Crowdsourcing

In my overview article '25 Years of Development' (*GIM* June 2012) written as a tribute to the 25th anniversary of this magazine, I touched upon crowdsourcing as a development which could create great opportunities. It also triggered the startup of a new series of which the first article is published in this issue and focuses on crowdsourcing for cadastral purposes (see page 20). What do we mean by crowdsourcing? The term has existed for some time now but without a unified definition; the meaning depends on the background of the user.

Basically, crowdsourcing means that data collected by non-professionals, usually for free, is used by others. These others may be laymen but also professionals use the data. Why would laymen spend time and effort to collect data without financial compensation? One reason is for leisure and the good feeling of being part of a community of like minded. It may be discovered, for example, that data thought to be stacked up in a governmental agency is in a severe state of non-existence or unavailability as a result of high costs or copyright protection.. Once amazement has faded away, one may utter "why not do it ourselves; smartphones, Earth viewers and Web 2.0 are in place?" The result is the creation of OpenStreetMap, just to mention one famous example. The incentive to contribute to such initiatives appears to be: "We outsiders can do better than the officials." On the other hand, the crowd may be sourced while being unaware that someone else is using the data they collect. Using the GNSS tracking of many car-navigation systems, road managers are able to rapidly detect traffic congestion; the car drivers are unaware that somebody is using data acquired by their on board devices.

The above two applications are either based on the assumption that a relatively small effort may gain mutual benefits, or on unawareness that others use data a personal device collects. There is a third important incentive for laymen to collect and disseminate geo-data which is when one has a special relationship with one or more pieces of land. This can be the restaurant manager who puts location and other data on a Web 2.0 platform for marketing purposes or the real estate broker who does the same with houses for sale. Such easily accessible data may not only be beneficial for the general public but also for demographers and urban planners. Also land owners / users living in a country where cadastres are just quasi existent will be interested in collecting data on their plots. Here a geographically close community may decide to map and register their properties using modern technology. This could result in local shadow cadastres in countries where cadastres are incomplete or in unofficial cadastres which could – eventually – be recognised by the national authorities.

The series on crowdsourcing aims to cover examples of the above. Feel free to contact me should you wish to make a contribution.

https://www.gim-international.com/content/article/crowdsourcing