

Breaking with the Past

Legacy mapping programmes embedded into National Mapping and Cadastral Agencies and Environmental Agencies, often specified by Statistical agencies, are rapidly eroding the wider relevance of many of their geospatial information services. For example, in Great Britain the Ordnance Survey's large scale topographic mapping product (OS MasterMap) still has too many artefacts from its military past and the US General Soil Map has various forms of generalisation rolled into the product that limits its usefulness in modelling environmental systems. Many products do not support interoperability and limit how we can manage land and our environment holistically.

If we were to start with a blank piece of paper and design geospatial information services to meet the needs of managing our dynamic cities and countries effectively and to support solutions to the global challenges of poverty reduction, food security and climate change, then the geospatial information services landscape would be quite different. Our new and increasingly complex requirements for balancing scale / complexity and space / time would be more effectively reflected in these new geospatial information services.

These legacy products are trapped in time and it is increasingly difficult for these Agencies to radically change their products. The size of their investments, the magnitude of their national products and the significant number of customers locked into the products are acting like constraints, limiting their ability to be nimble and respond to changing needs and a new range of users and applications. This stagnation and retreat to authoritative, large scale geospatial information services is being compounded by recent Open Data initiatives that are limiting revenue streams and restricting investment opportunities to support change.

This divergence between what the Agencies' legacy products can deliver and the changing set of end user requirements is being starkly highlighted in two areas. Firstly, the private sector is delivering innovative and more agile products, especially in the consumer domain, around high resolution satellite imagery, Lidar, ground based imagery, 3D and navigation aids (increasingly indoor). These provide a new and more attractive spatial experience for users and are opening up their products to a wide and diverse customer base through location-based services and location-based social media. Secondly, crowdsourcing is allowing users to directly capture and use geospatial information that is currently missing from the Agencies' legacy products. These two trends are relentlessly widening the gap.

Rather than using significant marketing resources to squeeze diminishing returns out of their legacy products, it is time for these Agencies to reassess their relevance and position in the modern information landscape, devise innovative business change strategies and migrate to a new set of geospatial information services relevant to and sustainable in the 21st century.