

Problems

Public/digital health agencies

- Public agencies/city councils lack scalable methods to produce biological data for urban planning models.
- Public agencies need a system to inform the public on avoiding communicable diseases, leading to less strain on treatment-focused healthcare systems and reduced treatment costs.
- Governments require strategies for early response to healthcare emergencies, like COVID-19, and for protection against potential biological risks, whether originating from humans or the environment.

Agritech

- Farmers require a real-time, simple, and lab-less method to respond early (and precisely) to infected crops, allowing them to cut and burn just the infected areas.
- Farmers need a platform that allow them to understand which soil areas are infected to avoid them at the time of planting the crops
- Logistics stakeholders need to easily detect pathogens in produce, discarding on time products that risk to contaminate the rest of delivery.

Solutions

Automated biosensing nodes

Implementing a network of biosensing devices capable of monitoring protein concentration in real-time, across various settings such as farms, cities, and transport systems.

Data analytics platform

Providing an intuitive data analytics platform that processes the data collected from the biosensing nodes and translates it into an intuitive map with protein concentration layers.

Integration services

Taylor made integration of biosensing data with current systems of health agencies, agritech firms, and public services.

Collaborative ecosystem

Establishing a collaborative ecosystem where data can be shared and leveraged among different stakeholders to improve public health outcomes and agricultural efficiency.

Key Metrics

Data integrity

How trustable are the results? Could we include controls that track the data quality?

System Uptime and Renewal

Which is the error rate? How much it last a node until we need to change it?

Node deployment rate

Which si the rate of deploying nodes compare to their "expiration time". How many nodes are deployed?

Network maintenance requirements

The deployed network wont be just defined by the system renewal and deployment rate but by the maintenance requirements. How much could we reduce it

Customer adquisition, retention & satisfaction

Value Proposition

Internet of BioThings

Connected biosensing nodes for real-time large scale protein concentration monitorization



Unfair advantage

Proprietary automation technology & regulatory compliance

Been able to fully automate aptasensors is key! We found the technology to do it after 10 years of hard research before spinning off. We spent the last 5 years just passing through the regulations! Any competitor would need similar times until reaching us

Key partnerships and clients lock-in

We'll partner with key public health and agritech stakeholders to integrate our biological data generation platforms with their existing pipelines, creating high switching costs for customers in case a competitor arise.

Network effects

As more stakeholders use the system, it becomes more valuable for everyone, creating a self-reinforcing advantage.

Channels

Direct sales & partnerships

Of stakeholders interested on enabling their infrastructures with the screening nodes

Custom online platform

We will design our own dedicated online platform for customers to access data and insights, request services, and receive support.

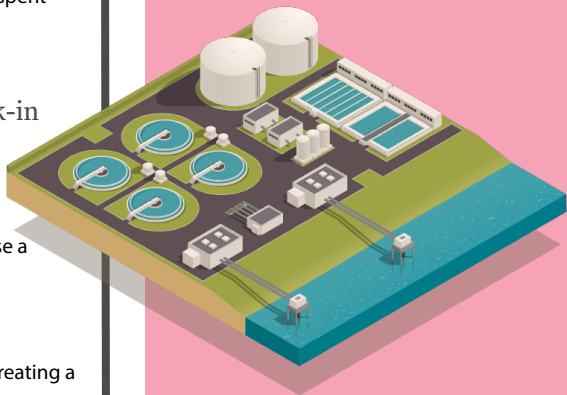
API integration

For bigger clients we will integrate the node-generated data into existing platforms of hospitals, logistic companies, etc

Customer Segments

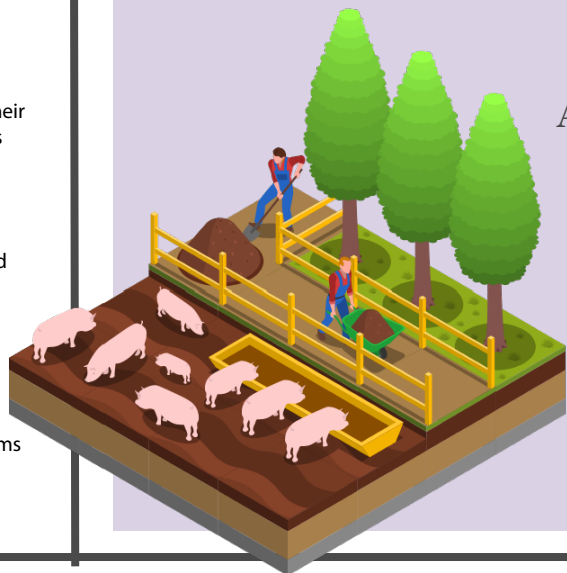
Public/digital health agencies

- Government health agencies
- City councils
- Seasonal virus observatories
- Hospitals, Clinics
- Research institutions.
- Public water suppliers
- Public transport agencies
- Military bioterrorism divisions



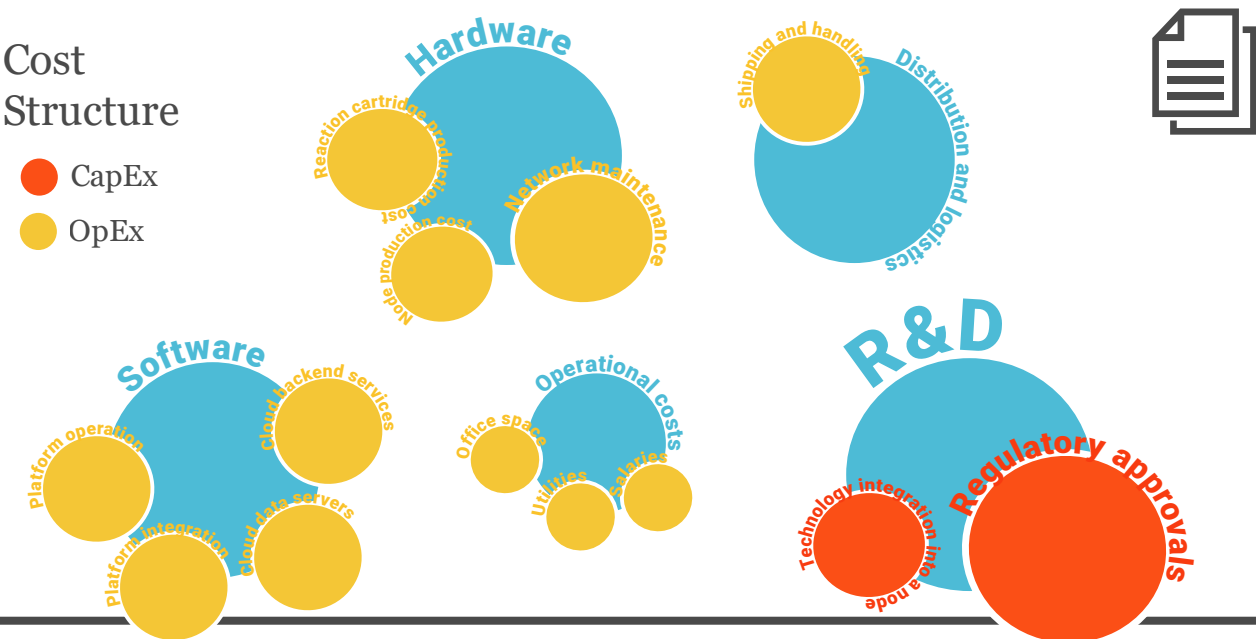
Agritech

- Supply change providers
- Agritech equipment producers
- Farmers and agrobusiness



Cost Structure

- CapEx
- OpEx



Revenue Streams

1st phase

Deploying the hardware B2B - Razor and blades

Deploying hardware that help monitoring a city, a farm, a transportation system, water distribution... For private customers we will reach private information agreements, for public stakeholders the data would be public and usable by anyone

Razor and blades model; Affordable hardware, main revenue comes from cartridges. This model will pay for the cost of deploying the first ammount of nodes to start generating data.

2nd phase

Data as a service

Once that we have enough ammounts of anonymized data and a deployed infrastructure to keep generating it, (e.g. real time data of the prevalence of viral charge in London tube categorized by station...), the main revenue will come from selling the data through our online platform. Monthly access to maps with protein concentration layers

3rd phase

Predictive models as a product

Once we achieve critical node density, we would be able to not only detect current pathogen levels but also to train ML algorithms that effectibly answer predictive questions. Our product would become this models, rather than the raw data