Earth Observation Business Models

Key Factors. Case Study: Satellogic

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A great discovery needs a great business model DISCOVERER

By applying two different business models methodologies, two successful companies working in the field of EO are examined. Thanks to that, the causes and consequences of their business models' key factors are exposed in order to be helpful for the DISCOVERER project.

The state of the art is focused on answering two questions:

Can business models from New Space be transferred into VLEO projects?

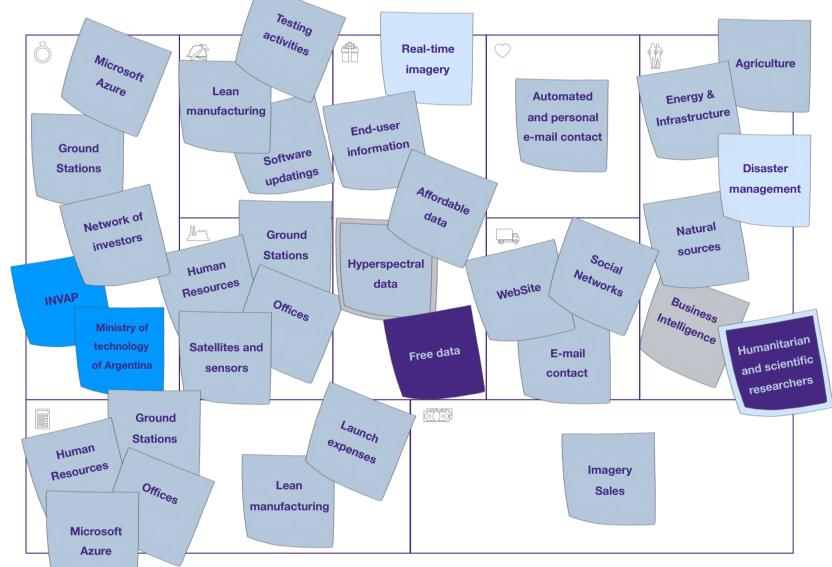
YES

"A business model can be understood as a set of hypotheses about how a company organises itself to create value and make profit by delivering it to the target market."

Not every business model has the same components, making their comparison difficult. To solve this fact, the Canvas template and the Causal loop diagram are tools used to translate all business models into a shared language.

The Canvas template, with its nine building blocks, was developed by A. Osterwalder (2005) with the aim to offer a complete representation of a business model from an operational point of view.

Like in a puzzle, in the canvas template, each building block is not as important as it is the coherent interrelation among them. Satellogic aim is to serve new commercial customer segments by providing affordable and real-time data. Their communication and delivery channels are purely automated, reducing with that the cost structure. The revenue stream coming from imagery sales of commercial customers, enables Satellogic to offer free data for humanitarian and scientific projects. To be able to provide their value propositions, they need to have AIM satellites developing EO activities and a whole infrastructure to design and manufacture them. As Satellogic can not develop all key activities **Democratise Earth Observation**



How?

New customer segments

End-user information

Affordable data

such as Microsoft Azure to provide Artificial Intelligence services and third party ground stations.

nor key resources, they have to sign some partnerships

Figure 1: Satellogic's Canvas template

What can **DISCOVERER** provide?



Cheap data acquisition

Cheap launch



J. E. Ricart and R. Casadesus (2010) opt for providing a

Lower orbits

Nanosatellites. Cheap technologies

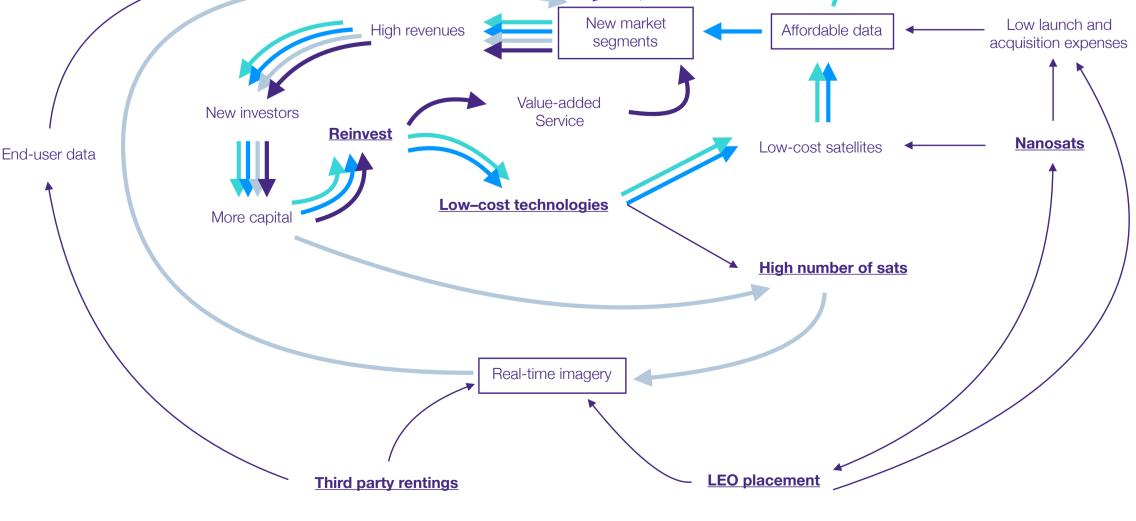
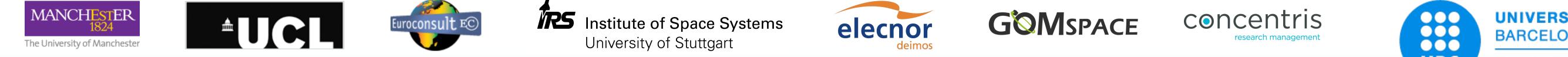


Figure 2: Satellogic's Causal Loop Diagram

more strategic and representation.

In the **Causal loop diagram**, the main choices taken by the enterprise and their consequences are linked by arrows. They create sometimes virtuous cycles, feedback loops that strengthen favorable components of the model, or vicious cycles, loops that can invoke the malfunction of the complete model.

Satellogic's mission of gaining new market segments by offering affordable data is reinforced with 4 virtuous cycles. These loops lead to even more rigid consequences and, therefore, they increase the strategic advantage of the company. Moreover, these loops are externally fed by orbital altitude issues, where the DISCOVERER project can introduce disruptive improvements and therewith, huge steps towards the democratisation of Earth Observation.





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