

Spatial information in the Web 2.0 approach

ABSTRACT

In the year 2005, online geovisualisation tools have attracted a lot of interest from the GIS community as well as from the general public. A change in paradigm in the world wide web at large, termed the Web 2.0 approach, has fuelled the development of new tools for online mapping. These so-called geobrowsers provide mapping tools to the wider internet community.

This thesis analyses the scope of these services by means of literature and application research and implementation of a test application. The most prominent services by commercial companies (GoogleTMMaps, WindowsTMLive Local, Yahoo![®]Maps, GoogleTMEarth) and two open source alternatives (worldKit, NASA World Wind) are evaluated in terms of their capabilities and limitations. Specifically, the functionality, usability and the ability to integrate data from different sources are examined.

In functionality, technology and business models, the geobrowsers differ greatly from GIS services. They are easy-to-use, efficient geodata viewers that are well suited to integrate information resources available on the world wide web. However, the integration of GIS data is less easy, particularly in the browser-based tools, and they offer only a limited amount, if any, of GIS functionality. The major achievement of the geobrowsers is that they have considerably raised the level of spatial awareness in the general public and stimulated user communities to share and collectively create spatial data.

Keywords: Internet GIS, web mapping, Google Earth, Google Maps, NASA World Wind, Yahoo Maps, Windows Live Local, worldKit