

SESSION 2

Convergence of Data Analytics and GIS

Anthony O'Flaherty, *Head of BI & Analytics, RACT*

Over the last decade or two our industry has experienced a 'slow' convergence of GIS with Information Technology (IT) and Operational Technology (OT). More recently, cybersecurity governance and tactics have been incorporated into GIS services to deliver the controls needed to keep our organisations and the communities served safe. In parallel, the Data & Analytics practice has undergone significant growth and transformation. This includes D&A domains of data capture, data architecture, data modelling & design, integration & interoperability, AI/ML & data science, governance, data warehousing, Master Data Management, metadata & Business Intelligence. More than ever organisations are investing in D&A for ready access to insights and analytics. The 'D&A wave' has resulted in sophisticated data architectures and systems supported by new roles and operating models. A key driver are expectations for growth and sustainability founded on evidence-based decision making. A secondary driver is the pervasion of D&A into all professional domains and the broader democratisation of Data & Analytics. This presentation explores the convergence of the GIS practice and that of Data & Analytics. Does the Geospatial Practice have a seat at the D&A table?

To Eat French Fries, You Have to Grow Potatoes

Rob Rowell, *Managing Director, InsightGIS*

Many of us enjoy French fries, whether they're from McDonald's or a French restaurant, but do we ever consider the effort behind bringing those fries to our table. Similarly, stakeholders and clients often focus solely on the end solution and its benefits, without thinking about the work involved in delivering it. Despite the substantial effort involved in developing successful geospatial solutions, are we still overlooking the importance of spatial data, resulting in missed opportunities?

Location Master Data Management

Andrej Mocicka, *Country Manager, 1Spatial Australia*

Growing economies, responding to climate change and subsequent natural disasters, planning and developing infrastructure plus other aspects of society and as outlined in the 17 Sustainable Development Goals of the UN. The geospatial industry provides the spatial data infrastructure, value-added services, analytics, and insights to various industries and across society as a whole.

The Spatial industry delivers substantial benefit and adds enormous value for social, environmental, and economic benefits.

Spatial professionals are able to obtain large amounts of data in extremely quick time. It is well known in the spatial industry that while data is easily obtained, it is seldom exactly what is required. This has given the spatial industry an issue of how the industry can provide data that is trustworthy and able to be used to make sound business decisions.

This is not a unique issue experienced by the spatial industry, it is encountered in many industries that deal with large amounts of data, particularly digital data. To address this, other industries have adopted a process called Master Data Management (MDM). Simply stated, it is a technology-enabled discipline that enables you to connect or combine data from multiple sources in different systems to enable enhanced analysis. In the spatial industry we call this technology Location Master Data Management (LMDM). LMDDM ensures that geospatial (and non-spatial) data can be processed in an automated and repeatable manner, across enterprise and different technology platforms. By auditing, validating, cleansing, synchronising, updating and analysing different location data sets, it delivers significant cost and time savings, and crucially, data that can be trusted and relied upon. It also prepares your data for system replacement and consolidation if needed.

This presentation will cover some case studies that show how organisations are dealing with the challenges of large data to make it fit-for-purpose and ultimately trustworthy.

Turning Digital Twin Data into Actionable Applications for Government and Communities

Sebastiaan Helsen, *Business Development Manager – Hexagon Safety, Infrastructure & Geospatial*

Explore how vast digital twin data can be transformed into practical applications that drive efficiency and innovation across government, emergency services and communities.