



Data protection : brave new world of data

An European data market to boost a data driven economy: the telecoms perspective



Maurizio Cecchi

Net Futures Conference – Bruxelles, 28/6/2017

The challenge

- **An European data market could have disruptive impacts on traditional businesses' value chains, redesigning the interaction between Communication Service Providers and the other industry sectors, and represents the best opportunity for Europe to achieve faster economic growth.**
- To materialize this concept there is a need for a secure marketplace infrastructure.
- **The creation of a solid reference and business model – working under General Data Protection Regulation (GDPR) rules** - able to support an open communication ecosystem is the key factor.
- One of the main priority of the European telecom industry is both the development of this reference model focused on stream analytics and the setup of an ecosystem around the communication services that could have a strong impact in many other industrial domains.
- In this new model the **strength of European GDPR rules for Communication Service Providers (CSPs) will be a competitive advantage** against the loose US and Chinese policy patterns.

A great opportunity : the harmonization of the legal environment provided by the GDPR

- In the past the protection of personal data in all European Countries was based on directive 95/46/ EC, under which national laws and additional instructions are aligned (but still maintain considerable differences).
- This is replaced by the **General Data Protection Regulation (GDPR) which will provide greater harmonization.**
- The new GDPR aims to protect the rights and freedom(s) of persons with respect to the processing of personal data by laying down the key criteria for making processing lawful and for the principles of data quality. It places extensive obligations to be clear **and right about the ways individuals' information is used** with regard to the processing of personal data and on the free movement of such data lays down a series of **rights of the data subject**, namely:
 - right of access to one's personal data;
 - rights of erasure, blocking or rectification of data, which do not comply with the provisions of the Directive, are incomplete or inaccurate;
 - right to be informed of all relevant details relating to the data processing and the rights granted to self;
 - the right to a judicial remedy for any breach of the above-mentioned rights.

How to build a secure European data market

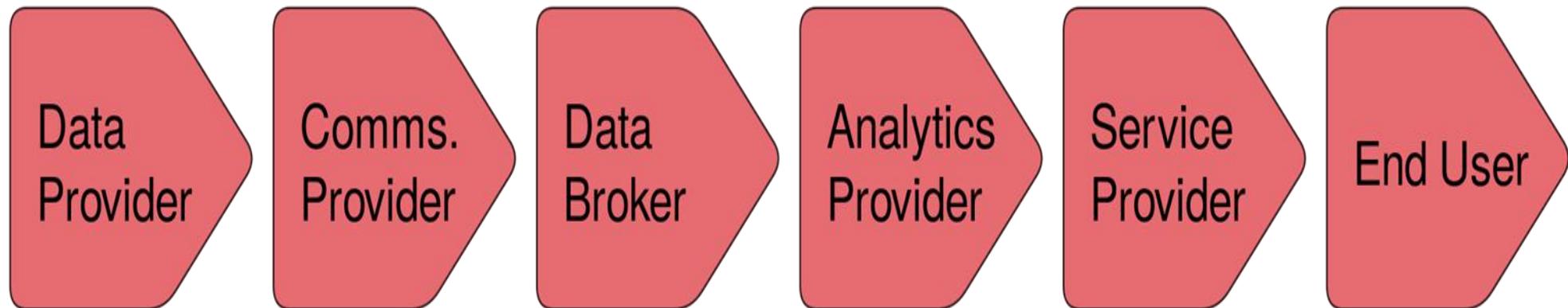
- The basic idea is **to develop a privacy solution that permits data elaboration showing just the output and not the data itself** → in other words, a user of the European Data Market should run a specific application/algorithm on the data of another partner and obtain the result **without accessing the details of the original data.**
- The objective is to **deal with the variety of acquired and ingested data in order to assess the veracity and the value of the data.** Data ingestion and **management procedures should be defined so as to guarantee the level of data privacy and security that is adequate to the GDPR standards**
- The data sharing mechanisms should therefore provide strong foundations based on data privacy and personal data protection and security, while **adding flexibility for data providers to share data without actually having to move it around, while other users** (i.e. service providers or app developers) should be able to find and access the data needed to generate business opportunities

Role of the telecom industry



An European Data market

In this context, the telecom industry are studying **a novel concept for enabling truly secure data exchange: a sustainable data ecosystem that will enable faster creation and monetization of entire data value chains and sustain a large number of data value chains across different industries and vertical sectors.** To this end we are working for an initiative that aims to create a platform for the enhancement of the dynamicity and value of data exchange in the Communications Service Providers sector, that will rely on the following reference model



How to protect privacy in this European data market

- ❑ In this market place **no one will share the data itself, but metadata about it and its location**, makes it particularly safe with respect to privacy.
- ❑ Data will continue to be managed by **Data Providers and owners. Therefore, these actors will remain responsible for data protection and privacy management.**
- ❑ Analyses on the shared metadata and aggregated information should be nevertheless carried out, in order to **avoid the risk that specific aggregation and analysis carry sensitive pieces of information.**
- ❑ In addition specific attention to the access to the system by data analysts should be paid, integrating role-based **access control according to a specific risk analysis model.**
- ❑ Privacy-related risks will be driven by certain key points, such as:
 - the **nature of data**,
 - **changing privacy requirements**,
 - **security implementation costs**
 - **leakage vulnerabilities.**

Thank you

For any question:

maurizio.cecchi@telecomitalia.it