SeaPod

Working doc

This is a co-creative document, [open content rules]

This is YOUR space (yes, yours!) to document what you are doing and what others are doing in the context of this project.

Contents

Important links

[Webpage on Sensorica's website]

Coordination

Work on governance (Tibi)
Work on tech development (open tech doc).
Work on relations with other communities.

Initial assessment

1. Innovation needs
2. Sensorica Ocean Builders relation - formalization: infrastructure (NRP), methodology (...), agreements -with the Custodian(s)

Innovation needs

See the technical document for more details on innovation needs

The goal here is to understand what Ocean Builders needs in terms of innovation, and scope the task of designing an ***open innovation strategy***.

Note that **innovation is dependent on its economic context**. Designing a product in a capitalist, market-based economy will not lead to the same result as designing it for the sharing economy: a shared car (CarToGo for example) is not the same as a proprietary car (individually owned). Also, urban planning and development is very different in socialist countries than in capitalist countries. For example, the phenomena of urban sprawl would be less common in socialist countries, which favor more efficient social and co-housing units with centralized utilities for providing electricity, heat, water, etc.
Ocean Builders is a commercial venture that emerged within the Seasteading community, which is built on the core idea of creating special zones where we can experiment with new governance and economic systems. The communities at sea that this movement wants to create must be generative of these new governance and economic models. This means that the context of innovation doesn't exist yet in this particular case. We need to put in place an innovation process that is not only generative of technological solutions, but is also generative of its own context. This is a **meta innovation process**.

Economic innovation

What type of economic systems are we envisioning? The design of a dwelling at sea, their relationships with other dwellings and utilities depend on the economic system in which these resources are produced, used and maintained. For example, a vacation village where small houses are rented to tourists for a short period of time doesn't look the same as a residential village, designed for permanent living. Moreover, socialist countries with centralized economies tend to build social housing and put their people in large buildings in urban areas, in order to optimize the use of energy and materials, and to diminish the costs of maintenance. In capitalist countries urban sprawls are common, fueled by a more individualistic and decentralized market economy.

[Tibi] it is probably not a good idea to fix economic parameters, since the goal of Seasteading movement is to explore different governance and economic systems.
But how are we going to design dwellings at sea, intended for building communities at sea, while opening up new opportunities for new governance and economic models?

Business model innovation

How are agents motivated to build and maintain the infrastructure of communities at sea? How can we make that economically and environmentally sustainable?

Technology innovation

See mindmap

[Tibi]: We need to cluster these innovation needs in categories, each category could have one or more projects. Clustering projects by category can bring benefits, if doing so we increase synergy between projects and similar incentives can be applied to all projects in a category.

Sensorica's open innovation methodology needs to be adapted to this innovation case that must be generative of its own context.

Categories

- Related to the water system
    - Showerloop
- Related to the power system
    - … find open source communities...
- Smart home applications - see all PropTech
    - … find open source communities...
- Food growing + fresh water production
    - Vertical automated plant growing systems - GrowSense
- IT infrastructure (Blockchain)
    - Identity management - german guy

    - Credentials management
    - Preferences
    - Transaction systems - payment
    - Ownership (models) / Title
    - Access management (builds on the above) - [Sensorica project]

Need visual maps, clickable, showing projects and how they connect.
Need general design limits, for every project group.

Home integration and automation platforms

[Hackathon to find, analyse and rate open source platforms.]

Community / Urbanism at sea innovation

Physical layout of important assets
See Burning Man's layout. The spatial arrangement of physical assets is very important for a well-functioning community.
What is the purpose of this community. What should be maximized, minimized and what should we compromise? Or how should we think about this so that we don't close off social innovation possibilities.

Utilities / possibly shared infrastructure, resources / commons

- Energy
- Communication
- Security / defence
- Emergency
- Waste processing
- Mobility

First impressions of Ocean Builders

Business model
Sharing economy, build SeaPods, which are floating short-term habitation units to be rented to tourists, using platforms such as Airbnb. Ocean Builders can be a real estate company?
People would invest time and money into the company and into its innovation and production and get equity in the short-term rental business.

Form of property of the Ocean Builders company is …

Form of property of the SeaPod is … some mention of blockchain ownership, borrowing from Maritime law, SeaPods being flagged like boats are, under the protection of a nation state. This is unclear and highly experimental.

Product design
The first SeaPod's design is heavily influenced by the *life on a boat* mindframe. The SeaPod is essentially a stand-alone, floating, short-term habitation unit, with poor features for interconnections or easy access from one SeaPod to the other. Such stand alone structures don't favor the creation of a community at sea -see the role of pedestrian mobility in land-based urban settings. But perhaps interconnectivity is not an important feafure taking into consideration the business model.

Production
The production model for the current SeaPod is a land-based one, using the boat infrastructure - marinas with heavy lifting equipment and repair shops. The first SeaPod model is not designed to be built at sea.

Exploring other economic models

P2P is one possible economic model/context adopted by these new pioneers at sea. Let's explore this possible…

Crowfunding real estate

Essentially, you can invest in a real estate project either as an equity investor or as a debt investor for as little as $1,000 – $10,000. Investors pool their money to take down an asset they would otherwise be unable to buy or lend on their own due to the cost or exclusivity of the property.

There are various types of Real Estate Crowdfunding

- Crowdfunded Bridge loans
- Long Term mortgages
- Real estate development
- Buy to Let (BTL)
- Buy to Sell (BTS) or flipping

See this paper

PropTech

- **Atlant** is making an effort to create a decentralized real estate marketplace. They try to achieve those results with tokenized ownership and p2p rentals.
- **Bowery** offers a cloud-based appraisal writing software that automates and speeds up the process compared to their leading competitors.
- **Buildium** is an intuitive and efficient cloud-based property management software. It is affordable and perfect for the medium size property management and small landlords.
- **Enertiv** digitizes the physical infrastructure to streamline the management and operations of large buildings. They install circuit-level sensors on every valuable piece of equipment, track the crucial indicators and analyze the data streams. These open tremendous possibilities for enhancing the safety and efficiency of elevators, boilers, exhaust fans and air conditioning.
- **Flip** provide a digital communication platform for rentals. They provide flexibility for renters and landlords. They provide a seamless experience for those looking to sublet or search for a home for a short period of time. Flip manages the entire process from screening the potential candidates to the payment of security deposits.
- **Foyr** was created in Bangalore, the Indian Silicon Valley. It was the first online interior designer. With the simple interface and request forms, Foyr tailor specific design solutions for your home. They measure the key indicators of your interior and adjust it to your cultural background.
- **Mashvisor** is a real estate data analytics company which helps investors find lucrative traditional and Airbnb rental properties. Their platform uses big data and predictive analytics to analyze the investment potential of properties. They use AI and machine learning to match buyers with the most appropriate investment properties.
- Property owners can try to market property themselves, but usually, they lack even the basic expertise. **No Agent** is changing this and enables landlords to manage their property professionally. No Agent's advanced knowledge and technological toolkit allow landlords to operate the process autonomously with minimum spendings.
- **Open Listings** innovative platform allows anyone to buy a house without the assistance of the real estate agent. Prospective buyers can manage all the process online with the self-service platform and in-house consultants. The platform saves up to half of the money that would usually go to the commission of the real estate agent.
- **Ravti** procures, tracks, and manages HVAC for big residential and office buildings.
- **Rentberry** is an innovative rental platform that enables direct interactions between tenants and landlords. It is an all-in-one platform that allow users to submit rental applications, track maintenance, requests candidate screenings, and e-sign rental agreements. One of the unique features of Rentberry is the custom offer feature that allows tenants to negotiate the rent price transparently through the platform.

Search more about **PropTech**

See also the EU / EC funded [Ghost project] aiming to respond to security challenges involved in smart-homes

High level urban design requirements

- Modularity - allow easy reconfiguration, repurpose, adaptability and agility
- Flow of residents - mix between permanent and short-term, and anything in between, allow easy access (low barrier), facilitate short-term stay
- ...

Is the model based on traditional forms of property?