

Transforming Historical Cities in Smart Cities by Using Geospatial Technologies

Descrizione

The term geospatial in the Anglo-Saxon world – but also in the scientific and technical Italian elite – is slowly replacing the word Gis, acronym of Geographic Information System. Geospatial is interpreted as a synonym of geographical notions, in a system that can include more than two dimensions, normally represented by the latitude and the longitude, introducing geographical information in a landmark that could be developed in three, or, by now, also in four dimensions. The simplest examples are the google maps, which in the classical plane dimension of the chart sheet have put together the three-dimensional place with a fourth dimension time-slider.

The impact of geospatial technology in our daily life has become rather relevant, showing itself as a global reference overview in our environment.

The impact of all the innovations that form the Geospatial technology is increasing in our lives. It reached such a relevance to become a key point in our environment. This is particularly recognizable in urban environment, as it allow us in using Location Based Services technologies, which are able to transform every georeferenced object in a smart object, inserting it in a network of objects through position relationship among which the objects in the network transmit data and information each other.

The common use of these networks of objects in our urban environment, could represent the structural network of the Smart Cities. When we use mobile devices in our trips, or when we share our feelings or other personal information on Social Network such as Twitter, Instagram or Facebook, we communicate also our geographical position (if we allowed it in our privacy agreement).

Many of the services offered by search engines, using our position, are able in showing us restaurants, hotels, shops, banks, drugstores and everything we need, even classifying the showed results on the basis of the appreciation of other users.

Thus, it is clear that geospatial technology is already present in the very core of our lives.

Calvino told about Invisible Cities, describing various shapes and configurations completely invented, maybe characterized by the loss of identity that the city inspires in its inhabitants.

A lost identity, which everyone tries to get back through the new intelligence provided by the communication net that, linked to the geographical mark, tries to make smarter our urban context.

Smart cities, where all the objects are crossroads of a net through which data blocks containing information travels from georeferenced sensors to satellites signals, which are able to reach both the great canyons of our cities and the inner of our buildings.

A market trend, which is looking for continuous innovations in order to inspire a stagnant economy, claims as smart, objects and activities that often are not so “smart” and that deflects from the aim of a full and specific knowledge of the visible urban context that still need to be transformed in “smart”.

The geospatial technology to manage data is available, as well as is ready also the technology to organise the data chaos, which has to be translated and transformed in order to show only the necessary information, considering the large amount of useless data that surrounds us. Mapmakers did for centuries this task, making understandable, in a graphical way, data around us, deleting the “ground noise” and using various mapping scales as information filter.

What lacks is the true intelligence, the social fabric, a lack of interconnection and the communication showed by the urban environment that have grown in the course of time.

Mankind prefers to live in well planned and tested urban structures, in which social relationships are getting stronger.

Being a smart city, with an historical urban pattern, means using geospatial information in a smart and appropriate way in compliance with the urban patterns that have been developed in the course of time in order to respond to the necessities of the relationships between people and environment.

In order to transform our historical urban pattern in smart cities, 1300 projects have been proposed in Italy, involving 15 million citizens and engaging 150 cities, for a total investment of more than 3,5 billion. A good start in the direction of geospatial urban intelligence.

Campi meta