

2. Business Model Generation in FSM

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In cooperation with:



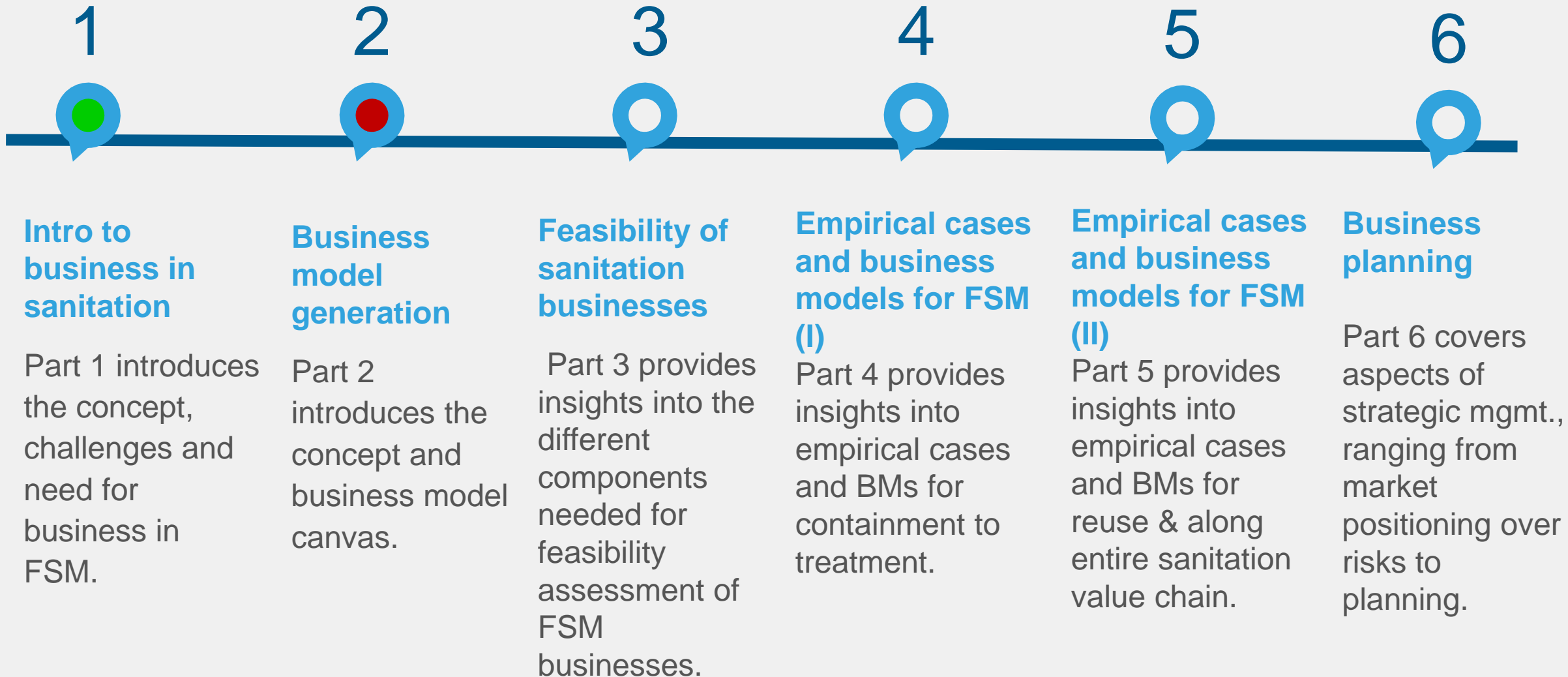


Learning Objectives

This component will allow you to:

- ♻️ Understand the different building blocks of a business model
- ♻️ Explore processes and challenges in developing a specific business model
- ♻️ Be able to apply the Business Model Canvas for FSM business ideas

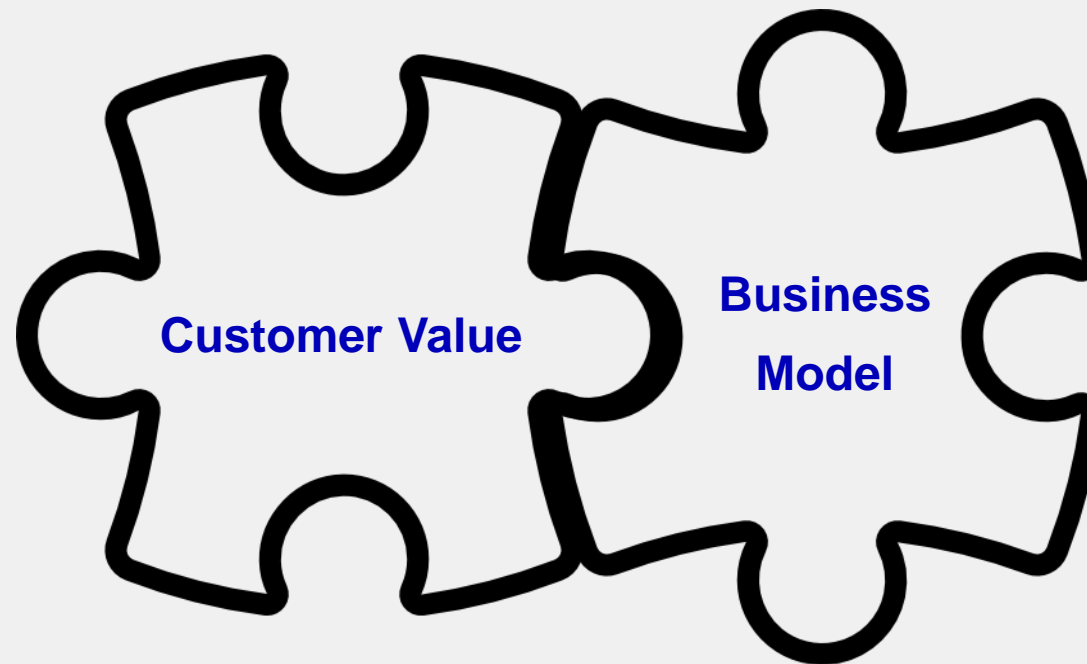
Session structure



■ Business model generation

What is a business model?

- Describes the rationale of how an organisation creates, delivers and captures value.



The way in which a company creates value (makes money*)!

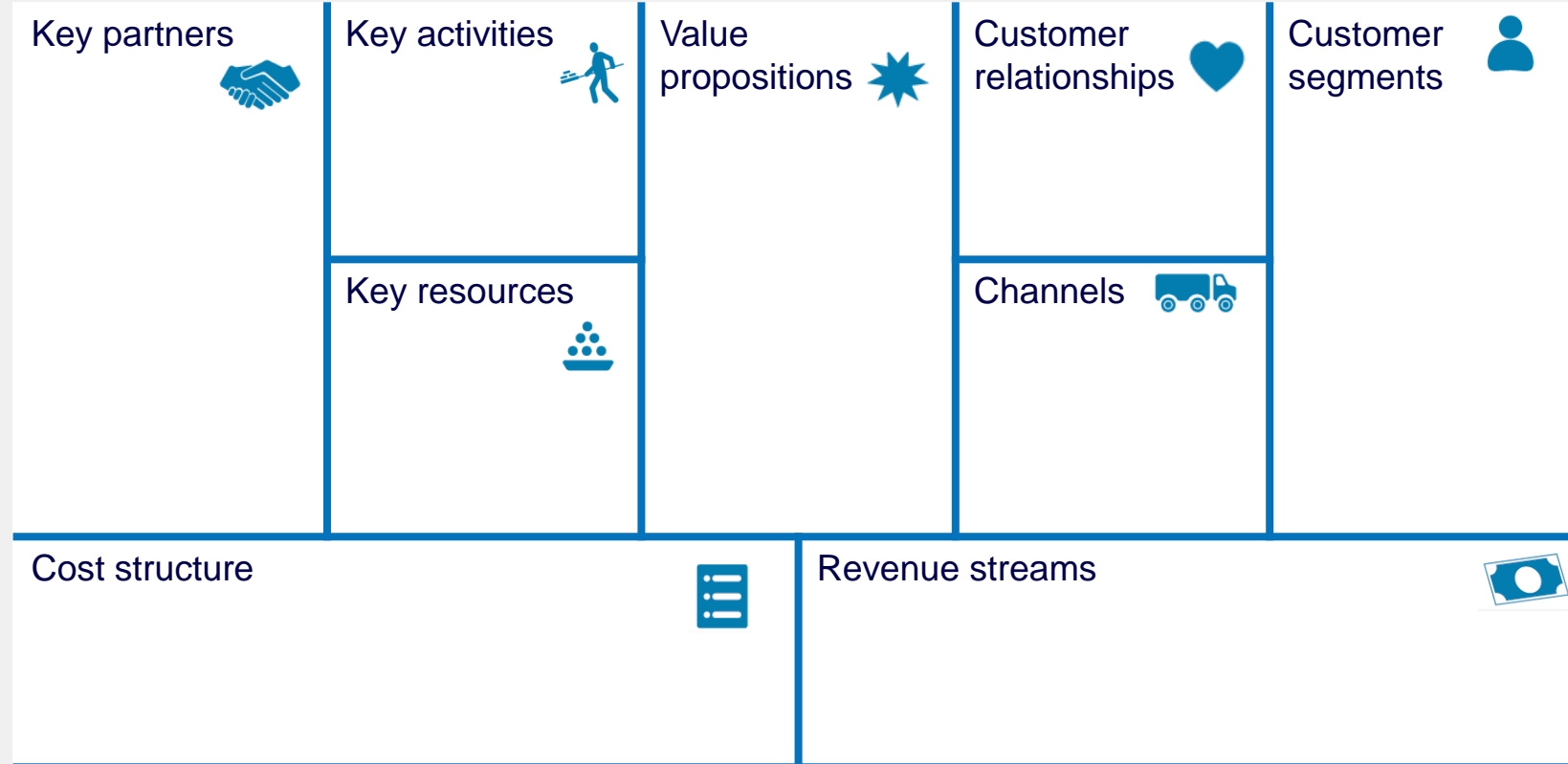
■ Business model generation

What is a business model?

- 4 core elements that describe any business:
 - ♻️ **Value Proposition:** added value that customer(s) derive from offered product(s) and service(s)
 - ♻️ **Customers:** for whom a business creates value by offering product(s) or service(s)
 - ♻️ **Operations:** activities, tangible and intangible resources needed to create value for customers
 - ♻️ **Financial aspects:** ability to capture value from activities and break even or earn profit

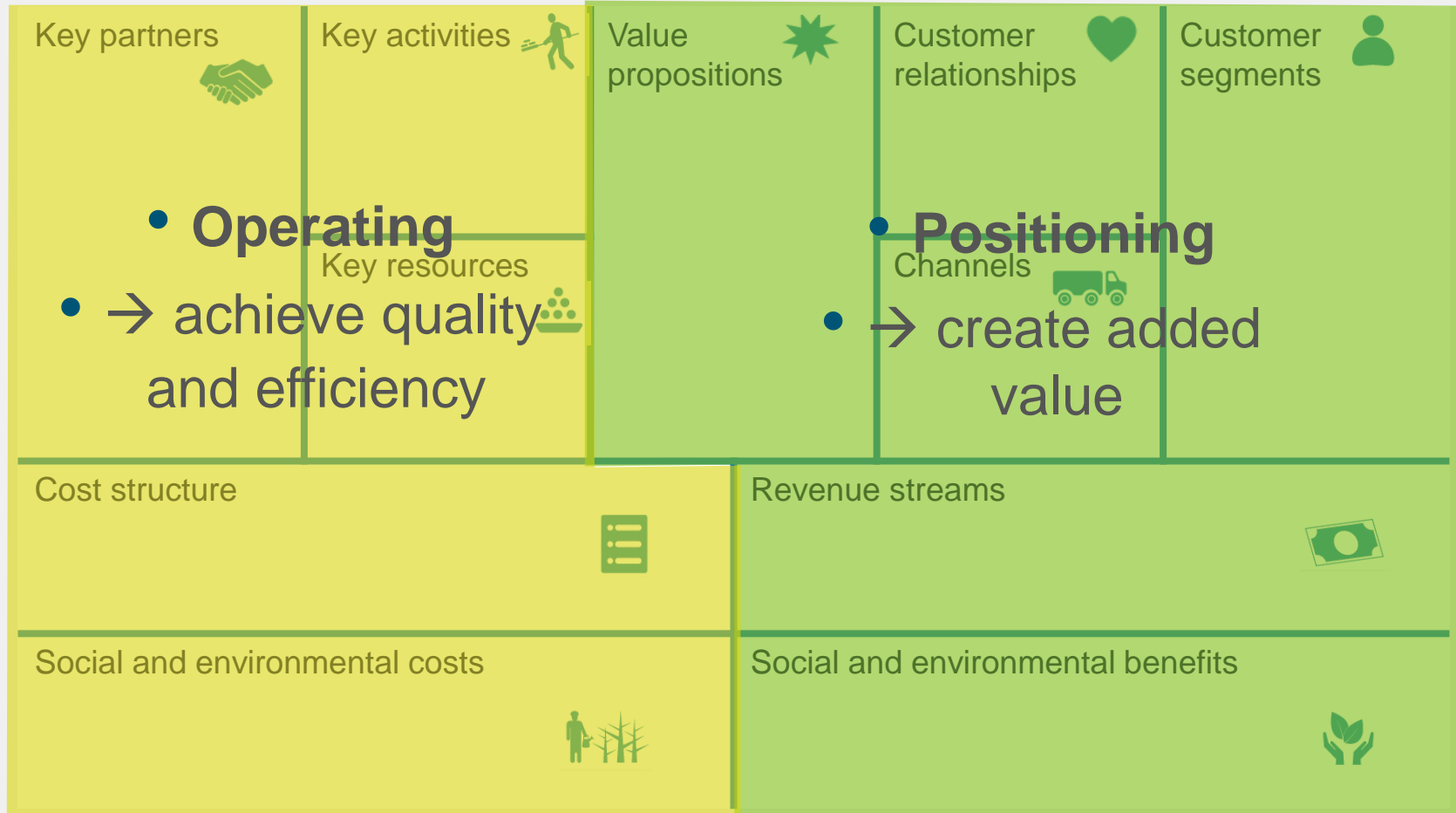
Business model generation

Extended Business Model Canvas



Business model generation

Attain competitive advantage in market position and operations



❖ Case Example

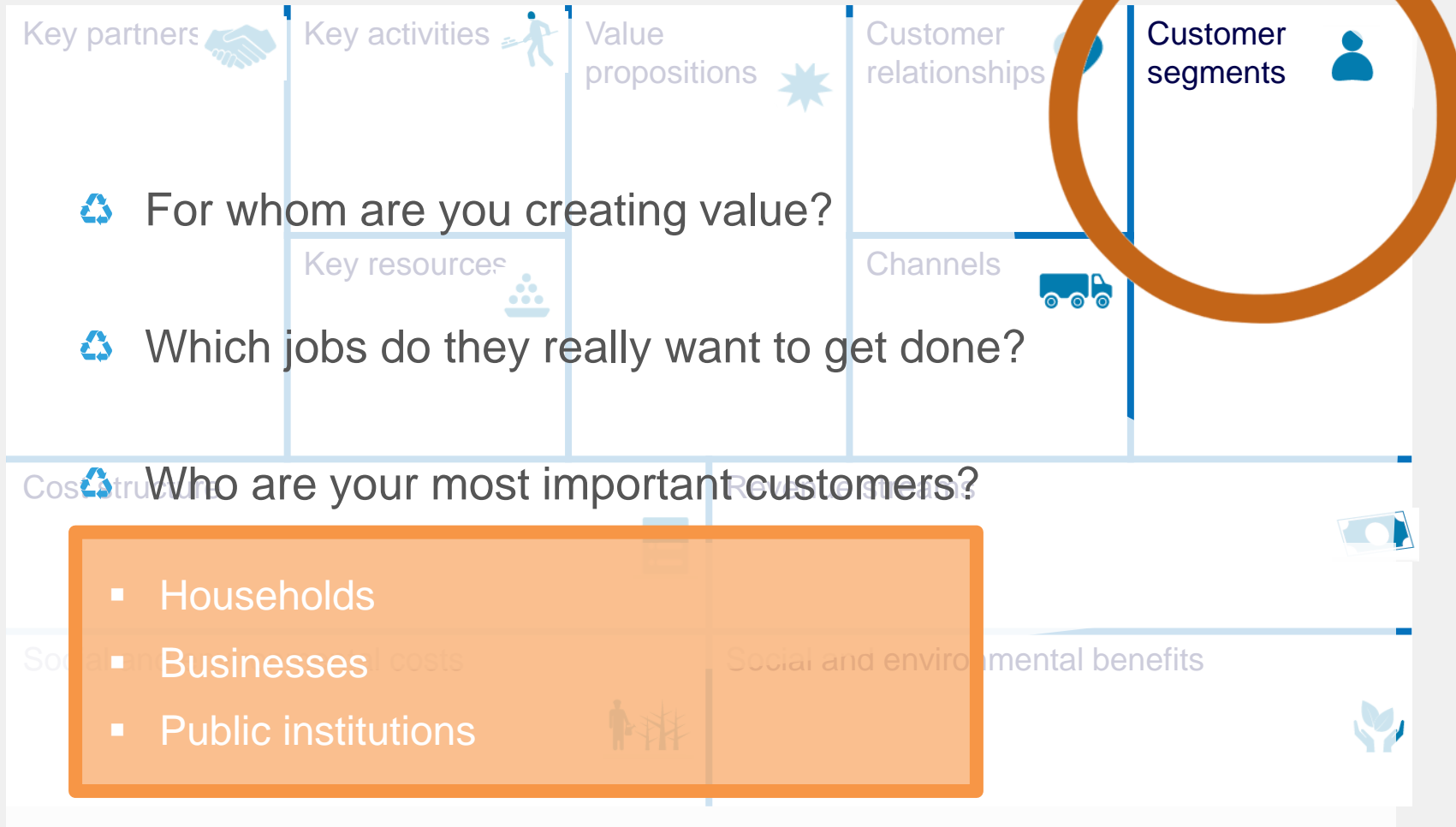
Indah Water Konsortium Sdn Bhd, Malaysia

- ♻️ In Malaysia, the Sewerage Services Act (SSA) came into force in 1993 ending the responsibility of local authorities in sewerage and septage management.
- ♻️ The Government of Malaysia awarded a concession to Indah Water Konsortium (IWK), which is wholly owned by the Ministry of Finance but operates as a private company.
- ♻️ IWK is responsible for providing scheduled desludging of septic tanks and emptying services for 88 LAs, with a customer base of 1.2 million people.



Business model canvas

Customer segments



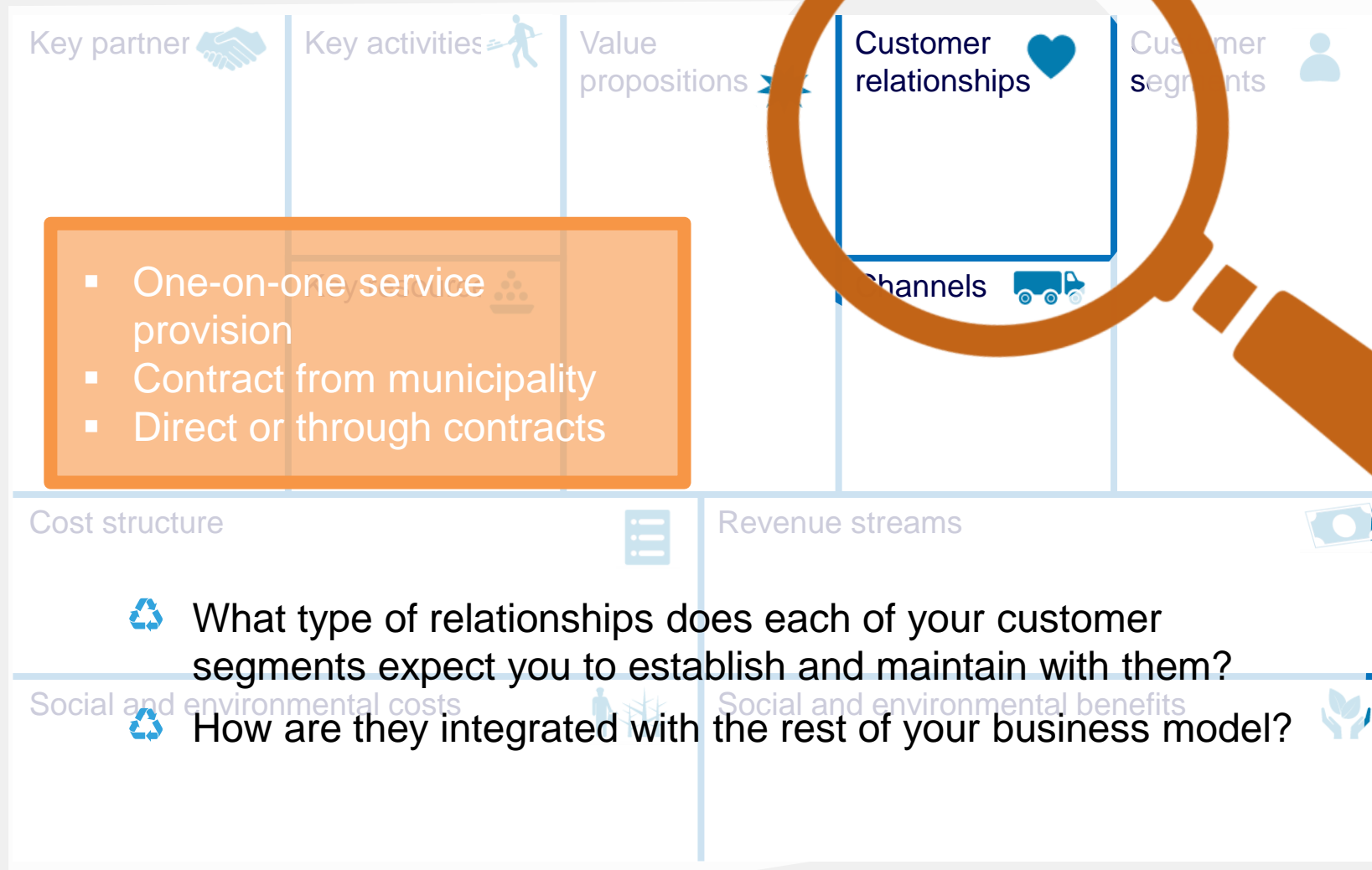
Business model canvas

Value Propositions



Business model canvas

Customer relationships

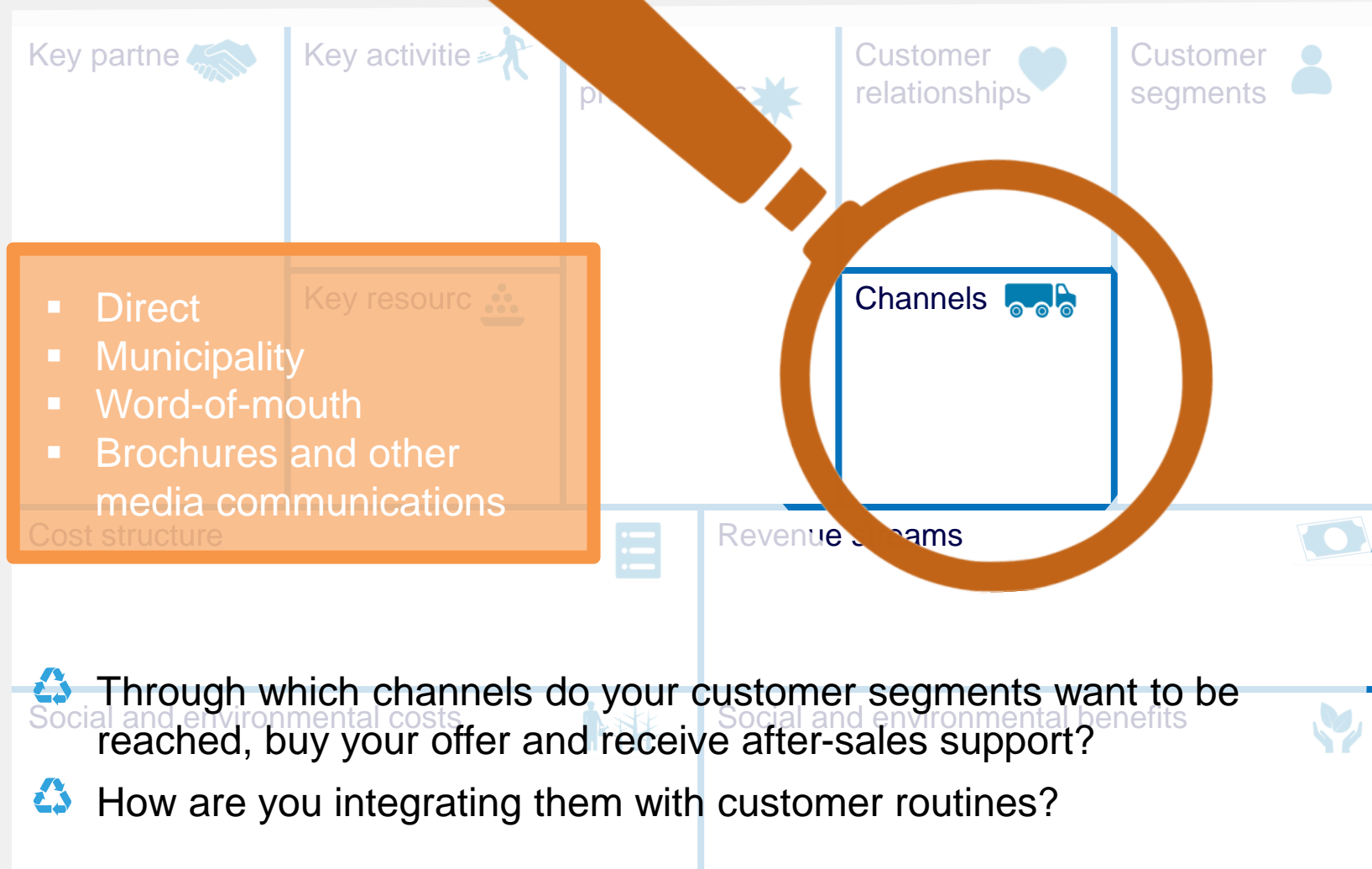


What type of relationships does each of your customer segments expect you to establish and maintain with them?

How are they integrated with the rest of your business model?

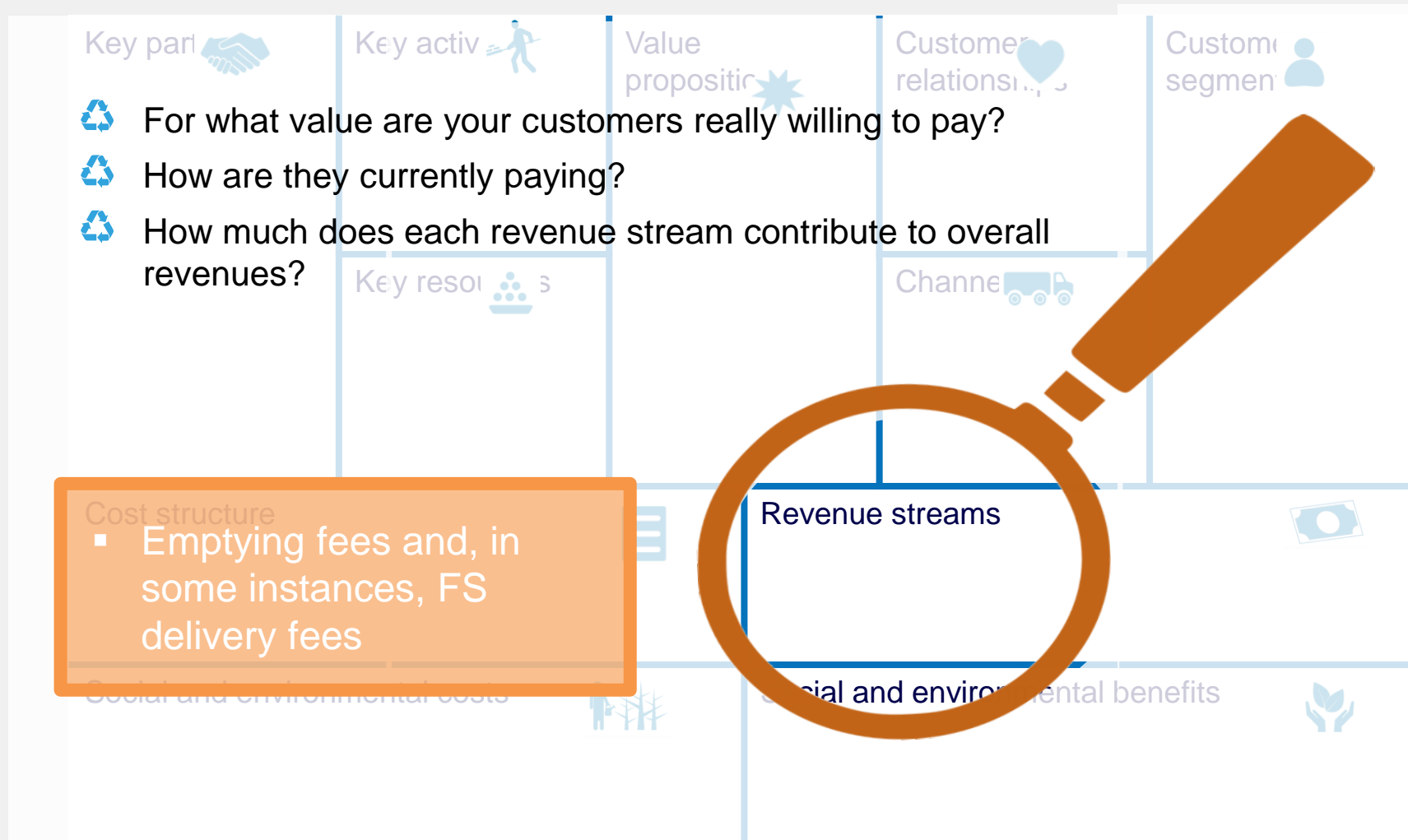
Business model canvas

Channels



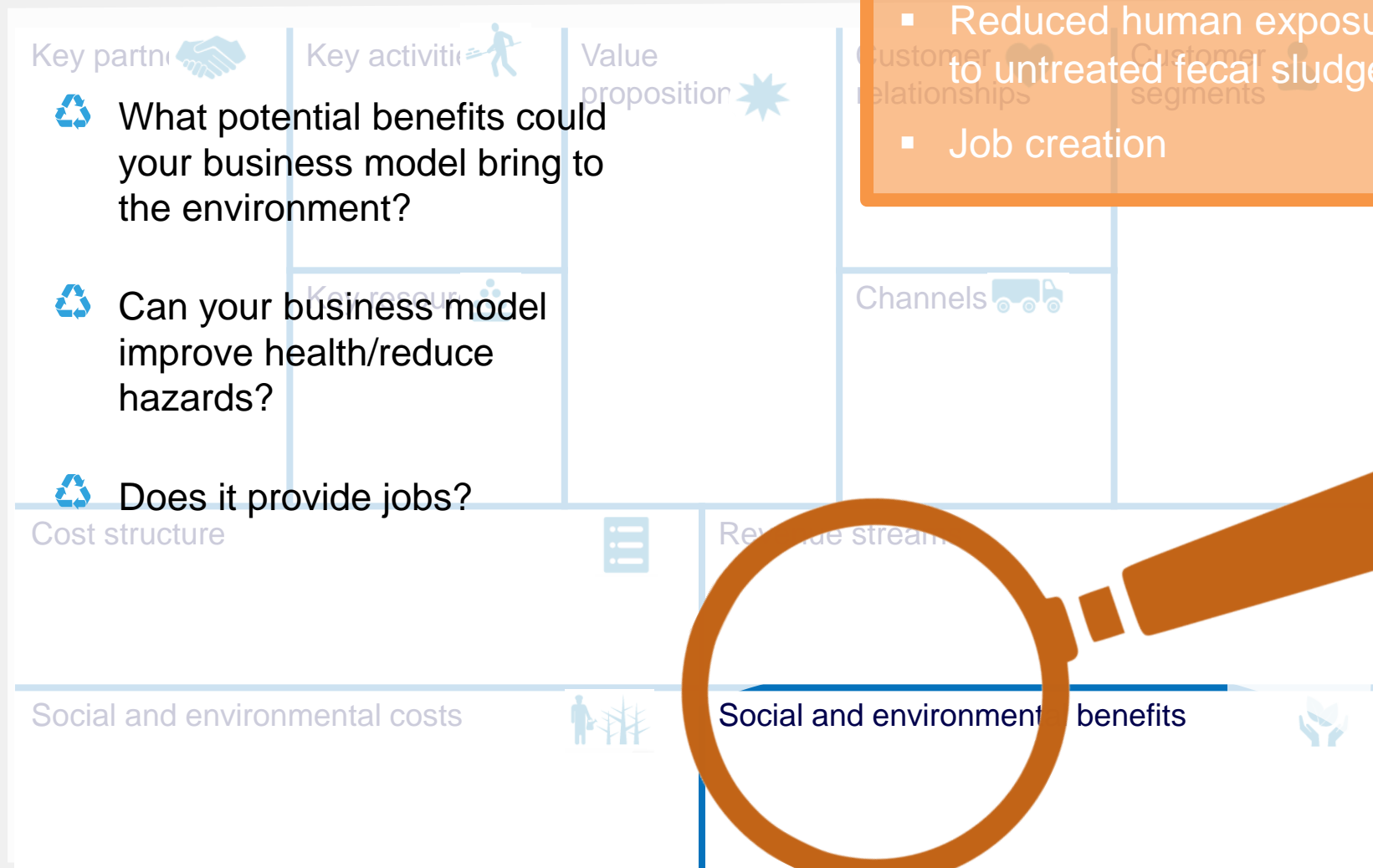
Business model canvas

Revenue Streams



Business model canvas

Social and environmental benefits



- Reduced pollution of water bodies and soils
- Reduced human exposure to untreated fecal sludge
- Job creation

Business model canvas

Key activities



Business model canvas

Key resources

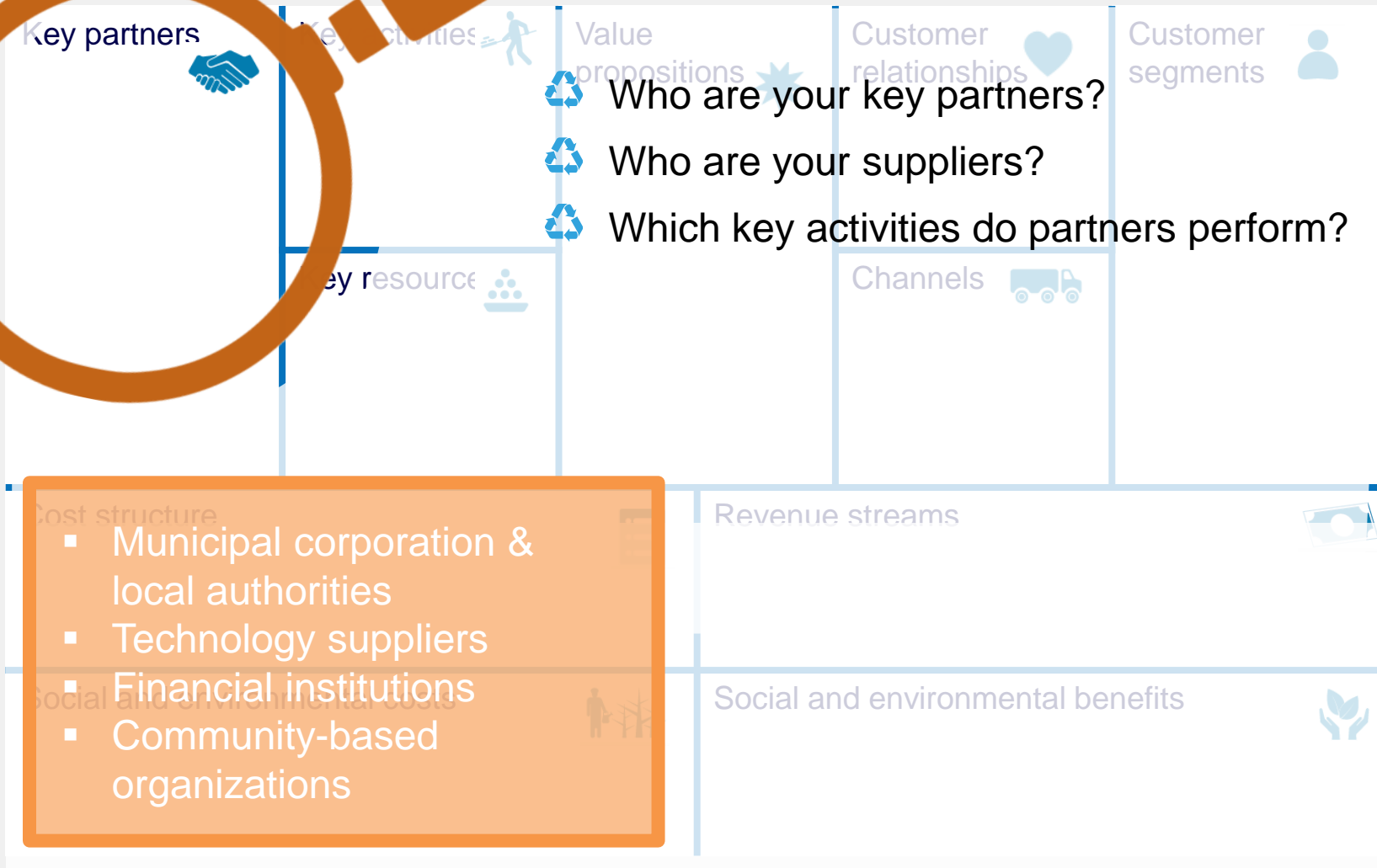
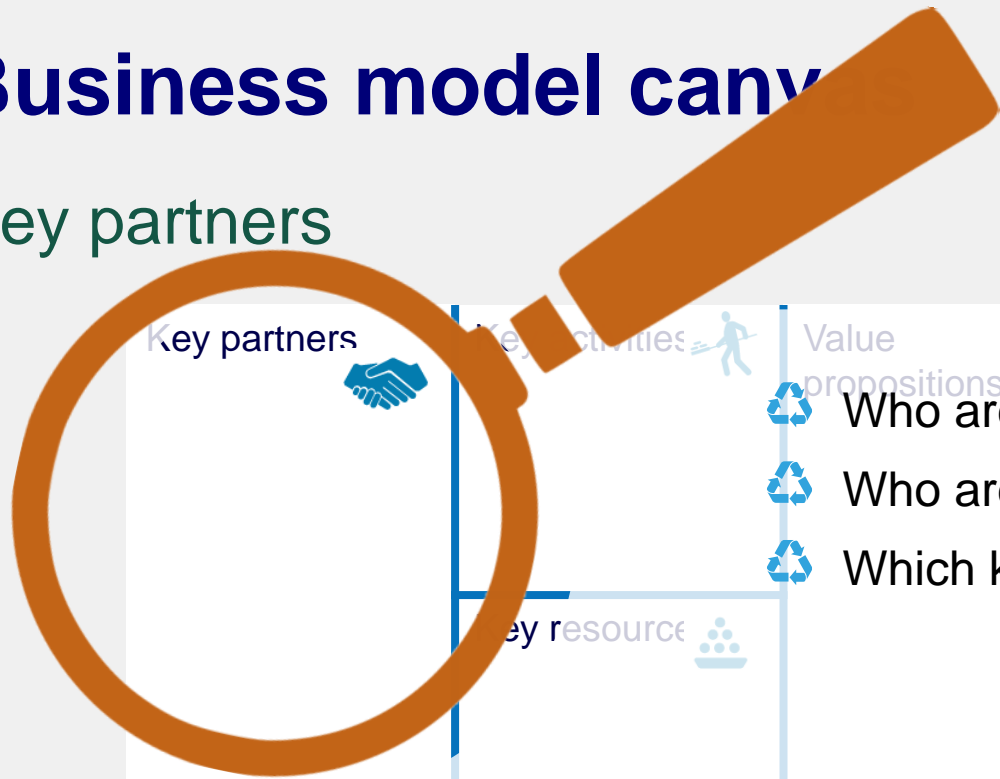


- Appropriate technology and equipment
- Labor
- Finance
- License and contracts for collecting waste

Which key resources do your value propositions require? Your channels? Customer relationships? Revenue streams?

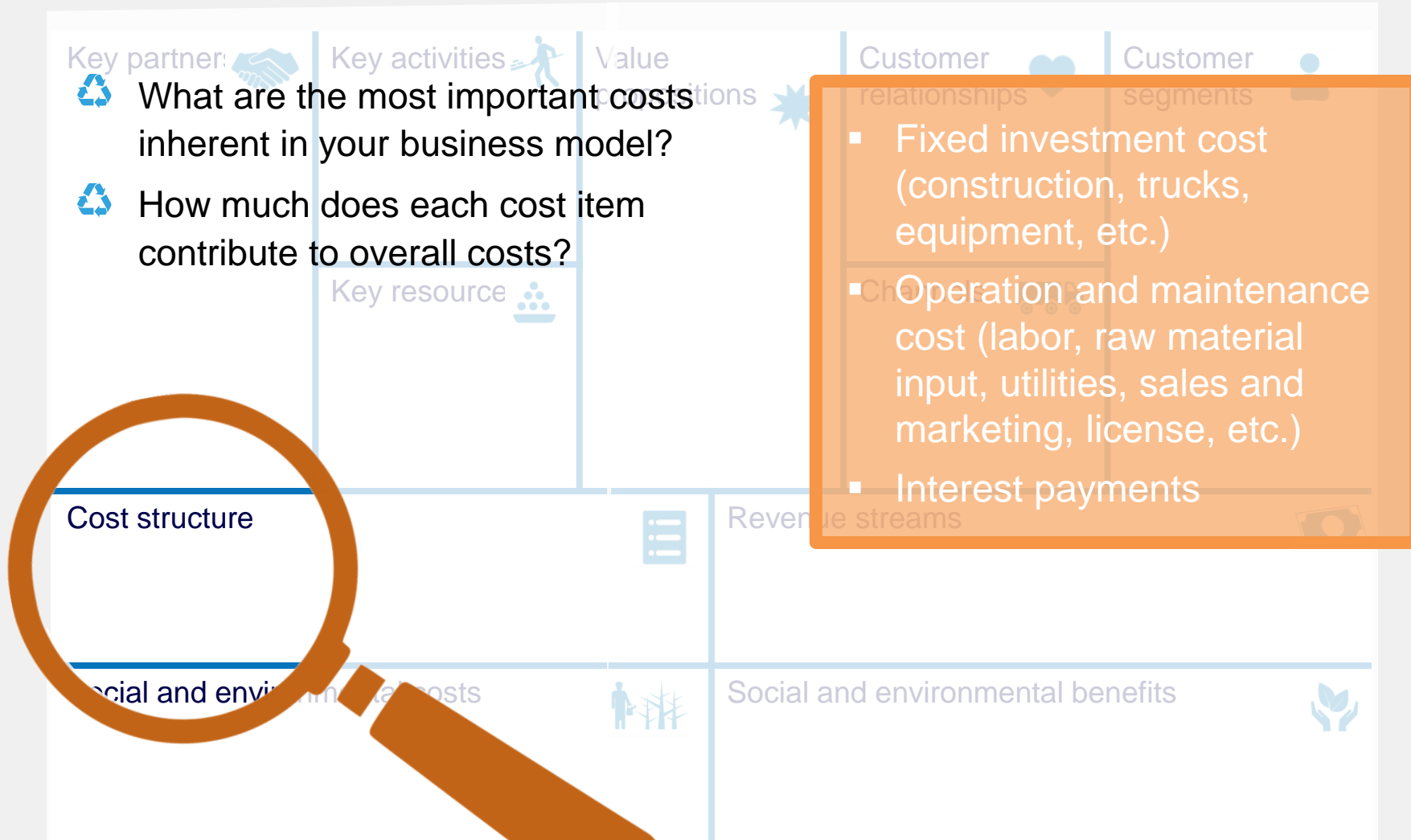
Business model canvas

Key partners



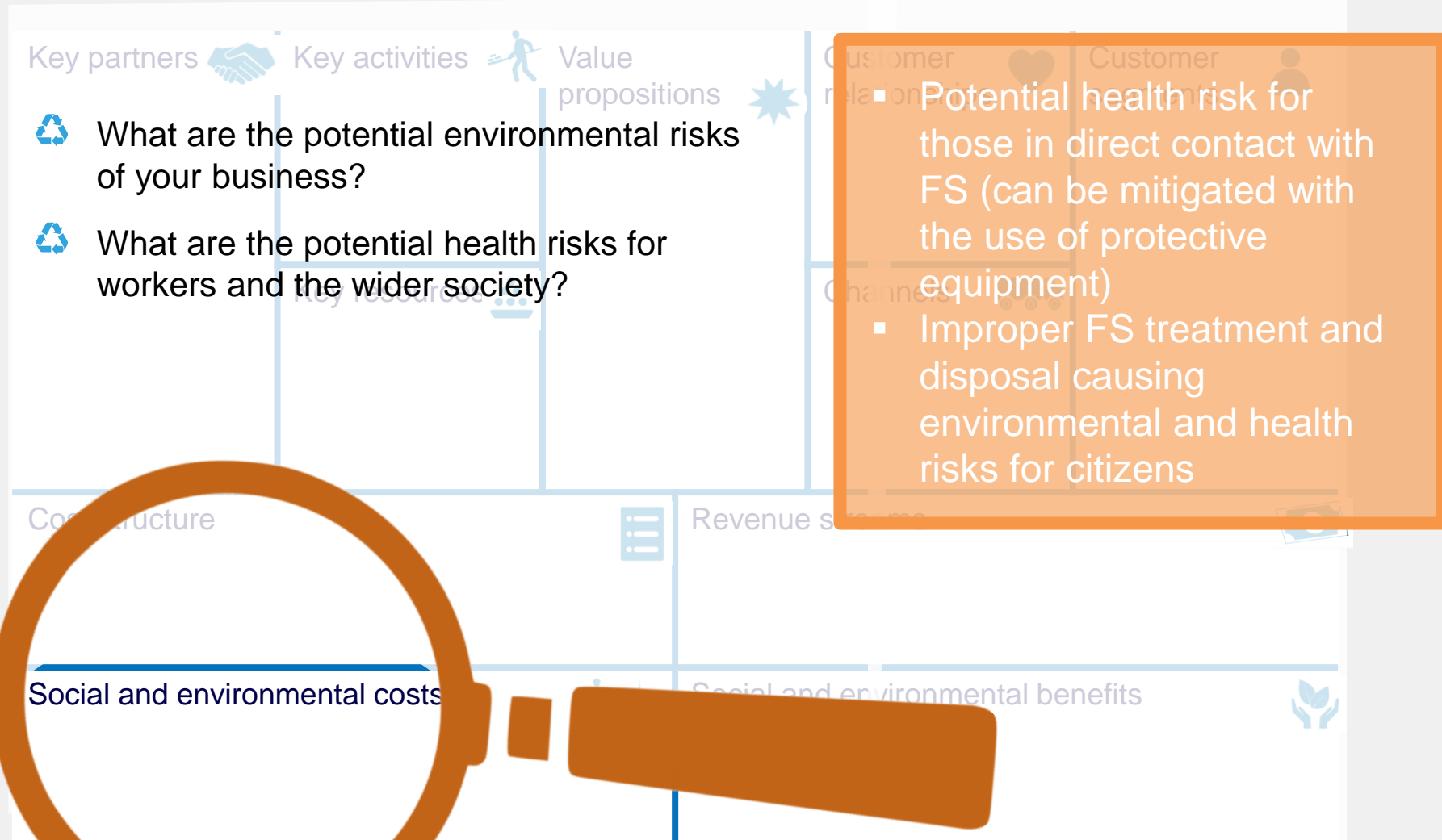
Business model canvas

Cost structure



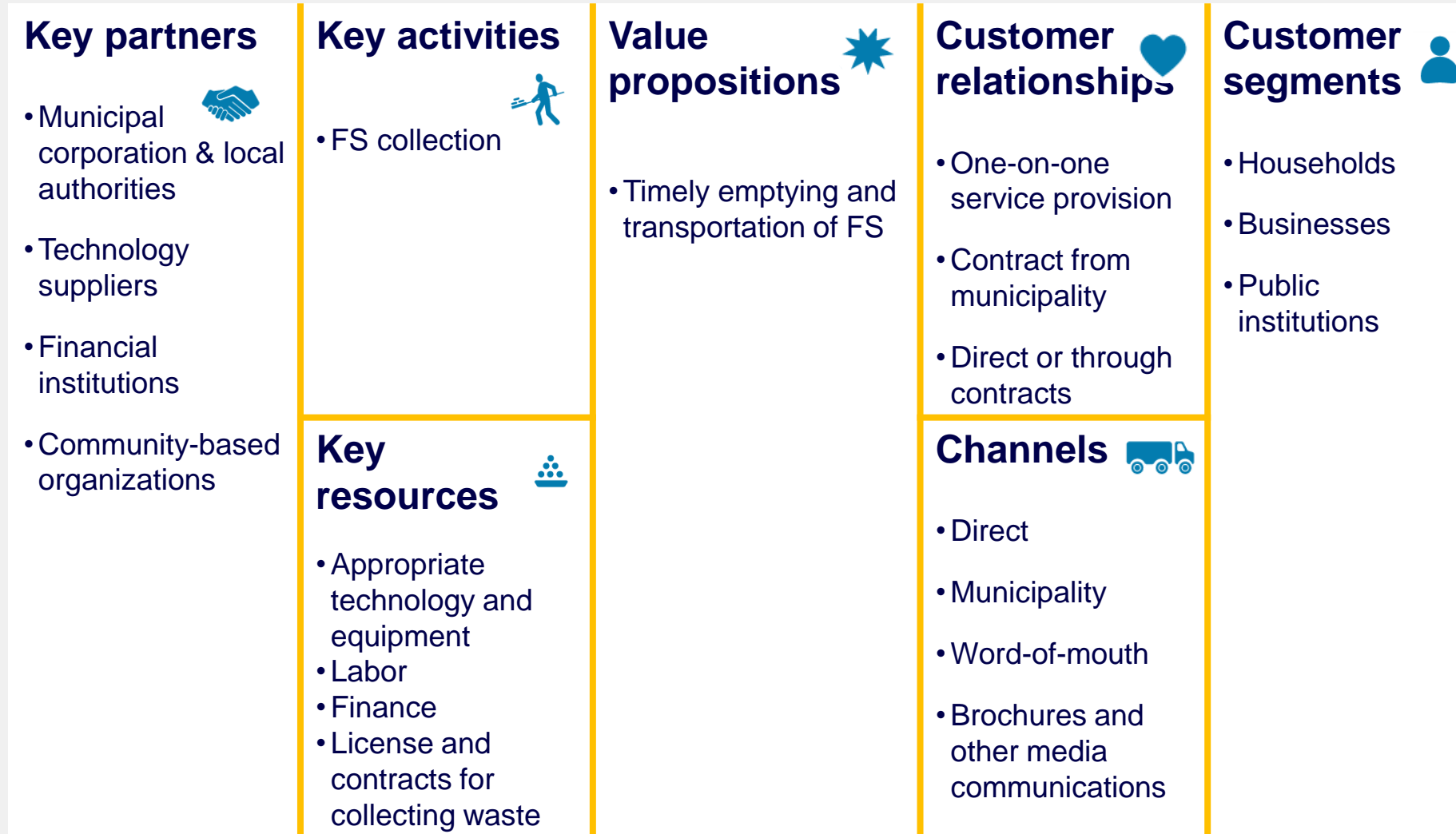
■ Business model canvas

Social and environmental costs







❖ Case Example

Indah Water Konsortium Sdn Bhd, Malaysia



❖ Case Example

Indah Water Konsortium Sdn Bhd, Malaysia

Cost structure  <ul style="list-style-type: none">▪ Fixed investment cost (construction, trucks, equipment, etc.)▪ Operation and maintenance cost (labor, raw material input, utilities, sales and marketing, license, etc.)▪ Interest payments	Revenue streams  <ul style="list-style-type: none">▪ Emptying fees and, in some instances, FS delivery fees
Social and environmental costs  <ul style="list-style-type: none">▪ Potential health risk for those in direct contact with FS (can be mitigated with the use of protective equipment)▪ Improper FS treatment and disposal causing environmental and health risks for citizens	Social and environmental benefits  <ul style="list-style-type: none">• Reduced pollution of water bodies and soils• Reduced human exposure to untreated fecal sludge• Job creation

■ Relevance

Why use the Business Model Canvas?

- ♻️ **Grasp relationships:** understand how building blocks relate to each other → strategic analysis of how the business creates added value and how it ensures efficiency and quality.
- ♻️ **Visual thinking:** neat breakdown of major considerations impacting a business → better understanding of the business' strengths and weaknesses and systematic identification of business risks.
- ♻️ **Iterate quickly:** use canvas to quickly evaluate tweaks in a business model.
- ♻️ **Easy to circulate:** easy access and dissemination.

The business model has to be evaluated and adapted or replaced continuously!

Categorization of FSM business models



BUSINESS MODELS FOR TOILET ACCESS AND *IN-SITU* ENERGY RECOVERY

- Public toilet with energy recovery

BUSINESS MODELS FOR TOILET ACCESS AND *IN-SITU* ENERGY RECOVERY (CONT.)

- Residential-institutional biogas

FSM Business Models

- 18 FSM Business Models extracted/developed

MODELS FOR EMPTYING AND TRANSPORT OF FECAL SLUDGE

- Commonly occurring private emptying and transportation
- Franchise
- Nonprofit
- Transfer station

MODELS LINKING EMPTYING, TRANSPORT AND

- Commonly occurring public FSM
- Licensing
- Call center
- Scheduled desludging sanitation tax
- Incentivized disposal
- Full private

MODELS EMPHASIZING REUSE AT THE END OF

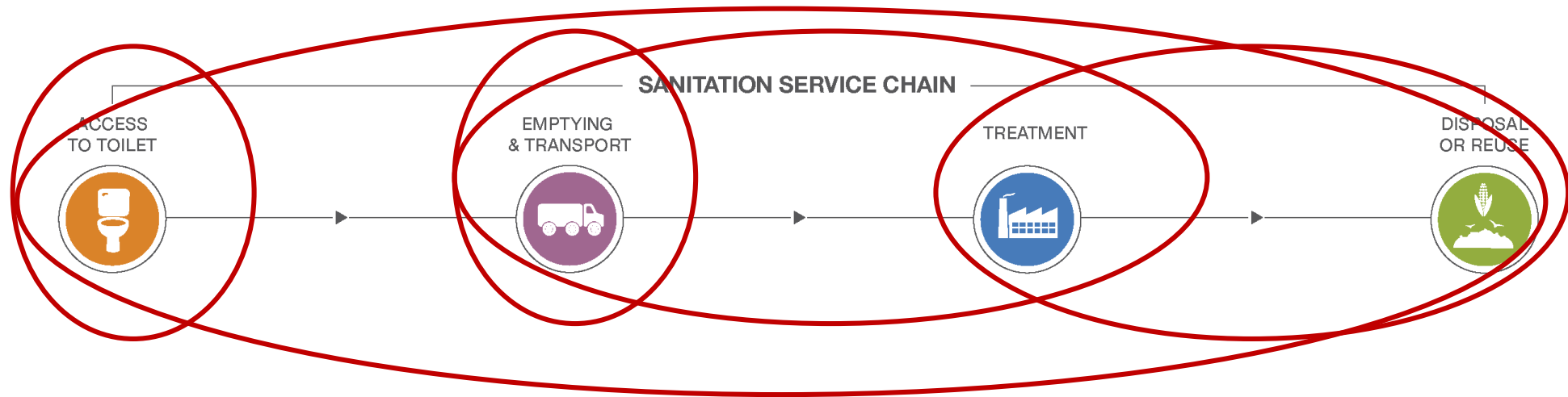
- Farmer-truck operator partnership
- Co-composting
 - Town cluster approach
 - Pull-push



MODELS COVERING THE ENTIRE SANITATION SERVICE CHAIN FROM TOILET ACCESS TO REUSE

- Non-movable UDDT installation
- Container-based sanitation (CBS)

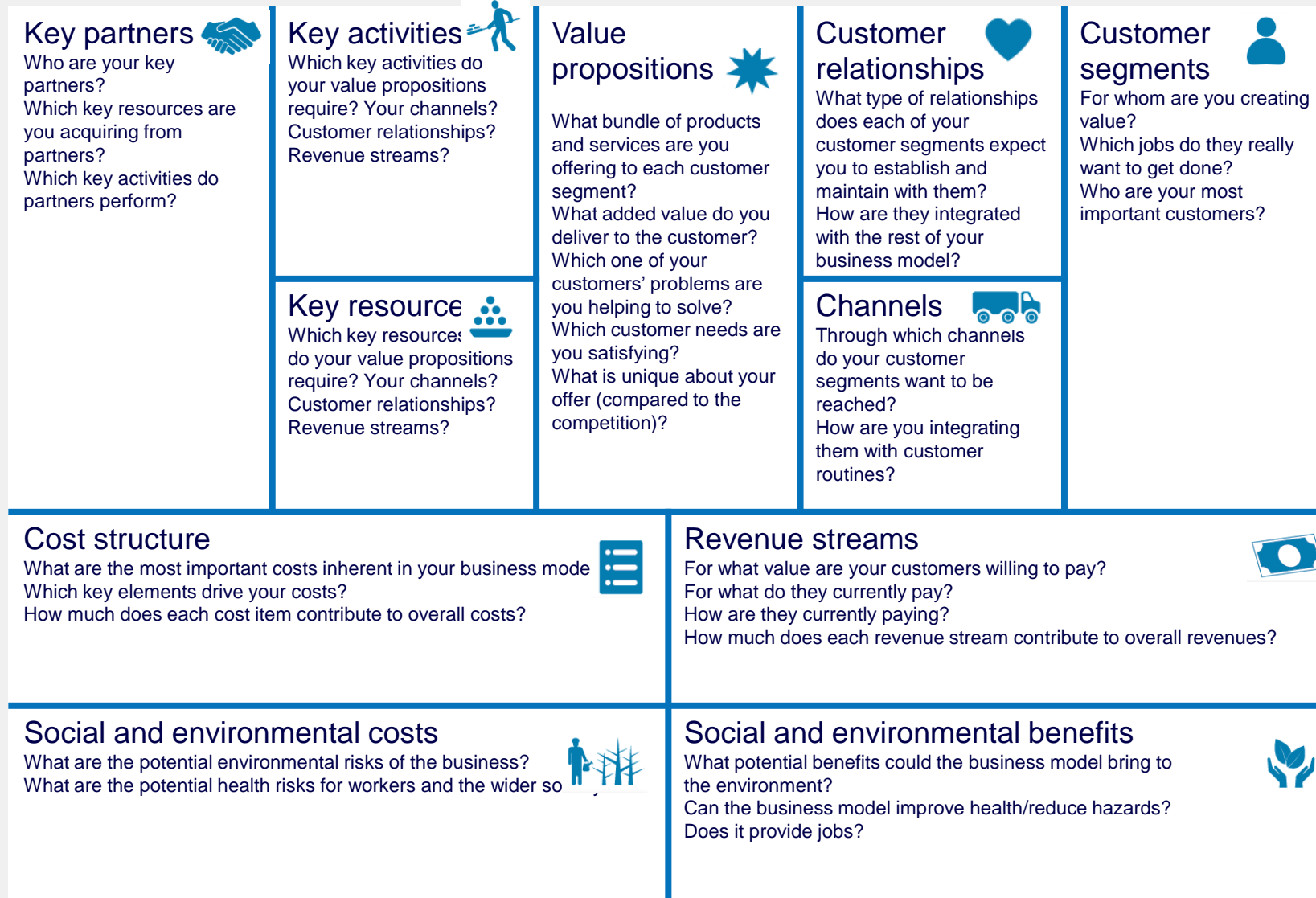
Fecal Sludge Management



Access, Emptying, Transport and Treatment Model

■ Cheatsheet “Business Model Canvas”

Extended business model canvas








■ Key takeaways

What you should take home





- ♻️ A business model describes the rationale of how an organisation **creates, delivers and captures value**. It is not to be confused with a business plan; rather it is the basis for developing a business plan.
- ♻️ The heart of any business model are the **customers** and the **products & services** and their added value corresponding to the customers' needs.
- ♻️ The other components of the business model describe how the organisation **creates added value**, and **achieves quality and efficiency**.
- ♻️ Use the Business Model Canvas to describe, design, challenge, and pivot your business model.

■ List of references

-  RAO, K., KVARNSTRÖM, E., DI MARIO, L., DRECHSEL, P. (2016). *Business models for fecal sludge management*. Colombo, Sri Lanka: International Water Management Institute (IWMI). CGIAR Research Program on Water, Land and Ecosystems (WLE). 80p. (Resource Recovery and Reuse Series 6).
-  Image source: Puzzle piece icon by [Recicon](http://www.flaticon.com) from www.flaticon.com [Accessed: 01.12.2018]
-  Image source: “Lemonade Stand” icon by Luis Prado, The Noun Project <https://thenounproject.com/> [Accessed: 01.12.2018]
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