Current State of Geospatial Technology Supporting LADM

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ABSTRACT

SOA, WebGIS, LADM – Evolving Opportunities

Services oriented architecture (SOA) has been used in several pilot fit-for-purpose LADM projects and is used successfully in deployed enterprise cadastral systems. This approach simplifies implementation, enables cloud operations, and now can work offline. Leveraging SOA and GIS delivers an extremely low cost entry point for developing systems while enabling the ability to evolve with new capabilities.

The scalability and security are not available with traditional approaches.

This presentation will cover:

Challenges new technology is helping address:

- Maintaining trust and confidence of the public;
- Out of sync business systems;
- Keeping data current;
- Minimize data errors;
- Transparent operations;
- Better fulfill data/info requests;
- Improve analysis;
- Data sharing;
- Training;
- Field management;
- New devices:
- Reduce operational costs;
- Generate revenue;
- New services;
- Data accuracy and completeness.

Major technology shifts include that help address these challenges:

- Client/Server → Web Services and Apps;
- Stand-Alone Desktop → Connected Desktops;
- Data Models → Web Maps and Layers;
- Static Data \rightarrow Real-Time;
- Single Server → Distributed Computing;
- Custom Applications → Configurable Templates & Apps;
- Proprietary Data → Open Data & Shared Services;
- 2D Features \rightarrow 3D Features;
- Spatial Analysis → Spatiotemporal & Big Data Analytics;
- Digital Cartography → Smart Mapping.

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BIOGRAPHICAL NOTES

Brent Jones, PE, PLS is Global Manager of worldwide cadastre and land records solutions for Esri. His responsibilities include strategic industry planning, business development, risk analysis and marketing. Brent's current interest include modernization of land administration processes, cadastral workflows, parcel data management, valuation, address systems, land records, and land registration in the developed and developing world. Brent is Past President of GITA (2007), the Geospatial Information & Technology Association (GITA). His previous employments include J. W. Sewall Company (1996-2005) and CES, Inc (1989-1996).

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