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# Understanding the Value of Geo-Information for E-Government: Implications for Public Sector Governance

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## Overview

- Previous research in geo-information science
- Modalities of valuing geo-information for e-government
- A Sketch of geo-information value for Geo-ICT
- Policy implications for public sector governance



## Previous research in geo-information science

The following definitions of geo-information are reported:

- Any information that can be geographically referenced (ANZLINC 2006)
- 'Spatial data' as 'any data with a direct or indirect reference to a specific location or geographical area' (EU 2007)
- 'Geographic information' as 'information concerning phenomena implicitly or explicitly associated with a location relative to the Earth' (ISO 2002; CEN 1998)



## Previous research in geo-information science

- SDI as an example of the problematique of Geo-ICT
- Many definitions for SDI
- Are SDI different from other information infrastructures?



# Geo-ICT evaluation and impact issues

## SDI evaluation approaches:

- Focused on directly assessing SDI projects
- Following the evolution of SDI initiatives
- Comparisons of SDI experiences



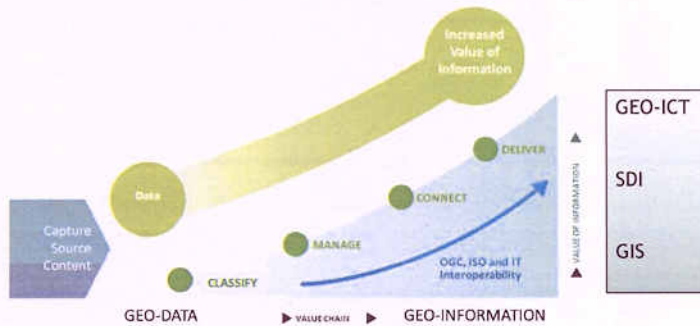
## Modalities of valuing geo-information for e-government

Modality of valuation	Definition	Value contributions
Contribution to Efficiency	the degree to which GIS operates with minimum waste, duplication, and expenditure of resources	<ol style="list-style-type: none"><li>1. Availability and accessibility of products and services</li><li>2. Cost (monetary and nonmonetary costs associated with utilizing a service or buying a product)</li><li>3. Coverage and completeness</li><li>4. Data acquisition capability</li><li>5. Data storage capability</li><li>6. Time-saving</li></ol>
Contribution to Effectiveness	the extent to which GIS has contributed to the satisfaction of information needs, in adequate quantity and quality of data and in the decision-making process.	<ol style="list-style-type: none"><li>1. Adequacy of service relative to needs of citizens</li><li>2. Improved planning, coordination and cooperation</li><li>3. Improved products and services</li><li>4. Job satisfaction / collaboration</li><li>5. Potentials for conflict resolution</li><li>6. Support for quicker, more explicit articulation of decisions (improved decision support)</li><li>7. User satisfaction</li></ol>
Contribution to Societal well-being	reported impact of GIS on broad societal objectives such as "individual integrity, social justice, distribution of wealth and fulfillment of human aspirations" (Clapp et al., 1989; p42)	<ol style="list-style-type: none"><li>1. Citizen-public sector interactions (participation)</li><li>2. Economic benefits</li><li>3. Enhancement of principles of a democratic society, for example, freedom from constraints such as corruption</li><li>4. Improved standard of health and safety</li><li>5. Long term contribution to positive future</li><li>6. Protection of legal rights, such as privacy (surveillance and confidentiality)</li><li>7. Social justice: fair treatment and a just share of benefits, for example equal availability of information to citizens when needed and equal ease of access</li></ol>

Adapted from: Akingbade, A., Navarra, D.D. and Georgiadou, P.Y. (2009) A 10 years review and classification of the geographic information systems impact literature 1998 - 2008. In: Proceedings of the workshop: Spatial Information for sustainable management of urban areas, Mainz, 2 - 4 February 2009, Germany.



# A Sketch of geo-information value for Geo-ICT



## Policy implications for public sector governance

- Value of geo-information?
- Nature of use of Geo-ICT for public sector governance
- The Polis, the Market and the trans-boundary disciplinary context



Thank You

Any questions?

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