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Innovations and Alternatives for the Valuation of Unregistered Lands and Properties.
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SYDNEY | DARWIN | ADELAIDE | NEWCASTLE | BIRMINGHAM | HONG KONG | SHANGHAI

What is Market Value?

"The estimated amount for which an asset or liability should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion".

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Finding the Market Value of Unregistered Lands

The GLTN have a Wicked Problem on their hands.

A wicked problem is one that is very hard and potentially impossible to solve because of its multilayered complexities and the lack of information about them. When you solve one part of a wicked problem, you raise others (Horn, 2001).

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Wicked problems can enfold three mutually influencing types of problems [Glouberman & Zimmerman, 2002, p. 2 (quotes in italics)]:

1. Simple Problems, like baking a cake. With them:

* *The recipe is essential*
* *Recipes are tested to assure easy replication*
* *No particular expertise is required. But cooking expertise increases success rate*
* *Recipes produce standardized products*
* *The best recipes give good results every time*
* *Optimistic approach to problem possible*

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2. Complicated Problems, like sending a rocket to the moon. With them:
* *Formulae are critical and necessary*
* *Sending one rocket increases assurance that the next will be OK*
* *High levels of expertise in a variety of fields are necessary for success*
* *Rockets are similar in critical ways*
* *There is a high degree of certainty of outcome*
* *Optimistic approach to problem possible*
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3. Complex Problems, like raising a child. With them:
* *Formulae have a limited application*
* *Raising one child provides experience but no assurance of success with the next*
* *Expertise can contribute but is neither necessary nor sufficient to assure success*
* *Every child is unique and must be understood as an individual*
* *Uncertainty of outcome remains*
* *Optimistic approach to problem possible*

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With wicked problems, if you take a wrong approach, you are likely to make them more wicked.

For complicated systems, leaders:

* Define Roles: Devise TORs etc and get them worked towards
* Be Decisive: Make a choice and deliver on it
* Tightly structure: "use chain of command and prioritise or limit simple actions"
* Know: Become and expert and direct/advise others
* Stay the course: maintain focus on the goal

[Allen 2013, (from Anderson & McDaniel 2000; Snowden & Moone 2007): Direct quotes in inverted commas].

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BUT:

For complex systems, if you try that they could well become more wicked:

For complex adaptive systems, leaders:

* Build Relationships: work with interacting patterns
* Find the Sense: use collective interpretation
* Use Loose Coupling: support communities of practice and add more degrees of freedom
* Learn on the job: act/learn/plan at the same time
* Note emergent directions: build on what works

[Allen 2013, (from Anderson & McDaniel 2000; Snowden & Moone 2007)].

AND:

They USE HEURISTICS (Rules of thumb: see below)

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To have a market value, first you have to have a market. A market can have simple, complicated and complex aspects, so a problem with a market can be wicked, and so can a valuation.

In complexity theory terms, market value is an emergent property from markets.

There have always been markets; there have not always been markets in land.

More usually, land has been used as a means of social control, and sometimes domination. But for market value, both parties must be willing, and not compelled.

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And knowledgeable.
And prudent.
To be either, you need data. Knowledge and prudence emerge from turning data into information, and from information knowledge, and from knowledge to understanding and prudence. When both parties have that emergent understanding in a transaction, we can have a market value transaction.

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Not Before.

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Question:
Just how much knowledge and prudence do you need to participate in a market?

Answer:
About as much as the person on the other side of the arm's length transaction, and both par for the market.

Otherwise, it won't be market value, and you could well be the sucker.

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Without lawyers and the infrastructure they provide, and without surveyors and the infrastructure they provide, you can still have land markets. They will be darker and more dangerous places, but they could still have market values in terms of that IVSC definition.

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It is our job as valuers to find out what those market values are. It is not our job to wait around until everything is just right, because markets don't.

In dark and dangerous places, we need light. We have at least two sources for such light to grow, and the more complex things are, the more we need them:

ONE IS RULES OF THUMB: ANOTHER IS DATA.

Data develops to understanding by use of better and better rules of thumb. *Data and data co-evolve, and with them markets do.*

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*Rules of Thumb are called
"Heuristics" . There are "Simple
Heuristics that Make us Smart"*
(http://www.socio.ethz.ch/icsd2013/speakers/slides/0_3_gigerenzer.pdf)

*What are some of the simple
heuristics that can help us understand
property markets, be they registered
or not?*

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Example Heuristic 1:
*Ratio of house price to household
income:*
Refer:

*http://www.numbeo.com/property-
investment/gmaps_rankings.jsp*

Question:

*If those ratios refer to those places,
what does that say about ratios in
your place?*

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Example Heuristic 2:

If you know the rental market value, what does that say about the sale market value?

If you know the sale market value, what does that say about the rental market value?

Refer:

http://www.lincolninst.edu/subcenters/land-values/rent-price-ratio.asp
http://www.businessspectator.com.au/article/2013/2/1/interest-rates/irregular-ratio-spooking-property

Question:

If those ratios refer to those places, what does that say about ratios in your place?

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Example Heuristic 3:

If you know the cost of a building that represents the highest and best use of the land, what does that say about the value of the land it should be built upon?

"There tends to be a typical ratio of land value to property (land + buildings) value for specific categories of real estate, with similar characteristics, in specific locations."

Refer: http://www.henrygeorge.org/ted.htm

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Example Heuristic 4:

Along with many other land-related activities, the Inverse Power Law can be seen to apply to land values, when small sites bring high values per square metre, and otherwise similar large sites bring low values per square metre:

Refer:

http://en.wikipedia.org/wiki/Power_law
http://arxiv.org/abs/cond-mat/0303535

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Example Heuristic 5:

It has also been shown that the Inverse Power Law may apply to land values and distances from the CBD and other attractors.

www.bartlett.ucl.ac.uk/casa/pdf/paper131.pdf

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There are many other heuristics that can provide an *ansatz* (which is an educated guess, often heuristically-based, used as a starting base to get to the truth. Many are used in mass appraisals).

But professionally, ansatzes aren't good enough for an individual property valuation. *In particular, they are nowhere near good enough when you are taking someone's property from them.*

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Not only is every property different, its value varies over time.

Every property, and every market for it, must be addressed by a valuer with respect for the complexities involved.

To get to understanding, ansatzes on their own simply will not do:

You need market value sales, market value sales, and more market value sales.

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Today, there is a huge amount of data available which can help understand markets in unregistered land, and much else besides.

The internet is now widespread throughout the developing world, and so are smart phones able to access the net, and they are being used to advertise properties for sale in both the formal and informal sectors. It is at this level that valuers can best read the market in the developing world in general and unregistered properties in particular, as much government data re prices etc is non-existent or highly compromised.

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So, as an example of potential responses to Cyprian's challenge for innovation, we present ours: the Property Attribute Data Warehouse (Property DAW).

It can pick up valuation-relevant data from anywhere, including newspapers and other offline sources, and organise it in any domain where real property has an indexing system.

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- The Property DAW is a management platform that efficiently connects and normalises both formal *and informal* property datasets. These can include data from sales and leasing media, government and private datasets.

- The Property DAW combines data management, analytics and reporting to provide a complete property data attribute warehouse to use towards market understanding.

- The property data attributes covers all real estate sectors including residential, commercial and rural.

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Key Benefits

KEY BENEFITS	PROPERTY DATA ATTRIBUTE WAREHOUSE
Enhanced Performance & Productivity	*Time consuming and repetitive tasks automated*
Enhanced Categorisation and Search	*More than 1000 categorisations spread over 30+ lists*
Enhanced Customer Service	*Improved work flows*
Data Consolidation	*Residential, commercial & industrial data stored in single repository*
Property Attribute Timeline	*Attribute snapshot created at time of transaction*
Multi-Platform	*Access Data via Desktop, Mobile & Web API. Apple, Windows & Android.*

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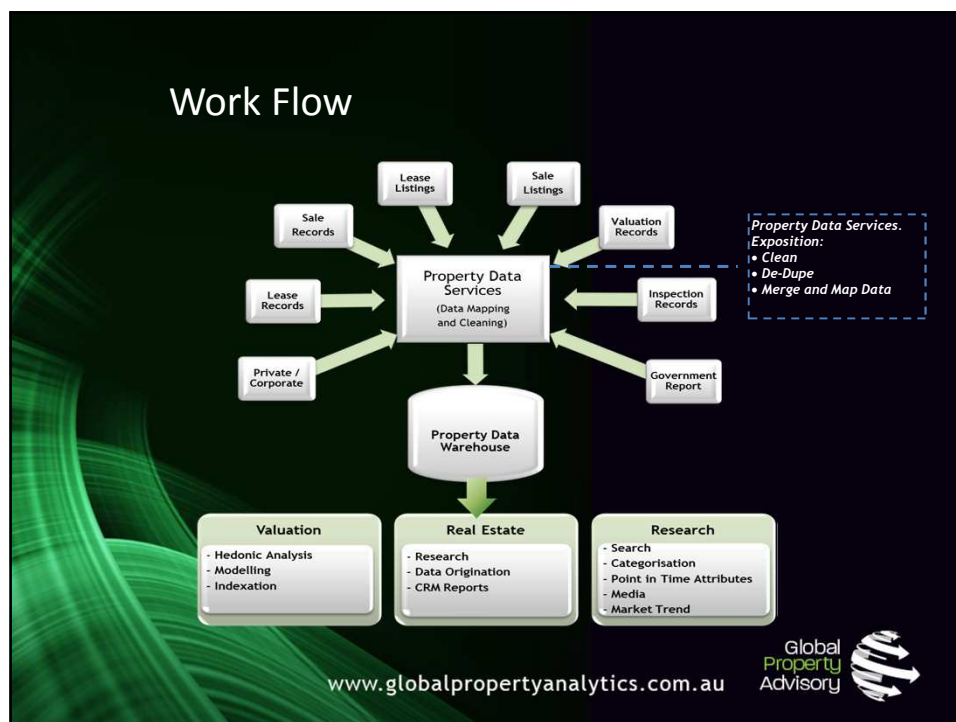
The Property DAW creates a central engine of global property data. Ultimately, it could draw data from anywhere on Earth, and like can be compared with like both within and even between markets.

That is, because markets emerge from people, and all people use heuristics, with appropriate caution and insight data from anywhere could be used as ansatzes to inform markets where there is no reliable data to be had.

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The database structure contains multiple attributes per property record and can contain thousands of attributes on multiple occupancy, multiple tenancy properties.

The database process has advance techniques for data collection, data retrieval, and data syndication which can be used for valuations of unregistered lands via direct comparisons, value mapping and other valuation assistance techniques.

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Critically in terms of the scales of the tasks ahead, the data gathering process uses technology to automate repetitive, time consuming tasks, giving more time for the valuer to exercise professional judgment and skills.

This can be the case for both developing and mature real estate markets, and for unregistered lands.

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It is specifically designed *by valuers for valuers* to deliver the data that has been developed into information designed to fortify the valuer with knowledge, and from knowledge to understanding and prudence.

The goal is to provide a *speaking valuation*, one from which the reader can know exactly what evidence was available, and how it was use to derive the valuation.

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That way, the reader can gain a clear picture of the strengths, weaknesses, opportunities and threats not only in applying the valuation, but in the market itself. For example, what allowances have been made for the risks differences between registered and unregistered lands, and why?

Such a valuation is valuable. Without evidence-informed judgment, it is not.

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The co-evolution of heuristics and interpretation of data, which can reach a level of probability making it admissible as science, has been going on in various markets for thousands of years. These include the market of ideas, and recently, where that market value definition's conditions are fulfilled, the market value of land.

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The first steps toward science, data and heuristics, can be drawn from everywhere and, in the right hands, adapted to local circumstances just as comparable sales are.

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In so doing, we should follow the agenda of Gigerenzer et al in their market of ideas' research program:

"1. The Adaptive Toolbox.
What are the heuristics we use, their building blocks, and the evolved capacities they exploit?"

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"2. Ecological Rationality.
What types of environments does a given heuristic work in?"

"3. Intuitive Design.
How can heuristics and environments be designed to improve decision-making?"

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Our answers can only have value if supported by understanding derived from a critical mass of analyses of sales, including understanding the parties' understanding, and the more comparable the properties are, the better.

So now, in the spirit of constructively addressing the three objectives of this Technical Session on the valuation of unregistered lands and properties:

Let's discuss them.

Thank you for listening,

Mike McDermott.

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