

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

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# Australian Government, Ministerial Online and Communications Council

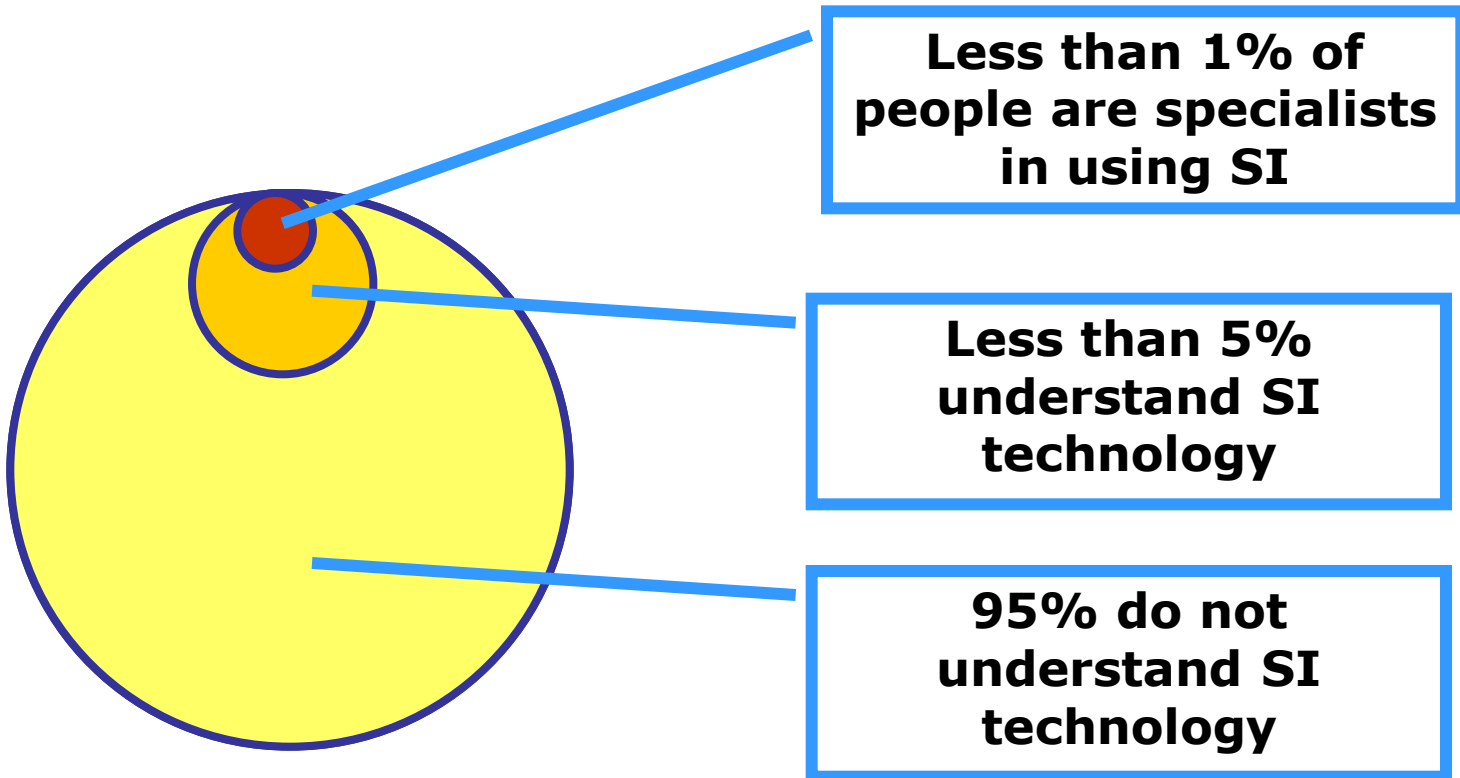
*8 September, 2006*

“...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

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- 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



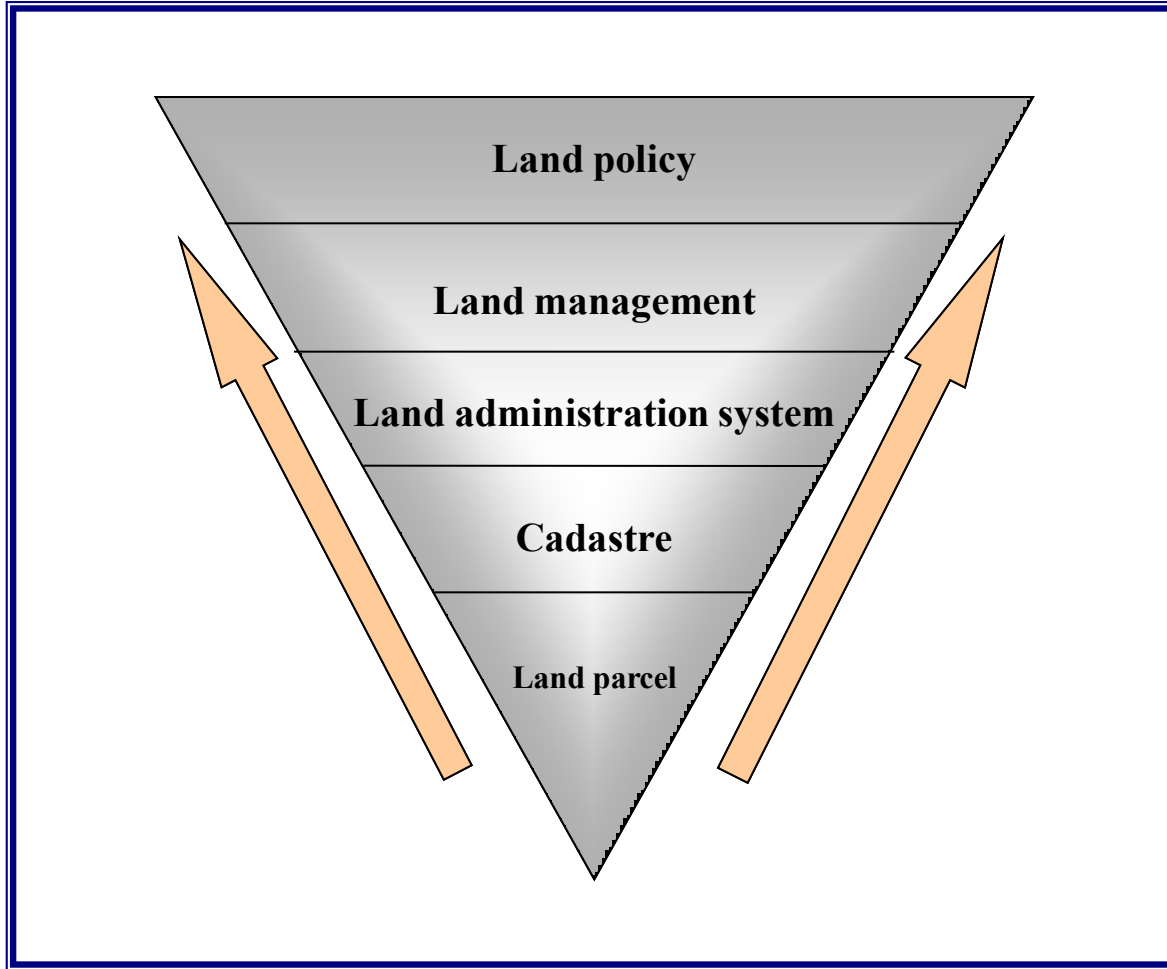
# But first understand three fundamental concepts

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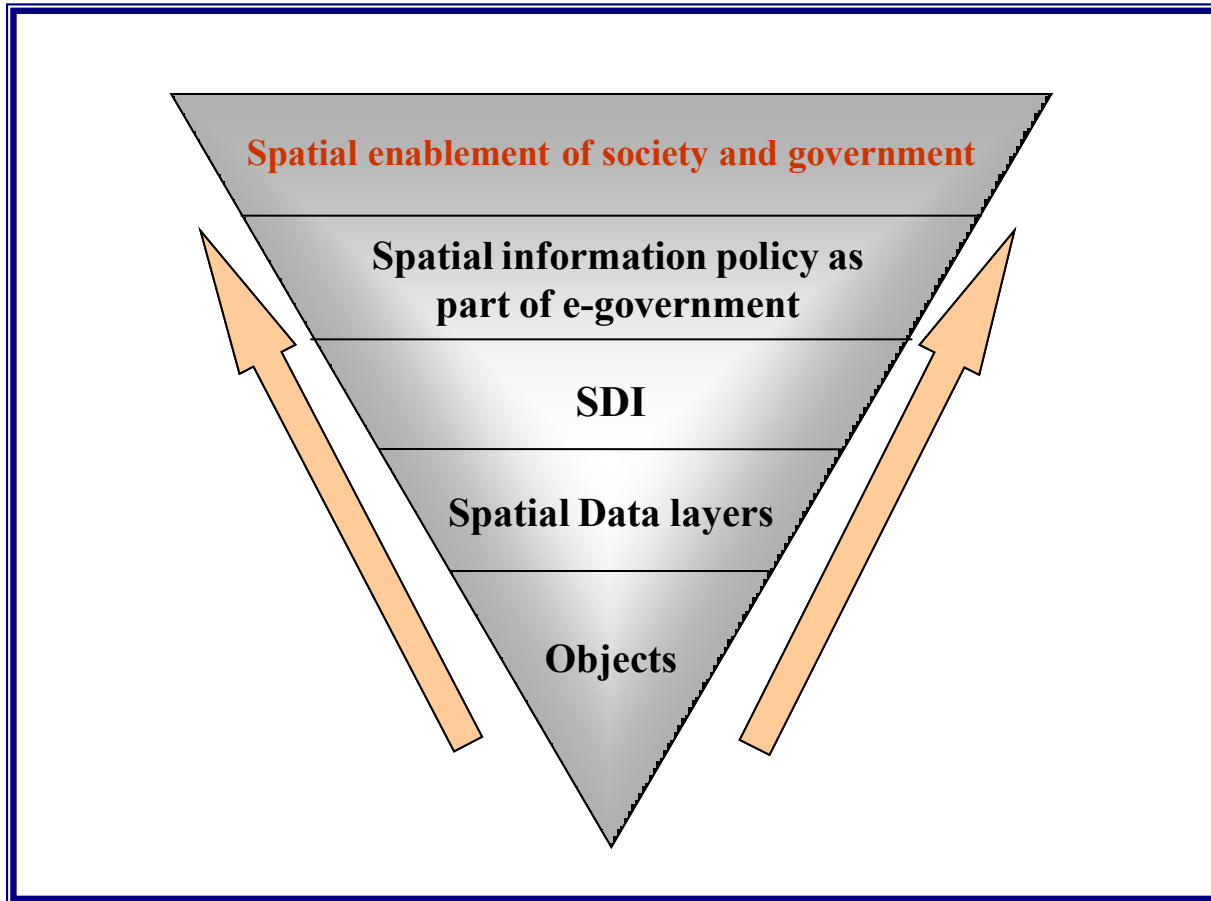
- Land in society
- Spatial information in society
- Importance of integration of natural and built environment in delivering sustainable development



# Land in Society



# Spatial Information in Society

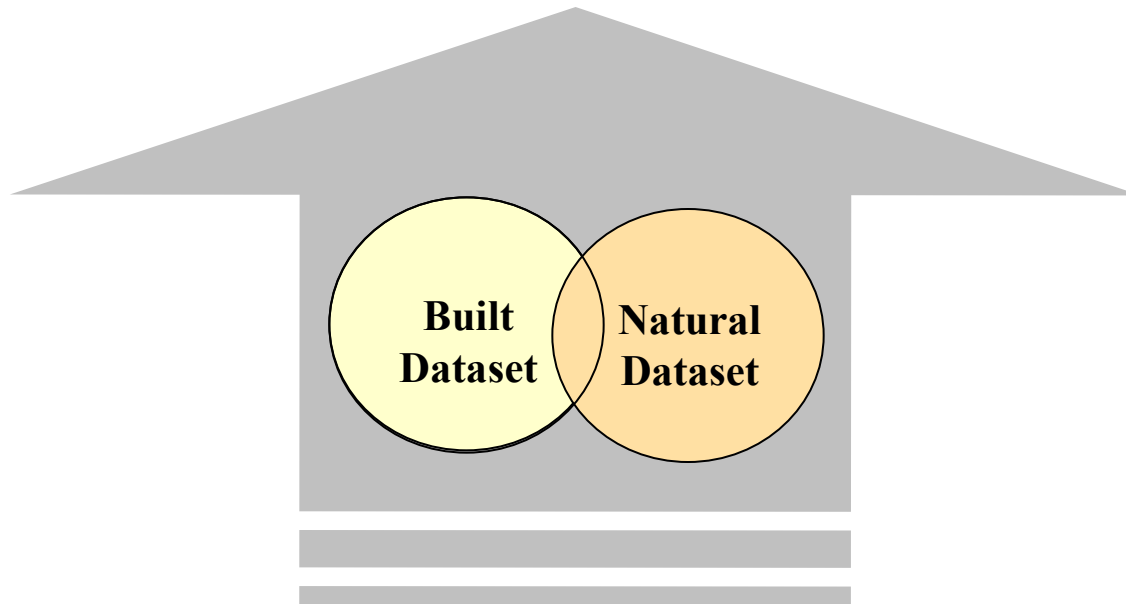




# The challenge is the relationship between Built (cadastral) and Natural (topographic) Environmental Datasets

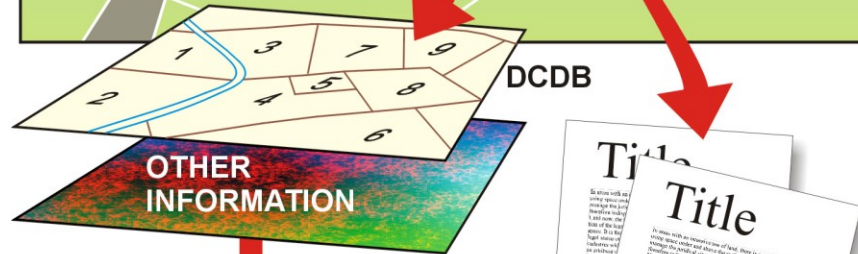
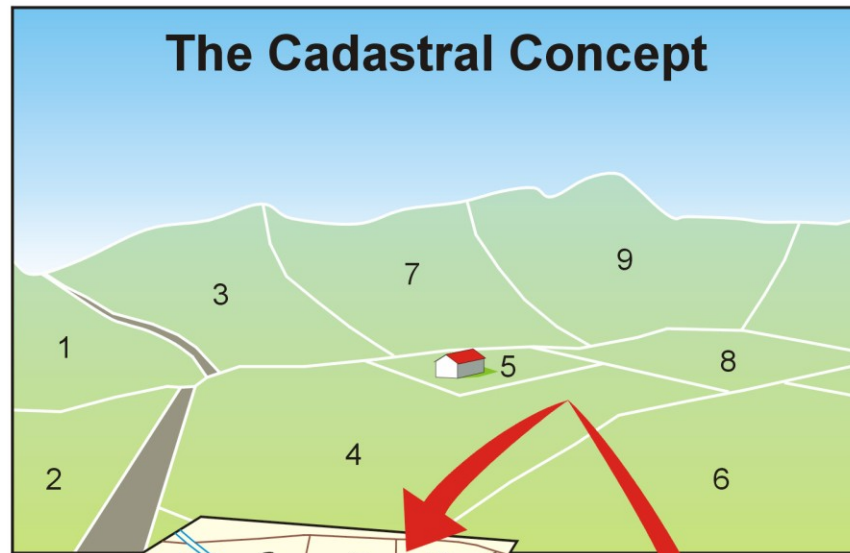
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## Sustainable Development

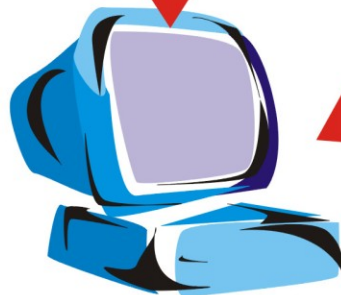


# Land Management Vision





MAPS & DIGITS



COMPUTER  
(LINK & INTEGRATE)



OWNERSHIP / LAND USE  
(TEXT & DIGITS)

# The traditional view of the cadastre



# Evolution of Land Markets



# Spatially Enabling LAS

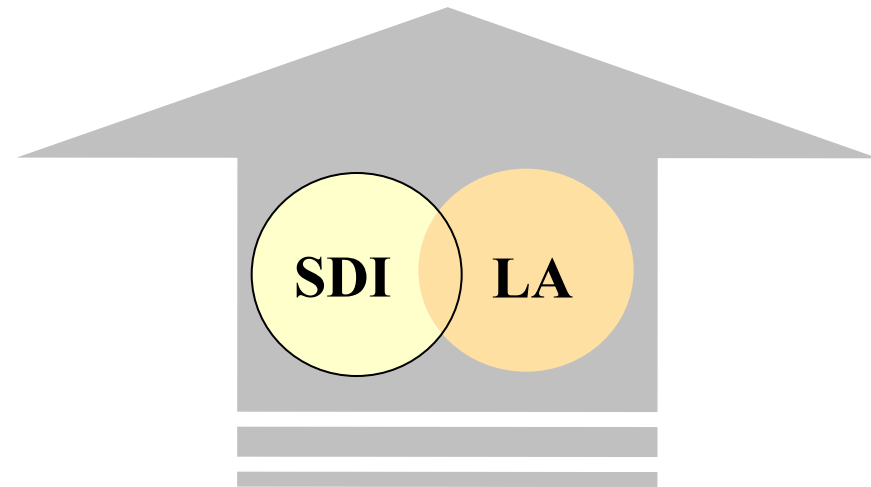
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*Land administration*  
generates information  
about places.

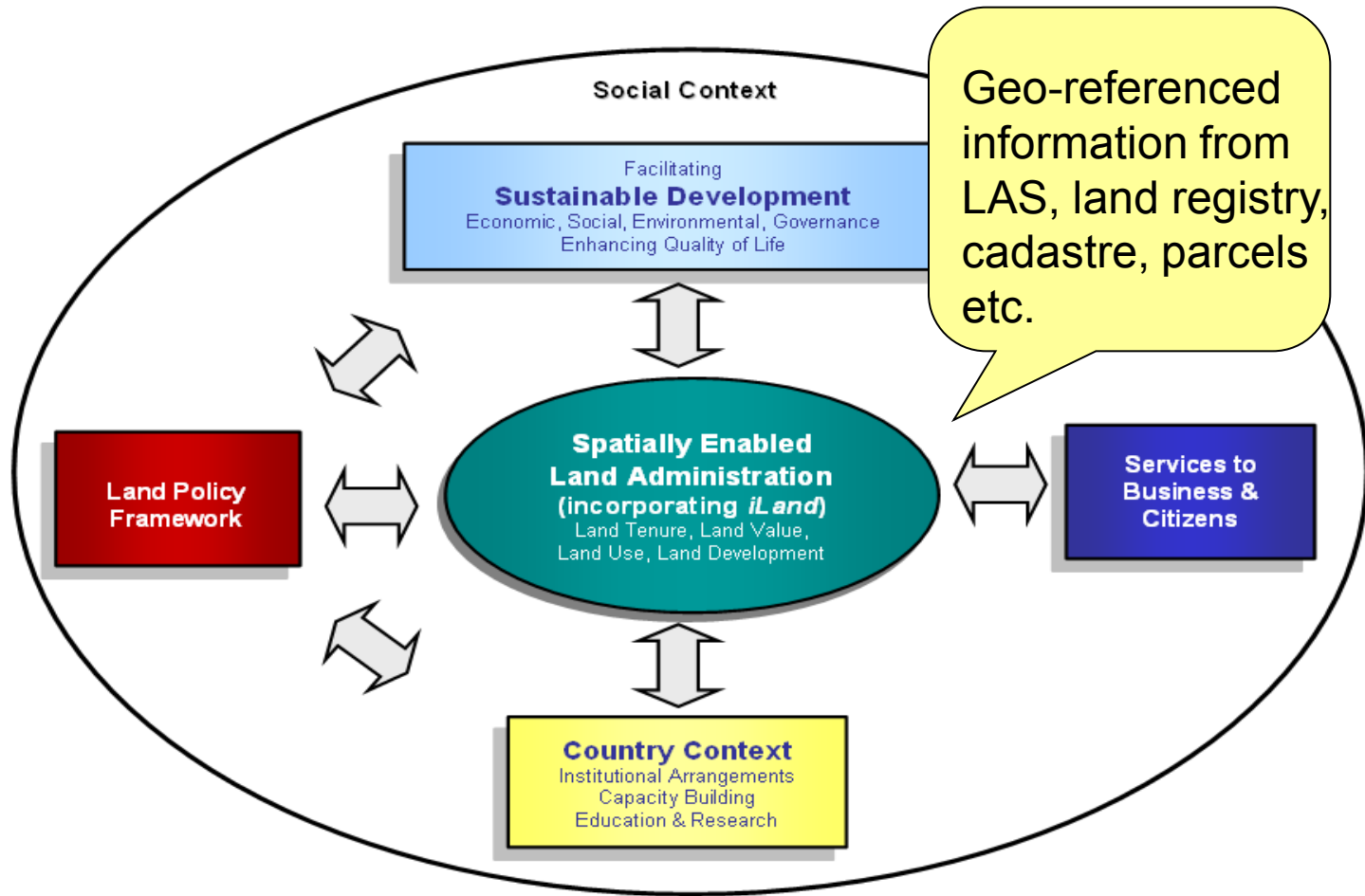
*SDIs* organise spatial  
information

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

**Sustainable Development**



# Land Management Vision

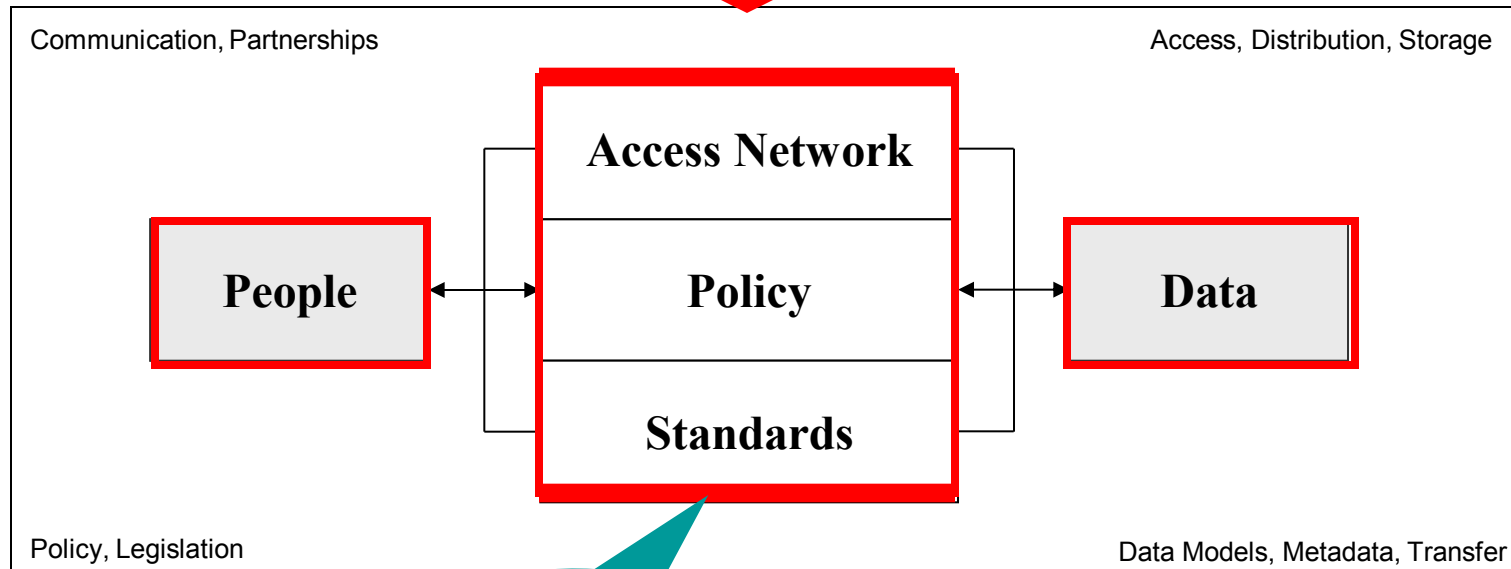


# SDI Vision



# Components of SDI

**Dynamic**



**Technological  
components**





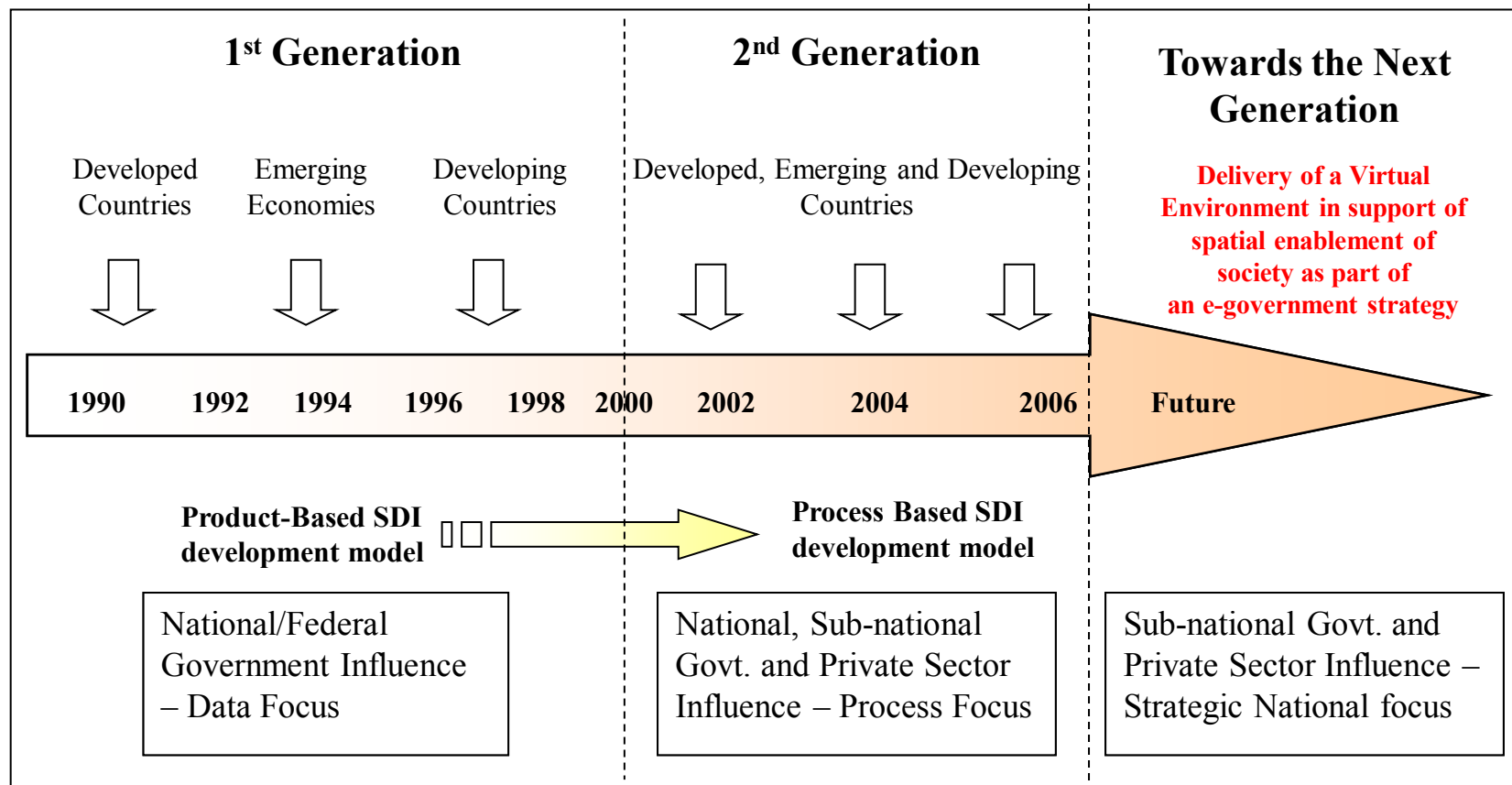
# Changing Role of SDI

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- 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.



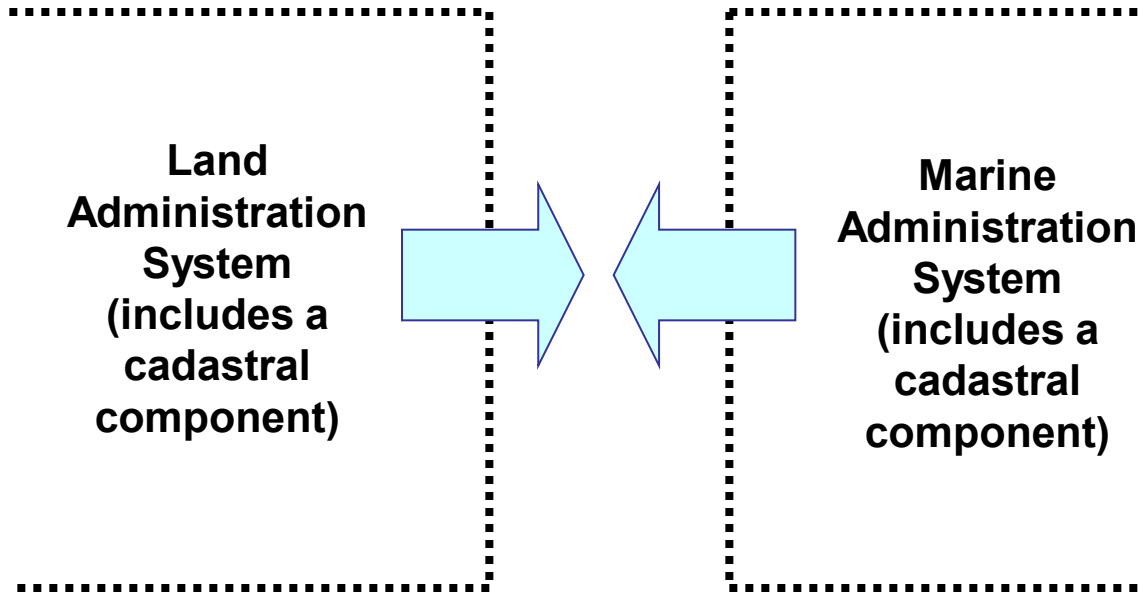
# Continuum of SDI Development based on the 1st and 2nd Generations of SDI



**LAND**

**SEA**

**Coastal Zone**



**Spatial Data Infrastructure**  
(includes cadastral data)

**Administering the Land and Marine Environments**

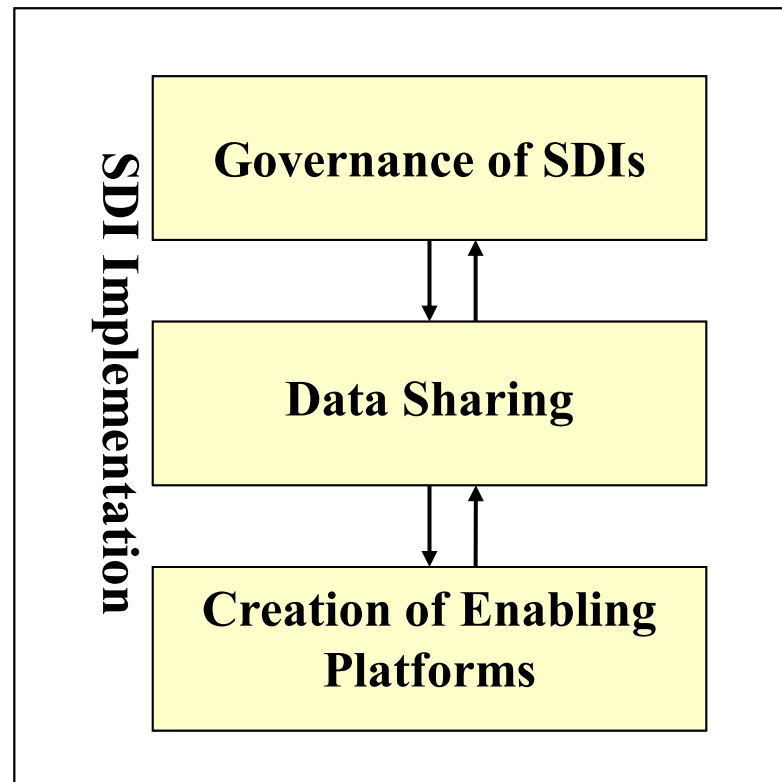
*(Resolution 3 – UN PCGIAP Workshop on Administering the Marine Environment – Malaysia 2004)*



# Strategic Challenges for SDI Development

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## 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

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- 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*

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### 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

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- 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

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

