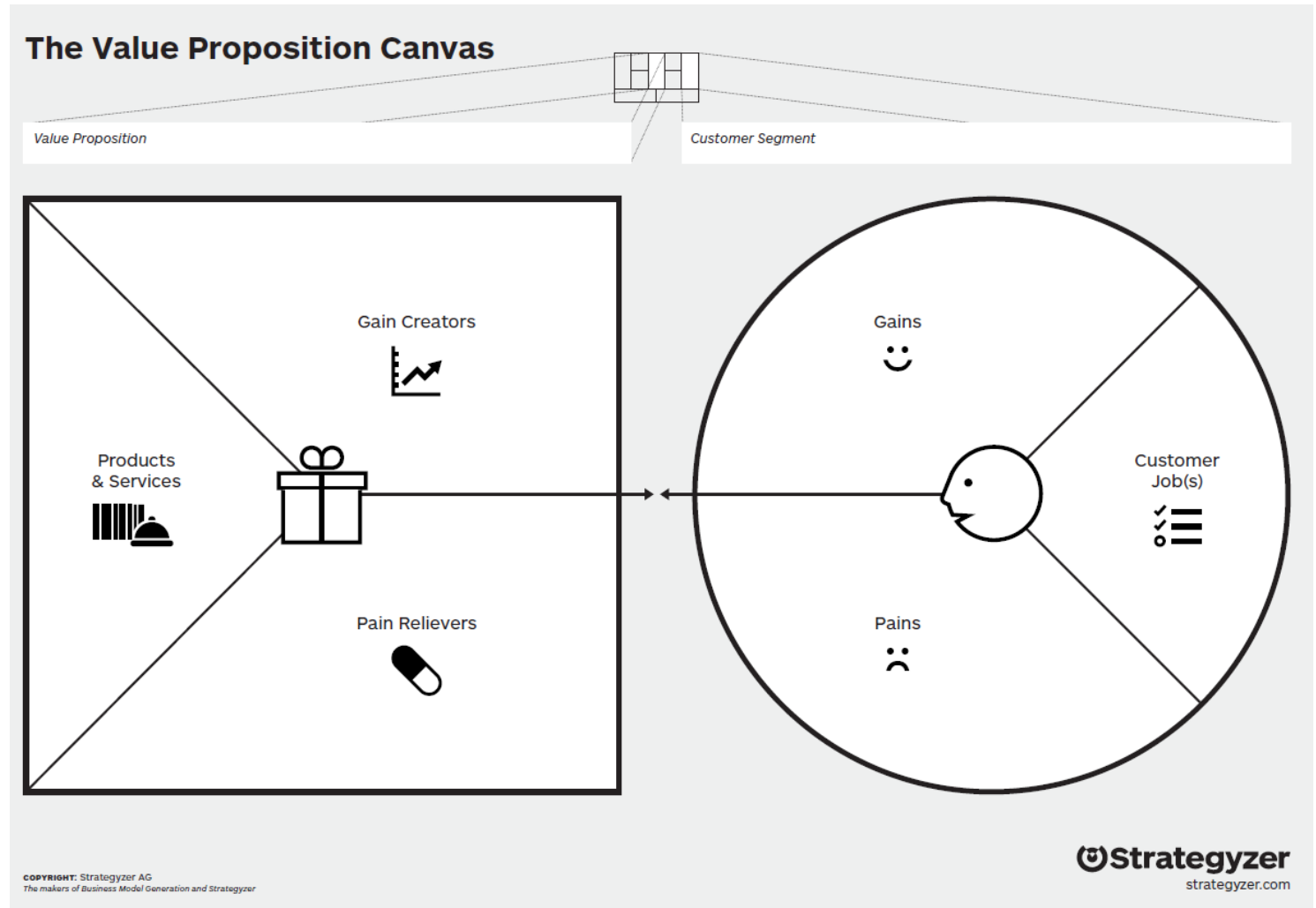
Rank products and services, pain relievers, and gain creators according to how essential they are to customers.

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 building blocks
 - 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

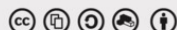
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Designed by:

Date:

Version:

<p>Key Partners </p> <p>Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform?</p> <p>MOTIVATIONS FOR PARTNERSHIPS Optimization and economy Reduction of risk and uncertainty Acquisition of particular resources and activities</p> <p>Block 8</p>	<p>Key Activities </p> <p>What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?</p> <p>CATEGORIES Production Problem Solving Platform/Network</p> <p>Block 6</p>	<p>Value Propositions </p> <p>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?</p> <p>CHARACTERISTICS Newness Performance Customization "Getting the Job Done" Design Brand/Status Price Cost Reduction Risk Reduction Accessibility Convenience/Usability</p> <p>Block 2</p>	<p>Customer Relationships </p> <p>What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they?</p> <p>EXAMPLES Personal assistance Dedicated Personal Assistance Self-Service Automated Services Communities Co-creation</p> <p>Block 4</p>	<p>Customer Segments </p> <p>For whom are we creating value? Who are our most important customers?</p> <p>Mass Market Niche Market Segmented Diversified Multi-sided Platform</p> <p>Block 1</p>			
<p>Key Resources </p> <p>What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams?</p> <p>TYPES OF RESOURCES Physical Intellectual (brand patents, copyrights, data) Human Financial</p> <p>Block 7</p>		<p>Channels </p> <p>Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines?</p> <p>CHANNEL PHASES 1. Awareness How do we raise awareness about our company's products and services? 2. Evaluation How do we help customers evaluate our organization's Value Proposition? 3. Purchase How do we allow customers to purchase specific products and services? 4. Delivery How do we deliver a Value Proposition to customers? 5. After sales How do we provide post-purchase customer support?</p> <p>Block 3</p>					
<p>Cost Structure </p> <p>What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?</p> <p>IS YOUR BUSINESS MODEL Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing) Value Driven (focused on value creation, premium value proposition)</p> <p>EXAMPLE CHARACTERISTICS Fixed Costs (salaries, rents, utilities) Variable costs Economies of scale Economies of scope</p> <p>Block 9</p>		<p>Revenue Streams </p> <p>For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues?</p> <table border="0"> <tr> <td>TYPES Asset sale Subscription Fees Licensing/Renting/Leasing Licensing Brokerage fees Advertising</td> <td>FIXED PRICING List Price Product feature dependent Customer segment dependent Volume dependent</td> <td>DYNAMIC PRICING Negotiation (Bargaining) Yield Management Real-time Market</td> </tr> </table> <p>Block 5</p>			TYPES Asset sale Subscription Fees Licensing/Renting/Leasing Licensing Brokerage fees Advertising	FIXED PRICING List Price Product feature dependent Customer segment dependent Volume dependent	DYNAMIC PRICING Negotiation (Bargaining) Yield Management Real-time Market
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DESIGNED BY: Business Model Foundry AG
The makers of Business Model Generation and Strategizer

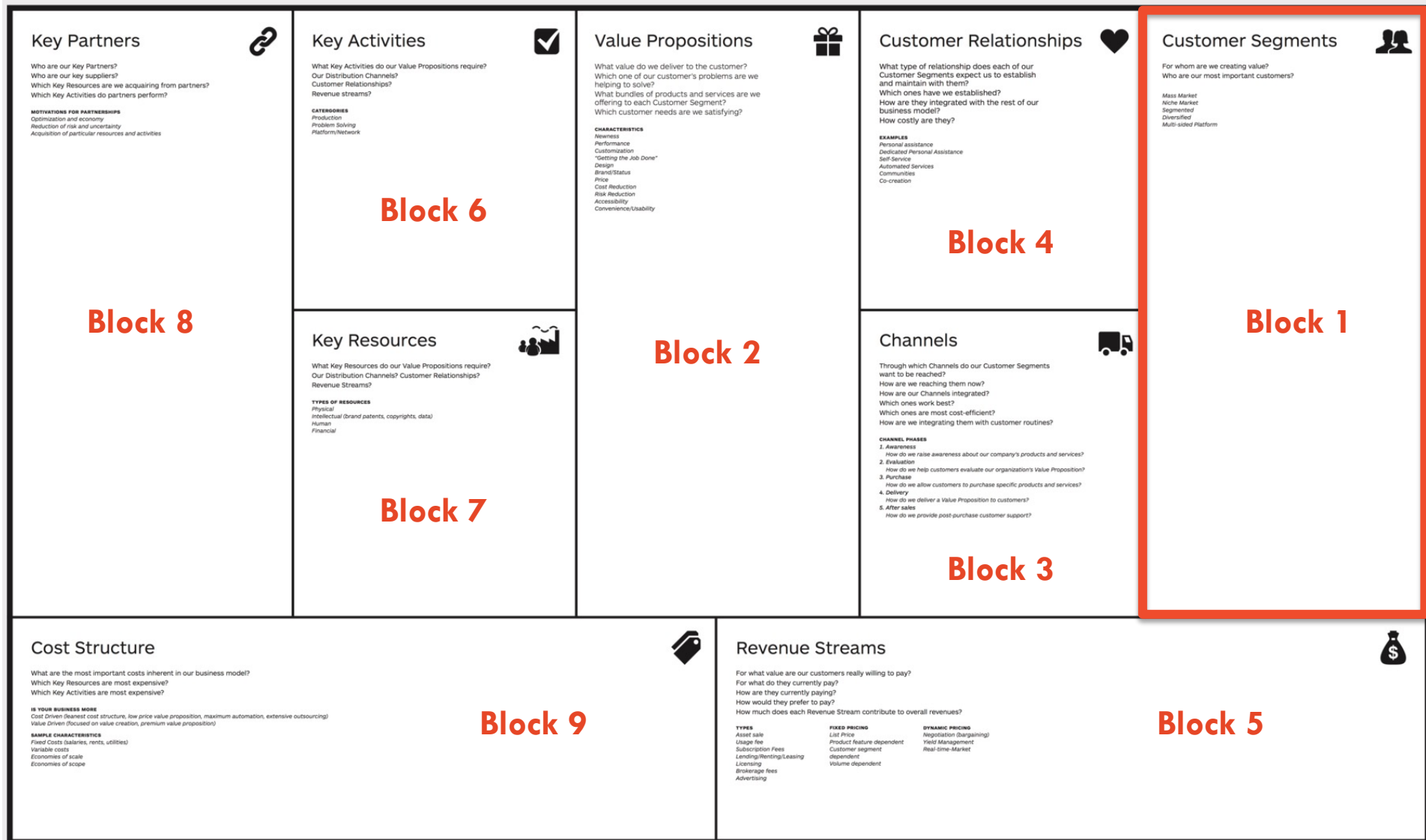
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BMC – Overview of the 9 Building Blocks

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

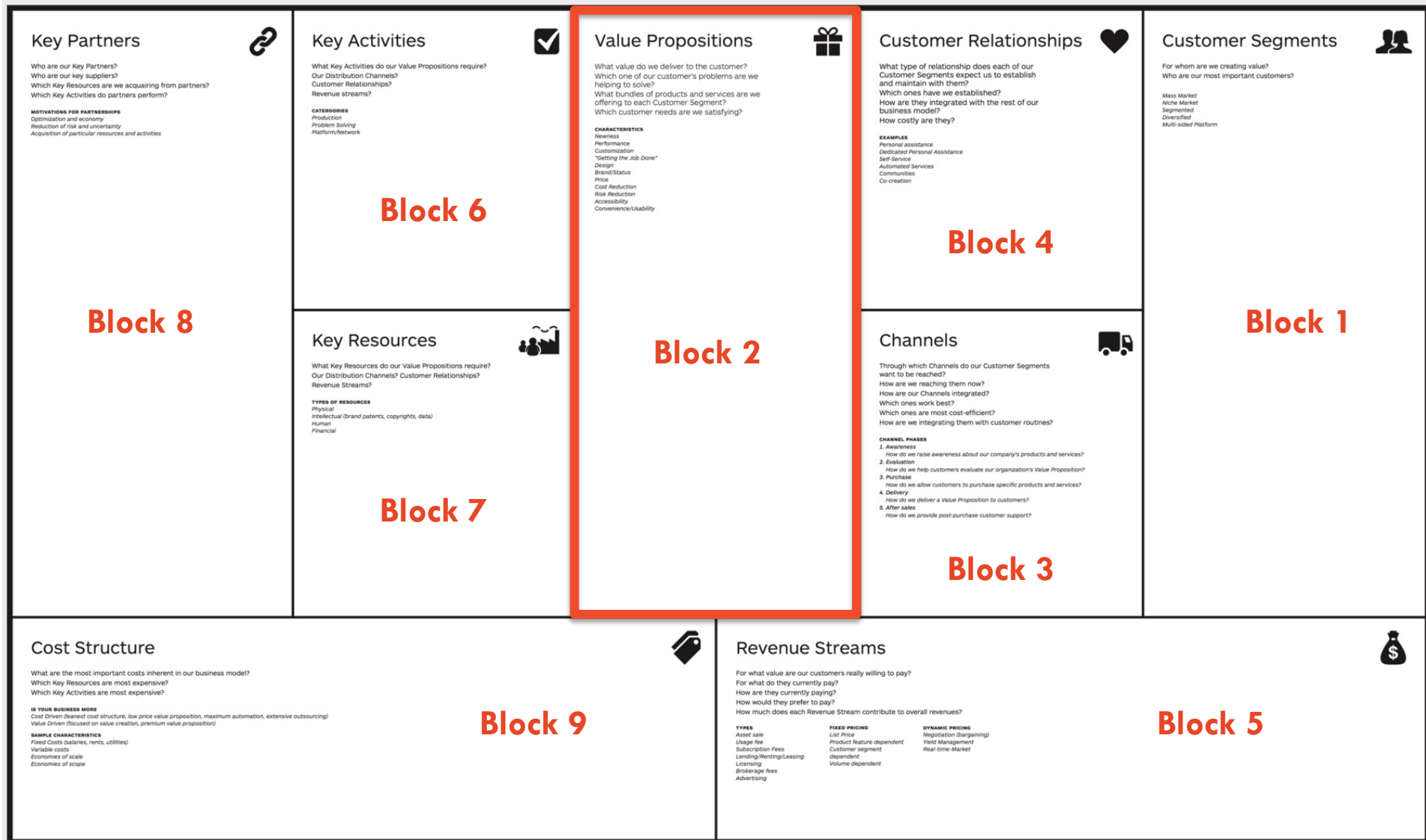
5 Types of Customer Segments

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 AI companies that require labelling services, and a base of annotators that can label data.

Customer Segments – Case Studies

Value Propositions

Block 2



Block 2: Value Propositions

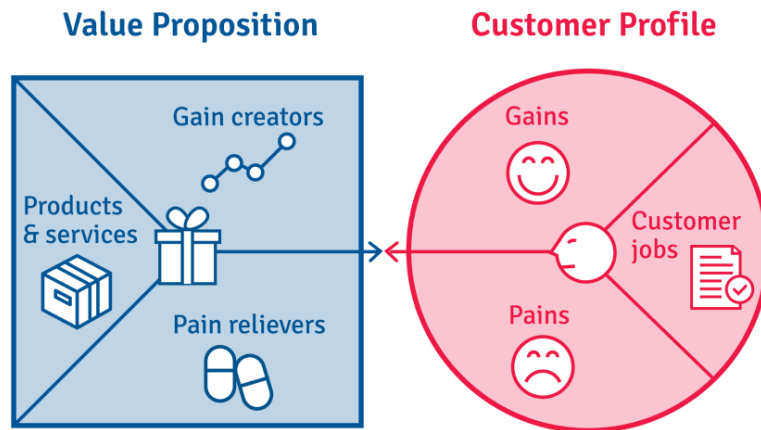
Describes the bundle of products and services that create value for a specific Customer Segment

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

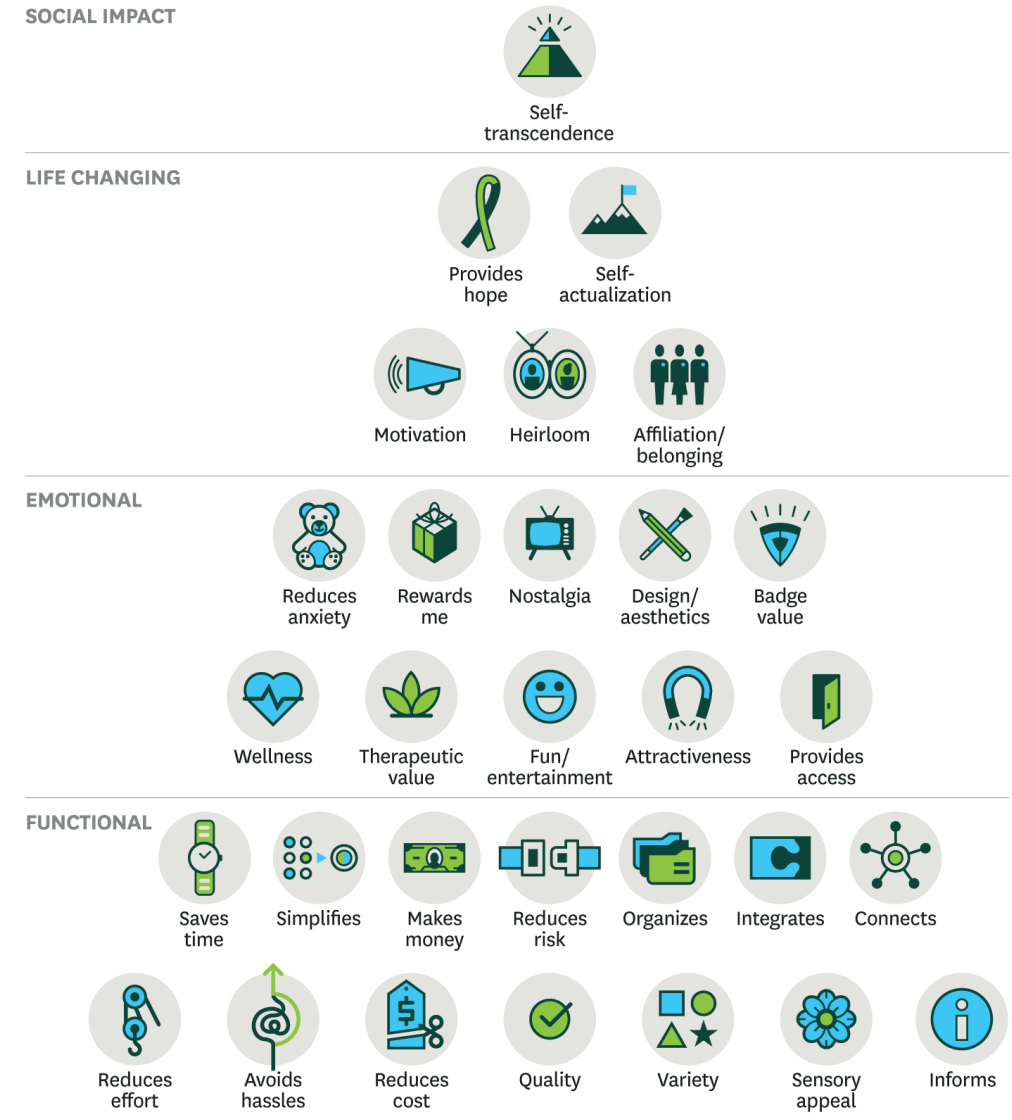
Product offering produce pain relievers and gain creators that match one or more of the jobs, pains, and gains that are important to your customer

Value Proposition Pyramid

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

- Functional
- Emotional
- Life Changing
- Social Impact

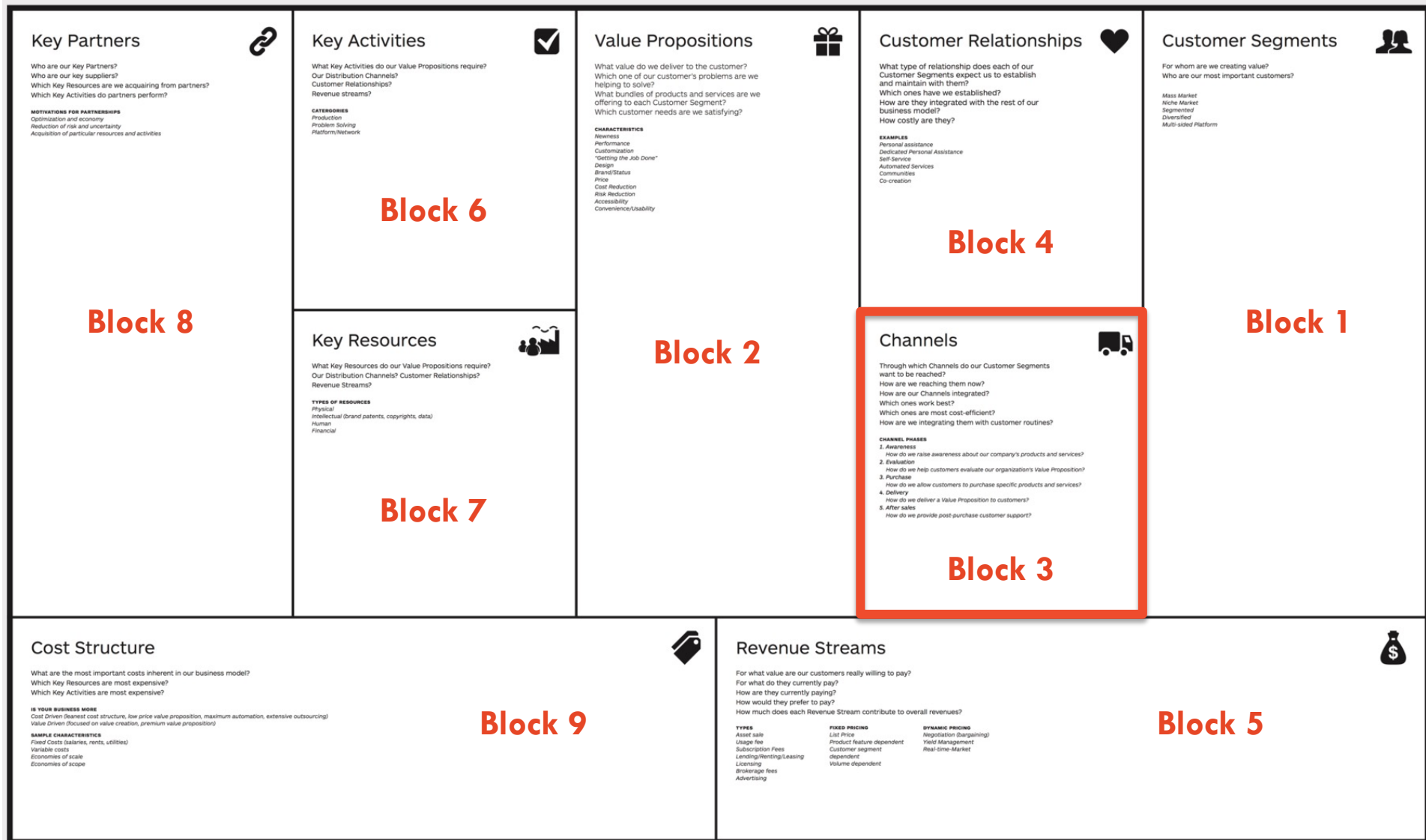
In general, the more elements provided, the greater customers' loyalty and the higher the company's sustained revenue growth.



Value Proposition Pyramid – Case Studies

Channels

Block 3



Block 3: Channels

How a company communicates with and reaches its 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:

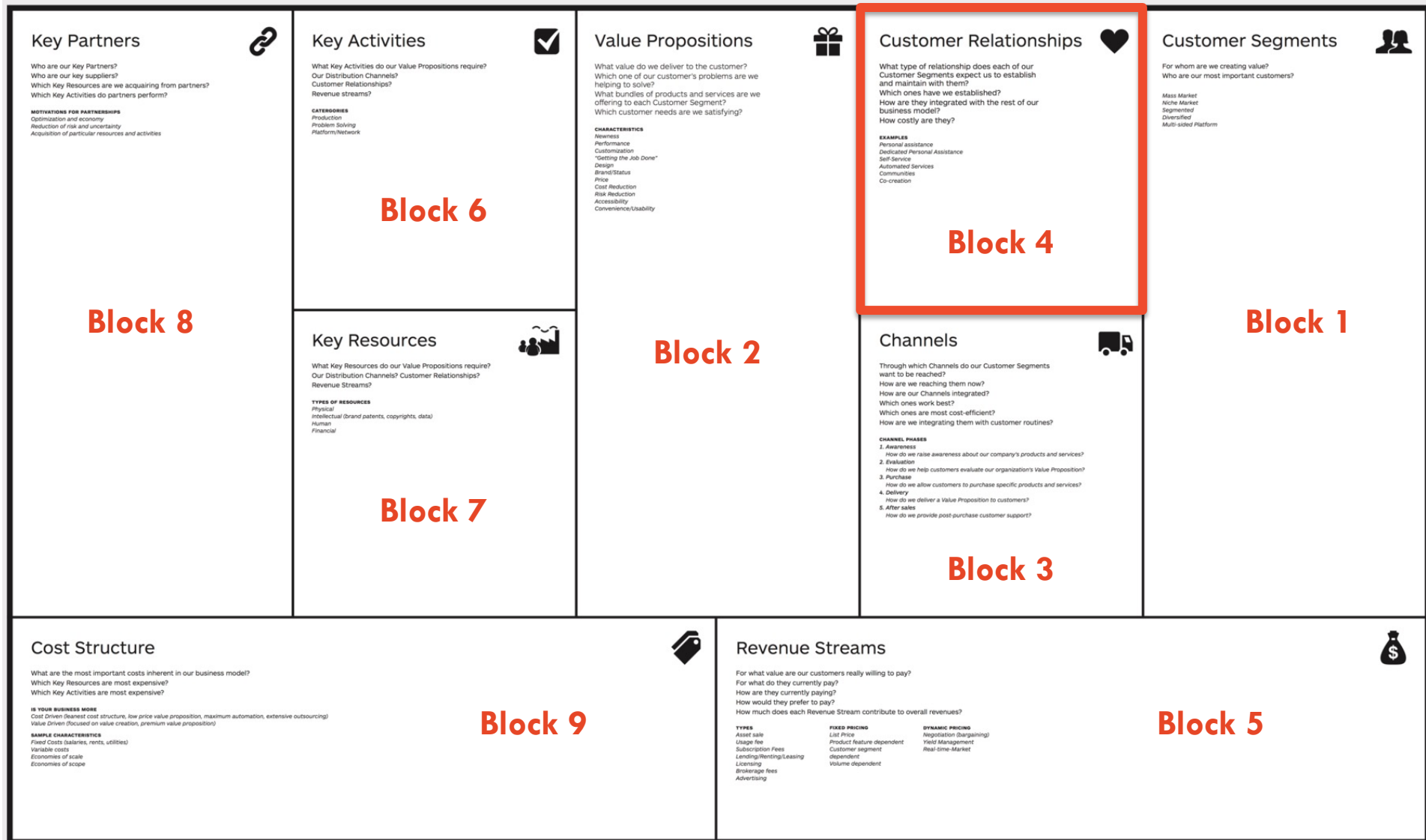
- Web: This include self-service sign-ups, logins and documentation; and live chats with a real person or AI (chatbot)
- Phone calls: With a real person or chatbot.
- Emails: Replied by a real person, or via pre-determined logic pathways
- Advertisements: Social media and search
- Payment
- Direct channels
 - 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



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



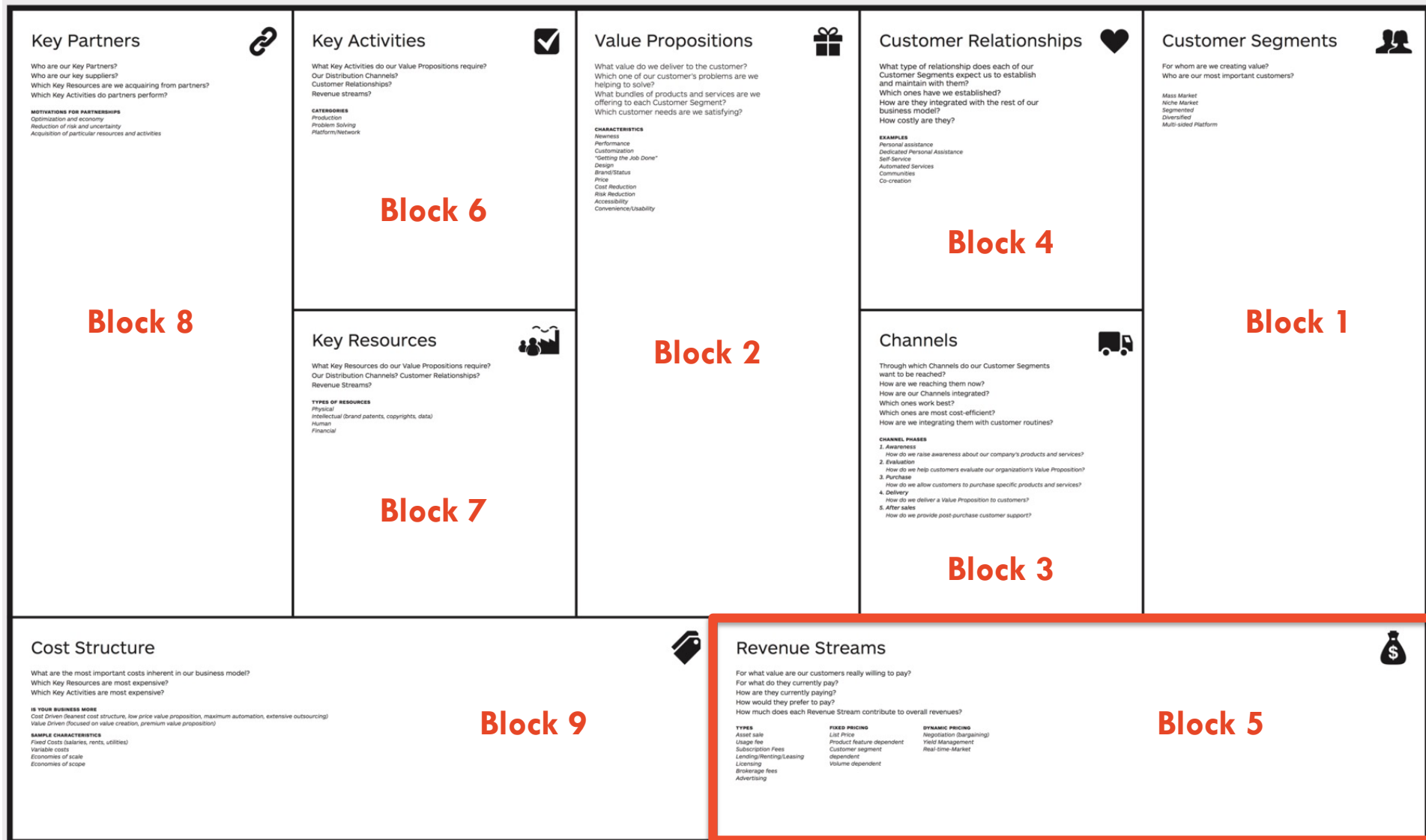
Automated Services
(e.g. Recommendations)



Communities

Revenue Streams

Block 5



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. Amazon.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



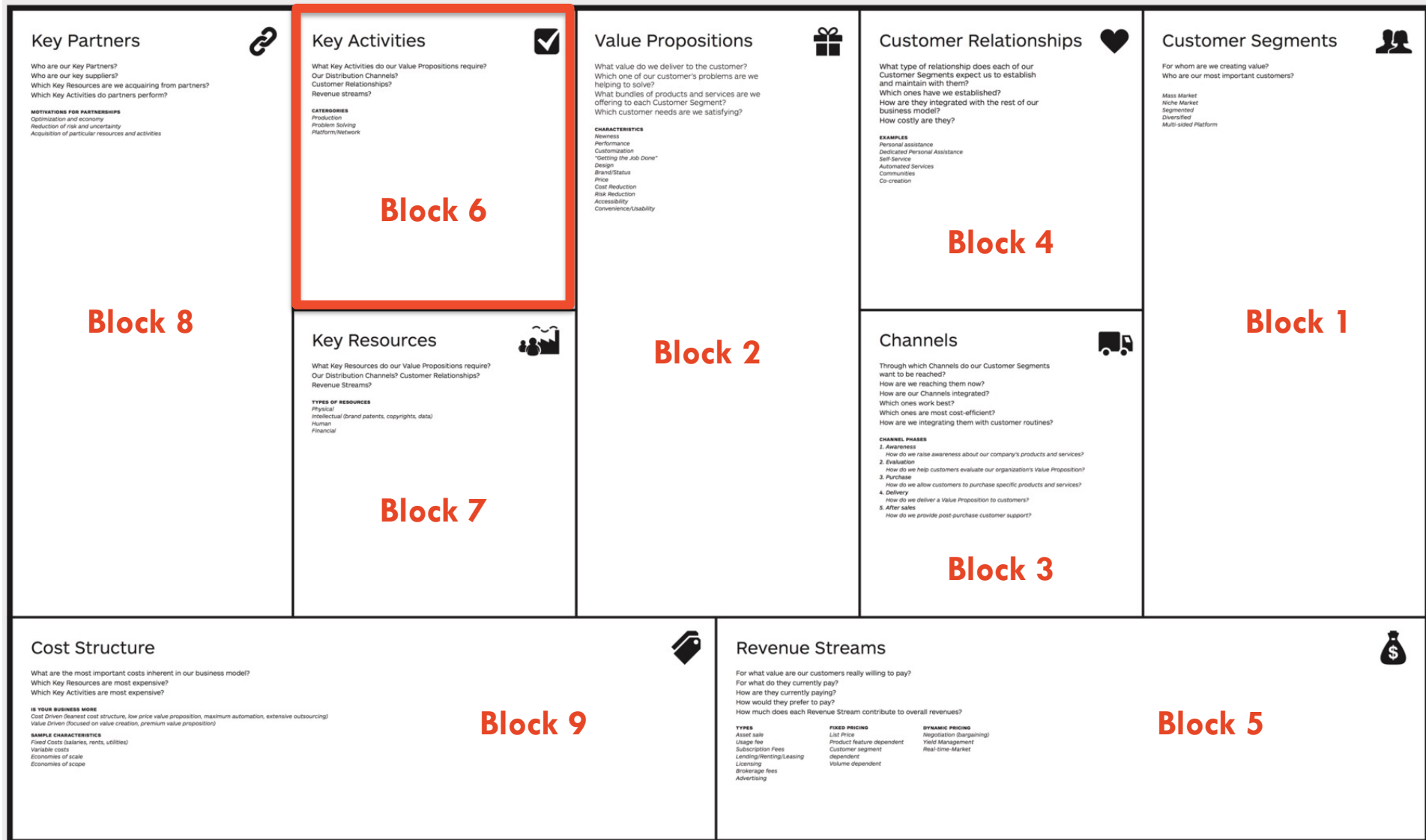
Lending, Renting
or Leasing



Transaction
or Brokerage Fee

Key Activities

Block 6



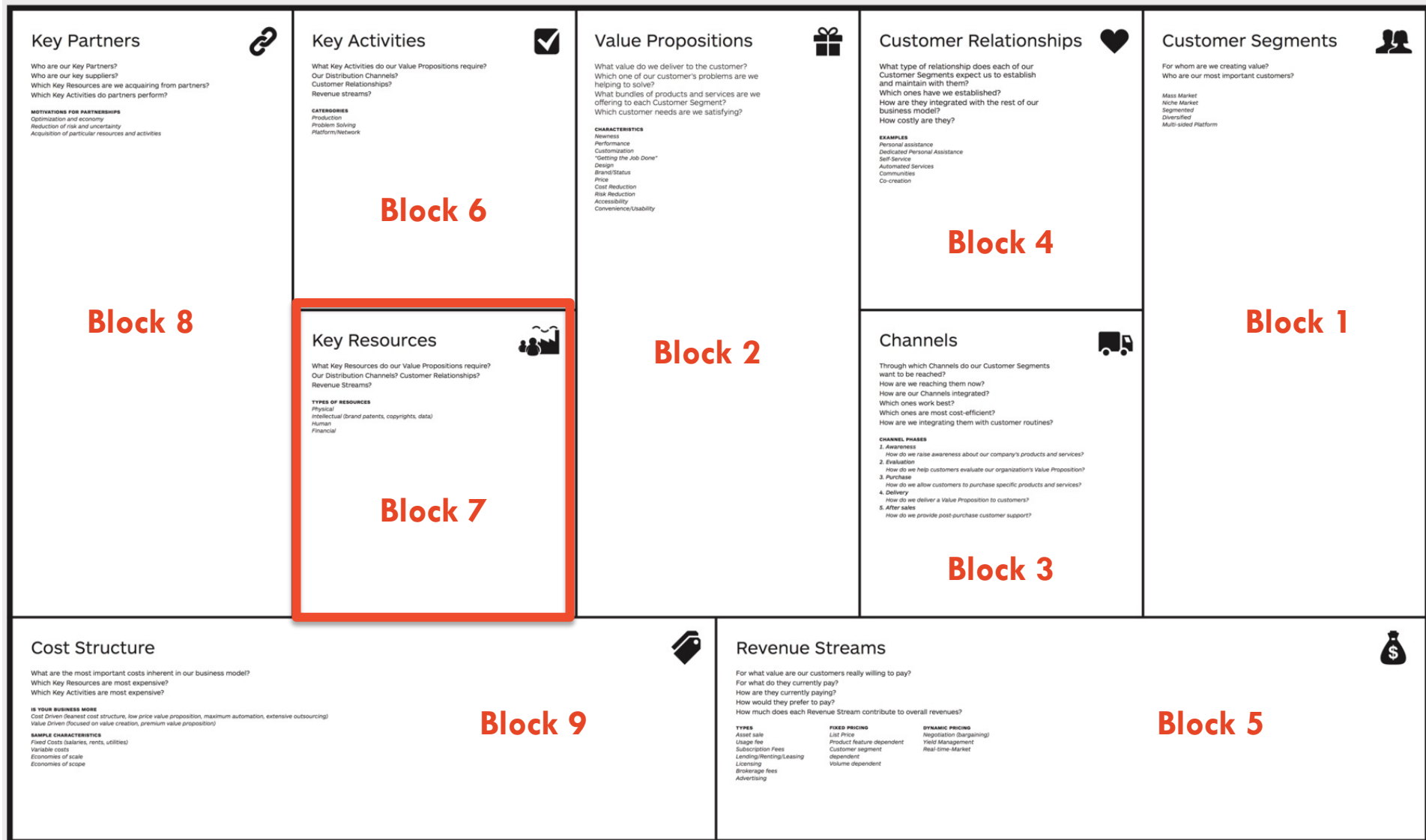
Block 6: Key Activities

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



Block 7: Key Resources

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

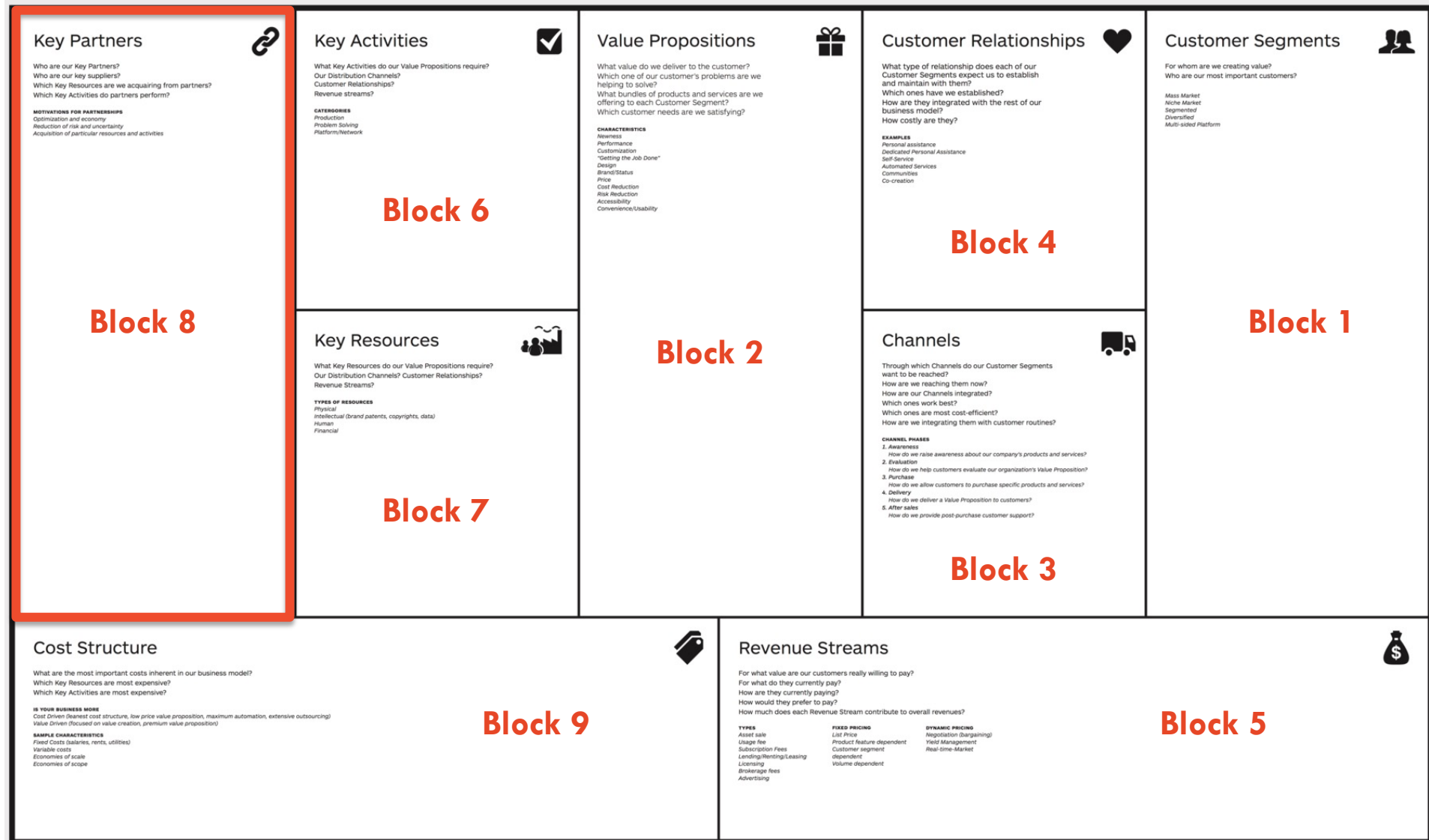
- Resources allow an enterprise to create and offer a Value Proposition, reach markets, maintain relationships with Customer Segments, and earn revenues
- Different Key Resources are needed depending on the type of business model
- An self-driving car start-up requires large volumes of training data 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 AI 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



Block 8: Key Partnerships

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

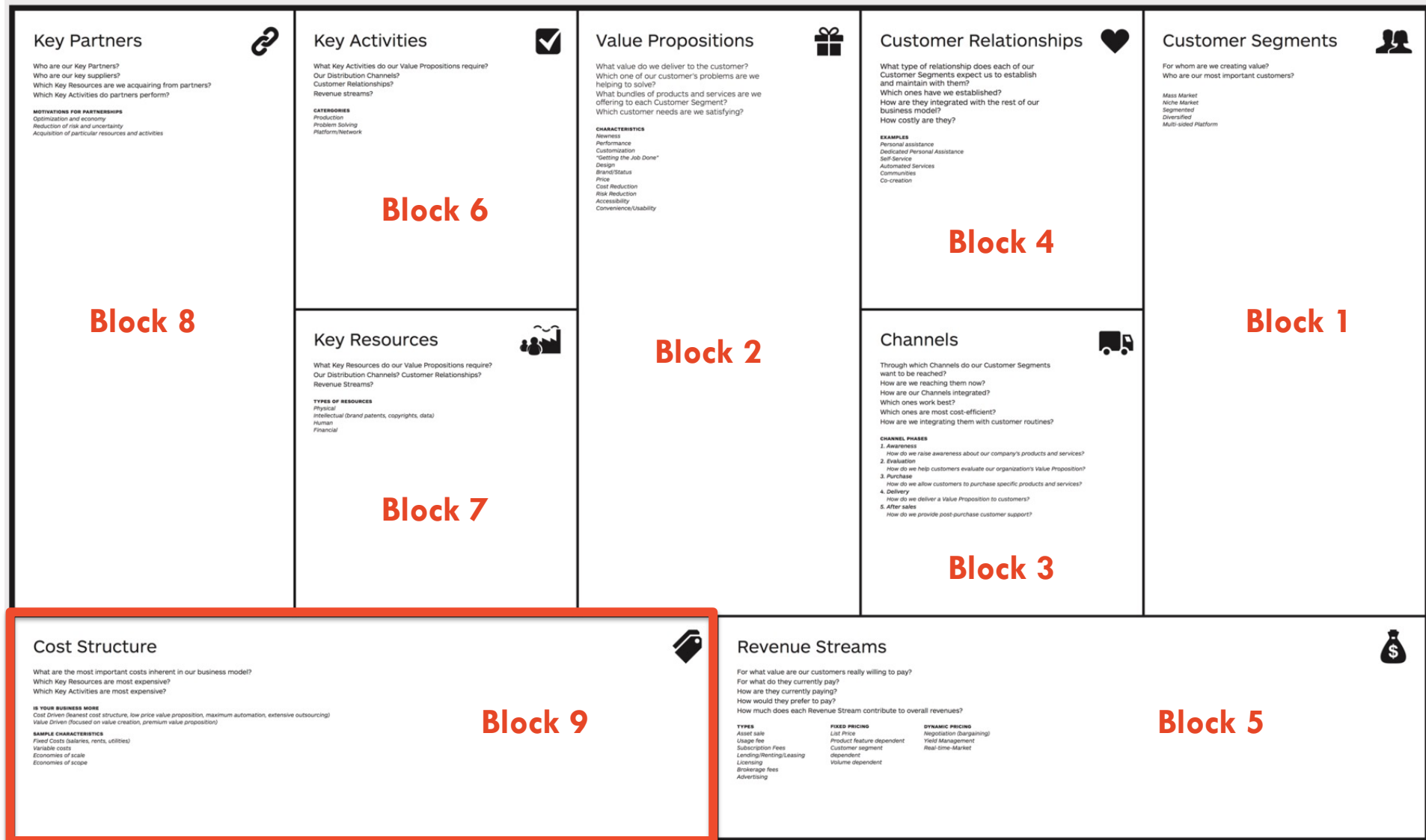
Companies create alliances to optimise their business models, reduce risk, or acquire resources.

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



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 \(hbr.org\)](#)