

Open Data Opportunities within the FIWARE Mexico's Node

Dr. Hugo Estrada Esquivel (INFOTEC)
Dr. Miguel Gonzalez Mendoza (ITESM)

The Future Internet is a massive data generator, including structured data from transactions conducted through the years, unstructured data from social networks and web content, and recently also includes data from the growing number of sensors – created under the concept of the internet of things–. This huge amount of data generated by this new trend requires the use of Big Data technologies for proper use.

Technological solutions for storing, processing and analyzing this huge amount of data are key to the use of these data. In this regard, the European program for the development of Future Internet (FI-PPP) has developed a public and open technology platform called FIWARE, providing a sustainable ecosystem to seize the opportunities of the new wave of digitization caused by integration of recent technologies (Internet of Things, Big Data and Cloud Computing).

FIWARE provides a set of standard components, generic, reusable and fully customizable, called **Generic Enablers** (GEs) that allow the development of solutions (products and services) intelligent, highly specialized, configurable, orchestrated, interoperable with each other, self-adaptive context and user profile and able to interact with the user in a multimodal (voice, image, text, gestures, etc.).

In Mexico, there is an official FIWARE node, having 687 cores ready to support application developers in scientific, public and industrial domains, thus promoting the use of open platforms such as FIWARE. Furthermore, teams were set up between Europe and Mexico with support from the European Commission and CONACYT to work on common challenges, potentially leading to common research and commercial purposes.

The main topics include, among others, the possibility to develop and implement **Smart Cities** applications, towards **Open Government Data** in Mexico, produced or commissioned by Federal, State and Municipal entities. The idea is to accomplish with the three main objectives of open government data: Transparency, Releasing social and commercial value, and Participatory Governance.

As an example, is the generation of statistical indicators from data available on the Web. These indicators must complement the statistical data of the National Institute of Statistics, Geography and Informatics (INEGI) of Mexico. Some of the sources for the Big Data Analysis Process are user comments from social networks and blogs, and also information from static and dynamic Web Pages.