

Spatially enabling government: a new vision for spatial information within an e-government environment

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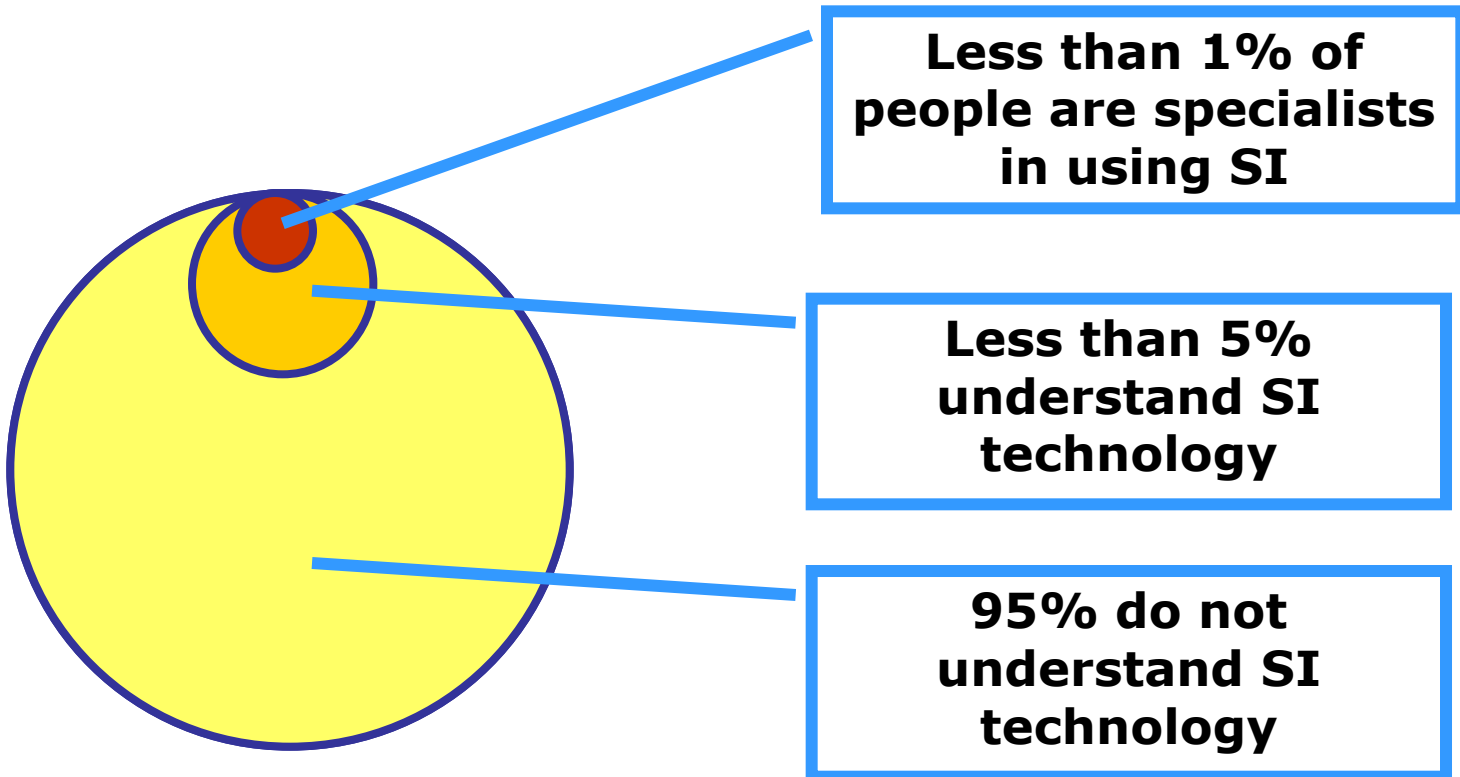
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“...spatially-enabled government is an exciting area for government. Spatially-enabled government uses place or location to manage and integrate government services and enhance business opportunities.”

The Hon Gary Nairn MP, Special Minister for State, Australian Government



The problem: Spatial enablement of government (or society) - few people know what we are talking about!



The answer: Provide the systems and people use them!!!

Consider: Google Earth merging with built and environment data. This unleashes the power of both technologies ...



emergency response, taxation assessment, environmental monitoring and conservation, economic planning and assessment, social services planning, infrastructure planning, etc, etc



Three visions to support spatially enabled government as part of e-government

- A land management vision: incorporating spatially enabled land administration
- A spatial data infrastructure (SDI) vision: SDI as an enabling platform
- A vision for a spatially enabled society

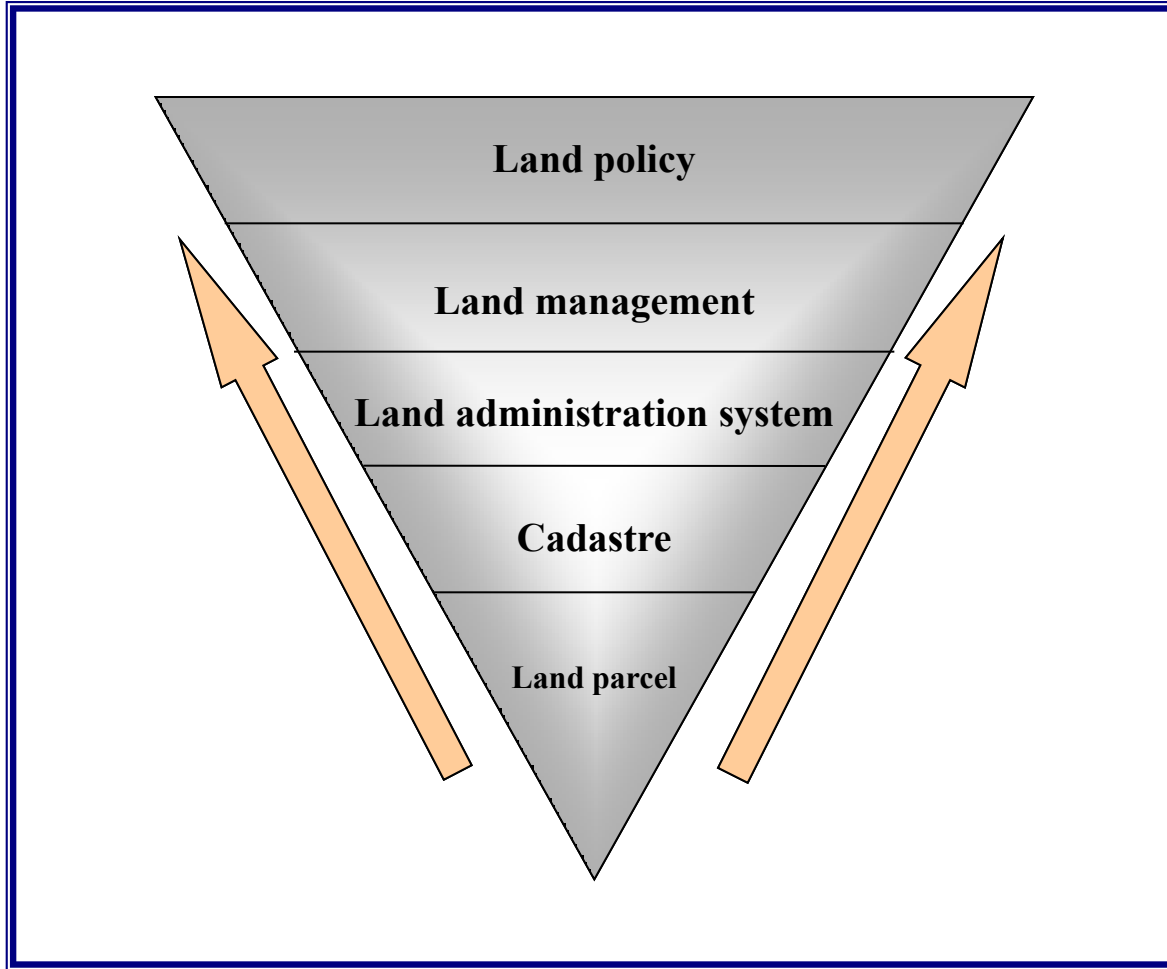


But first understand three fundamental concepts

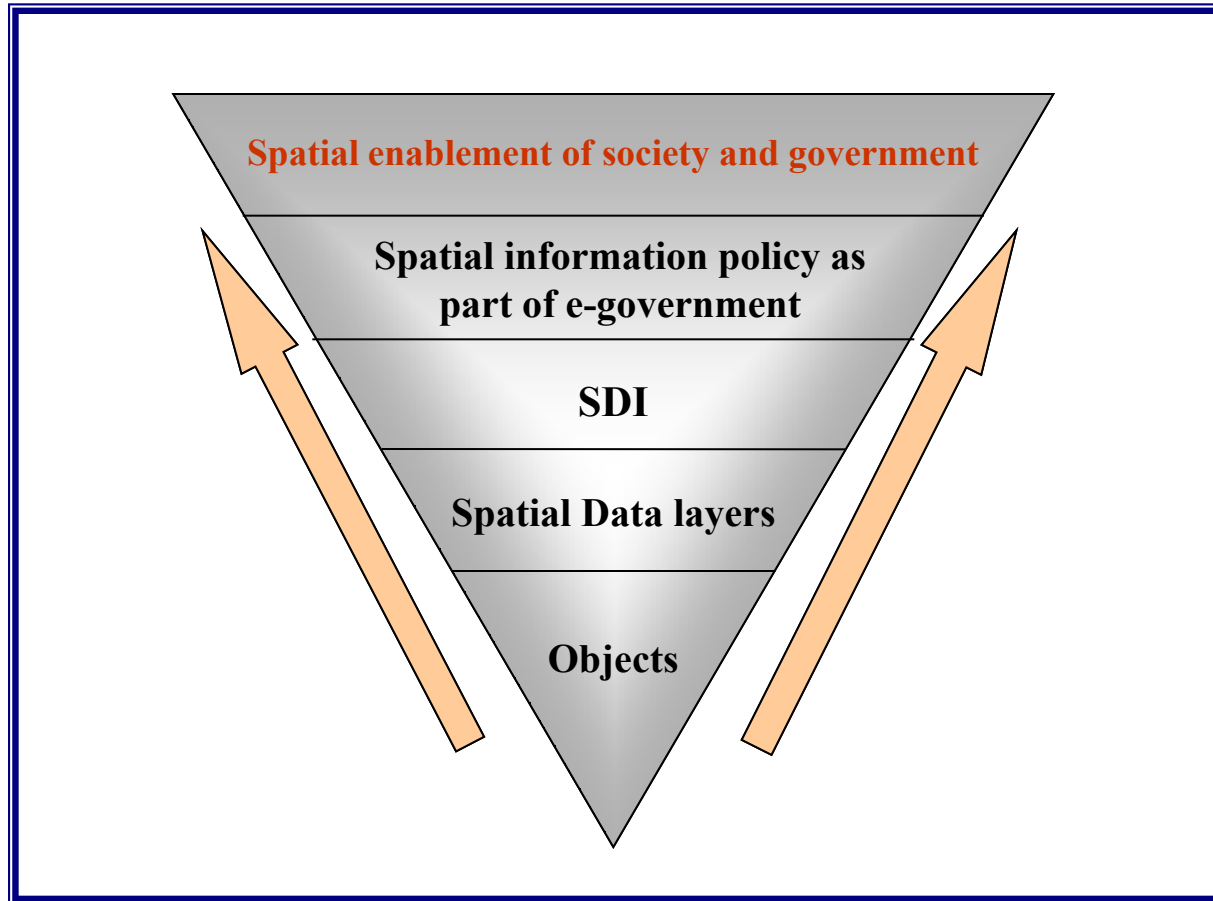
- Land in society
- Spatial information in society
- Importance of integration of natural and built environment in delivering sustainable development



Land in Society

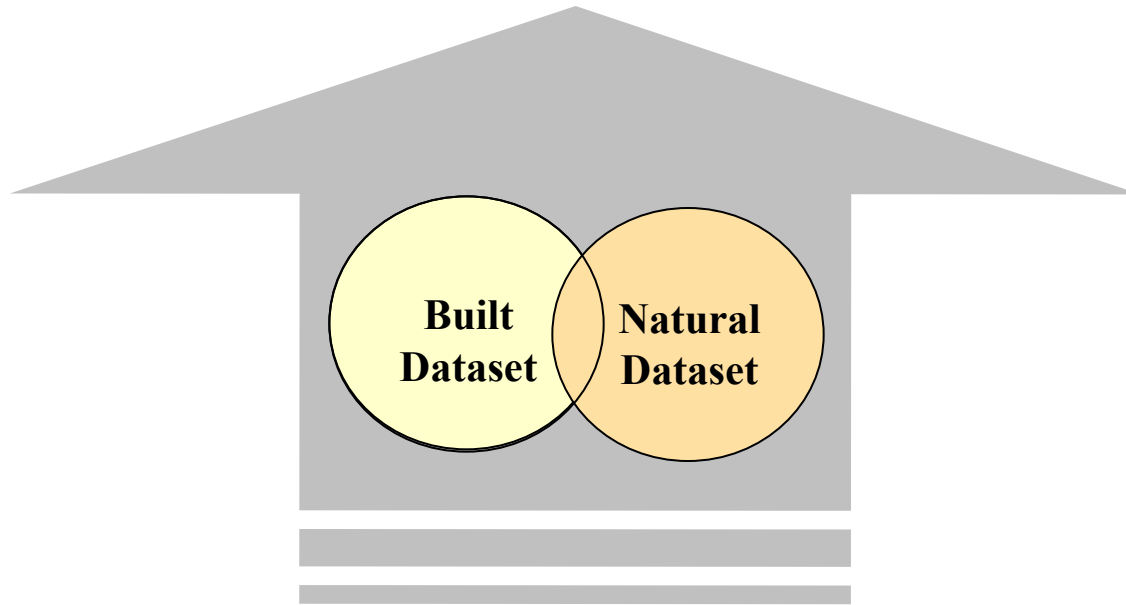


Spatial Information in Society



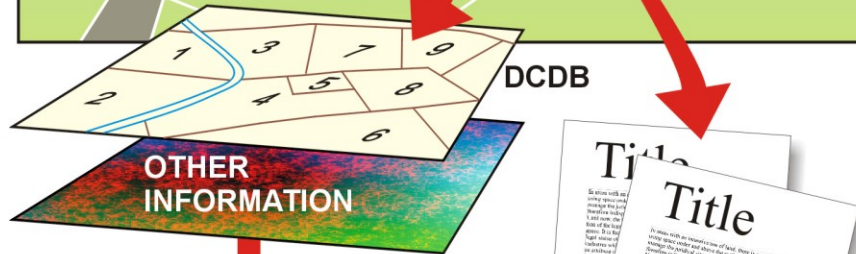
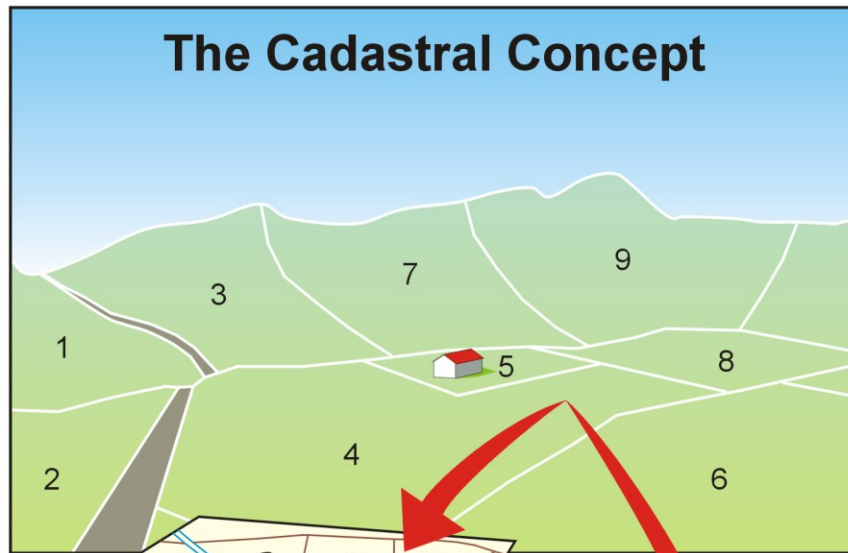
The challenge is the relationship between Built (cadastral) and Natural (topographic) Environmental Datasets

Sustainable Development

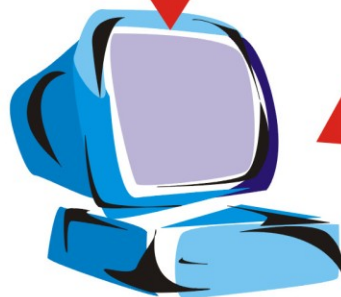


Land Management Vision





MAPS & DIGITS



COMPUTER
(LINK & INTEGRATE)



OWNERSHIP / LAND USE
(TEXT & DIGITS)

The traditional view of the cadastre



Evolution of Land Markets



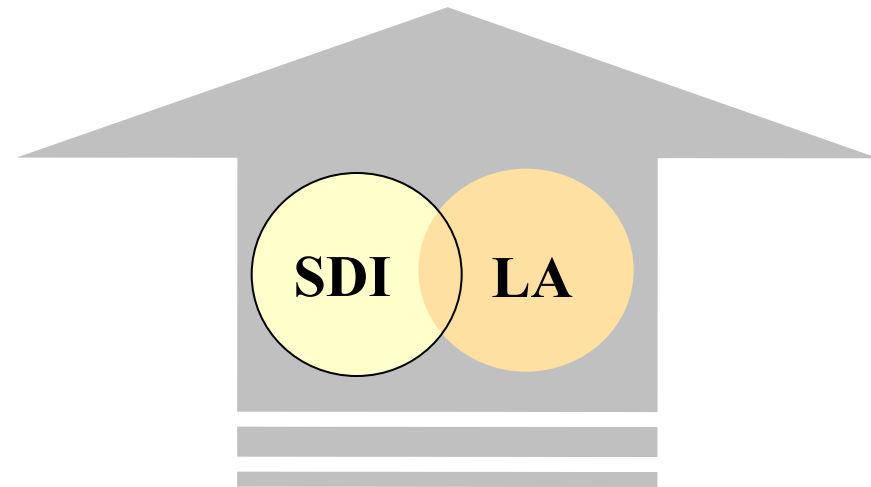
Spatially Enabling LAS

Land administration
generates information
about places.

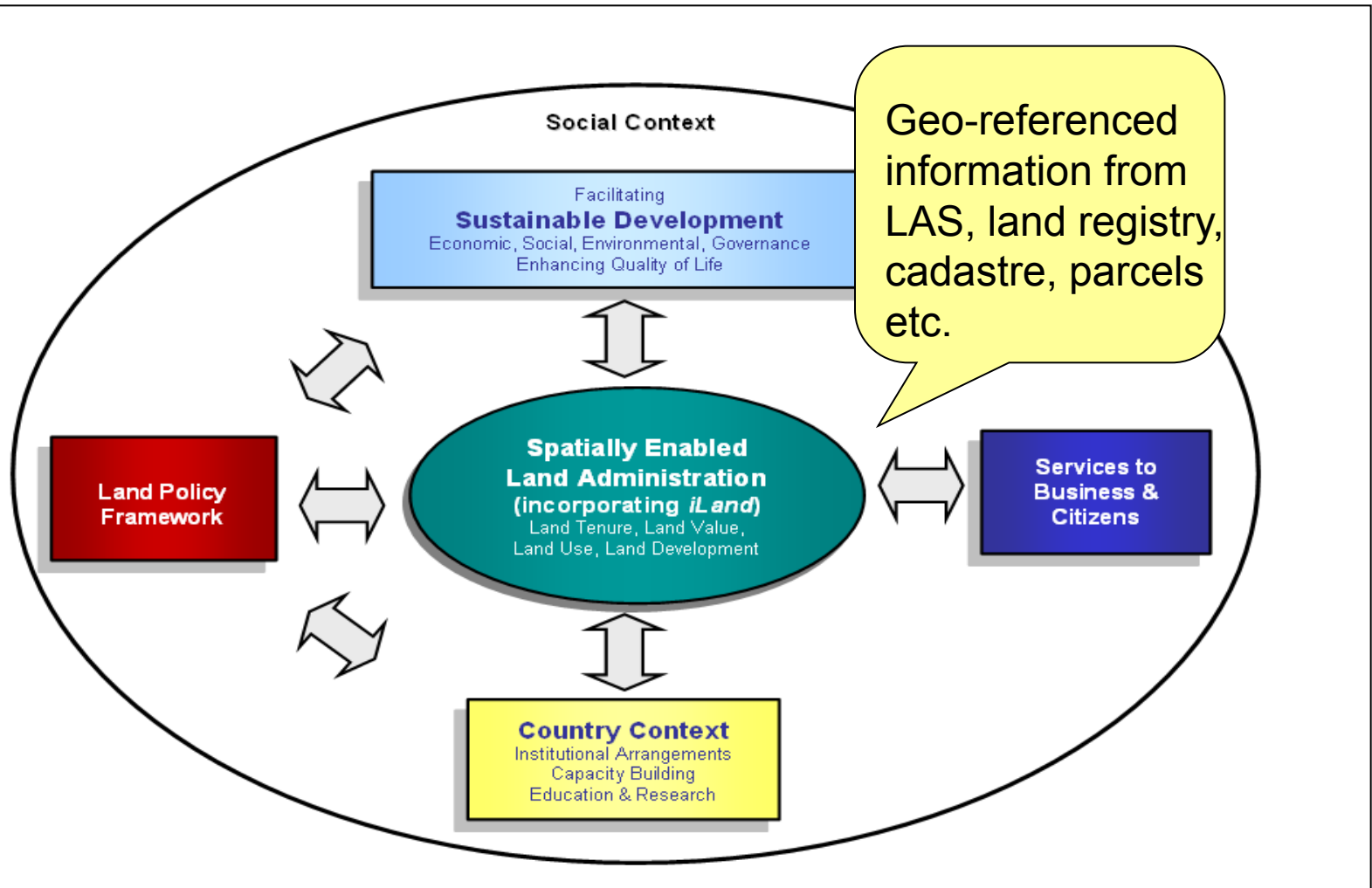
SDIs organise spatial
information

Together they provide
information about unique
places people create (built)
and use (natural).

Sustainable Development



Land Management Vision

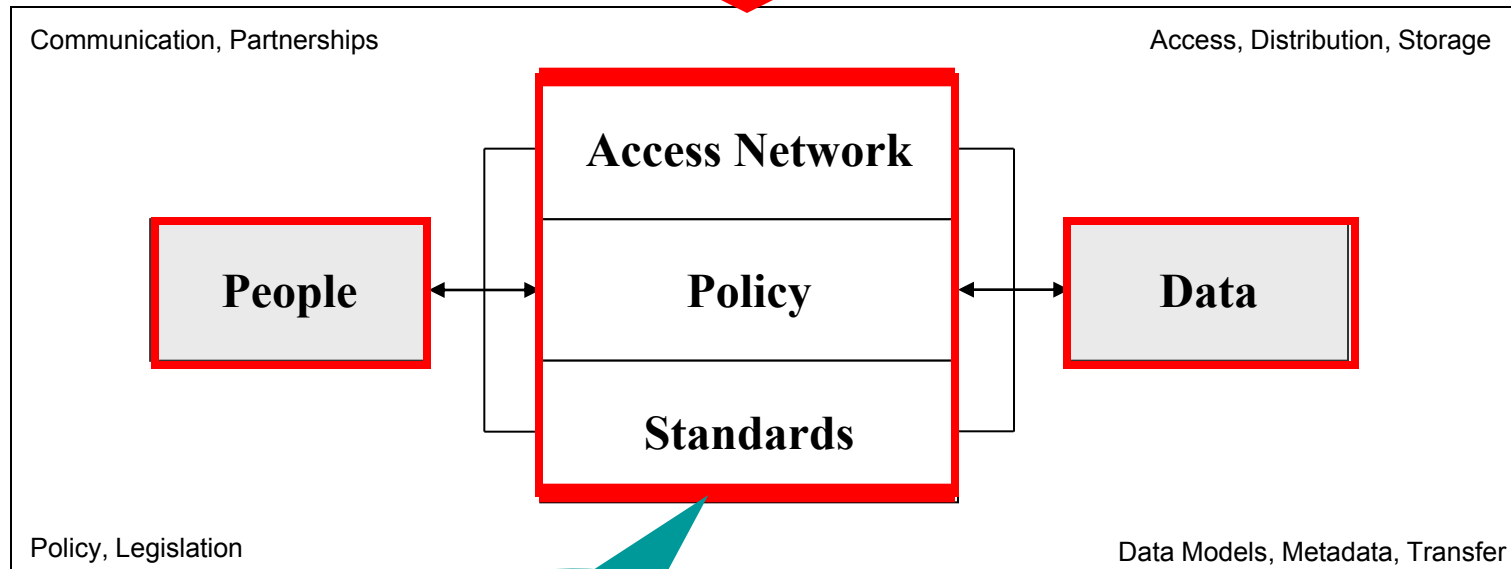


SDI Vision



Components of SDI

Dynamic



**Technological
components**

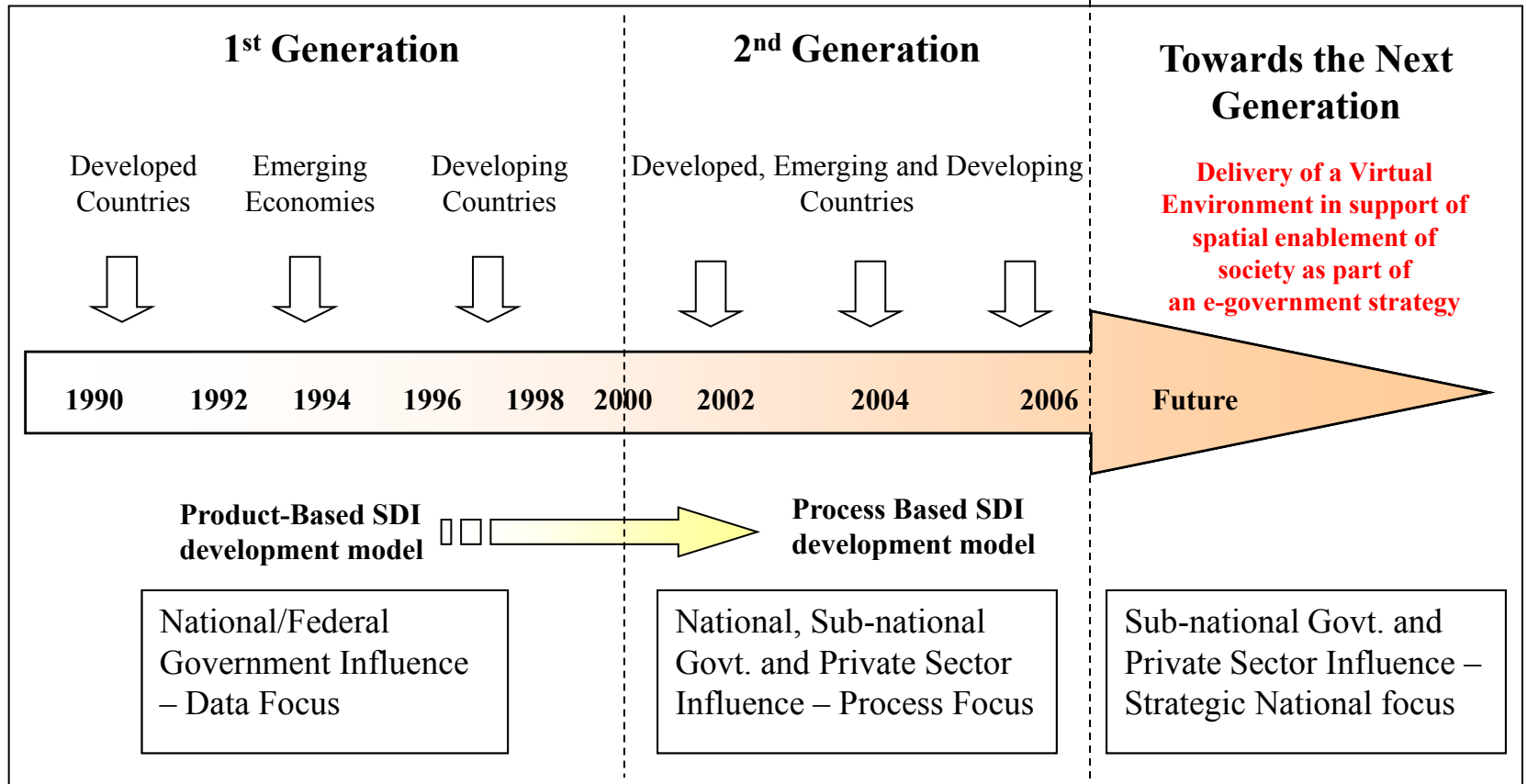


Changing Role of SDI

- Facilitate access/sharing;
- Through web services;
- Move to a new business paradigm of a ‘virtual jurisdiction’ or ‘virtual enterprise’ to promote partnership of SI-organisations;
- Develop an integrated platform to support the linking of services across participating organisations;
- Change “Whole of Government” business processes to use spatial information as part of e-government.



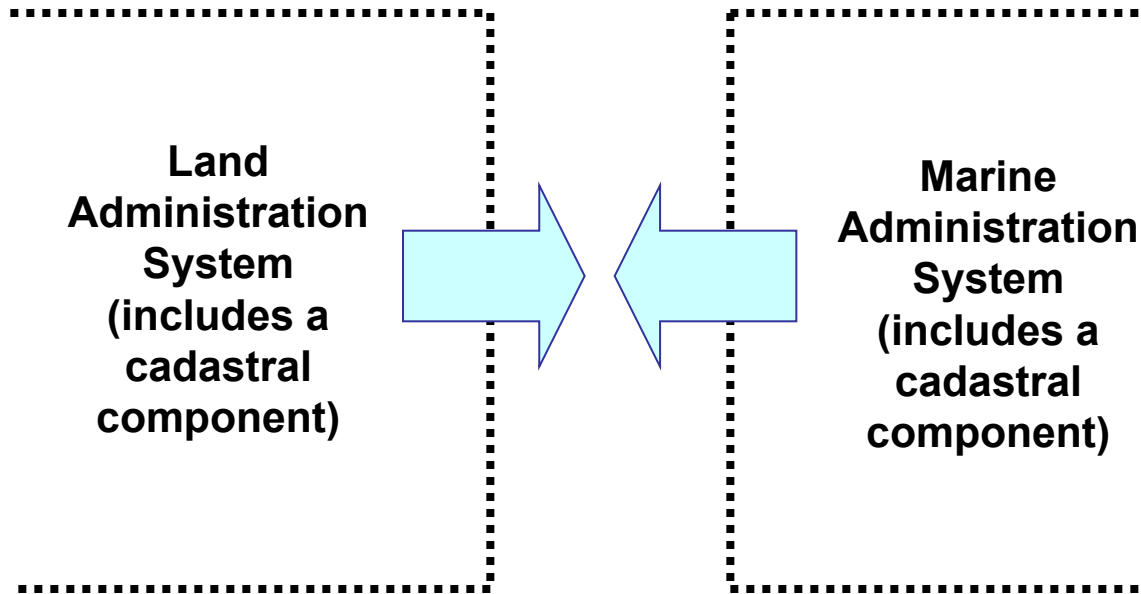
Continuum of SDI Development based on the 1st and 2nd Generations of SDI



LAND

SEA

Coastal Zone



Spatial Data Infrastructure

(includes cadastral data)

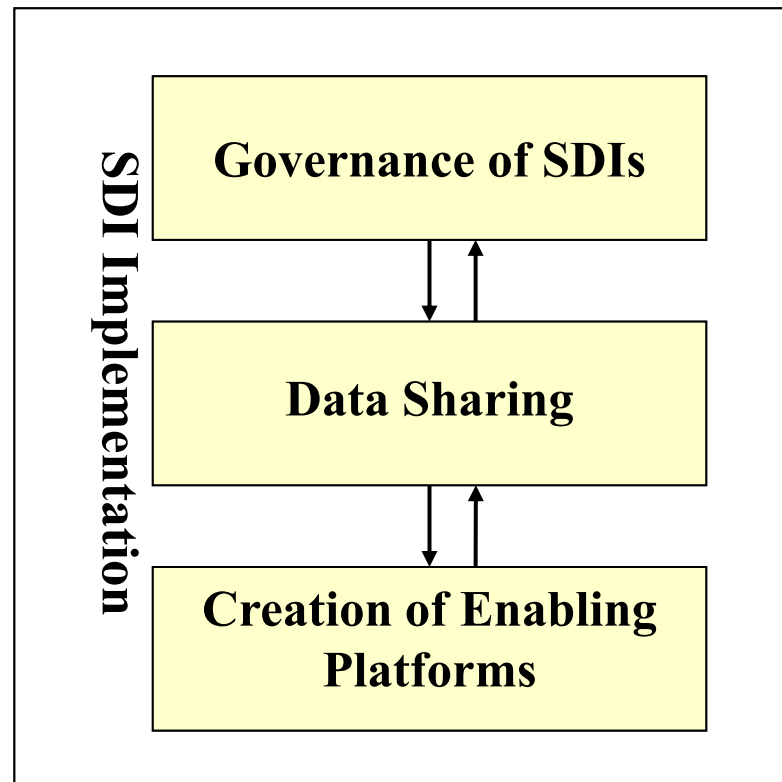
Administering the Land and Marine Environments

(Resolution 3 – UN PCGIAP Workshop on Administering the Marine Environment – Malaysia 2004)



Strategic Challenges for SDI Development

Spatially Enabled Government



Vision of spatially enabled government



Governments are spatially enabled when -

Location is used to organise their
information

and

Location and spatial information are
common goods available to citizens
and businesses to encourage
creativity and product development.



Challenges and Issues for spatially enabled society

- SDI to facilitate spatially enabled government as part of an e-government strategy
- SDI to facilitate integration of natural and built environment datasets
- Development of SDI vision, mission and road map – where are we heading?
- Role of government, private and academic sectors
- Capacity building



Collaboration, Cooperation and Partnerships

Key to Development of SDI Initiatives

Understanding the Continuum



Co-operation

- No formal rules
- Minimal resources
- Independent power
- Vague goals



Co-ordination

- Few rules
- Limited resources
- Some interdependency
- Agency goals



Collaboration

- High degree of formality
- High resource commitment
- Interagency control
- Collective goals

(McDougall *et al* 2004)



Conclusion

- SDI is a new and evolving concept
- SDI development is multi-disciplinary with policy, legal, institutional and technical dimensions
- SDI will be a *virtual environment* supported by an *enabling platform* - spatially enabling society and government within an e-government environment
- Innovations in use of information will involve private and government sectors.
- Research is central to SDI development



The way forward for UNRCC-AP and PCGIAP

Key focus on the development and implementation of a spatially enabled society (or government) within an e-government strategy in member nations

