

Opportunities in Spatial Enablement

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Opportunities

- Spatially enabling government (SEG)
- Spatially enabling society (SES)
- Local, state, federal or national

Focus on the role of land related data recognising the various roles of other types of spatial data (demographic, natural resource, sensor etc)





But what is "spatial enablement"?

- The power of place and location
- GOOGLE Maps etc
- The "Crown Jewels" a geocoded national address file (G-NAF) based on land registry data and a national cadastre linked to a national valuation file
- In Australia every land parcel is/was shown in GOOGLE Maps based on the government cadastres, but more importantly based on G-NAF (CadLite)
- Every address now submitted or put in a form, to government, business, emergency services etc can be verified automatically
- Every government and business transaction has ability to be recorded and tracked spatially





Spatially enabled society (SES)

- An evolving concept where *location, place* and other spatial information are available to governments, citizens and businesses as a means of organising their activities and information
- Simply, SES is about managing information spatially, not managing spatial information
- Transparent or ubiquitous use of spatial information. The vast majority of users do not know they are "spatially enabled" and don't care!





Spatially enabled government (SEG)

- Same principle as SES but applied to management and delivery of government services - part of e-government initiatives
- Requires a *"whole of government"* approach
- Applies to all levels of government. Local, county, state or provincial and federal (where countries are federations of states)
- Particular challenges where *large scale parcel level data* is managed at either local, county or state level







Remember spatial enablement is about managing information spatially, not managing spatial information







The key to SES is the property base or for the initiated... "the cadastre" The property base connects people to land





The Cadastral Concept

- The traditional view of the cadastre (buying, selling, leasing and mortgaging interests in land).
- The new approach makes the *cadastre central to spatially enabling government*



Spatially enabling land administration systems

- Land administration (and particularly the core cadastre) generates information about places (parcels, street address, values, land use, buildings)
- SDIs organise spatial information.
- Together they provide information about *unique places people create* (built) and use (natural).

Sustainable Development







SES is still and evolving/confusing concept

- FIG Task Force on Spatially Enabling Society
- Look to the use of spatial information in society. Try to understand drivers, rapidly changing technology and evolving society, and then project forward?





Some personal experiences

- iPhone and iPad
- iPhone 4s released yesterday (Siri, iCloud.....)
- Using "social media" to sell my house
- FIG International Symposium "Cadastre 2.0", Innsbruck, Austria, 30 September 2011 – but how applicable are the European lessons to Asia and the Pacific?





FIG International Symposium "Cadastre 2.0", Innsbruck, Austria, 30 September 2011

- Crowdsourcing Support of Land Administration A Partnership Approach. Robin McLAREN, Management consultant, Know Edge Ltd, UK
- Cadastre 2.0 Obstacles and Opportunities. Brent JONES, ESRI Global Marketing Manager, Survey/Cadastre/Engineering, USA
- New Media for Cadastre. Matthew DELANO, Business Area Director for Cadastral Solutions, Trimble, USA
- The Rise or Fall of the Cadastre Empire. Gavin ADLINGTON, The World Bank, Bank program in Europe Central Asia, USA
- What about an OpenCadastreMap? Peter LAARAKKER, Cadastre, Land Registry and Mapping Agency, The Netherlands
- Vision for a Cadastre X.0: Adding 6 New Dimensions. Dr. Xavier COMTESSE, Director, Avenir Suisse, Dr. Giorgio PAULETTO, Strategy and Technology Advisor, Observatoire Tecnologique, State of Geneva, Switzerland





Some of the take-aways from the meeting

- Of the 6 billion land parcels globally only 1.5 billion are registered. What are the implications of this?
- The mobile/smart phone is the laptop of the developed world
- The changing role of land and spatial professionals
- There are two very different worlds the developed and developing with very different drivers and agendas
- Disasters as a key driver in adoption of SES and land administration policies
- Politicians don't want to hear about cadastres and SDIs they want to solve real world problems
- Crowd-sourcing within the emerging spatially enabled society is opening up opportunities to fundamentally rethink how professionals and citizens collaborate in land administration – *Robin McLaren*





Some of the take-aways from the meeting (cont)

- Citizens' involvement, crowd sourcing, volunteered geographic information, social media, Web 2.00, mash-ups – the implications for land administration.
- Mapping, spatial and SDI organisations that have not have a strategy for citizens' involvement will/have "missed the boat"
- Only surveyors care about accuracy Gavin Adlington
- A contrary argument on the importance and role of AAA information (accurate, authoritative, assured) – a little understood and under-utilised public good
- Future cadastres will be 3D, monitoring dynamically based on historical data, multifunctional and multi jurisdictional, integration with social networks and will become an essential element of the knowledge society – Giorgio Pauletto





What does this mean?

- A revolution?
- A movement?
- Whatever, something big and dramatic is happening in the spatial and land administration space as a result of dramatic changes in technology and society globally





The big question?

Will the land and spatial professionals be the leaders or followers in this technological and social revolution?



