CITYCAPSTONE

We can all engage to make a difference

Problem

Cities are not prepared for a fast-growing population.

- **68% of the world population** is projected to live in urban areas by 2050*

- **386,000 babies are born daily**. Of these, over 90% will be born in less developed regions**

- **$ 15 Trillion** USD global infrastructure deficit***

- With a 2019 Global Competitiveness Index (**GCI**) score of **84.8 out of 100**, Singapore ranks first in terms of **infrastructure**, health, labor market functioning and financial system development****

* United Nations 2018
** UNICEF 2018
*** Global Infrastructure Hub / Oxford Economics 2017
**** The Global Competitiveness Report 2019. World Economic Forum

Are they prepared to face this **challenge**?

Solution

A platform where governments and citizens collaborate and support projects for their city

City Capstone

How to Prepare Them for the Future

Conscious Infrastructure	Social listening	Differentiated financing

Gives citizens active participation in the design of the future infrastructure

Big data analysis to define society demands and needs

Dynamic projects investments where everyone can be part of. Different ways to invest:
Tokens
Impact investing funds
General investment fund

Product

City Capstone merge society, government and investors in one platform

Society
- City people requires good quality infrastructure
- The best options for a healthy society relies on the active consideration of all demographic groups

Government
- Align projects coming from social listening background with the government public policies
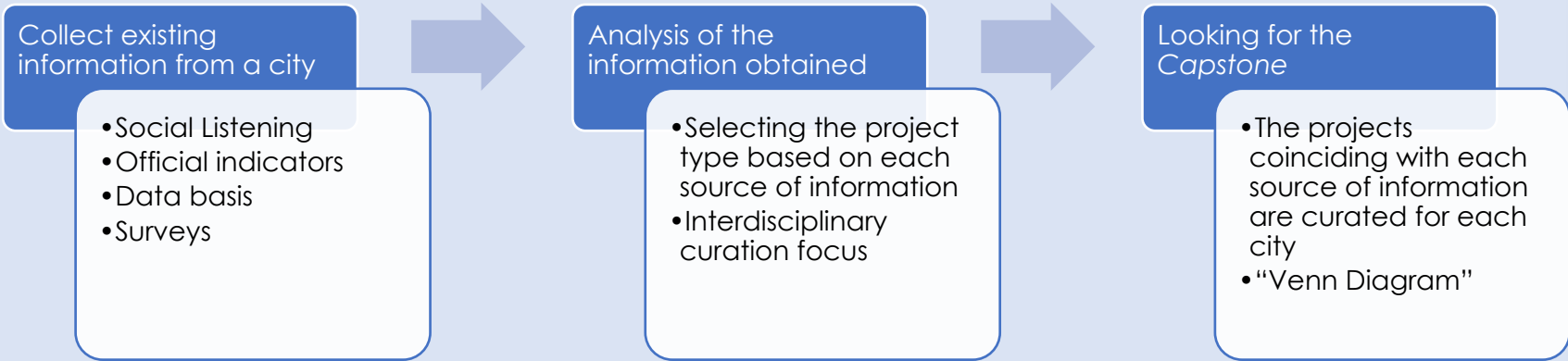- How the government can orientate city plans to citizens needs

Investors
- In financial terms, the expected revenue/benefit of the project in short, medium and long term
- From a common person to the sagacious investor, every people interested to invest in the new way to make infrastructure
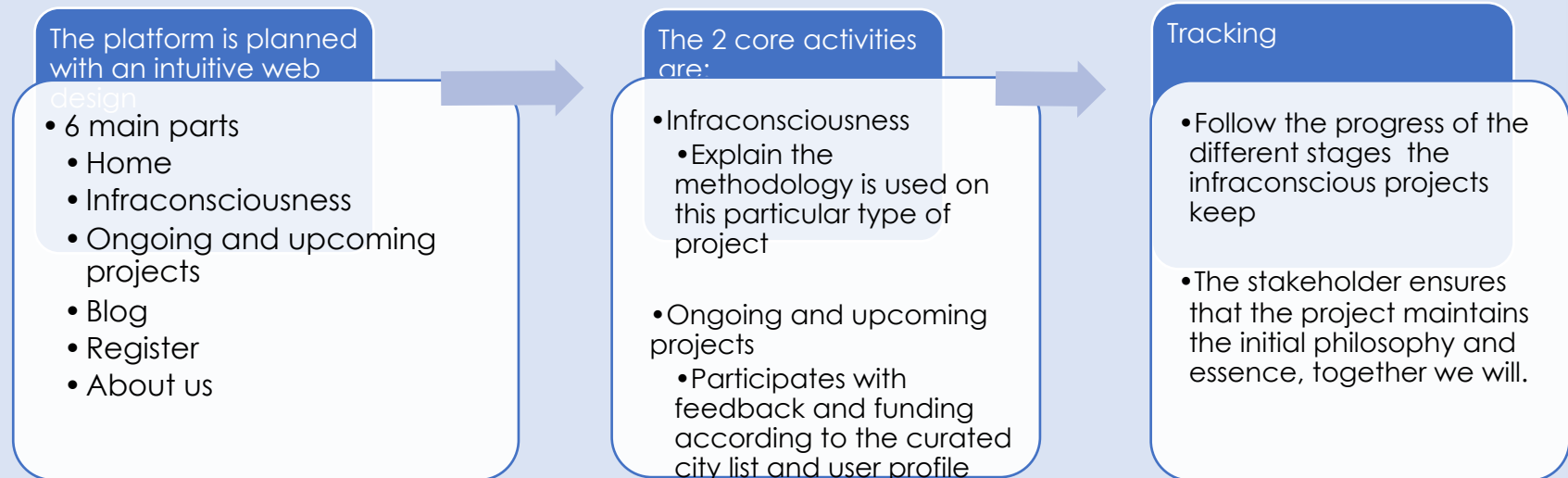
Product. How it works

A web / app to merge and find all the common interest between population, government and investors

Back end

Collect existing information from a city
- Social Listening
- Official indicators
- Data basis
- Surveys

Analysis of the information obtained
- Selecting the project type based on each source of information
- Interdisciplinary curation focus

Looking for the *Capstone*
- The projects coinciding with each source of information are curated for each city
- "Venn Diagram"

Front end

The platform is planned with an intuitive web design
- 6 main parts
  - Home
  - Infraconsciousness
  - Ongoing and upcoming projects
  - Blog
  - Register
  - About us

The 2 core activities are:
- Infraconsciousness
  - Explain the methodology is used on this particular type of project

- Ongoing and upcoming projects
  - Participates with feedback and funding according to the curated city list and user profile

Tracking
- Follow the progress of the different stages the infraconscious projects keep

- The stakeholder ensures that the project maintains the initial philosophy and essence, together we will.

Methodology

1. Define the city type
According to population density and economic development

Population Density ↑

Emerging Economy, High Population Density

Mexico City, Jakarta, Mumbai

› Optimal use of infrastructure
› Fast population growth
› Attractive ROI

1

Developed Economy, High Population Density

Londres, Detroit, Tokyo

› Society elites
› Sum-zero situation: same people working but different dynamic
› Encourage business that generate employment

2

Emerging Economy, Low Population Density

Lagos

› Open minded to new offers because of the scarcity
› High ROI in basic urban services
› Opportunity to start a correct city development since day 1 (water, transportation and energy)

3

Developed Economy, Low Population Density

Houston – Unusual type of cities, are disappearing

› Talent attraction and scarce job opportunities
› Efficient transport, clean air, green areas and support to arts and entertainment
› Help governments in build city enterprises

4

Economic Development →

Methodology

2. Social listening
Define what are the main problems the society is talking about

Analyze big data from social media

> Define the topic (s) you want to look for
> Develop a query with specific words according to the topic(s) selected
> Run the search in the software

Develop business intelligence

> Select a data sample of the universe
> Define the conversation tone and sentiment
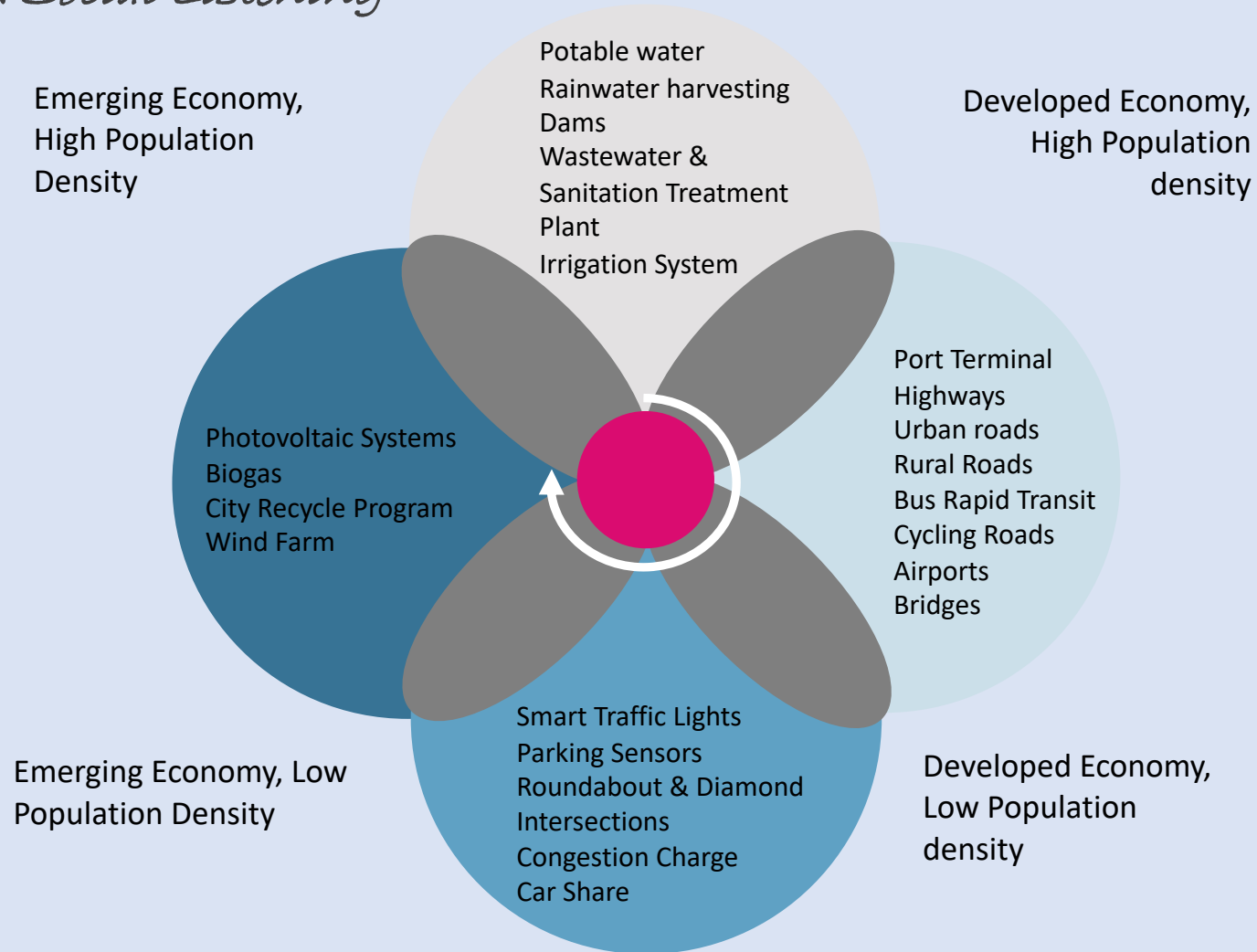> Align the data to obtain facts

Generate business analytics

> Go from facts to insights
> Look for possible solutions to society problems

Methodology

3. Select infrastructure projects

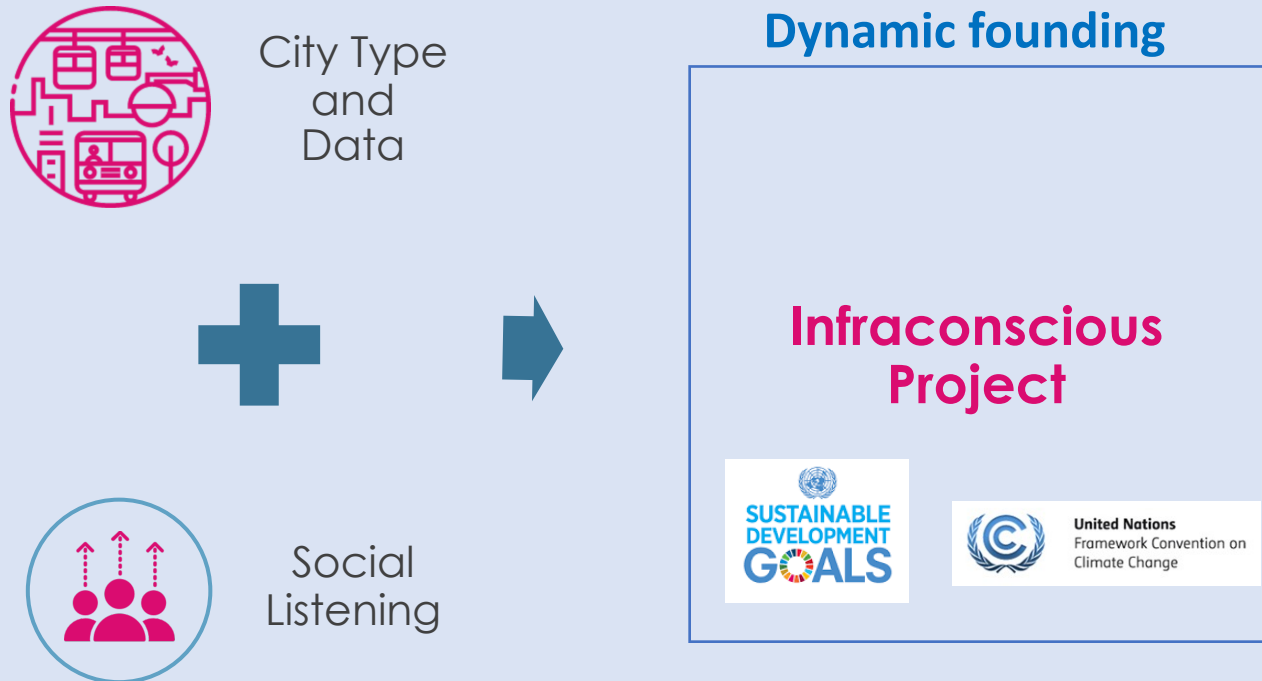Evaluate the infrastructure projects according with the *City Type* and *Social Listening*

Emerging Economy, High Population Density

Developed Economy, High Population density

Potable water
Rainwater harvesting
Dams
Wastewater & Sanitation Treatment Plant
Irrigation System

Port Terminal
Highways
Urban roads
Rural Roads
Bus Rapid Transit
Cycling Roads
Airports
Bridges

Photovoltaic Systems
Biogas
City Recycle Program
Wind Farm

Smart Traffic Lights
Parking Sensors
Roundabout & Diamond Intersections
Congestion Charge
Car Share

Emerging Economy, Low Population Density

Developed Economy, Low Population density

Methodology

4. Look for the capstone

Merge city needs with the social listening results to obtain an o city project

Select the top-notch projects as a result of the previous analysis

City Type and Data

Social Listening

Dynamic founding

Infraconscious Project

SUSTAINABLE DEVELOPMENT GOALS

United Nations Framework Convention on Climate Change

Unique Advantages

Why CityCapstone is different, why we're the solution

CityCapstone	Traditional

CityCapstone

- **Embraces social empowerment**
  The citizenship encourages ideas and projects through social listening and proactive participation.

- **Worldwide financing**
  Inclusive perspective allows plural stakeholders in order to democratize the inversion.

- **Transversal interface**
  The all-in-one platform gathers all the processes from different stakeholders.

- **Agile online frameworks**
  The *new normality* we are experience demands a rapid way to achieve rapid remote work and allows for change alternatives ensuring safer protocols.

- **Sustainable infrastructure analysis**
  Curation involved towards infraconsciousness.

Traditional

- **Government approach**
  Unidirectional manage of public affaire detonates on an ultimate decision resting in the bureau.

- **Public financing**
  Same old conventional taxes&programs scheme.

- **Traditional way through**
  Local, physical and limited channels to interact with stakeholders.

- **Long term projects**
  It requieres more time and resources to get, at last, an umpredictable result

- **Non-integral analysis**
  Considers few aspects that deviates into a misunderstood reality, privileging the economic as the unique benefit.

Competitive Landscape

Digital Aproach

Informative

Makes Projects Happen

Traditional

EIP-SCC
European Innovation Partnership on Smart Cities and Communities

zencity

CATAPULT Future Cities

City Capstone

SIDE WALK LABS

DATA REPUBLIC

ARUP

WSP

KPMG

accenture

McKinsey & Company

Global Infrastructure Hub

Deloitte.

BCG

EY

EY

Oxford Analytica

pwc

WORLD BANK GROUP
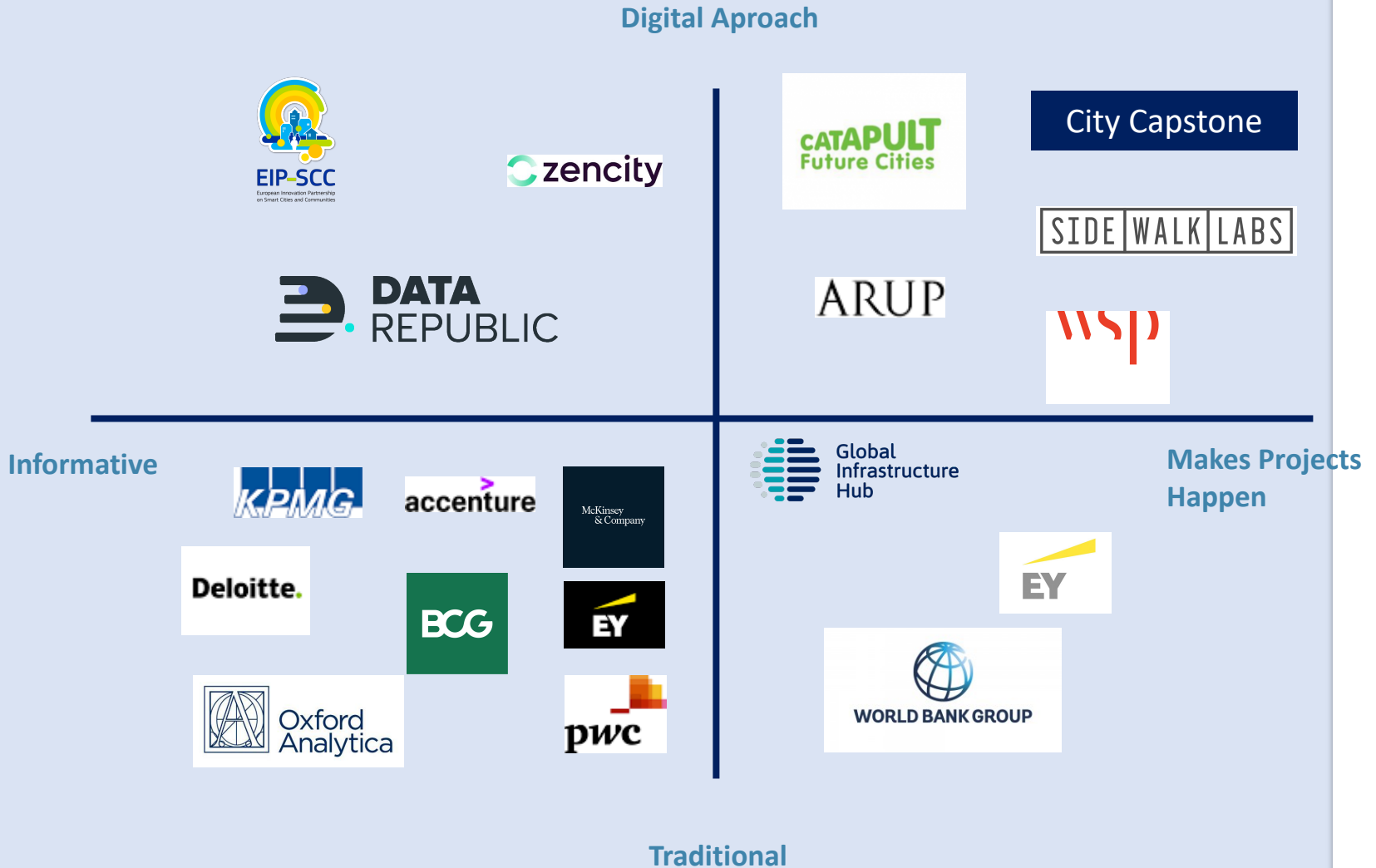
SWOT Analysis

STRENGTHS

- Infrastructure projects with high quality and sustainability standards
- Democratize the possibility of the small investor
- Understand the social impact of the final consumer through their digital lif
- Broad spectrum in project size, from micro to mega

WEAKNESSES

- Need for active participation in social networks (external)
- Society proposition can be unfeasible and demotivate (external)
- Low reliability information for insights (internal)

OPPORTUNITIES

- Focus on SEO can improve search engine ranking and increase the potential universe of projects
- Scalable platform to other strategic areas such as health, food and pollution
- Protection of intellectual property
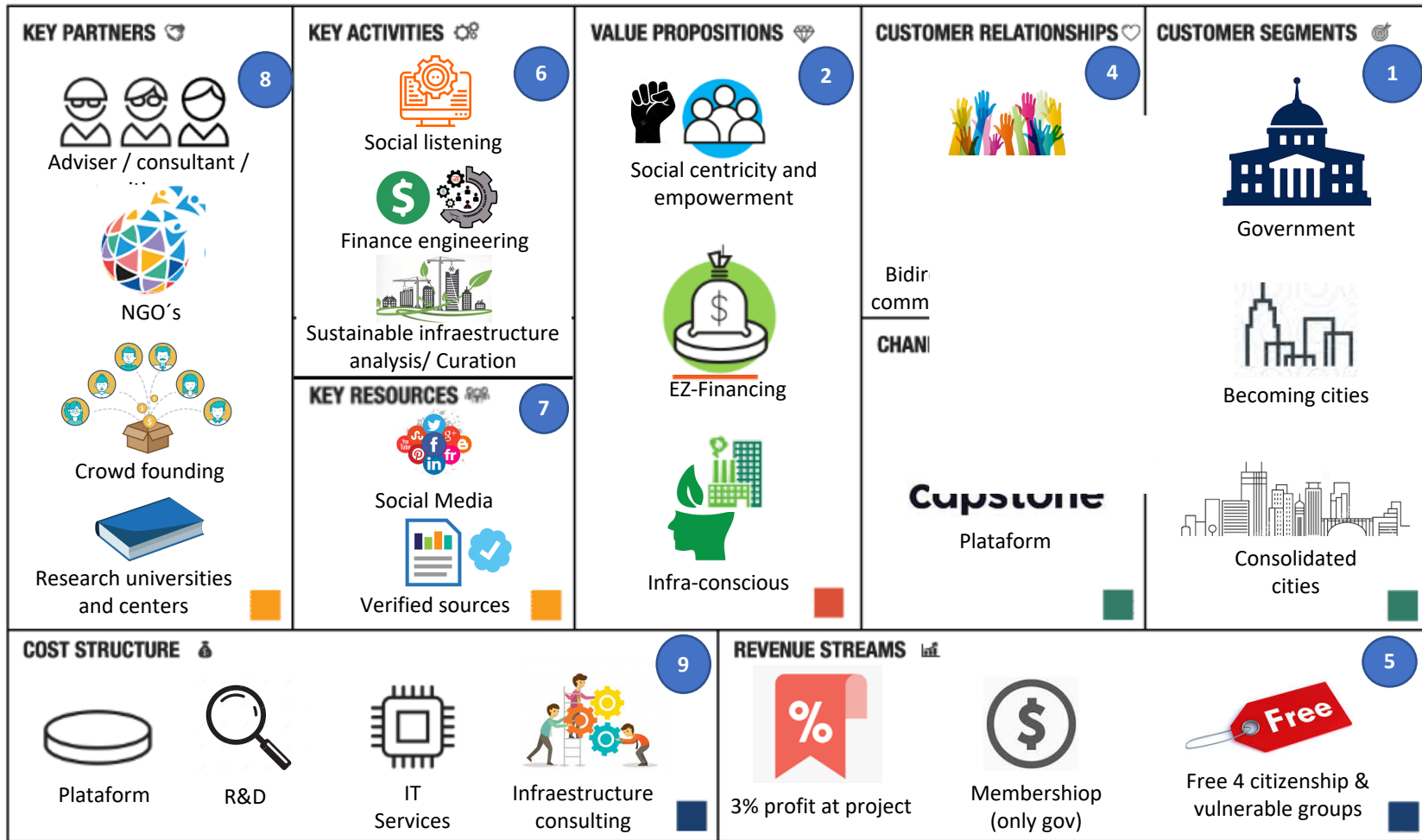- Scalability to multinational and international regions

THREATS

- Compliance risks on the international stage
- Listening platforms can scale to infrastructure analysis and investment platforms
- Information vulnerable to cyber attack
- Massification of similar platforms by social appropriation
- Incompatibility with governmental scenarios

Business model

KEY PARTNERS ⑧
- Adviser / consultant /
- NGO´s
- Crowd founding
- Research universities and centers

KEY ACTIVITIES ⑥
- Social listening
- Finance engineering
- Sustainable infraestructure analysis/ Curation

KEY RESOURCES ⑦
- Social Media
- Verified sources

VALUE PROPOSITIONS ②
- Social centricity and empowerment
- EZ-Financing
- Infra-conscious

CUSTOMER RELATIONSHIPS ④
- Bidirectional communication
- CHANNELS
- Plataform

CUSTOMER SEGMENTS ①
- Government
- Becoming cities
- Consolidated cities

COST STRUCTURE ⑨
- Plataform
- R&D
- IT Services
- Infraestructure consulting

REVENUE STREAMS ⑤
- 3% profit at project
- Membershiop (only gov)
- Free 4 citizenship & vulnerable groups

SECTION KEY
- CUSTOMER FOCUS
- FINANCIAL VIABILITY
- INFRASTRUCTURE
- OFFER

The Business Model Canvas is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License.

Market Size

Total Addressable Market

867.8

Million USD
Total Sales Worldwide

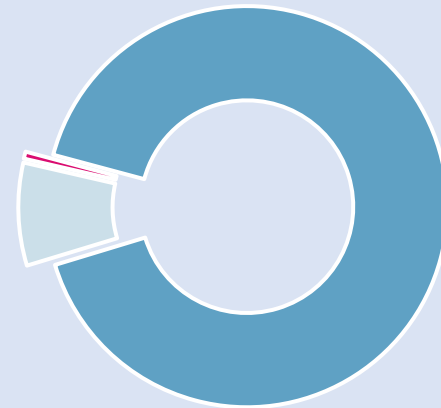## Serviceable Available Market

78.89

Million USD
México sales

Serviceable Obtainable Market

5.432

Million USD
Per City

Sales

TAM   SAM   SOM

Roll up plan

Process			Tools

Process

International	• Local available technologies
3 continents	• Historic success/failure projects
10 cities	• Population general preferences
2% revenues	

• International regulations
• Law regulations by country

National	• Orographic local databases
5 MS cities	• Local social listening
2% revenue	• Local sponsors and opinion leaders

• Startup advisory
• Sponsors support

State (pilot test)	• Example on a medium size municipality
1 MS city	• Step traction and potential financing result statement
Free of charge	• Local govern popularity index

• Govern council intermediate
• Govern collaboration
• Marker strategy base on web

Tools

Investment opportunities online

Project process and project examples

Cities projects upgrade

Orographic regional conditions and options to fit

The team

Bernardo Martínez
From Mexico City, this architect with a heavy infrastructure specialty has been evolving since 20 years ago with the latest applied technologies in concrete. Tech lover, globetrotter, wine taster and a black novel devotee.

Juan Carlos Miranda
Originary from Oaxaca, México, chose the profession of civil engineer because of the sheer pleasure of discovering and innovating. Meticulously modern, self-taught by nature, focused on detail, always looking for excuses and opportunities to grow and change

Nazario Valencia
Proudly born in Mexico state, the different pathways this architect and master in public administrator has been through, has given him the opportunity to collaborate in local government, private companies and entrepreneurship. Enjoys car repairing, metaphysics and autodidactic learning.

Raul Rodríguez
Native form Piedras Negras, Coahuila. Recently graduated civil engineer, his value added skills are used in infrastructure projects. Deep analysis and methodological rigor are his advantages. Some hobbies are traveling, exploring unknown places and meeting friends