Applying Geospatial Technologies to Real Estate Decision Making in Nigeria

Countries such as Nigeria are beginning to embrace the potential of geospatial technology and information in order to develop their economies. This is particularly so in fields such as land administration and real estate development where relevant stakeholders are taking advantage of increasingly affordable software and ever-growing volumes of crowdsources and open data.

Unlike developed countries, which were limited by the slow roll-out of heavy telecommunications infrastructure, these industries are being fast-tracked by more easily-deployable Wi-Fi networks to both urban and remote regions. Bolaji Afolabi explains how this is happening.

In the real estate service industry, it is not a question of whether or not you use a computer but rather to what degree the computer can support your operations. Essentially, this comes down to which computer hardware you use and which computer software or application can enhance efficiency in your real estate operation.

Real estate professionals in Nigeria are adopting geospatial technologies in their day to day decision-making operations. This includes identifying property location on Google maps, using GPS receivers in picking the coordinate of lands and buildings, and preparing property maps on GIS software. Dependence on geospatial technology and information continues to grow.

Furthermore, the increasing user-friendliness and easy integration of geospatial hardware and software to the real estate decision-making process helps professionals such as myself to identifying landed property locations, to analysing shortest route to properties under consideration, and to determine the proximity of a property to infrastructure and services.

In 2015, the Estate Surveyors & Valuers Registration Board of Nigeria (ESVARBON), the national professional regulatory body for Estate surveyors, stated in their Valuation Reporting Template document underlined the importance of geospatial.

"Site description in a real estate appraisal document must show GPS coordinate, property size dimension, neighbourhood utility networks, aerial photographs, maps etc."

The regulatory body is aware of the need to enhance real estate reporting frameworks with locational intelligence which can only be facilitated by geospatial technologies. Accordingly, there is little doubt that growing awareness on GIS, increasing integration of GPS to smartphones, and the reducing cost of computer systems are important factors contributing to the growing use of geospatial technologies in real estate decision making in developing countries such as Nigeria.

Aside from the above observations by the Nigerian regulatory body, geospatial technologies continue to transform real estate service delivery in a number of other areas. The first is in the representation of Real Estate activity in the country. GIS has a powerful ability to display land-based features in relation to subject properties, to assign data values to features on the map and to produce hard-copy property maps that can be embedded in valuation reports, brochures, and investment analysis reports.

The second area in which geospatial is transforming the real estate industry is in the field of Property Analysis. GIS technology can be used as a mapping and organising tools to make real estate developments comparable with one another. It can also help to reorganise property data into different spatial units, categorise and colours according to preferences and criteria; to keep a record of how spatial data might affect property values such as topographical nature of land areas and to keep track of economic activities in a nearby neighbourhood or proximity to a commercial highway. This capability can then be used to compare real estate information across various locations.

The final area in which geospatial technology is transforming the Nigerian real estate industry is in terms of the Spatial Analysis of Real Estate Market Drivers. A real estate market analyst, such as myself can use GIS technology to measure the distance between one existing or proposed development in relation to another, to identify patterns in property values and how they can be influenced by nearby economic forces such shopping centres or offices etc.

As long as locational intelligence is a necessity in real estate decision making, the application of geospatial technologies in this industry is indispensable.