Curricular design focusing on innovation competences

Huaan Fan

KTH, Stockholm, Sweden

Taraz State University, Kazakhstan. 2018-04-18

Higher education in the 21st century

- Globalization: people, market, capital, goods, services

  $\longrightarrow$ increased competition, knowledge-based & digital economy

- Social/political pressure:

  $\longrightarrow$ relevance, transparency, accountability

- Internal changes

  $\longrightarrow$ deregulation/decentralization, from elite to mass education

- Education as business

  $\longrightarrow$ student mobility, efficiency & effectiveness, value for money

Three components of InnoCENS

Macro level:
Innovation-friendly environment

'Software'
Creative students

Micro level:
Innovative entrepreneurs
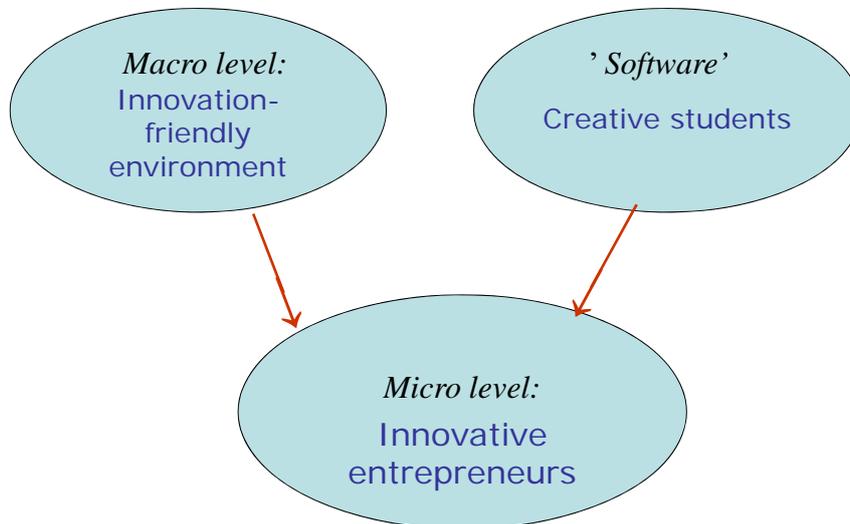
What is *creativity*?

- Use of imagination or original ideas to create something (Oxford Dictionary)
- Ability to produce original and unusual ideas, or make something new and imaginative (Cambridge Dictionary)
- A phenomenon where something new and somehow valuable is created. The created item can be intangible or physical (e.g. technical inventions, artistic works) (Wikipedia)
- A mental characteristic that allows a person to think outside of the box, which results in an innovative or different approaches to a particular task (businessdictionary.com)

What is *invention* ?

- A new scientific or technical idea, and the means of its embodiment or accomplishment

- To be patentable, an invention must be <u>novel</u>, have <u>utility</u>, and be non-obvious. To be called an invention, an idea only needs to be proven as workable.

- But to be called an <u>innovation</u>, it must also be replicable at an <u>economical</u> <u>cost</u>, and must satisfy a specific <u>need</u>. That's why only a few inventions lead to innovations because not all of them are economically feasible.

What is an *innovation* ?

- a new idea

- realized in the form of new, better, more effective technologies, products, services, processes,

- validated and proven on free markets or in non-commercial activities (*social entrepreneurship*)

Creativity, Invention vs Innovation

Creative scientists
(Newton, Einstein)

Creative artists
(Da Vinci, Mozart)

Creative inventors
(Edison, Nobel)

Innovators
(Entrepreneurs)

(Nobel, Elon Musk)

Innovation competences

- Creativity: ability to think creatively, originally, differently, outside of the box, ...

- Entrepreneurial mindset & skills
  - ✓ Commercialization: IP, patent, licensing, technology transfer, spin-off, ...
  - ✓ Startup: business model, market, customers, IP, team, finance, business plan ......

- Other personal & social skills which facilitate the realization of creative ideas

4

Bloom's Taxonomy (revised)

Higher-level thinking skills

Create

Evaluate

Analyze

Apply

Understand

Know

Analyze	Evaluate	Create
Apply		
Understand		
Remember (Know)		
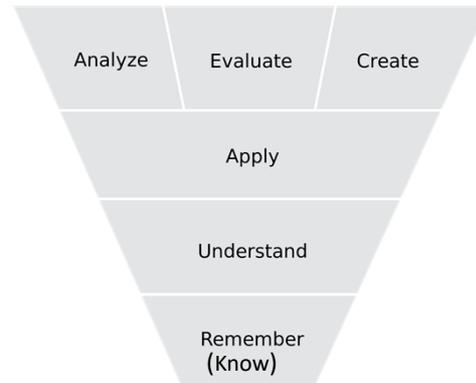
Lower-level thinking skills

Bloom's Taxonomy (1/2)

1. **Know** (*recalling important information*)
   – define, repeat, record, list, recall, name, relate, underline.

2. **Understand** (*explaining important information*)
   – discuss, describe, recognize, explain, identify, locate, report, review, tell

3. **Apply** (*solving close ended problems where there is a clear answer*) – e.g. interpret, apply, employ, use, demonstrate, dramatize, practice, illustrate, operate, schedule, sketch.

Bloom's Taxonomy (2/2)

4. **Analyse** (*solving open problems where there is no single clear answer*) – e.g. distinguish, analyse, differentiate, appraise, calculate, experiment, test, compare, contrast, criticize, diagram, inspect, debate, question, relate, solve, examine, categorize

5. **Evaluate** (*making critical judgements based on sound knowledge base*) – e.g. judge, appraise, evaluate, rate, compare, revise, assess, *estimate*

6. **Create** (*creating unique answers to open problems*) – e.g. compose, plan, propose, design, formulate, arrange, assemble, collect, construct, create, set up, organize, manage, prepare.

What is professional competence ?

- A combination of knowledge, understanding, skill, capability and attitude that enables an individual to perform certain *professional* tasks

- Competences deals with "what is expected in a *professional* workplace."

- Emphasis on **performing an actual job**, not gaining knowledge/skills for their own sake or as a hobby.

- A tool for better communication with employers and stakeholders - employability

Competences & Learning Outcomes

- Desired competences are defined on the basis of input from internal and external stakeholders (e.g. employers)
- LOs are statements of what a student is expected to know, understand and be able to do after completion of a course
- LOs are mostly formulated by the teaching staff, taking into account the programme's desired competences
- Learning/teaching activities help students to learn
- Assessment procedures ensure students have achieved the LO
- Learning Outcomes lead to skills/Competences
- Competences make graduates employable, useful for the society

Competences of a study programme

- Knowledge and understanding of the subject

- Practical skills

- Intellectual skills required to make use of existing knowledge and create new knowledge

- Generic (soft/transversal/transferable) skills

Competences for MSc in *Geodesy and Geoinformatics*

1) Broad knowledge in land survey, mapping and GIS
2) Specialised knowledge in spatial data acquisition and spatial analysis

3) Practical skills to do field measurements, process data and evaluate the results
4) Practical skills to structure, visualize and analyze spatial data using GIS software

5) Ability to choose proper methods for specifc conditions and requirements
6) Skills to evaluate possibilities and limitations of existing geodetic methods
7) Insight on the needs of new technologies/solutions in geodesy/geoinformatics

8) Be able to communicate effectively and present scientific work in oral/written form
9) Project management skills and ability to work in group and in project form
10) Insight on ethical, environmental and sustainable development issues and their relevance in professional work

MSc in *Geodesy and Geoinformatics*

1)	Adjustment theory	(7,5c)
2)	Map projections & reference systems	(7,5c)
3)	Global Navigation Satellite Systems (GNSS)	(7,5c)
4)	Physical geodesy	(7,5c)
5)	Laser scanning technologies	(7,5c)
6)	Integrated navigation	(7,5c)
7)	Spatial databases	(7,5c)
8)	Geovisualization	(7,5c)
9)	GIS architecture	(7,5c)
10)	Spatial analysis	(7,5c)
11)	Remote sensing and image processing	(7,5c)
12)	GIS project	(7,5c)
13)	MSc thesis project	(30c)

The Competence Matrix for *Geodesy and Geoinformatics*

COURSES → / COMPETENCES ↓	01. Adjustment theory	02. Map projections & RS	03. GNSS	04. Physical geodesy	05. Laser scanning	06. Engineering geodesy	07. Spatial databases	08. Geovisualisation	09. GIS architecture	10. Spatial analysis	11. Image processing	12. GIS project
broad knowledge in land survey, mapping and GIS	X	X	X	X	X	X	X	X	X	X	X	X
specialized knowledge in some areas and current research topics	X	X	X	X	X	X	X	X	X	X	X	X
practical skills to carry out measurements, process field data and evaluate results	X	X	X		X	X						
practical skills to structure, visualize and analyse spatial data using GIS					X	x	X	X	X	X	X	X
ability to choose proper methods for specific conditions and requirements		X	X		X	X		X		X		X
ability to evaluate possibilities and limitations of existing geodetic methods		X	X		X	X						X
insight on needs of new technologies and new solutions in geodesy and geoinformatics		X	X	X	X	X	X	X	X	X	X	X
skills to communicate effectively					X	X				X	X	X
ability to manage project and work in groups & project form					X	X				X		X
awareness on ethnical issues as wel as climate change + sustainable development				X	X	X	X			X		X

General formulations of LO & competences

- Knowledge and understanding:
  1) broad knowledge and understanding of the scientific foundation of the subject area concerned and proven empirical knowledge, as well as current research & development topics
  2) deeper knowledge in some parts of the subject field

- Abilities and skills
  1) ability to critically, independently and creatively identify, formulate complex problems and conduct needed R&D work which contributes to creation of new knowledge
  2) skills to create, analyze and critically evaluate different technological solutions

General formulations of LO & competences

- Abilities and skills

  3) skills to plan and implement qualified tasks under certain conditions, and evaluate the results

  4) skills to systematically integrate knowledge to analyse, judge and handle complex phenomena, problems and situations; skills to model, simulate and evaluate processes even with limited information

  5) ability to develop and design products, processes and systems with respect to human conditions and needs, as well as socioeconomical and ecological sustainability

  6) teamwork skills & skills to interact with people of different backgrounds

  7) ability to communicate in oral or written form, in national or international context, present and justify scientific conclusions

General formulations of LO & competences

- Values and attitudes

  1) Ability to make judgement taking into account relevant social and ethical aspects in research and development work

  2) Insight in both possibilities and limitations of science and technology, its role in the society, and a person's responsiblity on how science and technology is used and its socioeconomical, environmental and work condition-related impact

  3) Ability to identify personal needs of new knolwedge and take responsibility for continuously improving knowledge and competences

Innovation competences

- Ability to think creatively, differently and outside of the box

- Ability to critically evaluate existing solutions, identify needs for improvement and seek new solutions

- Ability to integrate knowledge and technologies from multiple technical disciplines or business branches

- Ability to take initiatives on interested tasks with devotion and entrepreneurial mindset

- Ability to develop teamwork and build collaboration networks

- Basic knowledge on innovation and entrepreneurship, skills to transform new ideas and scientific results into viable business

Innovation Competence matrix

Innovation COMPETENCES	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
1												
2												
3												
4												
5												
6												
7												
8												

Transversal competences project at UPV

Luis A. Ruiz

Workshop on Innovation Pedagogy and Entrepreneurship

Taraz, Kazakhstan. April 16-21, 2018

Contents

1. Introduction

Background and basic definitions

2. The Project

Why? What is needed?

3. The Competences

What should the students get?

4. Implementation

How and When will it get done?

5. Evaluation

How can we know the results?♪

Introduction

✓ **Competences**

Set of knowledge, skills and attitudes necessary to perform a given occupation and the ability to mobilize and apply these resources in a given environment successfully

✓ **Specific:** are those of a field or degree and are aimed at achieving a specific profile of the graduate

✓ **Transversal** *(generic, core, key, transferable, etc.)*

- Those competences that are key and transferable in relation to a wide variety of personal, social, academic and work contexts throughout life.
- They constitute a fundamental part of the professional and formative profiles of all or most of the qualifications

Transversal competences are common to all students of the same university, regardless of the degree they are studying

Introduction

The **transversal competences** are :

- ✓ **Integrators,** since they favor the integral formation of our students

- ✓ **Transferable** in academic, work, personal, social contexts …

- ✓ **Interdependent,** working a competence usually develop others

- ✓ **Multifunctional,** that is, versatile and capable of responding to different types of problems

- ✓ **Evaluable,** they must be broken down into learning outcomes to be able to prove the level reached by students♪

Introduction

*In the Knowledge Society, each citizen will require a wide range of competences to **adapt** flexibly to a **world** that is changing rapidly and that shows multiple interconnections (EU Education and Training, 2010).*

These generic competences are of great relevance for the **European Qualifications Framework**

Employers emphasize the great importance of transverse or generic competences in the professional performance of university graduates.

The **strategic plan UPV2020** says:

"Universitat Politècnica de València aims to move towards training models that allow students to acquire the necessary competences to obtain an adequate job placement"♪

As a consequence, at UPV the degrees explicitly incorporate the requirement that students are trained in these competences and that they be evaluated

The Project

The **main goal** of the project consists of:

- Establish a **strategy for the systematic evaluation of transversal competences**, defining where they are acquired and how they should be evaluated

- **Accredit the acquisition** of the competences to students graduated in any of the official degrees of UPV

Specific competences are taught, worked, acquired and certified. However, generic competences have been defined in the curricula and assigned to subjects, but they are not systematically worked or evaluated, so their acquisition is not guaranteed.

The Project

The **specific objectives** are :

- Simplify and **clarify** what we mean by transversal competences, taking into account national and international references

- **Define** the 13 transversal competences at UPV

- **Incorporate** the competences to the formation of the students using different ways or strategies

- **Design evaluation** processes and accreditation of transversal competences that are flexible and innovative

- **Implement** the processes of **evaluation and accreditation** of these competences in all the degrees taught at the university.

- Provide **visibility** of the results to society

The Project

Why to develop **the project**?:

- To provide UPV graduates with an **added value** that can differentiate them from other graduates and, consequently, make the offered studies more attractive

- To value the training of our graduates for **employers**

- To explain and validate the acquisition of competences for **international accreditations**

The Competences

✓ **CT-01. Comprehension and integration**

Understanding and integration of knowledge both, from one's own specialization and in other broader contexts

To understand means to "*perceive and have a clear idea of what is called, is done or happens, or discover the deep meaning of something*"

To demonstrate that something has been understood, the person identifies and recovers the information, and explains it with his words, interpreting and integrating the ideas from his perspective

The Competences

✓ **CT-01. Comprehension and integration**

It implies interpreting the information in a reflexive and precise way.

To achieve this, <u>activities</u> can be <u>focused on</u>:

- Compare concepts, principles and theories

- Sort objects, events, ideas

- Analyze and synthesize

- Sequencing, ordering

- Discover reasons that support an argument

The Competences

✓ **CT-01. Comprehension and integration**

Activities can be developed following different types of methodologies, such as:

• Group activities	• Questions
• Oral exhibitions	• problems
• Forums and debates	• Projects
• Readings	• Report writing
• Laboratory practices	• Seminar

The Competences

✓ **CT-02. Application and practical thinking**
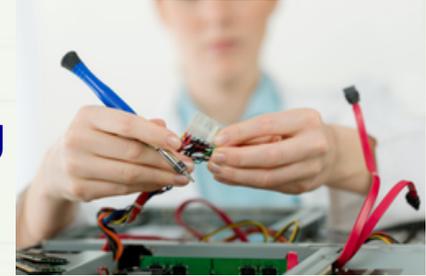
Apply the theoretical knowledge and establish the process to achieve objectives, carry out experiments, analyze and interpret data to draw conclusions

The student, in real life, needs to be **prepared to face situations** in which it is not enough to apply recipes or formulas

Proposed decisions/solutions must be argued and accommodate the available resources.

This competence develops the way of thinking directed to action, which allows adapting to new situations, making decisions and, consequently, ACTING

The Competences

✓ **CT-03. Analysis and problem solving**

Analyze and solve problems effectively, identifying and defining the significant elements that constitute them

Problems are new situations that require individuals to respond with new behaviors. The objective is that the student is able to apply structured procedures to solve problems, learning, understanding and applying knowledge autonomously

The Competences

✓ **CT-04. Innovation, creativity and entrepreneurship**

Innovate to respond satisfactorily and in an **original way** to personal, organizational and social needs and demands with an **entrepreneurial attitude**

The development of this competence requires:

- to think differently (creativity), and

- to commit certain resources on their own initiative in order to explore an opportunity, assuming the risk that this entails (entrepreneurship)

Copyright 1996 Randy Glasbergen.   www.glasbergen.com

$$\frac{\begin{array}{r} 2 \\ +\,2 \end{array}}{756893}$$

GLASBERGEN
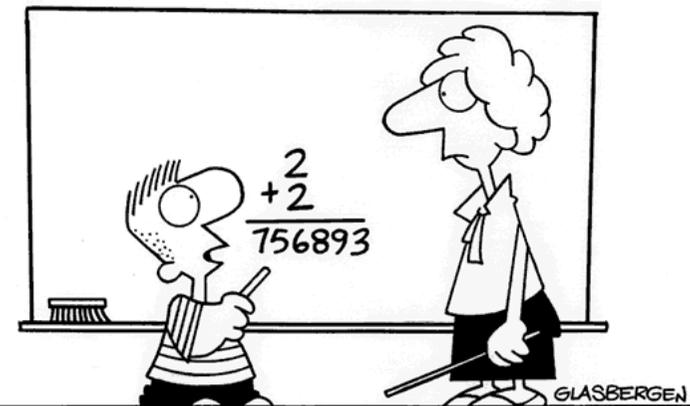
"In an increasingly complex world, sometimes old questions require new answers."

The Competences

✓ **CT-05. Design and project**

Design, direct and evaluate an idea effectively until it is finalized in a project

A project is an effort of **designing and creating** a unique service or product, by performing a series of tasks and an effective use of resources.

It favors the student to learn by doing and **integrating knowledge and skills** from different disciplinary areas, developing high-level intellectual skills, promoting learning and autonomous work, teamwork and self-evaluation.

The Competences

✓ **CT-06. Teamwork and leadership**

Work and lead teams effectively to achieve **common goals**, contributing to their personal and professional development

Teamwork involves creating and developing a climate of **mutual trust** between the components that allows working in a responsible and **cooperative** manner

To SHARE: share knowledge, commitment and responsibility. Assumes the distribution of tasks and roles and respect for the rules of the game established by and for the group

The Competences

✓ **CT-07. Ethical, environmental and professional responsibility**

Act with ethical, environmental and professional responsibility with oneself and others

<u>Ethical</u> responsibility refers to guiding human action in a **rational sense**, as it relates to actions and their **moral value**

<u>Environmental</u> responsibility is the imputability of a positive or negative assessment for the **ecological impact of a decision** (damage caused to other species, to nature or future generations).

<u>Professional</u> responsibility is included within the moral responsibility, reaching the inside of our conscience to **avoid** any **voluntary** failure and decrease **involuntary** failures

The Competences

✓ **CT-08. Effective communication**

Communicate effectively, both orally and in writing, appropriately using the necessary resources and adapting to the characteristics of the situation and the audience

It means having the ability to **transmit** knowledge and express ideas and arguments in a clear, rigorous and convincing way

The Competences

✓ **CT-09. Critical thinking**

Develop a critical thinking interested in the foundations on which the ideas, actions and judgments, both their own and those of others, are based

It involves **questioning** the underlying assumptions in our habitual ways of thinking and acting and, based on that critical questioning, be prepared to think and do differently.

Critical thinking is the thought of the questions: why things are like this ?, Why can not things be otherwise ?, etc.

The Competences

✓ **CT-10. Knowledge of contemporary problems**

Identify and interpret contemporary problems in their field of specialization, as well as in other fields of knowledge, paying special attention to aspects related to sustainability.

The need to understand contemporary political, social, legal and environmental issues and values, as well as the mechanisms for expansion and dissemination of knowledge. It is about developing the ability to "**stay up to date**" of current events in their field of knowledge and in society in general.

it is very important that students learn to evaluate complex situations using different approaches, such as: economic aspects, quality of life, environmental repercussions, local and national policies ...

The Competences

✓ **CT-11. Long-life learning**

Use learning in a strategic, autonomous and **flexible** way, throughout life.

This competence is closely related to the idea of training reflective professionals, who are not satisfied with reproducing routinely known solutions, but seek to generate new solutions.

Reflective practice is based on three pillars:

• action or know-how

• knowledge we develop on top of our own knowledge

• control we have on how we use our knowledge in a specific activity

The Competences

✓ **CT-12. Planning and time management**

Plan appropriately the time and schedule the necessary activities to achieve the objectives, both academic-professional and personal.

It implies being able to **organize and distribute** correctly the **time** we have available and distribute it according to the **activities** necessary to achieve our short, medium and long term goals

The Competences

✓ **CT-13. Instrumental specific**

Use the techniques, skills and updated tools necessary for the practice of the profession

Use of the **tools and technologies** necessary for the professional practice associated with each degree. The student will be able to identify the most appropriate tools in each case, knowing their utilities and being able to integrate and combine them to solve a problem, perform a project or an experiment.♪

The Competences

✓ **CT-13. Instrumental specific**

Use the techniques, skills and updated tools necessary for the practice of the profession

© Randy Glasbergen. www.glasbergen.com

2 + 2 = 4
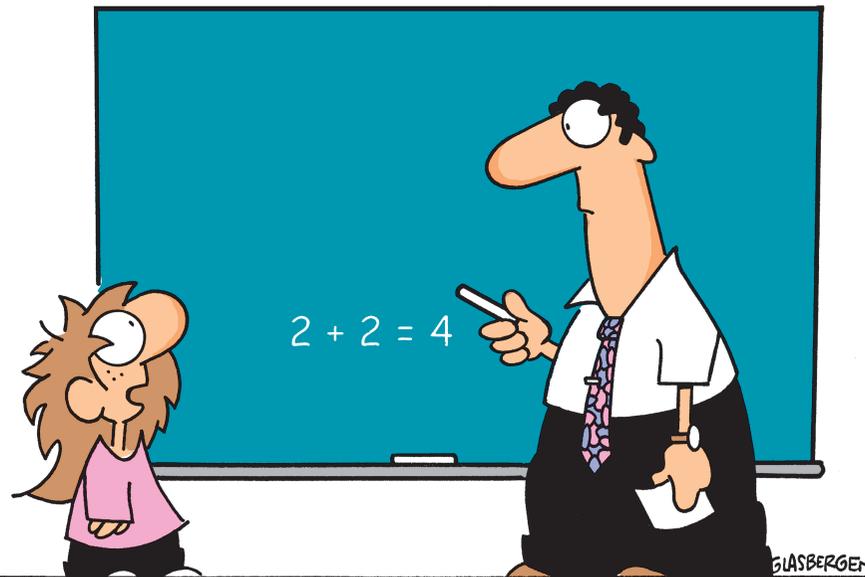
"How can I trust your information when you're using such outdated technology?"

Implementation

✓ **INCORPORATION OF UPV TRANSVERSAL COMPETENCES**

There are **three lines** to incorporate the UPV transversal competences to the studies:

- Curricula

- Bachelor or master theses

- Extracurricular activities

Implementation

✓ **INCORPORATION OF UPV TRANSVERSAL COMPETENCES**

LINE 1. Through the **study plans**:

- Step 1: Inclusion of transversal competences in *verification* documents.

- Step 2: Assignment of transversal competences to the different subjects/courses of the curricula.

    > **"control point"** courses

- Step 3: Specification in the *program contract* and in the *teaching guide* of the courses.

- Step 4: Follow-up and review by the Schools/Faculties to verify that the incorporation of transversal competences into the curricula is being carried out correctly.

Implementation

✓ *Verification* **document of a new degree/curricula**

Contents

1. Description of the degree
2. Rationale
3. Objectives
   - *Generic and specific competences*
4. Access and admission policy
5. Structure of studies and curriculum
6. Academic staff
7. Resources, materials and services
8. Foreseen results (indicators)
9. Quality assurance
10. Calendar

Official document of new proposal or modification of a curriculum leading to obtaining a higher education degreee

*The competences proposed in the title must be **evaluable** and its acquisition must be **guaranteed by all students** and be in accordance to the qualifications established in the European Higher Education Area (**EHEA**)*

Implementation

✓ **Example of *Teaching guide* of a course**

Remote Sensing And Cartographic Updating

Degree	Master's Degree in Geomatics Engineering and Geoinformation	[Elective]
Department	Dept. of Cartographic Engineering, Geodesy and Photogrammetry	
Area	Cartographic Engineering, Geodesy And Photogrammetry	
Credits	6	
Duration	Semestral	
Language of delivery	English Spanish	
Years delivered	2014/2015 al 2017/2018	

Course Description (2017)

Course Outline

Student Outcomes

Recommended Prior Knowledge

Syllabus

Distribution

Assessment

References

Information

Teachers

Scheduled exams

Summary Course Description

PDF Course Description

Implementation

✓ **Example of *Teaching guide* of a course**

Student Outcomes

Subject matter	Student Outcome
Geomatics	Students should have the learning skills which allow them to continue studying in a largely self-directed or autonomous way.
Geomatics	Poseer y comprender conocimientos que aporten una base u oportunidad de ser originales en el desarrollo y/o aplicación de ideas, a menudo en un contexto de investigación
Geomatics	To apply the acquired knowledge and the problem-solving capacity in new or unfamiliar environments in a broader and multidisciplinary context related with their field of study
Geomatics	To be able to integrate the knowledge for facing the complexity of formulating judgements from an information that -being limited and uncompleted - includes reflections on the social and ethical responsibilities related to the application of that knowledge and judgements
Geomatics	Que los estudiantes sepan comunicar sus conclusiones - y los conocimientos y razones últimas que las sustentan - a públicos especializados y no especializados de un modo claro y sin ambigüedades
Geomatics	Diseñar una idea de manera eficaz hasta concretarla en un proyecto en el ámbito de la Ingeniería Geomática y Geoinformación.
Geomatics	Trabajar y liderar equipos de forma efectiva para la consecución de objetivos comunes, contribuyendo al desarrollo personal y profesional de los mismos en el ámbito de la Ingeniería Geomática y Geoinformación.
Geomatics	Conocer, integrar y aplicar los métodos geoestadísticos y de análisis estadístico multivariante para la modelización espacial de variables geográficas y la resolución de problemas de ingeniería y territorio.
Geomatics	Conocer, utilizar y desarrollar equipos para la adquisición de datos georreferenciados en aplicaciones de ingeniería civil, gestión de recursos naturales y análisis territorial.
Geomatics	Conocer, manejar e integrar la legislación básica catastral, de registro de la propiedad y territorio, así como el manejo de datos catastrales, junto con otros datos en sistemas digitales para la visualización, análisis y gestión optimizados de dicha información georreferenciable.
Geomatics	Conocer, analizar y relacionar los aspectos básicos de la estructura y planificación territorial, el uso de datos cartográficos y saber modelizar los posibles riesgos ambientales.
Geomatics	Entender y utilizar sensores LIDAR aerotransportados y planificar las campañas de adquisición, el procesado y análisis de los datos y su integración para la caracterización de los entornos agroforestales, urbanos, fluviales y costeros.
Geomatics	Conocer y utilizar los sensores y técnicas de teledetección necesarias para la identificación y caracterización de cambios en el territorio y saber integrarlos con otros datos espaciales para resolver problemas de actualización de bases de datos cartográficas.
Geomatics	Conocer las técnicas y métodos de visualización 2D y 3D de la información espacial y utilizarlas en la modelización de escenarios para aplicaciones industriales, de obra civil y territorio.

Implementation

✓ **Example of *Teaching guide* of a course**

UPV-Generic Student Outcomes

Subject matter	Student Outcome

Geomatics	(10) Awareness of contemporary problems issues
	
	• Developed activities related to the acquisition of competence:
	    Seminarios prácticos en grupos reducidos
	• Detailed description of the activities:
	    El estudiante analiza de forma dirigida aplicaciones reales en el marco de programas de observación de la Tierra nacionales e internacionales, en particular el uso de bases de datos geoespaciales en la resolución de problemas medioambientales y globales.
	• Assessment criteria:
	    Presentación oral e informe escrito realizado por grupos reducidos

Implementation

✓ **Example of *Teaching guide* of a course**

Assessment

Type	Outline	Acts	Weight
Open-answer written test	Controlled test against the clock where the students must draw up their answers. Reference material may be consulted if such right is conceded	2	50%
Academic studies	Development of a project that can extend from brief and simple essays to extense and complicated projects, such as final year projects and PhD thesis	2	10%
Portfolio	Document drawn up by a student that contains the tasks carried out in a certain subject during the course	1	20%
Project	A didactic strategy where students develop a new and unique product through the fulfilment of severa...	1	15%
Observation	Strategy based on ... tasks, practical trai...		

Distribution

Syllabus	Teoria Aula	Pràctica Laboratori
Programas de observación de la Tierra y bases de datos cartográficas	4	4
Definición, análisis y extracción de información de objetos	4	6
Métodos de selección de variables y clasificación	6	6
Modelos de estimación de variables espaciales cuantitativas	3	6
Evaluación de la calidad	2	2
Procesos de actualización y análisis temporal	11	6
Total hours:	30	30

Implementation

✓ **INCORPORATION OF UPV TRANSVERSAL COMPETENCES**

LINE 2. Through the **bachelor** and **master theses**:

Provide an appropriate learning scenario for developing transversal competences, facilitating their integration and transfer

The **procedure** includes collecting information through 3 questionnaires:

• Questionnaire 1: **students** fill in when they present their thesis. The student compulsorily assesses the level he considers he has acquired in each of the TCs (from 1 to 5) and there is a free field in which he can make comments. This is not anonymous but it is explicitly stated that its evaluation will not have academic effects.

Implementation

✓ **INCORPORATION OF UPV TRANSVERSAL COMPETENCES**

LINE 2. Through the **bachelor** and **master theses**:

- Questionnaire 2: it is completed by the thesis **evaluation committee**. The commission evaluates each TCs. There is also a field of observations.

- Questionnaire 3 (*volunteer*): the **tutor** of the work assess the level reached by the student in the various TCs.

Implementation

✓ **INCORPORATION OF UPV TRANSVERSAL COMPETENCES**

LINE 3. Through **extracurricular activities**:

Competencies are learned over long periods of time and in very different contexts, both academic and extra-academic. In this project this learning experiences are considered, and students can incorporate **evidences** obtained in **other contexts** about their level of development in the different TC.

Some examples :

(1) promoted by the UPV by centers, departments, institutes, services …

(2) developed outside the UPV: sports teams, associations, cooperation …

Evaluation

1. Accreditation system for transversal competences UPV

✓ <u>Track 1</u>. Evidences collected through the courses considered "**control point**".

✓ <u>Track 2</u>. **Questionnaires** integrated in the bachelor and master theses

✓ <u>Track 3</u>. **Evidences** related to TCs that can be recognized institutionally.

The level of acquisition of TCs is reflected in two complementary ways:

- through the **diploma supplement** and
- through the **portfolio** of the TC of each student.

Evaluation

2. Qualification of transversal competences in the courses

The student, throughout the studies, can find **two types of evaluation**:

✓ Of the _subject_: traditional evaluation (from 0 to 10)

✓ Of the _transversal competence_ in the "control point" courses.

✓ Each transversal competence is evaluated according to the following **criteria**:

    ✓ A: the competence is achieved excellently

    ✓ B: the competence is completely achieved

    ✓ C: the competence is partially achieved

    ✓ D: the competence is not reached, that is, the criterion does not reach the minimum level

    ✓ Blank: do not have enough evidence to assess it

Evaluation

When to evaluate the acquisition of transversal competences through "control point" courses?

Since the transversal competences are acquired in a long evolutionary process, at least **three instants** have been established to evaluate their level of acquisition :

- at least once during the first two years of the bachelor degree (**level of domain I**);
- a second time in courses "control point" of the third and fourth year of bachelor (**level of domain II**);
- during the master (**level of domain III**).

In a **complementary** manner, the bachelor and master **theses** will also evaluate the degree of acquisition of transversal competences

Evaluation

HOW to evaluate the acquisition of transversal competences through "control point" courses?

- Definition of evaluation **activities** (problems, projects, oral presentations, portfolios, discussions, group work, tests, etc.)
- The use of **rubrics** (evaluation matrix)

A **rubric** or **evaluation matrix** is:
"a resource for the evaluation and qualification of learning, knowledge or performance of students in a specific activity and that establishes indicators (evidences) and a rating scale for each one of them".

That is, a rubric **sets the criteria** on which the teacher will focus his attention to evaluate the activity

Evaluation

Elements of the rubrics

- The three **levels of domain**, or stages for evaluation of the student.

- The **indicators**, which are concretions of the learning result that defines that level of domain

- The **descriptors**, which define the behavior of the student with respect to the indicator evaluated

- To homogenize these rubrics and the evaluation of transversal competences, a **scale of 4 values** has been established: D, C, B, A (to score a level of development of the competence: not reached (D), in development (C), adequate (B) or excellent (A))

The **final evaluation** is based on the weights the teacher assigns to each of the indicators and the descriptors

Evaluation

Detail of a rubric *(for a teacher to evaluate a TC in a particular activity)*

UPV TC-08b. *EFFECTIVE WRITTEN COMMUNICATION*

Level of Domain III (Master level)

Learning result that the student must acquire at this stage:

Write texts of scientific and technical quality and use resources that propitiate the reflection of a specialized audience

INDICATORS	DESCRIPTORS			
(concretions of the learning result)	(define the behavior of the student with respect to the indicator that is evaluated)			
Grammar Correctness *Her/his correct gramar helps to transmit ideas clearly and understandable* *Examples of evidences:* • *Use properly punctuation marks (points, commas, etc.) so that when reading facilitate the understanding.* • *Do not make mistakes of specialized or technical spelling, does not employ foreign words ...*	**D** Not reached *The misuse of the punctuation marks difficults an easy understanding of the text*	**C** In development *Even if the text is grammatically correct, its reading is boring, monotonous and/or little fluid*	**B** Good/adequate *The grammatical correctness helps to transmit ideas clearly and understandable*	**A** Excellent/exemplary *The personal constructions adapt specifically to the reader, his style is clear and understandable, as well as fluid and enjoyable*

Conclusions

✓ UPV TC project aims to **ensure** that all **students** graduated at UPV are **accredited and evaluated** for a set of basic competences

✓ TC are **implemented** through the curricula, the BSc and Ms theses, and external activities

✓ They are **evaluated at three different stages** of the studies: level of domain I, II and III

✓ They are **evaluated by means of**:

  ✓ "Control point" courses using activities and rubrics
  ✓ Questionnaires at BSc and Ms theses
  ✓ Other evidences in the extracurricular activities

✓ The level of acquisition for each student is **reflected in** the **Diploma Suplement** and the **Portfolio**

National University of Architecture and Construction of Armenia

Lianna Aghajanyan Hermine Samvelyan
Andranik Akarmazyan

Innovation Pedagogy

Turku University of
Applied Sciences

Turku, Finland, September 2017

Course Name : Project Management in Architecture and Construction Industry

Target Group

2-4 bachelor students

Academic hours

2 semester 64 hours

ECTS 5

Number of Students

15 person in each group (including international students)

Architect

Designer

5

Civil engineer

IT

Economist

5

5

Learning Objectives

Teamwork abilities.
Practical knowledge.
The growth of competitive advantages in practical label market.
Calculation - analytical skills development.
Interdisciplinary work capabilities formulation.
Formulation and development of leadership and project management skills for engineering specializations.

Pre Knowledge requirements

General skills and knowledge according to each specialization.

Assessments of end results

Examination process involves one current attestation and final exam.

Innovation teaching components

First time applied methods of interprofessional and multidisciplinary group.

As a result plan to improve students practical and analytical skills.

Online testing and assessment.

Self testing and self assessment.

Developed teamwork abilities by forming and implementing culture of engineering project management.

Thank you

... to be open to innovation by creating a learning new world!
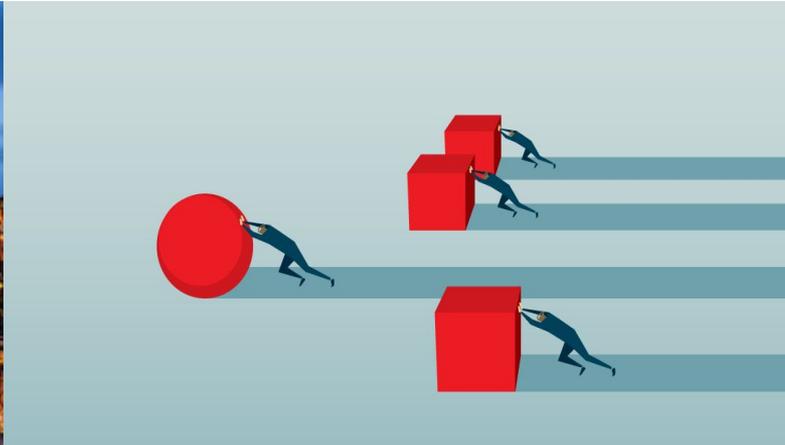
Think out of the

box

Innovation Competences Development and Assessment

Harri Lappalainen
Turku University of Applied Sciences Ltd.
Taraz, Kazakhstan
April 2018

Greetings from the happiest country in the world !

For more information, see https://www.theguardian.com/world/2018/mar/14/finland-happiest-country-world-un-report

"A better goal than being the most perfect one is to be the most unique one"

André Noël Chaker

Observation and development exercise

- Do you find similarities to your University?
  - If yes, what **should be** modified in your University?
    - How?

RSA ANIMATE: Changing Education Paradigms

Observation and development exercise

- Later during this workshop you will define
  - what **will be** modified in your University?
    - how?
    - by whom?

Co-funded by the
Erasmus+ Programme
of the European Union

INNOCENS
INNOVATION &
ENTREPRENEURSHIP

TURKU AMK
TURKU UNIVERSITY OF
APPLIED SCIENCES

EU Agenda for Higher Education

Priorities for action
1. Tackling future skills mismatches and promoting excellence in skills development
2. Building inclusive and connected higher education systems
3. Ensuring higher education institutions contribute to innovation
4. Supporting effective and efficient higher education systems

Source: COM(2017) 247 final

Co-funded by the
Erasmus+ Programme
of the European Union

INNOCENS
INNOVATION &
ENTREPRENEURSHIP

TURKU AMK
TURKU UNIVERSITY OF
APPLIED SCIENCES

INDOPED project

- "Modernizing Indonesian Higher Education with Tested European Pedagogical Practices"

- 5 European and 6 Indonesian partners

- Project period 10/2015-10/2018

- Funding from European Commission Erasmus+ Capacity Building programme

Lessons learned from INDOPED project (1/3)

Piloted methods increased students' (n=627) autonomy

- Independence from knowledge transmitted from teacher or handbook
- Enhanced personal and interpersonal innovation competences
- Capitalizing diverse resources, including interactions with peers
- Ability to collaborate in problem solving with teacher and peers
- Ability to work with limited resources (meeting deadlines)
- Self-rewarding motivation for learning

Lessons learned from INDOPED project (2/3)

Piloted methods affected to students' perceptions of lecturers

- Shift from the image of busy and unavailable clerk to friendly and cheerful partner
- Shift to willingness to take and share risks
- Increased tolerance for failure and making mistakes
- Collectivist values complemented by individualistic values (intelligence, ambition, creativity)

INNOCENS
INNOVATION &
ENTREPRENEURSHIP

TURKU AMK
TURKU UNIVERSITY OF
APPLIED SCIENCES

Lessons learned from INDOPED project (3/3)

Effects of pilots to lecturers (n=102)

- Increased lecturers' capacity for changing the culture of university education
- Helped the lecturers improve communication and supportive relationships with the students
- Increased all of the evaluated aspects of lecturers' capacity with life-long-learning attitude and passion for teaching
- Helped lecturers to become inspirational facilitators (motivating and appreciating creativity)
- Shifted the lecturers towards change-makers and promotors of new ideas

---

INNOCENS
INNOVATION &
ENTREPRENEURSHIP

TURKU AMK
TURKU UNIVERSITY OF
APPLIED SCIENCES

Additional information on INDOPED project

INDOPED KICK-OFF MEETING
Modernizing Indonesian Higher Education
with Tested European Pedagogical Practices

www.indoped.eu

The technical solution for curriculum work in TUAS

- A site in the TUAS Intranet
- Divided in three sections:
    - The mindmap with the texts
    - Formal guidelines (link list)
    - A chat box

- Open for all staff and students

Welcome to explore Innopeda Curriculum!

By clicking on the headers in the mind map below, you can get to know the innovation pedagogy approach which supports you with curriculum planning. You can start from the middle and move from the Learning Continuum to the first blue circle in the map. These headers are the **methods and tools** of innovation pedagogy, which help us to plan and implement a new approach to learning. The links in the blue circle are complete, and we are constantly working on the links in the red circle.

Thus, these pages are not complete but provide all of you the chance to participate in developing discussion and brainstorming on Yammer (on the right). We hope to see lots of active discussion here!

The curriculum is now a learning plan

The mind map gives you perspectives and means to think about learning in a new way. Through the links below the map, you can find preconditions for curriculum work to be taken into account in all curricula. Please read through the links with consideration!

Welcome to explore Innopeda Curriculum!

By clicking on the headers in the mind map below, you can get to know the innovation pedagogy approach which supports you with curriculum planning. You can start from the middle and move from the Learning Continuum to the first blue circle in the map. These headers are the **methods and tools** of innovation pedagogy, which help us to plan and implement a new approach to learning. The links in the blue circle are complete, and we are constantly working on the links in the red circle.

Thus, these pages are not complete but provide all of you the chance to participate in developing discussion and brainstorming on Yammer (on the right). We hope to see lots of active discussion here!

The curriculum is now a learning plan

The mind map gives you perspectives and means to think about learning in a new way. Through the links below the map, you can find preconditions for curriculum work to be taken into account in all curricula. Please read through the links with consideration!

When working with a remote connection, use this mind map: https://coggle.it/diagram/WSPd8G_UKQABaHk6 /63aa5236c3c89e7b64c53b3aa86d8b2af49030d266839f16f0cce680f459ce3f

Made with Coggle: create your own mindmap

< coggle

Education for better life

INNOCENS
INNOVATION & ENTREPRENEURSHIP

TURKU AMK
TURKU UNIVERSITY OF APPLIED SCIENCES

Education for better life

Why Innopeda?
The background of Innopeda
Innovation competencies as the goal of degrees
Innopeda - Learning continuum

Recognition of prior studies and competence
Competency-based curricula
Modular structures
365 year around studies
Flexible curricula

Developing digital teaching skills
Developing digital learning skills
Planning digital studies
Digital Studies
Practical training
Working-life orientation

Renewing teacher roles
Multidisciplinarity
Internationalization

Strategy for Internalization
International practical training
Supporting Exchange
Multicultural Learning Environments
Studying in English

INNOPEDA

Co-teaching
Project learning
Project learning environments
Business Accelerator
Team Learning
Active student
Students' well-being
Activating learning and teaching methods

Entrepreneurship
Versatile and development-oriented assessment
E-portfolio

Integration between studies and RDI activities
Recognition of prior learning acquired at work
Information retrieval
Renewing thesis

The background of innovation pedagogy
includes

- **The expanded concept of knowledge**, which also accepts intuition and tacit knowledge on the correlation between knowledge and the world.
- **The humanist view of man**; man is self-directed, we trust people's will, goodness, creativity, the ability to grow and develop.
- **Socio-constructivist learning theory** (incl. socio-cultural, experiential...)
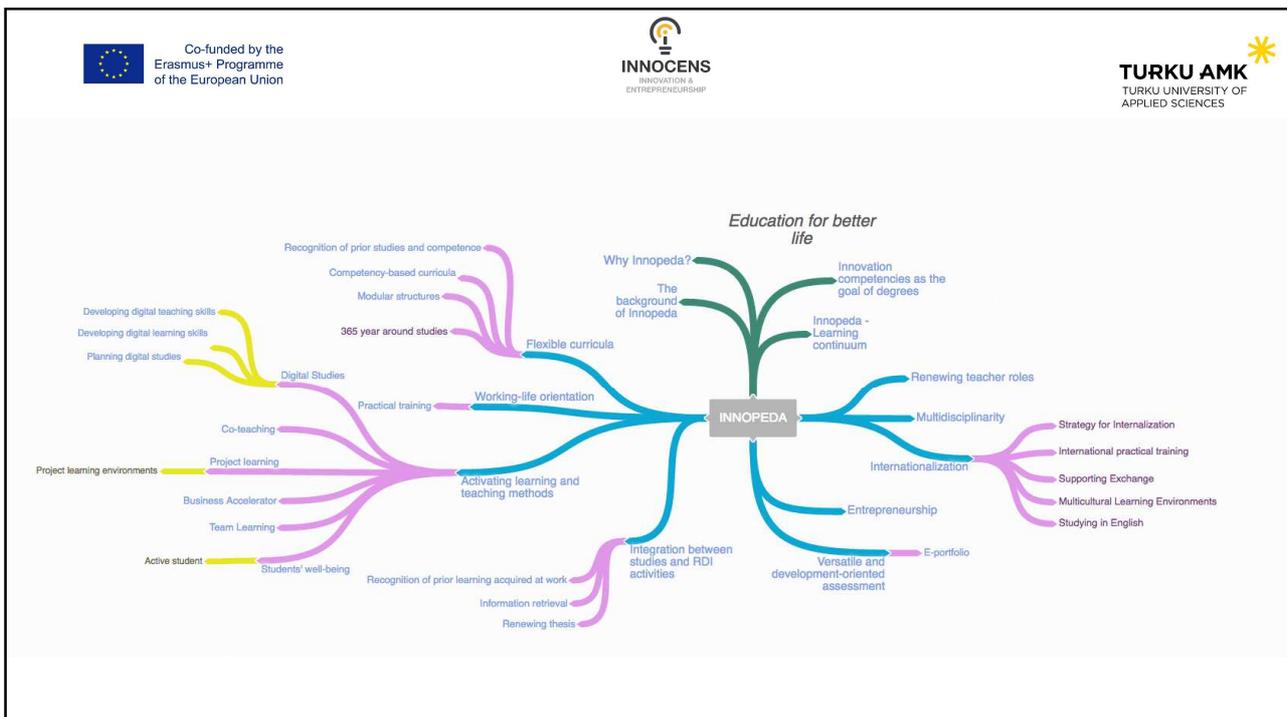
Education for a Better Life
-Innopeda® OPS

Aiming at an inclusive, sustainable society
With the value compass towards shared goals: appreciation, openness, quality, responsibility, community-orientation, trust. With the strategic plan, we build the technical innovation university of the future and develop well-being.

A view on the role of educational organizations now and in the future
- learning takes place also after the degree
- education takes place throughout life, not just at schools or educational institutes
- real life and education to walk hand in hand

Using innovation pedagogy as the approach
- knowledge, skills and attitudes to future work and life, e.g. life-long learning and growth mind-set
    - turning point of teaching work
    INNOPEDA CURRICULUM
    as the means

Co-funded by the Erasmus+ Programme of the European Union

INNOCENS
INNOVATION & ENTREPRENEURSHIP

TURKU AMK
TURKU UNIVERSITY OF APPLIED SCIENCES

Education for better life

INNOPEDA

- Why Innopeda?
- The background of Innopeda
- Innovation competencies as the goal of degrees
- Innopeda - Learning continuum
- Recognition of prior studies and competence
- Competency-based curricula
- Modular structures
- 365 year around studies
- Flexible curricula
- Developing digital teaching skills
- Developing digital learning skills
- Planning digital studies
- Digital Studies
- Practical training
- Working-life orientation
- Co-teaching
- Project learning environments
- Project learning
- Business Accelerator
- Team Learning
- Active student
- Students' well-being
- Activating learning and teaching methods
- Recognition of prior learning acquired at work
- Information retrieval
- Renewing thesis
- Integration between studies and RDI activities
- Renewing teacher roles
- Multidisciplinarity
- Internationalization
  - Strategy for Internalization
  - International practical training
  - Supporting Exchange
  - Multicultural Learning Environments
  - Studying in English
- Entrepreneurship
- Versatile and development-oriented assessment
- E-portfolio

© FINCODA UPV-SEE-CSP team (2017). *Innovation Competence Model*

Formal guidelines

- Innopeda curriculum – for groups starting in autumn 2018
- Instructions for drafting the study plans
- Instructions for writing the module and course descriptions

Developing the barometer for innovation competences

- How to measure Innovation Competencies?
- From analyzing the theoretical background to building the barometer
- 2011-2013
- International, 4 countries
- **INCODE Barometer**

INCODE

INNOKOMPPI

- Validation of the barometer to the University environment
- 2012-2014
- National, 4 UAS' + 1 University
- **Innokomppi Barometer**

- With universities and companies
- Development of the barometer also to the needs of companies
- 2015-2017
- International, 5 countries
- **FINCODA Barometer + software application**

FINCODA

FINCODA Rater Training

http://fincoda.langebuecher.de/

FINCODA Barometer
http://fincoda.dc.turkuamk.fi/

Israel Griol Barres

IDEASUPV
tu empresa empieza aquí

INNOCENS
INNOVATION &
ENTREPRENEURSHIP

israel.griol
@gmail.com

@igriol

DISCIPLINED
ENTREPRENEURSHIP

Taraz Workshop
20-21 April 2018
INNOCENS

UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

IDEASUPV
tu empresa empieza aquí

IDEASUPV
tu empresa empieza aquí

UNIVERSITAT POLITÈCNICA DE VALÈNCIA
DIRECCIÓN DELEGADA DE EMPRENDIMIENTO Y EMPLEO

02
SPACES

STARTUPV

Startup Private Offices
Coworking spaces
11 Open Spaces (1 per School)
Alcoy
Gandía

IDEASUPV
tu empresa empieza aquí

UPV Entrepreneurship
Roadmap

UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA
DIRECCIÓN DELEGADA DE EMPRENDIMIENTO Y EMPLEO

03

BOOSTING

ACCELERATION

STARTUPV network of mentors

IDEAS-UPV Technicians

Advisors

Access to Funding

7
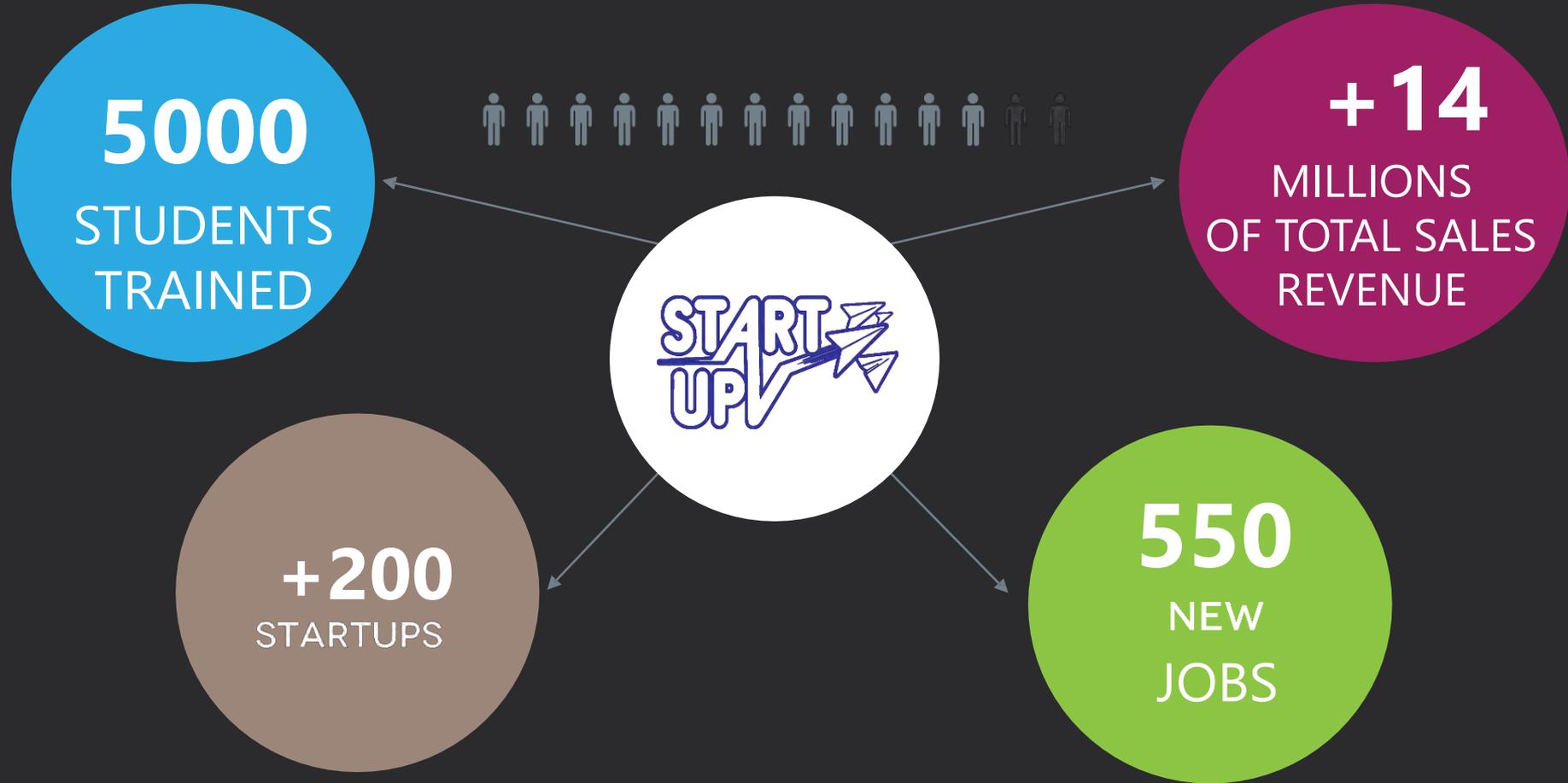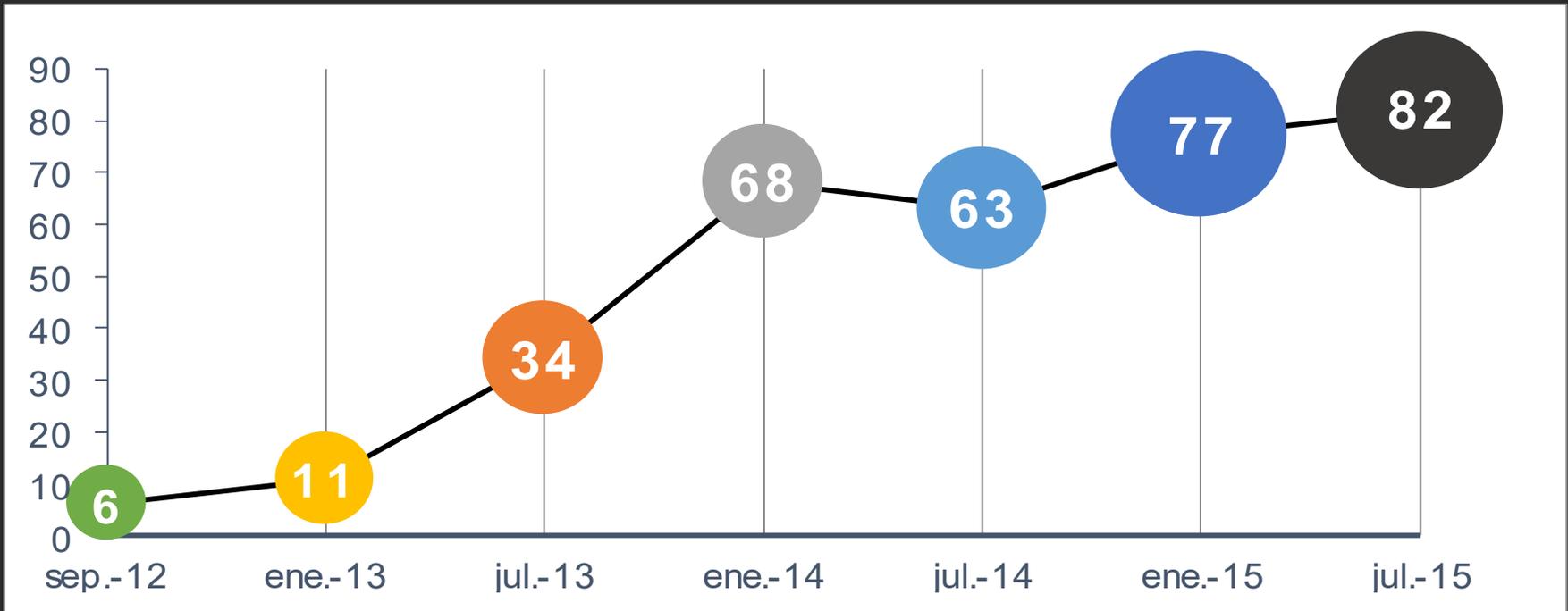
IDEASUPV
tu empresa empieza aquí

Our history

UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA
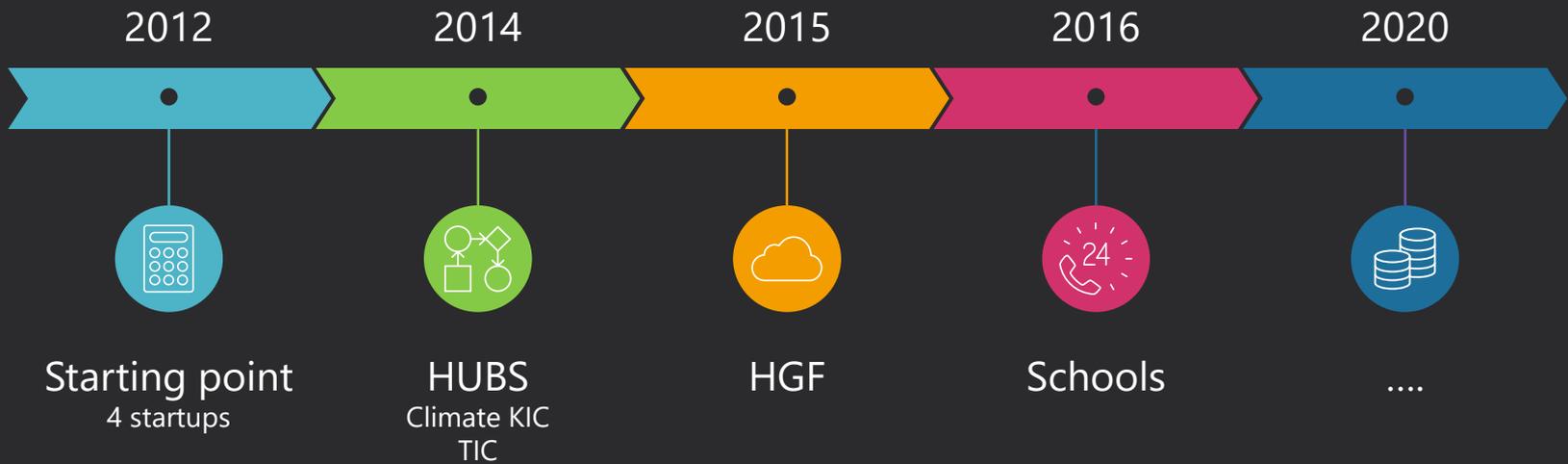
DIRECCIÓN DELEGADA DE EMPRENDIMIENTO Y EMPLEO

2012

2014

2015

2016

2020

Starting point
4 startups

HUBS
Climate KIC
TIC

HGF

Schools

....

Pyro

Closca

IDEASUPV
tu empresa empieza aquí

UNIVERSITAT POLITÈCNICA DE VALÈNCIA
DIRECCIÓN DELEGADA DE EMPRENDIMIENTO Y EMPLEO
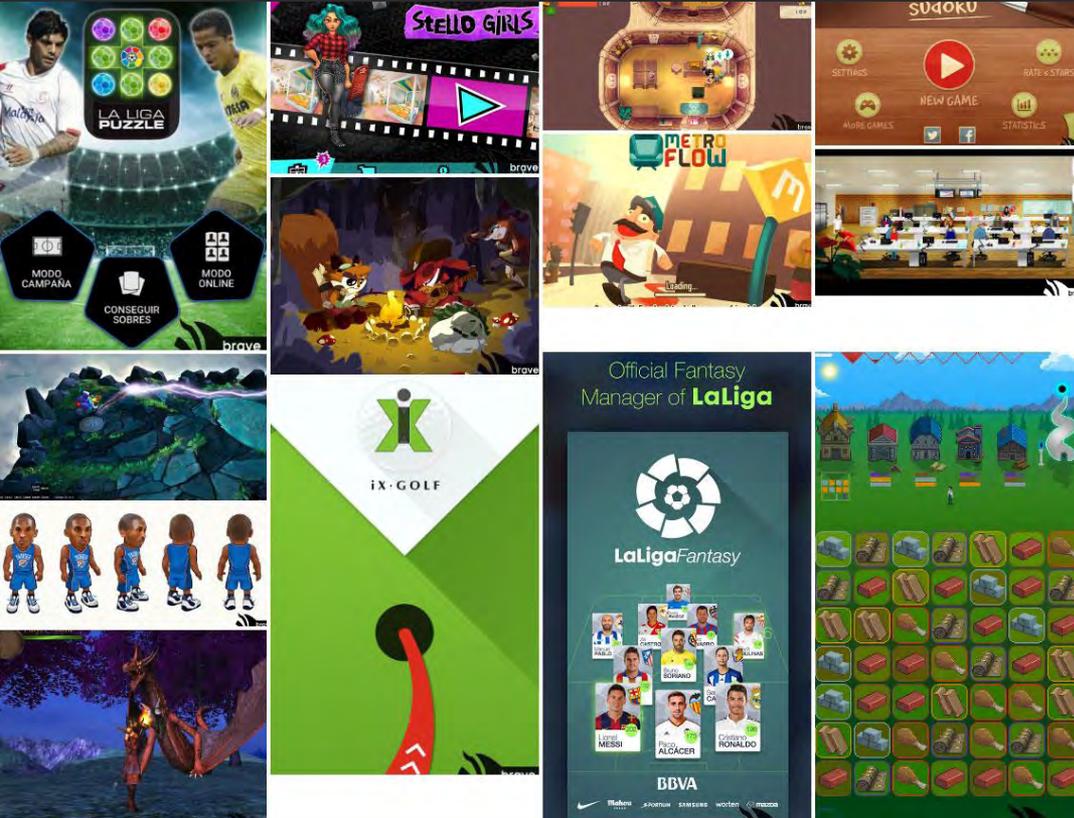
Wild Frame Media

Smile Hunter

IDEASUPV
tu empresa empieza aquí

UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

DIRECCIÓN DELEGADA DE EMPRENDIMIENTO Y EMPLEO

FORMACIÓN

SEMILLA

IDEASUPV

HUBS

FINANCIACIÓN

START UP

CHALLENGES

yuzz

CENTROS

CAMPUS

eit Climate-KIC

KIC HEALTH

InnDEA VALENCIA

yeeply
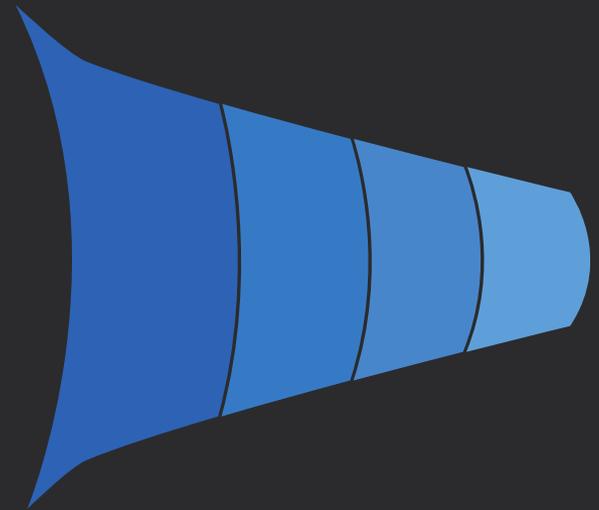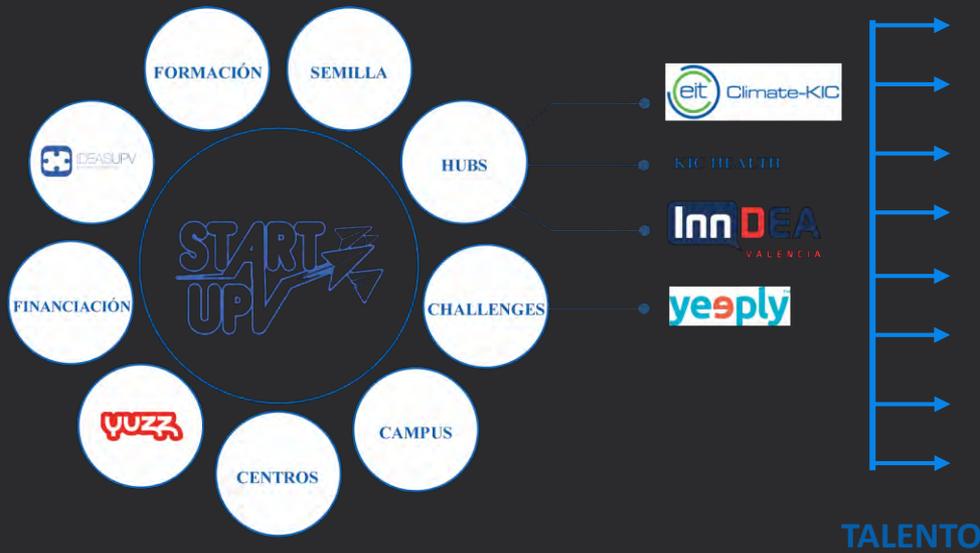
TALENTO
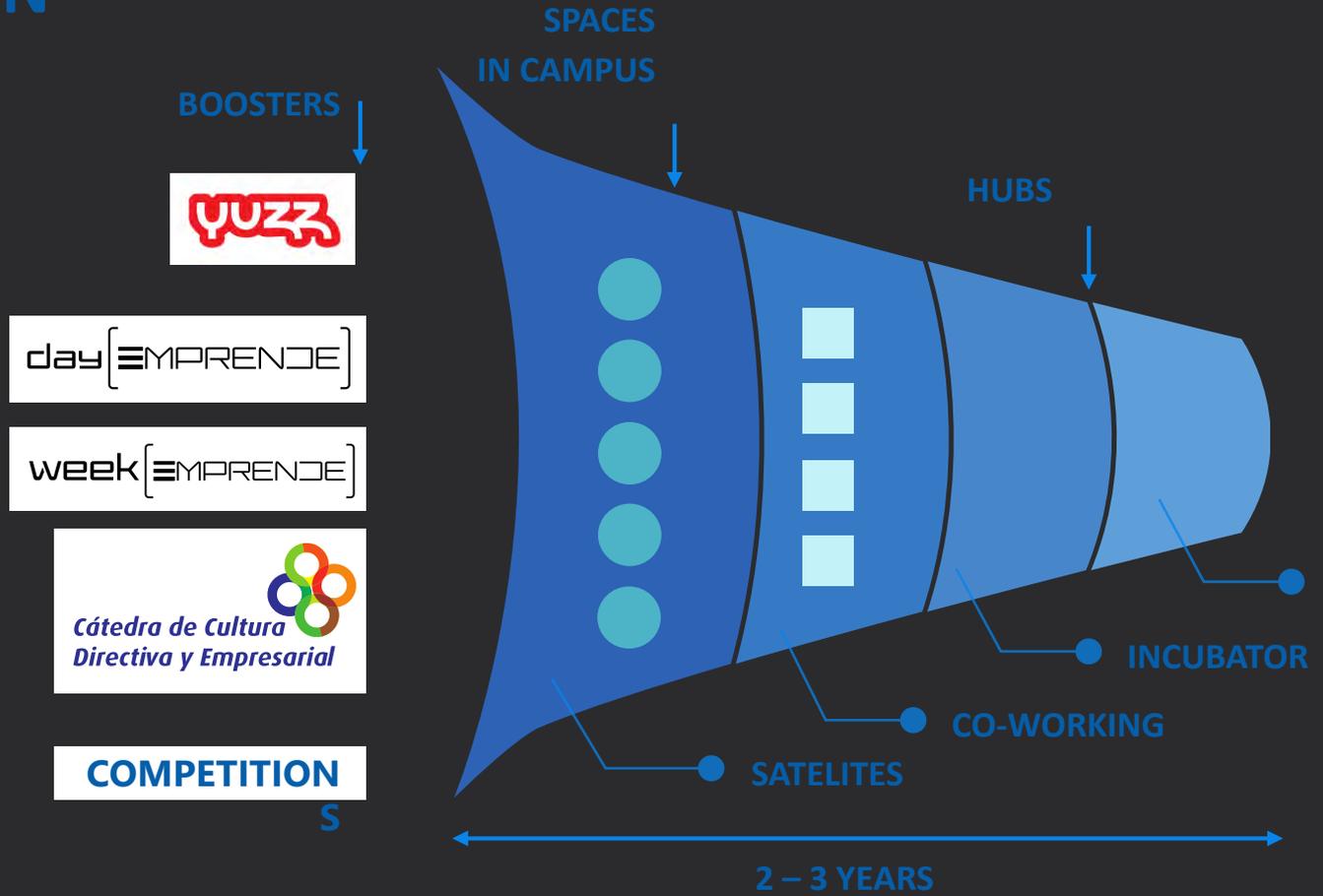
Audita
Legacy
BKS
Mundoarti
Shipeer
Seo&Sem

Vitcord
Geomodel
Bicilink
Tyris Software
Wonderbits

Peer To Park
Kibi Toys

Beroomers
Nilgo
Findme

Sciling
Pterodactive

Witrac
Closca

Tendfy
Pyro

Carpe Via

No Spoon Tech Lab
Consultoría 3.0

My Energy Map
GAQ
Wiquot

Training Experience

Wonka Center

Tuvalum
Fent Estudi
Relendo

Miotech
Cruxflux

Hidrónico
Biond
Bemore 3D

Geteco
Language & Sun
Smile Hunter
Textil Energy

Printable
Withink Web Design
Wild Frame Media
Yeeply
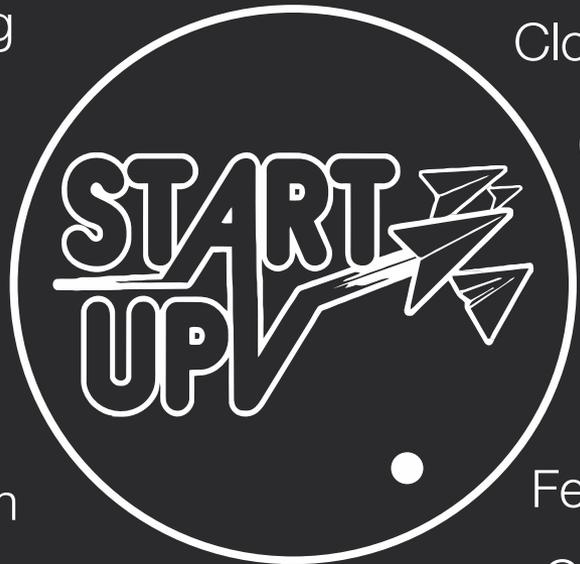
AGENDA

1. Successful Startups
2. Ideas
3. Startups?
4. Why be entrepeneurs?
5. Deals
6. Business Models
7. Business Model Canvas & Lean Canvas
8. Customer segments
9. Value Proposition
10. Channels
11. Revenue Streams, Cost Structure, Metrics
12. Competitive Advantage
13. MVPs
14. Validating Business Models
15. Teams
16. Elevator Pitch
17. Startup Fundraising

SUCCESSFUL STARTUPS

So what makes for a *successful* start-up?

Start with a brilliant founder like…

Mike, 34
Stanford
Alumnus

he used to be an...

Experienced Exec

All his operating experience built up some...

…outstanding credentials!

One day Mike has...

A "killer" product idea!

A "killer" product idea! he's really passionate about it

Mike's experienced.

He knows how to test his idea using...

...market research

The research looks good!

Mike moves forward, and writes a fantastic....

Great!
Based on the credentials, research, and plan, Mike has secured the final piece…

…VC Funding!

Money in hand,
Mike get's started on

...building his start-up.

He makes the headlines of every major...

… and he is
invited to give…

...keynote talks

Mike and his start-up are on a roll!

How likely is his business to succeed?

- Despite the experience, research and plan...

...Mike slipped up.

Let's help Mike with the things he didn't know.

1

No business plan survives the first customer contact.

Sticking to a planning document works for a known future, <u>not</u> for a start-up context.

IDEAS

IS IT POSSIBLE TO LEARN HOW TO BECOME ENTREPRENEURS?

EVERYTHING STARTS WITH...

EVERYTHING STARTS WITH...

What is the value of an idea?

WHERE CAN I FIND IDEAS?

SPRINGWISE

http://www.springwise.com

SPRINGWISE

☀ LIFESTYLE & LEISURE

In Czech Republic, train company announces singles-only 'dating carriages'

🇨🇿 **28th June**. Train journeys can be boring if travelers forget to bring along something to do. While the Catalan Government Railways has opted for QR code book chapters to keep its customers entertained, Czech Republic-based transport operator Ropid now wants to introduce singles-only carriages to help travelers to meet potential partners on ...

Read More ○

🐦 Tweet

in Share

🔴 +1 9

COOL BUSINESS IDEAS

http://www.coolbusinessideas.com/

COOL BUSINESS IDEAS

http://www.coolbusinessideas.com/

17 Jun 2015

CLEANS ROAD; CLEANS AIR

By Steven Teo On 17 June 2015 In Society & Environment

Empa, ETH Zürich and Bucher Municipal have developed a hybrid-electric powertrain for road sweepers that's said to consume half the energy of diesel-hydraulic vehicles and reduce emissions by more than 60 percent. The design replaces conventional hydraulic

0 Comme

THE SHOE THAT GROWS

By Steven Teo On 16 June 2015 In Society & Environment

Like Share 4 people like this. Be the first of your friends.

TRENDWATCHING

LATEST REGIONAL TREND BULLETINS

Asia

f 66 **tw** 163 **in** 182

MARCH 2015

POST-DEMOGRAPHIC CONSUMERISM IN ASIA

In 2015, Asia evolves beyond the old demographic models of consumer behavior.

READ NOW ›

South & Central America

PT ES

f 13 **tw** 86 **in** 48

MAY 2015

TRANSPARENCY TRIUMPH

TRANSPARENCY TRIUMPH

READ NOW ›

Africa

f 21 **tw** 104 **in** 71

MARCH 2015

CANDID CONSUMPTION

Why in 2015, institutions and brands will undergo the African inquisition, as increasingly curious consumers across the continent demand total transparency and information.

READ NOW ›

QUIRKY
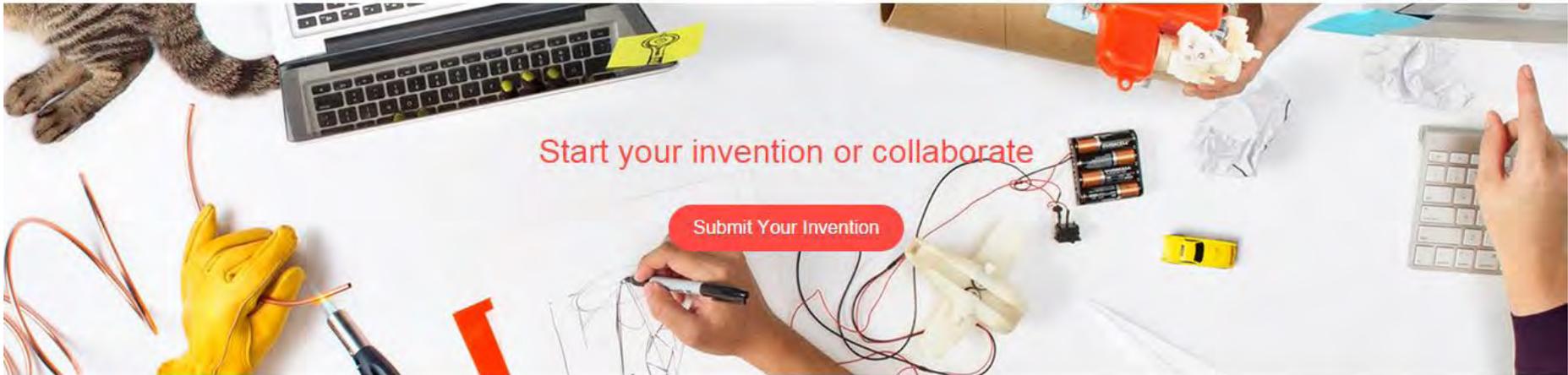
https://www.youtube.com/watch?v=jogQT7ijlA8

QUIRKY

http://www.quirky.com/
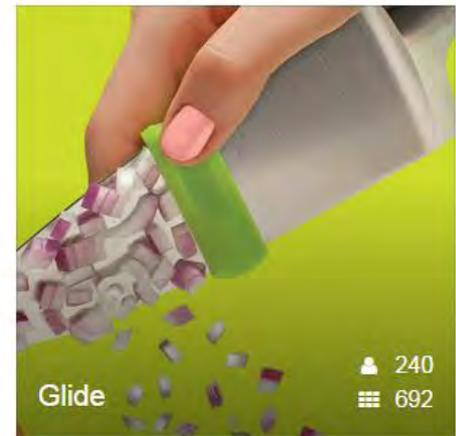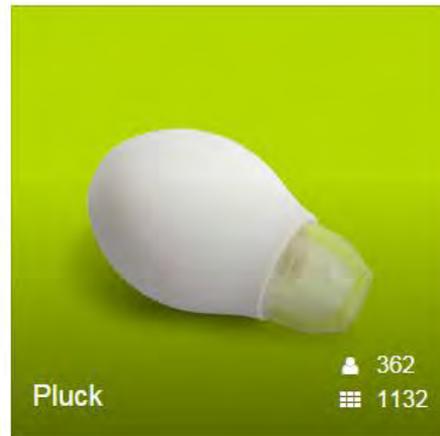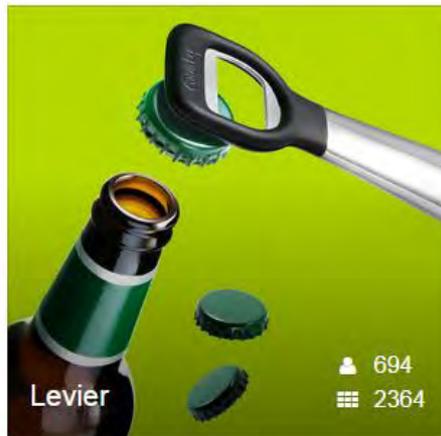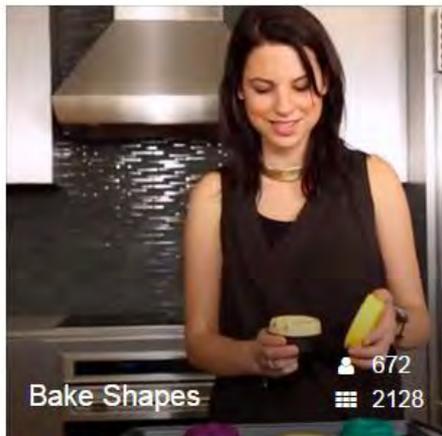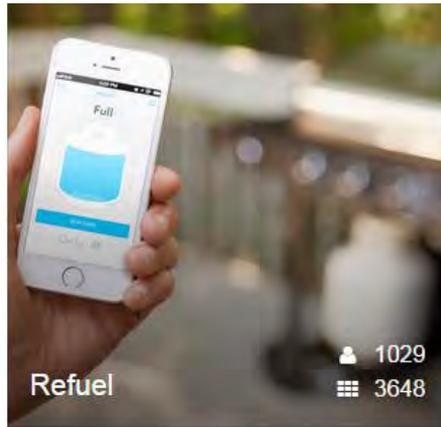
QUIRKY

Refuel

Smart propane tank gauge

Overview   Specs

Nothing puts the kibosh on a cookout faster than an empty propane tank. With Refuel, you'll never get caught off guard by said BBQ bummer again. This super smart propane tank gauge connects to the Wink app on your mobile device so no matter where you are, you'll always know when it's time to refuel.

INVENTED BY

anthony reddington
boston ma

CROWDFUNDING

KICKSTARTER

https://www.kickstarter.com/projects/2101519704/oval-the-first-digital-handpan?ref=card

CONCLUSIONS

- **Ideas have no value**

- **Ideas are free**

- **People will help you to transform your idea into something valuable**

- **There are only two kinds of people:**
  - **Who give excuses.**
  - **Entrepreneurs.**

STARTUPS?

A startup is not a small company.

So, what's a startup?

"A TEMPORARY ORGANIZATION DESIGNED TO SEARCH FOR A REPEATABLE AND SCALABLE BUSINESS MODEL"
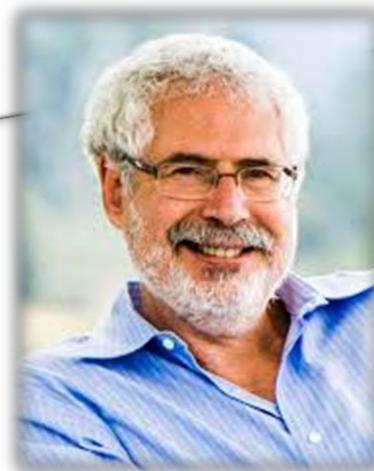
Steve Blank

SME Entrepreneurship

The company grows at a linear rate. When you put money into the company, the system (revenue, cash flow, jobs, etc.) will respond quickly in a positive manner.

SME Revenue, Cash Flow, Jobs over Time

Revenue/
Cash Flow/
Jobs

time
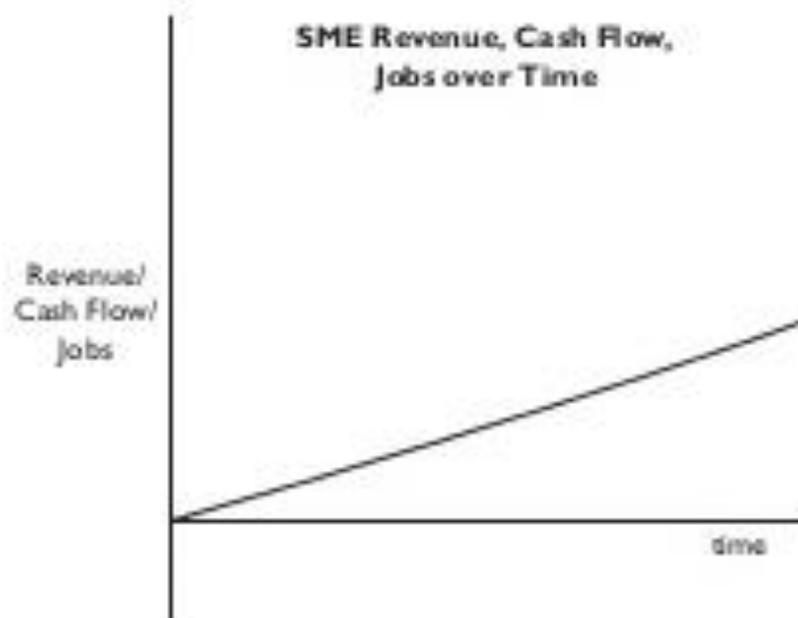
IDE Entrepreneurship

The company starts by losing money, but will have exponential growth. Requires investment. When you put money into the company, the revenue/cash flow/jobs numbers do not respond quickly.

IDE Revenue, Cash Flow, Jobs over Time

Revenue/
Cash Flow/
Jobs

time
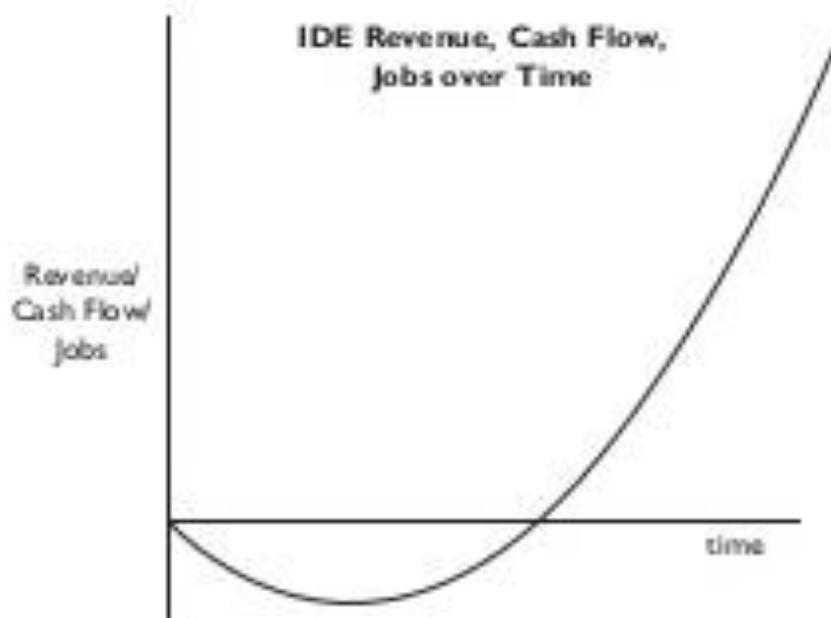
Source: Bill Aulet and Fiona Murray, "A Tale of Two Entrepreneurs: Understanding Differences in the Types of Entrepreneurship in the Economy," Martin Trust Center for MIT Entrepreneurship, November 2012. http://entrepreneurship.mit.edu/sites/default/files/AuletMurray_IIDEvSM.pdf

"A startup is a human institution designed to create a new product or service under conditions of extreme uncertainty."

Eric Ries

Startup VS Company

A **Startup looks for** a business model

A **Company executes** a business model
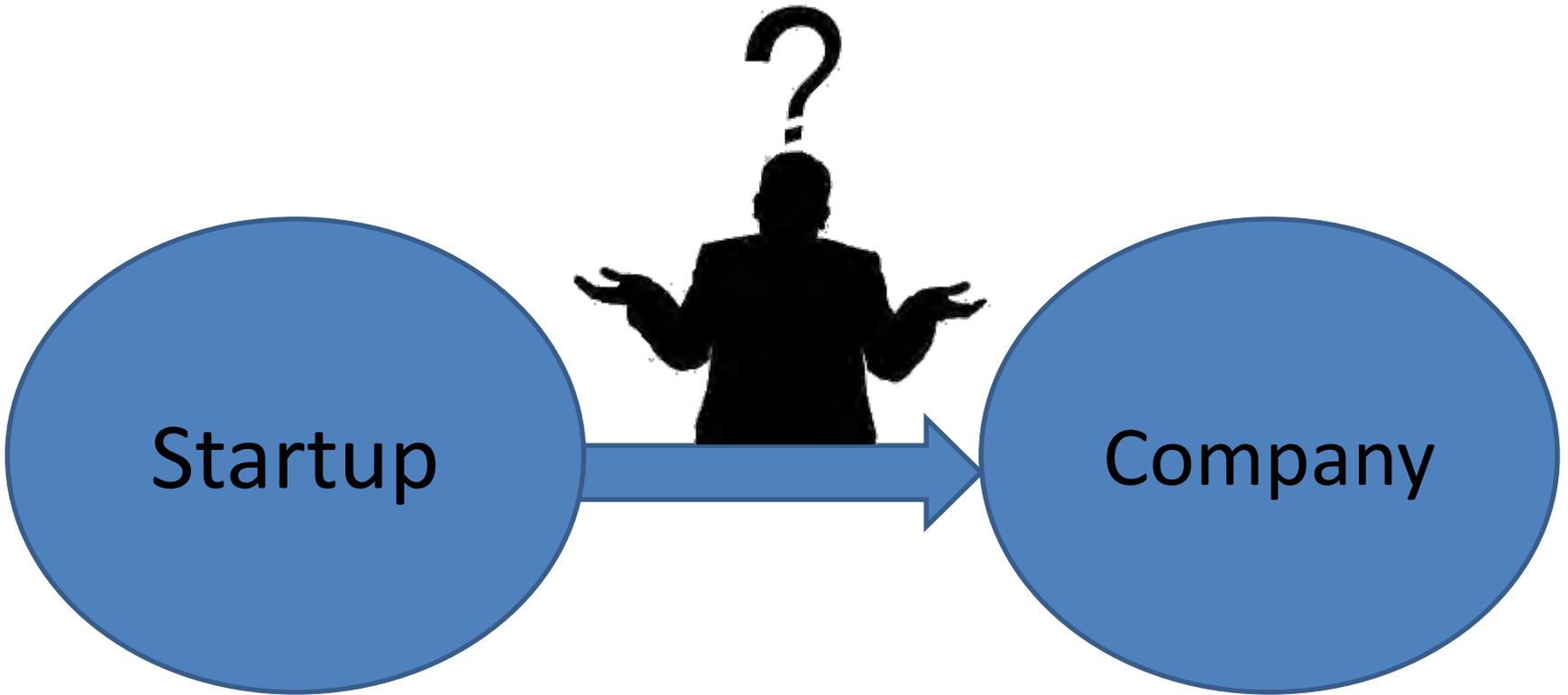
What is the main goal of a startup?

What is the main goal of a startup?

TO STOP BEING A STARTUP...

What is the main goal of a startup?

TO STOP BEING A STARTUP…
… AND TO BECOME A SUCCESSFUL COMPANY

ANDROID

NETFLIX

NOKIA

BLOCKBUSTER

Madrid Rock

Spotify

AVIS

zipcar

What do you like?

_____

_____

_____

_____

_____

Dislike?

_____

_____

_____

_____

_____

FINANCE • VENTURE CAPITAL

Unilever Buys Dollar Shave Club for $1 Billion

BLADES 　 BUNDLES

THE HUMBLE TWIN
$1

★★★★☆
11.5K Reviews

SELECT

...al best shaver, for guys who dig
simplicity and precision.

✓ 2 stainless steel blades

✓ 5 cartridges per month

THE 4X
$6

★★★★☆
16.1K Reviews

SELECT

A more advanced all around shaver that gets
right down to business.

✓ 4 stainless steel blades

✓ 4 cartridges per month

THE EXECUTIVE
$9

★★★★☆
15.4K Reviews

SELECT

The final frontier – it's like a personal
assistant for your face.

✓ 6 stainless steel blades

✓ 4 cartridges per month

You May Like

**Bolero Pack Variado
Passion 12 sobres x 9 g**

by BULEVIP | Sponsored

**Kristen Wiig Buys Histo...
Mid-Century House for
$2.96 Million**

by Mansion Global | Sponsored

**NBC Should've Seen the
Megyn Kelly Trainwreck
Coming**

by Fortune

OUR GOAL

BUSINESS MODEL → VALIDATION →   MILESTONES
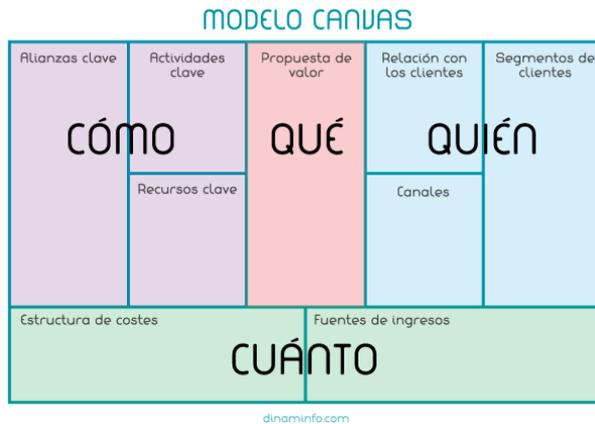
WHY BE ENTREPRENEURS?

Why do a start-up?

Why do a start-up?

- Change the world?

- Get filthy rich?

- Want to be in control?

What is your Founder's Dream?

- What do you want to achieve?

  - put a number to it

- And when?

  - and a date

Why do start-ups fail?

65% of start-up failures are related to team issues

Noam Wasserman, "Founder's Dilemmas"

Dreams translate to revenue target

- Impact means you sell 10.000's of products per year

- Getting rich also means getting big revenues
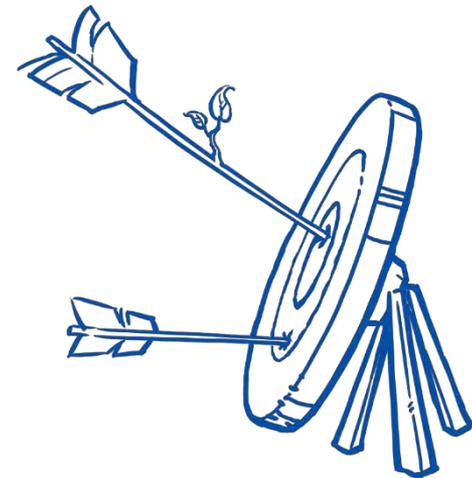
Example
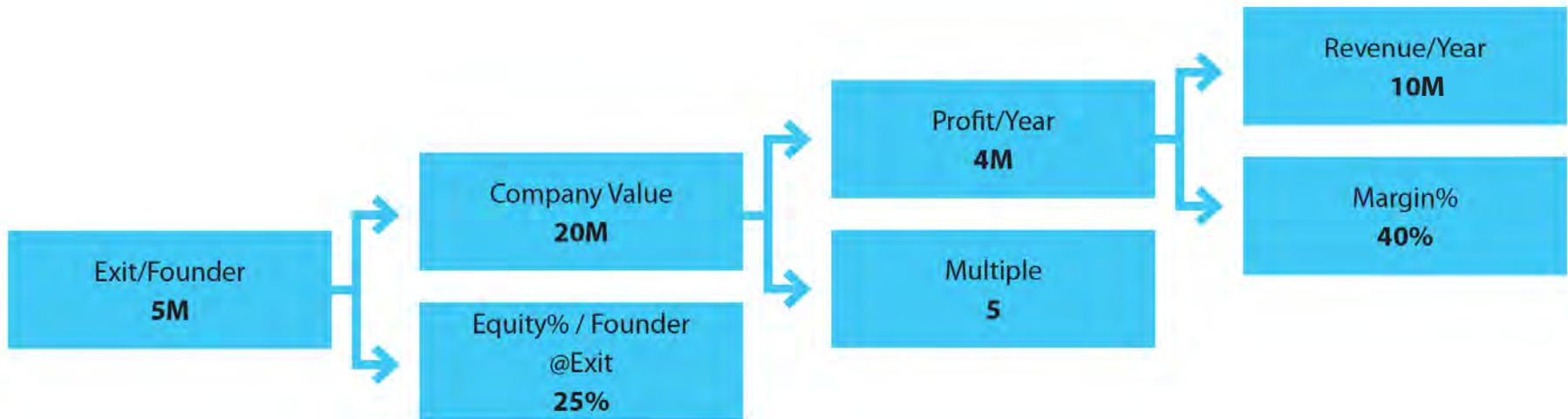
Does your start-up deliver on dream?
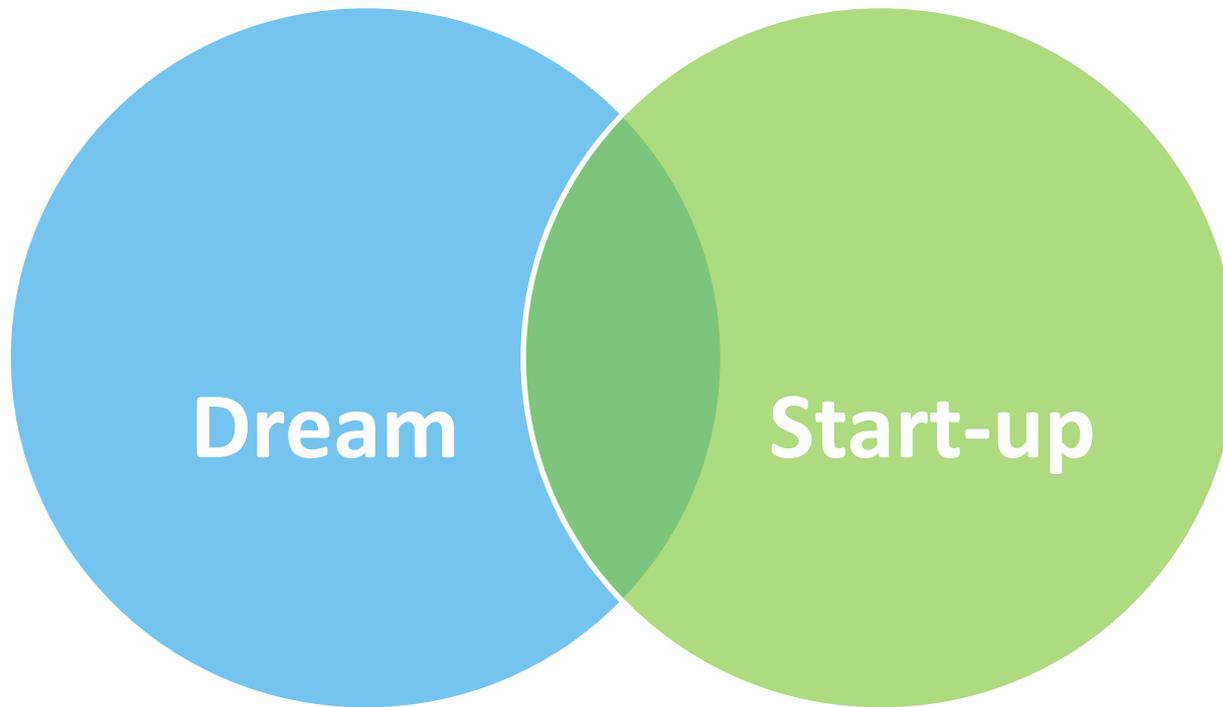
To Do

- Think up start-up that delivers on everyone's targets

- Founders can have different targets: One wants to have impact, other wants to get rich

- BUT AT THE END → COMMON REVENUE TARGET

To Don't

- Lower dream

- Ignore dream

- Change dream

DEALS

I'm so glad we all agree

ONCE I HAVE AN IDEA...

THE RACE STARTS

The Deal

The Deal is a sentence with four elements:

■ **The start-up:** that's you

■ **The customer:** the one you're selling to (either business or consumer)

◉ **The product:** what you're selling

$ **The price:** what the customer pays you in return

Start-up → Customer

B2C or B2B?

Product or Service?

- Product: you sell ownership of something
- Service: you sell use of something for a certain period of time

Example: B2C Product

Composter

WORMUP → Consumer

€300 / Composter
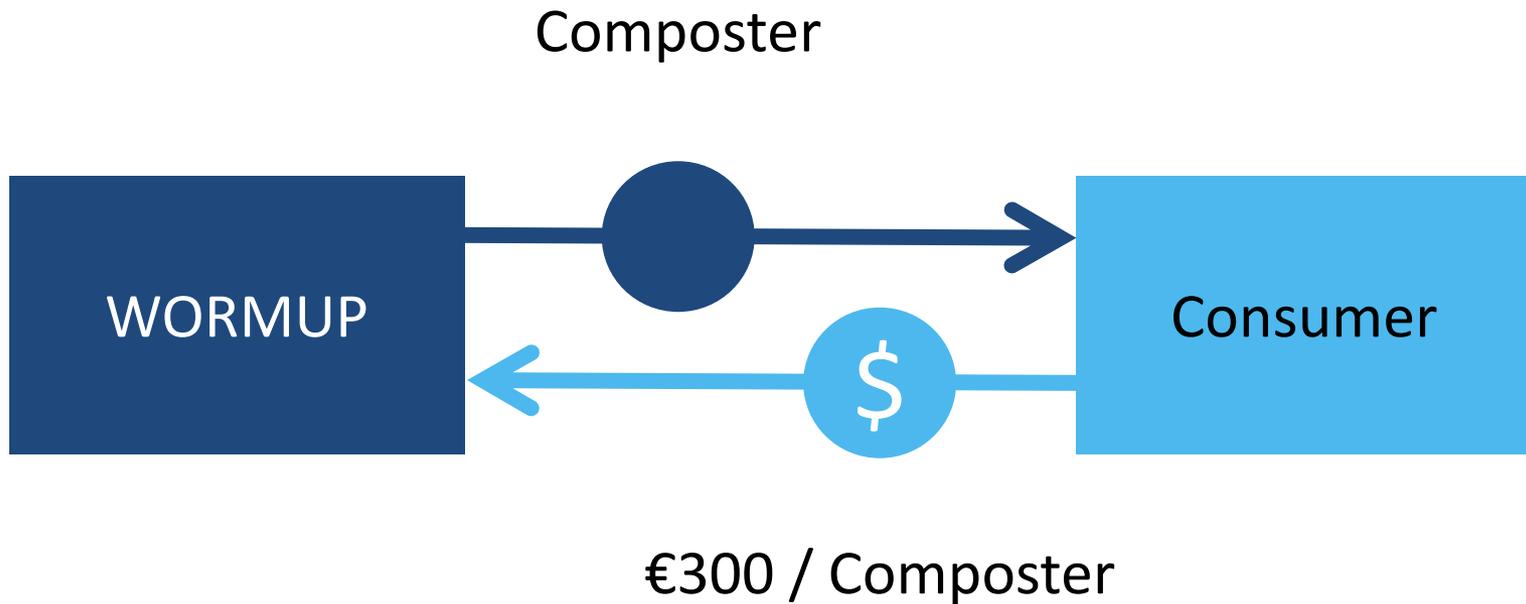
Example: B2C Service

Rental Solar Panels

Solease → **Private home owners**
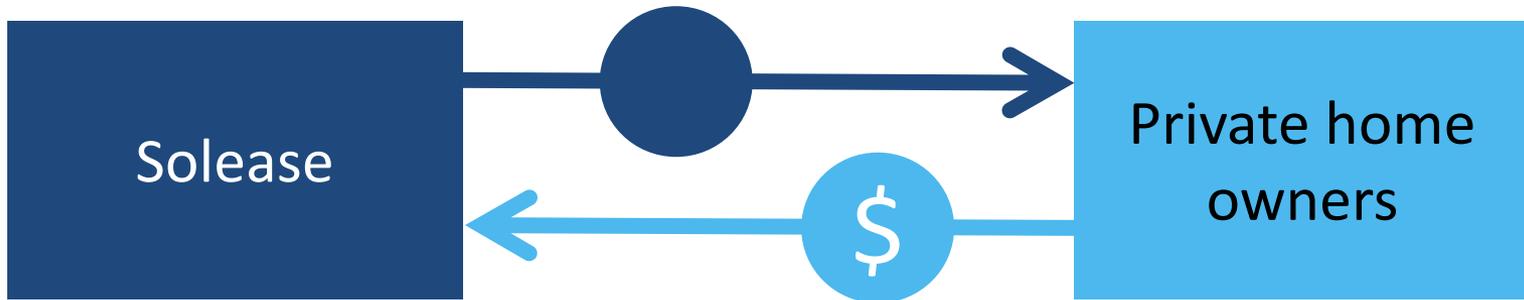
€55 / Month

Example: B2B Product

Example: B2B Product

Example: B2B Product

Powerwindows

Buildings

Physee → Real estate developers → Businesses

€250 / window

M€10 / building
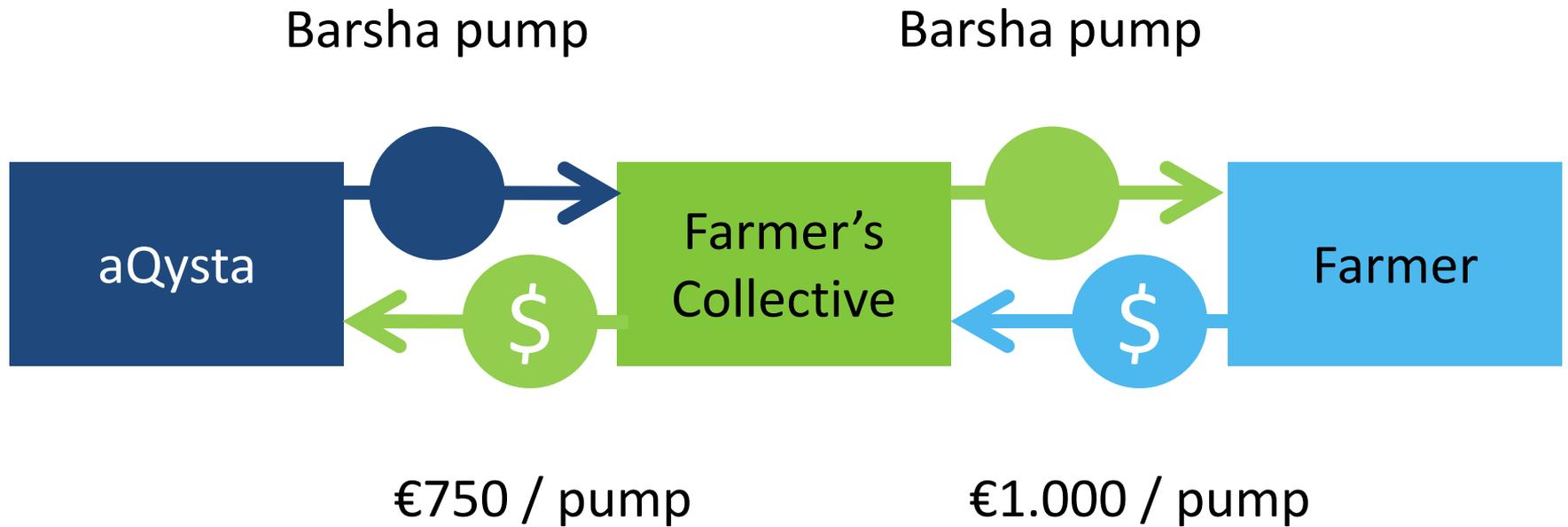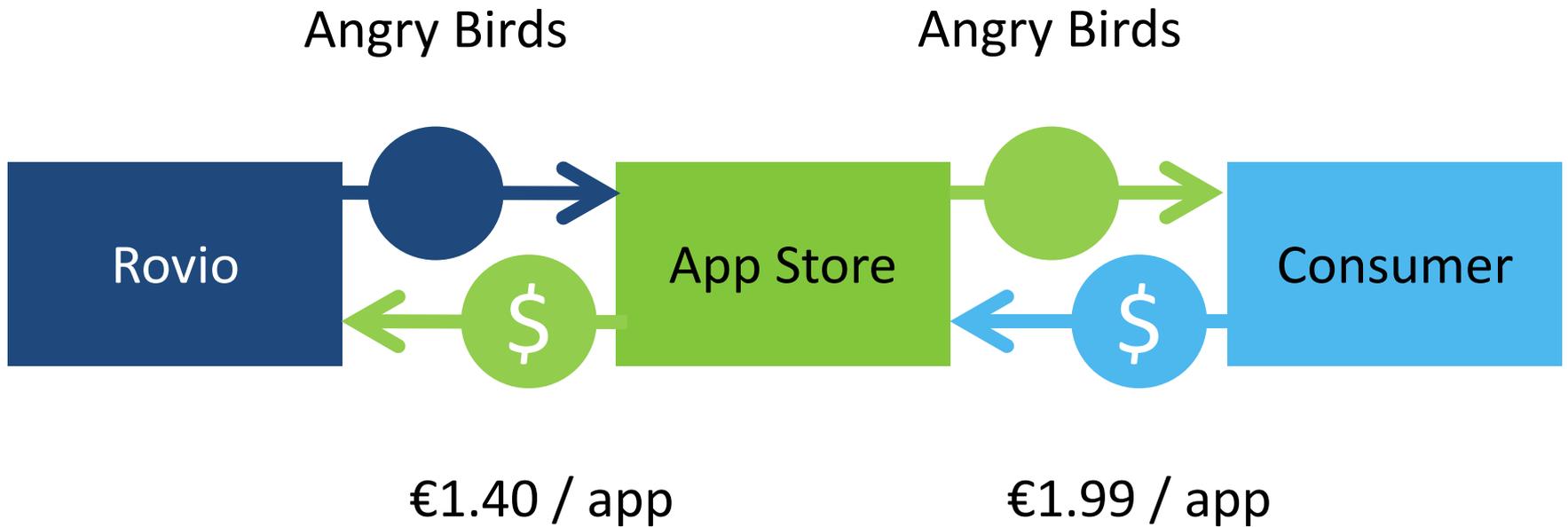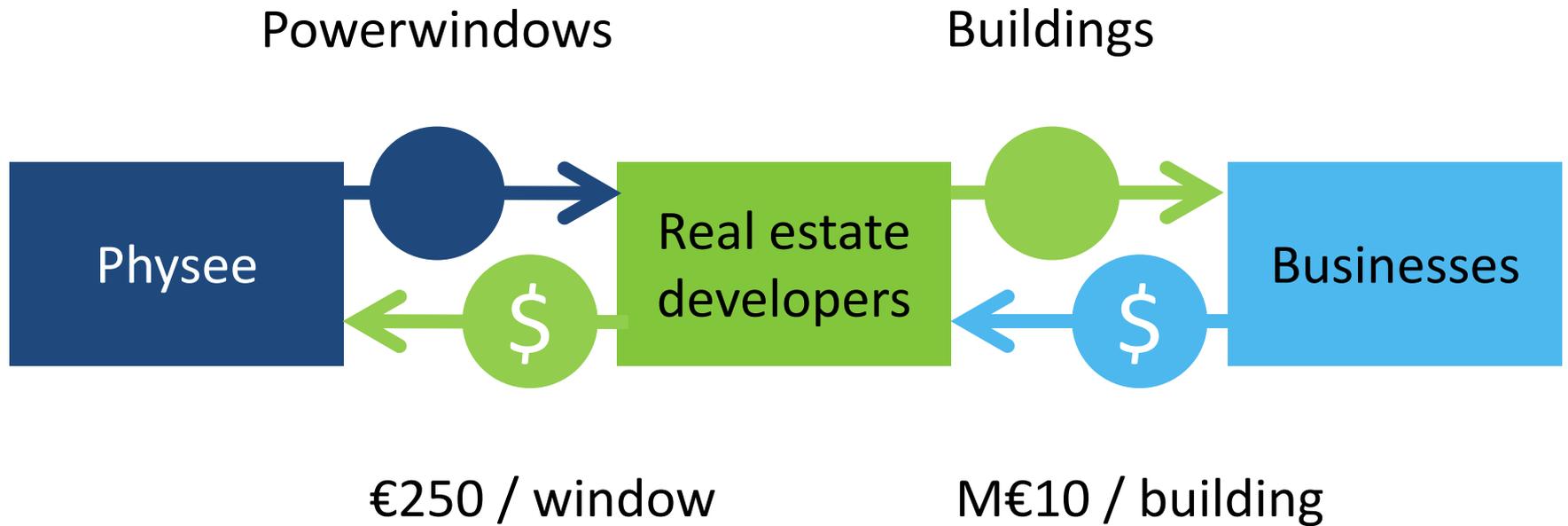
Example: Product is a Customer
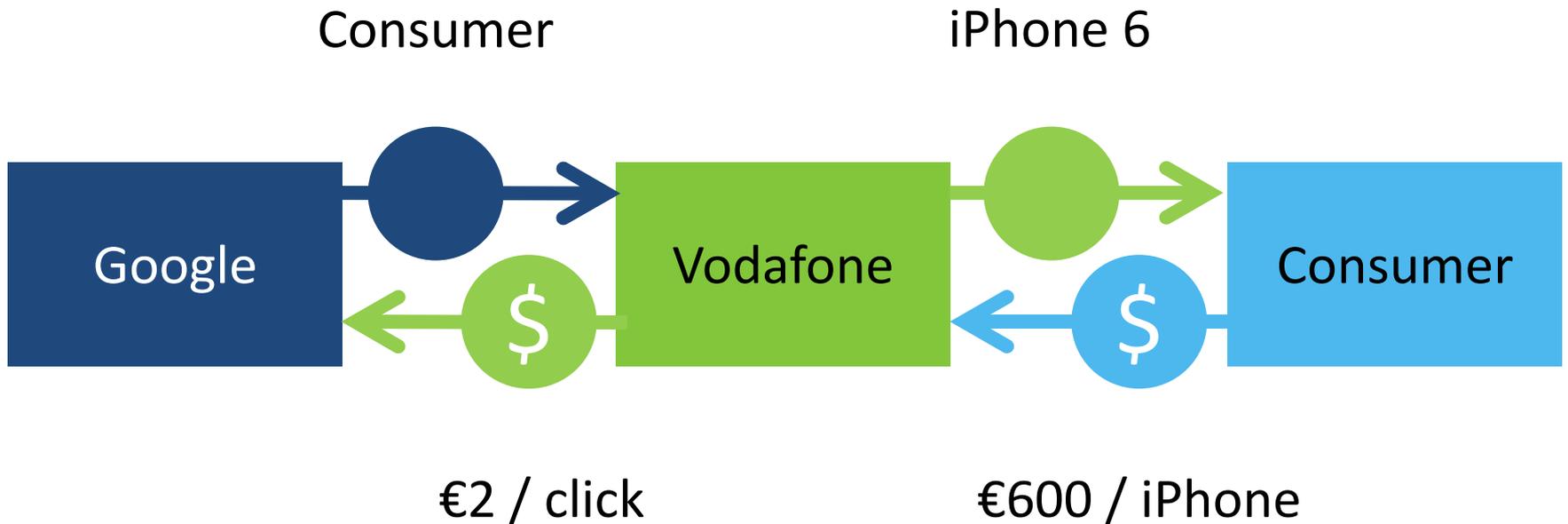
Deal if you sell a customer, and customer's payment goes through you
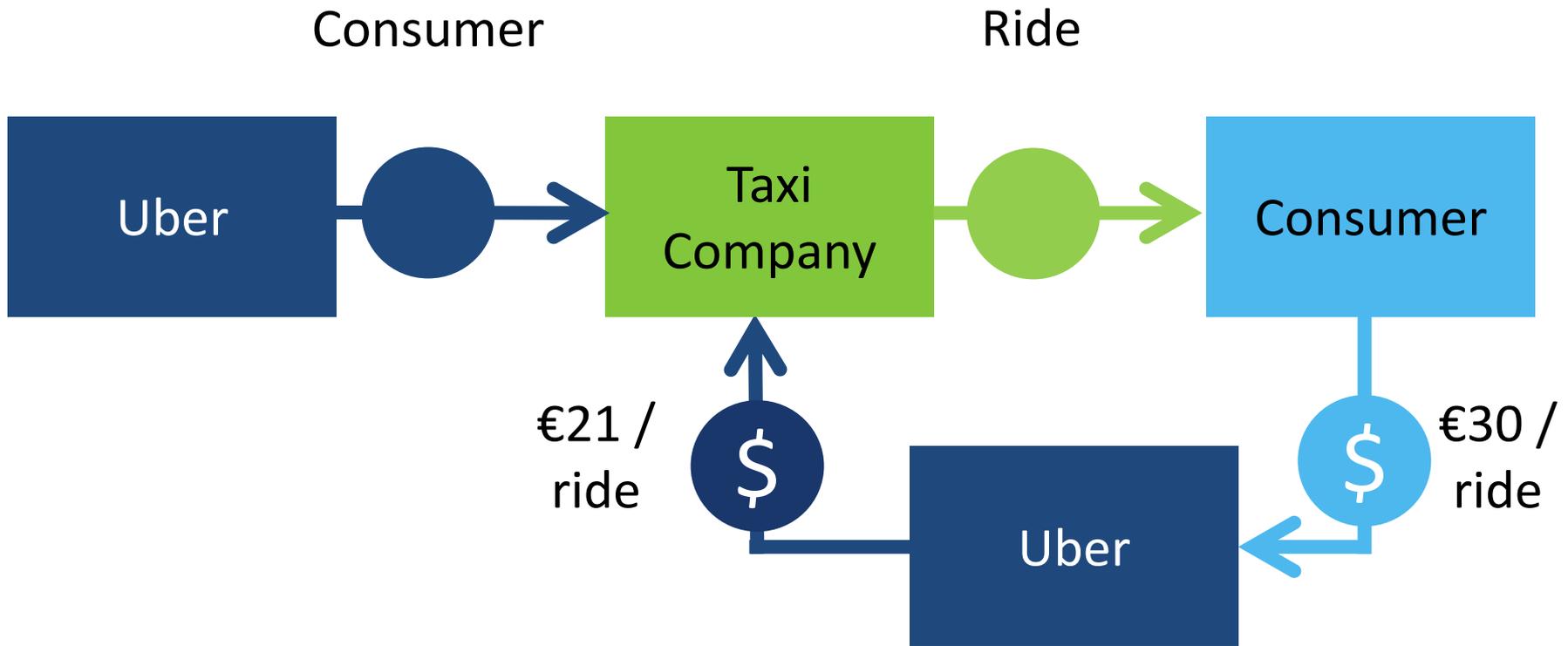
```
                    Cleaning service
┌──────────────┐   ────────────────▶   ┌──────────────┐
│              │                        │  Boat owners │
│              │                        │      ?       │
│   BoatStar   │                        │   Rental     │
│              │   ◀────────────────    │ companies    │
│              │                        │      ?       │
└──────────────┘                        └──────────────┘
           ~ 40€/boat/Twice
               a month
```

B2C / Hook and Bait

Coffee machines
and capsules

Nespresso	→	- Office workers - Upper middle class

50 c€ / capsule
200€ / machine
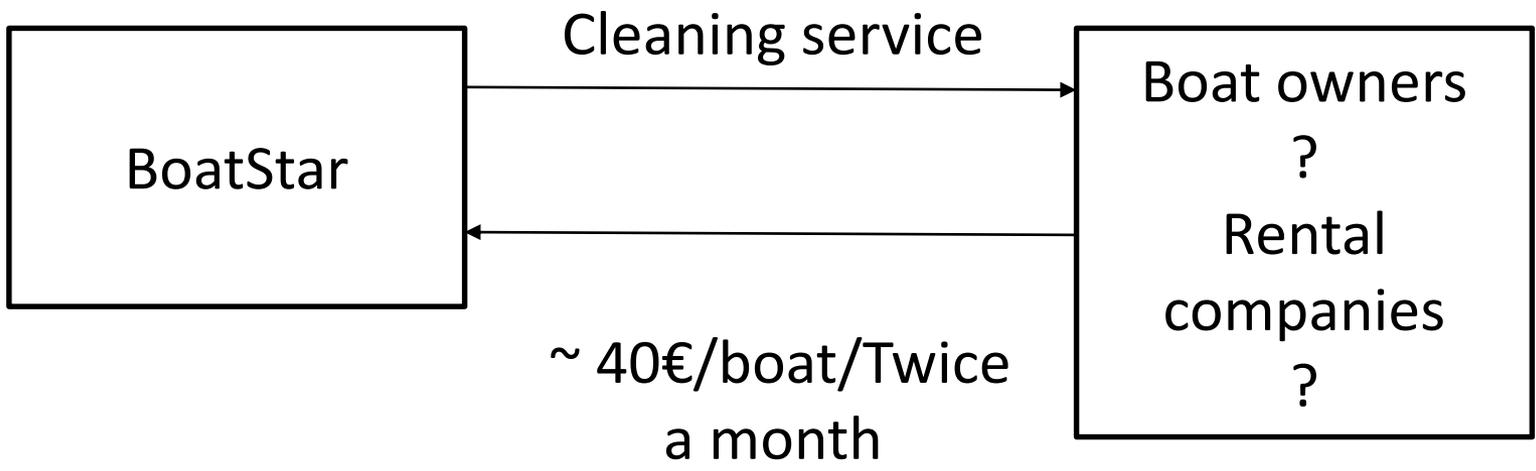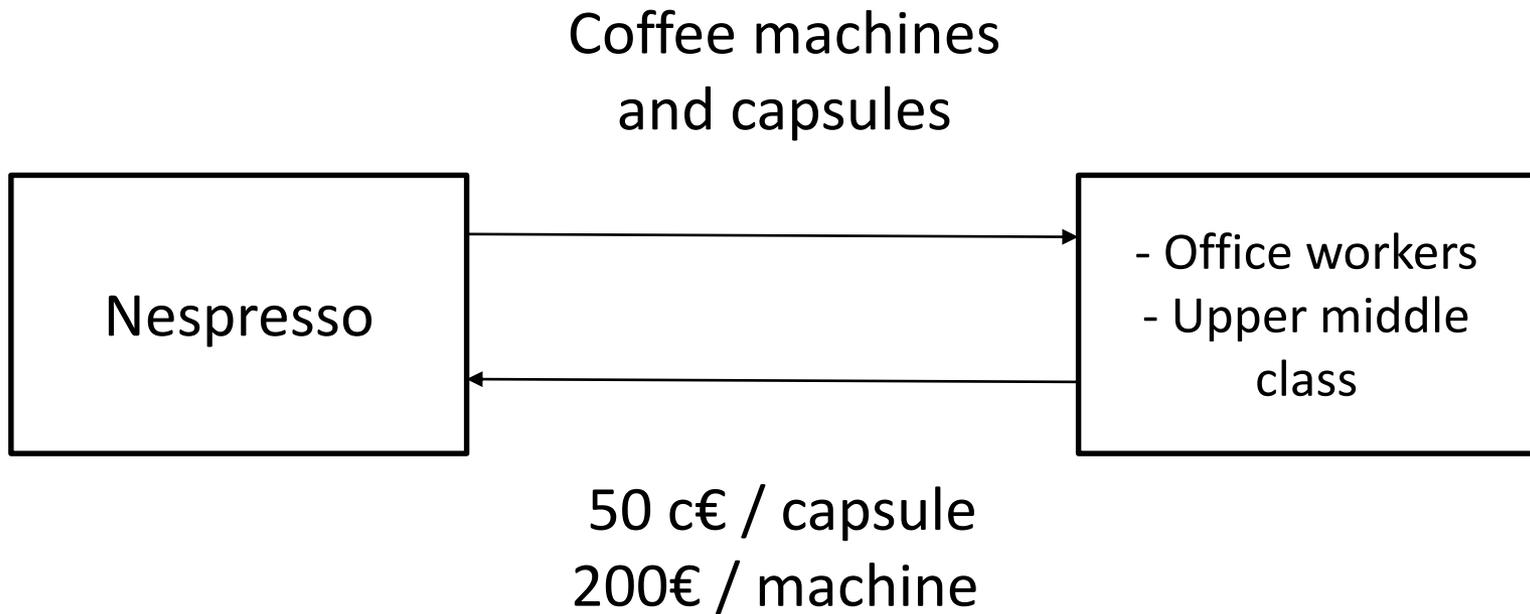
Exercise (20 min)

Draw your Deal

- What do you sell,

- To whom,

- At what price

The Deal
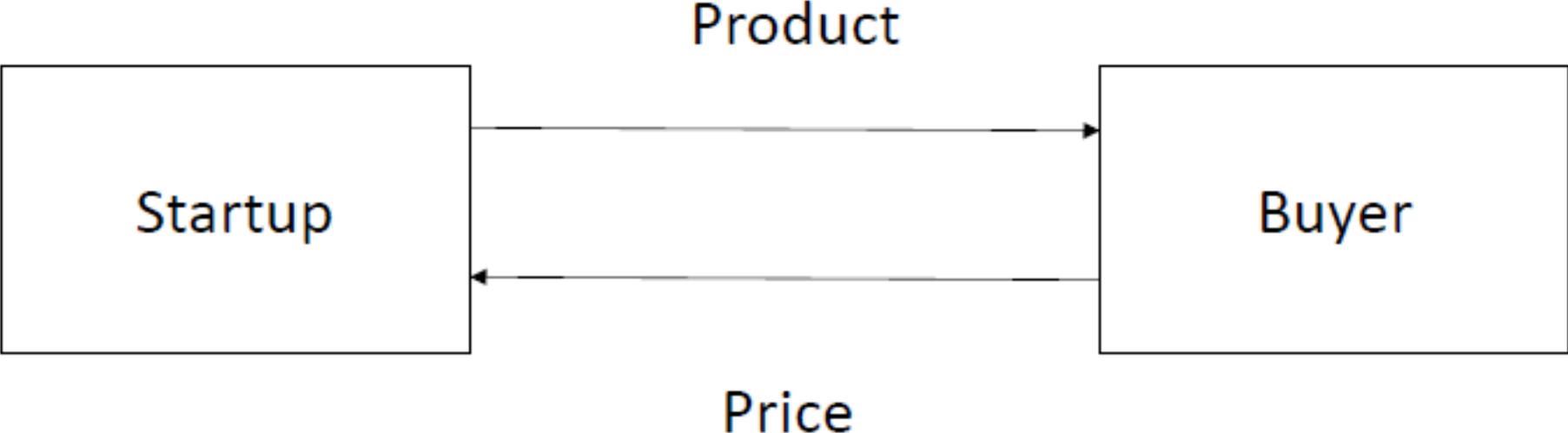
BUSINESS MODELS

Bait & Hook

Bait & Hook

Bait & Hook Farmville

Example two-sided market

Computing Capacity

Heater

| Business | → ← | Nerdalize | → ← | Consumer |

1/Computation

600/Heater
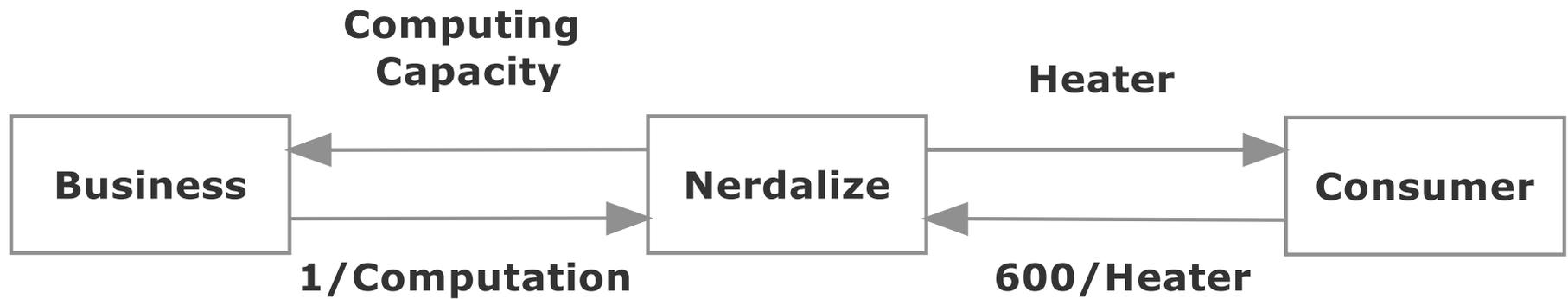
Multi-sided platform: Girls **don't** pay

Free newspapers

Freemium

Cuenta gratuita

Disponible desde 2 GB
Hasta 18 GB (500 MB por
recomendación)

Dropbox Pro

Planes de 100, 200 o 500 GB
A partir de US$9,99/mes

Dropbox para empresas

Planes disponibles desde 1 TB
para 5 usuarios
Facturación centralizada y

Long tail: AMAZON

Recommendation Algorithm

Customers Who Bought This Item Also Bought

Reckoning with Risk: Learning to Live with Unce... by Gerd Gigerenzer
★★★★☆ (8) £6.49

Gut Feelings: The Intelligence of the Unconscious by Gerd Gigerenzer
£10.27

Bounded Rationality: The Adaptive Toolbox (Dahl... by G Gigerenzer
£20.95

What Do Customers Ultimately Buy After Viewing This Item?

68% buy
Simple Heuristics That Make Us Smart (Evolution & Cognition)
£18.99

17% buy
Gut Feelings: Short Cuts to Better Decision Making
£6.74

9% buy
Influence: The Psychology of Persuasion ★★★★☆ (12)
£7.09

EL MODELO DE
SUSCRIPCIÓN

1. Mejor capacidad negociación

2. X *veces* para relacionarte cliente

3. Implicaciones financieras NOF

4. Xselling y UPselling

5. Invertir más en adquisición

6. ¿Cuál es el ciclo de vida?
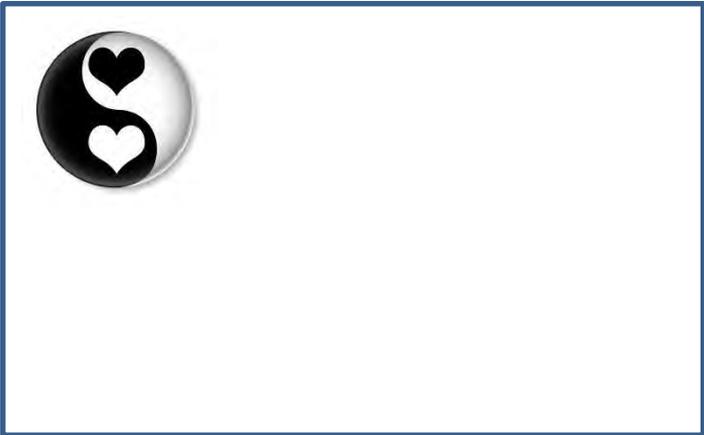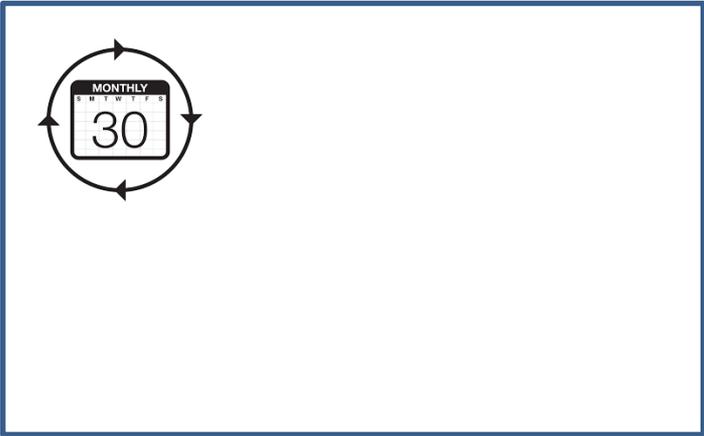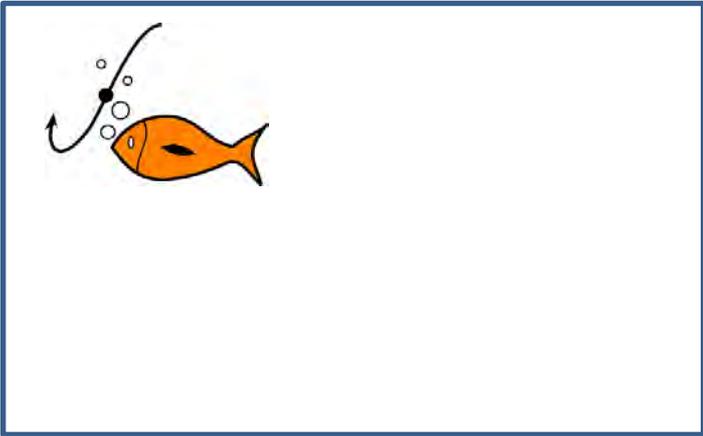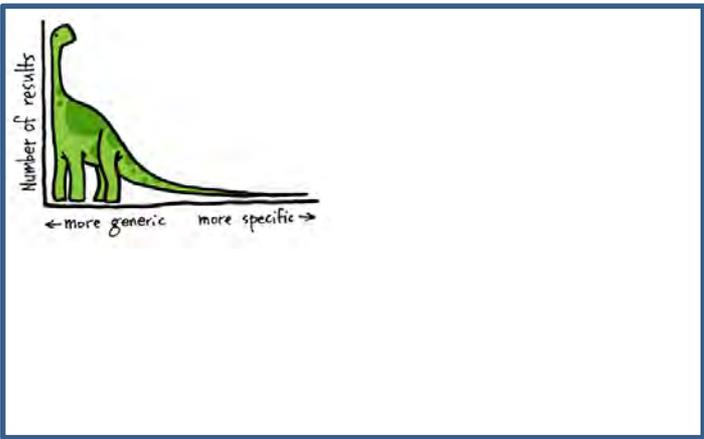
BUSINESS MODEL CANVAS

2

It's the business model, dude!

Hey Mike, your plan was to build a company, but did your plan include a Business Model?

THE VITAL PART OF A C...
CONSIDERATI...

11. **Definition.**—A c...
...hing which induces a p...
...tract. It is the substa...
...ducing the parties t...
...nt. A Sufficient...

"A business model describes the rationale of how an organization creates, delivers and captures value"

Alex Osterwalder

Creates Value

Delivers Value

Value Proposition

Captures Value

BUSINESS MODEL CANVAS
– Alexander Osterwalder
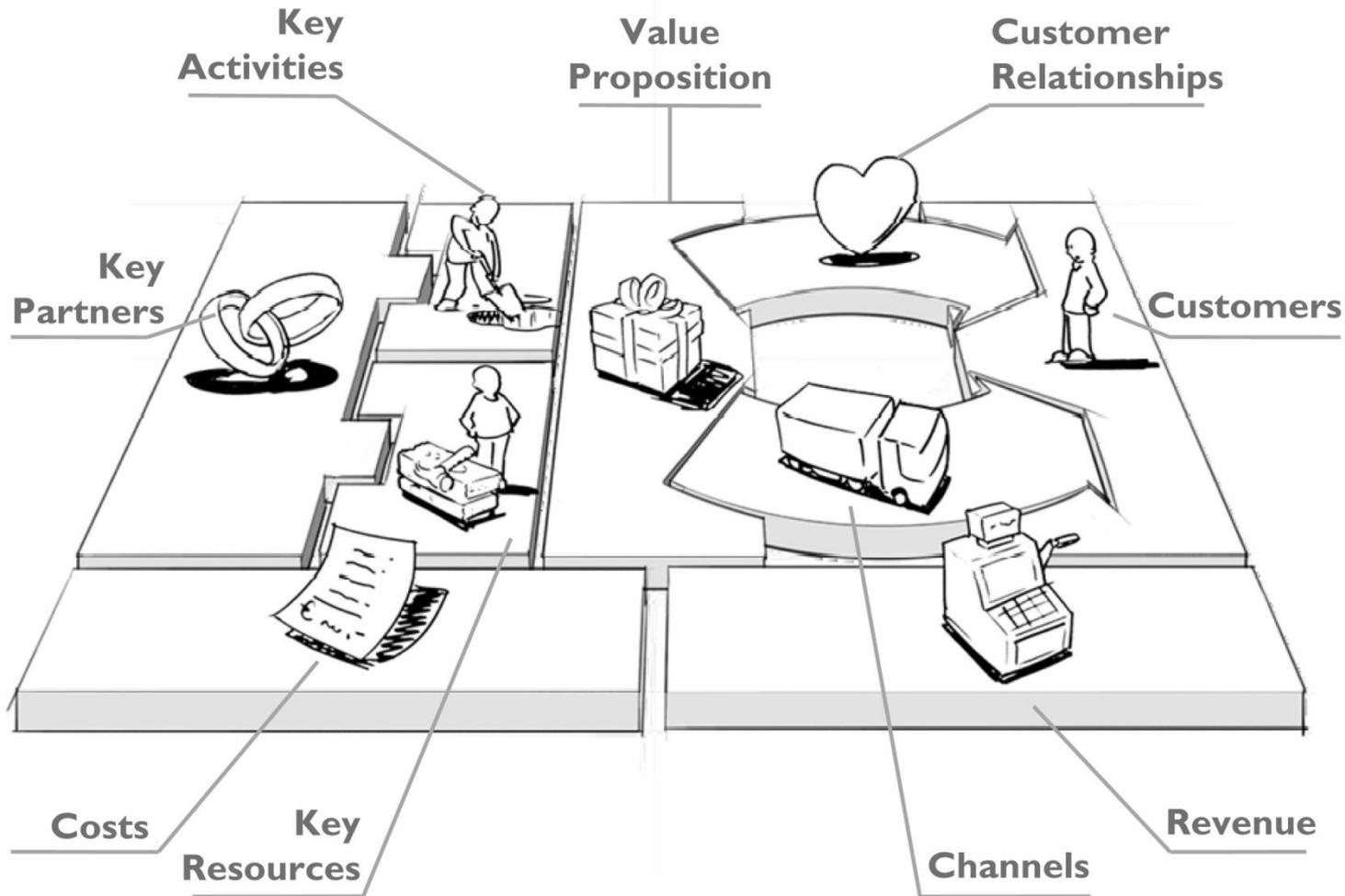
"Hmm, interesting so what do I make of that?"

CUSTOMER SEGMENTS
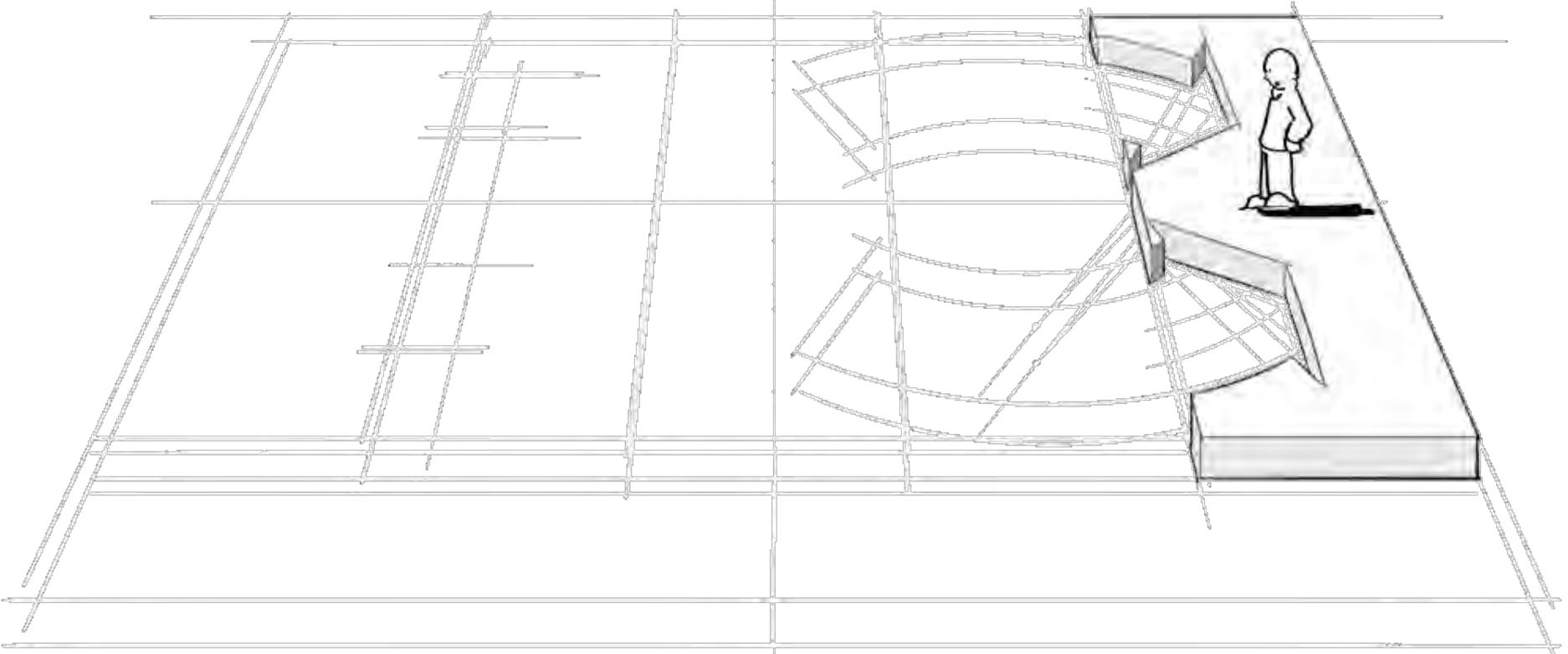
which customers and users are you serving?
which jobs do they really want to get done?

images by JAM

VALUE PROPOSITIONS
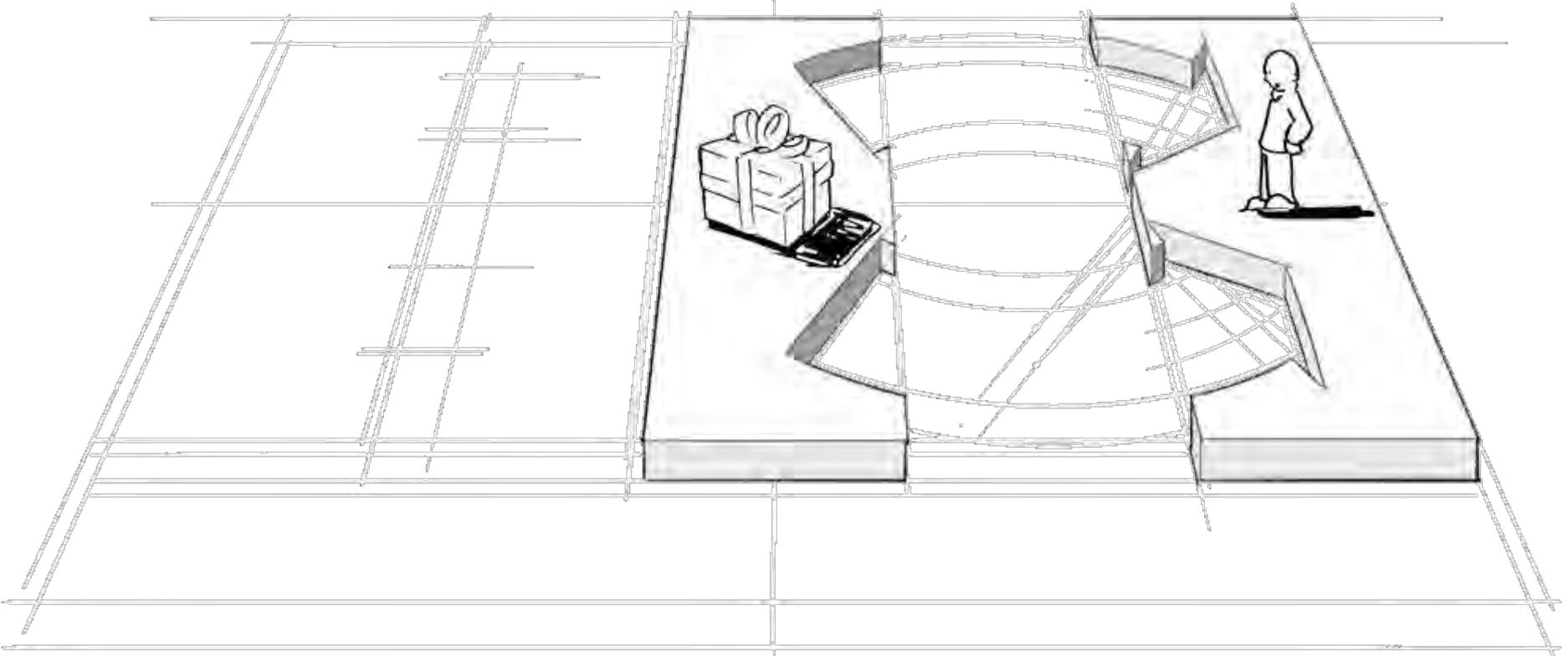
what are you offering them? what is that
getting done for them? do they care?

CHANNELS
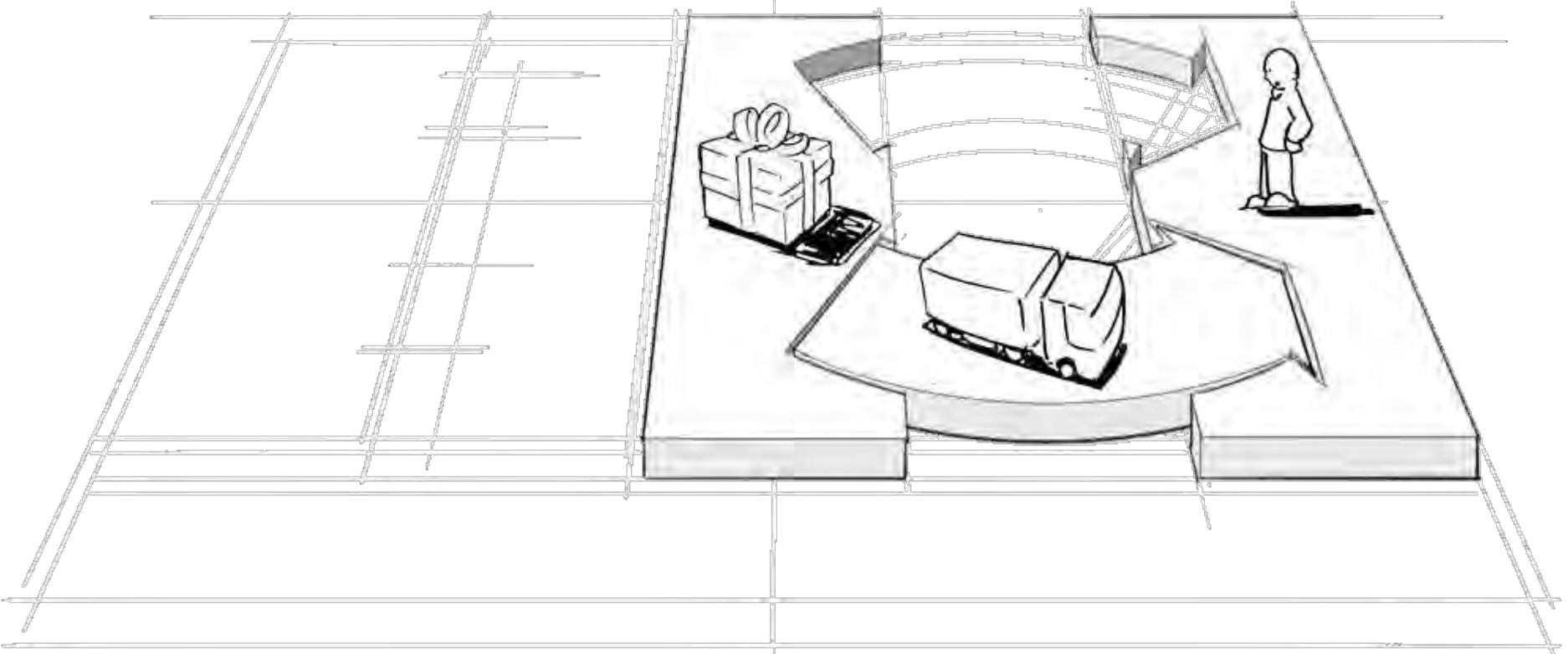
how does each customer segment want to be reached?
through which interaction points?

CUSTOMER RELATIONSHIPS
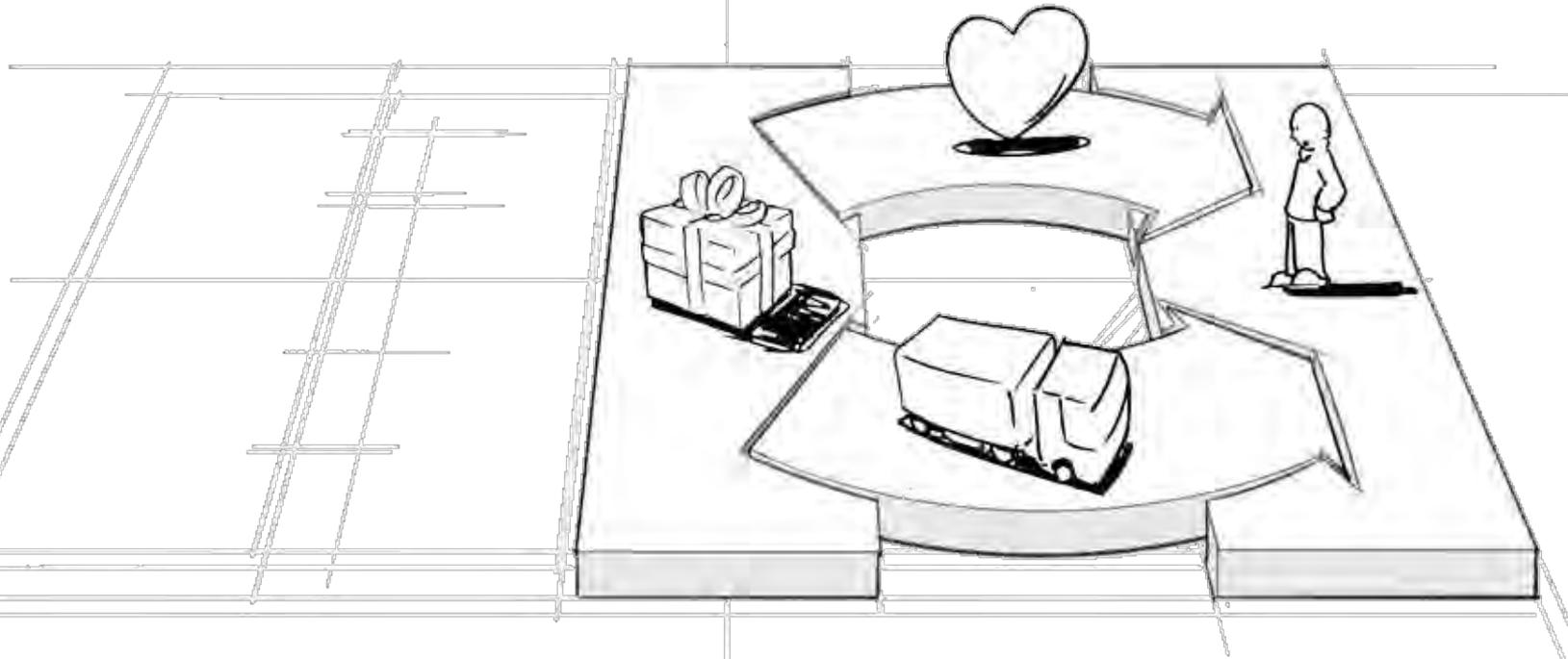
what relationships are you establishing with each segment?
personal? automated? acquisitive? retentive?

images by JAM

REVENUE STREAMS
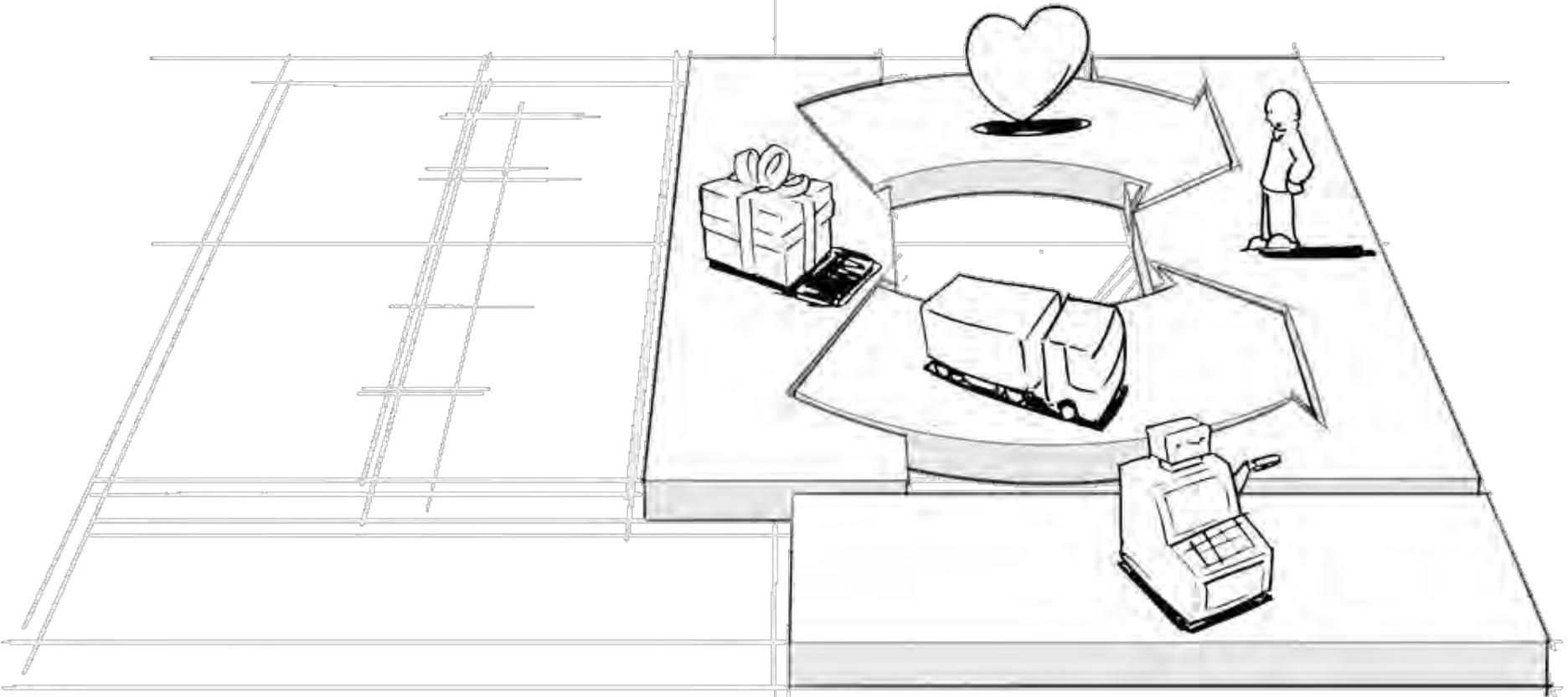
what are customers really willing to pay for? how?
are you generating transactional or recurring revenues?

KEY RESOURCES
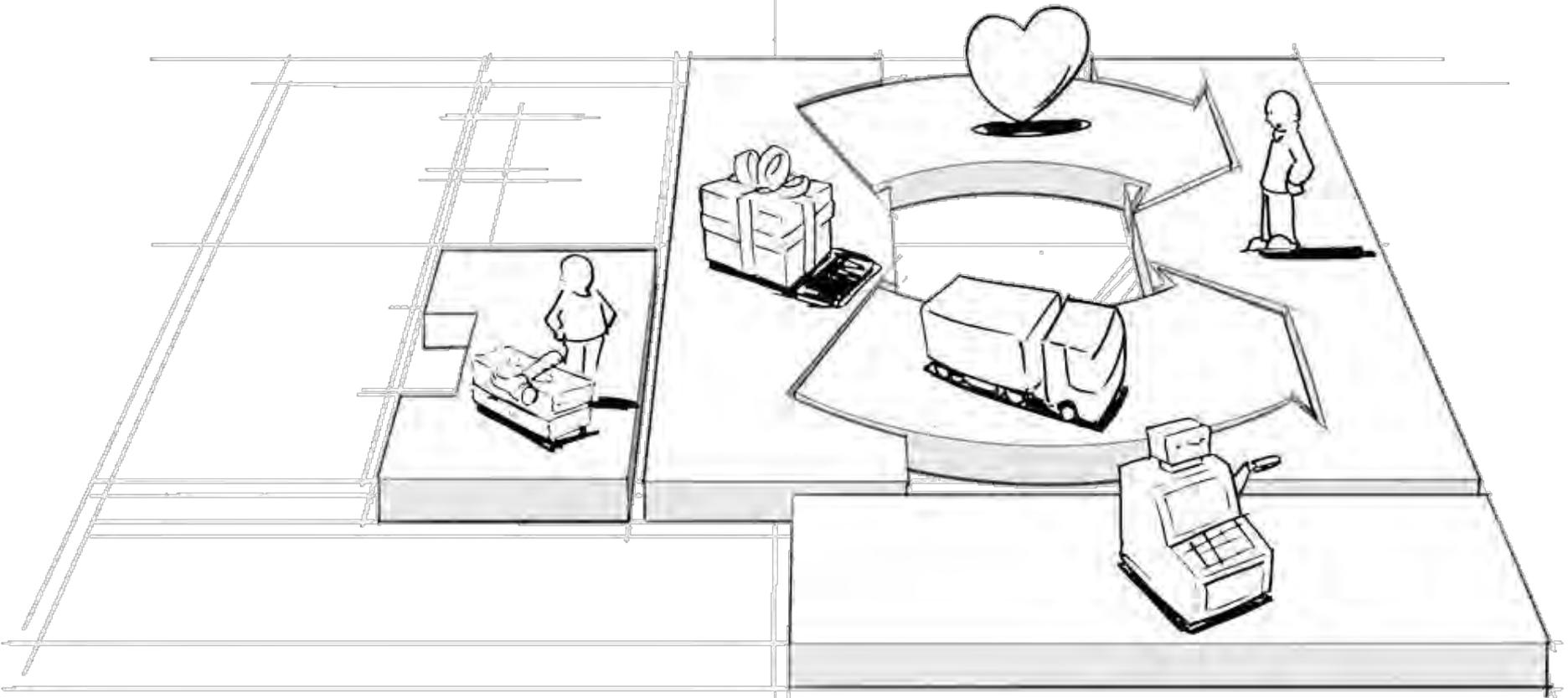
which resources underpin your b.model?
which assets are essential?

KEY ACTIVITIES
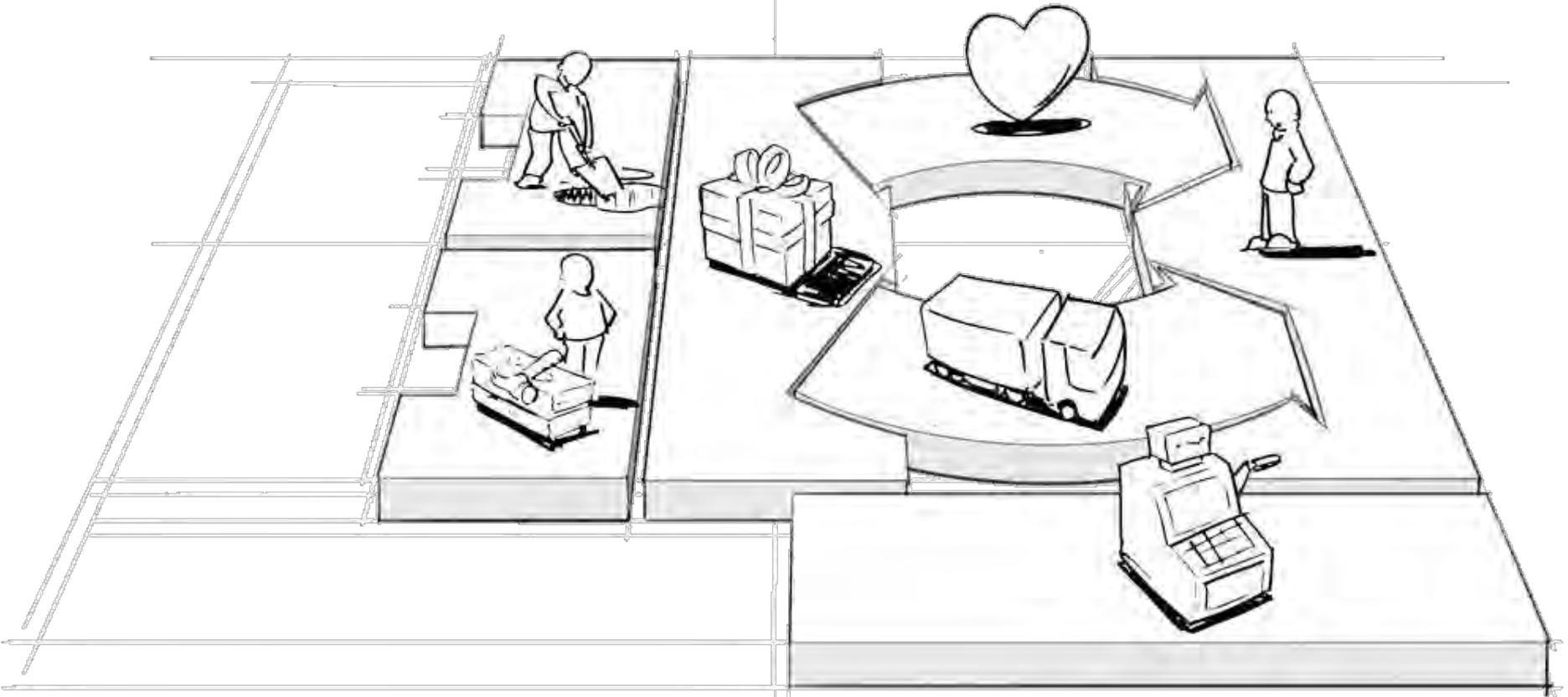
which activities do you need to perform well in
your b.model? what is crucial?

KEY PARTNERS
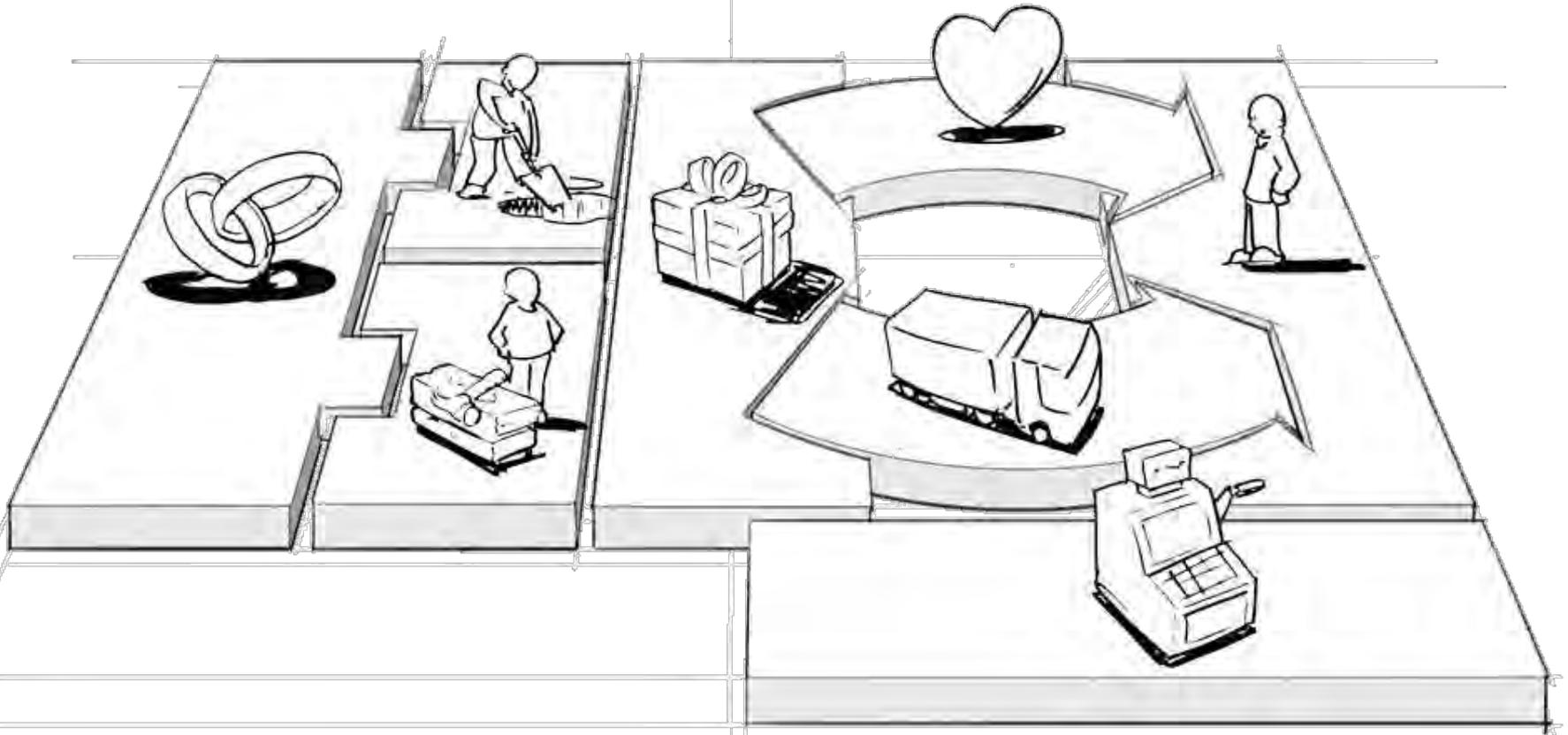
which partners and suppliers leverage your model?
who do you need to rely on?

COST STRUCTURE
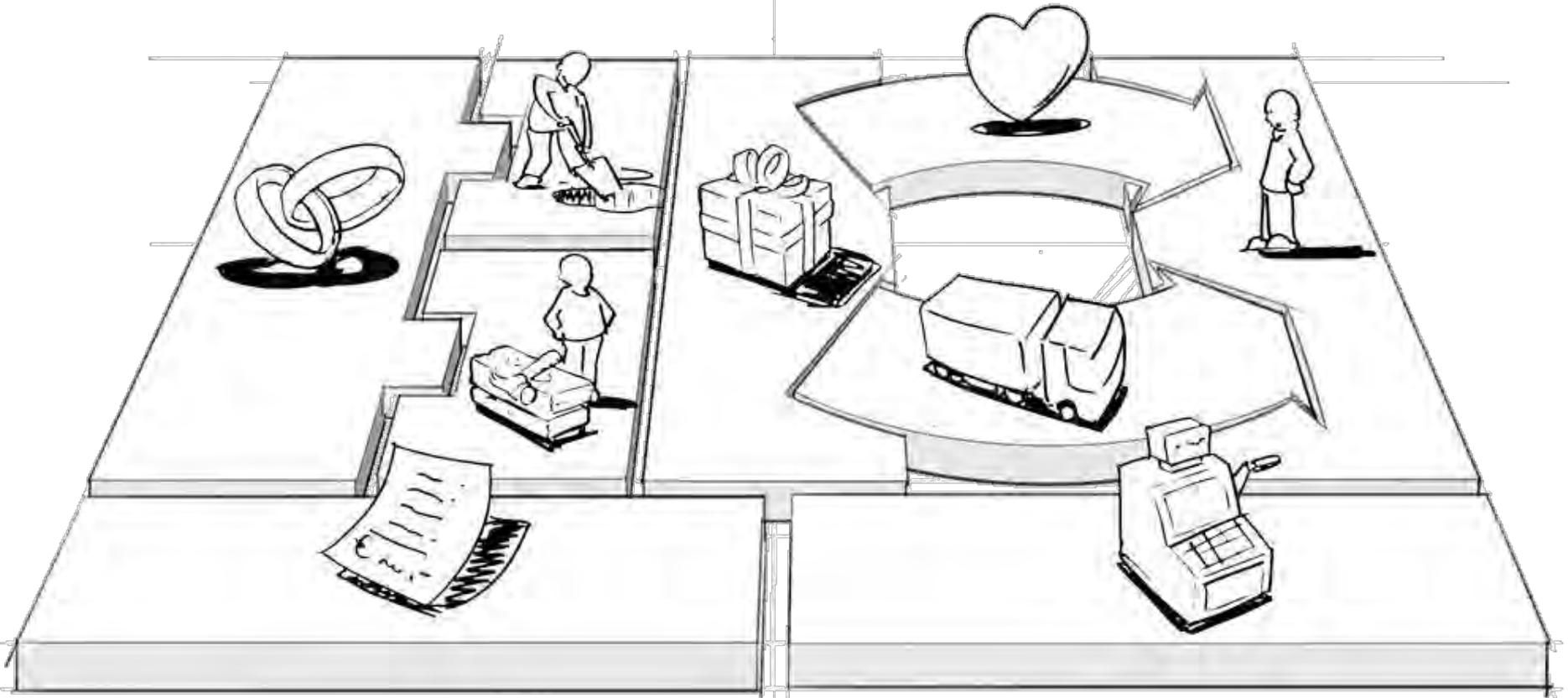
what is the resulting cost structure?
which key elements drive your costs?

Business Model: Santa Claus
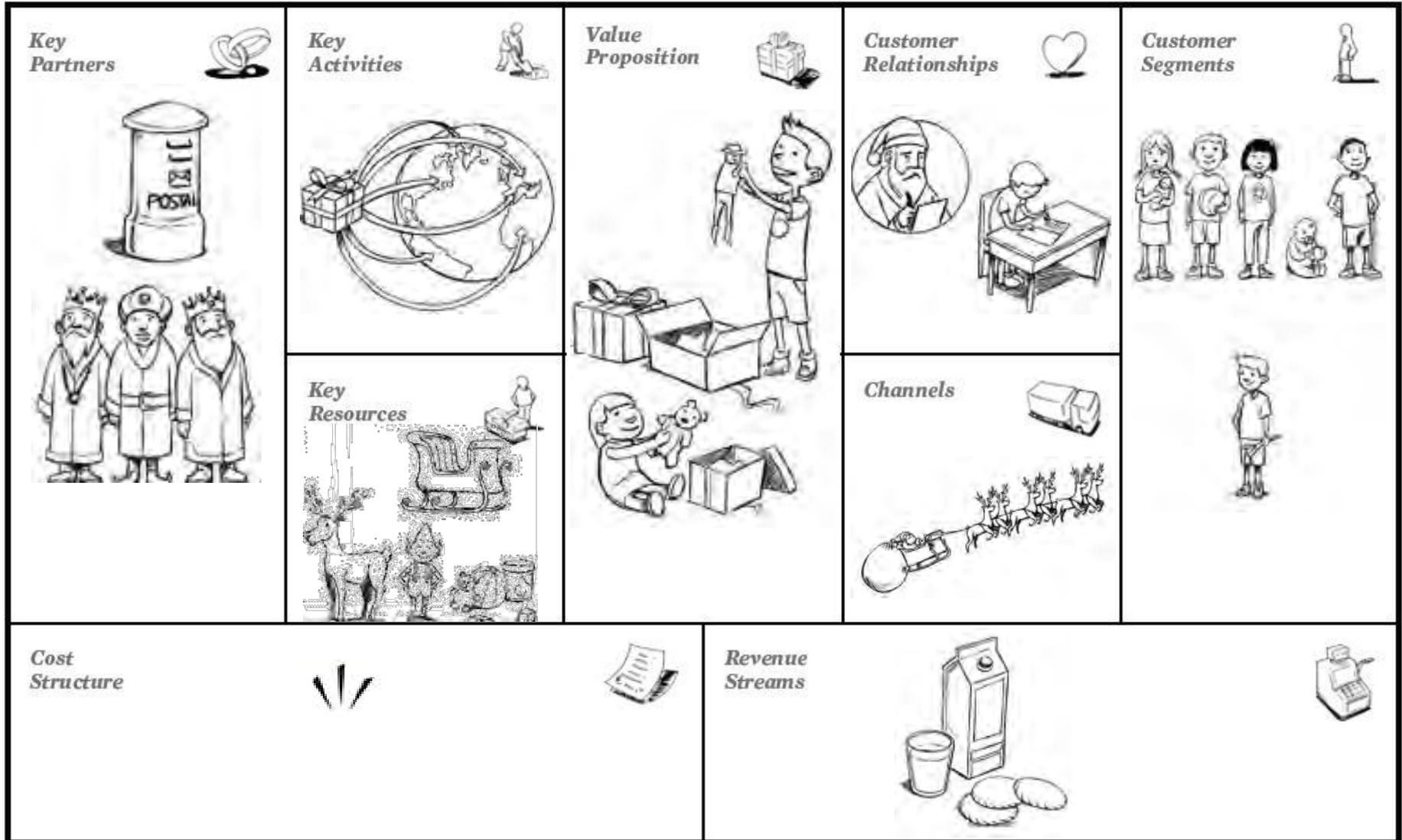
Business Model: Nesspreso

LEAN CANVAS – Ash Maurya

PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
2	**4**	**3**	**9**	**1**
+ alternatives	**KEY METRICS** **8**		**CHANNELS** **5**	+ early adopters
COST STRUCTURE **7**		**REVENUE STREAMS** **6**		
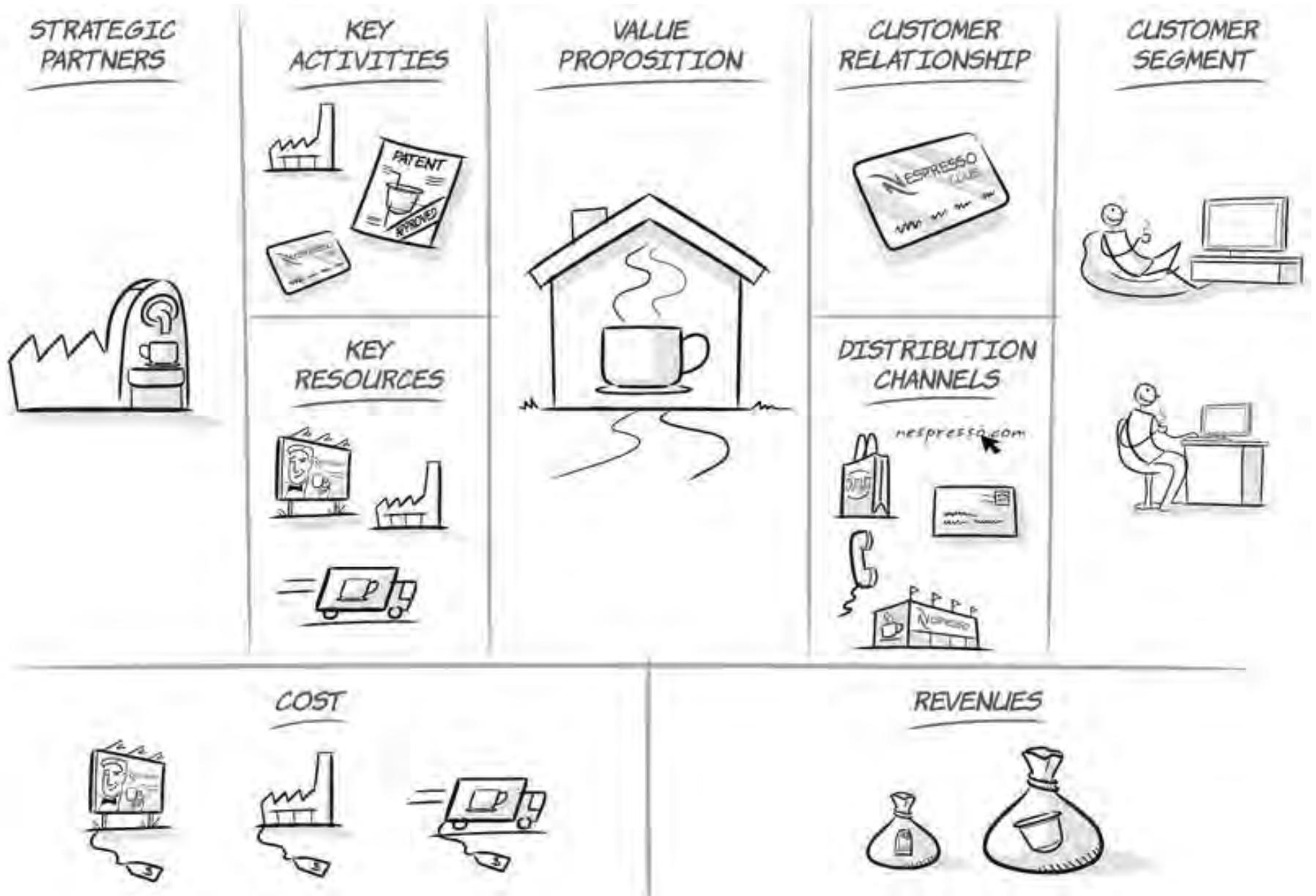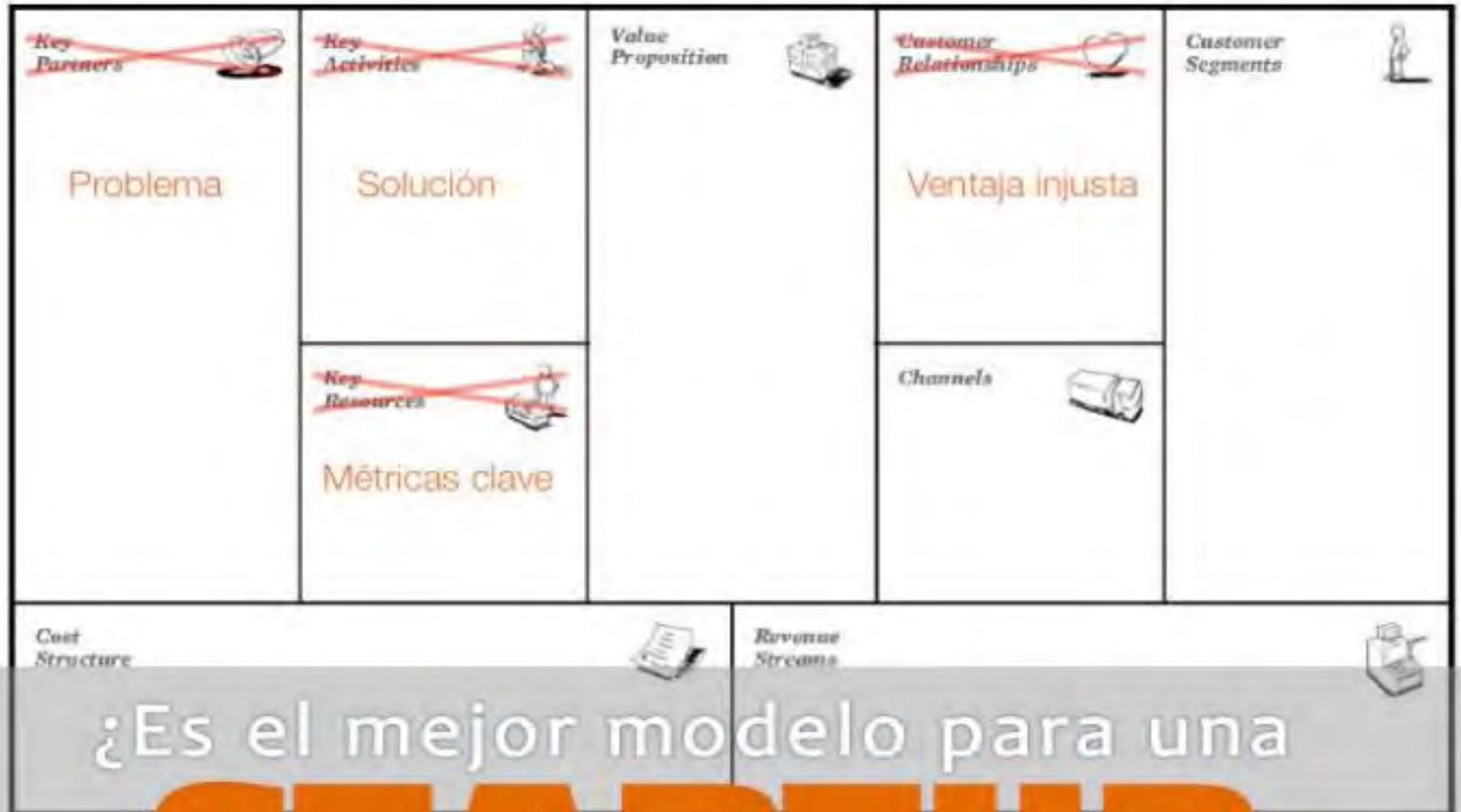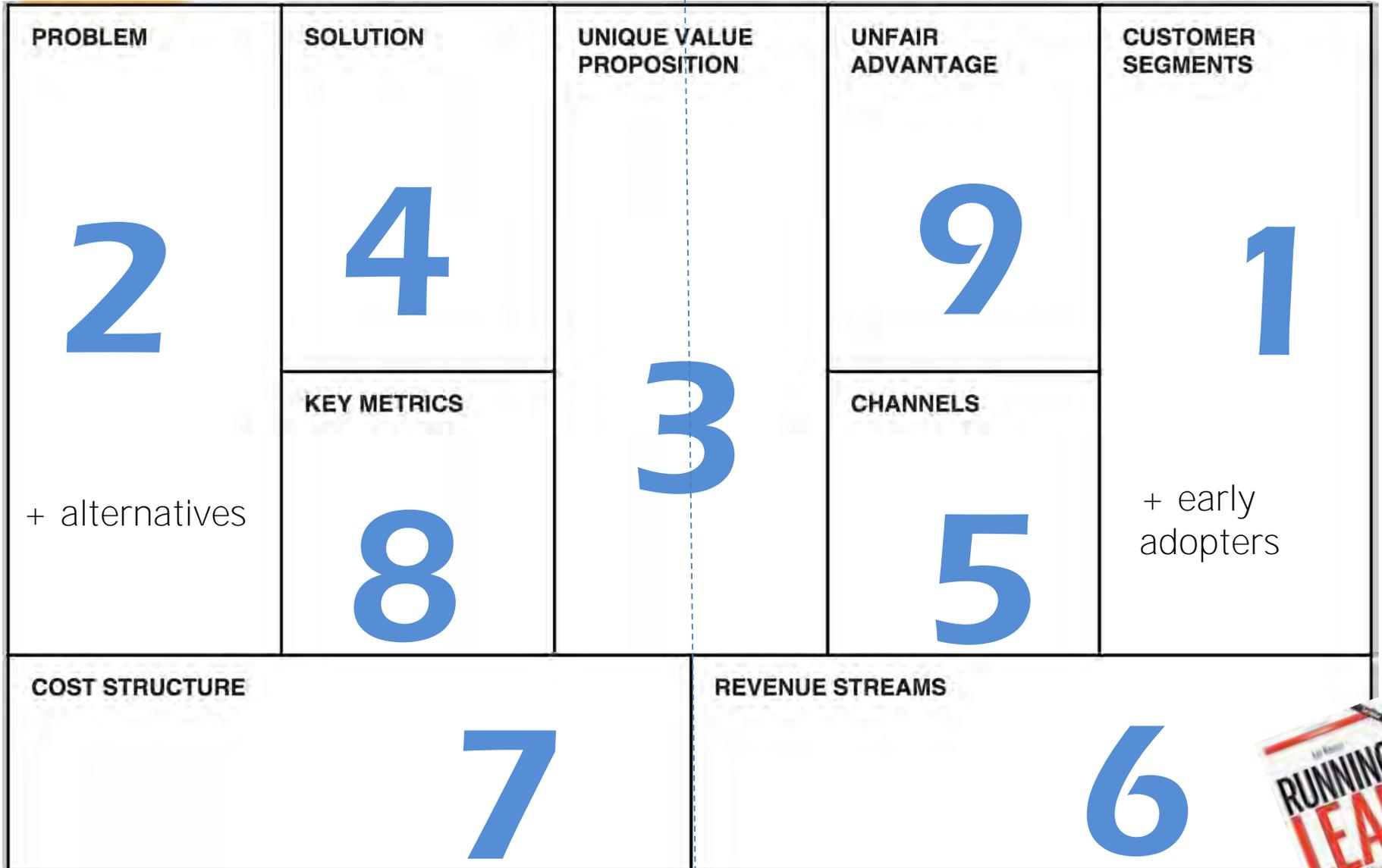
PRODUCT

MARKET

use it as a
tool to...

The Business Model Canvas

sketch out your business model

www.businessmodelgeneration.com

The Business Model Canvas

Key Partners

Key Activities

Value Propositions

Customer Relationships

Customer Segments

Key Resources

building
block

Channels

Cost Structure

Revenue Streams

The Business Model Canvas

Designed for: Designed by:

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments

building block (note on Key Activities)

building block (note on Value Propositions)

building block (note on Customer Segments)

Key Resources

Channels

building block (note on Key Resources)

Cost Structure	Revenue Streams

The Business Model Canvas

Designed for: Designed by:

Key Partners

building block

building block

Key Activities

building block

building block

Key Resources

building block

Value Propositions

building block

Customer Relationships

building block

Channels

building block

building block

Customer Segments

building block

Cost Structure

building block

building block

Revenue Streams

building block

Business Model: Santa Claus

Business Model: Nesspreso

3

Take time to think through alternative possibilities.

the same technology, product, or service can have <u>numerous business models</u>
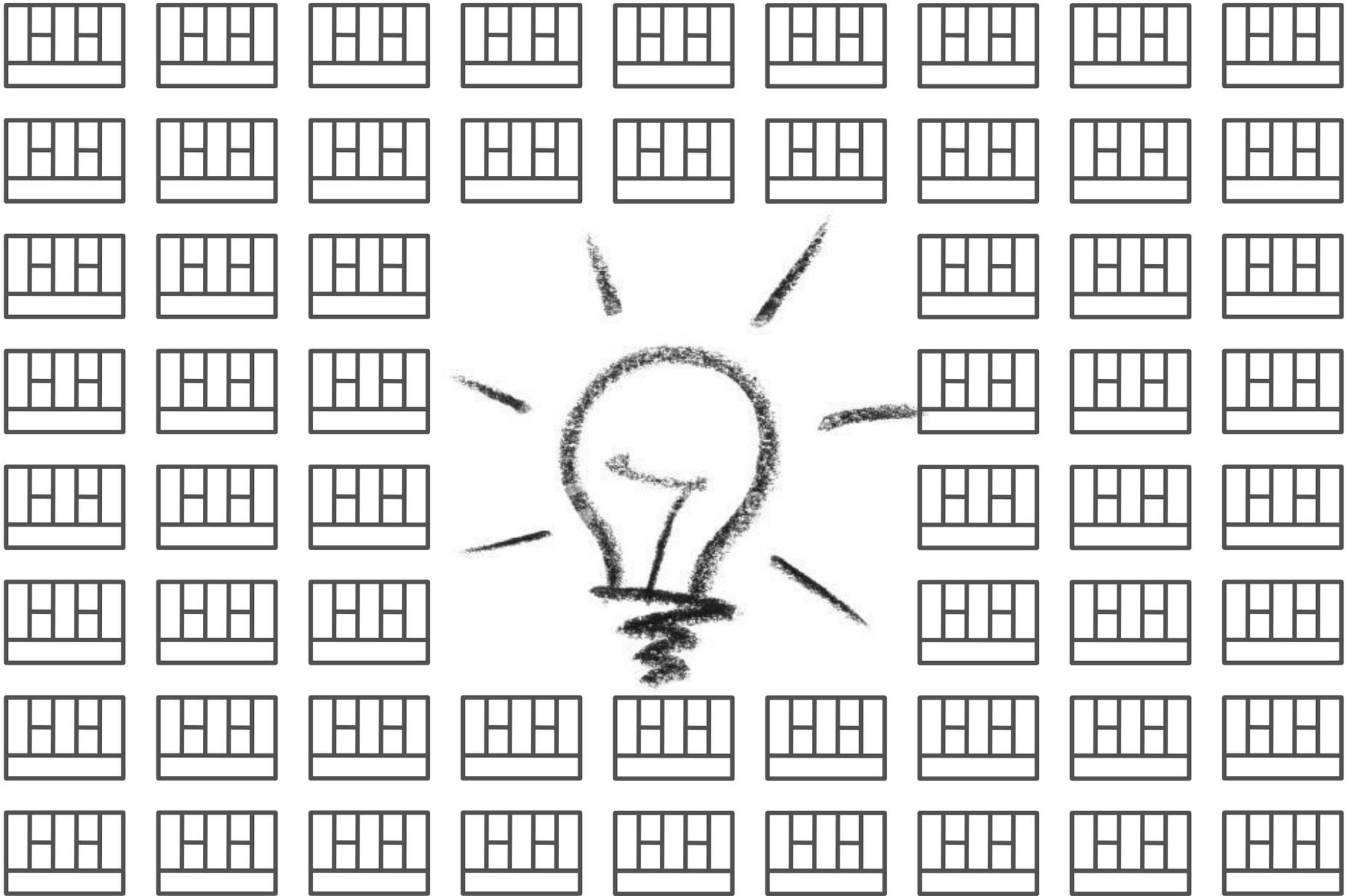
try sketching out alternative business models by asking yourself...

transactional vs. recurring revenues

niche market vs. mass market

capital expenditure vs. partnership

scale vs. scope

product vs. service

blue ocean vs. red ocean

direct sales vs. indirect sales

personal vs. automated

open vs. closed
human intensive vs.

disruptive vs. incremental

difficult questions

one customer segment vs. another

physical vs. virtual

production

copyright vs. copyleft

fixed vs. variable costs

paid vs. free

distributed vs. centralized

in-sourcing vs. out-sourcing

advertising vs. sales

only make a first choice after prototyping and thinking through several models...
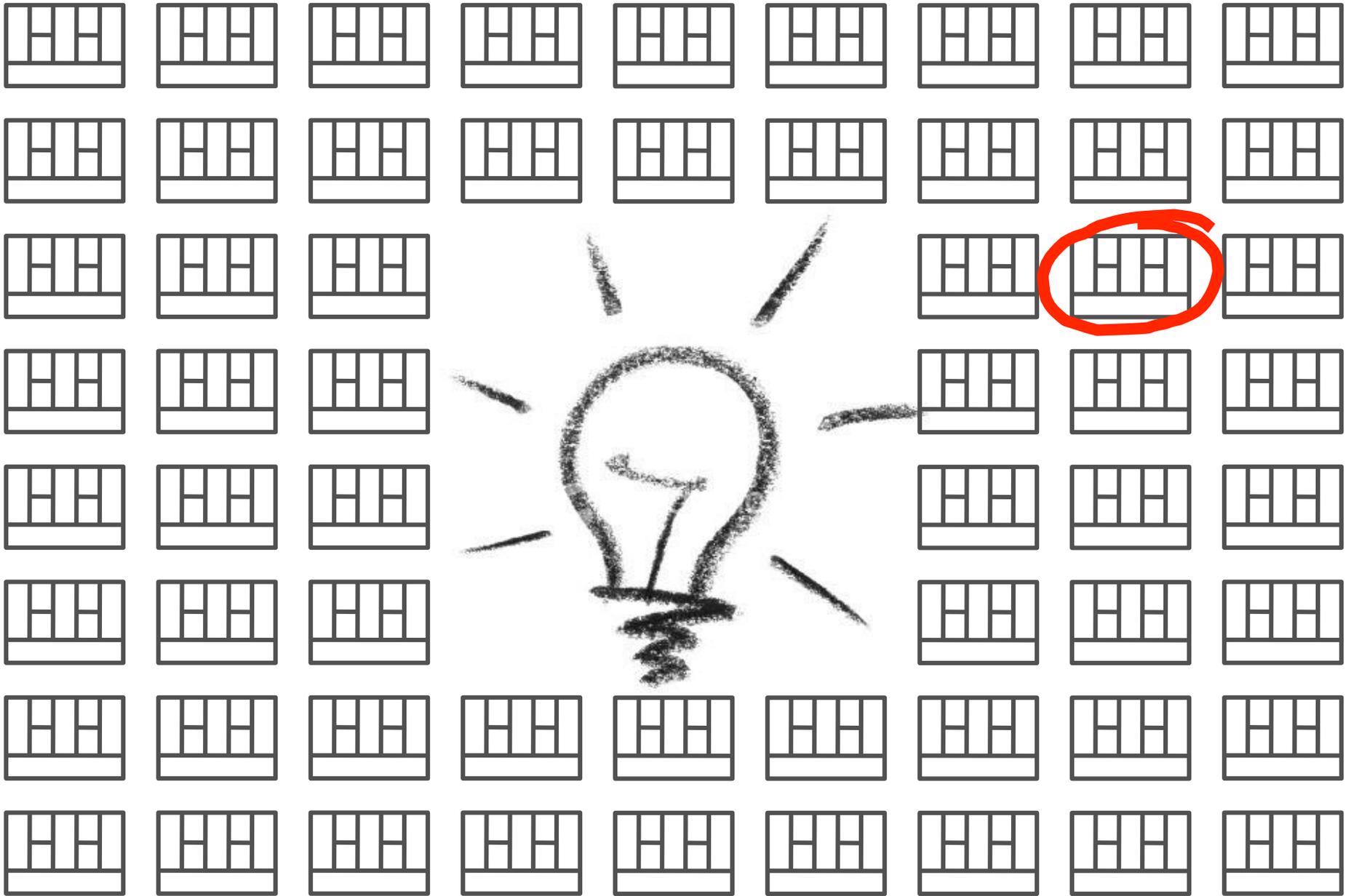
4

Your business model idea is just a set of hypotheses.

a business model might look great on paper…

…but be honest that it's
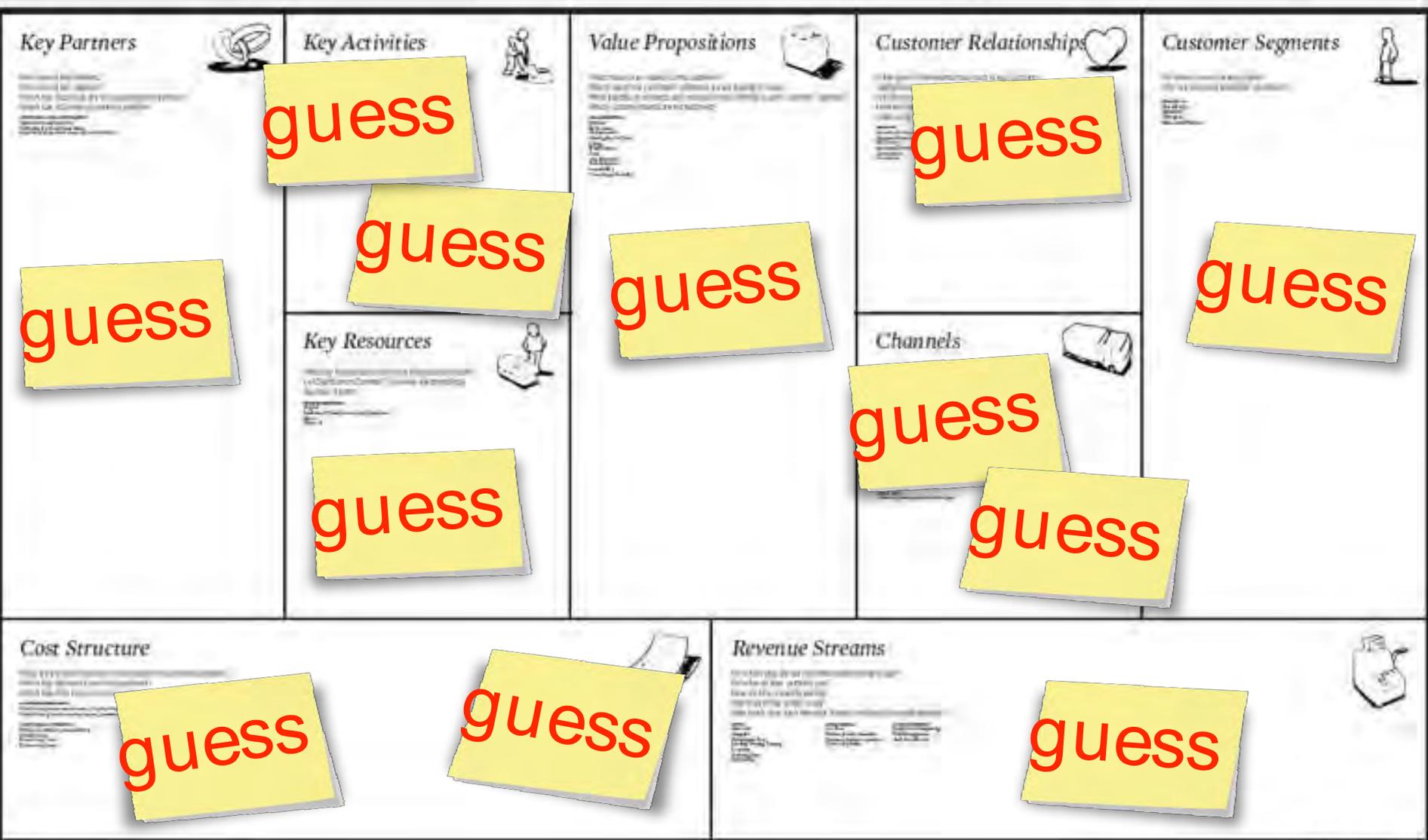
...so you need to get out of the building and...
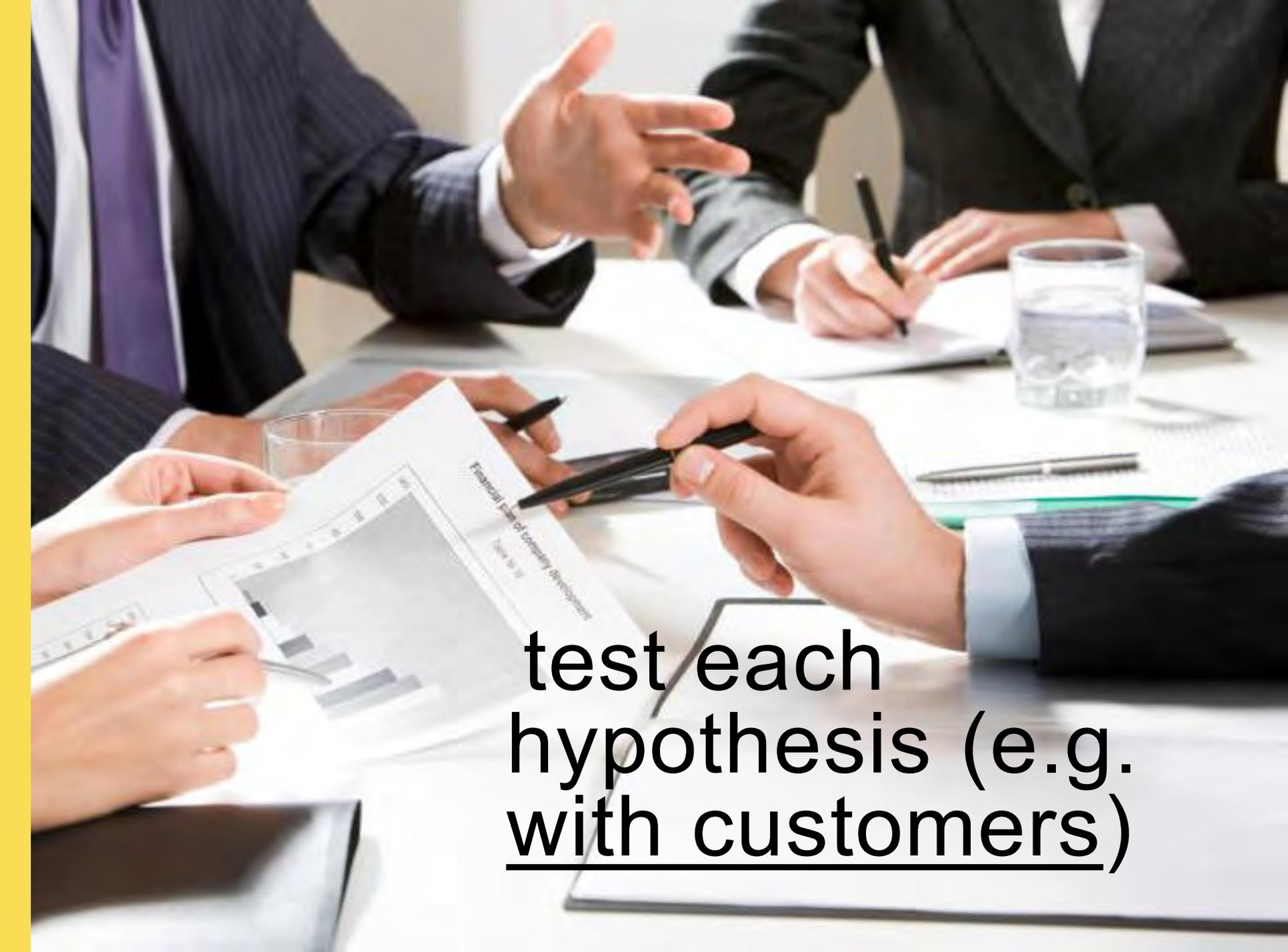
test each hypothesis (e.g. with customers)

this business model testing process is called Customer Development
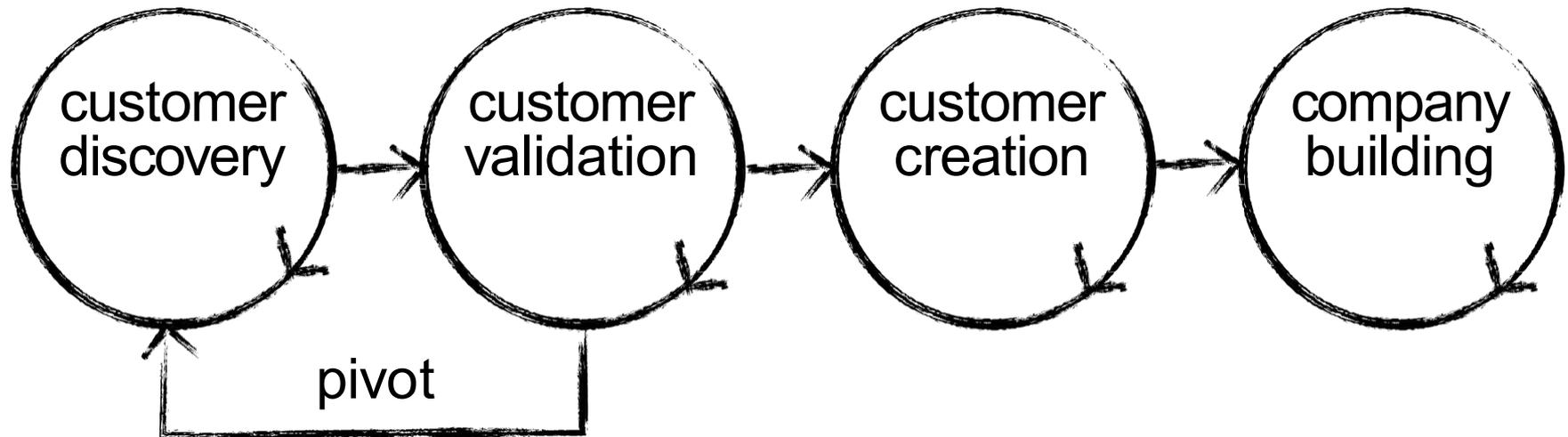
two different phases...

search

customer discovery → customer validation → customer creation → company building

pivot
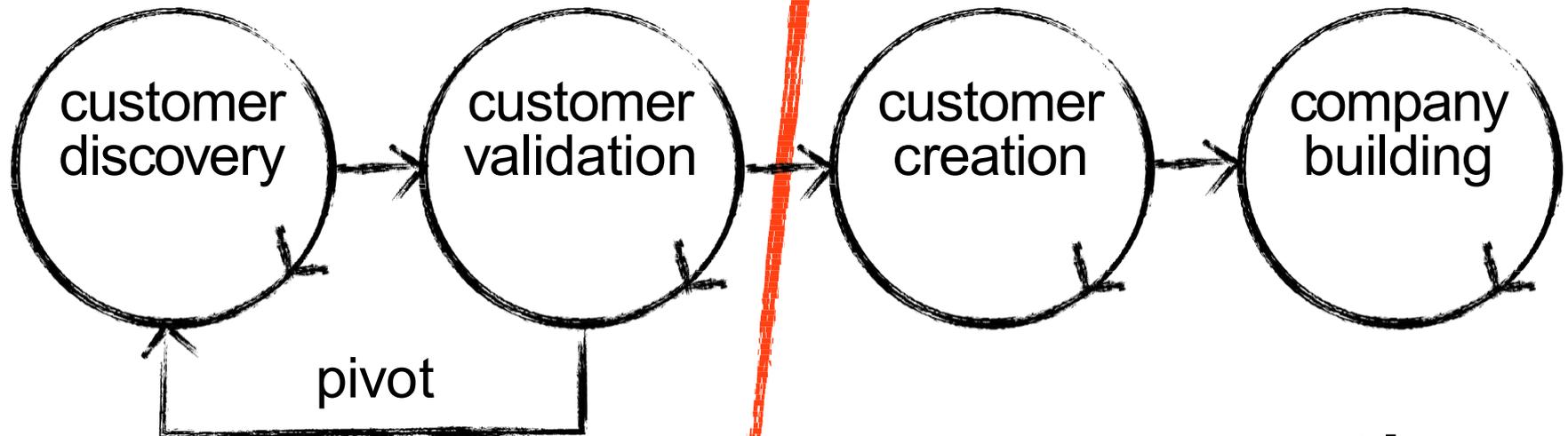
execution

... verifying every hypothesis

customer discovery → customer validation → customer creation → company building

pivot

test your hypotheses

Key Partners

Key Activities

Value Propositions

Customer Relationships

Customer Segments

Key Resources

Channels

product

market type

competition

Cost Structure

Revenue Streams

test your hypotheses

Key Partners

Key Activities

Value Propositions

Customer Relationships

Customer Segments

problem

customer

user

payer

Key Resources

Channels

Cost Structure

Revenue Streams

test your hypotheses

Key Partners

Key Activities

Value Propositions

Customer Relationships

Customer Segments

Key Resources

Channels

channel

Cost Structure

Revenue Streams

test your hypotheses

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
channel (customer) (problem)	Key Resources	product market type competition	demand creation	problem customer user payer
			Channels channel	

Cost Structure	Revenue Streams
validate business model	pricing model

to accomplish this you will need a special and agile customer development team.

A team that …

... gets out of the building!

you need to adapt the business model until you can prove it works

5
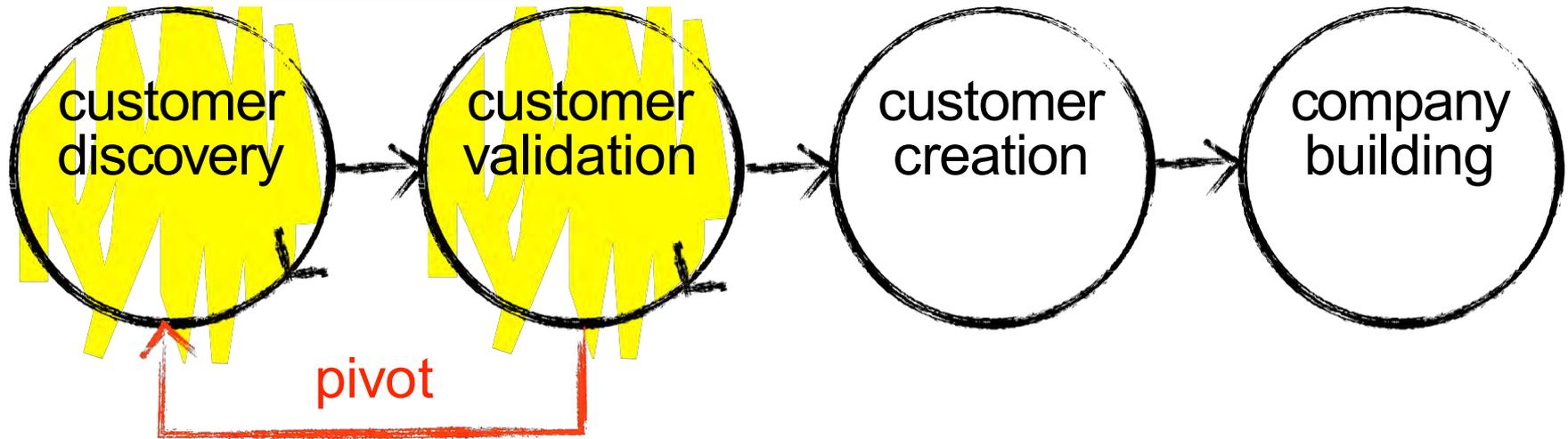
Don't build your company, until you've verified your Business Model

or you'll risk …

Burning your cash while searching for a working business model

execution is ~~not~~ search

execution *follows* search

Build when you've found your model

only then execute:

scale your marketing

customer discovery → customer validation / customer creation → company building

pivot

execution
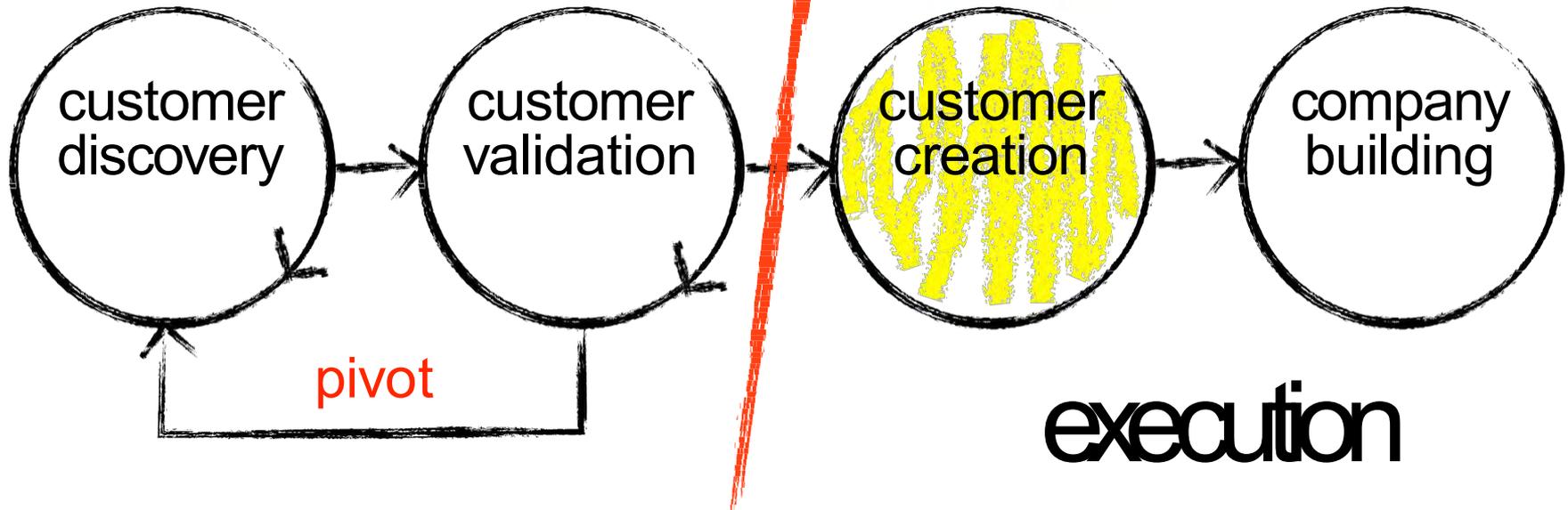
and build your org

structures

customer
discovery

customer
validation

customer
creation

company
building

pivot

execution
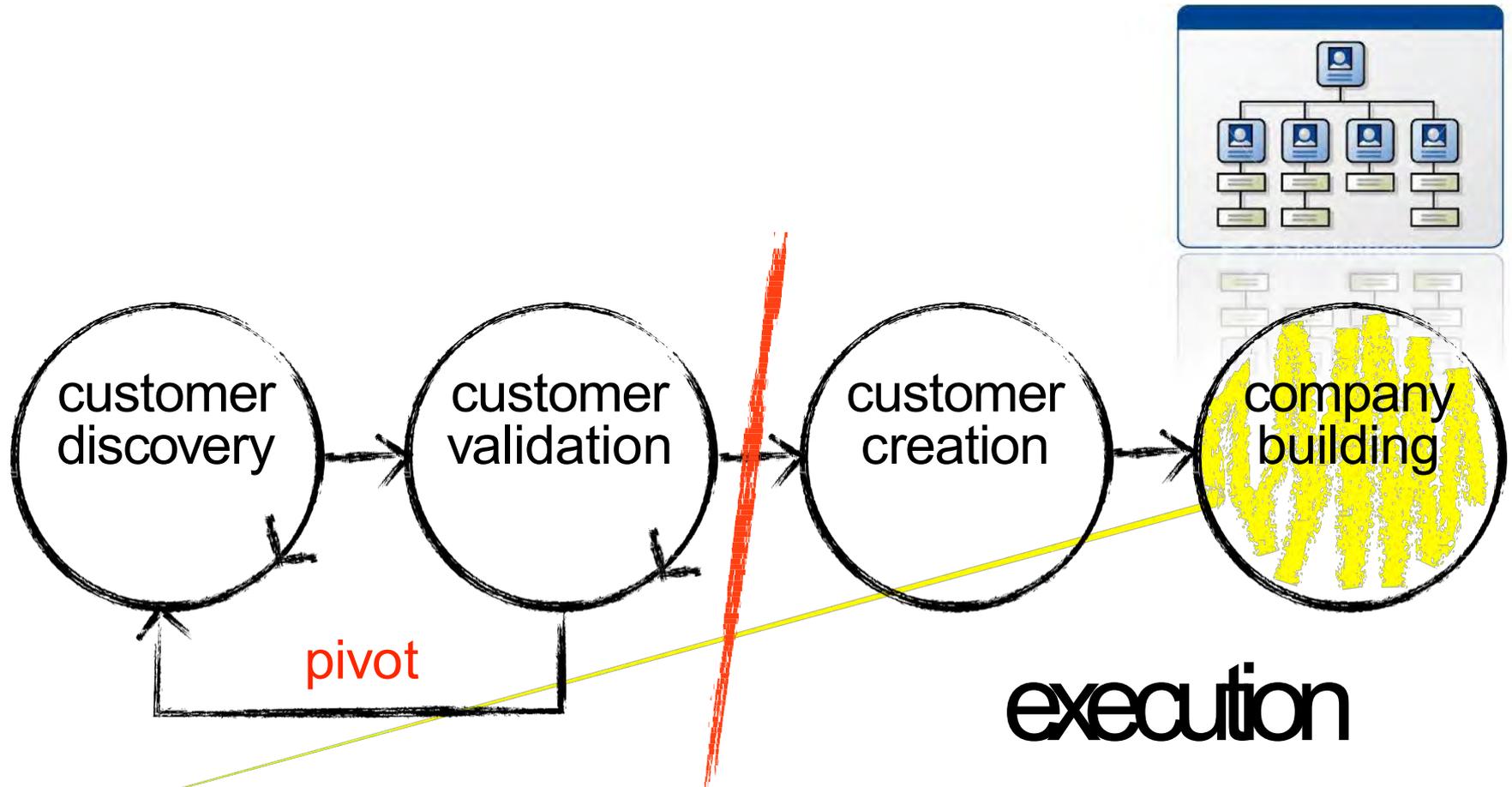
1 *No business plan survives the first customer contact.*

2 *It's the business model, stupid.*

3 *Take time to think through alternative possibilities*

4 *Your business model idea is just a set of hypotheses.*

5 *Don't build your company, until you've verified your Business Model*

IDEAS

LEARN

BUILD

Minimize the
total time through
the loop

DATA

CODE

MEASURE

"LEAN"

THE LEAN STARTUP

How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses

ERIC RIES
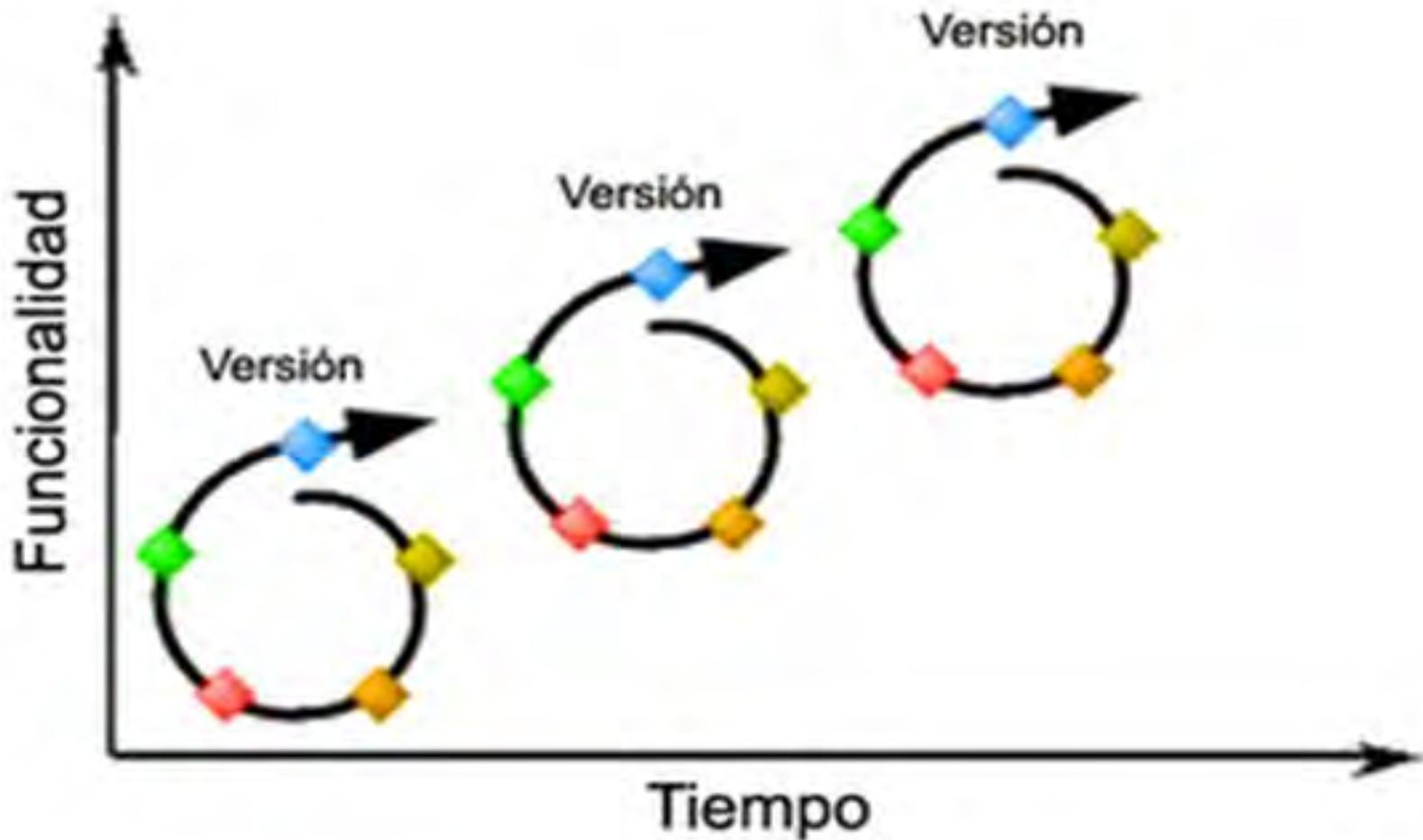
CUSTOMER SEGMENTS

Lamborghini dealership

We have invested **5M€,** including coffe **machine 700€**
We have hired 2 people
According to the research, best area in town
TAM=2500
First week, nobody came.
An old friend appears in her **Volvo...**
Do we fix it?

Customer profile

Gender	Male, female
Age	17-40 y.o.
Region	Moscow (during initial growth stage)
Occupation	Student, young professional, internal migrant, middle management
Social level	Medium, high
Characteristics	Has a smartphone
User category	Early adapters, technologically advanced
Other	Active users of social networks, outgoing personalities

Ride Sharing

SÍ: Money, Feedback
NO: Image, Focus in mi Business M

VOLVO
Mujer, Educada, 30-40 años, Casada con hijos, ingresos 30-**50k€, lleva a** sus hijos al futbol sábado por la mañana y al Burger a comer.
Compra SEGURIDAD.

LTV: 10k€

LAMBORGHINI
Hombre, Cincuentón, Divorciado, Ingresos 1-**2M€, "George** Clooney**",** Compra IMAGEN y EXCLUSIVIDAD.

LTV: 500k€

Si voy a por los dos, modelo sirenita. No resuelvo el problema.

Persona Example: eGallary – Better?

"I am Vlad"

He likes to try out new things and talk about it

Male

33 years old

Lives on Kutuzovskiy Prospect in Moscow

Current salary is USD 10.000/ month

Little time

Recently moved into his new flat with his girlfriend

Loves Strelka and Ginza Projects

In winter he loves skiing in Austria or France

Works at VTB Investment Banking

Vlad needs some paintings for his new apartment.

E-Gallery
Timeless art. Less time, more art.

Loves esquire,Forbes, afisha, pop, GQ

In summer he travels around the whole world

ANSWER: BETTER BUT NOT GOOD ENOUGH

Persona Example - Best

- Chuck Kirby, Facilities Manager, IBM NE Data Center in Littleton, MA
- 20K Blade servers today growing at 15% per quarter for past two year and for the foreseeable future
- Second generation American
- Lives in Medford
- Medford High to Middlesex Community College
- Moved to Winchester
- Family with 2 kids (12, 15)
- Mid-career, many years at company, technical, maintenance focus, vocational degree
- Been in job for 5 years and seen three managers already
- Promotion path forward is to manage more facilities
- AFCOM, Uptime Institute, Green Grid, starting to read blogs (Hamilton & Manos)
- Ford 150 pickup truck, Beeper always on, volunteer fireman mentality
- Customers' Customer and Their Priorities (think mindset of a utility customer)
  - 1. Reliability, 2. Growth, 3. Costs, 4. "Greeness" – PUE

Market-Driven

China's sindromme

Target Customer-Driver
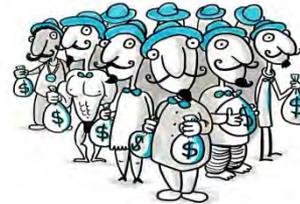
I focus in a business model.

Customer-Driven

I focus in a single customer (Mermaid's Sindromme)

Market-Driven

China's sindromme: "If only 0.1% of the total population is my customer, I'll be rich"

Mermaid's sindromme

Customer-Driven

Everybody's my customer.

APP para vender naranjas.

My customer is:

My customer is:

People who like oranges...

My customer is:

People who like oranges...

... and own a smartphone.

Market Pull & Technology Push
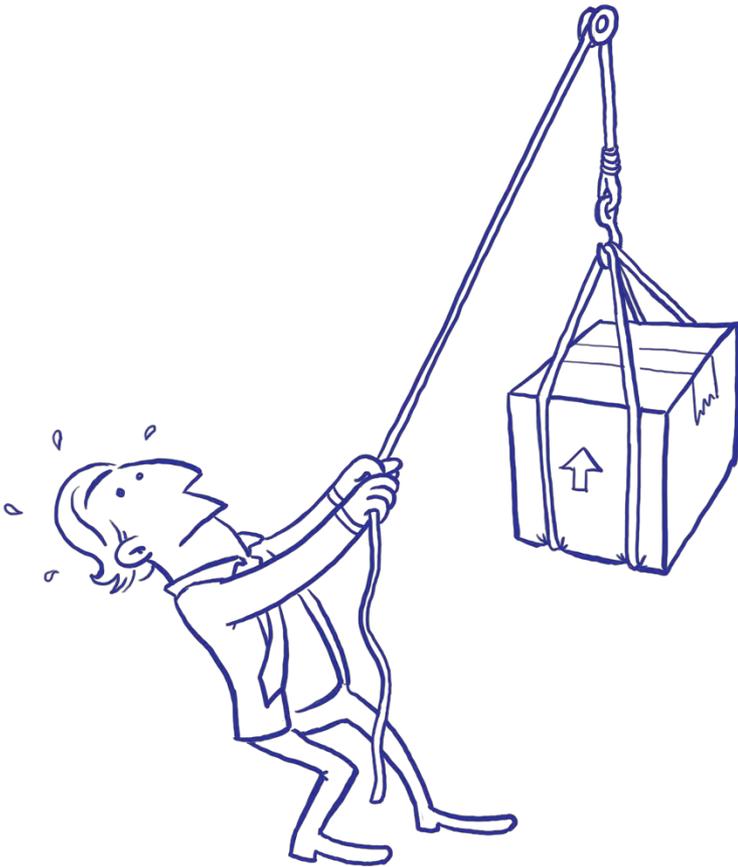
Market Pull
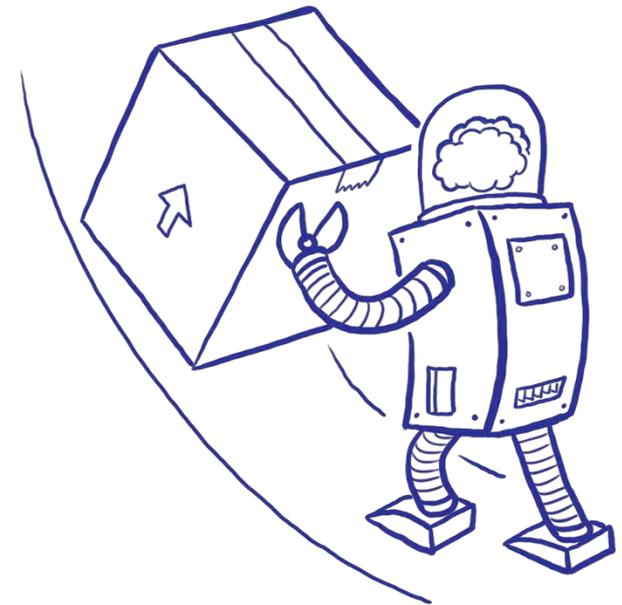
Technology Push

Example: Ink free printer

TOCANO

Tocano is developing revolutionary, ink-free printers!

Printing with Tocano printers, doesn't require consumables.
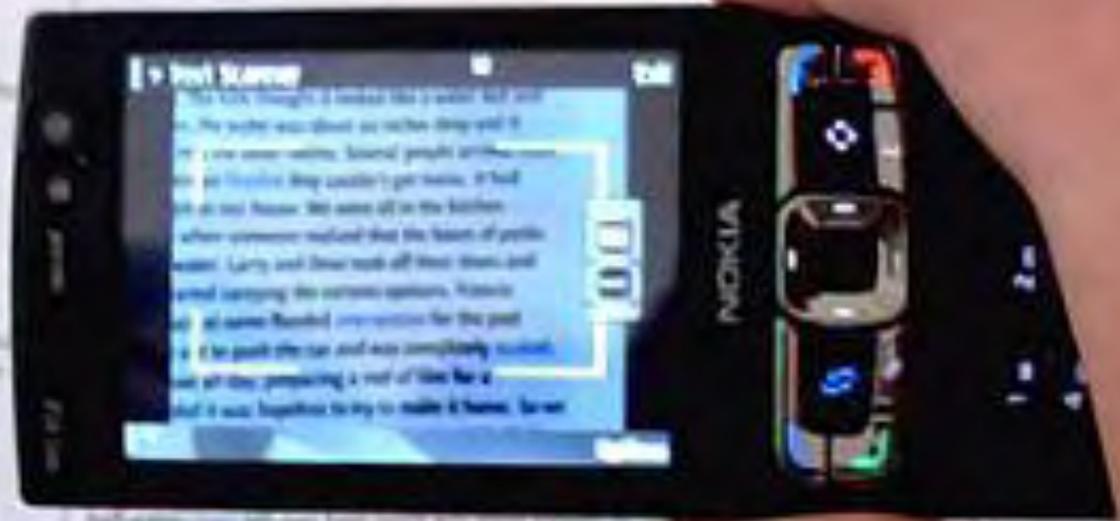
OCR: Optical Character Recognition

SERVICE FOR PHOTOGRAPHE

Everyone that takes photos.

More specific:

1. Professional photographers
2. Graphic designers
3. Architects
4. Doctors
4. Weddings
5. Girls that take selfies
in the bathrooom
6. Parents with small babies

I WANT TO CLEAN BOATS
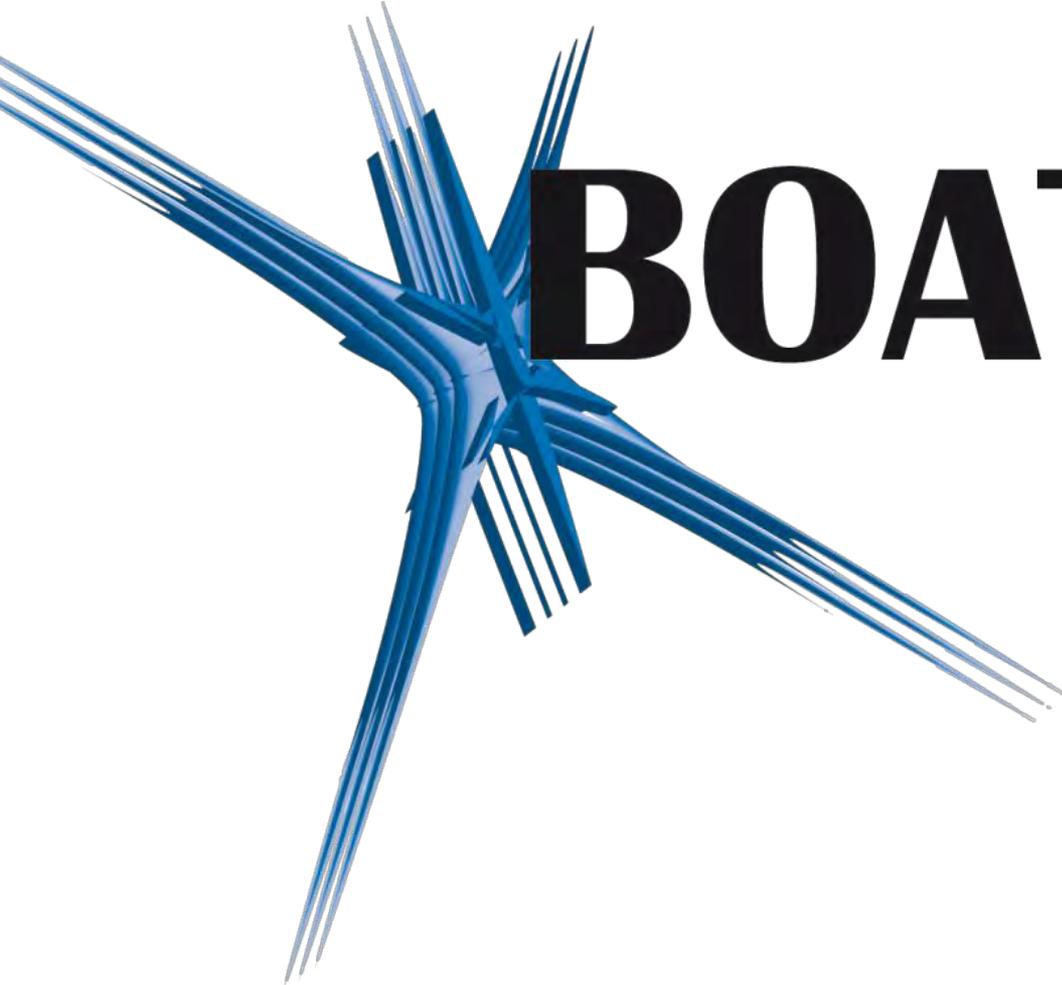
BOATSTAR

cleaning services

CREATING VALUE

¿How can I start?

Customer list
Everyone that ownes a ship.

More specific:

1. Boat Owners (B2C)
2. Megayachts owners.
3. Nautic motorbikes owners.
4. Ship rental companies
5. Nautic clubs
6. Maintenance companies

Customer list
Everyone that ownes a ship.

More specific:

1. Boat Owners (B2C)
2. Megayachts owners.
3. Nautic motorbikes owners.
4. Ship rental companies
5. Nautic clubs
6. Maintenance companies

Market Segmentation
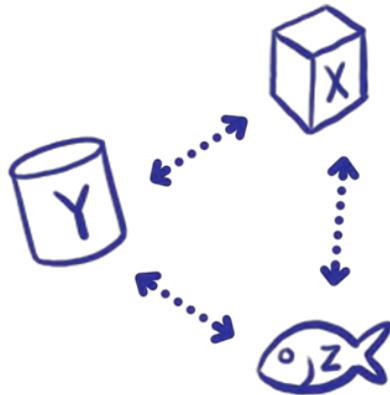
Segment by product requirement
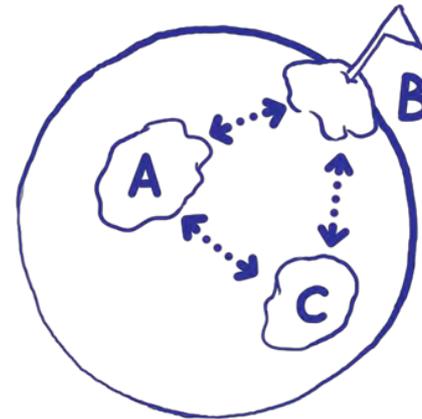
Segment by geography

Find Homogeneous Segments
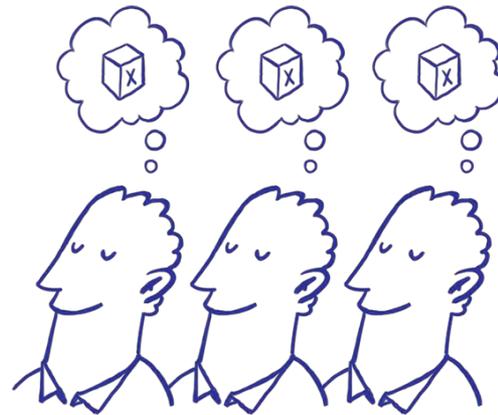
Homogeneous Segment
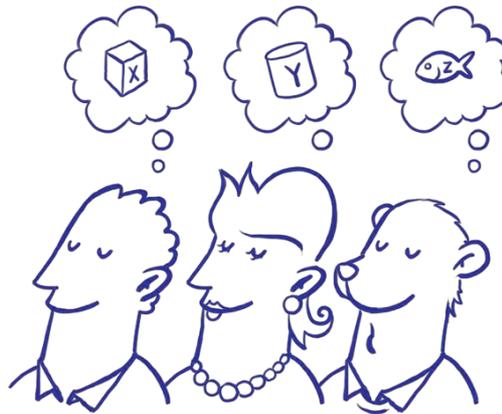
Non-Homogeneous Segment

Exercise: Brainstorm (60 min)

- Make **Groups** Of 3 **Different** Startups
- Brainstorm For **15 min** About 1 Startup
  - Short Intro About Deal
  - Others Give Input For Possible Reasons/Markets
  - Collect Input On Sticky Notes
- Then **Switch** To Next Startup
- Last **15 min** Sort And Group Collected Ideas

Tips & Tricks

- We are looking for customers, not technical applications
- You only have 15 min, do not spend it al on explaining your technology
- Write down 1 customer per post-it
- Do not hold back, generate as many ideas, we sort and select later

Where to start?

- Resources are limited
- You need to pick 1 segment to conquer first
- Establish credibility
- Then conquer the other segments

Beachhead Market

- Your first entry into the market
- Small enough to become a significant player
- Big enough to generate some cash
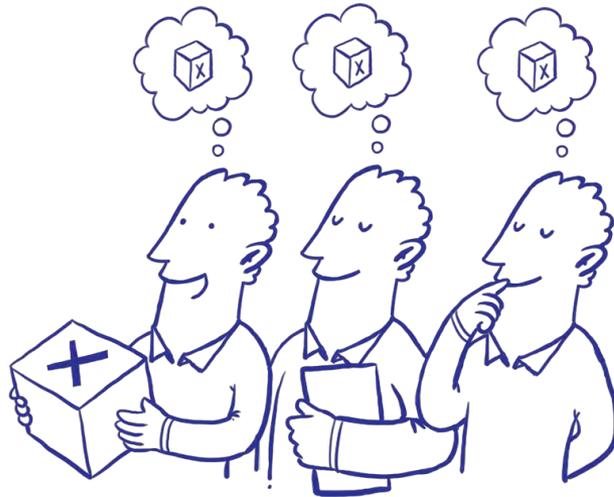
Selection Criteria

- Buyer?
- Well-funded?
- Accessible?
- Buying reason?
- Whole product?
- Competition?
- Next segment?
- Founder's Dream?

Market Segment *Describe the market segment*	Wind blade producers	Marine	Railway	Automotive	Aeronautic	Singular Buildings
Buyer *Is there a single, identifiable economic buyer?*	3	1	2	3	3	0
Well-funded? *Is the target customer well- funded?*	3	1	2	3	3	3
Accessible? *Is the target customer readily accessible to you?*	2	1	1	0	2	1
Buying reason? *Does the customer have a compelling reason to buy?*	3	1	1	0	1	2
Whole product? *Can you deliver a whole product?*	3	3	3	1	2	3
Competition? *Is there competition that could block you?*	0	2	2	0	2	2
Next segment *If you win this segment, will it help enter additional segments?*	3	3	1	2	2	0
Founder's Dream *Is the market consistent with your Founder's Dreams?*	3	2	1	2	3	1
Total Score	20	14	13	11	18	12

Example

Exercise: Beachhead Market (45 min)

- Select 6 market segments from your brainstorm

- Fill in the table and rank each segment for each criteria (1-5)

- Then select your Beachhead Market

TAM: total possible demand for your product

Total number of farmers.

SAM: based on your current business model

Number of farmers who will use methane for power generation.

SOM: based on practical limits of your business model

Number of farmers that I can give service with my resources.

Source: faberNovel

TAM Sizing Example: inTouch

157 M

Women in the US

6 M

Pregnant Annually

2 M

First Time Moms
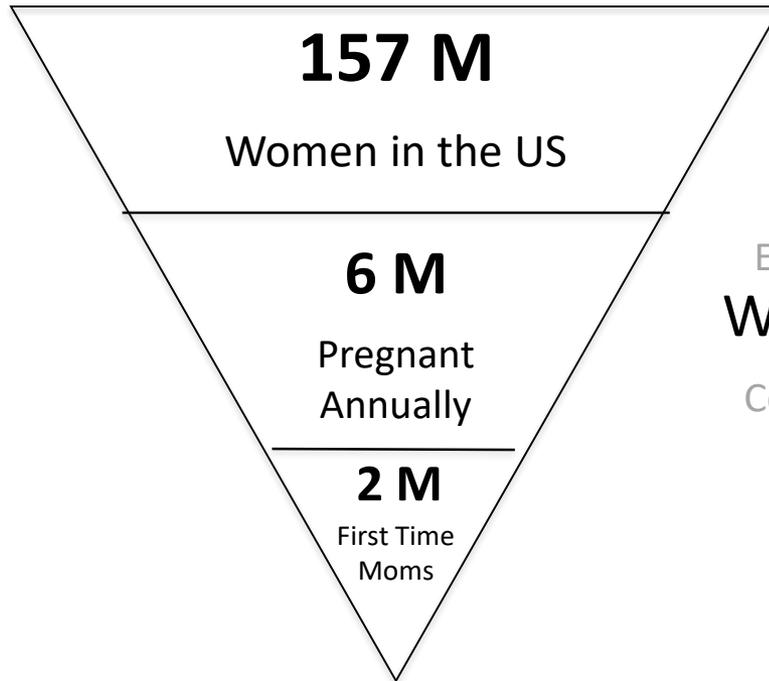
Technology Savvy

Extend her excitement

Indications

Capture pregnancy experience

Use mobile "apps" to track health

Easy to use   Low maintenance

Want convenience Real-time feedback

Comfortable to wear   Intuitive

Share monthly pregnancy photos

Share via social media

Connect with family and friends

Update her care network

In the US, there are 2 Million women like Michelle

Photo: visualphotos.com

**BUT NOT ENOUGH…
NEED TO GET TO $'S PER YEAR!**

inTouch

Connecting mommies with their babies
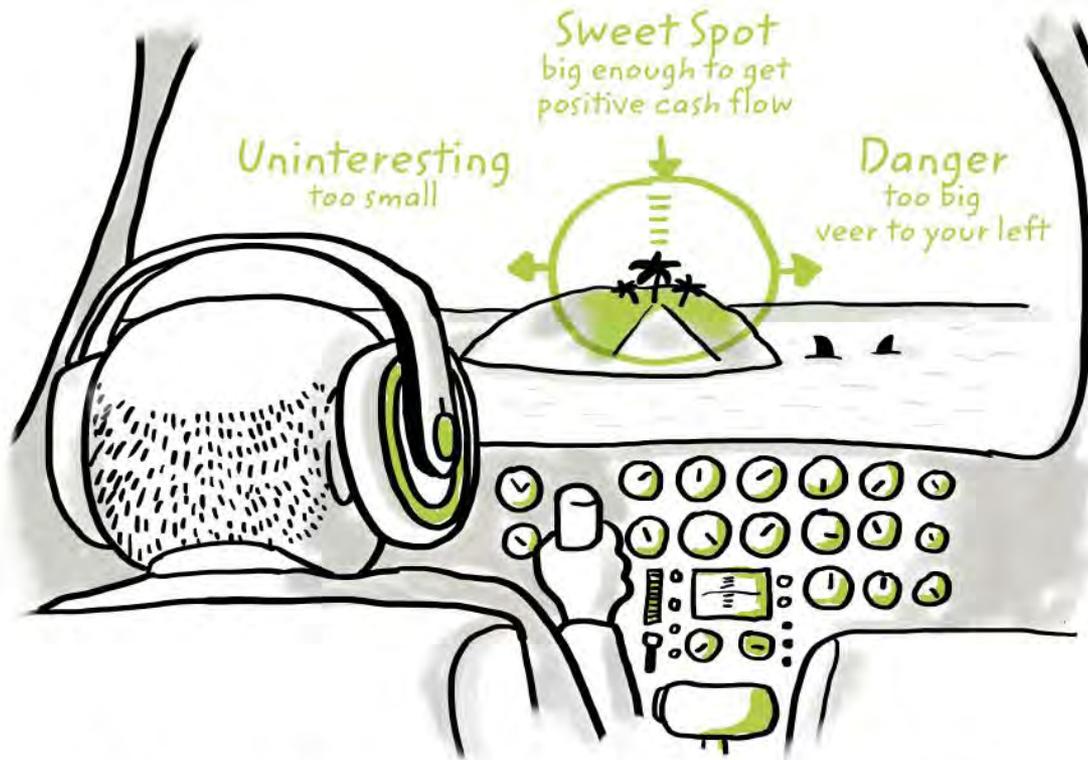
Sweet Spot
big enough to get
positive cash flow

Uninteresting
too small

Danger
too big
veer to your left

Beachhead TAM calculation
is your sanity check
that you are headed
in the right direction

Beachhead Market

Waste Management Facilities in Valencia Region

Adjacent Markets

Activities/places with sewage and black waters

WWTP

Agroindustry

"Prison"

VetiGoal

All Europe 5,000

South Europe 652

Spain 256

Valencia Region 25
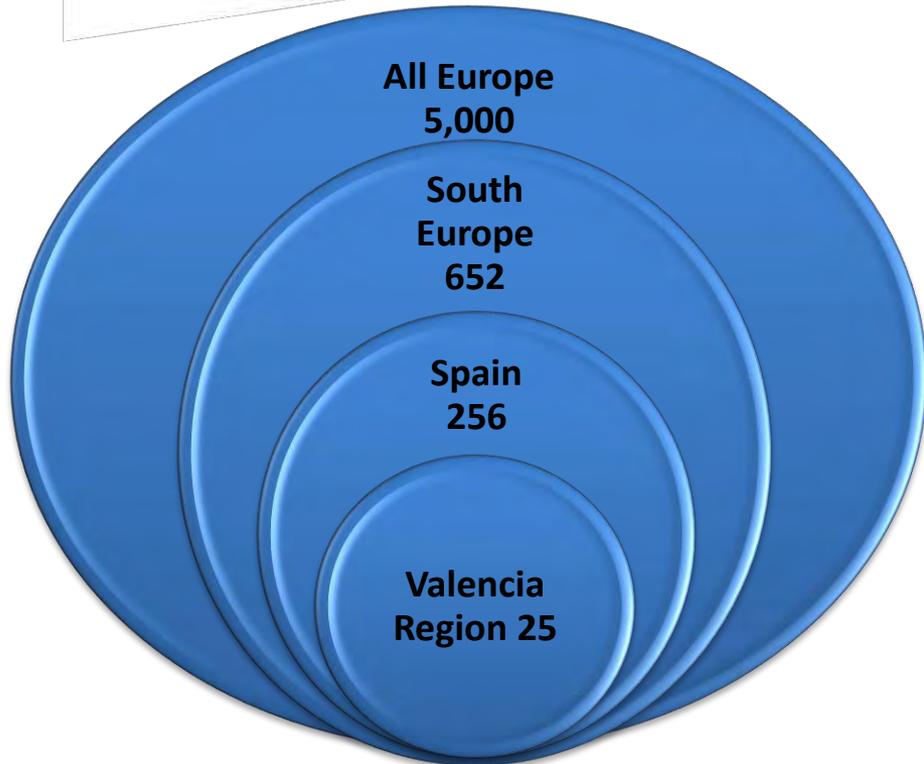
Market

BEACHHEAD MARKET

RICE PRODUCERS

0% RESIDUE

World
165,200,000 ha

Europe
430,000 ha

Italy
240,000 ha

Spain
120,000 ha

Valencian
Region
17,000 ha
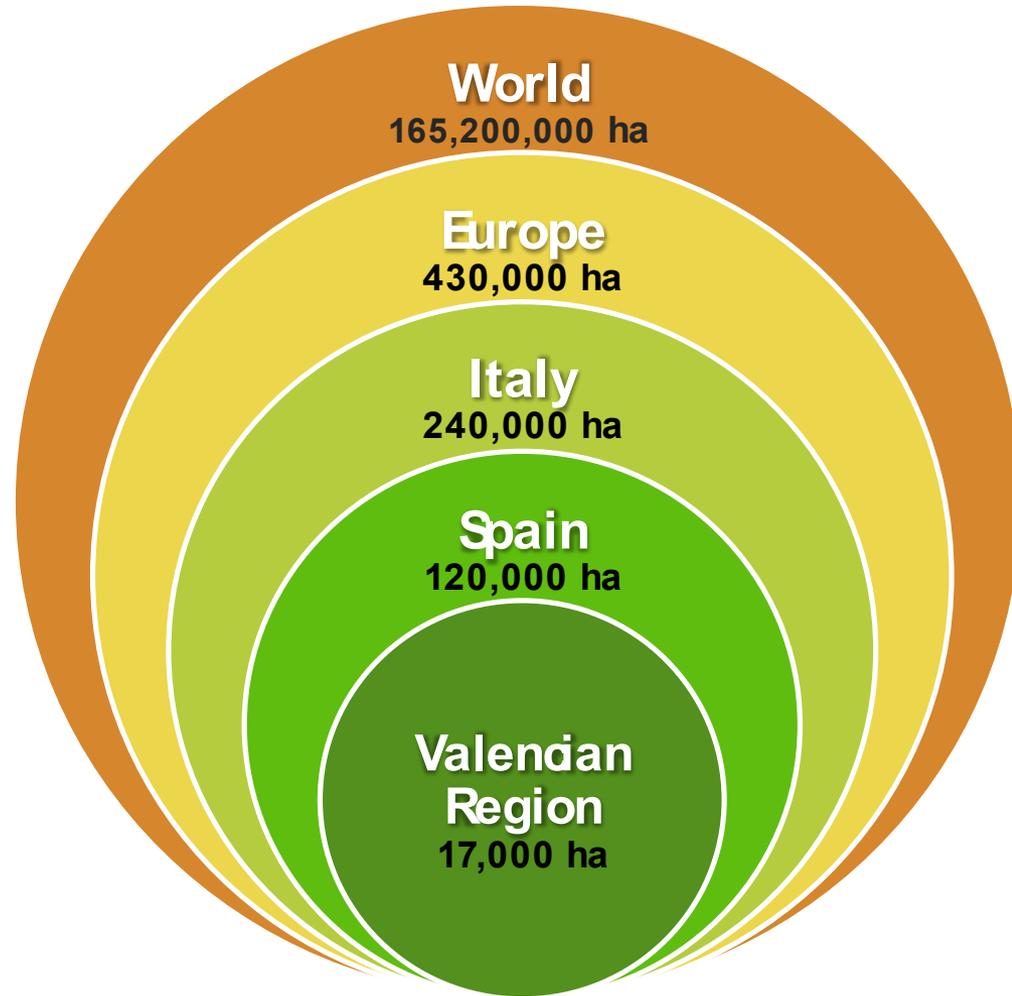
THE DEAL

RENT

Energetic tiles that produce electricity

→

←

100€/(tile*Day)

EnergyDream

Music Events

MARKET

Europe
10.000

Spain
500

Mediterranean side

100

Mall   Disco   Metro

Adjacent markets

2

Pain
Aspirina

vs.

Delight
Vitaminas

MARKET SEGMENTATION: Planning

1) BRAINSTORMING OF POSSIBLE CUSTOMER SEGMENTS

2) PICK YOUR BEACH HEAD MARKET

3) QUANTIFY THE MARKET, MAKE A PLAN

4) PLAN WHO WILL BE YOUR EARLY ADOPTER

5) FILL THE SLOT IN THE CANVAS

LEAN CANVAS – Ash Maurya

PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
2	**4**	**3**	**9**	*Ship owners*
	KEY METRICS		**CHANNELS**	**1**
+ alternatives	**8**		**5**	+ early adopters
				- New owners. *-People not happy with current service.*

COST STRUCTURE	REVENUE STREAMS
7	**6**

PRODUCT   **MARKET**
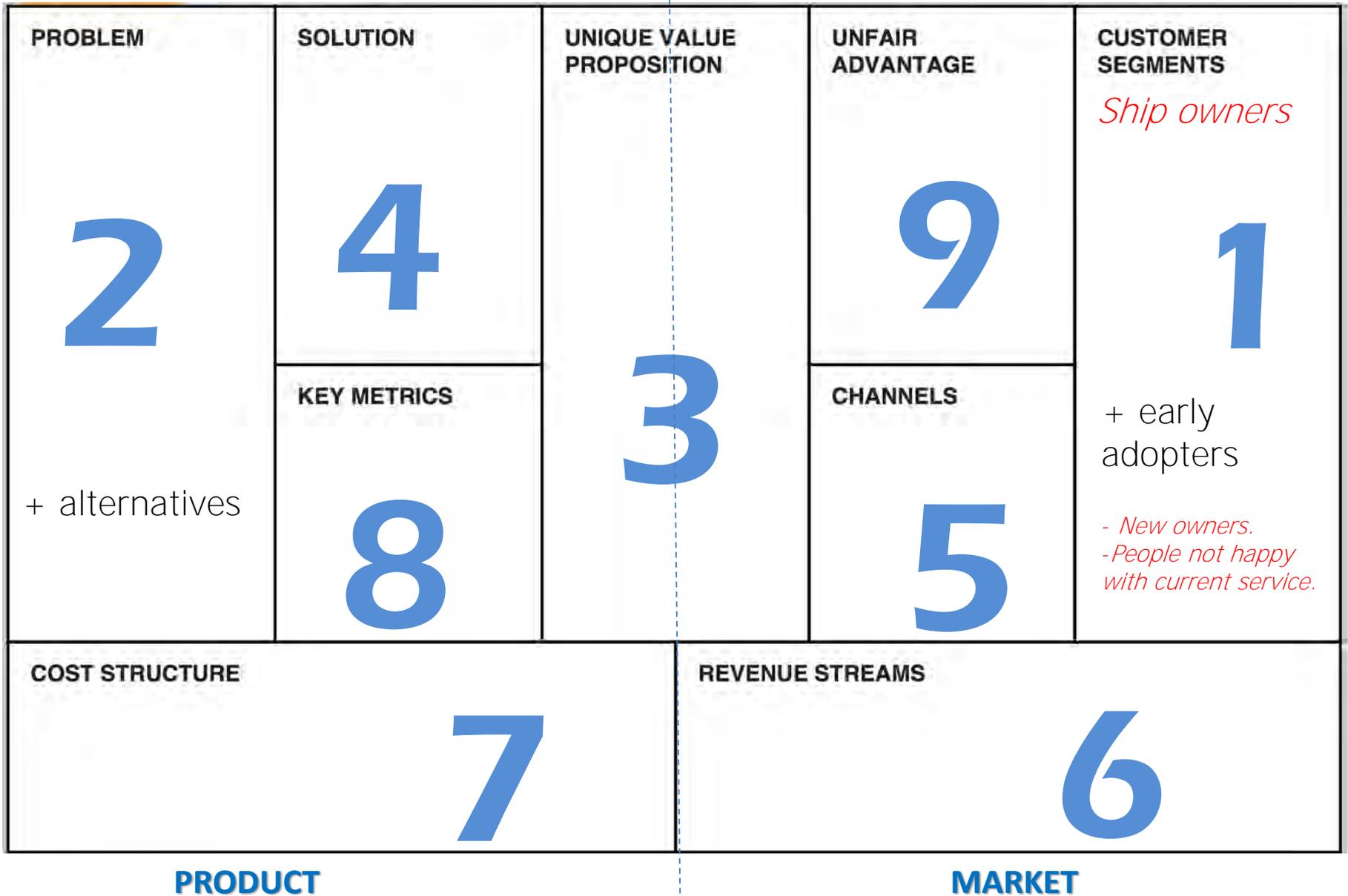
VALUE PROPOSITION

"Hi There..."

What's your customer's problem
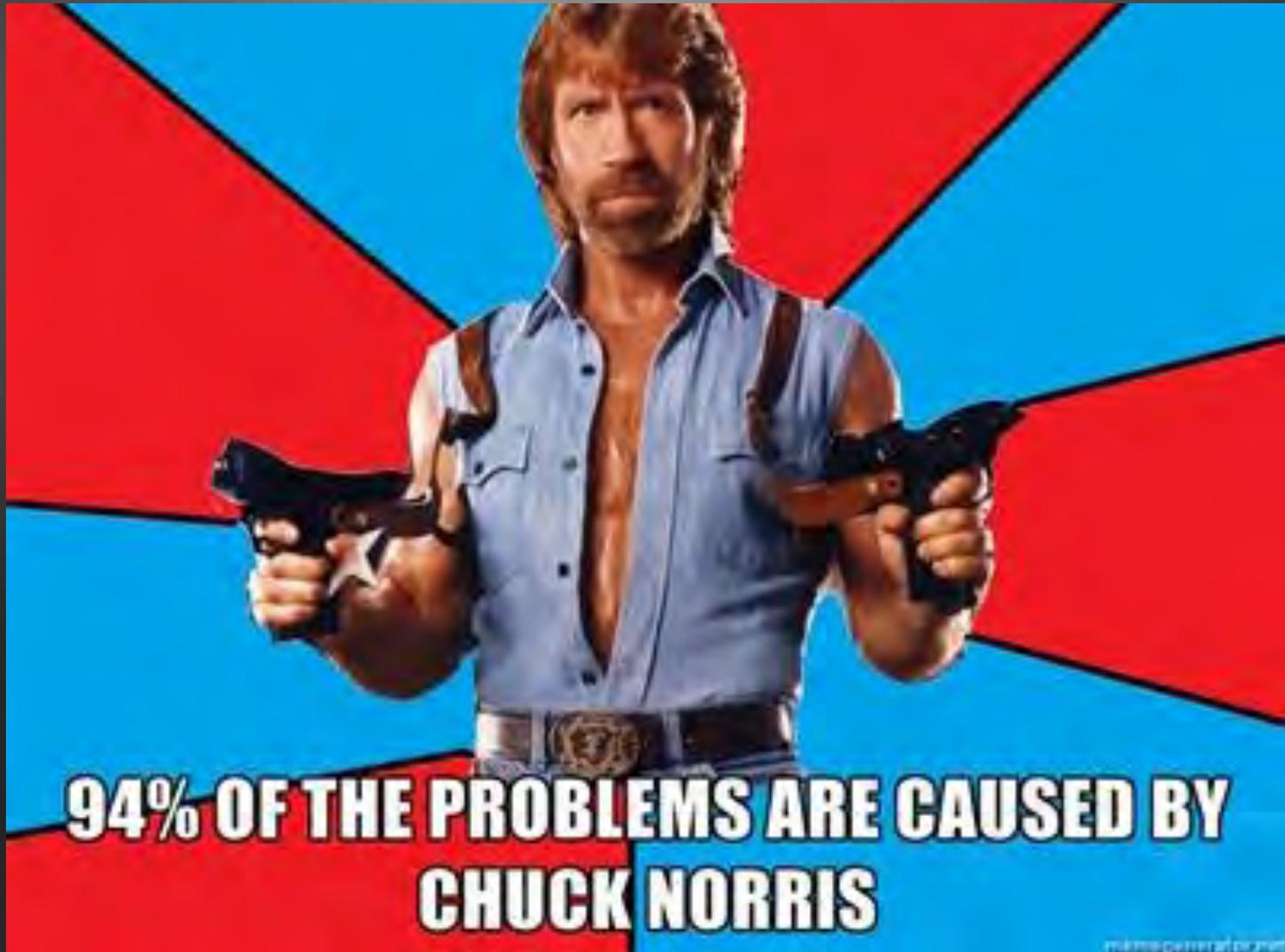
PRODUCT/SERVICE
- Problem
- Product Description
- COMPETITIVE ADVANTAGE

SOCIAL IMPACT

BUSINESS SYSTEM AND ORGANIZATION

Why buy your product?

- Addresses a need, solves a pain or problem?

- In B2C reasons can be both economical and emotional

- In B2B it is always about economic benefit.
  How can you help your customer to make more money?

VALUE PROPOSITION: B2C

1) CHEAPER

2) BETTER:

   1) INNOVATION, TECH, PERFORMANCE

   2) CUSTOMIZATION

   3) DESIGN, USABILITY, USER EXPERIENCE

   4) BRAND

   5) LONG TERM COST REDUCTION

   6) JOB TO BE DONE

   7) OTHER: ECO, SOCIAL...

VALUE PROPOSITION: B2B

INCREASE BENEFITS

1) COST REDUCTION

2) IMPROVE QUALITY (INCREASE FINAL PRICE)

3) REACH NEW MARKET SEGMENT

A Business Model chain:
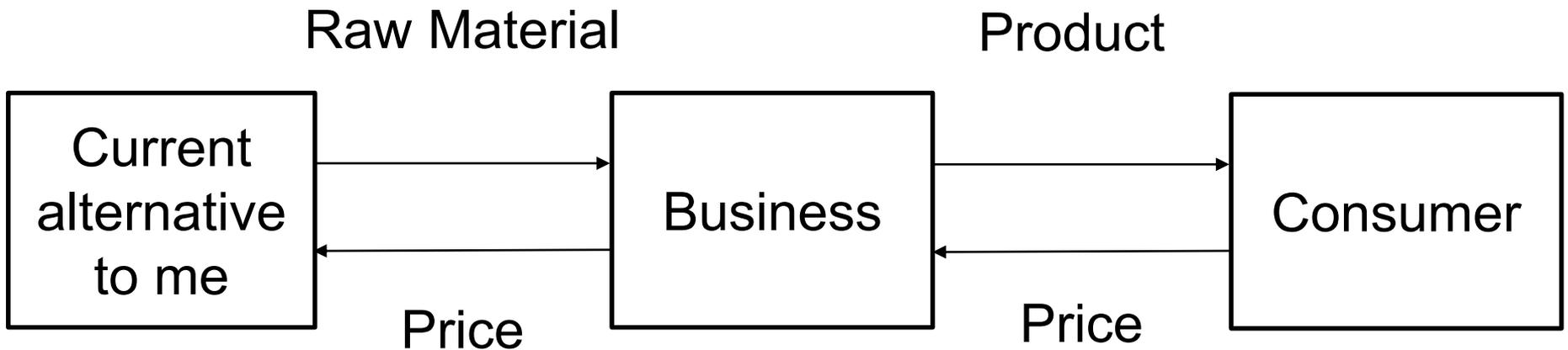
Raw Material

Product

| Current alternative to me | | Business | | Consumer |

Price

Price

My Business Model chain:

Better Raw Material

Product

Startup → Business → Consumer

Higher Price

Price

My Business Model chain:

Startup → Better Raw Material → Business → Better Product → Consumer

Consumer → Higher Price → Business → Higher Price → Startup
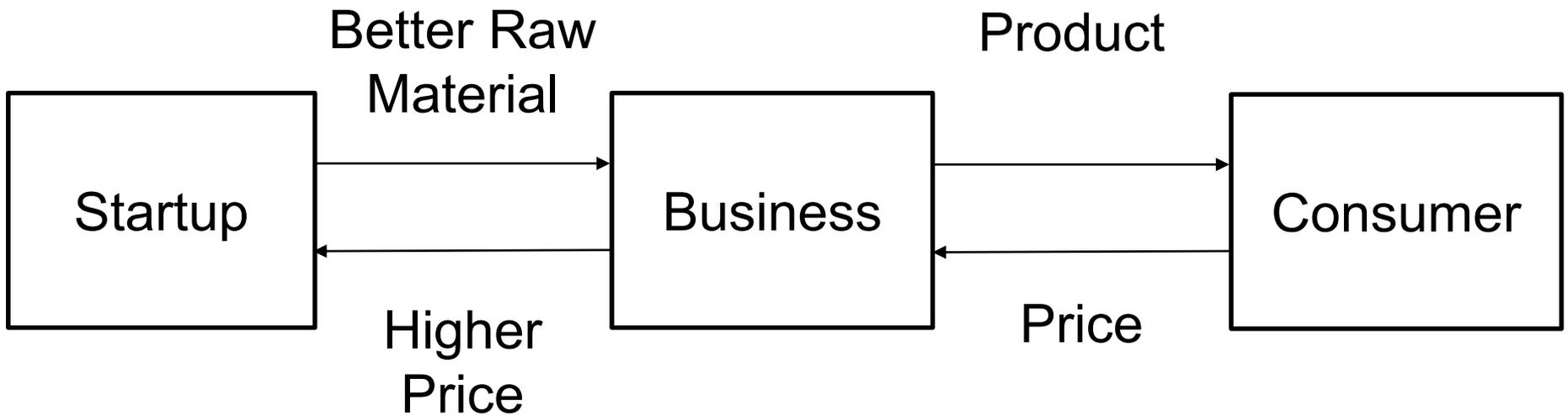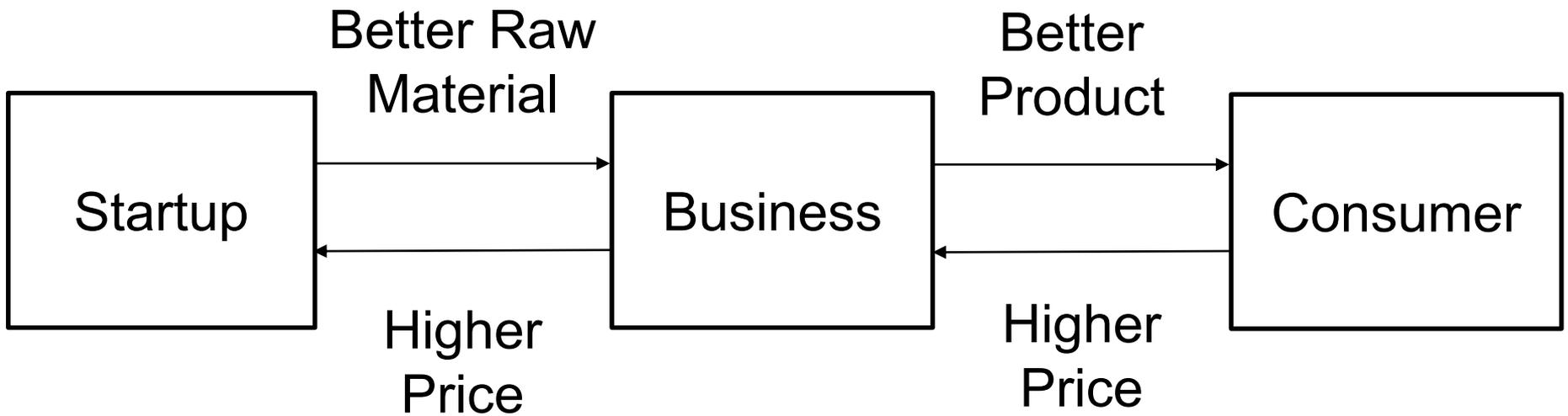
My Business Model chain:
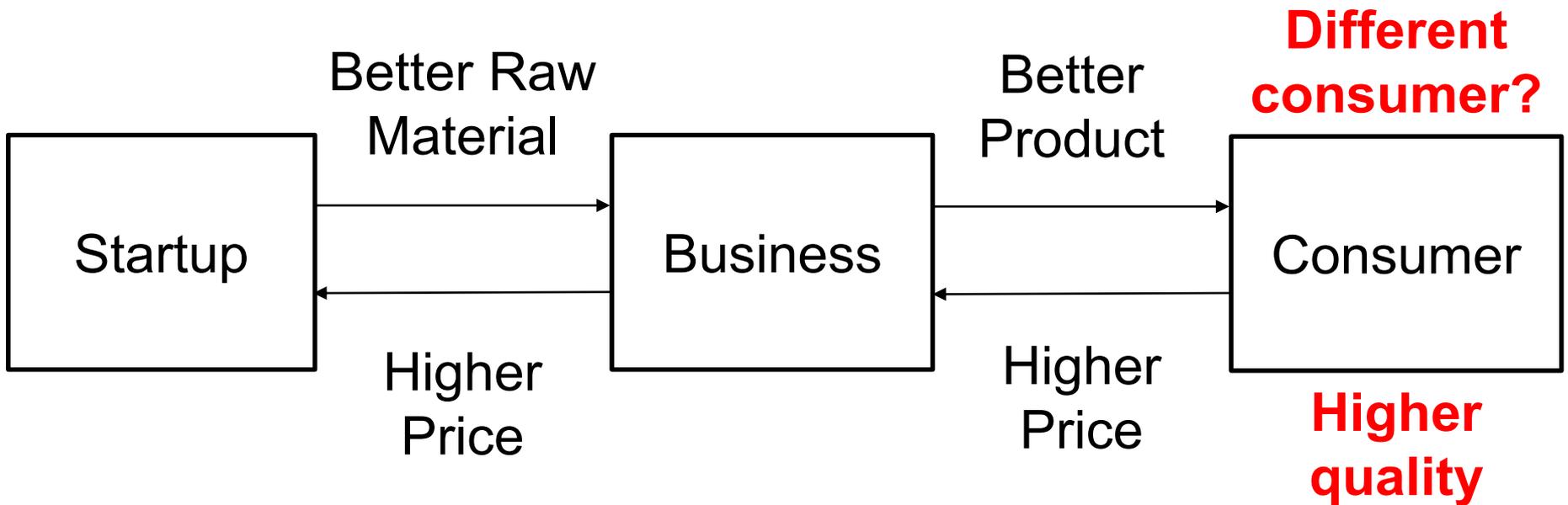
My Business Model chain:
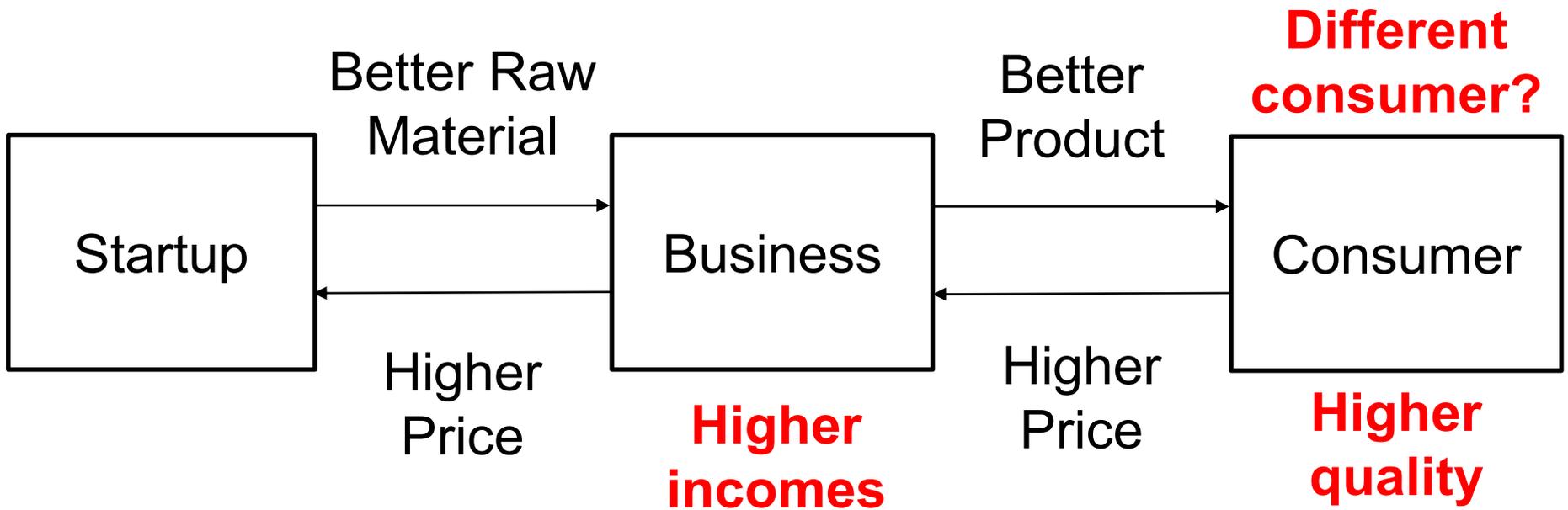
The Deal

✓ Coatings that bind to the material at a nanometer level:
  ✓ Improved properties (fire, water and UV resistance, among other);
  ✓ Retain original aspect and texture;

nanocoating

| **Future NanoCoatings** | ⬅️➡️ | **Cork producers and manufacturing industries** |

25 €/Kg
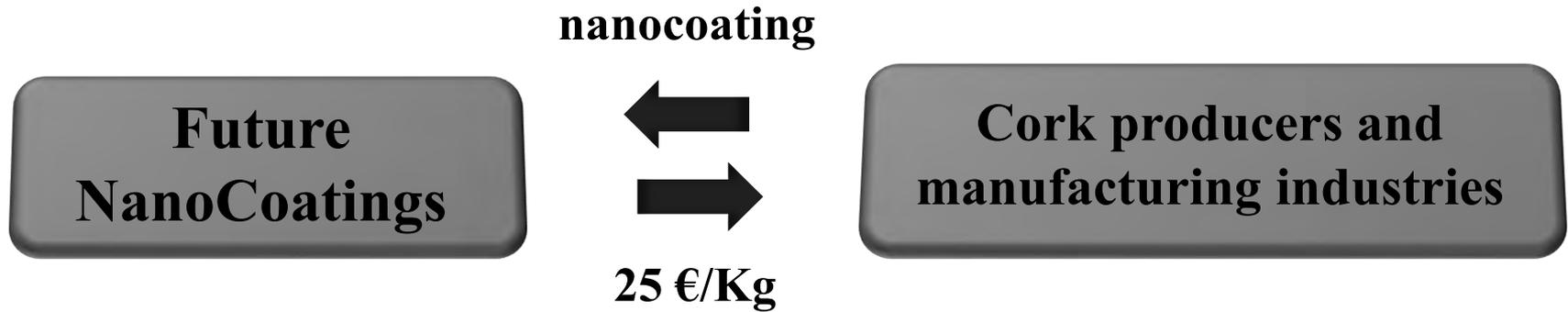
✓ **Market of €2 billion;**

With Future NanoCoatings

↑ 2 €/m²
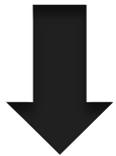
↑ 50%
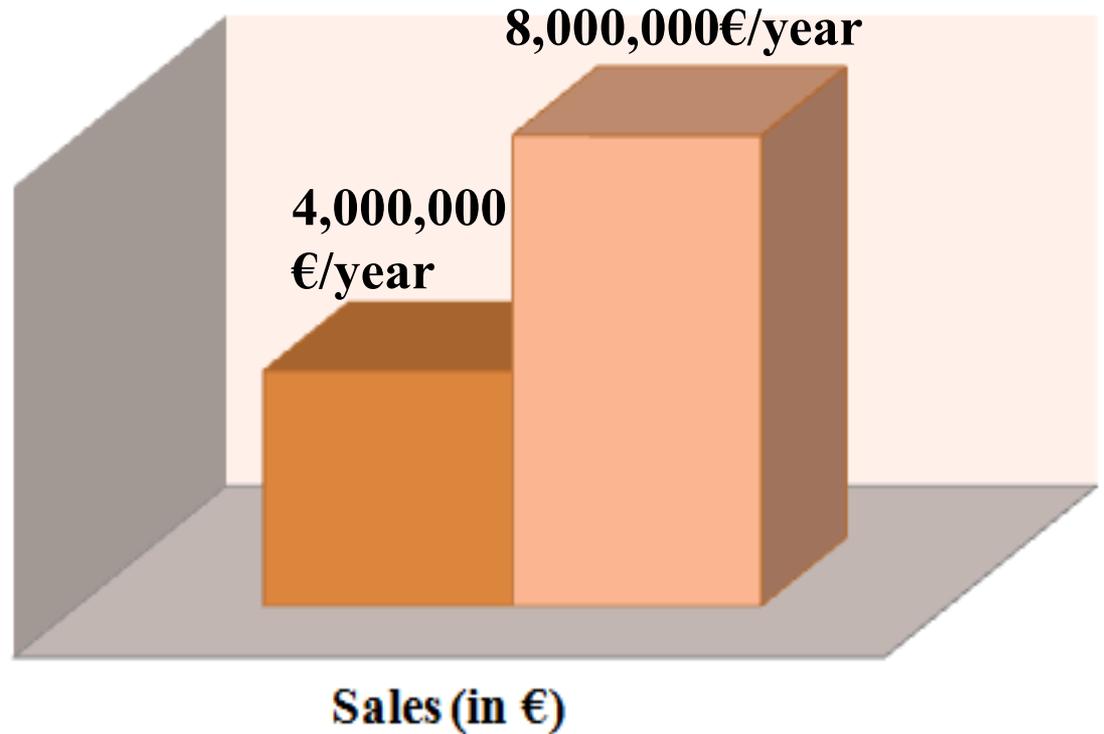
8,000,000€/year

4,000,000 €/year

Sales (in €)

VALUE PROPOSITION: Planing

1) Define and quantify your **customer's** pain

2) Define alternatives/competitors

3) Define solution

4) Decide Value Proposition. If B2C, choose better or cheaper.

5) Quantify Value Proposition.

6) Define High Concept Pitch.

7) Fill in slots 2, 3 & 4 of your Lean Canvas.

What's your customer's problem?

When I'm hungry, I usually don't have much time or money, but I'm tired of hamburgers and I want change of pace. Also, I'd like to be able to specify the exact ingredients I want in my meal. And, it would be really swell to have a glass of wine or beer with the meal.

Describe the problem:

- Not much money
- Not much time
- Cannot specify ingredients
- No wine or beer included

Problem

- Not much money
- Not much time
- Cannot specify ingredients
- No wine or beer included

Solution

- **Cheap slices of pizza.**
- **Cool box for taking away.**
- **Select your 3 favourite ingredients. X€ per additional**

Define your main product:

Meal consisted of cheap slices of pizza (customer can specify 3 ingredients) with cool box for taking away and a free drink.
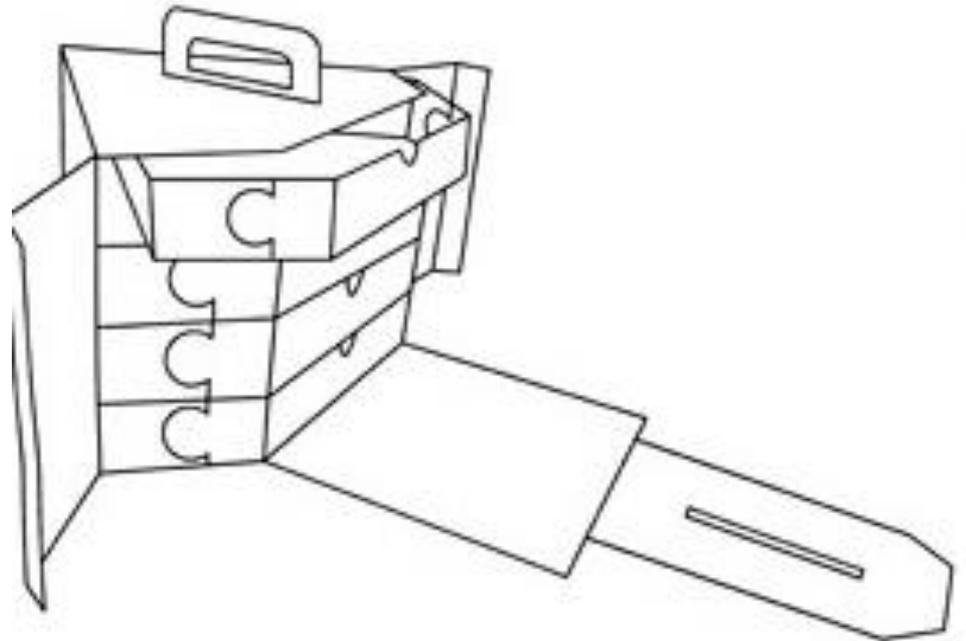
Define your product:

1) Meals for taking away:

PIZZA   +   "COOL" BOXES   +   DRINKS

Define your product:

2) Pizza lovers:

HEART SHAPPED PIZZA   +   "COOL" BOXES   +   DRINKS

Define your product:

3) Plastic boxes for slices:

Describe value proposition of each product:

1) Meals for taking away:

PIZZA	+	"COOL" BOXES	+	DRINKS

CUSTOMIZATION

GETTING JOB DONE

DESIGN

BRAND?

PRICE?

Define your product:

2) Pizza lovers:

HEART SHAPPED PIZZA   +   "COOL" BOXES   +   DRINKS

CUSTOMIZATION
+
SEGMENTATION   **DESIGN**   **BRAND?**

Define your product:

3) Plastic boxes for slices:

USER EXPERIENCE

DESIGN

IMPACT IN CLIMATE CHANGE (for not using cardboard boxes)

EXAMPLE 2: VALUE PROPOSITION

Provider of Paint for building sector.

VALUE PROPOSITION

Climate friendly Paint – 15% more expensive.

EXAMPLE 2: VALUE PROPOSITION

Provider of Paint for building sector.

VALUE PROPOSITION

Climate friendly Paint – 15% more expensive.

NOBODY BUYED IT!!!!!

EXAMPLE 2: VALUE PROPOSITION

Customer pain: Taskforce is 70% of total costs.

VALUE PROPOSITION

**Paint dries in 6h instead of 24h, so you can apply 2nd layer the same day.
AND it's climate friendly.**

EXAMPLE 2: VALUE PROPOSITION

Customer pain: Taskforce is 70% of total costs.

VALUE PROPOSITION

Paint dries in 6h instead of 24h, so you can apply 2nd layer the same day.
AND it's climate friendly.

SUCCESS: PRICE 40% MORE EXPENSIVE!!!!

EXAMPLE 2: VALUE PROPOSITION

Problem: 70% of the costs are related to taskforce.

Solution: Paint that dries in 6h.

VALUE PROPOSITION: Reduce the costs in 50%.

Alternatives: Paint that dries in 24 h. No reduction in taskforce costs.

Describe your competitors:

- A competitor is not someone developing the same product as you, is someone that is giving an alternative solution to the same problem your product is giving an answer to.

Describe your competitors:

- Give numbers.
- What are their products and prices?
- Why your products are different and better?

- Knowing your competitors prices is very useful for deciding your product price.

ANALYSIS OF COMPETITORS
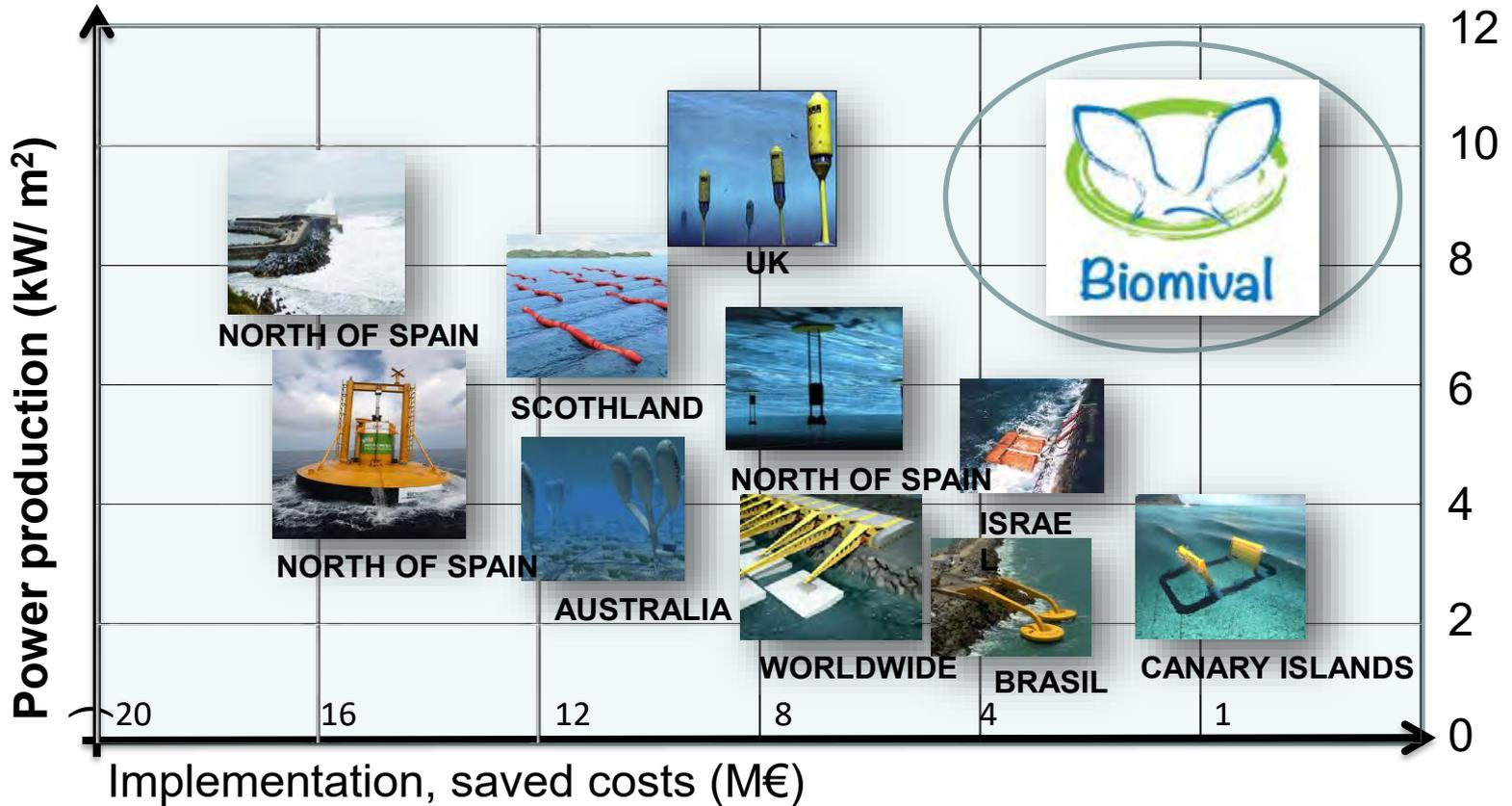
BIOMIVAL COMPARED TO SOLAR/WIND POWER GENERATION

… CONSTANT, PREDICTABLE AND HAS NO POWER VALLEYS.

Product Comparison Template

Best Options	Product 1	Product 2	Product 3
Sample criteria	GOOD FEATURE		BAD FEATURE
Sample criteria	GOOD FEATURE		GOOD FEATURE
Sample criteria		GOOD FEATURE	BAD FEATURE
Sample criteria	GOOD FEATURE	GOOD FEATURE	BAD FEATURE
Sample criteria	GOOD FEATURE		BAD FEATURE
Sample criteria	GOOD FEATURE	BAD FEATURE	
Sample criteria	GOOD FEATURE		BAD FEATURE
Sample criteria	BAD FEATURE		
Sample criteria			BAD FEATURE
Conclusion	ACCEPTABLE		REJECTED

"We don' sell drills, we sell perfect holes".
Black & Decker

"We don't sell machines, we sell solutions".
Put your company name here.

Bicycle Street Equipment

secure Bicycle Parking

bicycle Self-Service Station

Interviews: 163   Surveys: 902 answers

Bicycle Self-Service Stations & Secure Parkings

BICIWAY

VALUE PROPOSITION: Planing

1) Define and quantify your **customer's** pain

2) Define alternatives/competitors

3) Define solution

4) Decide Value Proposition. If B2C, choose better or cheaper.

5) Quantify Value Proposition.

6) Define High Concept Pitch.

7) Fill in slots 2, 3 & 4 of your Lean Canvas.

Example: Snocom

Snow Removal
Machines
("Snowcubers")

Snocom → Airports

200k/
Machine

Airport wants to operate more profitably
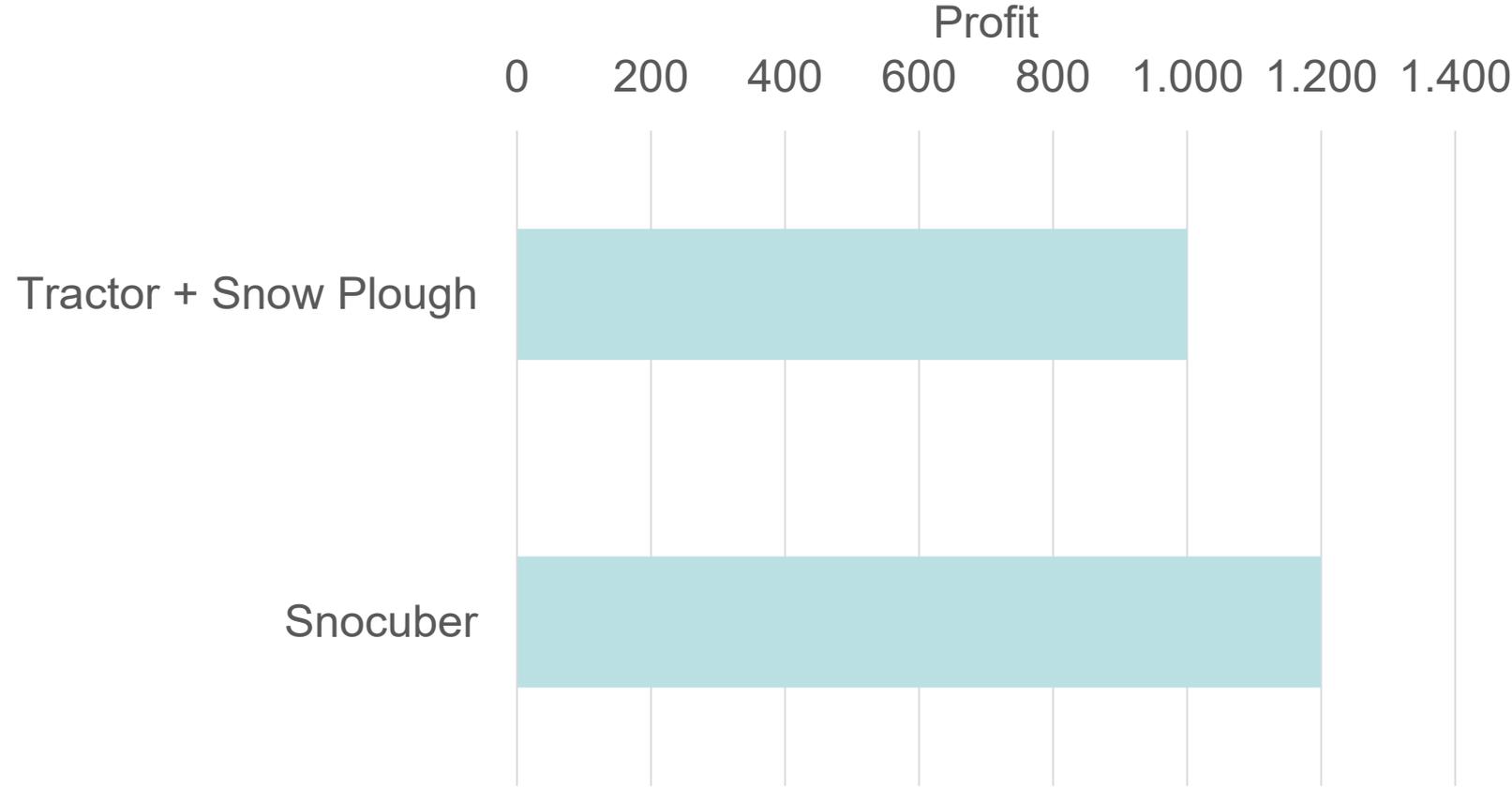
B2C is always about..

1. Better
2. Cheaper

Example: Solease

Private home owner wants

to obtain greener (= better) energy

CO2 Emissions
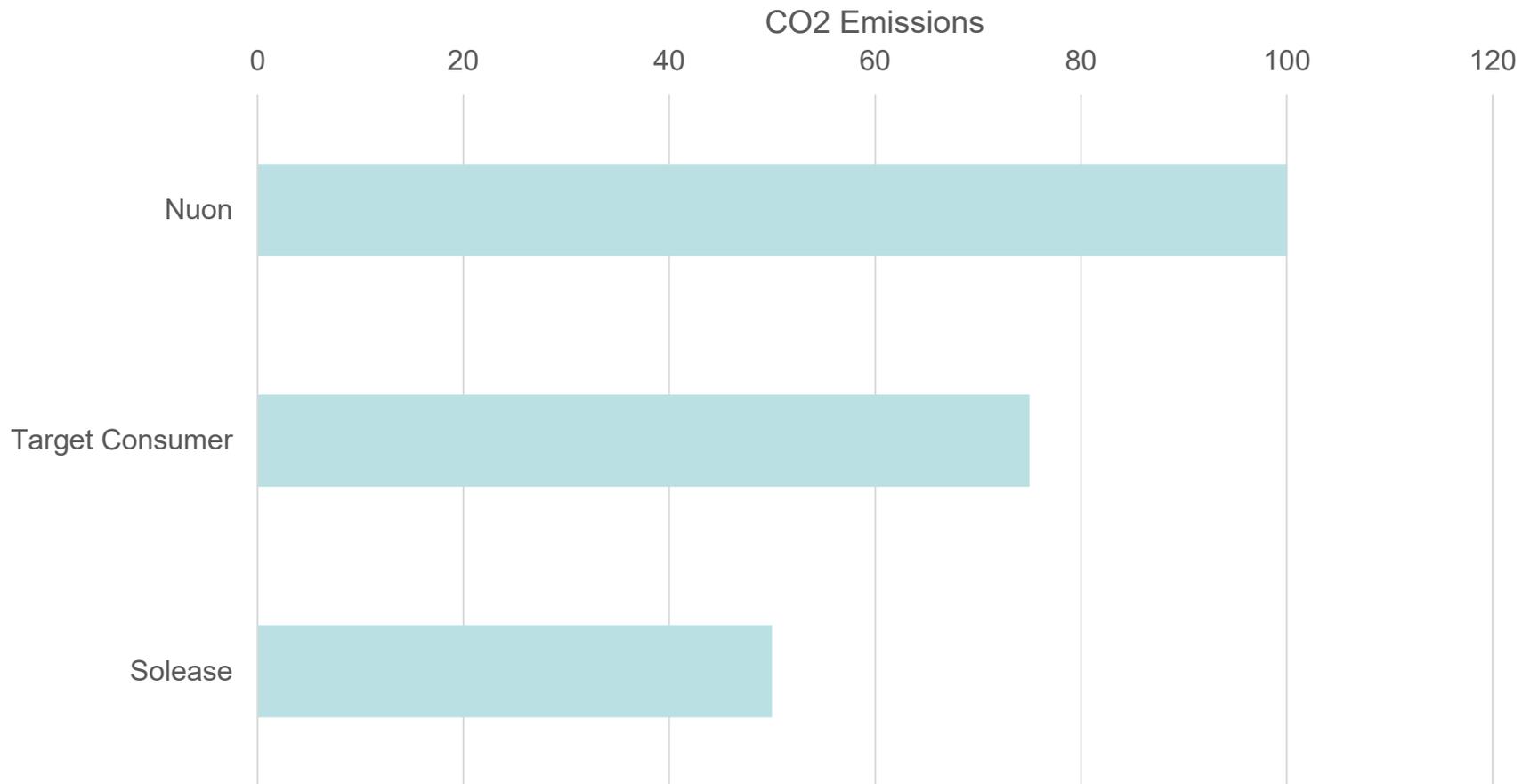
In conclusion

- ## What is the customer pain?
  - Current product is not good enough
- ## Why hasn't he solved his pain yet?
  - Product competitor is not good enough either
- ## Your product is better
  - So charge at least the same price

Private home owner wants to obtain cheaper energy
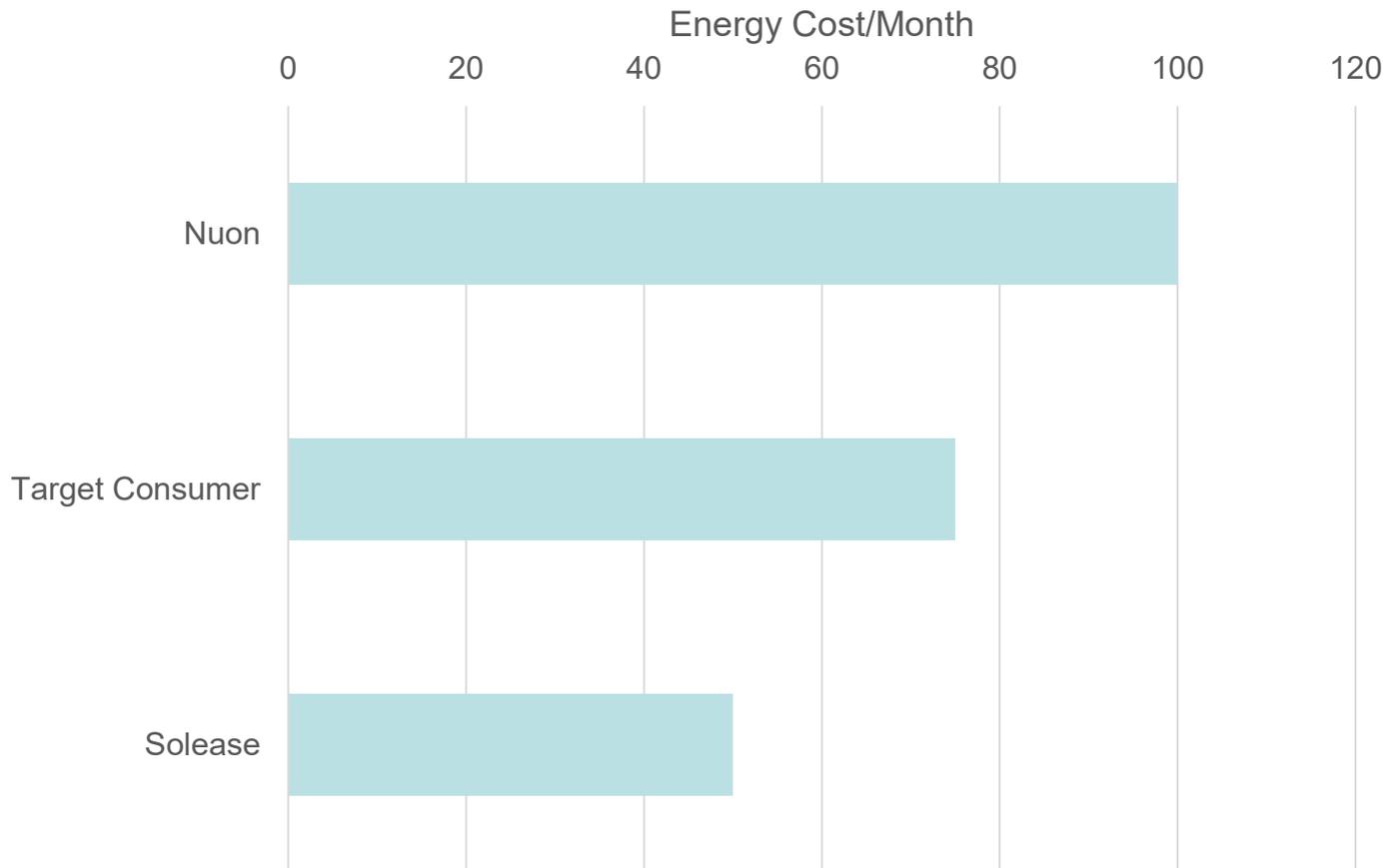
In conclusion

- ## What is the customer pain?
  - Current product is too expensive
- ## Why hasn't he solved his pain yet?
  - Product competitor is also too expensive
- ## Your product is cheaper
  - But has the same quality or less

Value Proposition Example: inTouch

At the moment, Michelle can use…

Heart-rate monitors

Intuition

Professional Ultrasound

Consult "Dr. Google"

With **inTouch**, Michelle may…

inTouch

technology is proven
- Data Collection
  - Heart-rate
  - Movement
- Intellectual Property
  - Algorithm that correlates data to positive response
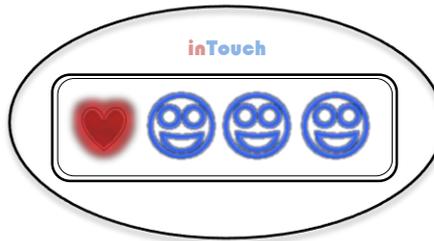
read to her baby,   **then receive feedback.**

Facilitating intimacy and providing reassurance.

inTouch
Connecting mommies with their babies

Photos: gadgetrivia.com
mothering.com
sheknows.com
parents.com
allvoices.com

Quant. Value Prop. Example II
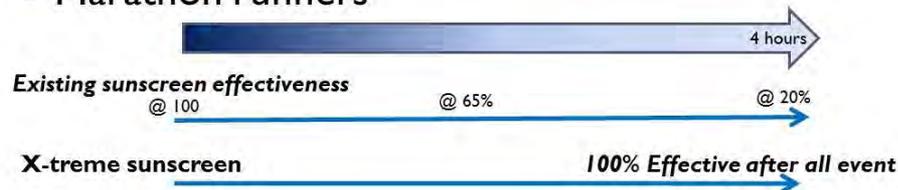
- Tri-athletes

Swim Bike Run 2-10 hours

Existing sunscreen → Gone after swimming

X-treme sunscreen → *Effective after all event*

- Marathon runners

4 hours

Existing sunscreen effectiveness
@ 100 @ 65% @ 20%

X-treme sunscreen *100% Effective after all event*

1.   **SIX times longer duration**

2.   **FIVE times higher effectiveness**

3.   **At least THREE times lower quantity applied.**

SMART SKIN CARE *Long-lasting protection for your skin*

Quant. Value Prop. Example III

Assume Typical Herd Size of 1,000

Current process

- 200 cattle develop BRD
  - 50 deaths
    - Lost revenue ($997/head)
  - 150 illnesses
    - Treatment cost ($16/head)
    - Reduced feed efficiency ($15/head)
    - Lower quality grade ($58/head)

Loss to disease: $63K

Process w/ Meater

- 150 cattle develop BRD
  - 25 deaths
    - Lost revenue ($997/head)
  - 125 illnesses
    - Treatment cost ($16/head)
    - Reduced feed efficiency ($15/head)
    - Lower quality grade ($58/head)

Loss to disease: $36K

$27 per calf

Coating Solutions for Windturbine Blades

There's a BIG pain

300 hours finishing

The Need

Surface Protection

Protected | Unprotected
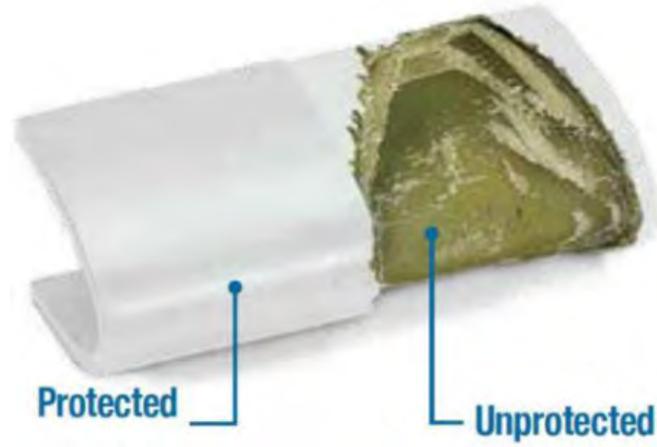
OUR solution
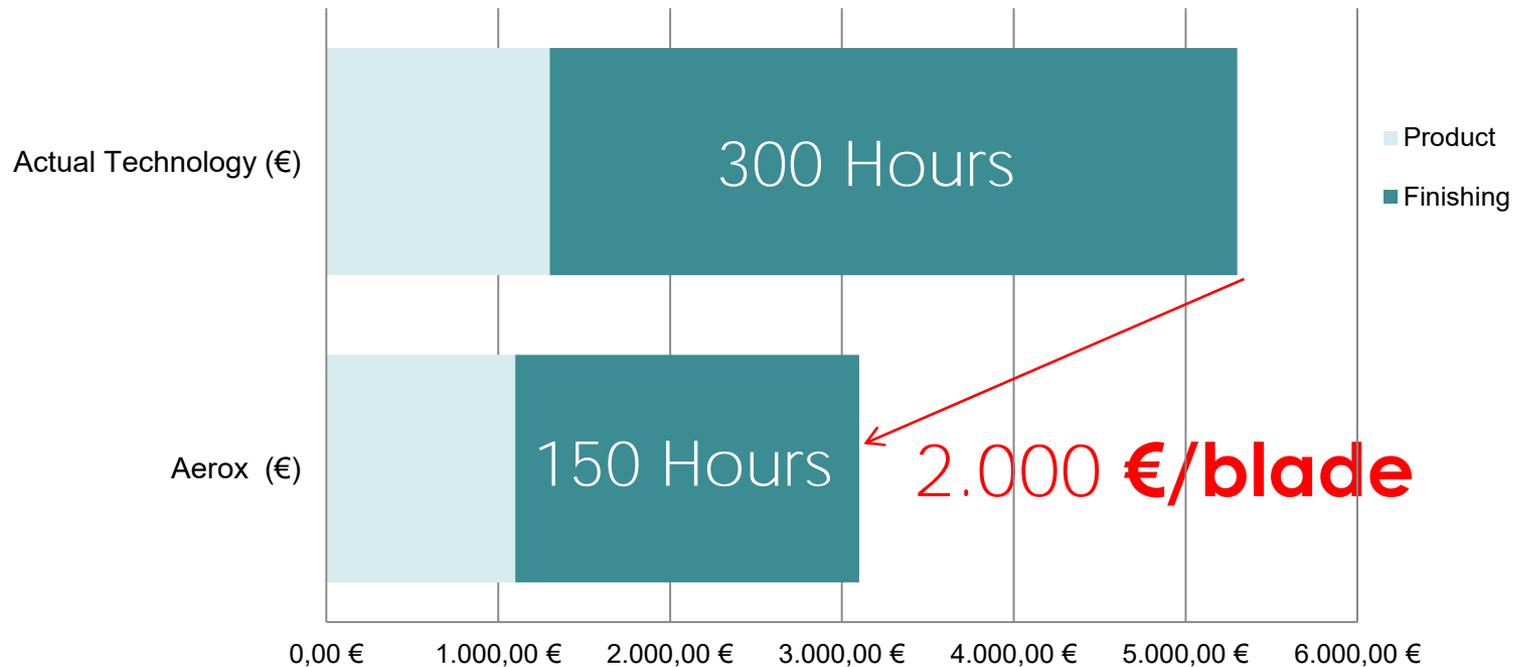
50 % Costs Savings

CUSTOMER VALUE PROPOSITION

1. Enabling higher towers

4.3m

2. Lower total cost
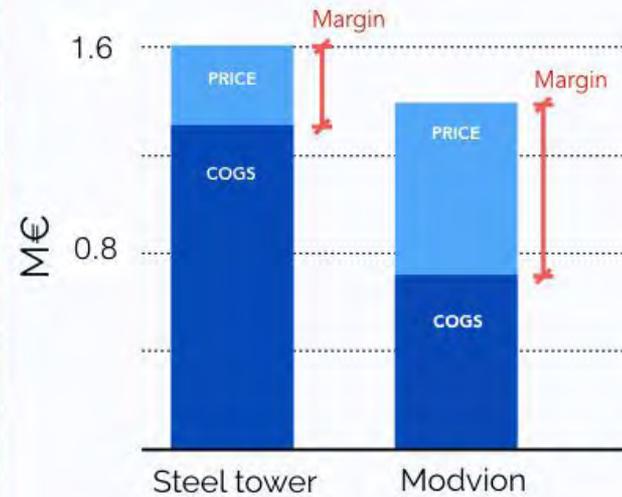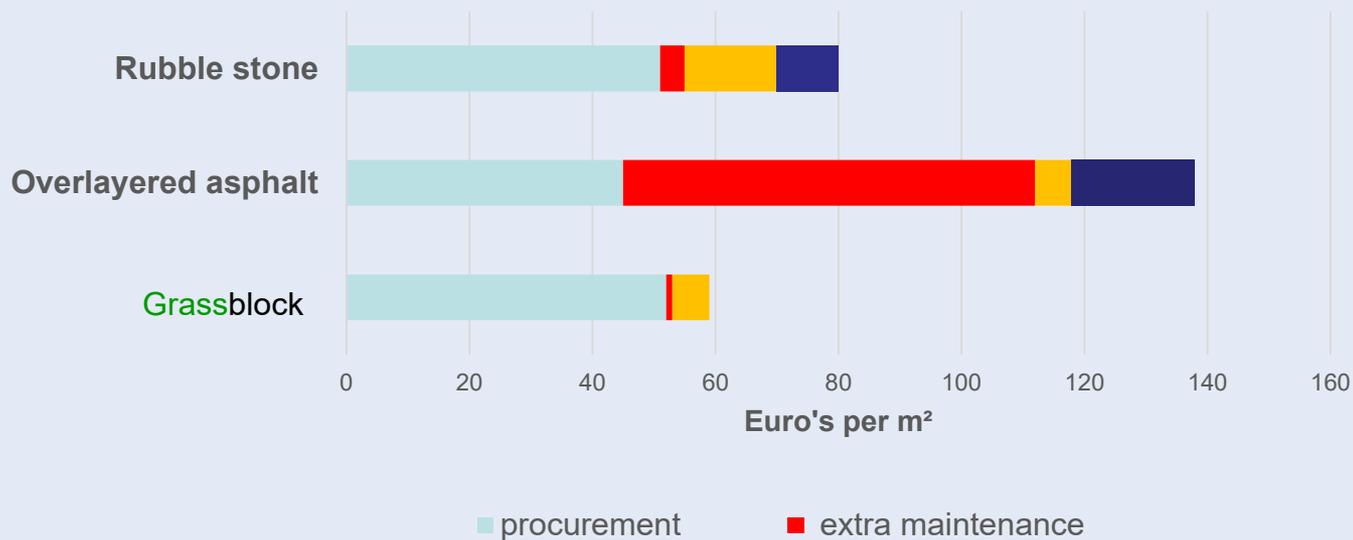
Upcycle coffins

PRODUCT

EACH ONE IS UNIQUE
LIKE EACH PERSON

NO METAL
NO VARNISH
RECLAIMED DOORS
RECLAIMED WOOD
RECYCLED TEXTILE
PERSONALIZED
CERTIFIED

VALUE PROPOSITION: Planing

1) Define and quantify your **customer's** pain

2) Define alternatives/competitors

3) Define solution

4) Decide Value Proposition. If B2C, choose better or cheaper.

5) Quantify Value Proposition.

6) Define High Concept Pitch.

7) Fill in slots 2, 3 & 4 of your Lean Canvas.

Why are you different?

At the end, *you*'re *different or… you*'re *cheaper*
Guy Kawasaki

HIGH-CONCEPT PITCH

24S = Spotify + 📚
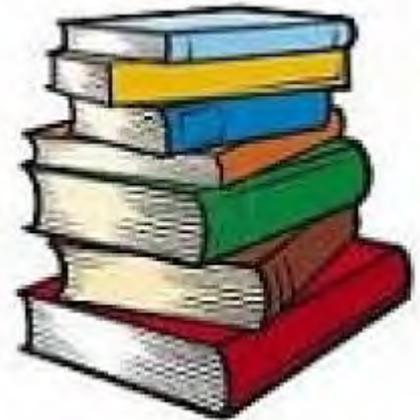
Exercise

1. Decide: 1) B2B Or 2) B2C
2. If B2C decide: 1) Better Or 2) Cheaper
3. Draft 1 slide with bar chart for your customer
4. Check if your price is right
5. Check if you fulfill Founder's Dream

LEAN CANVAS – Ash Maurya

PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
- No companies specialized in this service. *- High price.* **2** + alternatives *Sailors (club), Marina Estrella,* **Tramontana...**	**-Exclusively cleaning services.** **- Low price.** **4** **KEY METRICS** **8**	*The best cleaning service, at the lowest Price (30% less)* **3** HIGH-LEVEL CONCEPT *Eulen, but for boats.*	**9** **CHANNELS** **5**	*Ship owners* **1** + early adopters *- New owners.* *-People not happy with current service.*

COST STRUCTURE	REVENUE STREAMS
7	**6**

PRODUCT   **MARKET**

CHANNELS

CHANNELS

1) HOW DO WE INFORM OUR CUSTOMERS?

2) HOW DO THEY SEARCH US?

3) HOW CAN THEY PURCHASE OUR PRODUCTS?

4) HOW ARE WE DELIVERING THE PRODUCT?

5) IS THERE ANY AFTER SALE SERVICE?

CUSTOMER RELATIONSHIPS

1) PERSONAL ASSISTANCE

2) DEDICATED PERSONAL ASSISTANCE

3) SELF-SERVICE

4) AUTOMATED SERVICES

5) COMMUNITIES

6) CO-CREATION: Customer is involved in the creation of the product.

SALE CHANNELS

1) SALES FORCE

2) ONLINE

3) OWN SHOP

4) PARTNER'S SHOP

Bienvenido Log in | Mi Cuenta | Favoritos | Mapa del Sitio | Contactar

0

JUEGOS DE LA MESA REDONDA

INICIO   NOVEDADES   TOP VENTAS   PROMOCIONES   SEGUNDA MANO   COMO COMPRAR

GO

4 GODS

1 2 3 4 5 6 7 8 9 10

CATEGORÍAS

T I M E

LEAN CANVAS – Ash Maurya

PROBLEM	**SOLUTION**	**UNIQUE VALUE PROPOSITION**	**UNFAIR ADVANTAGE**	**CUSTOMER SEGMENTS**
- No companies specialized in this service. *- High price.* **2**	*-Exclusively cleaning services.* *- Low price.* **4**	*The best cleaning service, at the lowest price (30% less).* **3**	**9**	*Ship owners* **1**
+ alternatives Sailors (club), Marina Estrella, **Tramontana...**	**KEY METRICS** **8**	*HIGH-LEVEL CONCEPT Eulen, but for boats.*	**CHANNELS** *-Brochures tied to the boats.* *-Word of mourh.* *-Maintenance companies.* **5**	+ early adopters *- New owners.* *-People not happy with current service.*

COST STRUCTURE	**REVENUE STREAMS**
7	**6**

PRODUCT   **MARKET**

REVENUE STREAMS COST STRUCTURE METRICS

REVENUE STREAMS

1) ASSET SALE

2) USAGE FEE

3) SUBSCRIPTION FEE

4) LENDING/RENTING/LEASING

5) LICENSING

6) INTERMEDIATION

7) ADVERTISING

X-Selling

Sell products from partners.

Up-Selling

1 month free if you subscribe for a y

Describe cost structure

Direct Costs	per unit
Product/Service 1	0
Product/Service 2	0
Product/Service 3	0

Indirect Costs	yearly
Company registration	0
Transportation	0
Travel	0
Office	0
Net Salaries	0
Salary overhead*	0
Legal costs	0
Insurance	0
Marketing	0
Bank Fees	0
Others	0

WHAT CAPITAL DO YOU NEED?

Long-term assets purchases
+ First Year Direct + Indirect costs

Long-term Assets purchases	Year 1
Machines	0
Patents and Intellectual property	0
Other	0

FUNDING

| Explore (concept) | Validate (pre-seed) | Build (seed/startup) | Launch (early stage) | Growth | Maturity |

Lean Costs
Self-funding
Bootstrapping

Self-funding
Bootstrapping
Friends/Family
Govt. Grants

Crowd funds
Angel funds
Seed VCs

Crowd funds
Angel funds
VC Rounds

VC Rounds

Bank Funds
IPO Investors

Profit
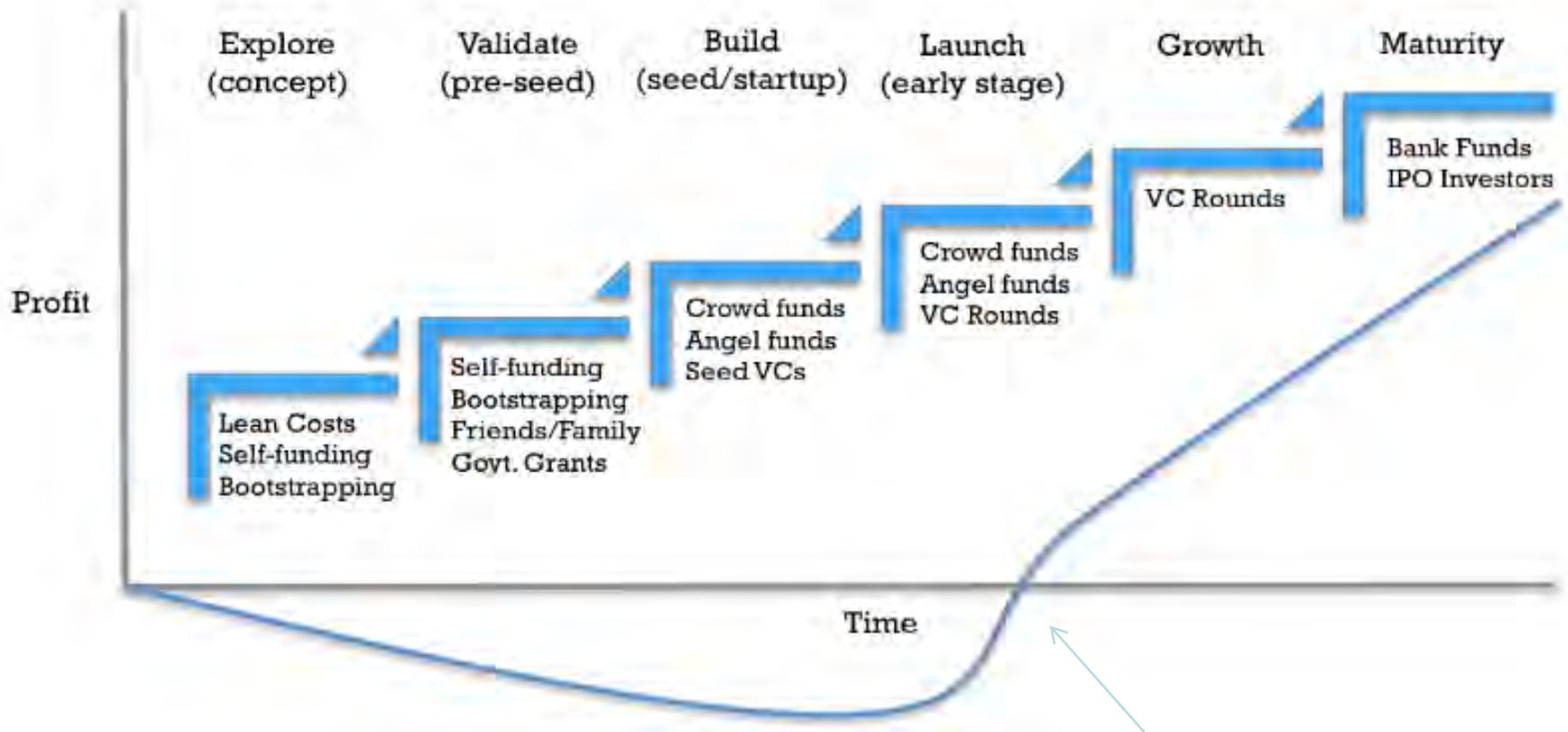
Time

BREAK-EVEN
Time? Sales?

COST STRUCTURE

1) Fixed and Variable costs

   -Fixed if they are the same despite the volumen of goods or services provided.
   - Production, Sales and Financial.
   - Economies of Scale and Scope.

2) Define main cost

It is usually OPEX, especially salaries.

Product

- You sell ownership of something
- Margin/Product, Products/Year

Margin/Year <u>Product</u>
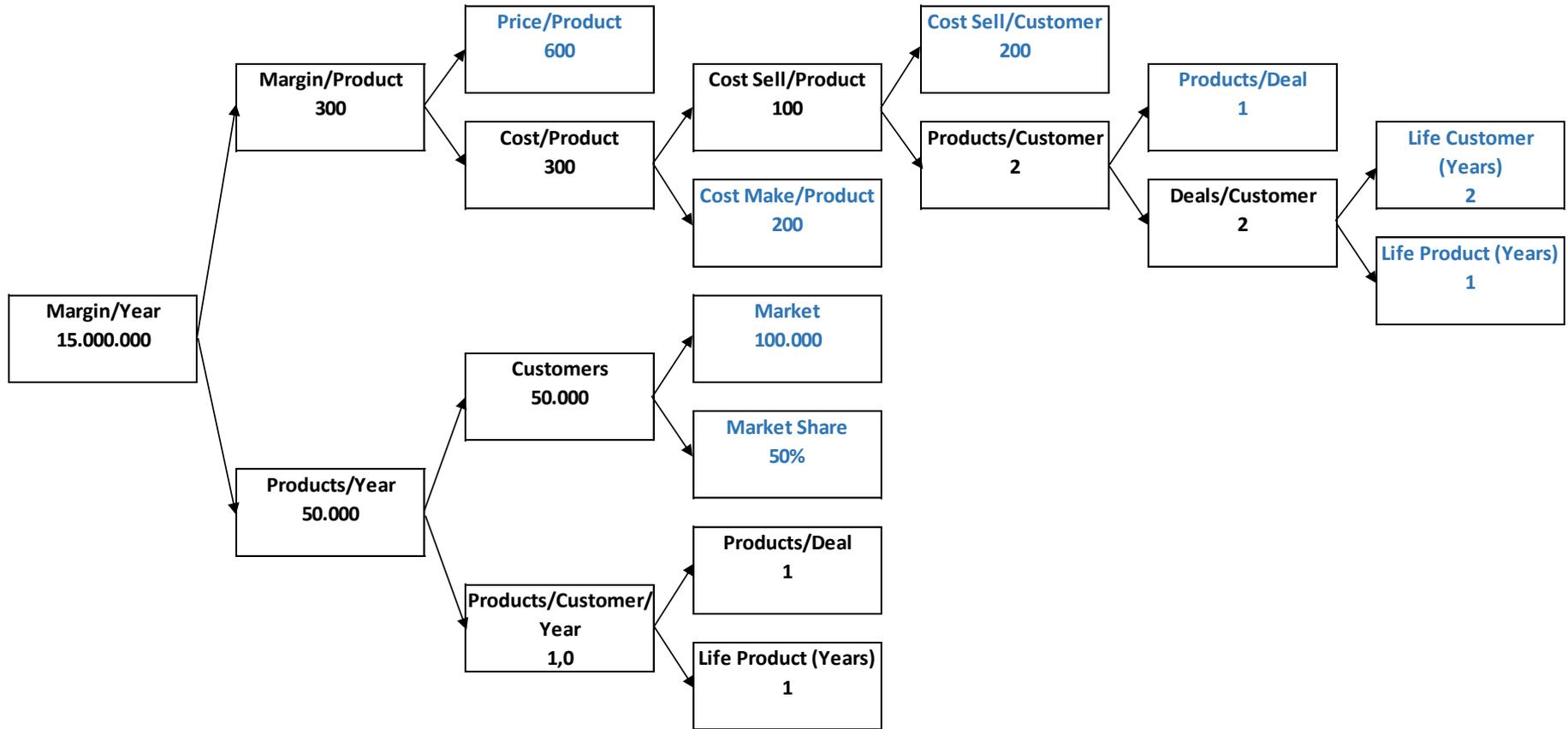
Key Value Drivers
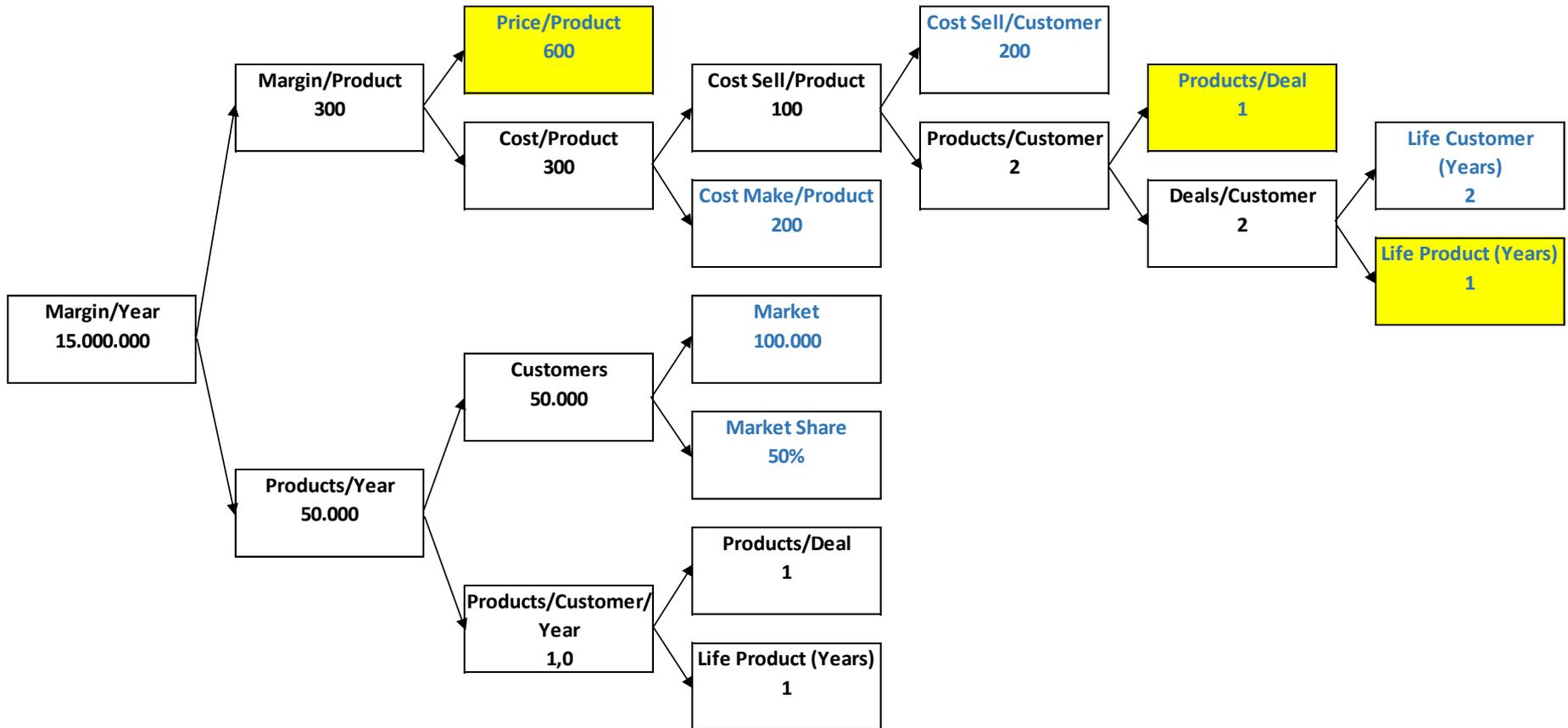
Facts/Assumptions
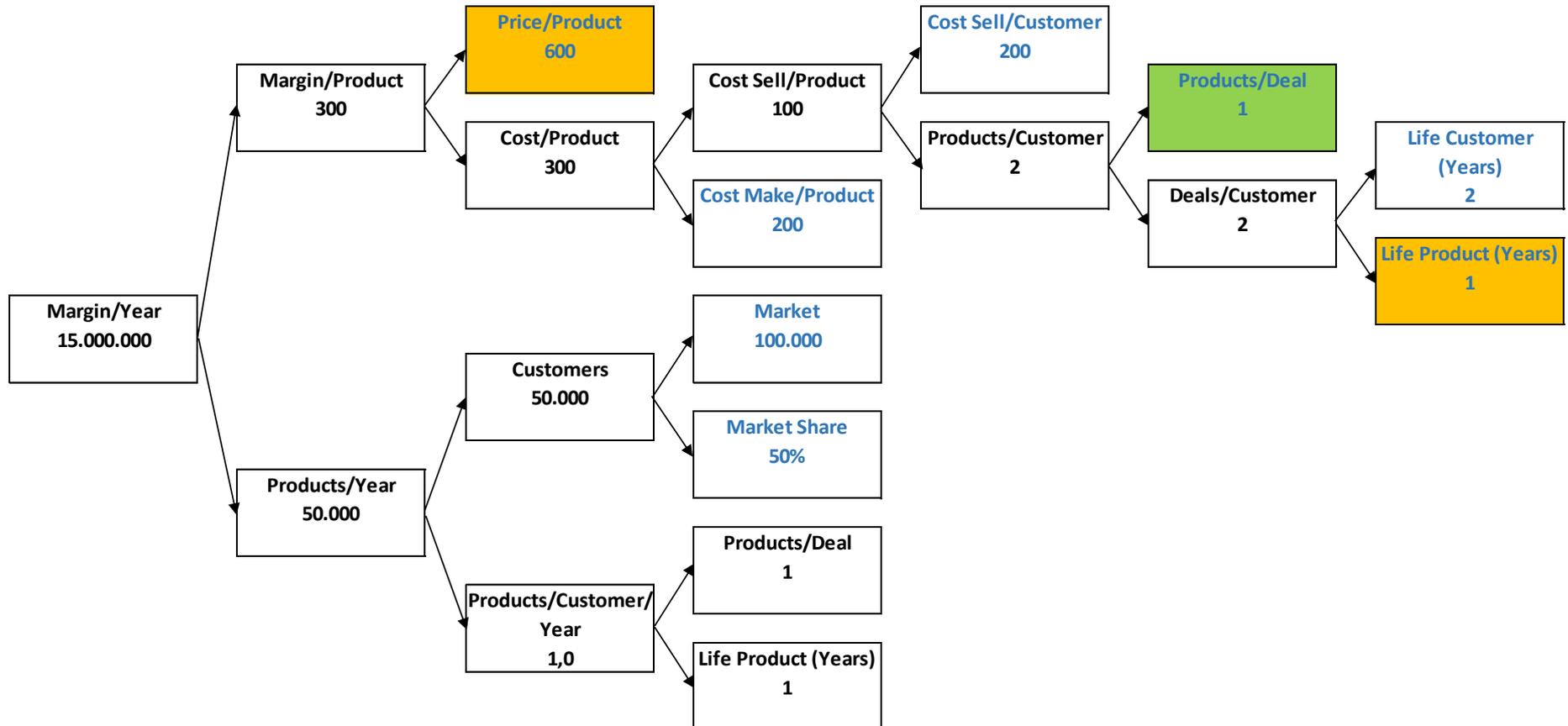
Service

- You sell use of something or someone for a certain period: hour, day, month, year, etc.

- Margin/Customer/Year, # Customers
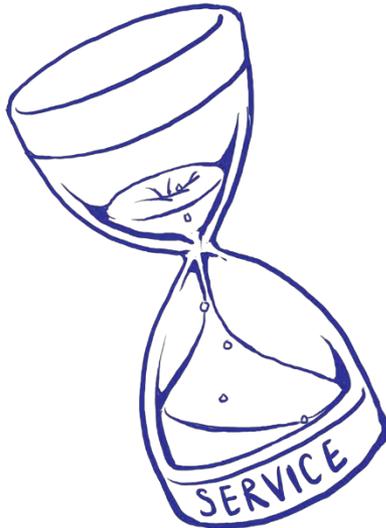
Margin/Year Service
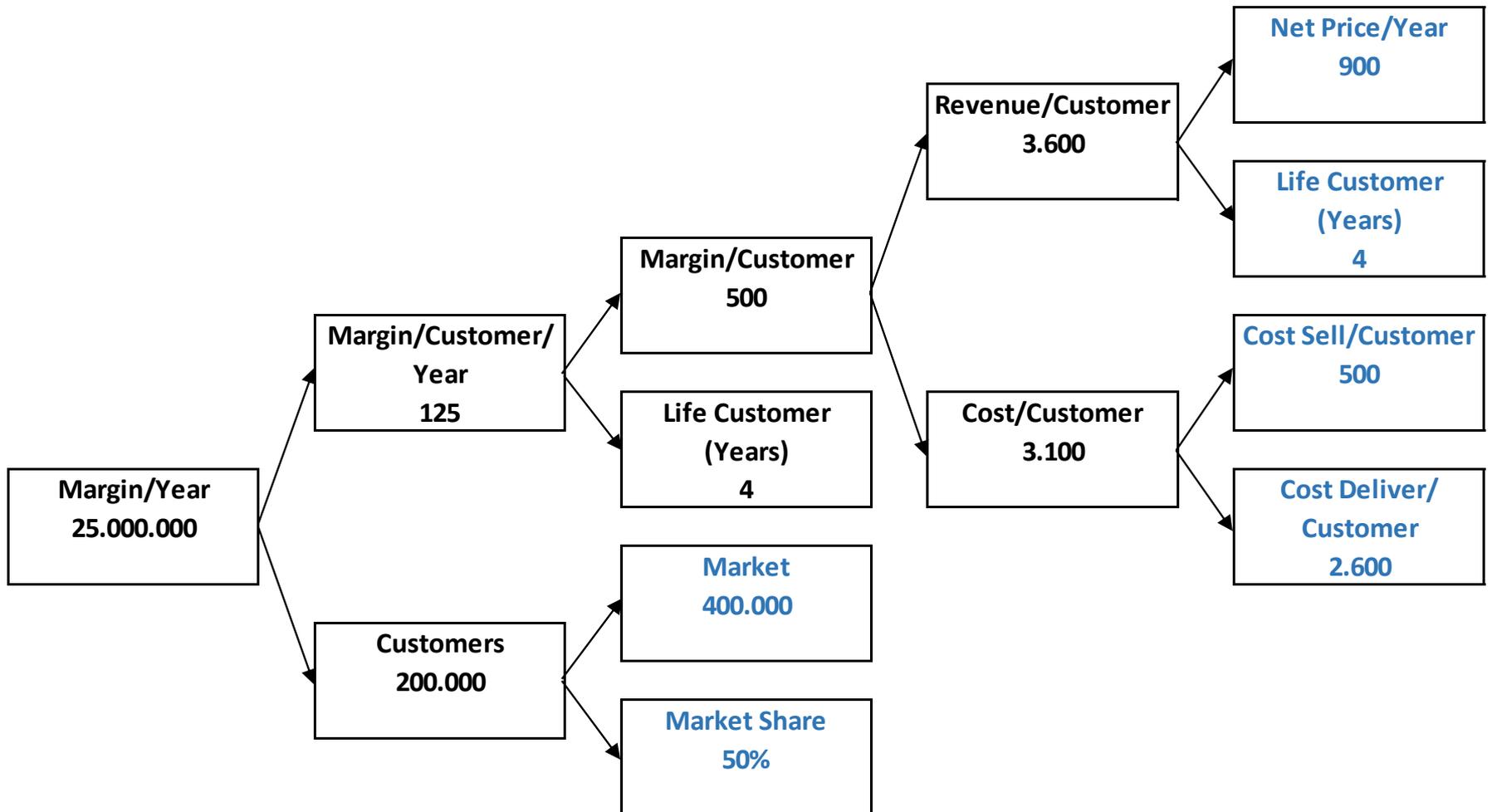
Exercise

1. Draft your Financial Tree
2. Identify Key Drivers
3. Indicate Facts or Assumptions

PIRATE METRICS

ACQUISITION	How do users find you?
ACTIVATION	Do users have a great first experience?
RETENTION	Do users come back?
REVENUE	How do you make money?
REFERRAL	Do users tell others?

PIRATE METRICS: Dashboard

Category	User Status	Conv %	Est. Value
Acquisition	**Visit Site** (or landing page, or external widget)	100%	$.01
Acquisition	**Doesn't Abandon** (views 2+ pages, stays 10+ sec, 2+ clicks)	70%	$.05
Activation	**Happy 1st Visit** (views X pages, stays Y sec, Z clicks)	30%	$.25
Activation	**Email/Blog/RSS/Widget Signup** (anything that could lead to repeat visit)	5%	$1
Activation	**Acct Signup** (includes profile data)	2%	$3
Retention	**Email Open / RSS view -> Clickthru**	3%	$2
Retention	**Repeat Visitor** (3+ visits in first 30 days)	2%	$5
Referral	**Refer 1+ users who visit site**	2%	$3
Referral	**Refer 1+ users who activate**	1%	$10
Revenue	**User generates minimum revenue**	2%	$5
Revenue	**User generates break-even revenue**	1%	$25

LEAN CANVAS – Ash Maurya

PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
- No companies specialized in this service. *- High price.* **2** *+ alternatives Sailors (club), Marina Estrella,* **Tramontana...**	**-Exclusively cleaning services.** **- Low price.** **4** **KEY METRICS** *Number of basic vs Premium customers Goal:* *Revenues 1M€ / year* **8**	*The best cleaning service, at the lowest price (30% less).* **3** *HIGH-LEVEL CONCEPT Eulen, but for boats.*	**9** **CHANNELS** **-Brochures tied to the boats.** **-Word of mourh.** **-Maintenance companies.** **5**	*Ship owners* **1** *+ early adopters* *- New owners.* *-People not happy with current service.*

COST STRUCTURE
FIXED:
- *Employees: 1100 euros gross. (8 boats / days) x 50 employees*
- *Marketing and brochures (800 euros / month)*

VARIABLES:
- *Cleaning products (compran 2 soaps pallets per month).*

7

REVENUE STREAMS

Suscription: **~40€ x 2** *days/month*
Up-selling: 1 free month per year.
1 free month per additional customer.

6

PRODUCT   **MARKET**

COMPETITITVE ADVANTAGE

How will you protect its uniqueness?

Is it possible to get a patent for your product?

(DM/70577) 1. Packing for pizza-slice; 2. Box for pizza-slice
part de pizza

Enregistrements internationaux /
International Registrations /
Registros internacionales

(11) Registration number
DM/070577
(15) Date of the international registration
05.08.2008
(18) Expected expiration date of the registration/renewal
05.08.2013
(22) Filing date
05.08.2008
(73) Name of holder
GRECU ALEXANDRI

1.1 1.2 1.3

2
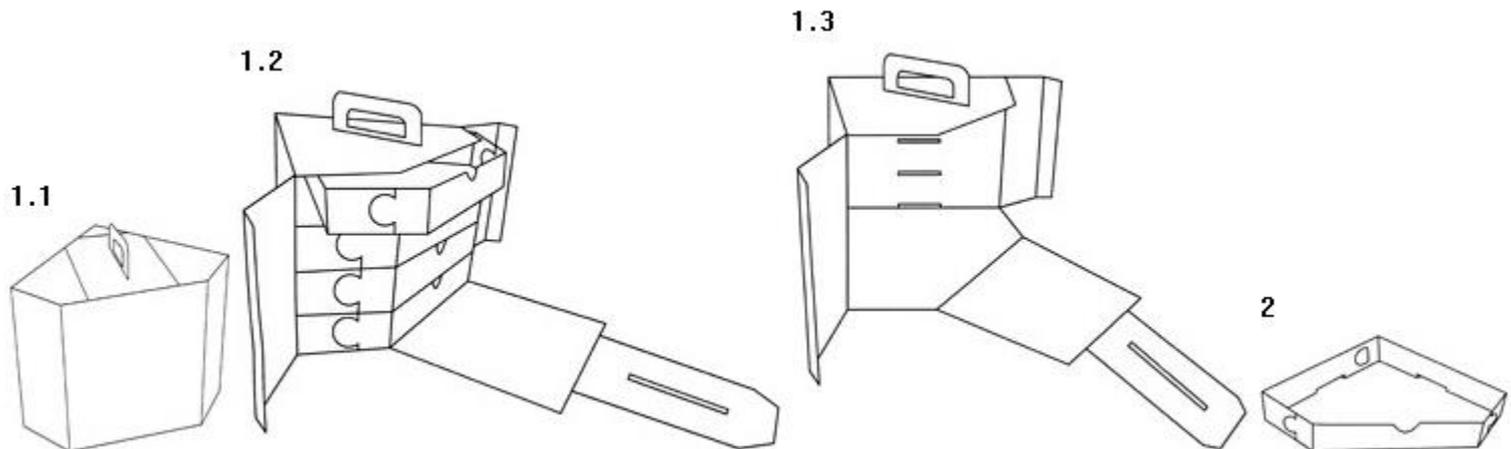
How will you protect its uniqueness?

Do you have anything difficult to copy?

Competitive advantage

CATEGORÍAS

Novedades

Top Ventas

Promociones

Segunda Mano

Juegos de Tablero

Juegos de Cartas

Juegos para Niños

Juegos de Importación

Juegos de Dados

Expansiones de juegos

Juegos de Rol

Suplementos de Rol

Libros y Revistas

Accesorios

Torneos

Géneros

Marcas

PROMOCIONES

JUEGOS EN

STAR WARS REBELLION (CASTELLANO)

Vive la Guerra Civil Galáctica como nunca antes la has vivido. En el juego de mesa **Star Wars Rebellion,** controlarás por completo **al Imperio Galáctico o a la incipiente Alianza Rebelde.** Con **más de 150 miniaturas de plástico y dos tableros de juego representando los treinta y dos sistemas más importantes de la galaxia,** Rebellion es tan grande como el universo de Star Wars merece ser.

Cantidad 1

Disponibilidad: 48 HORAS

87,96 €

Añadir al carrito

Pedir informacion

OTROS PRODUCTOS DE LA MISMA CATEGORÍA:

Carcassonne Edición Invierno

King Of Tokyo 2016

Martinique
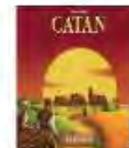
Los colonos de Catán (edición 2015)

Ora Et Labora

Catán: Los Colonos de América

Catán: Los Colonos de Euro

Competitive Advantage

- Customer lock-in
- Long-term agreements
  - Suppliers, customers, distributors
- Regulation
- Branding
- Intellectual property
  - Patents, trademarks, copyrights, trade secrets

Barriers to Entry

- Someone else with ample funds cannot enter your market because…

Describe your key resources

INTELLECTUAL

- Brands
- Propietary knowledge
- Patents
- Copyrights
- Partnerships
- Customer databases

Describe your key resources

PHYSICAL

- Manufacturing facilities
- Buildings
- Vehicles
- Machines
- Point-of-sales
- Distribution networks

Describe your key activities

- Design the product
- Make the product
- Deliver the product
- Solve problems
- Marketing
- Other logistics

In which activities are you focused on?
Which activities are going to be done by partners? Why?

LEAN CANVAS – Ash Maurya

PROBLEM

- No companies specialized in this service.
- High price.
- Customers do not want to think about maintenance.

2

+ alternatives Sailors (club), Marina Estrella, Tramontana...

SOLUTION

-Exclusively cleaning services.
- Low price.
-Database with maintenance companies.

4

KEY METRICS

Number of basic vs Premium customers
Goal:
Revenues 1M€ / year

8

UNIQUE VALUE PROPOSITION

The best cleaning service, at the lowest price (30% less).

3

HIGH-LEVEL CONCEPT
Eulen, but for boats.

UNFAIR ADVANTAGE

- Cleaning processes.
- Customer agreements..
- Own cleaning service.

9

CHANNELS

-Brochures tied to the boats.
-Word of mourh.
-Maintenance companies.

5

CUSTOMER SEGMENTS

Ship owners
Rental companies

1

+ early adopters

- New owners.
-People not happy with current service.

COST STRUCTURE

FIXED:
- Employees: 1100 euros gross. (8 boats / days) x 50 employees
- Marketing and brochures (800 euros / month)
VARIABLES:
- Cleaning products (compran 2 soaps pallets per month).

7

REVENUE STREAMS

Suscription: ~40€ x 2 days/month
Up-selling: 1 free month per year.
1 free month per additional customer.
Comnsision for maintenance companies.

6

PRODUCT   **MARKET**

MVPs

First rule for startups

> "Life's too short to build something nobody wants."

Ash Maurya
— Running Lean

A **Startup** **looks** **for** a business model

A **Company** **executes** a business model

Validate your Assumptions

Assumptions

Facts

354
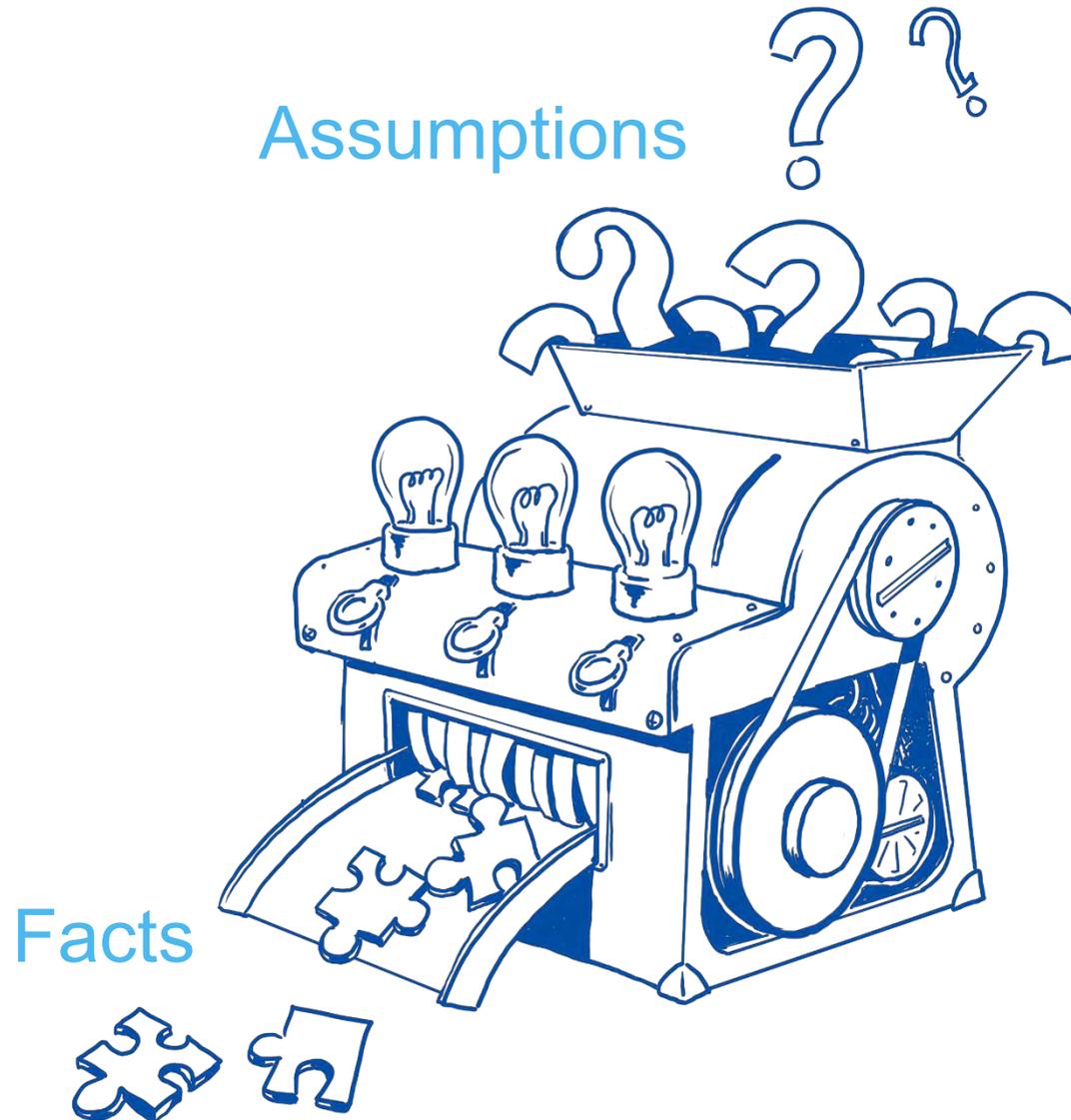
Our startup is our lab!

MVPs

> A **Minimum Viable Product** is that version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort.

Eric Ries
– Lean Startup

MVPs

A **Minimum Viable Product** is:

The **smallest** possible experiment to:

Prove the **maximum** set of hypotheses about your business model.

VALIDATED LEARNING!!!

Learning loop
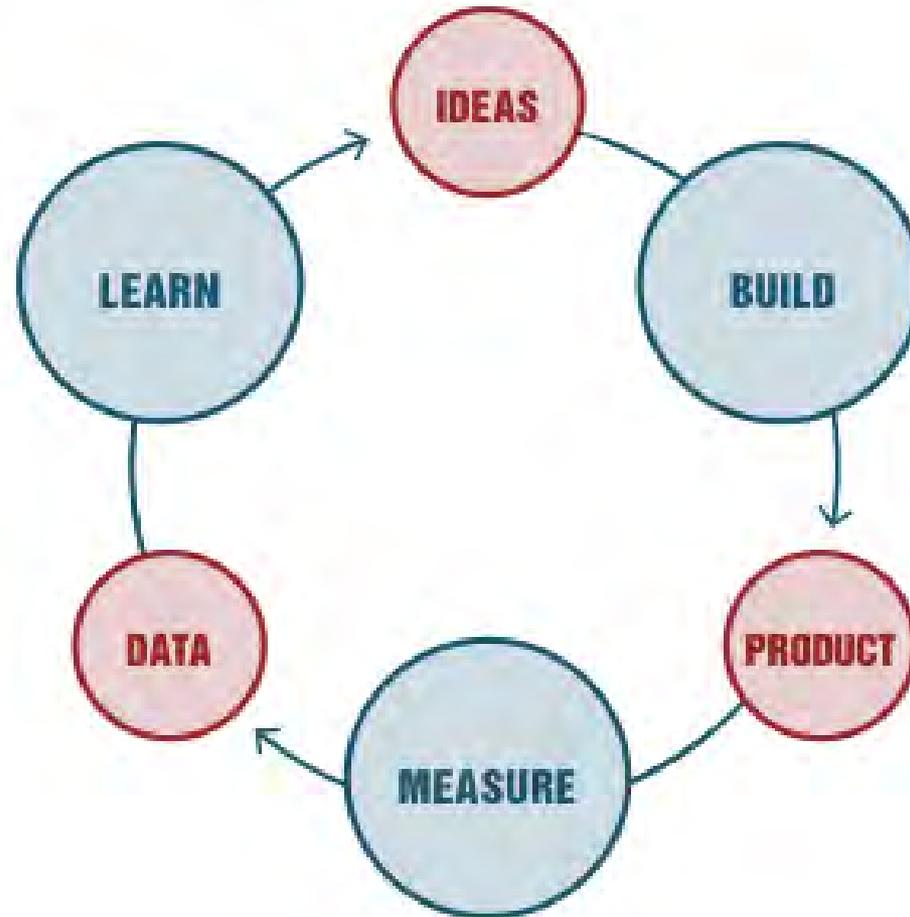
Learning loop through time
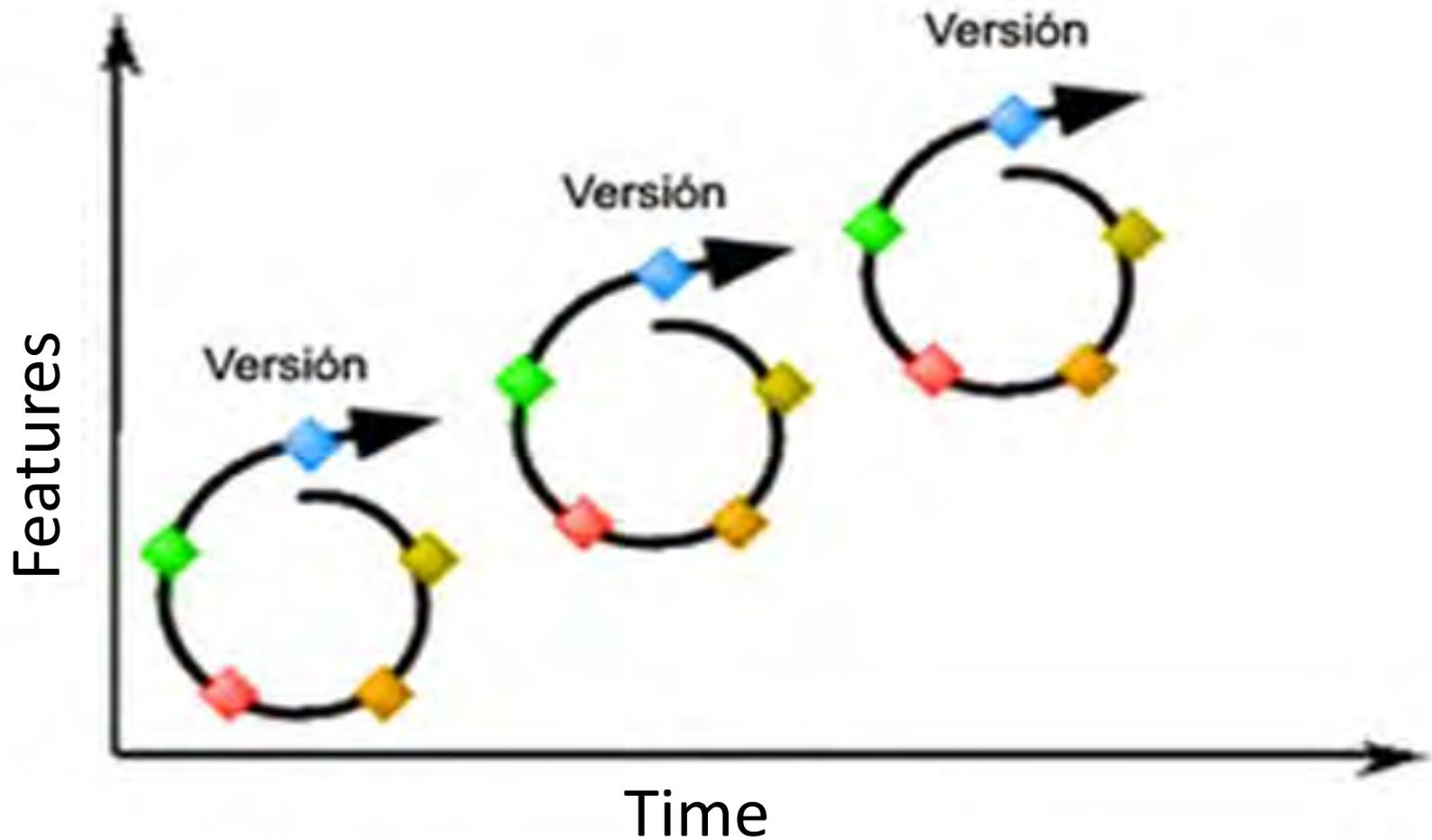
"MVP"

HOW TO BUILD A MINIMUM VIABLE PRODUCT

NOT LIKE THIS

1   2   3   4

LIKE THIS

1   2   3   4   5

image by blog.foxmonkeys.com   original idea: spotify product team

Why MVPs?

- Because I need to validate my assumptions in the real world, with real customers.

- Because I need to know what is really important.

- Because I need to go faster than my cash burn rate.

Choice your MVP

1. Customer interviews
2. Landing pages
3. Test A/B
4. Advertising campaign
5. Crowdfunding campaign "Sell first, build later!"
6. Explainer video
7. Wizard of Oz "Fake it until you make it"
8. Blogs
9. Pilots
10. Paper and Digital prototypes

& much more

Customer interviews

Everybody Lies!

THE MOM TEST

How to talk to customers & learn if your business is a good idea when everyone is lying to you.

Rob Fitzpatrick
a foundercentric.com book
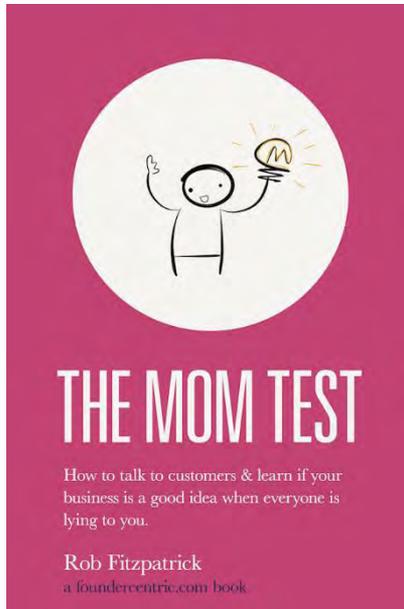
Commitment is the best signal

1. Time
2. Money
3. Reputation

(People tell us what we want to hear,
   if we ask the wrong questions)

Landing Page

THE ANATOMY OF A PERFECT LANDING PAGE
HOW DESIGN TRANSLATES TO USERS

TEN KEY LANDING PAGE FEATURES THAT DRAW IN USERS

NICELANDINGPAGE.COM

N NICELANDINGPAGE.COM

7 → LINK | LINK | LINK | LINK | LINK

1 → **A NICE LOOKING HEADLINE** 2

A SECONDARY HEADLINE

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderitculpa qui officia deserunt mollit anim id est laborum. 3

8

- Lorem ipsum dolor sit amet, consectetur adipisicing elit.
- Sed do eiusmod tempor incididunt ut labore et dolore.
- Ut enim ad minim veniam, quis nostrud exercitation.

5

4

DO IT NOW! [click here!] ← 6

A TESTIMONIAL!

Lorem ipsum dolor sit amet, sectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniamdolor in reprehenderitculpa qui officia deserunt mollit anim.

✓ SECURE

MORE INFORMATION

Lorem ipsum dolor sit amet, sectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniamdolor in reprehenderitculpa qui officia deserunt mollit anim.

9

Landing Page

WHAT TYPES OF COLORS ARE GOOD FOR DIFFERENT SITES?

Colors that will entice a viewer will vary among different sites. Applying the right colors might draw in traffic, bore viewers, or scare some away. They set the mood of a landing page and influence viewer's actions.

YELLOW
- Optimistic and youthful
- Often used to grab a viewer's attention

ORANGE
- Aggressiveness
- Used as a call-to-action and attention grabber

RED
- Energy
- Increases heart rate and creates urgency
- Often seen with clearance sales and references to food

PINK
- Romantic and feminine
- Used to market products and services for woman and young girls

BLUE
- Creates the sensation of trust and security
- Often used by banks and businesses

PURPLE
- Soothing and calm
- Often relates to beauty or anti-aging products and services

GREEN
- Associated with wealth
- The easiest color for the eye to process and used with finance or entertainment websites

BLACK
- Powerful and Sleek
- Seen as luxurious and sophisticated

Test A/B

Source: Smashing Magazine

Advertising campaign

Crowdfunding

Crowdfunding

Cerrado

Closca Bike Helmet - Safety, Functionality & Style

Most elegant and Convenient Foldable Bike Helmet. Red Dot Design Award 2015.

CLOSCA DESIGN
Valencia, España
Acerca de | Haz una pregunta

$79,939 USD fondos totales recaudados
281% financiado el July 25, 2015

Explainer videos
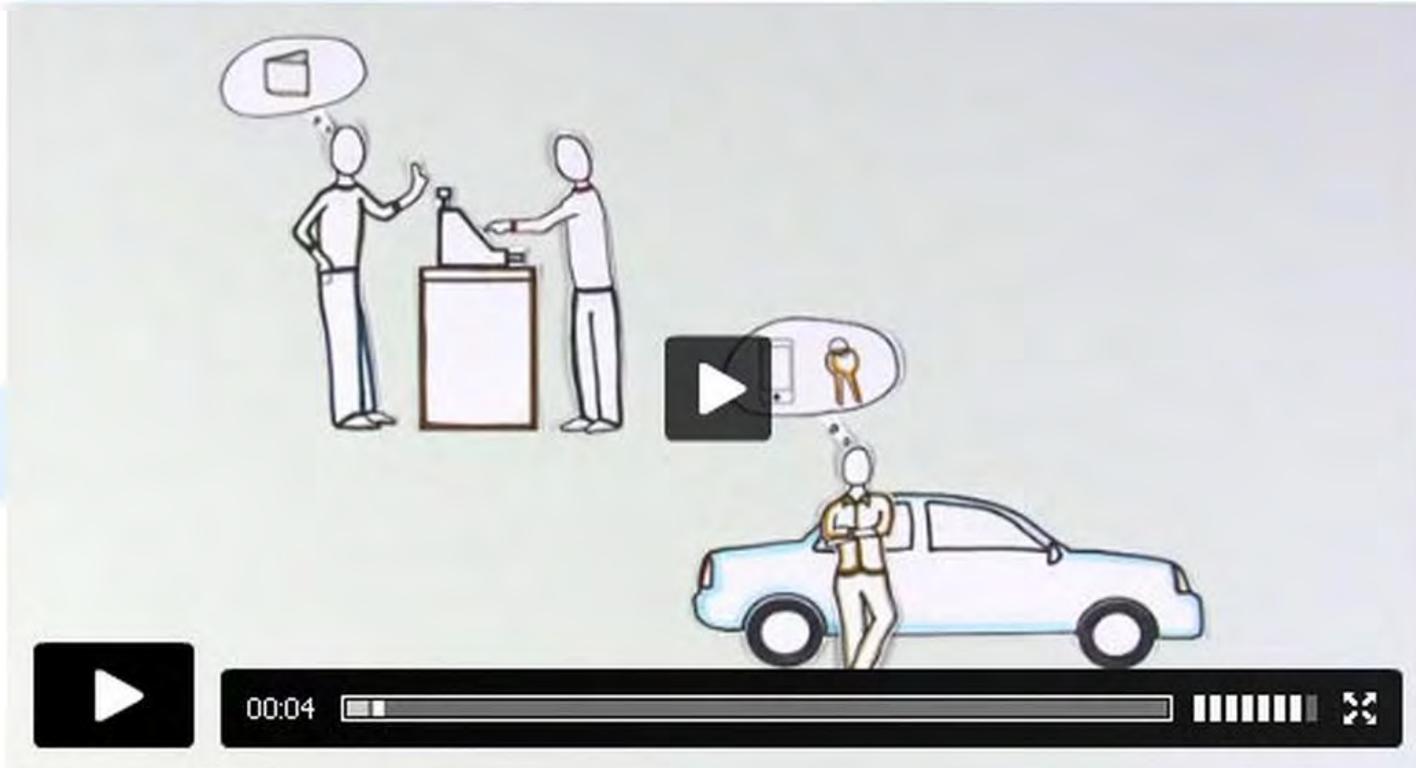
Explainer videos

Wizard of Oz

Blogs (for your potential customers)

Pilots

FOOD TRUCK

RESTAURANT

Paper and Digital Prototypes
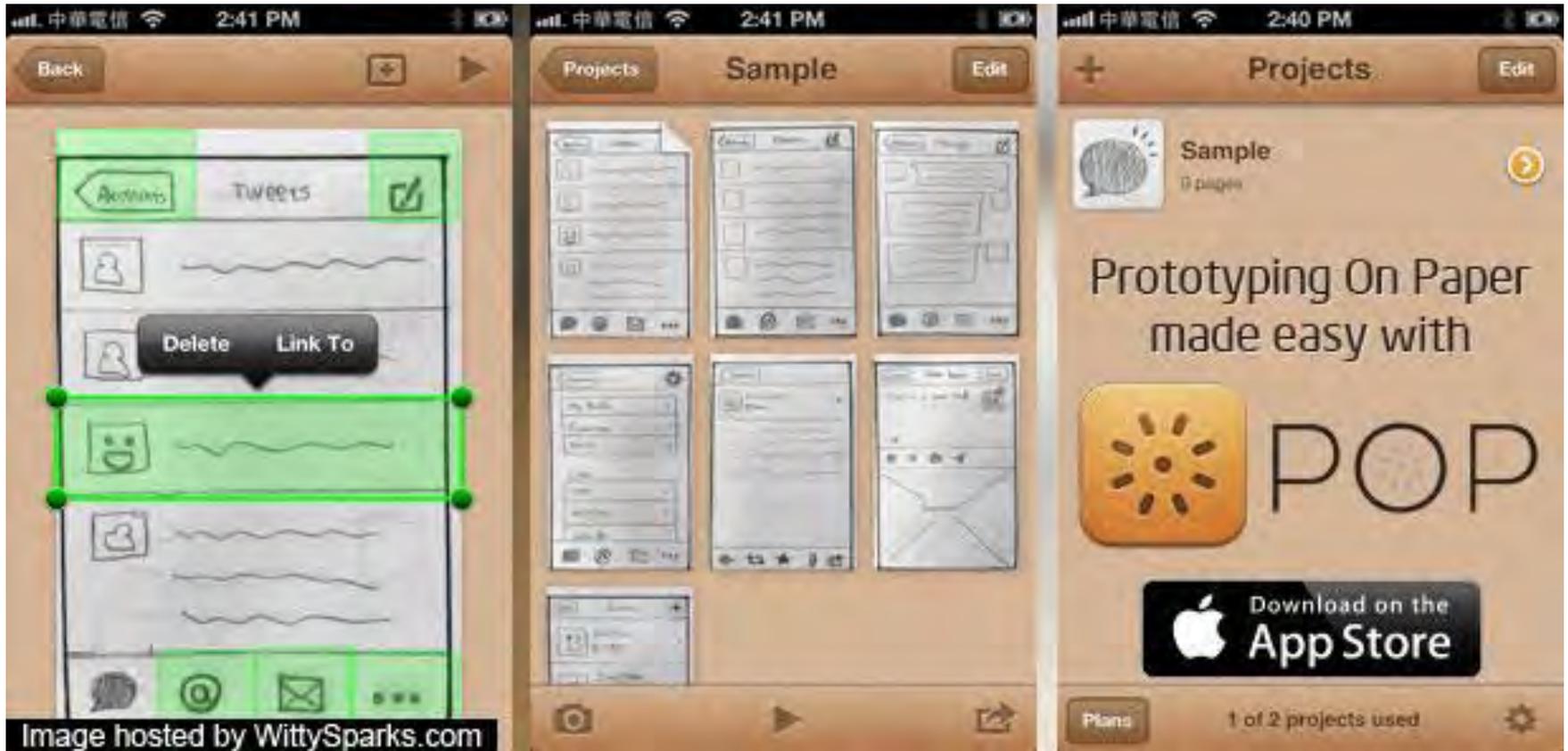
Choice your MVP

1. Customer interviews
2. Landing pages
3. Test A/B
4. Advertising campaign
5. Crowdfunding campaign "Sell first, build later!"
6. Explainer video
7. Wizard of Oz "Fake it until you make it"
8. Blogs
9. Pilots
10. Paper and Digital prototypes

& much more

VIDEO PROMOCIONAL INICIAL DE DROPOBOX

VIDEO

DROPBOX HOY
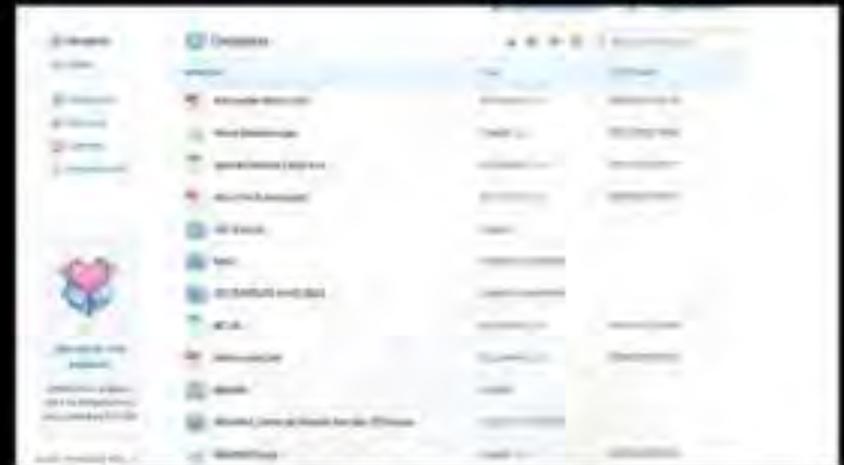
PRIMER PROTOTIPO DE AIRBNB EN 2009

AIRBNB HOY

LANDING PAGE
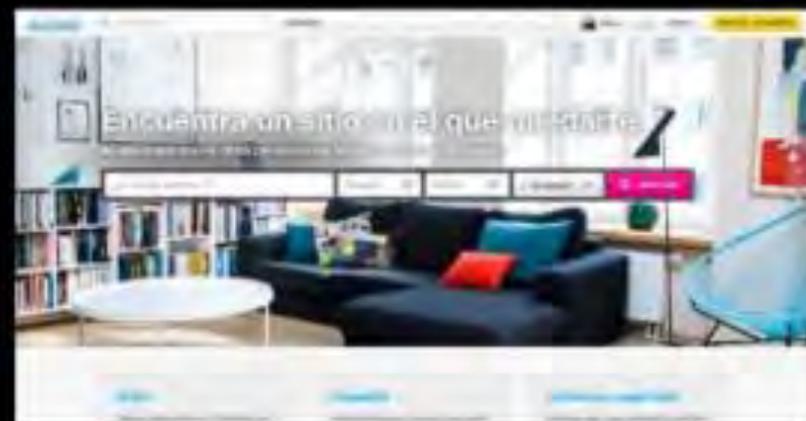
FOOD TRUCK DE COMIDA THAILANDESA

RESTAURANT

PROTOTIPO FUNCIONAL

PROTOTIPO DE ZAPPOS

ZAPPOS.COM

FUNDADORES DE PEBBLE ARMANDO RELOJES

PEBBLE WATCHES

https://www.kickstarter.com/projects/597507018/pebble-e-paper-watch-for-iphone-and-android/description

VALIDATING BUSINESS MODELS

A Business Model chain:
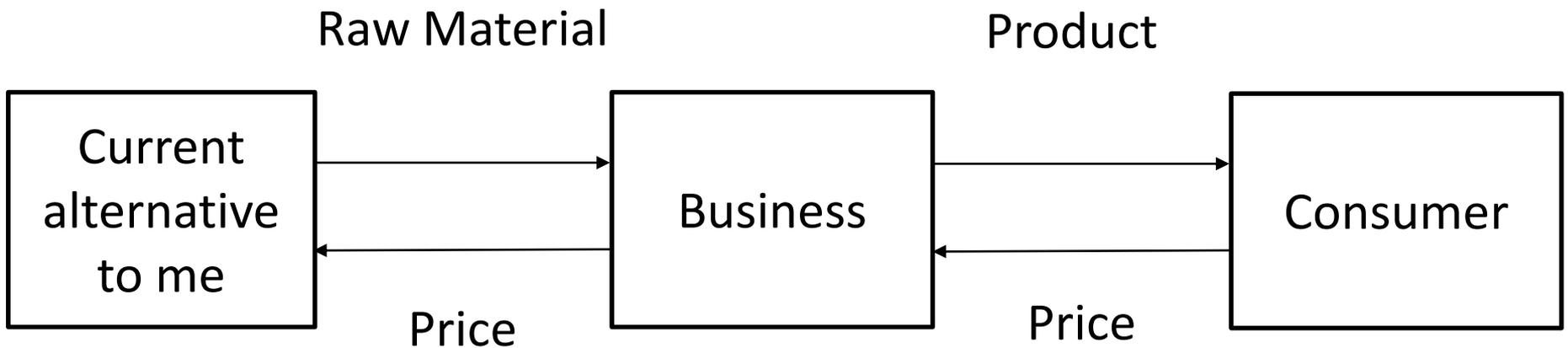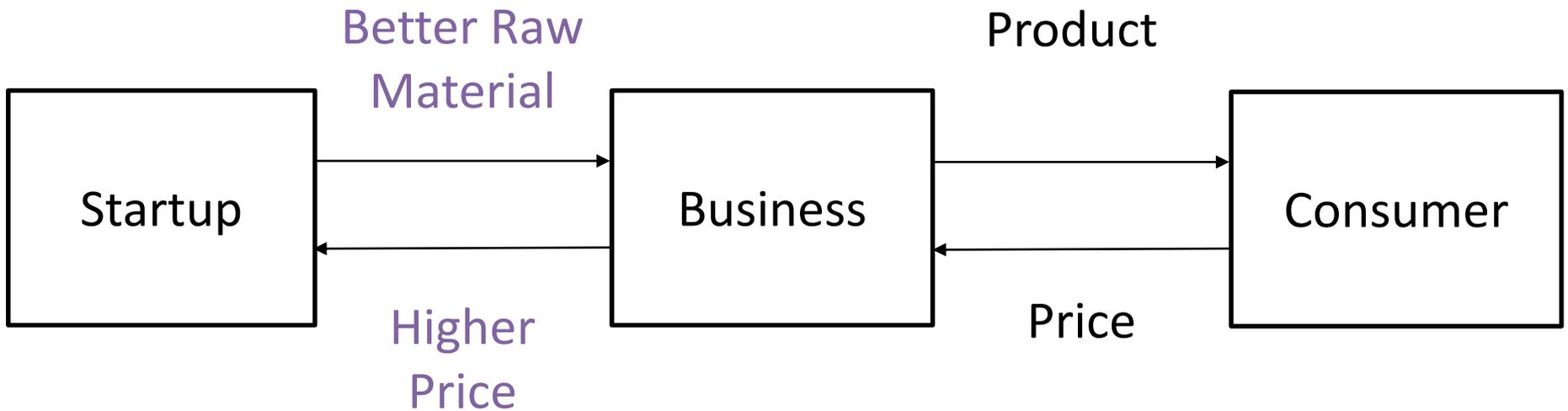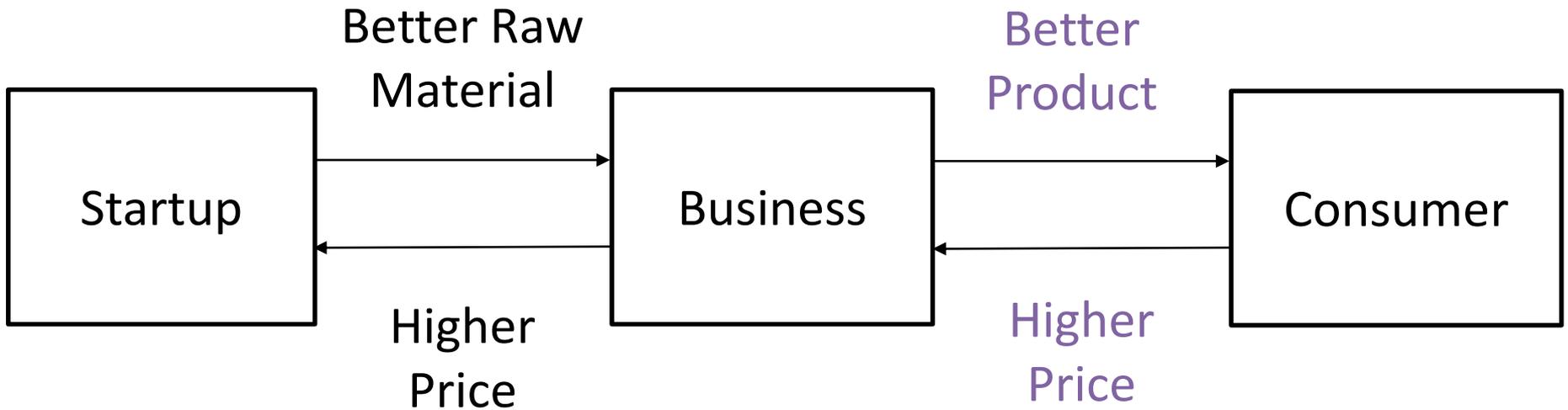
Raw Material

Product

```
┌──────────────┐         ┌──────────────┐         ┌──────────────┐
│   Current    │  ─────▶ │              │  ─────▶ │              │
│ alternative  │         │   Business   │         │   Consumer   │
│    to me     │  ◀───── │              │  ◀───── │              │
└──────────────┘         └──────────────┘         └──────────────┘
```

Price

Price
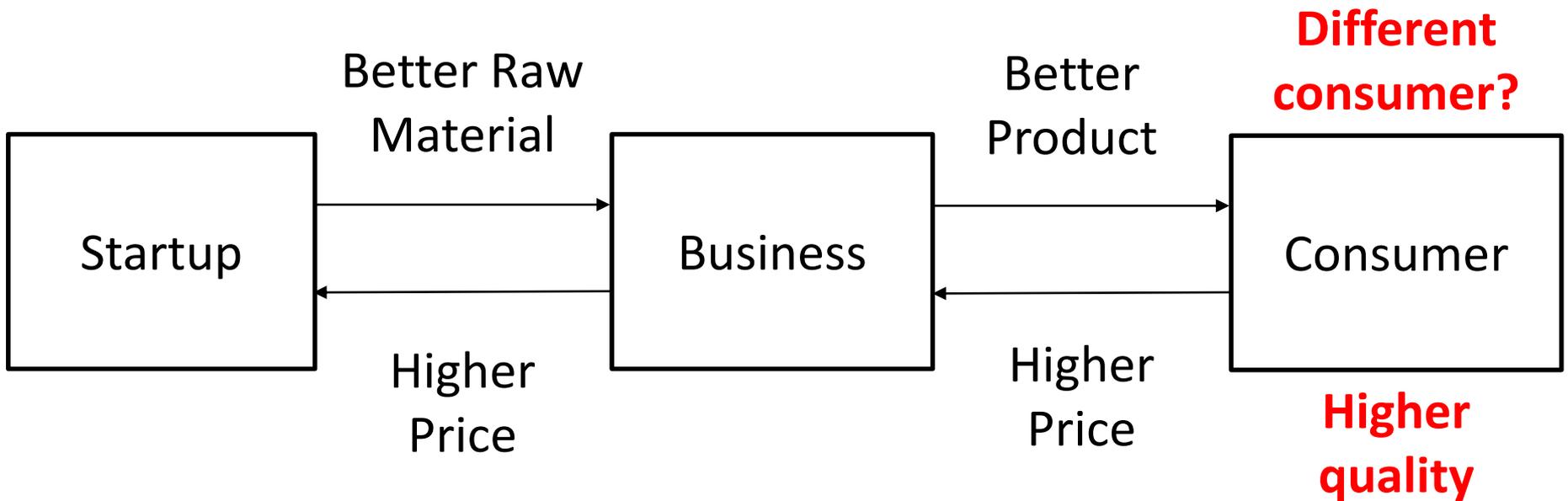
My Business Model chain:

My Business Model chain:

My Business Model chain:

My Business Model chain:
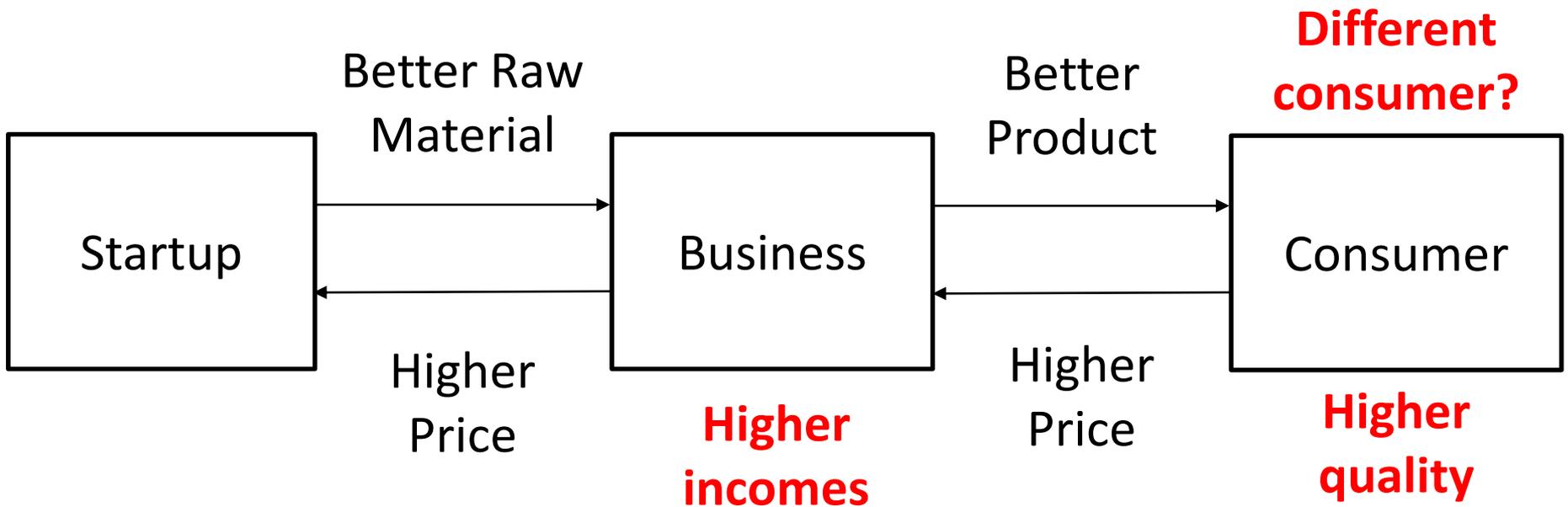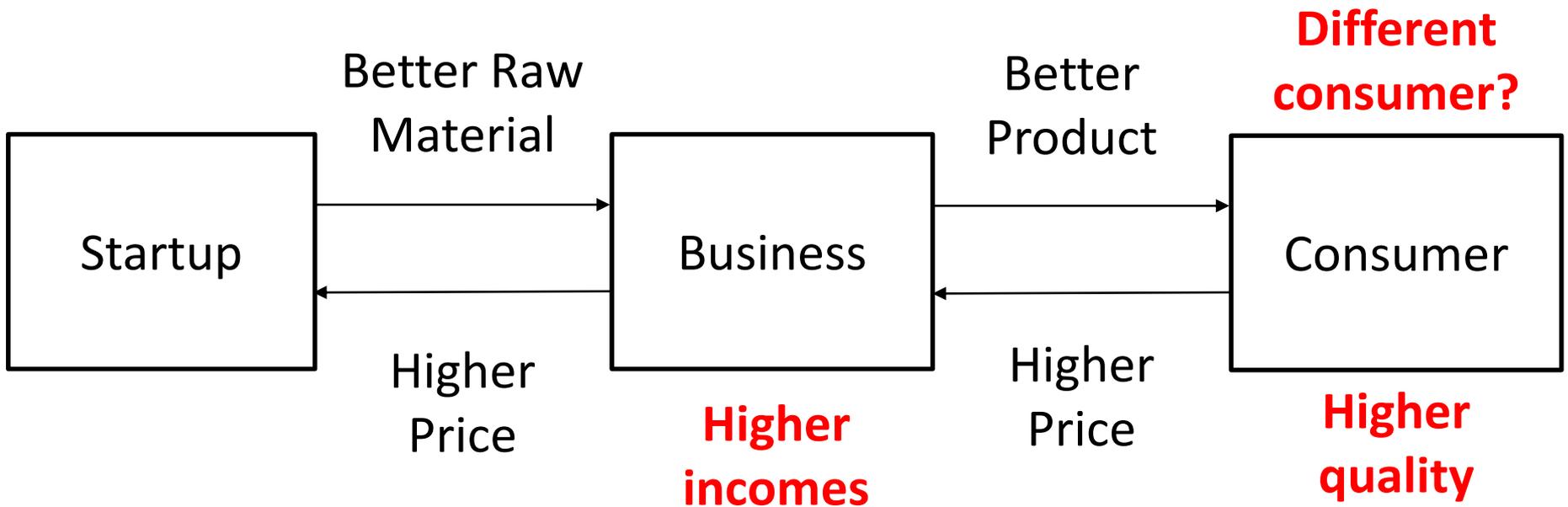
My Goal: Validate our Assumptions

Assumptions
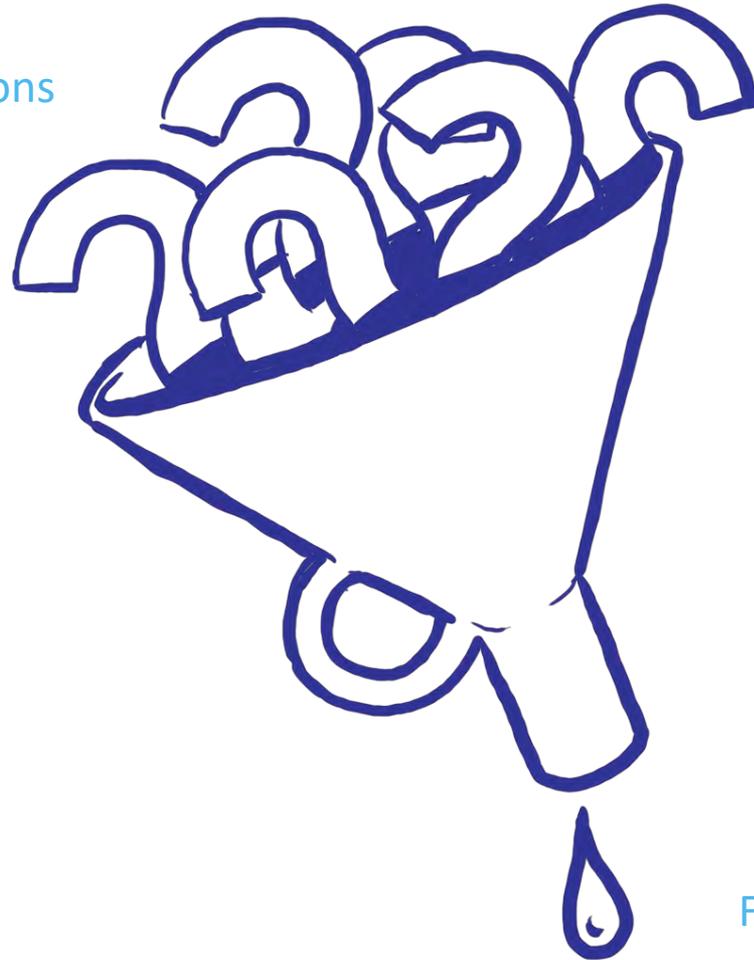
Facts

Not **everyone** is your customer

Innovators

Early adopters

Early majority

Late majority

Laggards

G.A. Moore, *Crossing the Chasm*
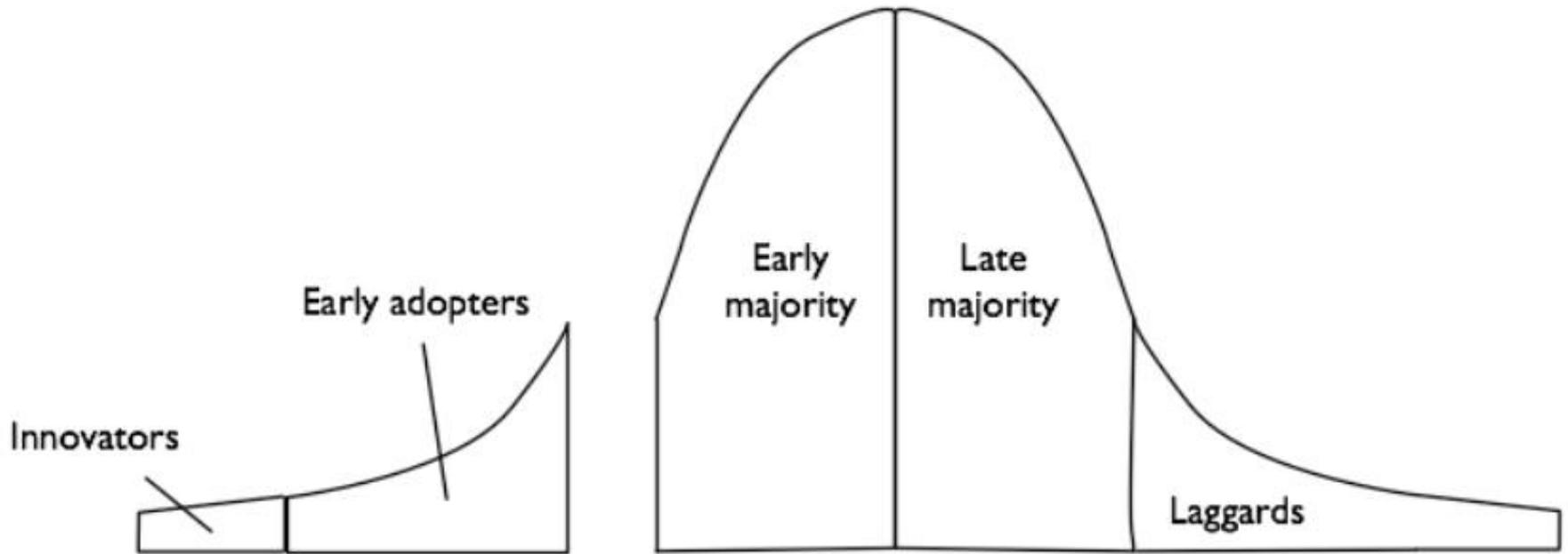
Focus on Early adopters

- Has a **problem**
- Is **aware** of having a problem
- Has been **actively looking** for a solution
- Has **put together** a **solution** out of piece parts
- **Has** or can acquire a **budget**

Interviewing Customers is a Special Kind of Torture

It's like...

Interviewing Customers is a Special Kind of Torture

Talk to a stranger.

That stranger is immensely busy...   and hates being sold things.

That stranger will likely destroy your vision for a company.

Mom, I have an idea for a business – can I run it by you?

Of course, dear!

You like your iPad, right? You use it a lot?

Sure! It's great!

Okay, so would you ever buy an app which was like a cookbook for your iPad?

Hmmmm

And it only costs $40! That's cheaper than those hardcovers on your shelve!

I love cookbooks! Sounds nice!
Does it come with vegan recipes?
Or something special for Xmas?

But actually...

Okay, so would you ever buy an an... ...book for

Hmmm

Well, I have plenty of cookbooks. I don't need a computer in the kitchen – It might get dirty! App? I never bought an app. Aren't they supposed to be $1? Do you need your credit card for that?

Let me try to change the subject!

on

I love cook
Does it come wi...
Or something special for Xmas?

Quiz

Good Question ☐

Bad Question ☐

FIRST RULE FOR VALIDATING YOUR IDEA

Do not talk about your idea.
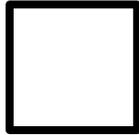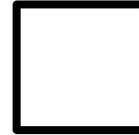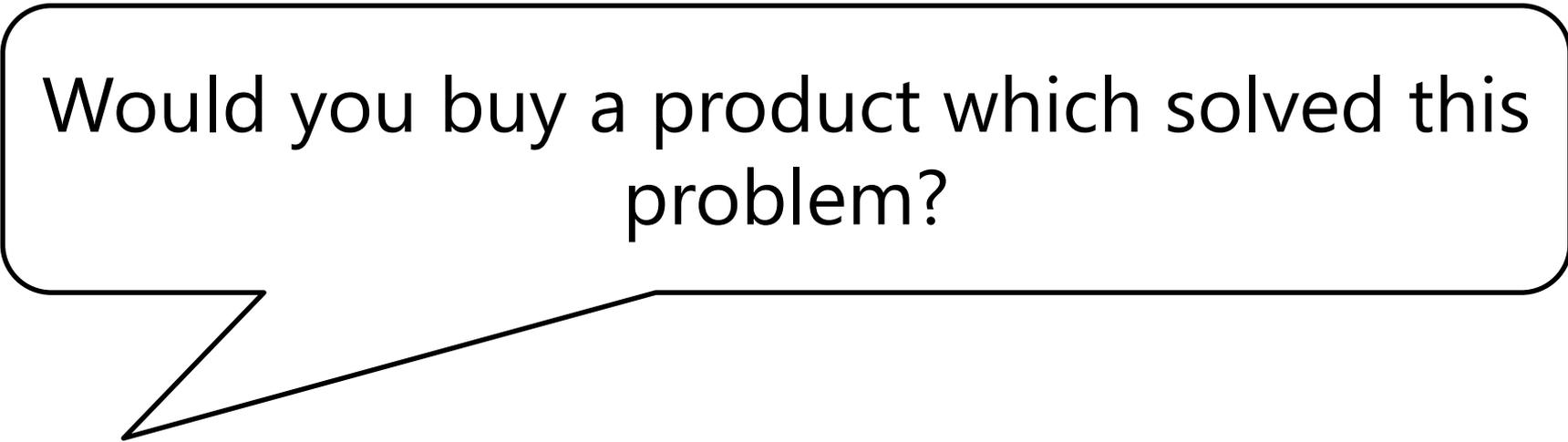
Would you buy a product which solved this problem?

How much would you pay for this?

SECOND RULE FOR VALIDATING YOUR IDEA

Do not talk about the future.

WOULD

- •"If we built a product that solved X problem, **would** you use it?"
- •"How much **would** you pay for something that did X?"
- •"**Would** you like your existing solution better if it did X?"

AMATEURS

LET ME SHOW YOU HOW TO DO IT

My Customer Interview Script

1. What's the hardest part about ___[problem context]___?

2. Can you tell me about the last time that happened?

3. Why was that hard?

4. What, if anything, have you done to solve that problem?

5. What don't you love about the solutions you've tried?

Question #1: What's the hardest part about ___[problem context]___?

Don't be so specific that you tell them about the problem *you* want to solve:

> What's the hardest part about finding a good vegetarian restaurant in a new city?

But you also don't want to be so broad that you're inviting discussion about a range of problems you have no interest in solving:

> What's the hardest part about being a vegetarian?

You want to ask about a *significant problem context* :

> What's the hardest part about eating out as a vegetarian?

Question #1: What's the hardest part about ___[problem context]___?

Listen for: **The words they use to describe the problem.**

Question #1: What's the hardest part about ___[problem context]___?

You can discover new problems:

"The portions aren't large enough"

"I don't really trust that the things I order are meat-free"

"A yelp search for 'vegetarian' returns results like 'Joe's All American Steak House' with comments like, 'Don't bring your vegetarian friends here.'"

Question #1: What's the hardest part about ___[problem context]___?

Remember to Empathise:

"I've experienced exactly the same problems myself"

"You're not alone there. I've talk to several other people who have said the same thing."

"That makes sense"

Question #2: Can you tell me about the last time that happened?

- We ask stories because they enable us to dive deeper into paths we could never hypothesize "**inside the building.**"

- You'll learn 23x more from a story than you will a yes/no answer.

- **Phrases** and **jargon** you can turn into marketing copy.

Listen for: Have they tried to solve it in the last **6 months**? If not, **start over** asking about a different challenge.

Question #3: Why was that hard?

- Customers don't buy a what, they buy the why.

> ## Listen for:
> The **real** problem they're trying to solve.
> **Emotions** you can evoke in your marketing copy.

Question #4: What, if anything, have you done to solve that problem?

- If they aren't looking for solutions already, this isn't a big enough problem for us to solve.
- For someone to take a bet on us, a startup, an unknown entity, we must be solving a problem so pressing, customers are actively searching for solutions.

Listen for:
The **channels** you can use to find other customers like this one.

Question #5: What don't you love about the solutions you've tried?

- This is our Unique Value Proposition. We'll build something that solves our customer's problem, in a way that's better than their alternatives.
- It helps you quantify your value proposition.

Listen for:
This is how to differentiate your solution from the competition.

IN-VALIDATION!

- "Can you tell me about the last time you tried to find a good vegetarian restaurant in a new city?" – If the problem is not mentioned, you still can be direct with Q2!!!
- Put extra weight on their response to Question #4: "What, if anything, have you done to solve that problem?"

Is the right customer?
Is it better to focus on another problem?
Your hypothesis has been invalidated.
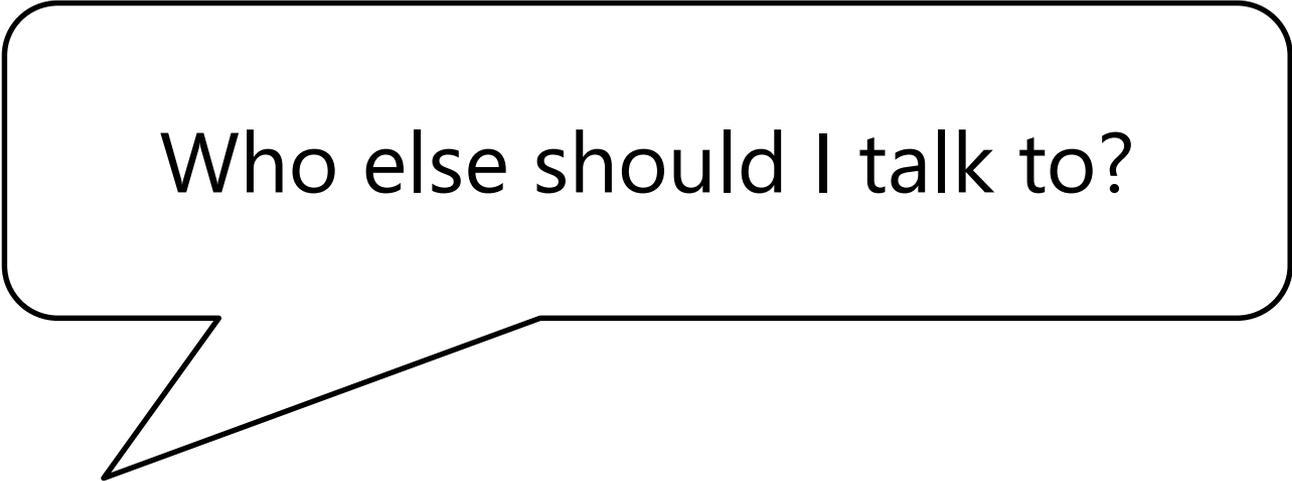
You are looking for **emotions**

- Frustration

- Excitement

- Things **they care about**

Ask about

- **Frequency** & **Details**
- **Current** solutions
- **Past** behaviour

Quiz

Did we make progress?

Good meeting outcome ☐

Bad meeting outcome ☐

⚠️ **They don't care!**

Compliments and stalling tactics

Compliments are not commitments

OK

⚠️ Warning!

Partial compliment
Is there a valid reason they cannot introduce you right now?

OK

Danger!

A promising signal, but people
can't predict
their own behaviour.

OK

Commitment is the best signal

1. Time
2. Money
3. Reputation
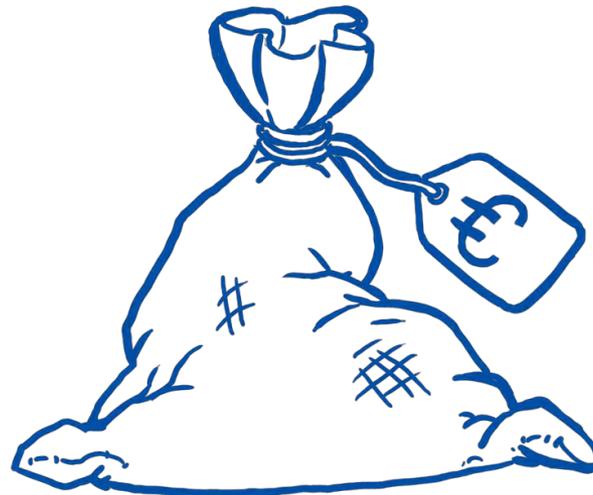
Interview Tips & Tricks

- Listen, don't talk

- Encourage, but don't influence

- Parrot back, or misrepresent to confirm

Compliments

are **not**

commitments

Interview **Tips** & **Tricks**

Know your **goals** and **questions** ahead of time!

Interview **Tips** & **Tricks**

- Be Sherlock, investigate:
  - If you hit a strong signal, ask around it

- Drill **down** into it, **Five Why's**, root cause analysis

Listen, **don't** talk

Encourage, but
don't influence

Parrot back, or

misrepresent to **confirm**

Where can I obtain contacts?

[Rapportive Hack](#)
[JigSaw](#) (now Connect at Data.com)
[LinkedIn](#)
[Mechanical Turk](#)
Kimono

Article: [Anybody that Knocks LinkedIn Doesn't Know How to Use It](#)

CHANNEL	EFFECTIVINESS
Postal shipping	Hahahaha
Mail	Low/Medium
Cold Call	Hahahaha
Cold call (pregunto por...)	Low
Cell Phone (reference)	Great
LinkedIn	Good / Very good
Other networks	---------
Personal meeting	Good / Very good

UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

Biblioteca y Documentación Científica

BETA
poli [Buscador]

👤 Invitado   ★ Mi Portal   🏛 Mi Biblioteca   🔒 Identificarse

🐦Vista clásica 🔍 Nueva búsqueda 📣 Nuevas adquisiciones 📰 Revistas-e A-Z 🗄 Bases de datos A-Z 🏷 Tags ? La biblioteca responde ⊕ Ayuda

Idioma: Español ⌄

Búsqueda Global   Catálogo   Biblioteca Digital   Bibliografía de asignaturas

| sabi | Biblioteca Digital UPV ⌄ | Buscar | Búsqueda Avanzada |

contiene las palabras ⌄   Todos los campos ⌄

Expandir mis resultados
☐ Incluir referencias sin el texto completo

Mostrar solo
Revistas Peer-reviewed (758)

Refinar Mis Resultados

Recurso electrónico
OneFile (GALE) (710)
SciVerse ScienceDirect (Elsevier) (415)
MEDLINE (NLM) (131)
Emerald Management eJournals (70)
Arts & Sciences (JSTOR) (47)
Muestra 15 más ⌄

Tipo de documento
Artículos (1.184)
Libros (95)

1.363 Resultados para **Biblioteca Digital UPV**   clasificar por: relevancia ⌄   1-10 Siguiente →

Mostrar solo Revistas Peer-reviewed (758)

☆ **SABI [Recurso electrónico-En línea]**
Bruselas : Bureau van Dijk 1996

Base de datos

Detalles   Comentarios y tags   Servicios adicionales

☆ **Cosmic wabi-sabi: Tell-tale morphological imperfections in impact crater shapes revealed by numerical analysis**
Tabares - Rodenas, Pascual ; Ormo, Jens ; King, David T.
Earth and Planetary Science Letters, Sept, 2013, Vol.377-378, p.211(7) [Revista Peer Reviewed]

Artículo

Detalles   Comentarios y tags   Servicios adicionales

☆ **Cosmic wabi-sabi: Tell-tale morphological imperfections in impact crater shapes revealed by numerical analysis**
Tabares-Rodenas, Pascual ; Ormö, Jens ; King, David T.
Earth and Planetary Science Letters [Revista Peer Reviewed]

Artículo

Ver todas las versiones

Recibir | Redactar | Charlar | Direcciones | Etiqueta ▾ | Filtro rápido

Buscar... <Ctrl+K>

↕ ★ ⬀	Asunto	∞ Destinatario	🕐 Fecha
	Re: Saludos desde DIAGNOMA		30/01/2014 10:35
	Re: Saludos desde DIAGNOMA		30/01/2014 10:21
⬀	Re: Canalización Gas Natural		29/01/2014 17:53
	Re: Asuntos pendientes		29/01/2014 08:55

Responder | Responder a todos ▾ | Reenviar | Archivar | No deseado | Eliminar

De José Jesús Del Olmo Vico <j.delolmo@diagnoma.es>

Asunto **Re: Canalización Gas Natural** 29/01/2014 17:53

Miguel Ángel Castelló <m.castello@diagnoma.es> Otras acciones ▾

j.delolmo@diagnoma.es
▸ Bandeja de entrada
  Borradores
  Plantillas
  Enviados
▸ Archivos
  Correo no deseado
▸ Papelera

joolvi@upv.es
▸ Bandeja de entrada
j.delolmo@trainingexperience.org
▸ Bandeja de entrada
  info@trainingexperience.org (1)

El 20/01/2014 11:04, José Jesús Del Olmo Vico escribió:

Buenos días Luis.

Le escribo este correo debido a que ▮▮▮▮▮▮ nos ha proporcionado su contacto. Nosotros somos una Ingeniería que se dedica a la Obra Civil, Edificación, Terreno y Patrimonio.

Hablamos con ▮▮▮ a posibilidad de ofertar nuestros servicios a la hora de realizar una prospección de servicios enterrados mediante georradar en las obras de canalización de gas en la Vall d'Uixó, tal y como nos comentó el técnico del Ayuntamiento de dicho municipio.

Si están interesados en que les presupuestemos los trabajos, o incluso en conocernos para que les expliquemos en profundidad lo que hacemos, no duden en ponerse en contacto con nosotros.

Muchas gracias de antemano por su atención. Un saludo.

PS. Adjunto catálogo de servicios.

--

José Jesús Del Olmo Vico
Ingeniero de Caminos, Canales y Puertos

E-mail: j.delolmo@diagnoma.es
Telf: 644 27 02 83

Diagnoma

⬀ 1 adjunto: Presupuesto georradar Vall d'Uixó.pdf 130 KB

Guardar ▾

Cold Email Sample

Subject: Remote coding

Hi Sam,

I read your article on volunteering your professional skills in Guatemala – it was really inspiring. I'm looking to travel more and you've got me thinking about incorporating volunteering when I do!

I have a software company trying to improve remote medical record coding.

I'm not looking to sell anything, but since you have so much expertise with remote coding, I'd love to get your advice on our product so we don't build the wrong thing.

If you're available, I'd love to chat for just 20 minutes – Thur or Fri morning?

Thanks for any help,
Justin

Short? 5 sentences. That's all you need. Any longer than that and you're wasting their time.

Personal? This part is the most work, but it's what's going to separate you from the spammers. Plus, researching each of your customers to find something unique about them is going to give you incredible insight. Consider commenting on their:

• Blog posts
• Any professional organizations they belong to
• Companies listed on their LinkedIn profile
• Tweets they've sent

This is Important: Don't skip this part. Without something personal in there you're liable to get flagged as spam. If that happens enough times, you'll forever be relegated to junk mail.

Valuable? In this case we're offering to "improve remote medical record coding." Our hypothesis is that Sam has problems with her remote coding process and by hinting that we're trying to solve them, we're giving her a reason why spending 20 minutes with us will be worth her time.

Without this line you're "offering" to take 20 minutes of her time, and giving nothing back. Why would she sign up for that?

Note: Be vague. You don't want to seed your customer with the problem you're hypothesizing. Note how the email doesn't say anything about making "remote coding":
Faster
Cheaper
More secure
More accurate

Exercise: Customer conversations
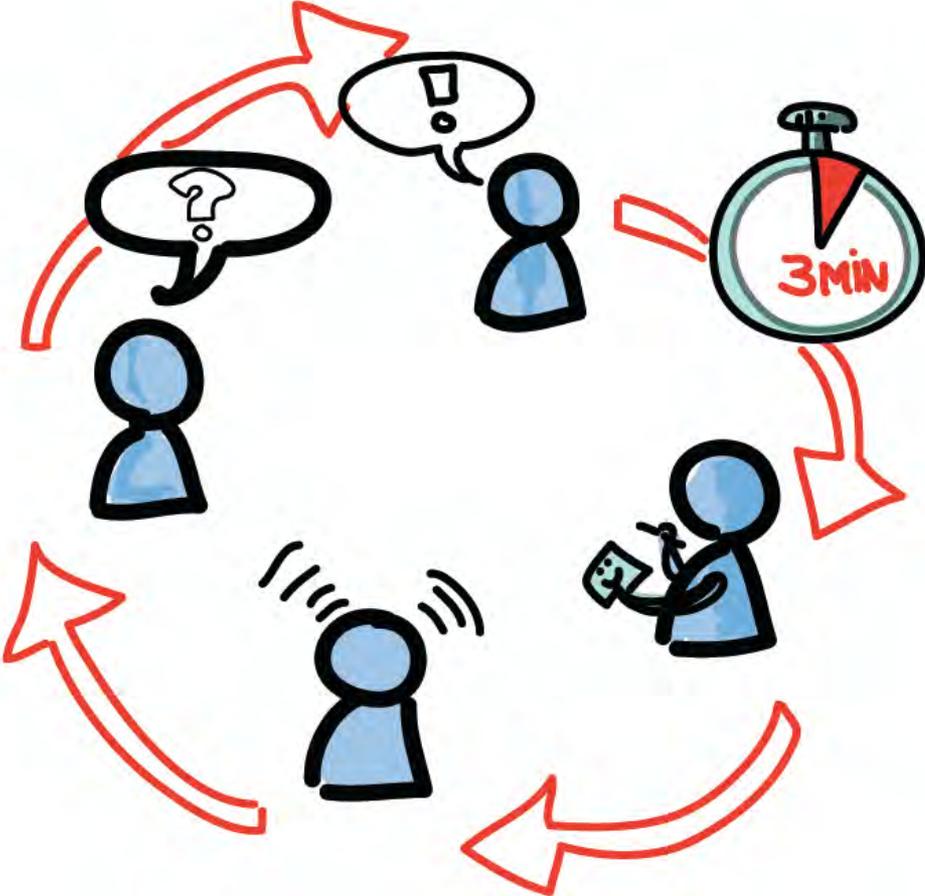
TEAMS

... YOU'RE GOING TO SEEM 4 TIMES THE SAME PERSON.

Three profiles for a Dream Team:

"To run an efficient team, you only need three people: a Hipster, a Hacker, and a Hustler."

Forbes

HIPSTER

HIPSTERS

It takes a lot of effort to look like you don't care.

HIPSTER

Usually working their way into the mix as the **designer** or creative genius, they'll make sure the final product is cooler than anything else out there. But, not only that, they'll ensure the shade of blue used to accent the font really brings out the subtle homage to an artist from the '70's you've probably never heard of.

CUSTOMIZATION   DESIGN   USER EXPERIENCE   BRAND

MARKETING

HACKER

HACKER

The one most likely to sit quietly through a board meeting until uttering the three sentences that **answers the all important question of "how?"** the new idea or initiative can be brought into reality. Resembling MacGyver with their ability to wield various lines of code or programing languages, you'll get dizzy trying to keep up with their keystrokes.

NEWNESS   **TECHNOLOGY**   **PERFORMANCE**

HUSTLER

Because tonight is going to be legendary!!!!

HUSTLER

They have the tendency to be the most misunderstood member of this trio. The Hipster is likely to accuse the Hustler of having sold out to the man because of their constant question of **"It's cool, but is it something our partners and clients want?"** The Hacker is likely to do their best to avoid one on one conversations with the Hustler as a result of jock vs. geek episode back in high school.

PRICE   COST REDUCTION

Three profiles for a Dream Team:

When the Hipster brings the **creative design** and cool factor, the Hacker brings their utility belt of **technology solutions**, and the Hustler finds the right way to package it all up and take it to the masses in the form of **sales** and partnerships, it is a combination that is tough to beat.

The only question is, does your team have all three?

A Pitch Deck format!

1 Deal

(module 2)

What is your Deal?

2 Market

(module 3)
What is your Beachhead Market? Why did you pick this segment?

3 Customer Value Proposition

(module 4)
Who is your Customer? What is the Value Proposition?

4 Product

(show us a picture or demo)

What is your Product?

5 Financials

(module 5)
What are the Key Financials?

6 Climate Impact

(module 6)
What is the Climate Impact?

7 JTBD and Competitive Advantage

(module 7)
What is your Competitive Advantage?

8 Team & Founder's Dream

(module 1)
Who are you? What is your Founder's Dream?
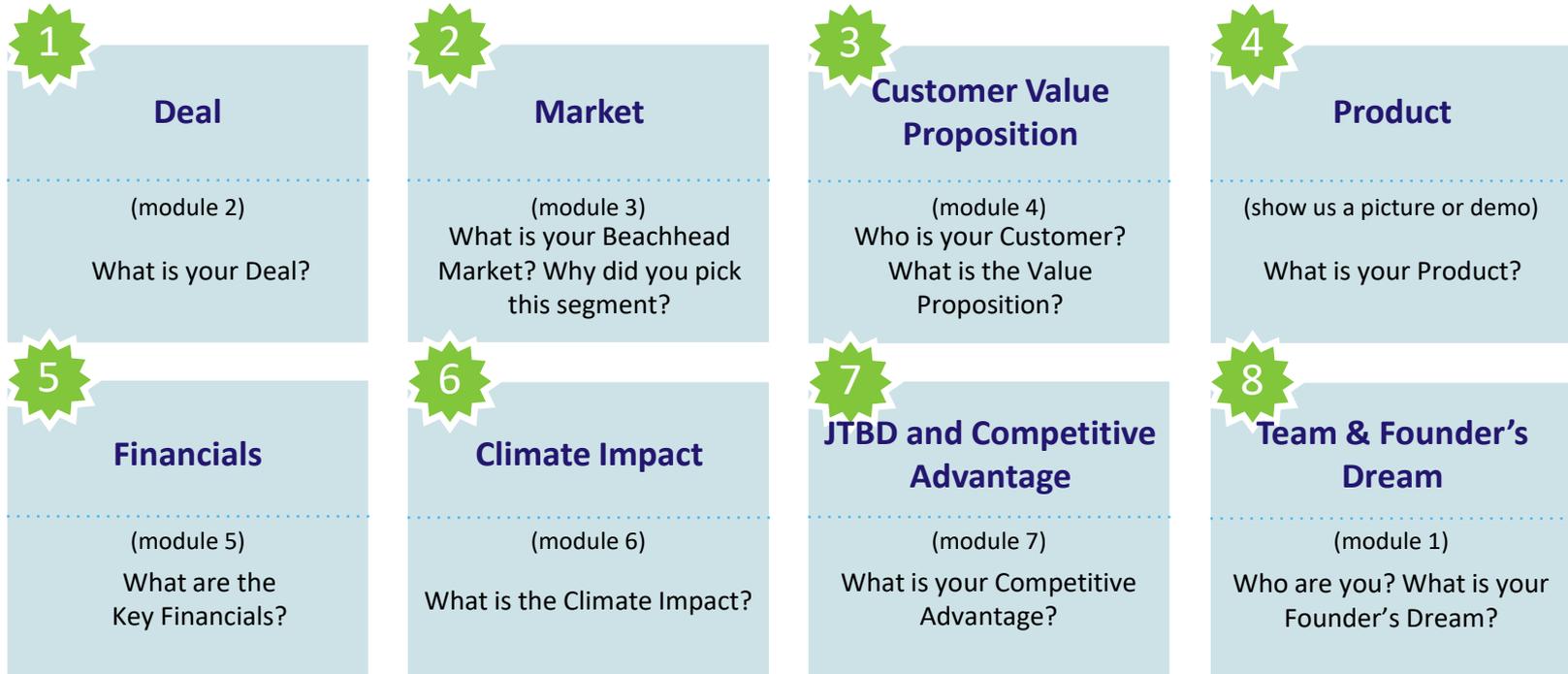
Validate your Assumptions
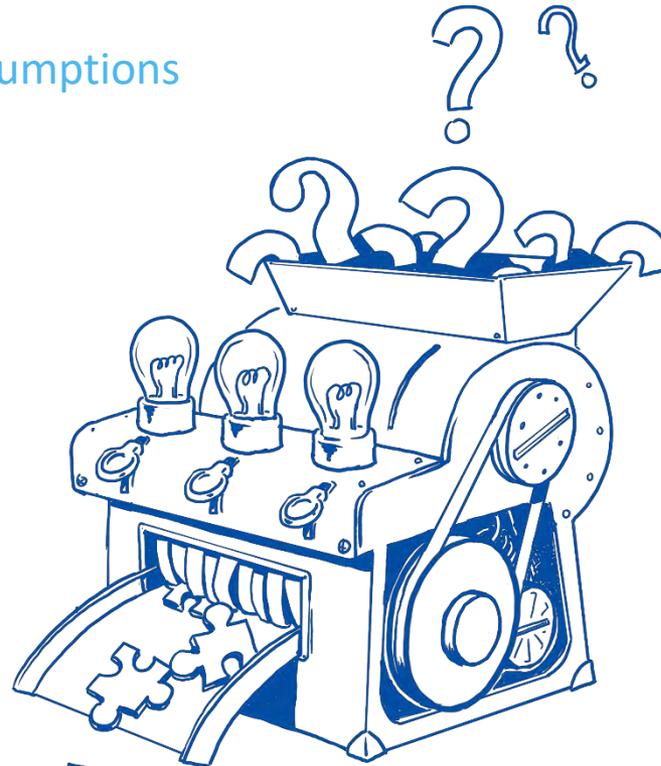
Assumptions

Facts

Types of assumptions

- Customer – is there a problem or opportunity?
- Market – is there a big enough market segment?
- Product – Can I build it?
- Team – Do I have the right people?
- Financial – Will we make money?
- Legal/IP – Do I have Freedom To Operate?

Experiment Design template

1. Hypothesis: define the assumption you want to validate
We believe that …

2. Experiment Design: define how you are going to test the hypothesis
To verify that we will ….

3. Metric: Define the metric you are going to use
And measure ….

4. Minimum Success Criteria: Define the criteria to validate the hypothesis as true?
We are right if ….

5. Results: What are the results obtained?
We observed ….

6. Learnings: What can we learn from the results?
From that we llearned that …..

7. Next Steps: Decisions and actions.
Therefore we will …..

Breathe

- Make sure you **feel good about yourself** before going on stage. Think about a moment in your life or something you achieved that you feel really good about. Take that feeling with you when you go on the stage – you'll feel a lot more relaxed.

- Don't forget to breathe! **Breathe from your belly** and just relax.

Non-verbal communication

- Never put your hands in your pockets. Instead, **use your hands** to give some extra power to your speech.

- **Never cross your arms.** It blocks your breathing and it looks very defensive, where you want to be nice and open.

- Stand on 2 feet, **be grounded in 1 space.** Trick: stand straight, a little wide and turn the points of your shoes to the outside. This will lock your knees.

Interaction

- Make sure **the jury is ready** for your story. If not, wait until they are and focus on your breathing.

- **Make eye contact** with 3 people in the room: 1 in center, 1 left, 1 right to whom you can kind of talk to. Look at the jury once in a while as well.

Choose your words carefully

- **Avoid jargon.** Your customers are not interested in technology; they want a solution for their pain. Use the language of your customer.

- Don't use verbs like hope, plan and might. Use language that shows you're really committed. **Use will, are and can.**

- **Give short answers**, it allows the jury to ask more questions and to get to know more about your idea.

Eat, sleep, pitch, repeat

Practice, practice and practice. It's really not that hard, you just need to do it a lot.

Practice at least 50 times, to anybody you can imagine, in front of the mirror and use video to see yourself..

"Taxi Pitch"

Why "Elevator Pitch"?
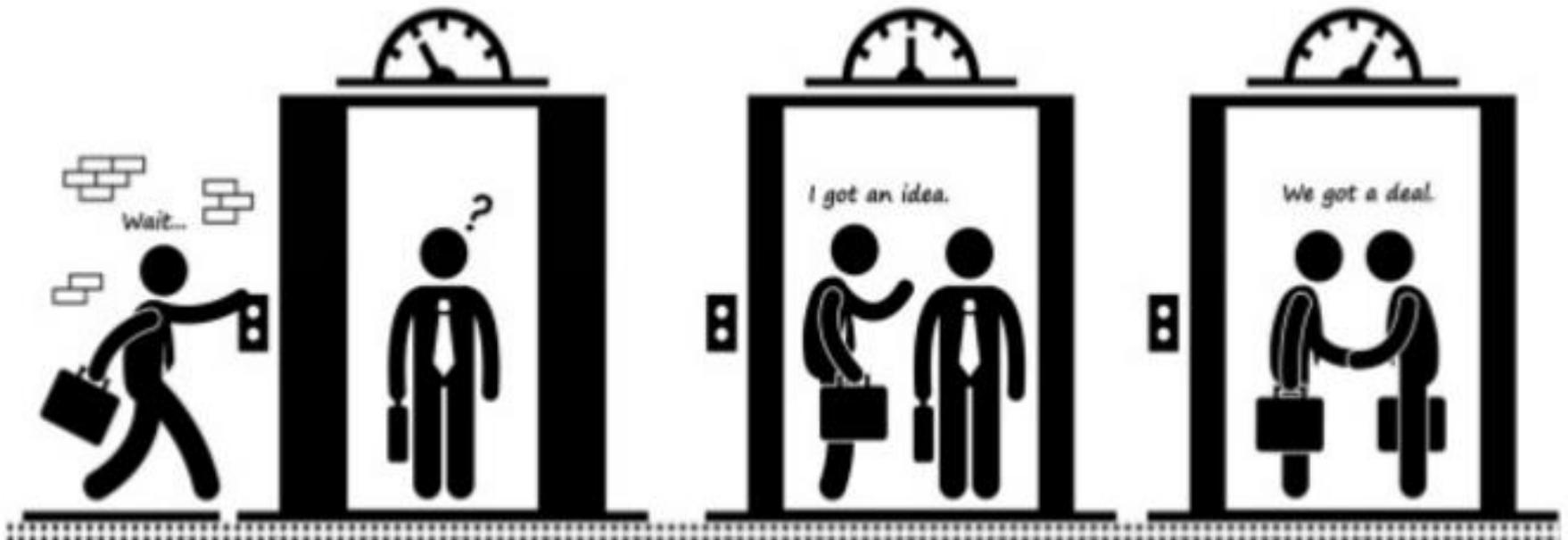
Different situations:

I'm so glad we all agree

Our objective :

STAND OUT
OF THE CROWD

People should get your message in

3 SECONDS

Tell a story
Once upon a time

time
control

Do not be

nerveous

Different *voice tones*
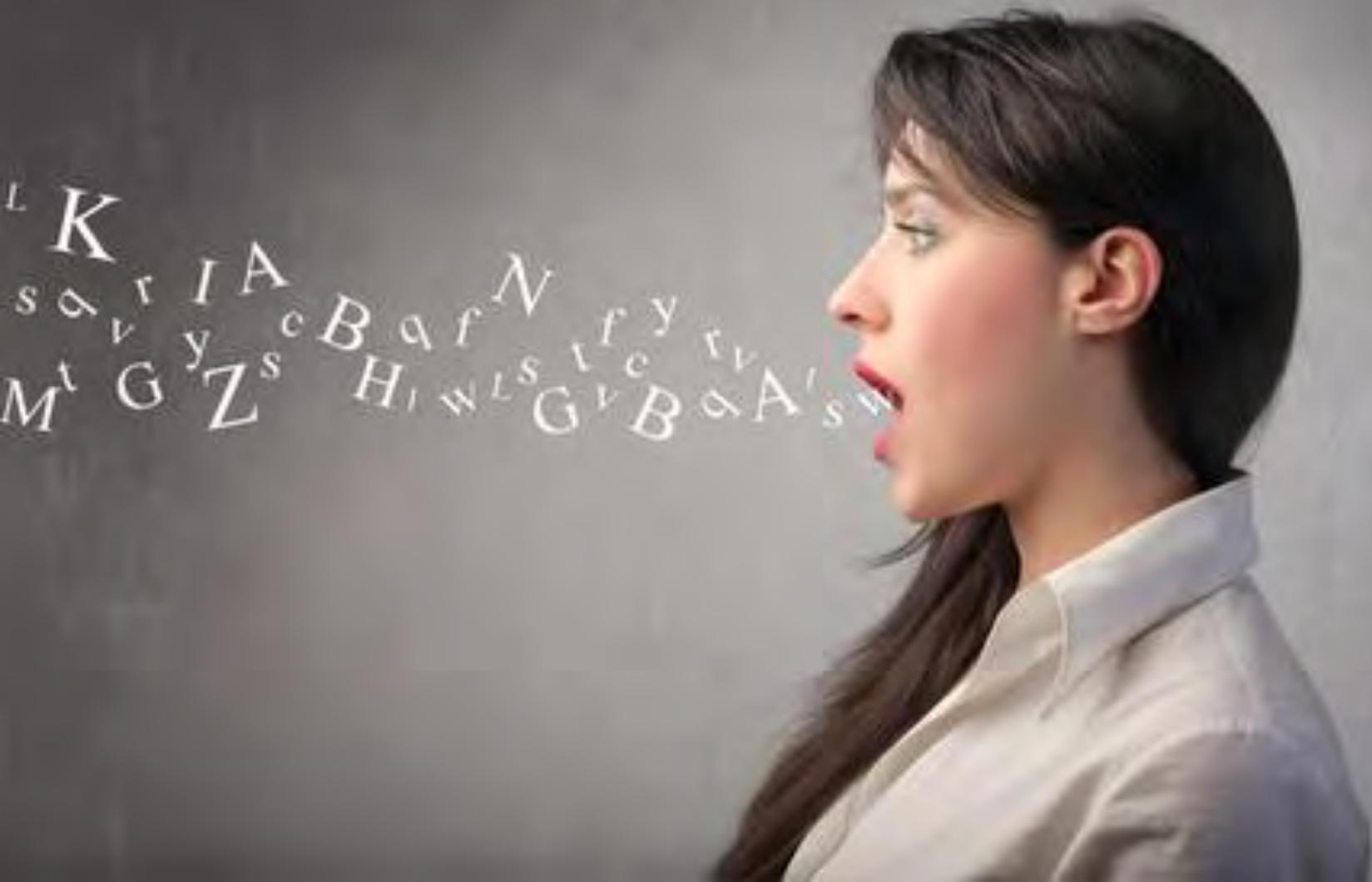
Take care of your

body

language

Hands in your pockets!

No crossed arms or hiding them

1

2

1

2

- Esconder las manos en los bolsillos es símbolo de inseguridad

- Al igual que el mentón hacia abajo

- La vista al piso

- El peso del cuerpo es depositado en un solo pie.

Esta postura refleja que me protejo y literalmente me cierro ante cualquier respuesta negativa o incómoda.

☐ Brazos a las caderas denotan agresión y una postura a la defensiva.

You can use as many slides as you need...

... but every slide must have a reason to be there.

BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA
BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA BLA

This is not a slide.

INFO

INFO INFO INFO INFO
INFO INFO INFO INFO
INFO INFO INFO INFO

INFO INFO INFO INFO INFO INFO INFO INFO
INFO INFO INFO INFO INFO INFO INFO INFO
INFO INFO INFO INFO INFO INFO INFO INFO
INFO INFO INFO INFO INFO INFO INFO INFO
INFO INFO INFO INFO INFO INFO INFO INFO
INFO INFO INFO INFO INFO INFO INFO INFO
INFO INFO INFO INFO INFO INFO INFO INFO
INFO INFO INFO INFO INFO INFO INFO INFO

WAHOU !

This is a document.   *This is a slide.*

In Latin America, 90 million attendees go to conferences to learn, but most important, to meet new people.

90M
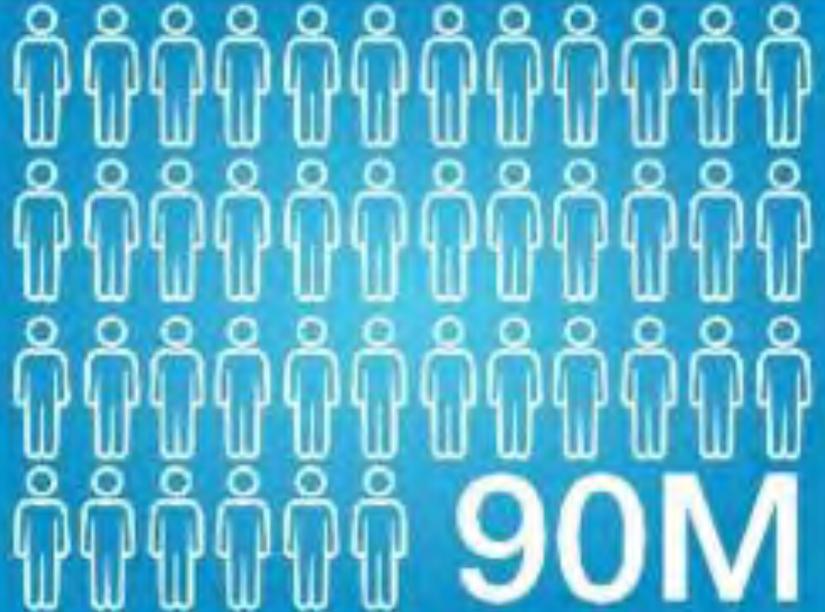
If you are rehearsing a milion times, how can you have mistakes on your slides?

Default type is
wrong.

Respect
your audience.

respeta a tu
audiencia

Use
DIFFERENT
font styles.

Chunkfive

Fertigo

Quicksand

NEVIS

Museo

caviar dreams

BEBAS NEUE

DK Crayon Crumble

Postface Medium

Open Sans Great Vibes Roboto Exo

Alex Brush Pacifico NEXA RUST

Quicksand Raleway Lobster Oswald

Grand Hotel ChunkFive Alegreya Sans

Montserrat Kaushan Script League Gothic

Learning Curve Pro Allura Sofia

NEW!!

Font Squirrel

Google Fonts

Filters:

Grumpy wizards make toxic

Grumpy wizards make

dafont.com

KG A LITTLE SWAG

JACK RUNNER

KG Beneath Your Beautiful

5
minutEs
is
nothing...

5 minutEs is everything!

Waynergy
the way for energy harvesting

João Champalimaud
CEO, MSc Management

Francisco Duarte
CTO, PhD student MIT-Portugal

Waynergy®

Capturing Energy

Francisco Duarte
C.E.O.

Choose WISELY

HOW ?

Art

Music

Movies

History

Cultures

...

YOU MUST CHOOSE

BUT CHOOSE WISELY

WHERE ?

Take your own pictures

Buy stock photos

Use Creative Commons

NEW!!

Compfight

Flickr

ⓘ Attribution License

| From florian.scholz | From Kentuckyguard | From toprankonlinema... | From florian.scholz | From florian.scholz |

» **58,276,835** photos (See more)

ⓘ ⊜ Attribution-NoDerivs License

| From melquiades1898 | From mradwin | From photosbyChloeMuro | From photosbyChloeMuro | From Tambako the Jaguar |
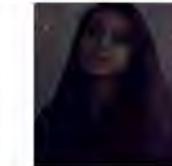
» **16,578,413** photos (See more)

ⓘ ⓢ ⊜ Attribution-NonCommercial-NoDerivs License

Briefly...

Attribution means:
You let others copy, distribute, display, and perform your copyrighted work - and derivative works based upon it - but only if they give you credit. ⓘ

Noncommercial means:
You let others copy, distribute, display, and perform your work - and derivative works based upon it - but for noncommercial purposes only. ⓢ

No Derivative Works means:
You let others copy, distribute, display, and perform only verbatim copies of your work, not derivative works based upon it. ⊜

Share Alike means:
You allow others to distribute derivative works only under a license identical to the license that governs your work. ↻

MSI
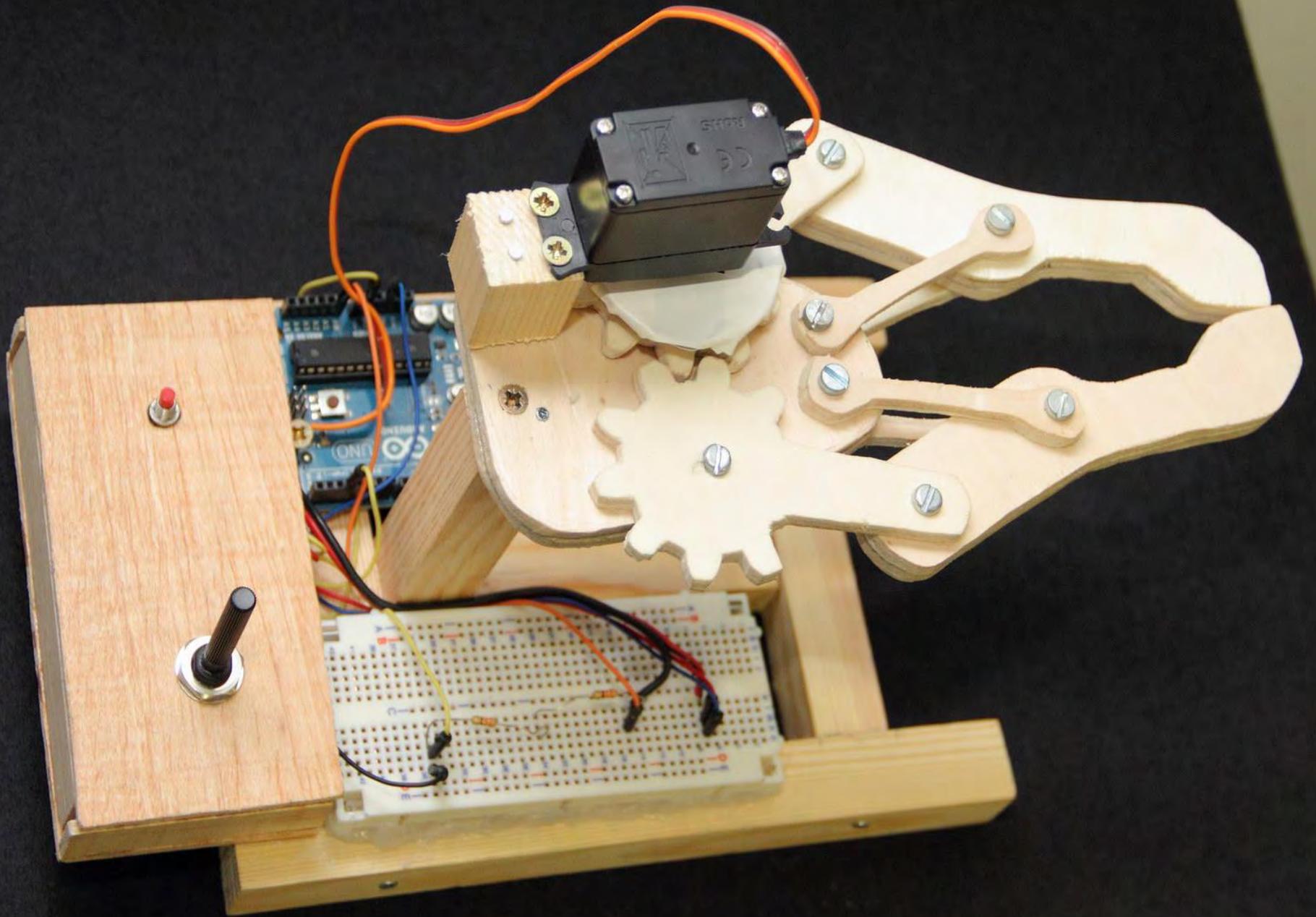
## Electrical Characteristics over recommended operating free-air temperature range (unless otherwise noted)

| PARAMETER		CONDITIONS			DM54/74 41A			141			UNITS
					MIN	TYP(1)	MAX	MIN	TYP(1)	MAX	
V_{IH}	High Level Input Voltage				2			2			V
V_{IL}	Low Level Input Voltage						0.8			0.8	V
V_I	Input Clamp Voltage	V_{CC} = Min, I_I = −12 mA								−1.5	V
V_{OL}	On-State Output Voltage	V_{CC} = Min, I_O = 7 mA	−55°C to +70°C							2.5	V
			125°C							3.0	
I_{OH}	Off-State Reverse Current	V_{CC} = Max	T_A = 125°C				N/A			N/A	
			T_A = 70°C	V_O = 60V			2.5				μA
			T_A = −55°C, 0°C, 25°C				3.0				
			T_A = 55°C	V_O = 55V			60			60	
I_{OH}	Off-State Reverse Current for Input Counts 10–15	V_{CC} = Max, V_O = 30V	T_A = 70°C				40	70	1	50	μA
							1.6			5	
V_{OH}	Off-State Output Voltage	V_{CC} = Max	I_O = 0.5 mA							15	μA
			I_O = 1.0 mA								
I_I	Input Current at Maximum Input Voltage	V_{CC} = Max, V_I = 5.5V	A Input		3	40				40	mA
			B, C, or D Input		3	40				80	
I_{IH}	High Level Input Current	V_{CC} = Max, V_I = 2.4V	A Input		−1.0	−1.6				−1.6	mA
			B, C, or D Input		−1.0	−1.6				−3.2	mA
I_{IL}	Low Level Input Current	V_{CC} = Max, V_I = 0.4V									
I_{CC}	Supply Current	V_{CC} = Max(2)			21	36		11	25		

Notes
(1) All typical values are at V_{CC} = 5V, T_A = 25°C.
(2) I_{CC} is measured with all inputs grounded and outputs open.

Logic Diagrams

5441A/7441A
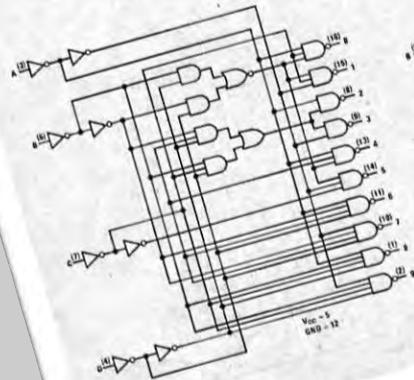
V_{CC} = 5
GND = 12

54141/74141
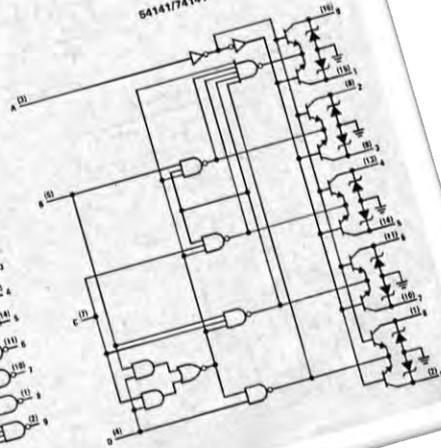
"Hi There..."

WHO AM I – PROBLEM – SOLUTION

PROBLEM – WHO AM I– SOLUTION

"We don't sell drills, we sell perfect holes".
Black & Decker

"WE DON't SELL PRODUCTS, WE SELL SOLUTIONS".
Put your company name here.

"People BUY WHYs,
NOT WHATs".
Steve Jobs

Bicycle Street Equipment

bicycle Self-Service Station

secure Bicycle Parking

Interviews: 163   Surveys: 902 answers

Bicycle Self-Service Stations
& Secure Parkings

BICIWAY

Pain

City Problems:

Car Traffic

Air quality

Energy dependence

Bicycle Users:

Lack of bicycle infrastructures

Interviews: 163   Surveys: 902 answers

Pain

VEHICLES KINETIC ENERGY
(**INPUT**)

CAPTURE AND CONVERSION
SYSTEM
(*WAYNERGY*)

ELECTRIC
ENERGY
(**OUTPUT**)

DIRECTLY CONSUMED
STORED
INJECTED INTO GRID

the way for energy harvesting
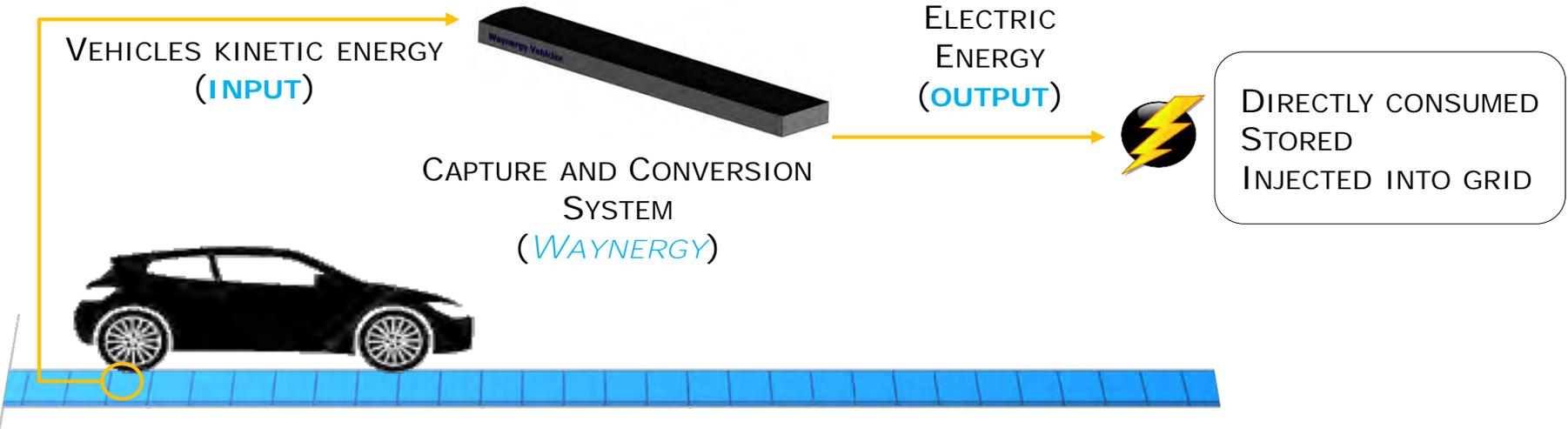
HARVESTER

- **Handles 50.000 vehicle loads per day**
- Handles for fully loaded trucks
- Harvest >90% of the released energy
- Installs easily

CONVERTER

- **Conversion efficiency higher than 60%**
- Installs easily

STORAGE

- **Storage efficiency higher than 80%**
- Controllable system

Road developed to capture energy from passing cars
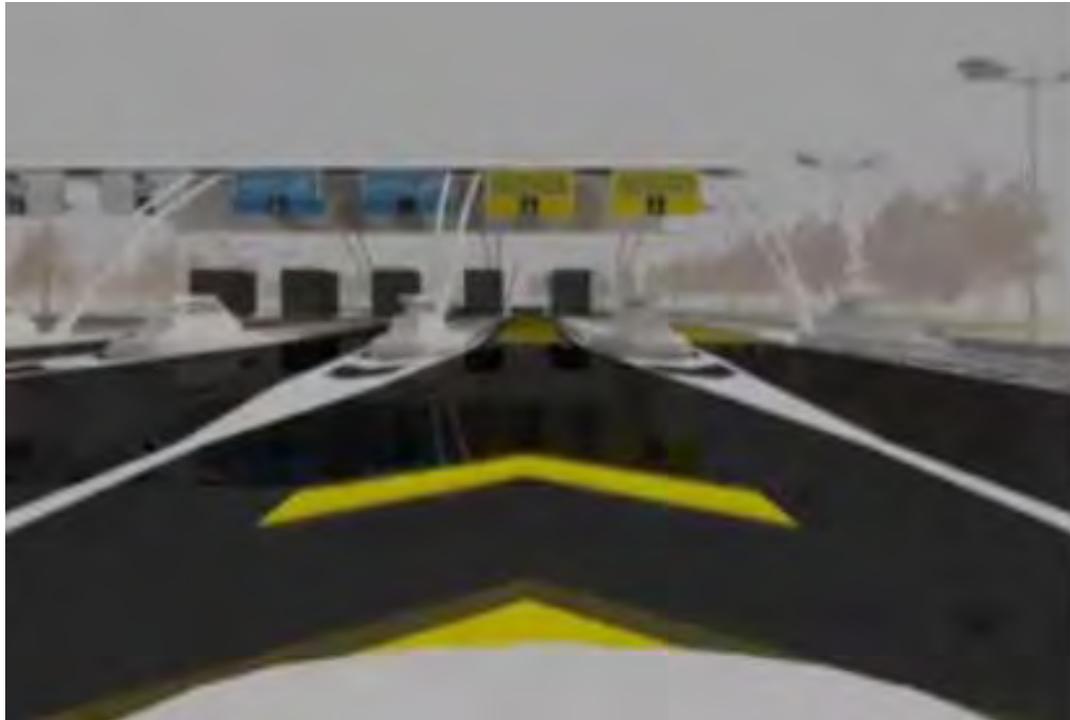
http://www.3news.co.nz/world/road-developed-to-capture-energy-from-passing-cars-2014090718

548

Road developed to capture energy from passing cars

http://www.3news.co.nz/world/road-developed-to-capture-energy-from-passing-cars-2014090718

Road developed to capture energy from passing cars

http://www.3news.co.nz/world/road-developed-to-capture-energy-from-passing-cars-2014090718

550

"WE HOPE, WE WILL TRY, MAYBE"

"WE WILL BE, WE ARE".

Cover slide

DEAL

MARKET

VALUE PROPOSITION

product|solution

FINANCIALS

CLIMATE IMPACT

JTBD|COMPETITIVE ADVANTAGE

TEAM|DREAM

MODELO DE NEGOCIO
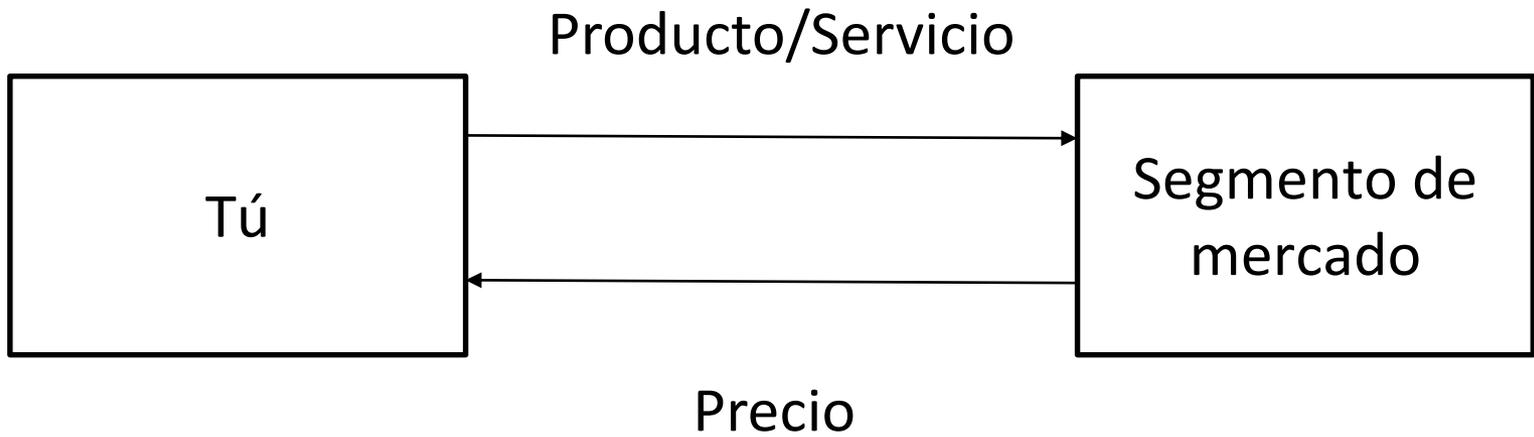
Producto/Servicio

| Tú | → | Segmento de mercado |

Precio

PROPUESTA DE VALOR – B2C

1) INNOVACIÓN, TECNOLOGÍA

2) PERSONALIZACIÓN

3) DISEÑO, USABILIDAD, EXPERIENCIA DE USUARIO

4) MARCA

5) PRECIO

6) REDUCCIÓN DE COSTES

7) VALORES ECO, SOCIALES...
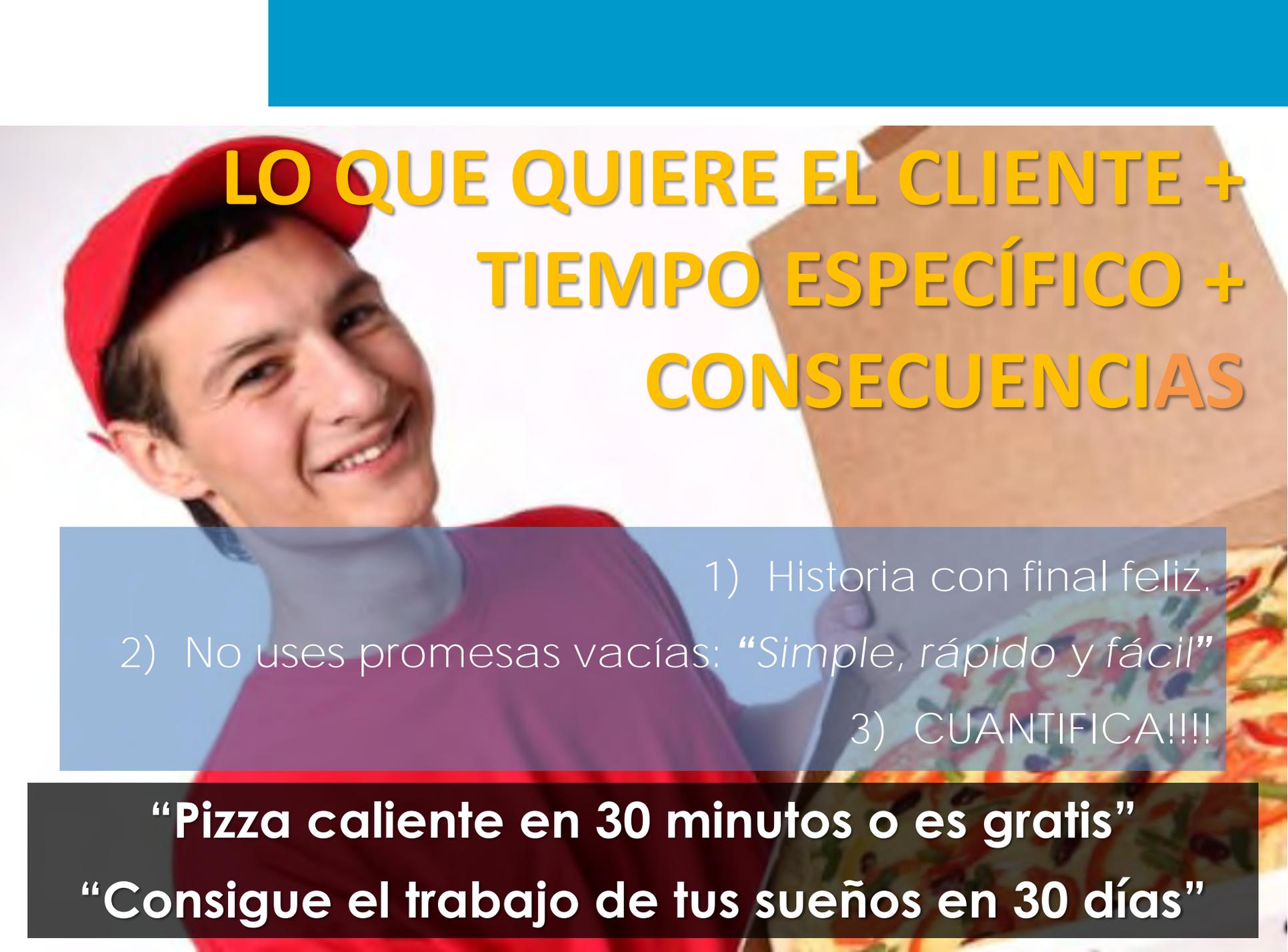
LO QUE QUIERE EL CLIENTE + TIEMPO ESPECÍFICO + CONSECUENCIAS

1) Historia con final feliz.

2) No uses promesas vacías: **"***Simple, rápido y fácil***"**

3) CUANTIFICA!!!!

"Pizza caliente en 30 minutos o es gratis"

"Consigue el trabajo de tus sueños en 30 días"

HIGH-CONCEPT PITCH

Boca a oreja
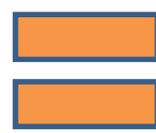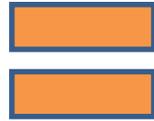
Propietarios quieren energía más barata
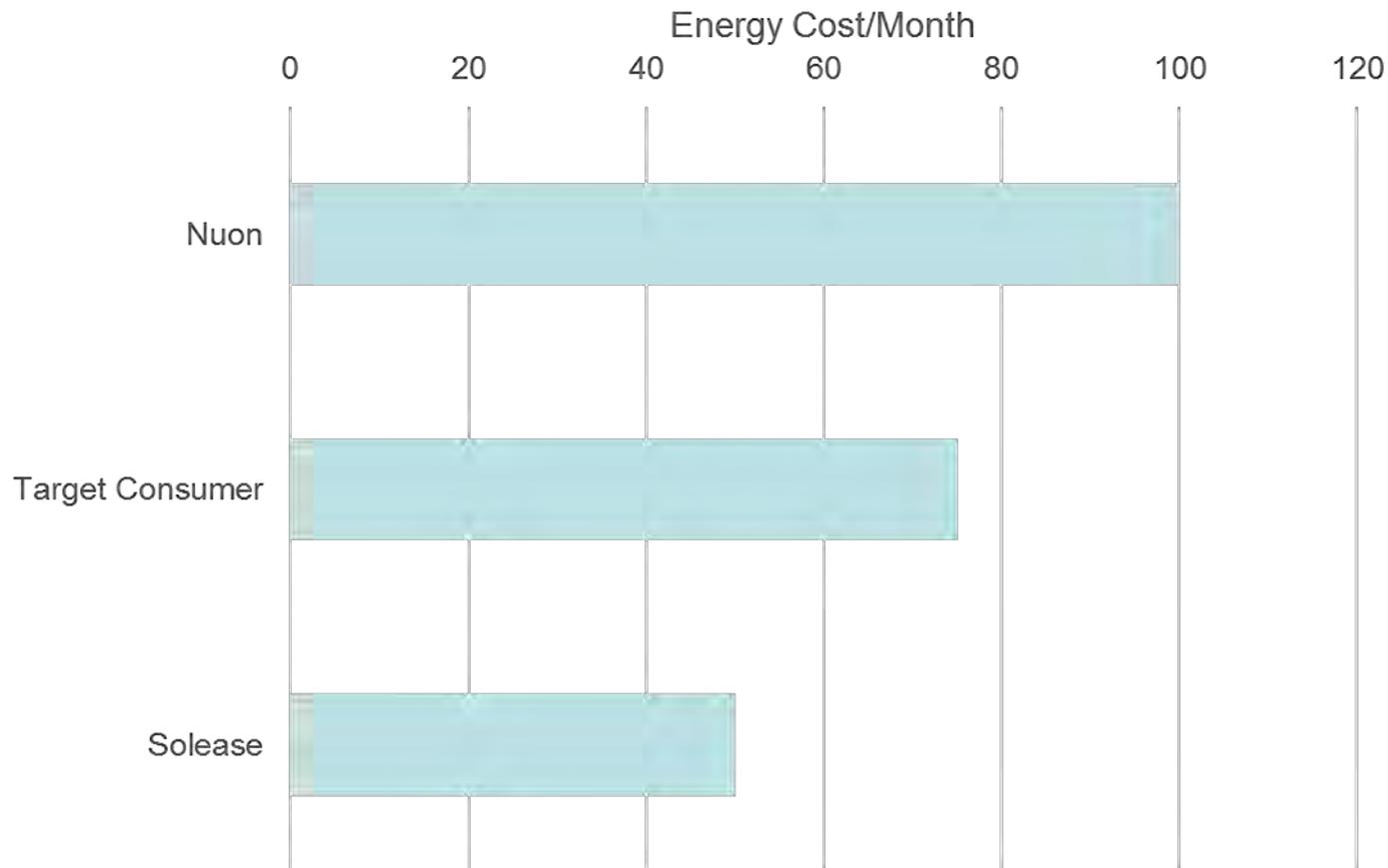
Quant. Value Prop. Example II
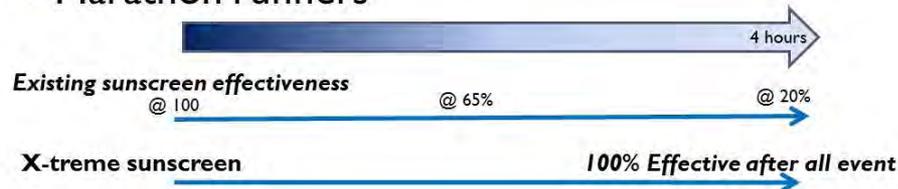
- Tri-athletes

  2-10 hours

  Swim   Bike   Run

  Existing sunscreen   Gone after swimming

  X-treme sunscreen   *Effective after all event*

- Marathon runners

  4 hours

  Existing sunscreen effectiveness
  @ 100   @ 65%   @ 20%

  X-treme sunscreen   *100% Effective after all event*

1.   SIX times longer duration

2.   FIVE times higher effectiveness

3.   At least THREE times lower quantity applied.

SMART SKIN CARE *Long-lasting protection for your skin*

Market Landscape (Example 2)
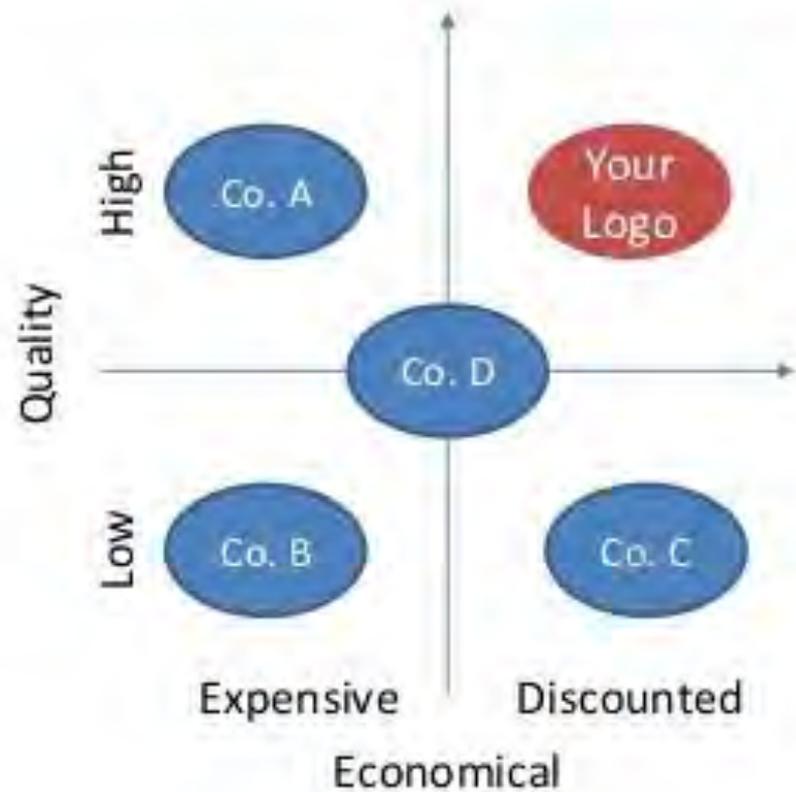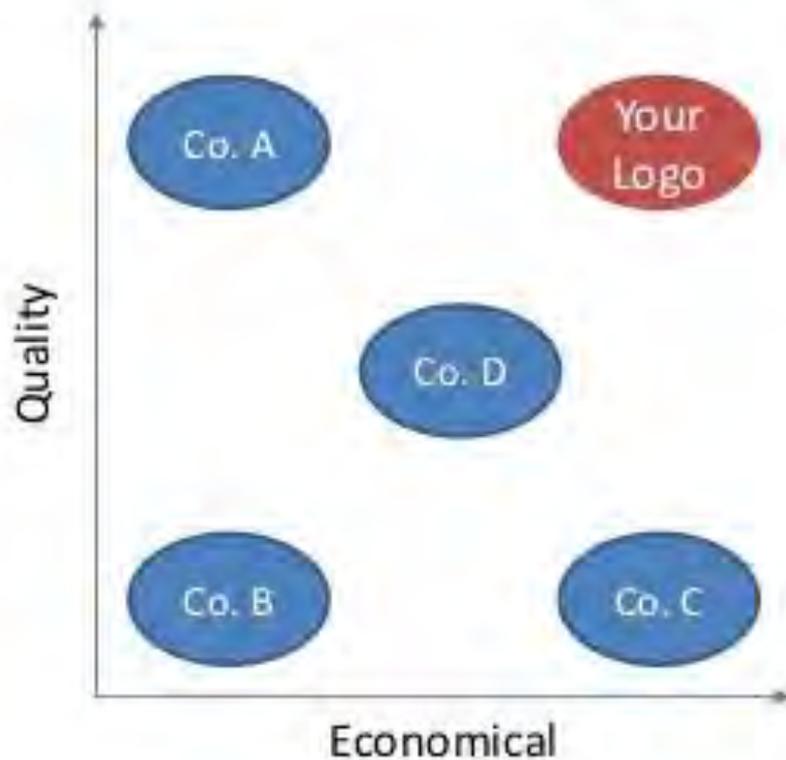
ANALYSIS OF COMPETITORS
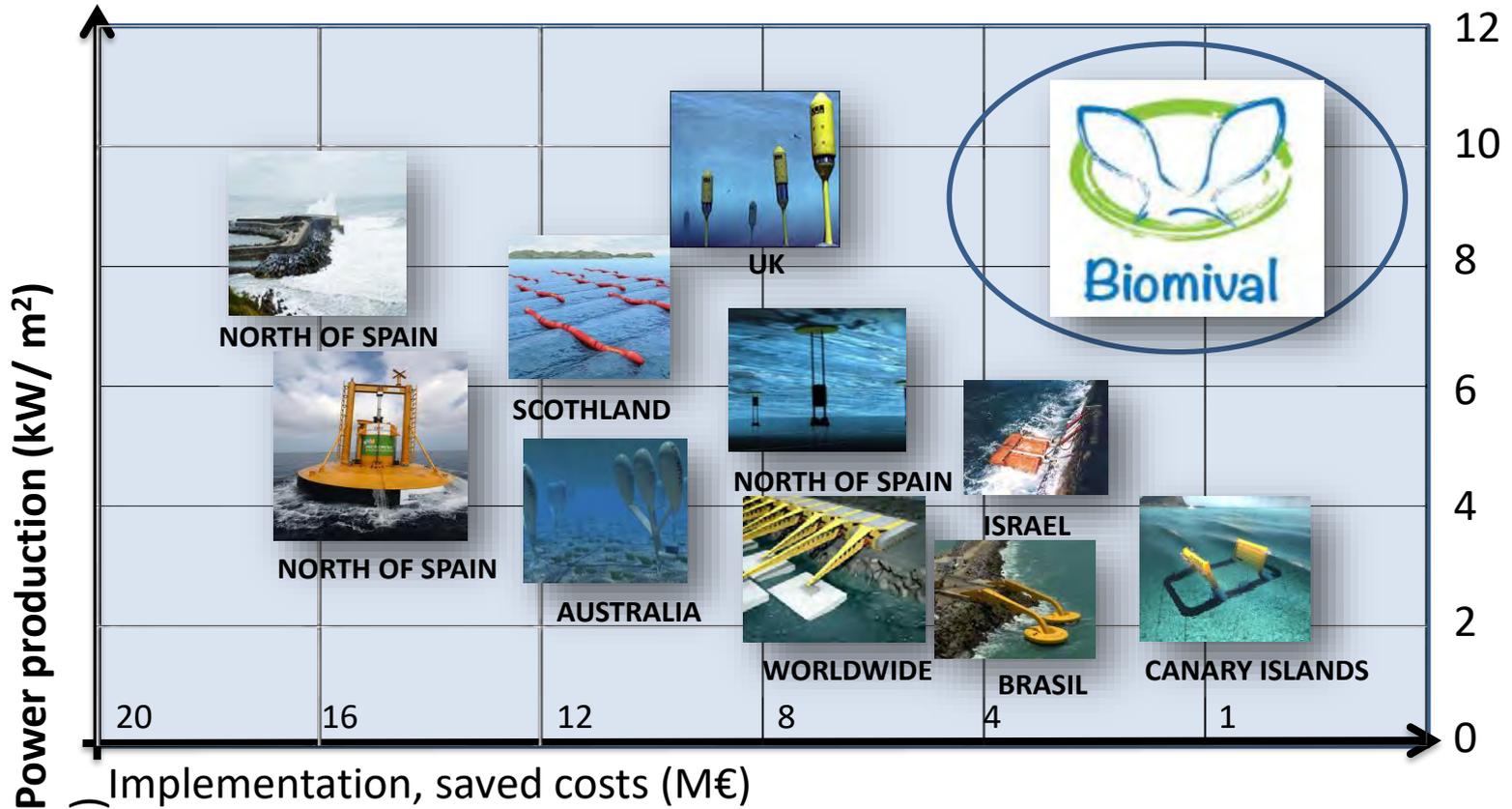
BIOMIVAL COMPARED TO SOLAR/WIND POWER GENERATION

... CONSTANT, PREDICTABLE AND HAS NO POWER VALLEYS.

MERCADO

MERCADO DE LA MÚSICA ONLINE

ESPAÑA 192M €

A.LATINA 759M €

MUNDIAL 5.200M €

PREVISIÓN 2014
15.772M €

94.000 M CANCIONES ESCUCHADAS ONLINE EN 2012 A NIVEL MUNDIAL
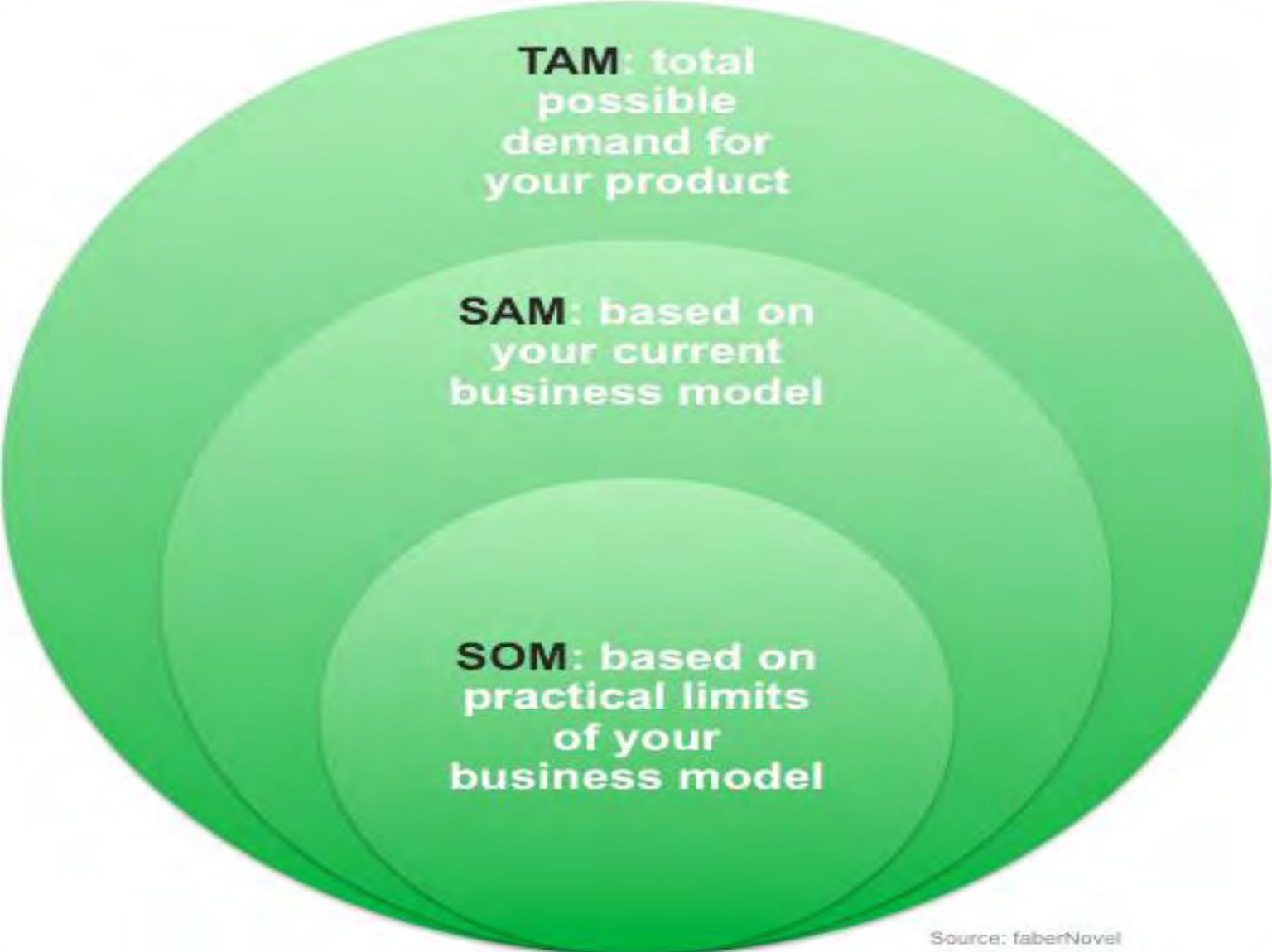
TAM: total possible demand for your product

SAM: based on your current business model

SOM: based on practical limits of your business model
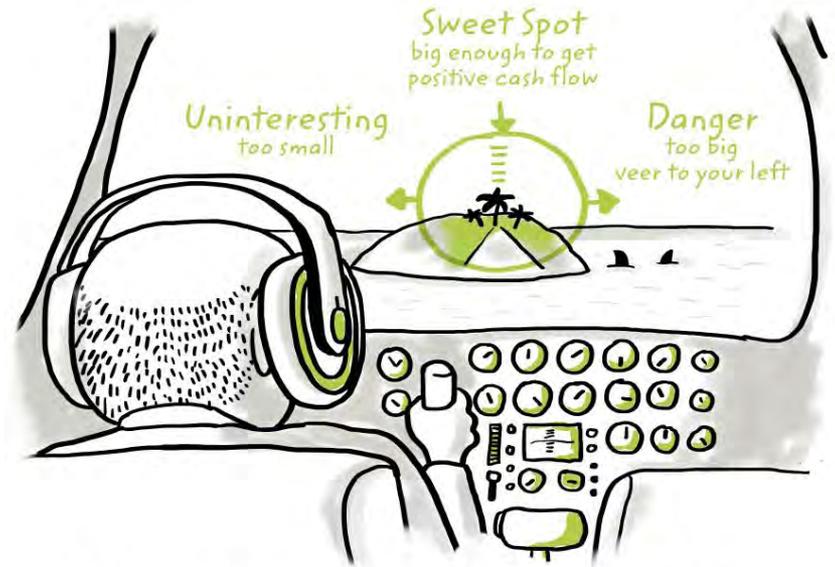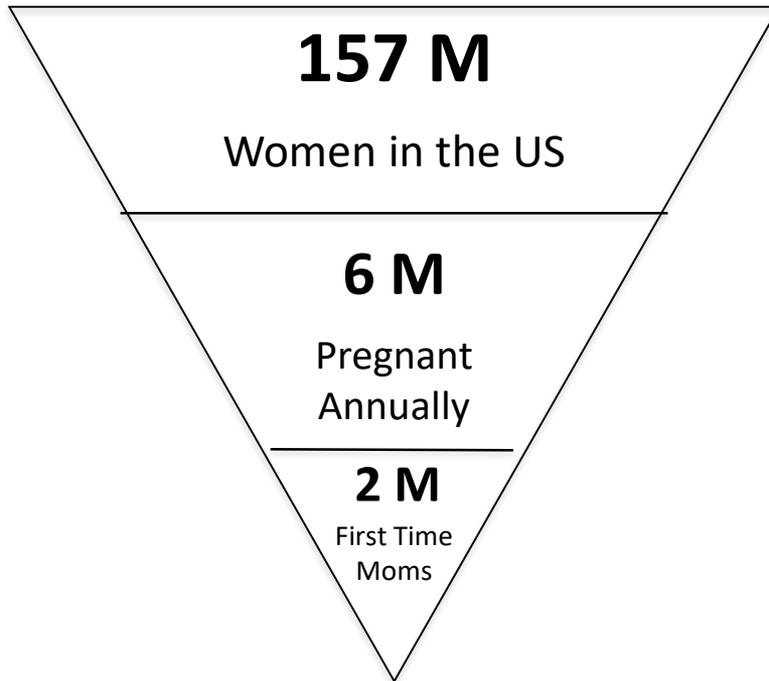
Source: faberNovel

157 M

Women in the US

6 M

Pregnant Annually

2 M

First Time Moms

Sweet Spot
big enough to get
positive cash flow

Uninteresting
too small

Danger
too big
veer to your left

Beachhead TAM calculation
is your sanity check
that you are headed
in the right direction

Beachhead Market

Waste Management Facilities in Valencia Region

Adjacent Markets

All Europe 5,000

South Europe 652

Spain 256

Valencia Region 25

Activities/places with sewage and black waters

WWTP

Agroindustry

"Prison"

VetiGoal
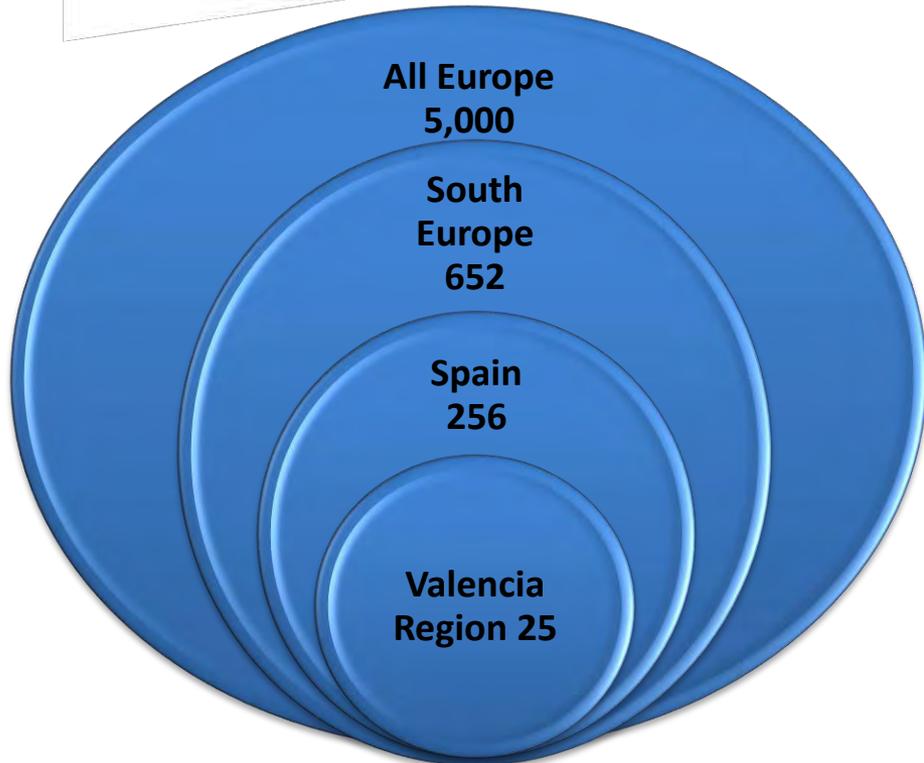
BUDGET

CONSULTING		**$ 50K**
STUDIES		**$ 20K**
- PREPARATION		$ 11K
- PANEL A		$ 1K
- PANEL B		$ 2K
- PANEL C		$ 3K
PRODUCTION		**$ 18K**
- SHOOTING		$ 6K
COMMUNICATION		**$ 12K**
- PRINTING		$ 4K
TOTAL		**$ 100K**

OUR STRATEGY

Idea ✓

✓ Tech Validated by AIDO

IP Worldwide Patent ✓

✓ Build a team

Working demo at Valencia Port ✓

✓ Get Sacyr as our partner

$100k Get funding for a pilot | 2017 |

| 2018 | Get Repsol as our customer
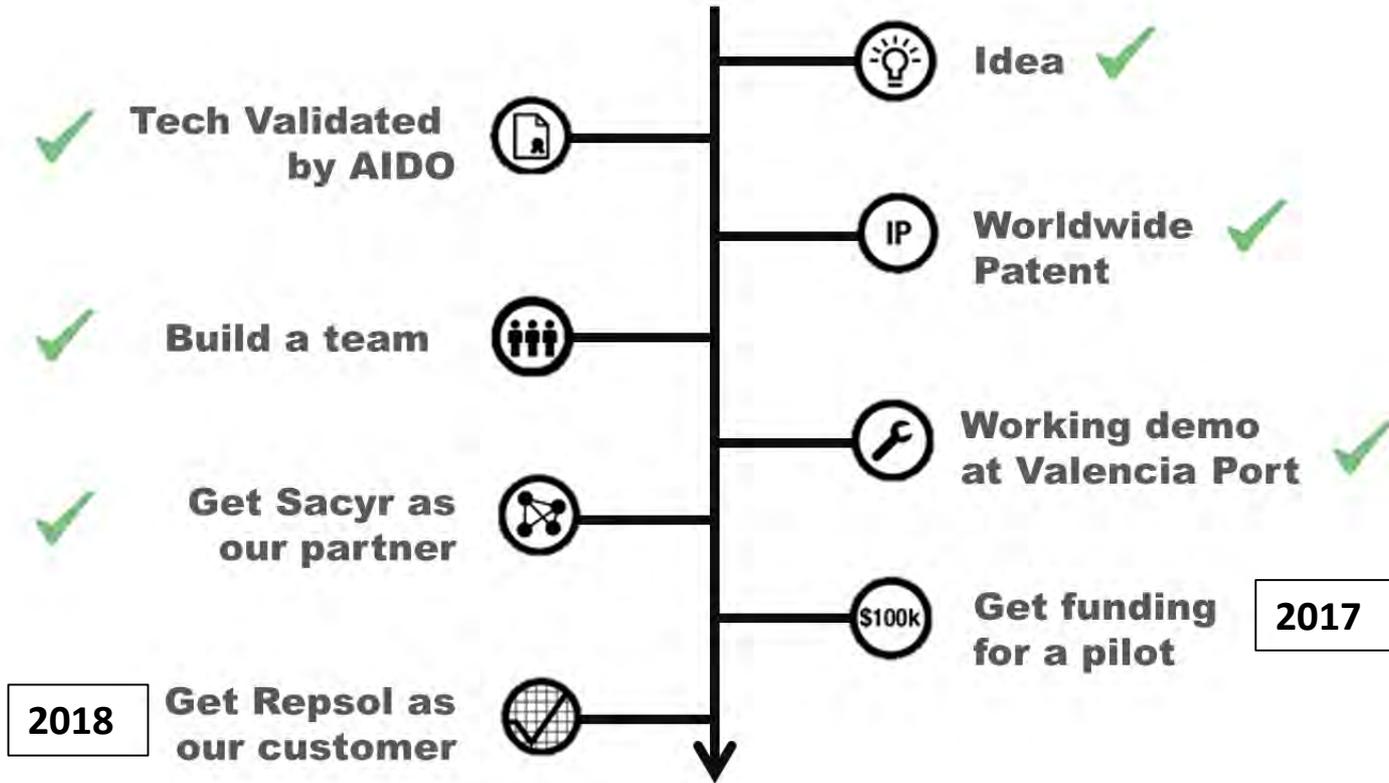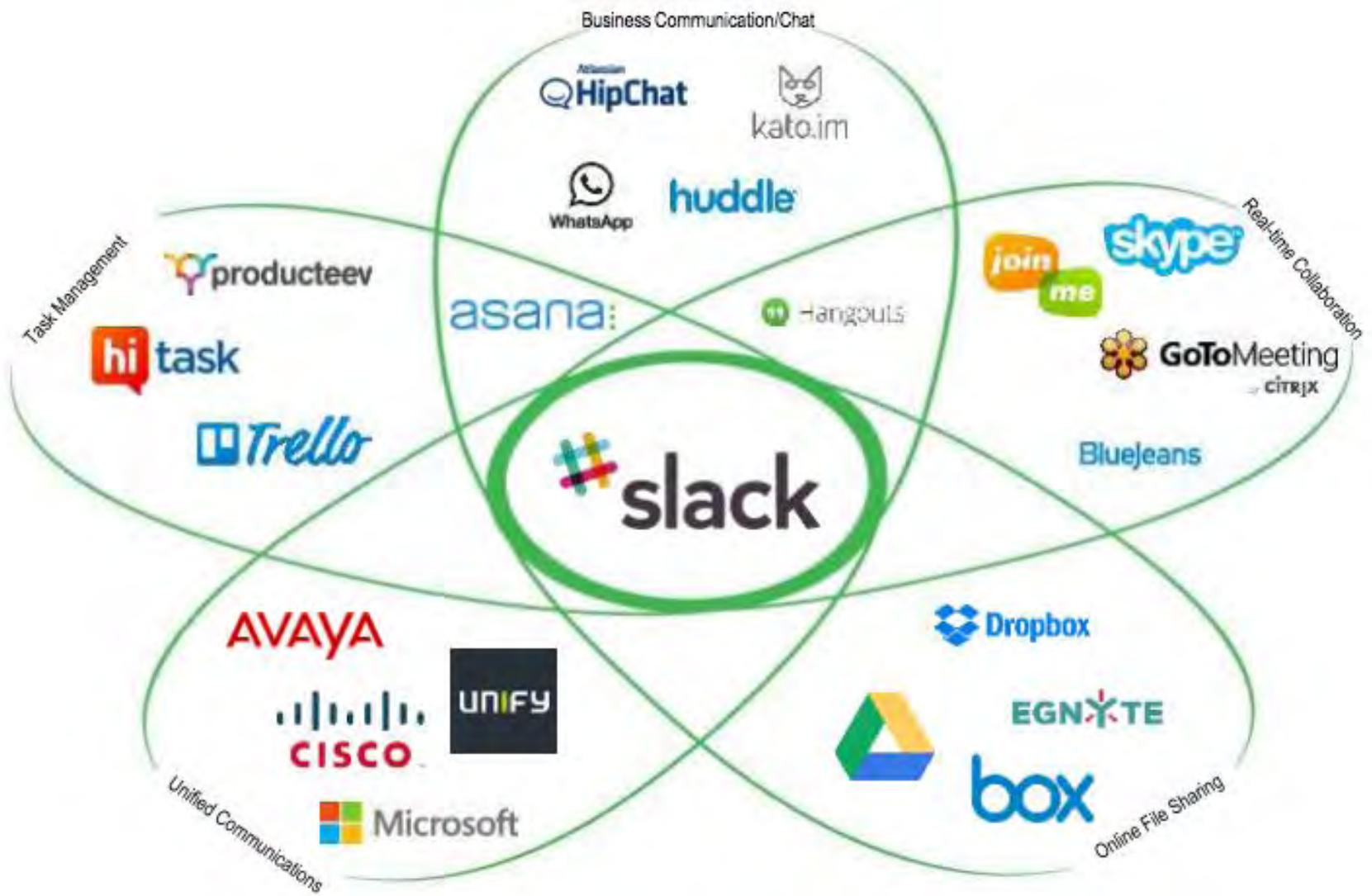
TIENES EL EQUIPO PERFECTO...

... PERO SI NO LO DESCRIBES BIEN...

… PARECERÁ QUE SOIS X VECES LA MISMA PERSONA.

Biciway Team

Hugo Freire
Operations and Product Development

Rui Amador
Sales and Marketing

Paulo Santos
Bike Mobility Expert

Emily Saturnino
Sales and Marketing

Frederico Lopo
Industrial Designer

Full Time

Full Time

Advisor

Part Time

Part Time

BICIWAY

EQUIPO

Jose Garcia-Luengo
Co-Founder & CTO

DATADEC   CISCO

David Leiva
Co-Founder & CCO

onbile

Paula Mascarós
Co-Founder & CEO

GRUP rtvv

VNIVERSITAT DĢVALÈNCIA

Guilherme Vinicius
Back-End Dev.

NOVAKOASIN

agathos

Domingo Casarrubio
Front-End Dev.

Telefónica

canales

Maria Escrivà
Co-Founder & CFO

Trolli   -LINEEX-

Alfredo Cuadrón
CMO

COSTORAMex   zoonity

Share with anyone from any cloud

Cover slide

DEAL

MARKET

VALUE PROPOSITION

product/solution

FINANCIALS

CLIMATE IMPACT

JTBD|COMPETITIVE ADVANTAGE

TEAM|DREAM

Do it with your

own
style

and...

JUST TRY.

STARTUP FUNDING CURVE

CLOSCA

CLOSCA
CROWDFUNDING

CLOSCA®

reddot design award
winner 2015

CERRADO

Closca Bike Helmet - Safety, Functionality & Style

Most elegant and Convenient Foldable Bike Helmet. Red Dot Design Award 2015.

PROPIETARIO DEL PROYECTO

CLOSCA DESIGN
Valencia, España
2 campañas | Más

$80,309 USD fondos totales recaudados
282% financiado el July 25, 2015

CLOSCA
SME INSTRUMENT

WILDFRAME MEDIA

WILDFRAME MEDIA

134.000 $

WILDFRAME MEDIA
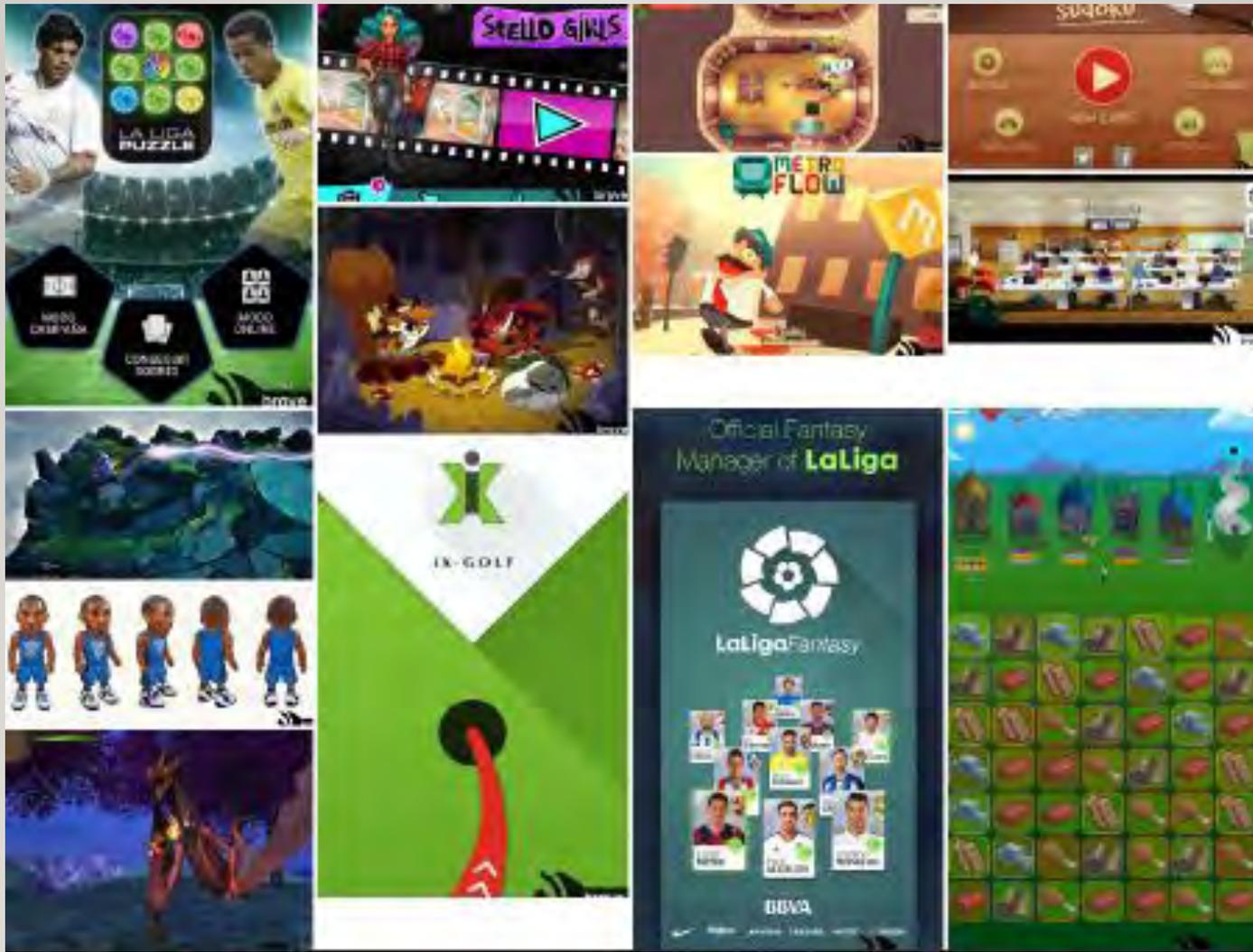
YEEPLY

LINKING MOBILE PROFESSIONALS

YEEPLY

BUSINESS ACCELERATORS
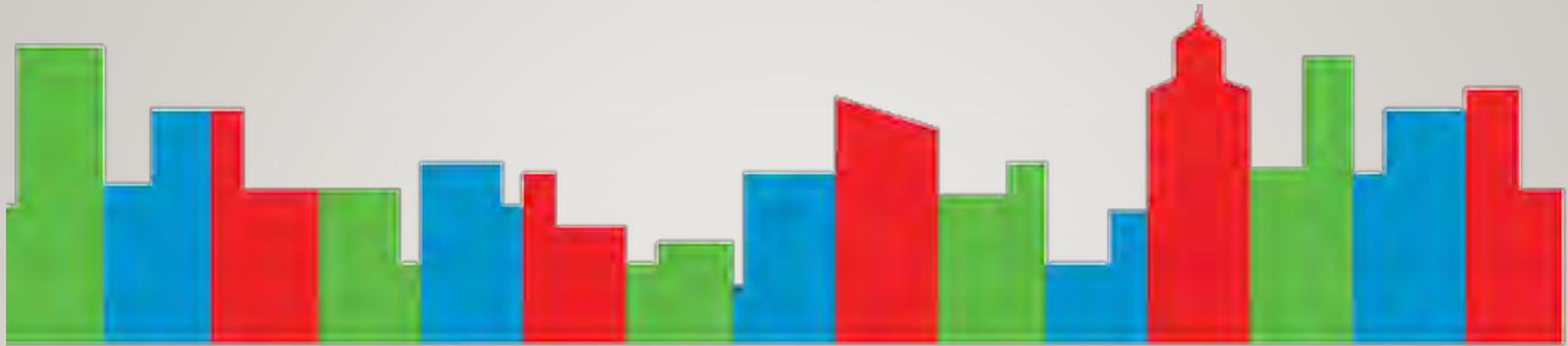
VALENCIA ECOSYSTEM: DEMIUM, LANZADERA, CLIMATE KIC, BBOOSTER…

YEEPLY

AWARDS

YEEPLY

4500 developers – 700 projects

320.000 €

Private + ENISA + IVACE

VITCORD

VITCORD

BUSINESS ACCELERATORS + PRIVATE INVESTMENT

SeedRocket

Born in 2014

Round in 2017:

750.000 €

100.000 users

739.000 video reproductions

QUIBIM

QUIBIM
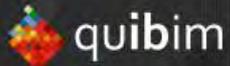
QUIBIM

BUSINESS ACCELERATOR + PUBLIC GRANTS


CONVERTIBLE LOAN

PUBLIC GRANT
Phase 2 → 1M€

QUIBIM

TECH TRANSFER UPV – OWN INVESTMENT FUND

550.000 € - Tech Transfer UPV, AYCE Capital, Bioinfogate

STARTUP FUNDING CURVE
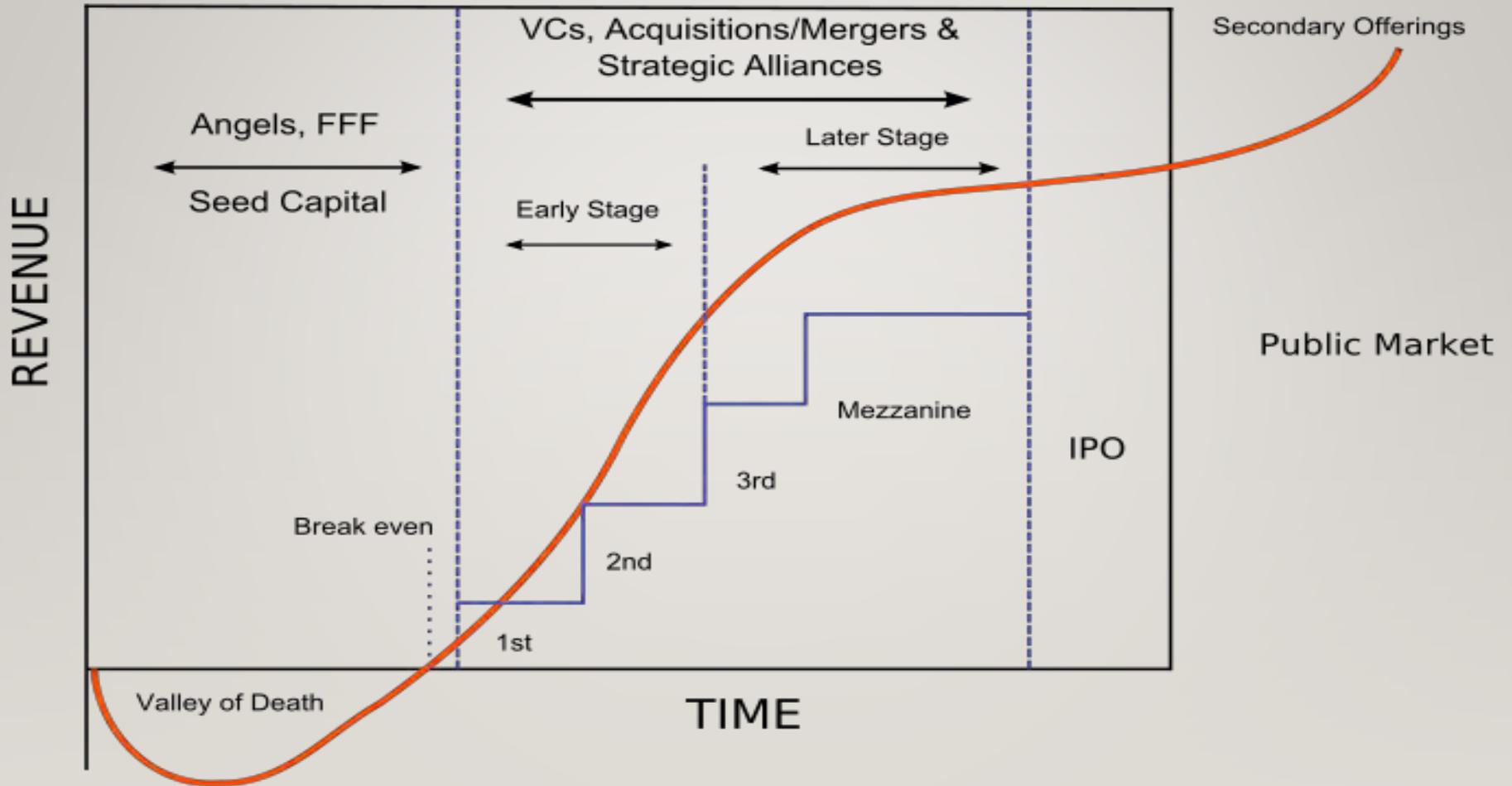
STARTUPV

THANK YOU
THE CASE OF STARTUPV

ISRAEL GRIOL BARRES IGRIOL@IDEAS.UPV.ES

STARTUPV ECOSYSTEM MANAGER – IDEASUPV

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

"NO! Try not ! DO or DO NOT, There is no try."