

Do a market for Earth Observation Data exist?

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Recently, a great attention has been given to the exploitation of Earth Observation data, as a mean of industrial innovation and source of potential societal benefits. EU is at forefront in Earth Observation technologies: ESA launched the Sentinel Constellations, a set of redundant satellites that will offer high availability and resiliency as required by industries to run businesses.

Several attempts and approaches have been experimented with alternate success in terms of self-sustainability, easy-of-use and scalability: from Thematic Exploitation Platforms, Business incubators to a Marketplace for EO services and data. All these approaches seem to enable a pipeline business model, i.e. where business is based on the acquisition of resources (a product and/or service) that are pushed to the consumer through the value chain in a unidirectional way.

However, the Digital Transformation is radically changing the market landscape: ubiquitous connectivity, hands-held technology and user interactions are enabling elements of the platform business model, as successfully exemplified in various markets such as AirBnB, Uber, Google, etc.

The platform model, instead, focuses on the creation of value through establishing an intelligent networking among users: where pipelines create value “on-top” of managed resources, platforms (that usually don’t even own such resources) create value by linking producer and consumer of resources. Platforms, as analysed in depth by S.P. Choudary (Choudary et.al. 2015), execute as a content aggregator that can simultaneously satisfy different type of interests. Platforms exploit also the phenomenon of network externalities, i.e. a service increases in value whenever increases the number of interacting individuals. Externalities could be of two types: same side (e.g. as in the telecommunication networks) or cross-side. Platform model exploits cross-network externalities, which are linked to the diffusion of the product, not among members on the same side of the market, but to the diffusion of the product on another network (or side). For example, Amazon marketplace bridges producers and consumers, while Uber helps drivers and riders to meet or AirBnB links housekeepers and tourists.

These features also allow the business model to scale faster, thanks to the nature of the user, who could be both resource provider as well consumer (prosumer): this creates new opportunities, but also new challenges to face with. The breakthrough work of Choudary on the platform analysis models highlights the distinctive features of this new approach as well as the best practices that facilitate its understanding and implementation. This presentation aims to open a debate among stakeholders and to illustrate the initial hypothesis about how to implement the platform model in the EO sector for the benefit of all actors involved.

Topic Area

Business models, sustainability and policies

Type of abstract

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