POLIRURAL

Future Oriented Collaborative Policy Development for Rural Areas and People

Practice abstract 09

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www.polirural.eu

PoliRural final Text Mining solution

One of the objectives of PoliRural is to bring solutions to policymakers in order to support rural areas in responding to contemporary challenges. In this context, a Semantic Explorer (Semex.io) tool was designed for the project, with the objective of providing support to researches involved in Foresight, System Dynamics Modelling and Policy Evaluation.

The product created is a powerful tool able to extract knowledge from unstructured data and communicate the results in the most effective way. The development of the tool started with the creation of the Regional Library where all the partners provided links to relevant documents. For research projects such as PoliRural, it is especially important to manually create the initial library by collecting relevant documents that can then be text mined. Following inputs from Pilots and different Work Packages, the Semantic Explorer started to take shape.

The functionalities that work the best as a support to policy related activities are Topic extraction, Named Entity Recognition (NER), Geo-location, noun chunks/tokens and, last but not least, Sentiment Analysis/Polarity. Through these processes the user is able to extract insights regarding a chapter such as the main topic, short summary of long texts, the geo-location, text related to organizations or places and whether the text contains positive or negative sentiments. Two main sections have been developed through feedbacks from users: analytics (possibility of visualizing data through a semantic tree - *Topic Explorer*) and curated reading list (possibility to create collections of articles and extract aggregated data results such as overall summary, most recurrent topics, keywords and named entities).

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