7 Stories Showing the Strength of GIS

GIS has come a long way since Roger Tomlinson introduced the term 'geographic information system' in his paper titled 'A Geographic Information System for Regional Planning'. Even so, today's geographic information systems still generate and maintain spatial information which aids in the creation of maps and data analysis. A wide variety of applications and disciplines benefit from GIS technology nowadays, as this overview shows. These seven selected articles also provide a glimpse of where GIS is heading in the future.

3D-GIS: a Technology Waiting to Be Explored and Used

3D-GIS tools are very powerful. They add a third dimension to the already very strong and useful 2D-GIS functionalities, allowing complex sets of information to be combined with maps, plans and any other visual representations of spatial areas. Moreover, 3D-GIS opens up a very new form of geoanalysis... Read on

Mobile GIS Proven to Transform Land Administration

In 2015, a rigorous test of GIS proved that Esri technology can greatly assist in building a sustainable land administration system that is incredibly easy to implement and put into use. By combining technologies and leveraging standards, geospatial mobile apps can be rapidly deployed, eliminating the obstacles that typically impede land administration progress in developing economies. Read on

The Need to Integrate BIM and Geoinformation

The construction industry appreciates the benefits of BIM uses but seems to underestimate the value of BIM information integrated with geoinformation. To respond to all stakeholders' demands, BIM is expanding towards integrating information from the surroundings stored in a GIS, as has been carried out in a large study conducted in Rotterdam, The Netherlands. Read on

GIS Coalition to Aid Removal of Land Mines

Esri and the Geneva International Centre for Humanitarian Demining (GICHD) have signed a memorandum of understanding (MOU), strengthening a partnership to eliminate land mines and explosive remnants of war through the power of geography. The MOU furthers Esri's support in modernising GICHD's Information Management System for Mine Action (IMSMA). Built with Esri's world-leading GIS technology, the software system serves a critical purpose in the mine action process: understanding exactly where mines are located prior to conducting clearance. Read on

Bringing Geography into Everything (Interview with Ed Parsons)

As Google's geospatial technologist, Ed Parsons is responsible for evangelising Google's mission to organise the world's information using geography. GIM International caught up with this 'man with a mission' in Barcelona during one of his countless foreign trips. Parsons thinks the GIS community is ready for the next challenge: becoming more web-savvy. "To become citizens of the web, take a less GIS-specific approach to publishing data. We need to recognise that 95% of the consumers of whatever we create will not be GIS specialists. We can't expect them to understand GIS metadata catalogues and particular ways of encoding geographic content that they have never come across before." Read the full interview here

Urban Planning, Management and Decision-making in the Cloud

There is still an enormous gap between the GIS and BIM industries nowadays, and great ideas are often lost in today's interdisciplinary design process. That starts with the lack of tools to communicate thoughts and concepts. Just visualising the actual situation of a city is a time-consuming process, and the situation tends to worsen when data is exchanged (and unfortunately also lost) frequently between the project partners involved. Furthermore, during a design session it is typically difficult to include relevant key metrics such as the direct assessment of urban design scenarios with regard to costs, floor area and energy demands. Read the full story here

Geomatics Helps Relief to Reach More Refugees

Medair uses the power of geo-ICT to help communities of refugees more efficiently. Since 2009 it has been Medair's policy to employ GIS-trained staff assigned to specific projects. The number of such employees fluctuates, but there are usually around five or six at any given time – a small group, but with significant effect. Good examples of their work include their role in getting relief to Syrian refugees in Lebanon and to the homeless in the Philippines. Full story here