

VGI in the Geoweb: an Experiment to Test Data Reliability

Michael Buzzelli

The University of Western Ontario

Abstract

This paper presents an experiment to test the quality, validity and lay monitoring of data in the Geoweb using such sites as Wikimapia. This experiment is set in the context of opposing arguments on the quality and reliability of data in the Geoweb, particularly those data that are provided by ordinary citizens.

Background and Relevance

A theoretical tension exists between the view that data in the Geoweb is championed by citizen sensors (Goodchild, 2007) versus the 'cult of the amateur' (Keen, 2007). The former sees the opportunity for the Geoweb to facilitate self provision, quality monitoring and map making while the latter refutes the 'wisdom of the crowd'.

Methods and Data

Publicly provided data, including geographic place names, geographies and metadata were systematically modified and tracked for update and corrections in Spring 2010. A timeline of corrections (or further changes) was traced over a four week period. Baseline and change data trace the extent to which all types of VGI are corrected. All data changes introduced in the study that remained at the end of the observation period were returned to their original values/formats.

Results

This case study shows that there is a high degree of community monitoring and protection of publicly provided data, geographic information and metadata. This is true of public- and private-sector sites in a number of Canadian cities. At least in this case we see that the citizen sensor has validity for generating, updating and maintaining high quality public domain data. The citizen sensor sometimes vehemently protected data but there is no support in this case study for the view that the Geoweb suffers unwise or amateur data provision.

Conclusions

At least in this case we see that the citizen sensor has validity for generating, updating and maintaining high quality public domain data. The citizen sensor sometimes vehemently protected data but there is no support in this case study for the view that the Geoweb suffers unwise or amateur data provision.

References

Goodchild, MF (2007). Citizens as voluntary sensors: spatial data infrastructure in the world of Web 2.0. *International Journal of Spatial Data Infrastructures Research* 2: 24–32.

Kean, Andrew (2007). *The Cult of the Amateur: How Today's Internet is Killing Our Culture*. New York. Doubleday