(II) BOLOGNA

ROCK HACKATHON 2018

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ROCK

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ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

COMUNE DI BOLOGNA

urban center bologna

ecopreneurs for the climate

PROGRAM

26-27 May

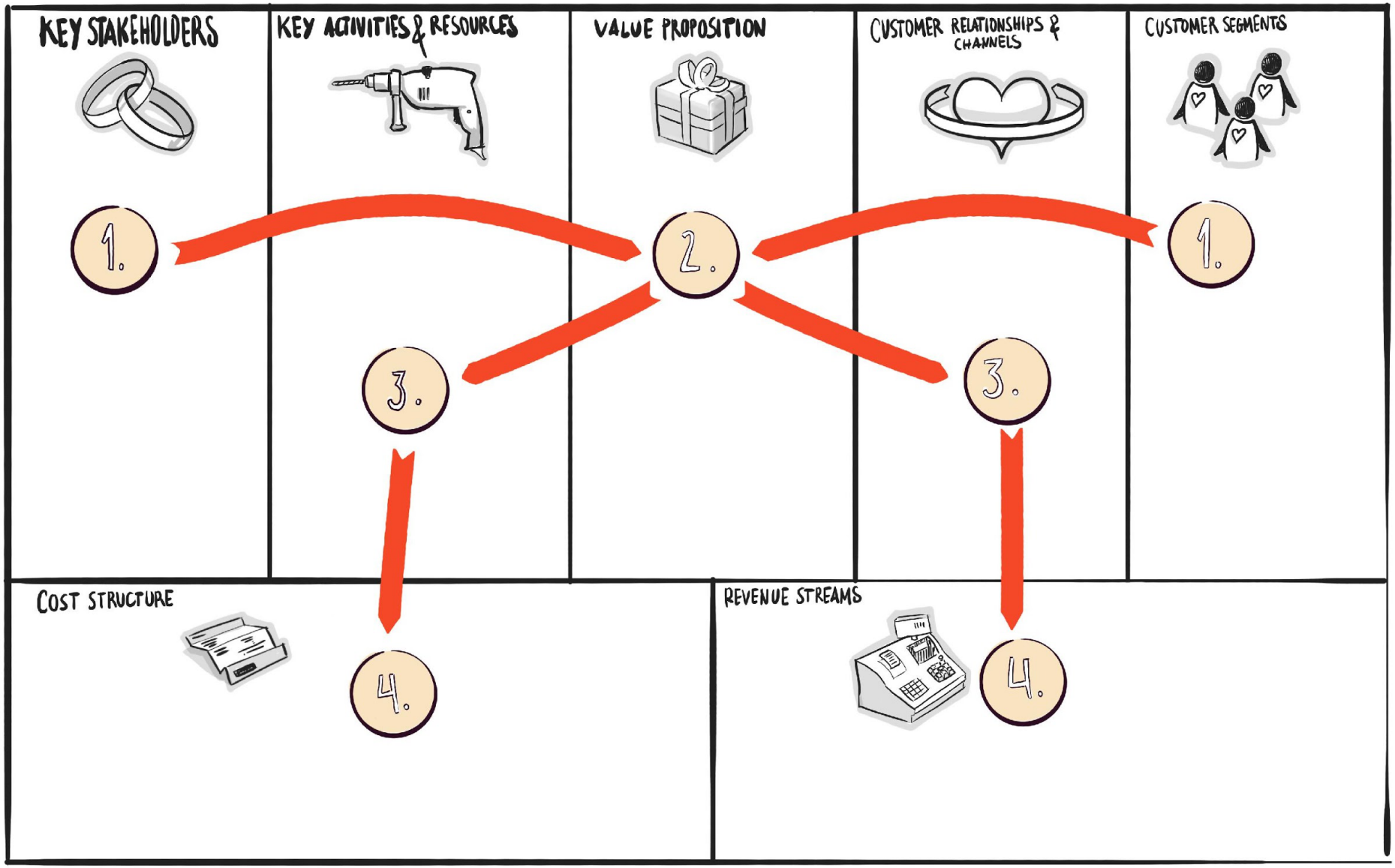
Day - session	Schedule	Contents
May 26 - Morning	9:30 - 10:00	Presentation of the initiative: goals, organizers, partners, program, methodology and follow-up
	10:00 - 10:45	Identification and framing of local environmental challenges in Bologna
	10:45 - 11:00	Break
	11:00 - 12:00	Solution design I: objectives, customers, partners and stakeholders
	12:00 - 13:30	Solution design II: value proposition
	13:30 - 14:30	Lunch break (meal not included)
May 26 - Afternoon	14:30 - 16:00	Solution design III: business model, communication & engagement
	16:00 - 16:15	Break
	16:15 - 18:00	Prototype building
May 27 - Morning	9:30 - 11:00	Prototype testing and feedback gathering
	11:00 - 11:15	Break
	11:15 - 13:30	Enhancement of prototype
	13:30 - 14:30	Lunch break (meal not included)
May 27 - Afternoon	14:30 - 16:00	Preparation of presentations and rehearsals
	16:00 - 16:15	Break
	16:15 - 17:30	Final presentations to the jury & audience
	17:45 - 18:30	Announcement of winners at Piazza Verdi

Solution design II:

Value proposition:

(12:00 - 13:30)

0. Objectives, mission & vision



1 SKETCH & SET

SKETCH YOUR BUSINESS IDEA

You have a business idea in your mind. Sketch it by briefly answering the questions in each box. You can use this excercise to set up your initial hypothesis and understandings about the different components of any business plan.

KEY STAKEHOLDERS

Who are the main actors that are going to affect the project or be affected by it? - team (founders and employees), partners, providers, media, local community, etc.

KEY ACTIVITIES & RESOURCES

What activities will you put in place to materialize the value proposition (products or services)? What resources (physical, human, financial ...) will those require?

VALUE PROPOSITION

What value the project offers to customers and stakeholders? -meeting needs, satisfying wants, solving problems, tackling challenges, etc.-
- How does it contribute to the protection and/or improvement of the natural environment?
- How does your project contribute to the society?

CUSTOMER RELATIONSHIPS & CHANNELS

How will you attract and engage your potential customers, seeking to achieve sales, but also to get feedback, spread the word, etc.? Which channels will be most suitable for so doing?

CUSTOMER SEGMENTS

Who are your potential customers (pay a certain price or rate for the value they receive)? -Segment them in separate categories if they differ substantially- Who are your beneficiaries (benefit from the value created)?

COST STRUCTURE

What are the costs the project will incur into by implementing the activities desired using the resources needed? - List, and if possible estimate roughly-

REVENUE STREAMS

How much are your customers willing to pay?-By comparing with similar products/ services in the market, try to set approximate prices or rates for each product - customer segment pair-.

BUSINESS CASE

"I have an idea!"

Hassan

KEY STAKEHOLDERS

Local communities
Government
Suppliers
Technicians
Local government

KEY ACTIVITIES & RESOURCES

Installation and maintenance of solar PV system
Transport

Solar PV system
Batteries
Technicians: installation, maintenance
Office

VALUE PROPOSITION

PROVISION OF SOLAR ENERGY TO RURAL AREAS

SOCIAL VALUE
Reduce social inequalities
Reduce poverty

ENVIRONMENTAL VALUE
Improve the air quality

CUSTOMER RELATIONSHIPS & CHANNELS

Proactive approach to clients
Customers as part of the project
Product adapted to customers' needs.

Direct.

CUSTOMER SEGMENTS

Households with some income

Small business

BENEFICIARIES
Customers' families and relatives
The neighborhood

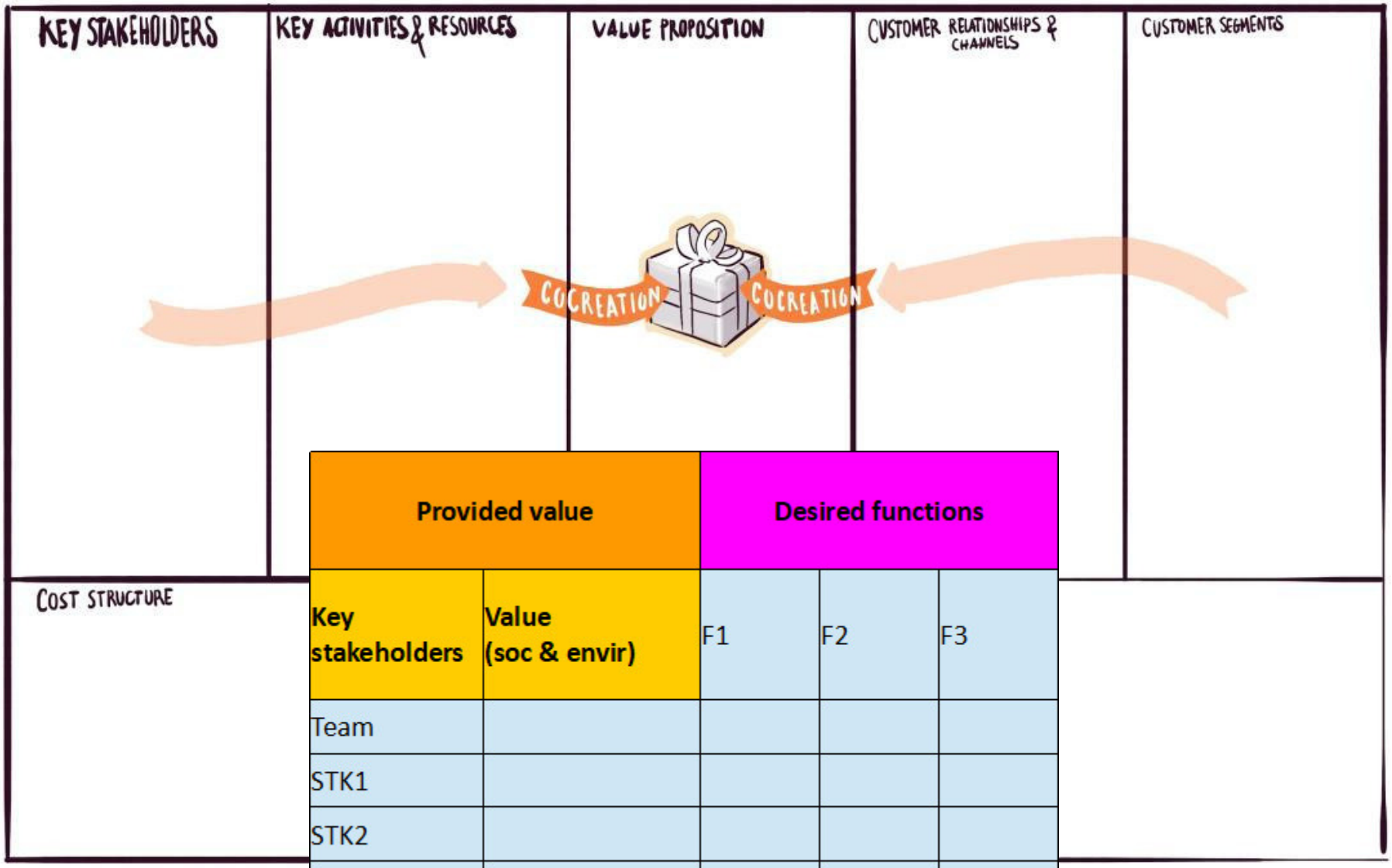
COST STRUCTURE

Purchase and transport of solar PV system
Installation and maintenance of solar PV system
Office maintenance
Communication

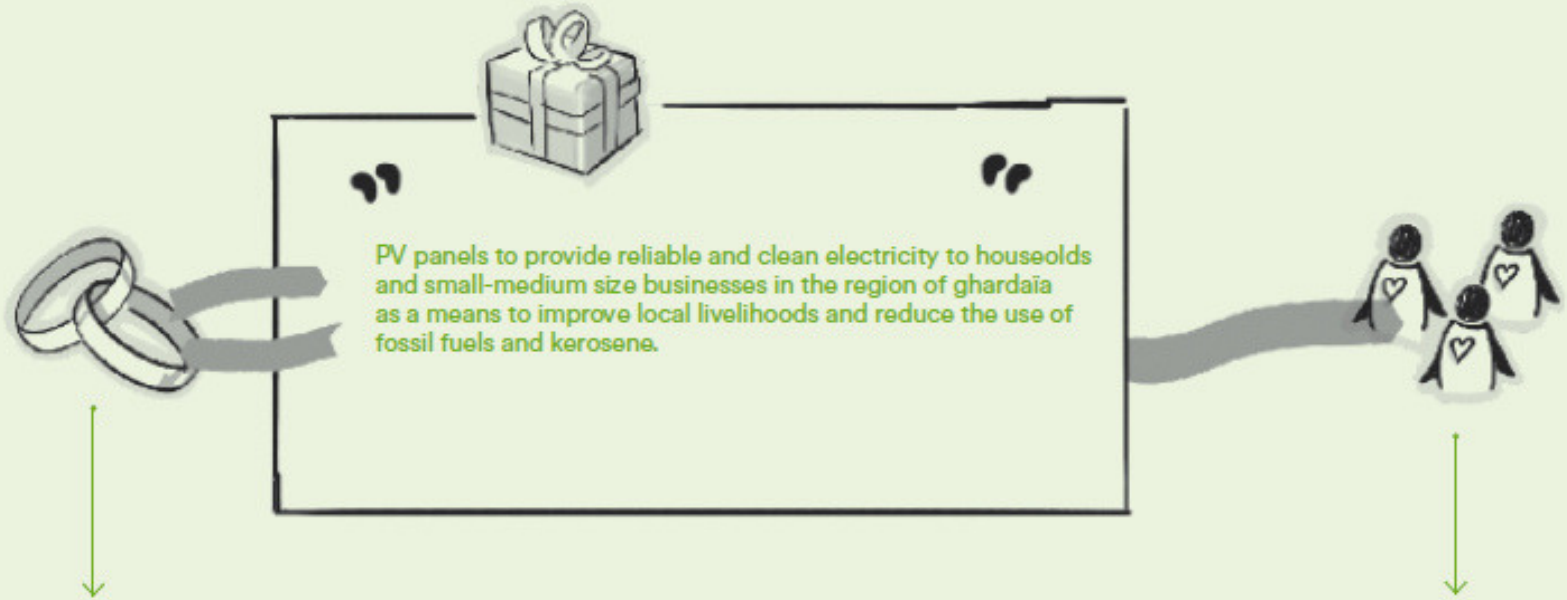
REVENUE STREAMS

Subsidies
Small fees
Sponsorship

Value proposition



Provided value		Desired functions		
Key stakeholders	**Value (soc & envir)**	F1	F2	F3
Team				
STK1				
STK2				
STK3				



Technicians: Co-creation; employment, supervise PV systems.

Community Leader: Co-creation & Feedback; Beneficiaries, decision making.

Local Government: Feed-back; villagers satisfaction, regulatory frameworks.

Suppliers: Partnership & customer provider; provision of solar PV systems.

Renewable energy companies: competitors.

Government: Partnership; pilot project-influence other stakeholders, legislation.

Bank: Partnership; clients-credit and fee collection.

Sonelgaz: competitors, improve electricity infrastructure.

Community: Feedback; beneficiaries, attitudes towards projects.

Segments: Rural households and small businesses- co-creation.

Profile: Low population, low income, willing to improve opportunities of their children and businesses. They don't want to deal with legal and technical issues. Should they feel the project is complex to develop they won't go for it.

ECODESIGN (info)

- VP -> products/services
- Ecodesign of VP & products/services

Lunch break

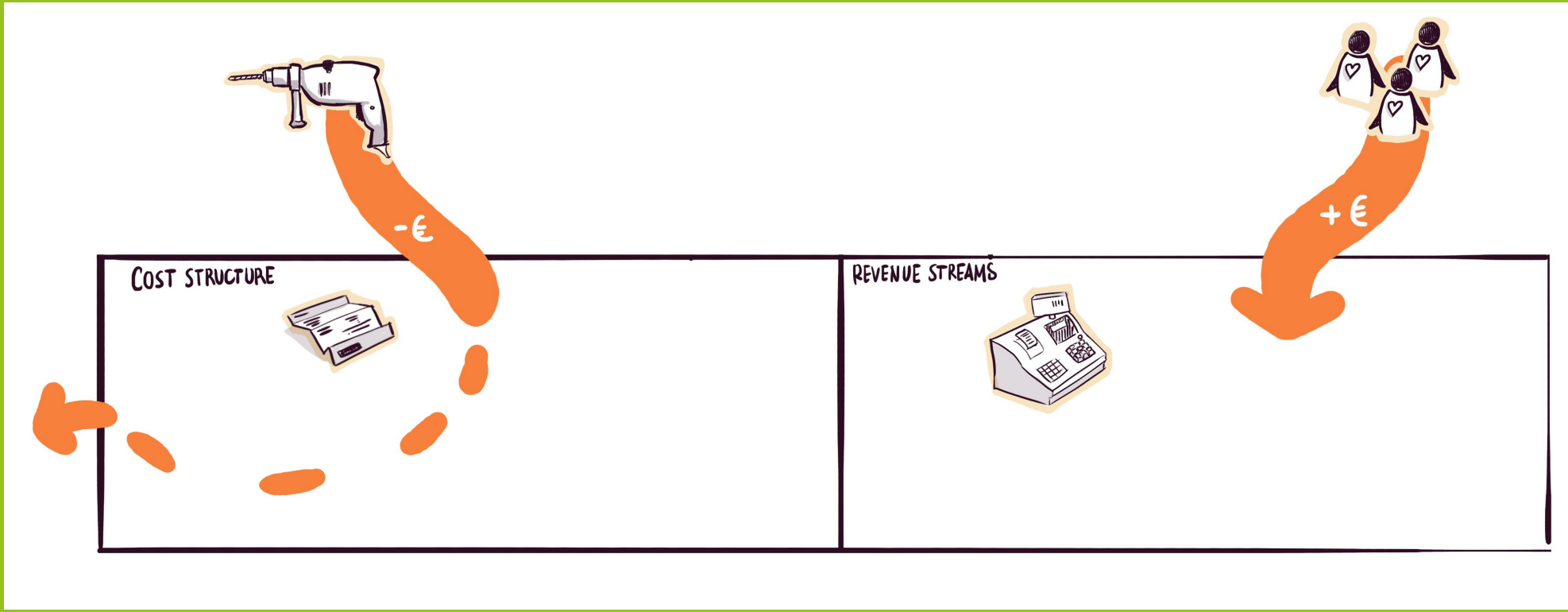
(13:30 - 14:30)

Solution design III:

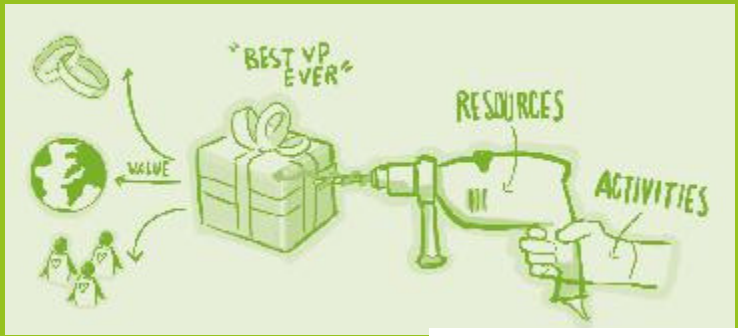
Business model

(14:30 - 16:00)

Busines model



Activities & resources (info)



Key Activities 1

Problem solving
What activities and tasks do you need to accomplish to create your VP, solve a specific challenge or maintain a high level of innovation in your business?

Production
What activities and tasks do you need to accomplish to produce your products or supply your services?

Platform/ network/ sales
What activities and tasks do you need to accomplish to create a efficient and valuable network or platform in order to promote sales, distribution, communication with stakeholders?

Supply chain management
What activities and tasks do you need to accomplish to create a efficient and valuable supply chain management system? What do you need to deal with supplier?

Write a list of *Key activities*. Remember that some of them may be related with specific activities of your business niche market, other may be related to general management. Both are very important, don't forget it!

Key Resources 2

Human capital
What human resources does your value proposition require? what about the people working for/ with you?

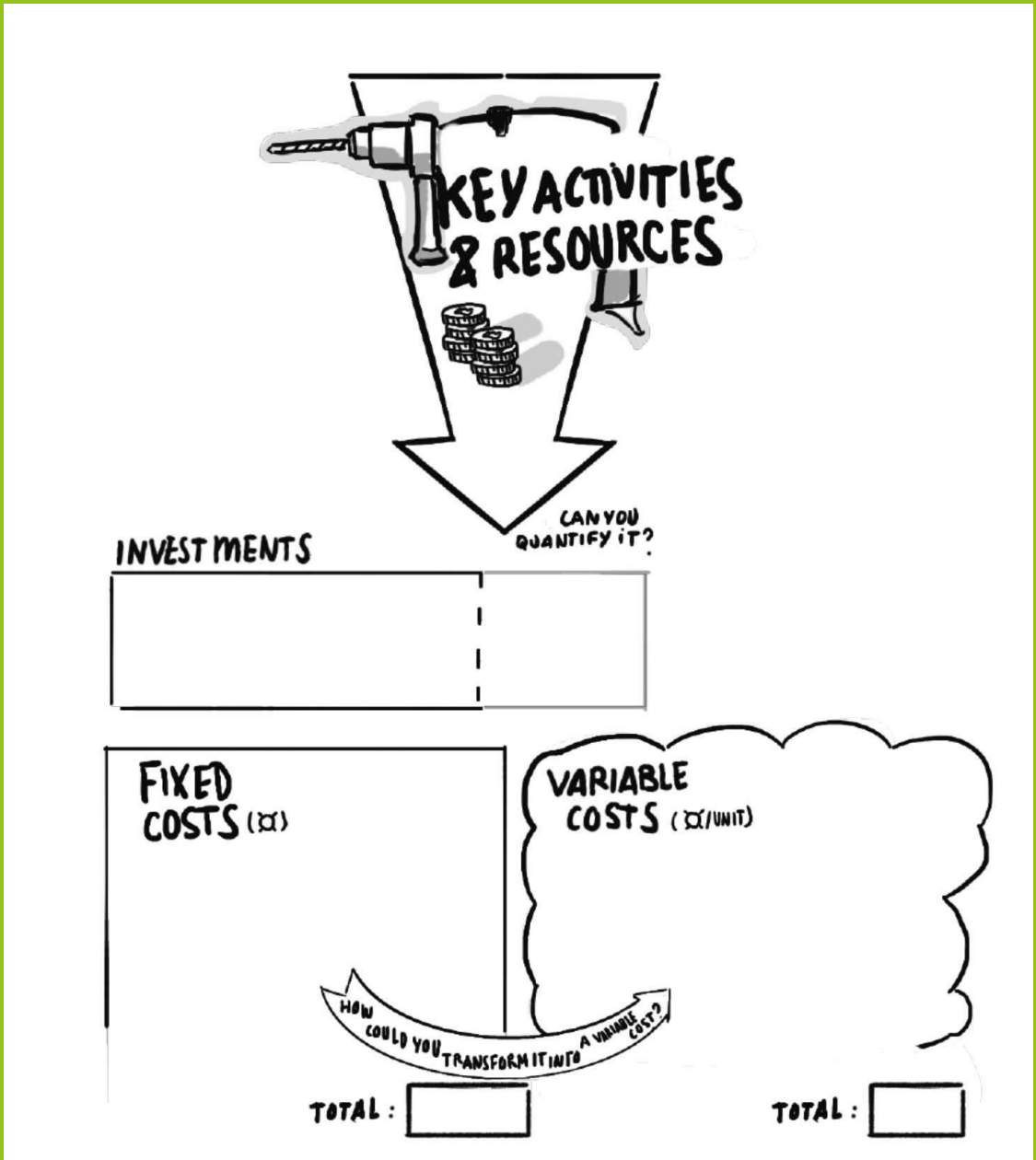
Physical capital
What physical resources are important for you business? (Think about facilities, machinery, vehicles...)

Intellectual & digital capital
Which intellectual and digital resources do you need? Do you need licences, patents, software?

Financial capital
Which type of financial capital do you need? Have you investments, loans or other financial issues (e.g. machinery leasing...) related with your business?

Write a list of *Key resources* considering everything you need to create, deliver and manage your products, services and perform business operations.

Costs (info)


KEY ACTIVITIES & RESOURCES
CAN YOU QUANTIFY IT?
INVESTMENTS
FIXED COSTS (¤)
VARIABLE COSTS (¤/UNIT)
HOW COULD YOU TRANSFORM IT INTO A VARIABLE COST?
TOTAL :
TOTAL :

Customers: Revenue Streams

1. LIST THE PRODUCTS & SERVICES YOU ARE OFFERING...

1. Reliable and clean electricity from SOLAR PV installations.
2. Recycling of PV Systems.
3. Solar home PV Systems.
4.
5.

2. SELECT AN ADEQUATE REVENUE MODEL FOR EACH AND PRICE THEM...

	PRICE?		PRICE?		PRICE?
ASSET SALE	(2) To be studied	LENDING/RENTING/LEASING		ADVERTISING	
USAGE FEE	(1) 14.172/year	LICENSING		SUBSIDIES	(3) 50.000 per unit
SUBSCRIPTION FEE		BROKERAGE FEES			

3. DESCRIBE HERE THE CHARACTERISTICS OF YOUR REVENUE MODEL...

Usage Fees: customers will pay a feed for the use of the system (fee-for-service delivery mode). A survey was carried out determine the cost for present energy sources. Based on this assessment, and on the estimated operation costs, the service fee is determined at 7L181 dinars per month.

Subsidies should cover around 50% of the initial costs of the solar house PV systems and the rest should be included in the usage fee. The company in partnership with government or other institutions will buy and own the PV systems.

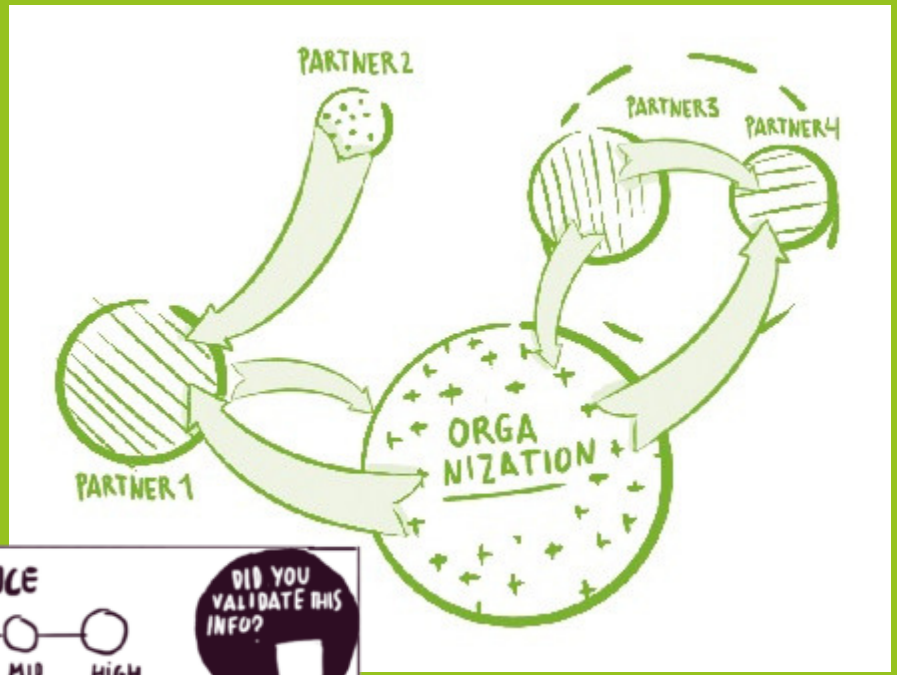
At the moment it is not clear where to get these subsidies from. It could be a governmental incentive, or an international green initiative. The repayment period (in case of a loan) and amount of return from buying PV systems will be based on the initial purchase price, with rate of interest added and a small premium for administration of this mechanism

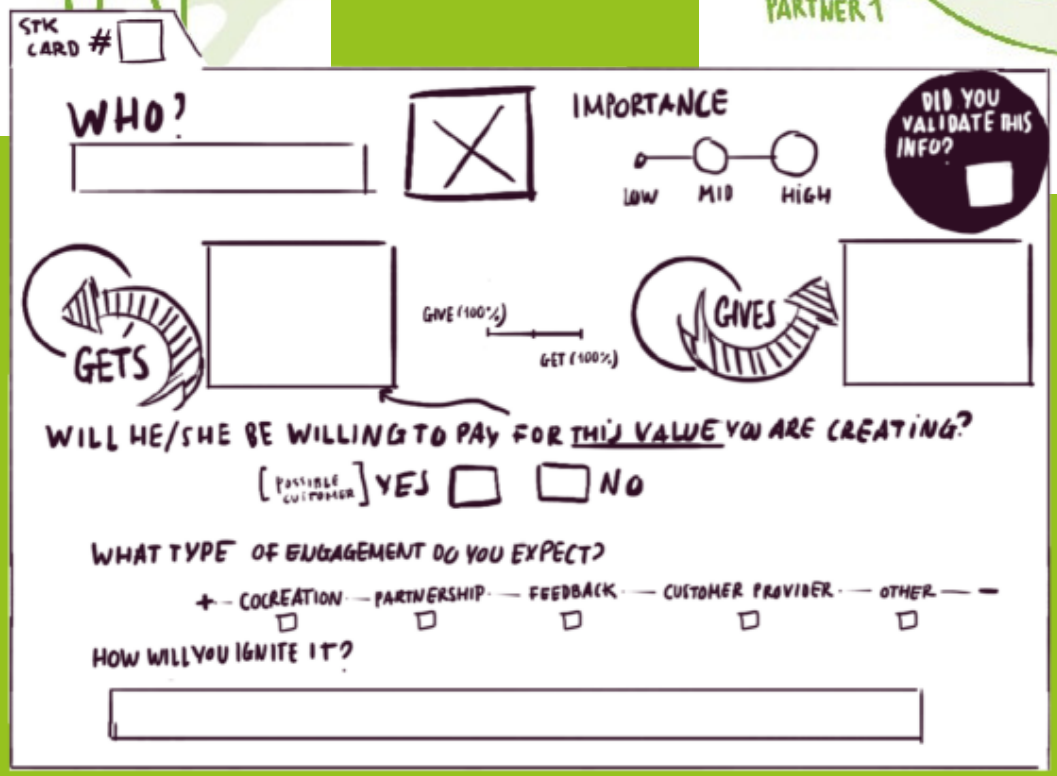
Asset sale: coming from the recycling of PV systems on the long run. So it is a revenue that will have effect once batteries and PV systems become old (5 to 10 years).

Solution design (extra):

Communication strategy and engagement

Exchanges of value: engagement





Customer Journey: interaction

EMOTIONS

What emotion does your customer feel in each stage of the journey?

NEEDS & THOUGHTS

Which are the needs in each stage? Which thoughts arise in the process?

TOUCH POINTS & CHANNELS

When do you interact with your customers? What channels do you use?

STAGES

What stages does your customer transits?

HOW TO PROVIDE A UNIQUE EXPERIENCE?

What actions could improve the customer's experience in each of the stages?

WHAT DO WE NEED TO PROVIDE IT?

What resources, knowledge and systems do you need to provide this experience?

Need identification	Finding alternatives	Getting interested	Assessing the proposition	Closing a contract
'I get really annoyed about the electricity supply. So many times we suffer from cuts and can't follow my daily routine.'	'I heard about a company that came to the village. They are selling stable electricity access.'	'I believe in what SRA is selling. Which are the tradebacks? What about the maintenence?'	'I needed some opinions and talked with some friends. We discussed about closing a contract with SRA. Not sure if I am in the right path. It will allow my children to study at night.'	'I signed the contract today. Some issues with understanding legal details.'
	Word of mouth. Community.	Personal assistance. Sales force.	Telephone + Internet.	Personal assistance. Sales force + local technician.
	Clear Value Proposition communication. Promote easy word of mouth transfering. Promotional materials?	Well trained sales force. Need to empathize with real drivers for local people. Strong emphasis on life cycle activitiies.	Our webpage should clearly explain the gains of our Value Proposition. Telephone assistants should be able to solve any doubts.	Reduce steps as much as possible. Easy to understand and simplified. Need to present channels for clients to communicate with us.
	Strong communication strategy. Targetting easy understanding and transferability.	Internal training program. Communication skills. Strong feedback among sale force.	Training telephonic assistants. Webpage development.	Hard work in the legal aspect. How to simplifiy the process without losing legal security?.

PRE

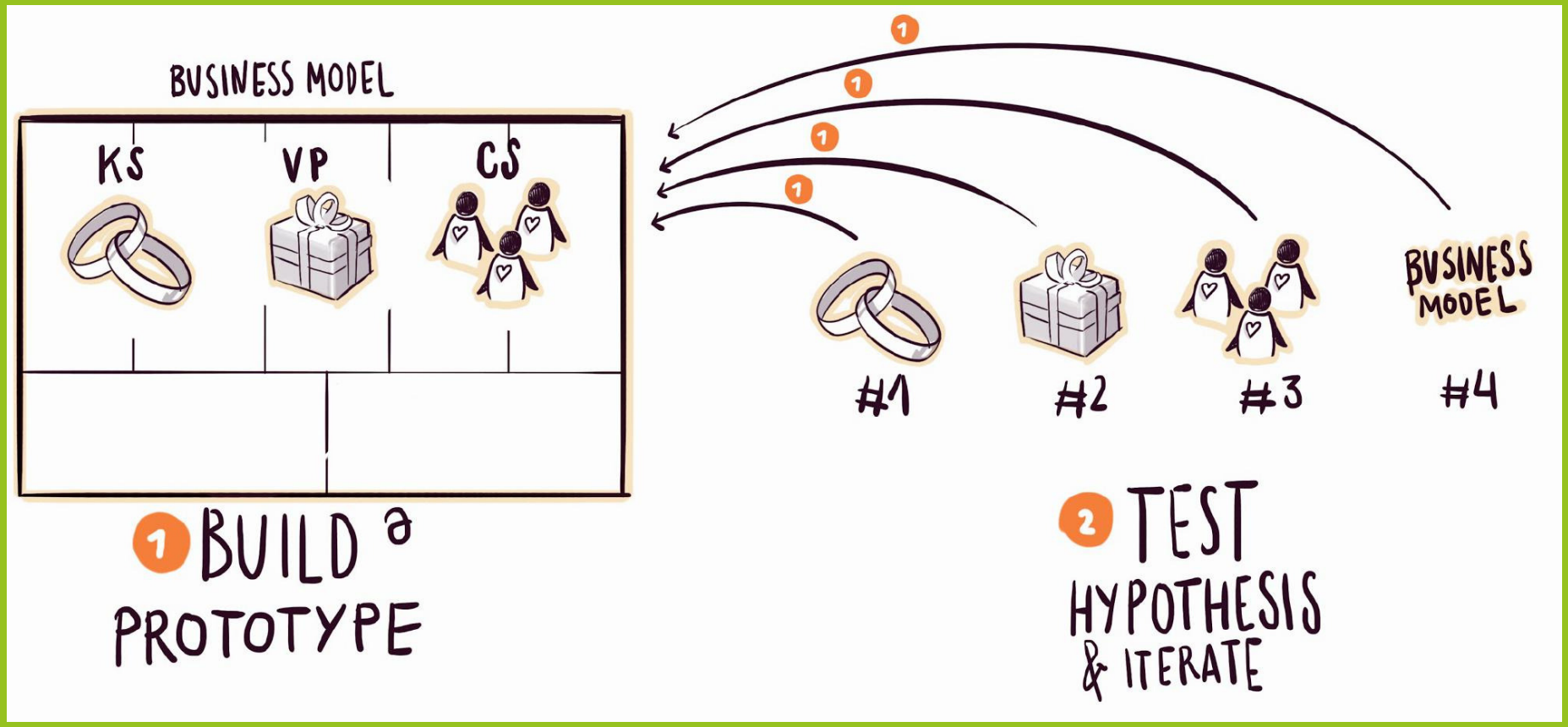
DURING

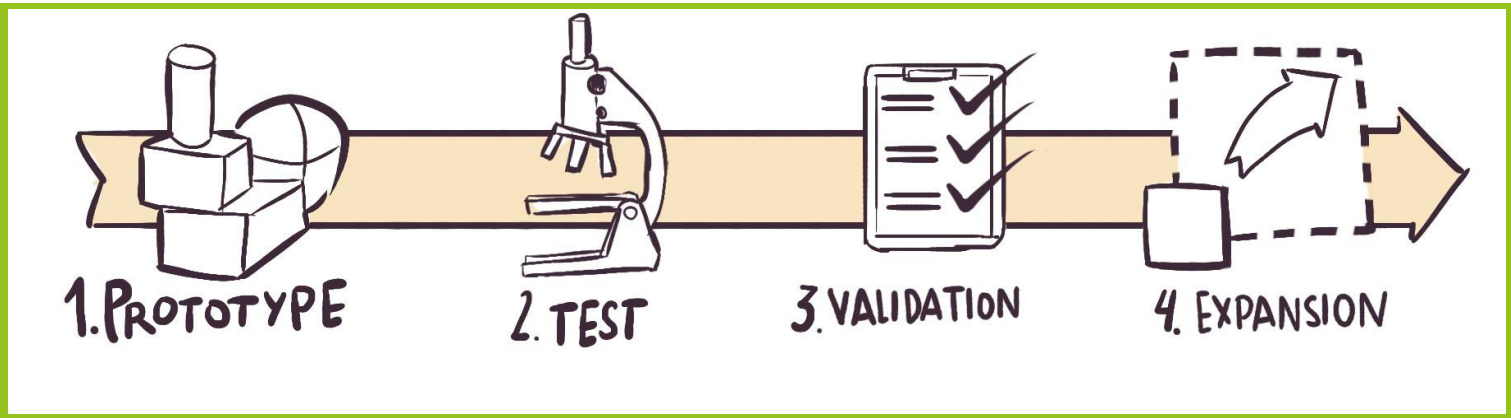
Building, testing & enhancement of prototype

Day 1: 16:15 - ...

Day 2: 9:30 - 13:30

Prototype to be tested





Test: VP, partners & customers

1. Customer segments
Focus groups, interviews, debates, and conversations via social media are all valid channels for the purpose of checking our customers' needs, aspirations, gains and pains.

2. Engaging the stakeholders
Metrics to gauge stakeholder engagement can be built around number of attendants, participation level, enthusiasm on the subject, willingness to engage further, and feedback/satisfaction.

3. Value proposition
To check the value proposition we need prototypes capable of delivering it to customers and stakeholders, and then measure their and then gauge their perception and ultimately appreciation of it.

4. Problems and needs
Although there is no explicit box in the matrix, the contractor must ensure that it will meet a demonstrated problem. It is indeed important that he does not spend his time in a developer solution for a problem that does not exist.

Case study

Green business canvas prototype

KEY STAKEHOLDERS

Technicians: employment – supervise PV systems.

Community leader: feedback & decision making.

Local government: feed-back; villagers satisfaction- regulatory frameworks.

Suppliers: partnership & customer provider; provision of solar PV systems

Renewable energy companies: Competitors.

Government: partnership; pilot project- influence other stakeholders, legislation.

Bank: partnership; clients- credit and fee collection.

Sonelgaz: competitors, improve electricity infrastructure.

Community: feedback; attitudes towards project.

KEY ACTIVITIES & RESOURCES

Activities:
- Purchase, installation and maintenace of solar house pv systems.
- Training of technicians and sales force
- Informing customers.
- Financial, legal and contractual management.
- Lobby local government.
- Managing facilities logistics and storage of materials.
- Reinforce the stability of supply.
- Negotiations with suppliers.
- Managing the recycling of pv systems.

Resources:
- The team, technicians and office employee.
- Warehouse.
- Storage room.
- Office in tizi ouzou.
- 2 Vans and 1 car.
- Web page.
- Softwares and licences.
- Mortgage.
- Microcredits.

VALUE PROPOSITION

Provision of electricity from solar pv systems to households and businesses from the tizi ouzou region at an affordable price (fee-for-service) that involves the installation, maintenance and dismantling of solar pv systems as a means to improve local welfare while minimising the environmental impact.

CUSTOMER RELATIONSHIPS & CHANNELS

Relationships:
- Worf of mouth among community members.
- Proactive approach to clients: village and personal meetings
- Customers as part of the project.
- Technicians act as trainers or advice givers fro customers, promoting good practices for longevity and efficiency.
- Need to improve delivery to have a better relationship with them.
- Seek continious feedback from customers.
- Strong after sales assistance.

Channels:
- Face-to face interaction.
- Mobile phone.
- Clear and simple webpage.

CUSTOMER SEGMENTS

Segments:
- Rural households and small businesses- co-creation.

Profile:
- Low population, low income.
- Willing to improve opportunities.
- Fear dealing with legal and technical issues.
- Can withdraw if the project is complex to develop.

Market:
- Niche of electricity services market where there is no competition.
- Added value: quality and reliable service tailored to customers' needs; customers' engagement in the design and implementation of the project.

COST STRUCTURE

Fixed costs:
- Marketing.
- Insurance rates 3%.
- Payment collection in rural areas.
- Labour costs: rural algeria team, technicians, office employee.
- Office rent in tizi ouzou.
- Internet connexion.
- Software licences.
- Open source software for office tasks.

Variable costs:
- Maintenance & spare parts.
- Training of personnel.
- Marketing.
- Van and car use and maintenance.
- Office costs (telephone, electricity, etc)
- Web page.
- Inflation and interest rates.

Financing:
- Purchase of solar pv home. systems -109, 815.
- Training of technicians- 300,000.
- 2 Vans used by technicians -2,500,000 per unit
- 1 Car used by manager and salesforce – 1,500,000 per unit.

- At least 2.543.000.

(All currencies are in dinars).

REVENUE STREAMS

- Reliable and clean electricity from SOLAR PV installations – 14,172 per year.
- Recycling of PV systems- to be assessed.
- Solar home PV systems-50,000 per unit from subsidies or microcredits.

Grazie mille!

Avanti eco-imprenditori :)

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