

Data Producer

A concrete example

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Objective

- The data Producer aims at creating high quality, interoperable and reusable data.
- The Producer's purpose (formalized into data requirements) is to improve the amount of exploitable knowledge about a domain of interest.
 - The Producer objective is not to support a specific application or service, but instead, to create the data which will be exploited for the creation of multiple services and applications.
- Other users (Consumers) will benefit from the data Producer work, by creating application specific data (based on application specific purposes), thus enabling the usage of Application and services into the domain of interest.

Methodology

- The Producer uses **iTelos** to achieve the above objectives.
 - **Purpose Definition:** Identification and formalization of the interested domain elements (entities).
 - **Information Gathering:** collection of data, relative to the above entities, from existing data sources.
 - **Language Definition:** description of the concepts used to define the domain's entity types and their properties.
 - **Knowledge Definition:** modelling of the ontology classes for each entity types identified previously, by using domain specific reference ontologies.
 - **Data Definition:** generation of the high quality, interoperable and reusable data, shaped as KGs, for each domain entity

Produced Data

- By following the iTelos methodology, the Producer generates multiple resources, all referred to the domain of interest.
 - **Language resources:** the set of concepts, with their natural language description. More natural languages can be considered, for example Mongolian and English. This enhance the concepts interoperability and reuse.
 - **Knowledge resources:** the ontologies produced to model the entity types in the domain of interest.
 - **Data resources:** which can be divided internally into:
 - **Datasets:** original version of the data collected, cleaned and formatted.
 - **Knowledge Graphs:** high quality, interoperable and reusable data, produced as output of the whole Producer process.

Data Distribution

- The resources generated by the Producer, thanks to the iTelos methodology, when possible, are **published** to be shared and reused for many different purposes into the domain of interest considered.
- To this end, the Producer has to;
 - generate a specific set of **metadata** for each resource (type of resource) produced;
 - publish such a metadata into a dedicated **data catalog**.

Example - Produce your own data

- The concrete example here presented, shows how each single Person can be its own data Producer.
- The domain of interest considered is: Myself (Simone Bocca).
- In this case, the Producer objective is to generate high quality data, about different aspects of my life, by considering the places and the events occurring in my life.
- The result of this example is published through a specific [data catalog](#).