Standards and business models transformations

Sylvain Marty, Tony Jolibois, Tarek Habib, Jean-Michel Zigna and Elisabeth Lambert

(Submission #346)

Abstract

Recent years have seen an unprecedented increase in the amount of available data, open innovation initiatives and open software bundles. The expectation of the public actors, from political to the general public actors, is that companies shall work towards the transformation of their business towards a more service based approach, making more openly available know-how (data and software) and in the same time increased competitiveness vis-à-vis international competition.

These trends have led to the adoption of standards to facilitate data distribution by producers to end-users. However, the relation remained direct from producer to consumer and we are just recently witnessing the emergence of aggregators, call them marketplaces, who try to add value by bringing a number of producers into a single shop to consumers. The ultimate objective of aggregators would be that new applications and services would emerge from the interaction of producers on their platforms. Joining an aggregator has a number of benefits for producers as it is expected to increase their reach and enable the creation of new services, but it also raises a number of technical, legal and commercial questions.

The value-added aggregators on their end face a number of challenges, technical, but also commercial and legal. On the technical side, it is a challenging task to federate, identities, data, dissemination mechanisms and system monitoring for operations. On the commercial and legal sides, it is not feasible today to centralize all information from data producers on a single infrastructure and to guarantee full data and IPR protection for technical feasibility but also for differences in regulations. Let alone the cultural gap to convince producers to move to new solutions.

We tried to respond to these challenges through the development of a fully distributed data federation system implementing the INSPIRE directives. We believe that the current INSPIRE compliant OGC standards bring the solution to create a common “glue” layer between heterogeneous data providers and bring them into a safe, controlled centralized system to external users. We have implemented an operational instance of this centralized system for the European Copernicus Marine Service. The distributed architecture builds on an opensource software (Motu) that we deploy on each producer’s premise to connect to the centralized system.

In this presentation we propose to discuss our approach as well as ideas on how we expect this architecture to help the transformation of business models and to create new technical and commercial growth opportunities.

Categories

Topic Area: *[4.1]INSPIRE Thinking out of the box – INSPIRE innovation*
Abstract Type: *Oral Presentation and paper in IJSDIR*

Additional Fields

Comments: Business transformation, INSPIRE directive, OGC standards, MOTU, centralized architecture, distributed systems