Cluster 3: Innovation and Standards

Framework for Effective Land Administration

Expert Group on Land Administration and Management United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM-LAS)

The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency.

The second is that automation applied to an inefficient operation will magnify the inefficiency.

- Bill Gates, Founder Microsoft



"If I had asked people what they wanted, they would have said faster horses."

- Henry Ford

Doing things differently in land administrating is a necessity for prosperity and peace.

- Why we're here

"Innovation is the creation, development and implementation of a new product, process or service, with the aim of improving efficiency, effectiveness or competitive advantage."

Innovation and Trends

Global Trends in Land Administration

- Engaged landholders
- Multipurpose
- Transparent/Accountable
- 3D/4D Applications ownership/value
- Growing security concerns
- Fully connected data workers
- Sharing data

- Configured solutions
- Cloud infrastructure
- Online data
- Faster data updating
- Ongoing data quality improvement
- Lightweight apps and devices
- Community driven cadastral mapping
- Faster implementations

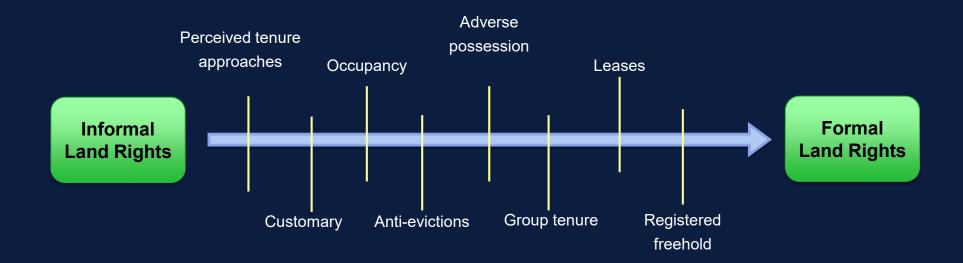
Innovation Responds to Challenges & Opportunities

Common Global Challenges in Land Administration

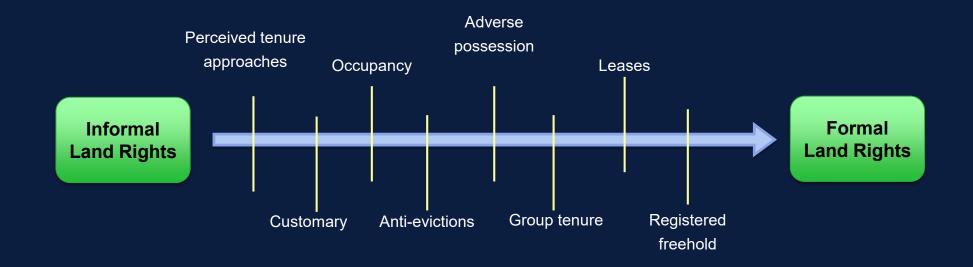


accountability

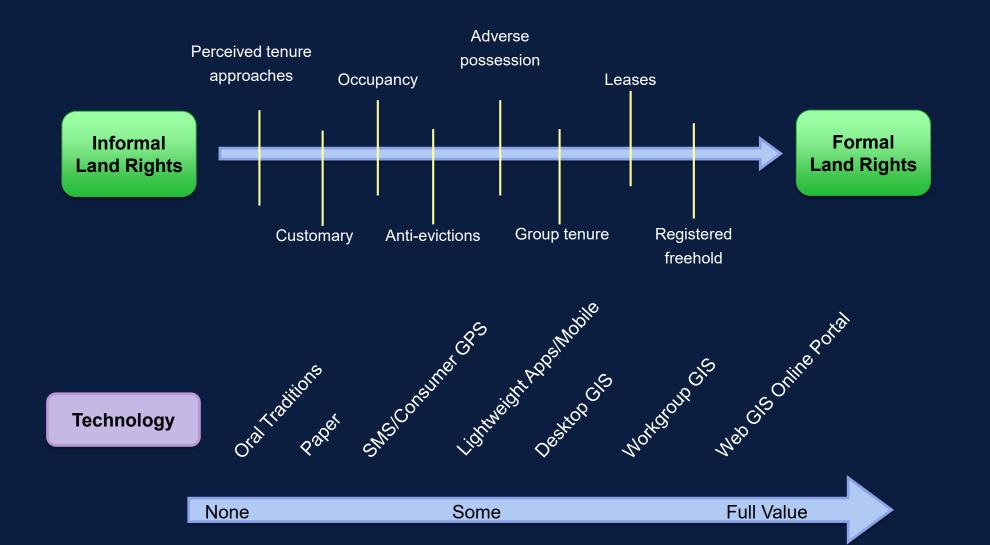
Workflow Management

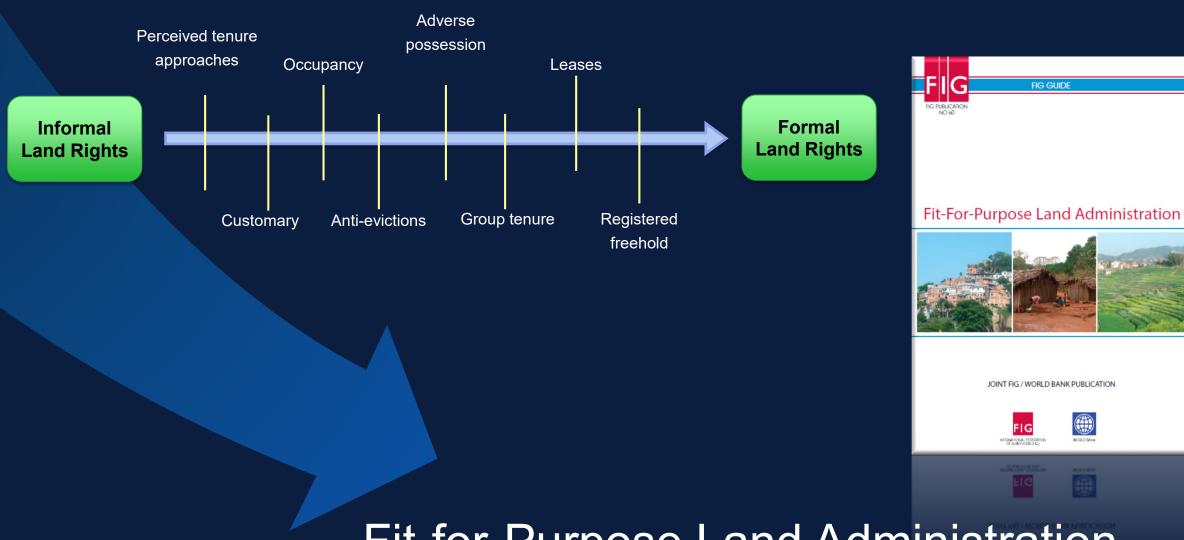


Continuum of Rights

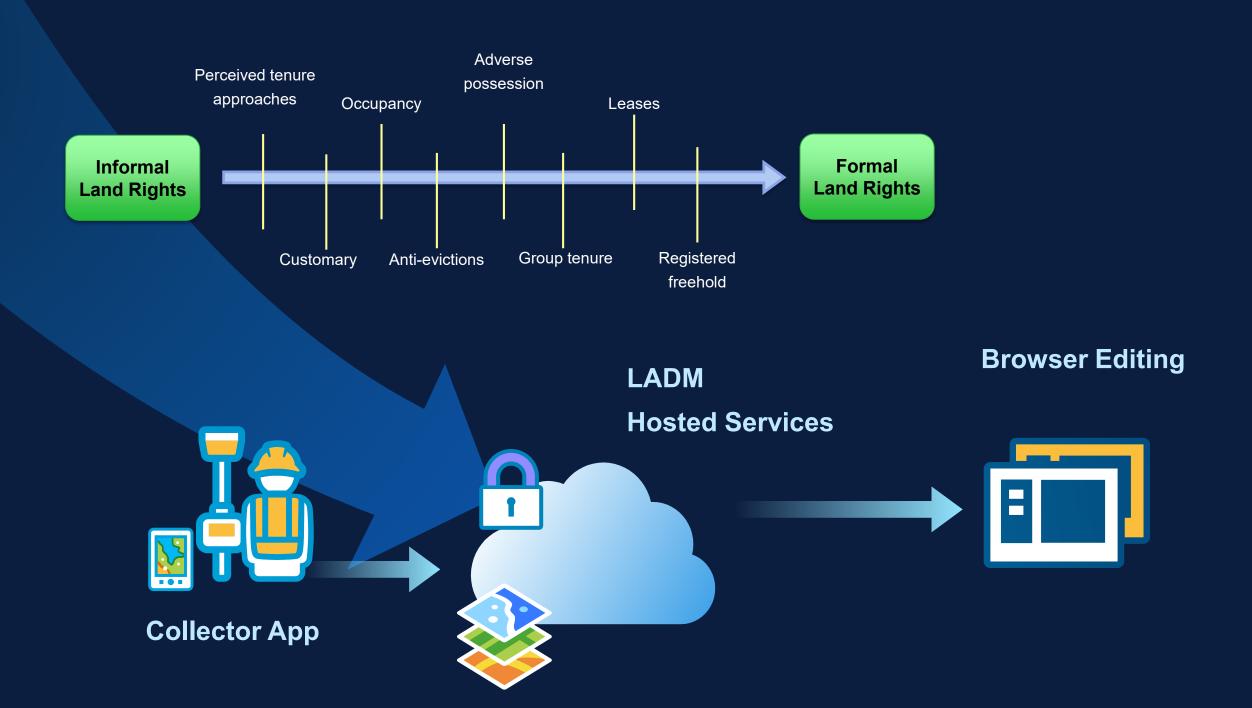








Fit-for-Purpose Land Administration



Standards Power Innovation

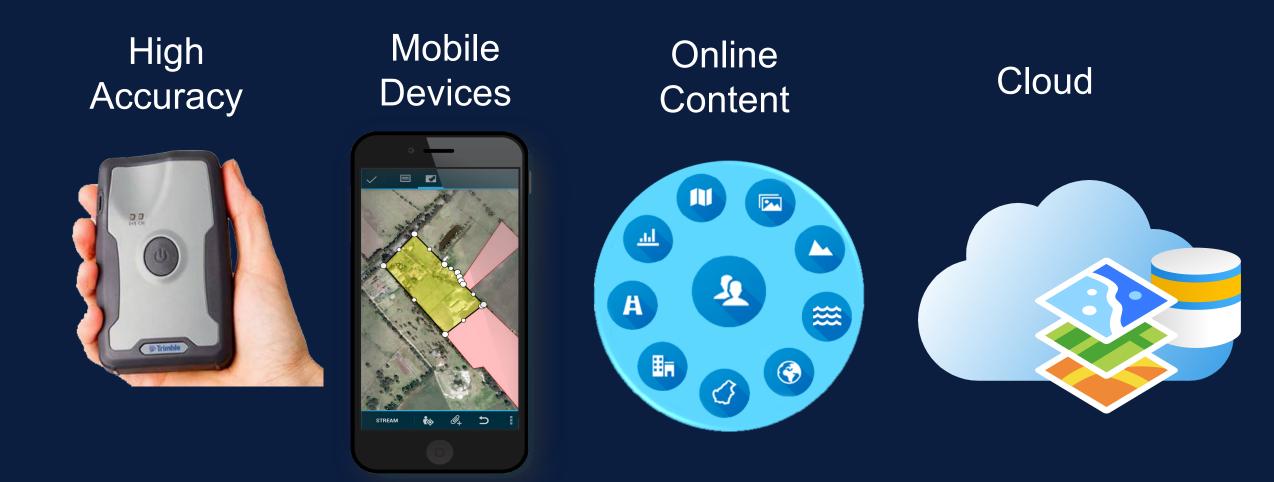








Standards Enable Connecting Modern Technology



Open Standards

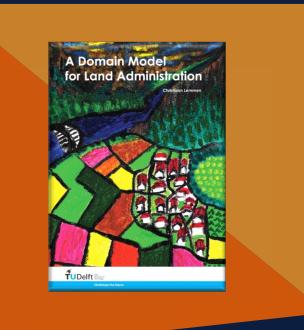
WCS KML **GML** WMS SQL **CSW** SOAP **OPENDAP WMTS** SLD **IFC WPS** GeoPackage NetCDF OGC[®] LAS REST **JSON**

Industry Formats

WaterML Web Scene (I3S) **Imagery OLEDB** DXF Hadoop CityGML **DBMSs** LERC **AIXM** COLLADA DWG **DGN** OneGeology **FileGDB INSPIRE** Shapefiles **Adobe Creative Cloud** Azure **AutoCAD** MS Office **AWS** SAP HANA

IBM Cognos

Interoperability



Open Models

- Technology Innovations and Inventions Will Continue (and at an increased rate)
 - Faster, Cheaper, Smarter, Better.....
- Standards Enable New and Existing Technology to Interoperate
 - Leveraging new capabilities
- Standards Enable Faster Solutions
 - Leveraging past research and experiences
- New Opportunities and Capabilities Will Continue with Innovation and Standards

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