SDI 3.0

Delivering Place - Transforming Government

UN – GGIM
Exchange Forum

Doha, Qatar
February 2013

Mark Sorensen, CEO
The GPC Group

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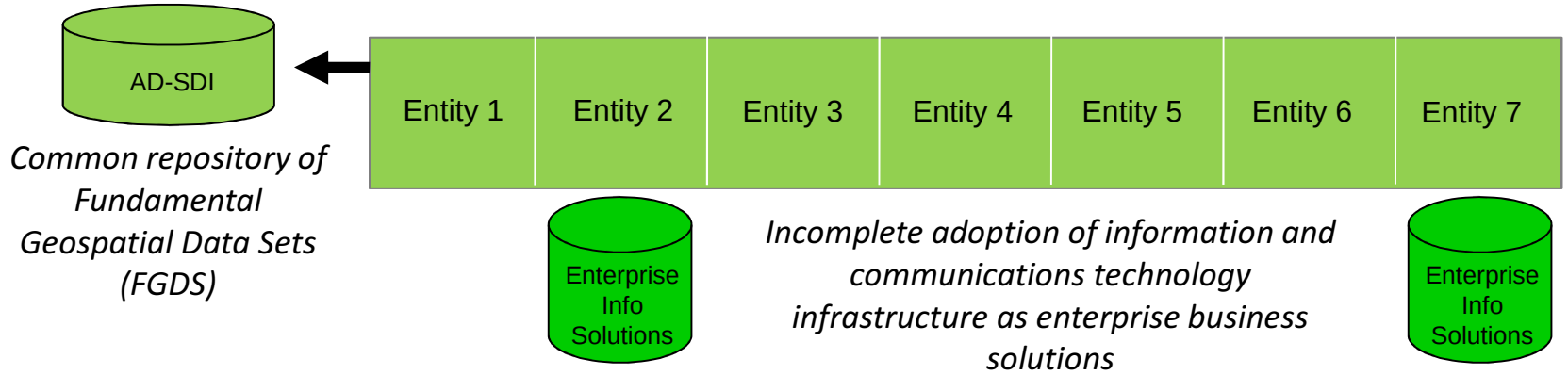
Proposition

- "Delivering (geospatial) Place" depends on **for Whom? What? When? Where? Why? and How?**
- SDI evolving - technologies massively converging
- Mobile telephony vanguard of global information technology adoption
- Opportunity to leverage SDI and other Community Information Infrastructure to transform government and evolve new approaches to deliver Place to new audiences in new ways

SDI 1.0

SDI as a concept recognized GIS data as a fundamental infrastructure that supports national physical, cultural and economic development and environmental protection, akin to highways, telecommunications networks, health and educational facilities.



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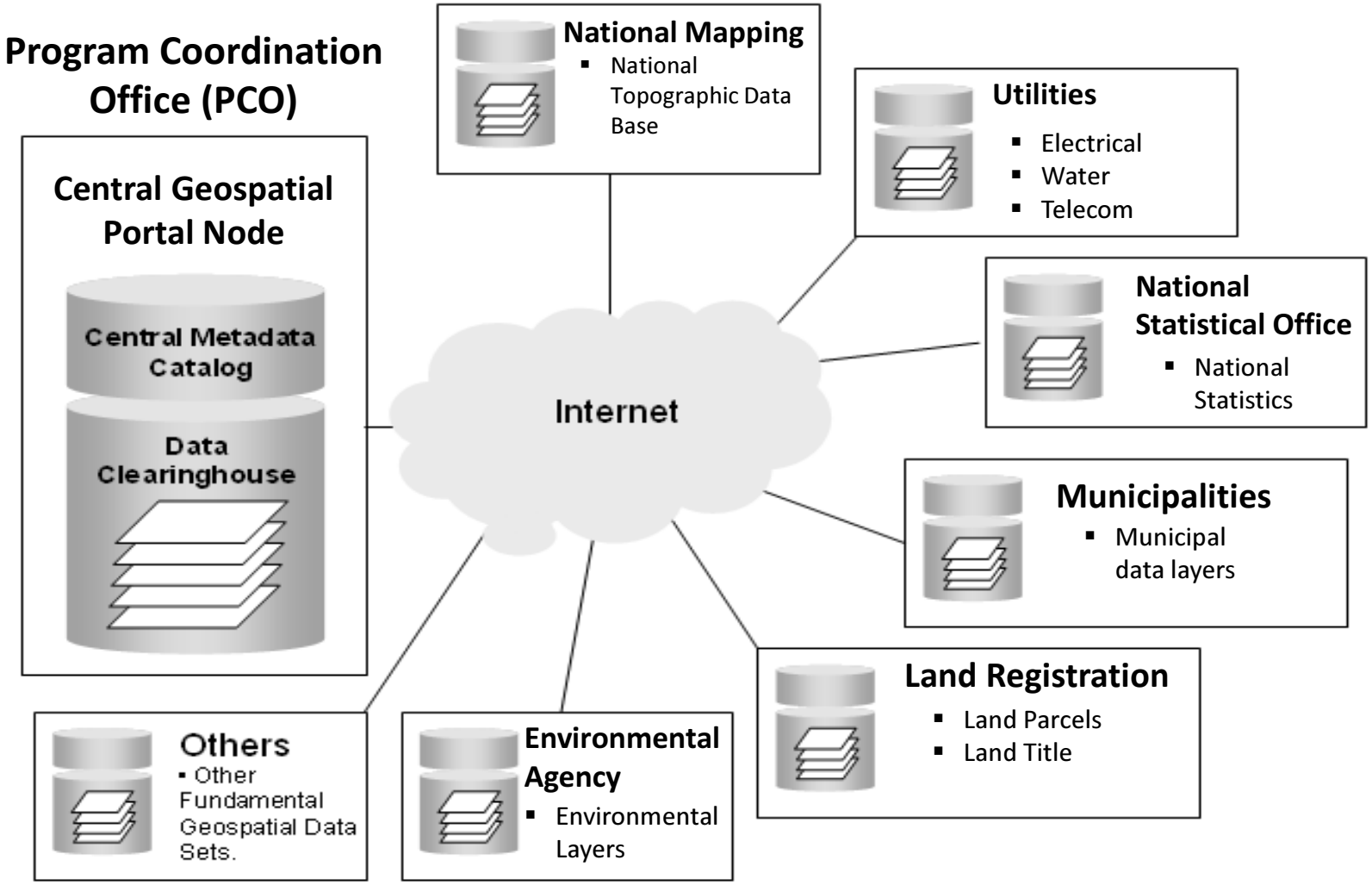
Network of Interoperable Nodes



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SDI Growth Paced with Technology Adoption Stages

Wow!! Collectively we have a lot of existing information and expertise!!

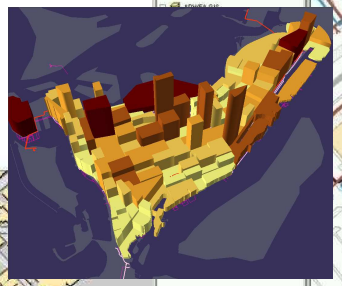
2030

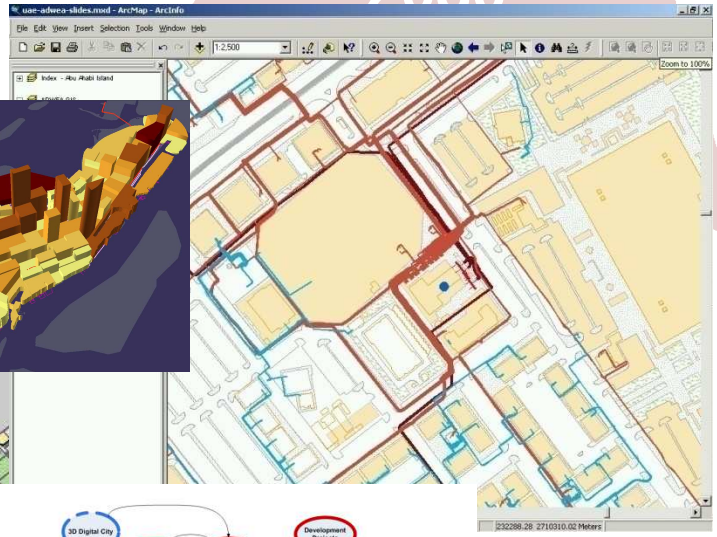
This is something we MUST do……

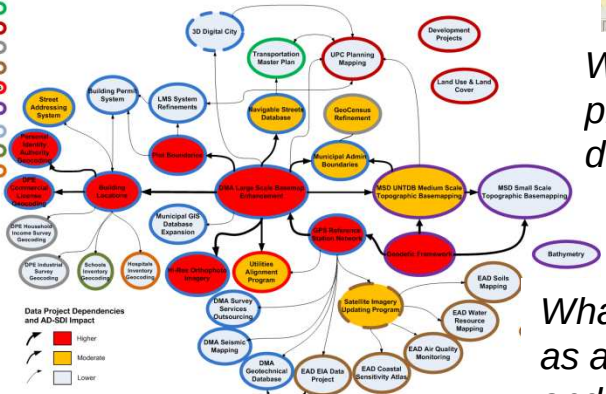
Important to understand the progression of technology adoption….

Level 1 – Awareness, Understanding and Commitment

What is GIS?

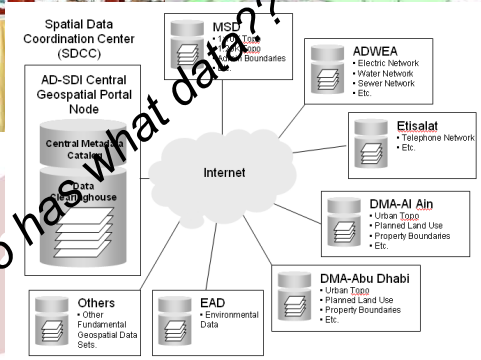






What ongoing projects are we a doing??

Who has what data??



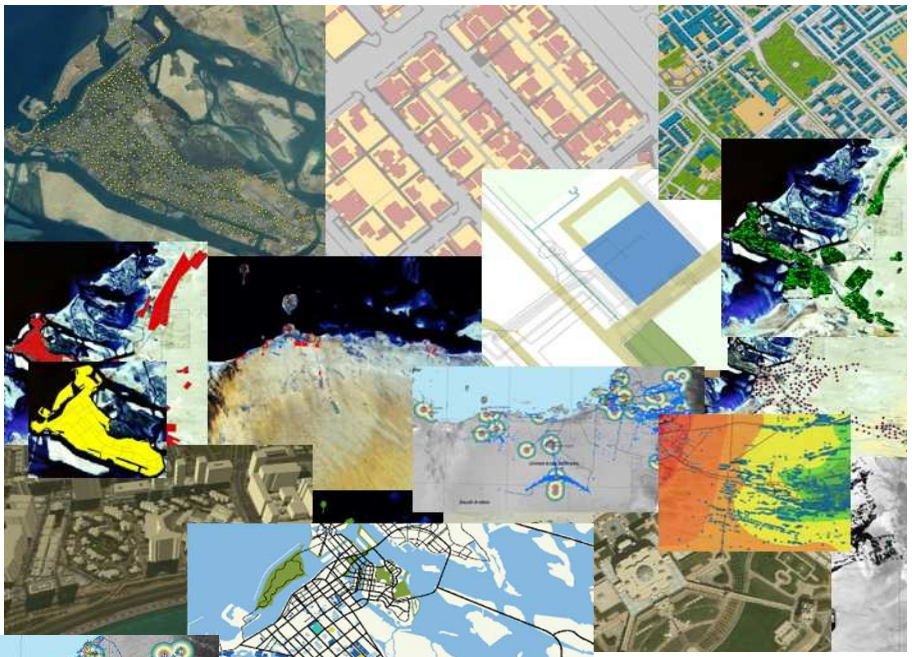
What do we need as a community and how do we work together?

AD-SDI Growth Paced with Technology Adoption Stages

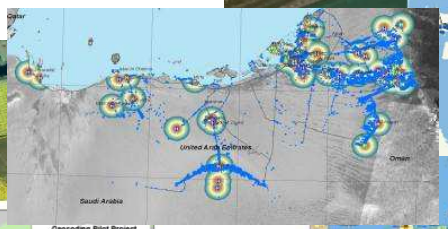
Now I can see what others are doing and planning!!

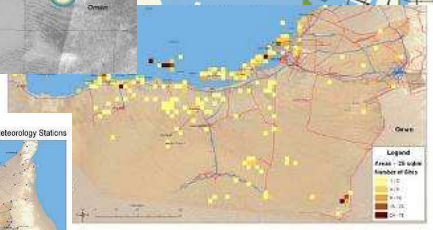
Important to understand the progression of technology adoption….

Level 2 – Basic Capacity and Inventory



What do I have, and where ??





Who has information related to me and my needs ??

What standards do we need in place??

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Effective and progressive Enterprise GIS, GIS Federations, and SDI's are not events or projects, or rubber-stamp models……

…but rather institutional "movements" that must be carefully guided through stages of development that fit each unique situation

A Movement (versus a Program) implies fundamental organizational transformation as a core eventual outcome

Project → Program → Movement → **Transformation**

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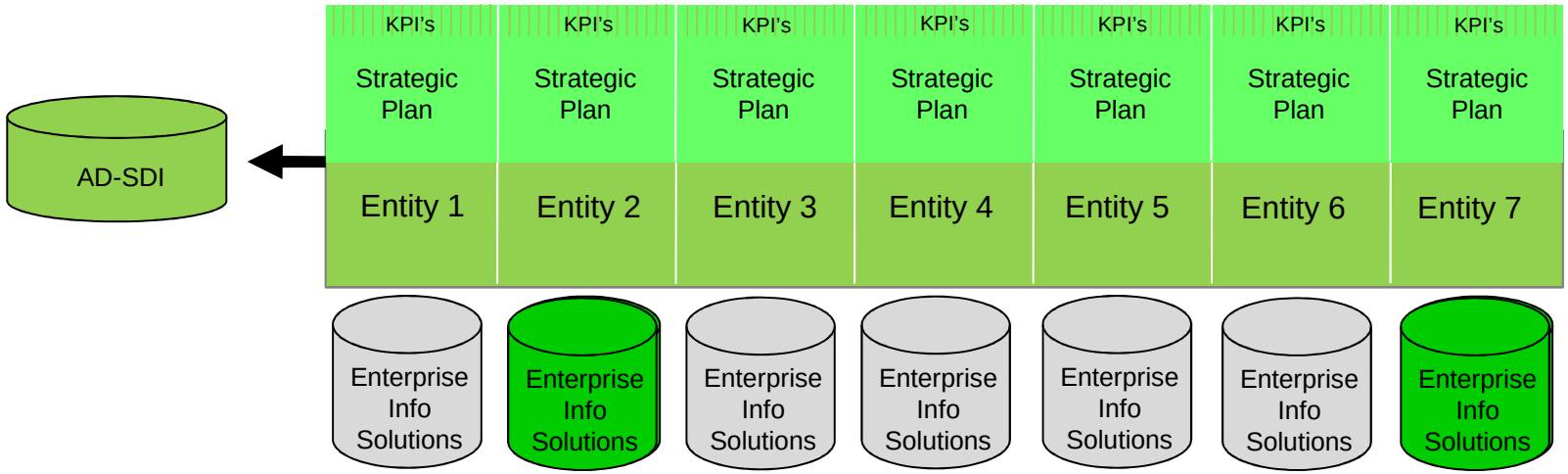
What is Spatial Data Infrastructure (SDI)? 2.0

SDI 2.0 involves the institutionalization of the SDI framework as a permanent function of government, codified in policies, regulations and financial structures, advanced GIS capability pervasive across stakeholder community, and data custodians updating their information through ongoing business transactions, and making this information immediately available to the community. GIS and SDI recognized as key enabling environment for strategic planning and sector-based policy making.



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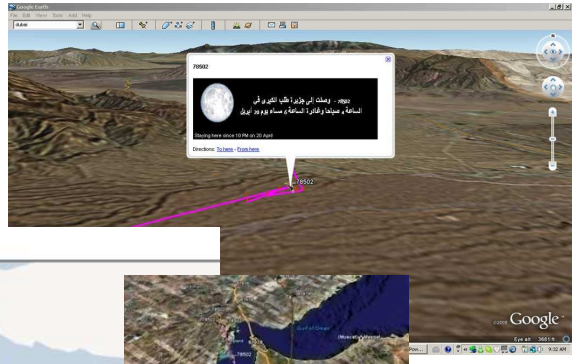
AD-SDI Growth Paced with Technology Adoption Stages

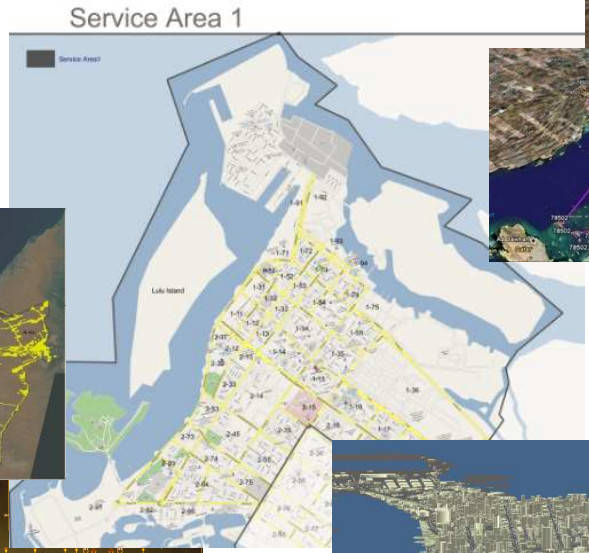
Understanding builds capacity, builds more understanding…….

Level 3 – Enterprise GIS Development, Business Streamlining, and Expansion

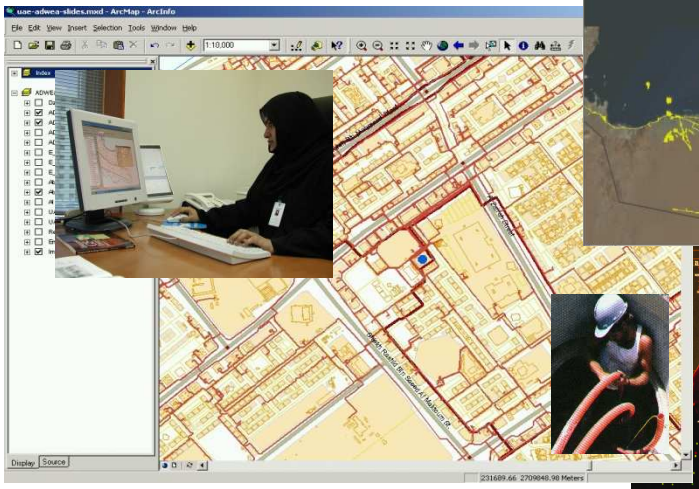
We can do some interesting and attention-grabbing applications!



I need to lay out and monitor my service areas…..



This is helping to do my job quicker and better…..



It is getting easier to coordinate with others…..

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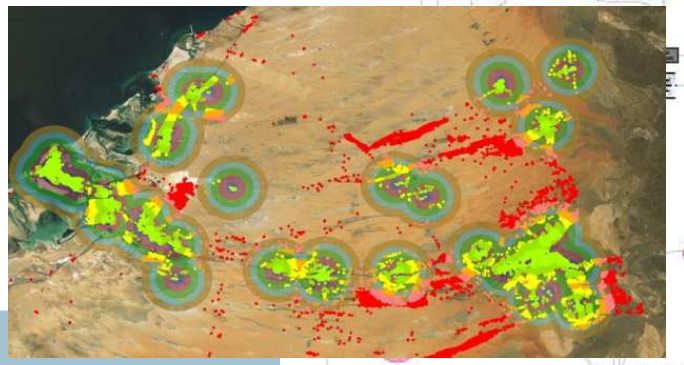
AD-SDI Growth Paced with Technology Adoption Stages

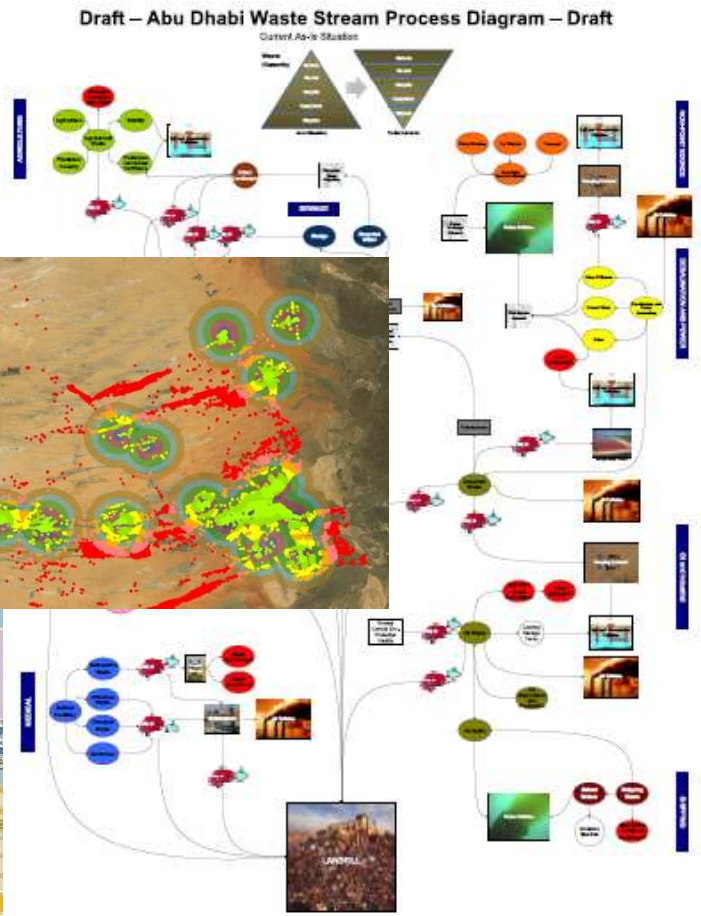
Now I can link my procedures with those of others!!

Important to understand the progression of technology adoption….

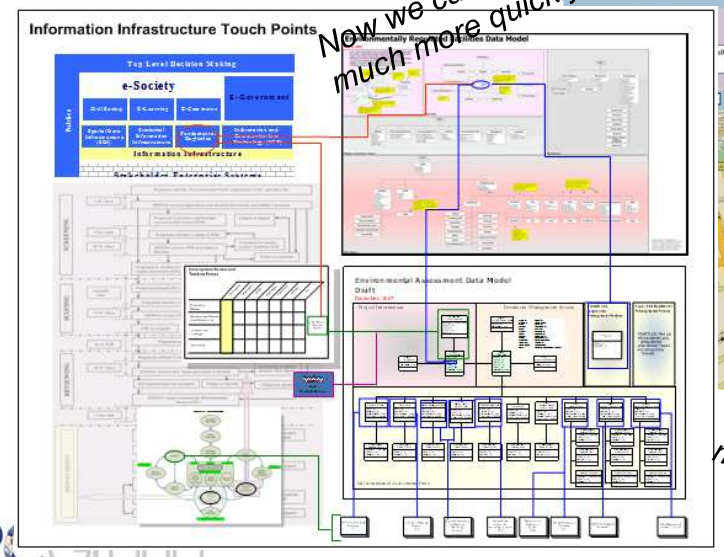
Level 4 – Inter-Sector Business Integration and Expansion

I can see by my analysis that our issues need to be coordinated…..





Now we can process our NOC's much more quickly….



Development review and approval coordinated across more than 30 agencies…..

What government business processes need linking??

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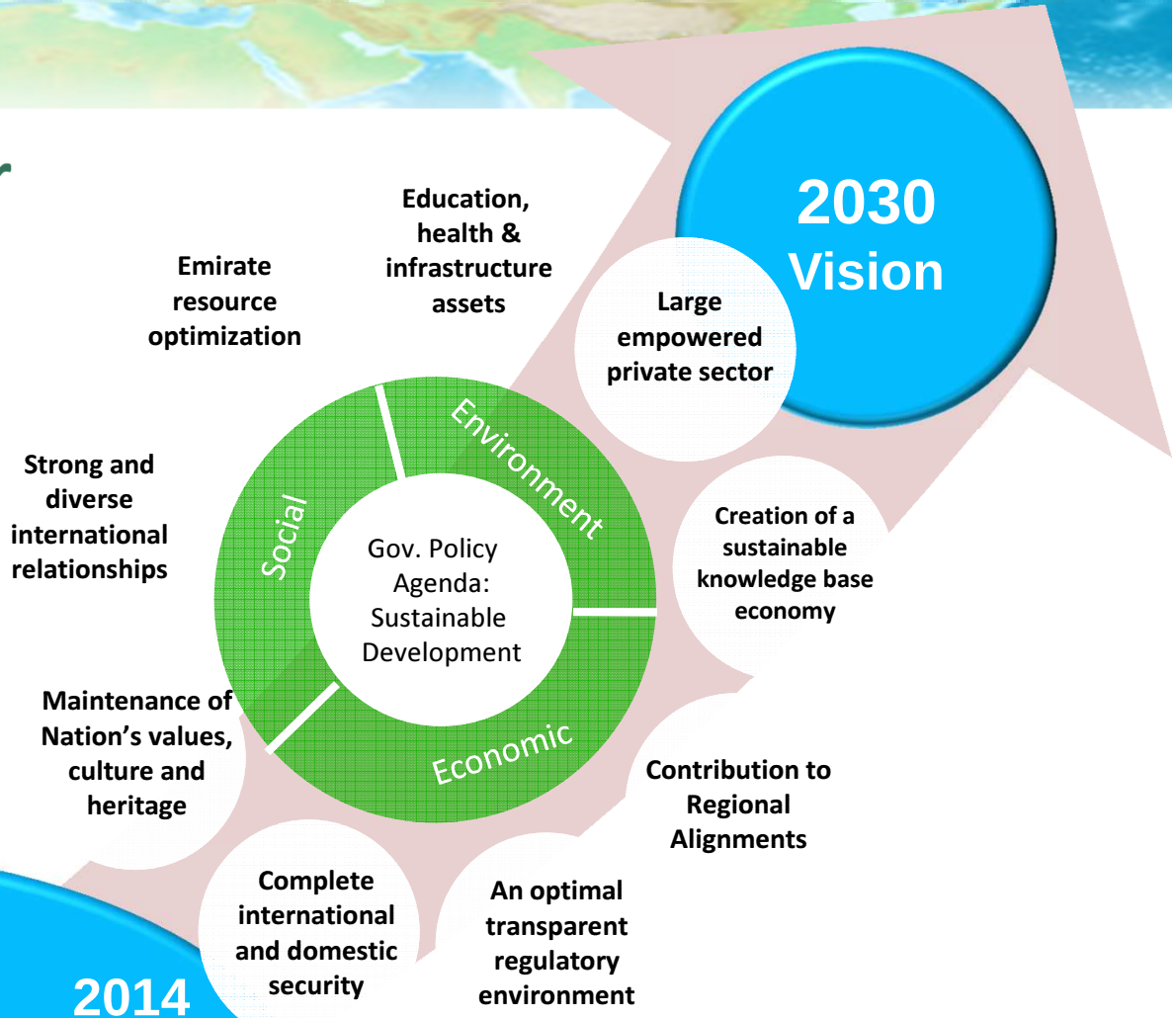
Long-Term Vision for Nation Set by Government Policy Agenda

How can GIS and SDI contribute to the achievement of this agenda?



SDI Strategic Plan

2014

2011

2010

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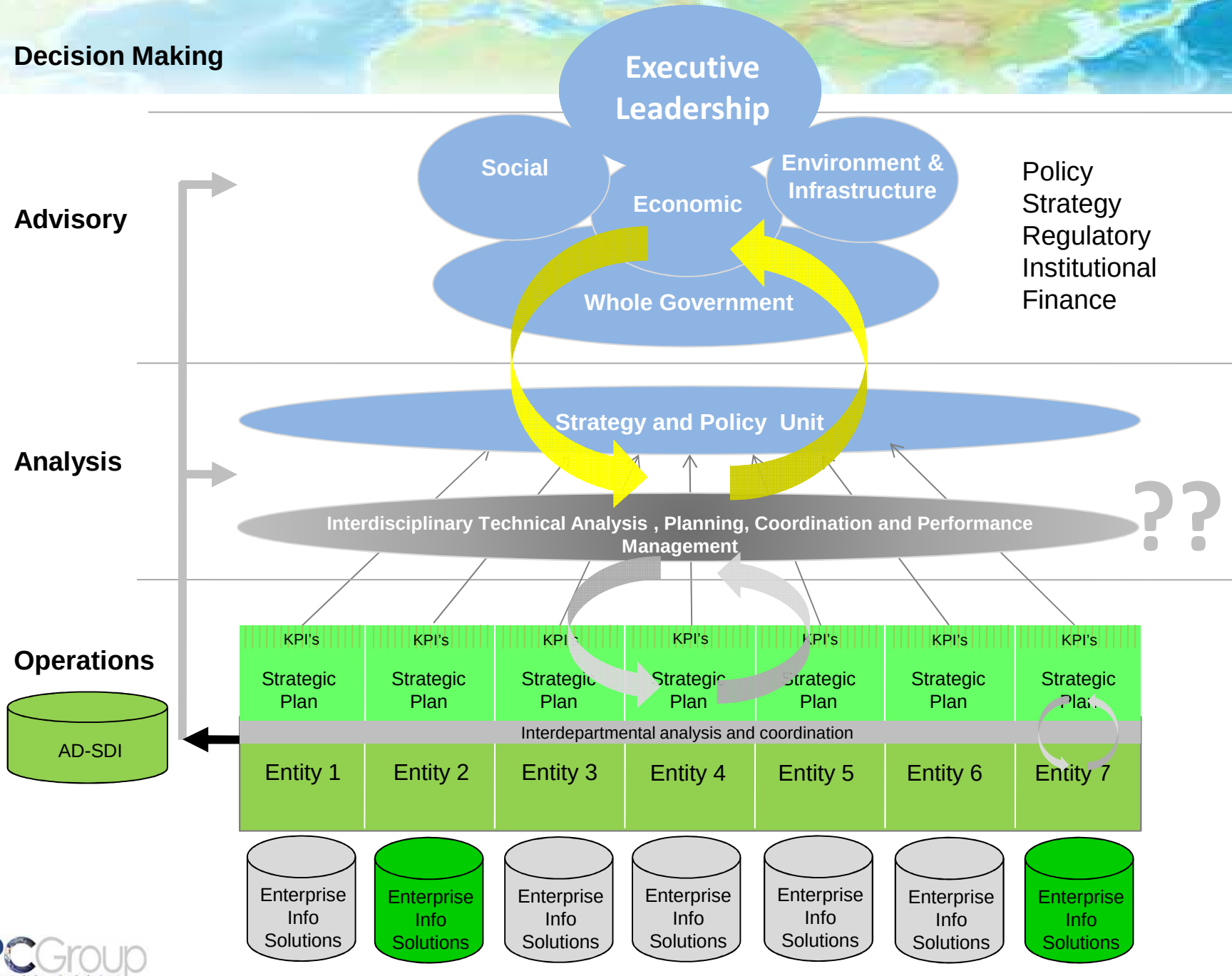
Decision Making



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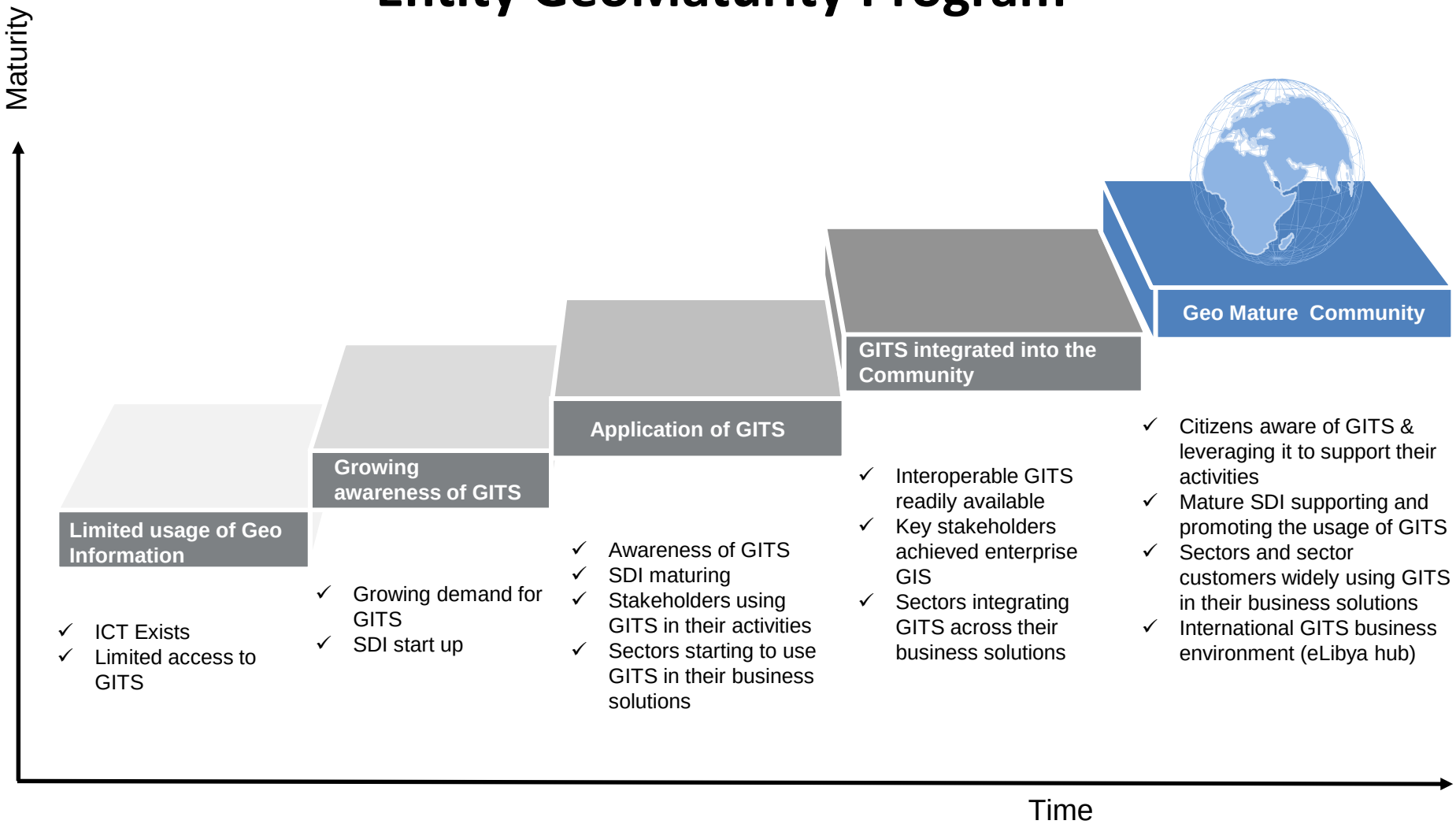
Entity GeoMaturity Program



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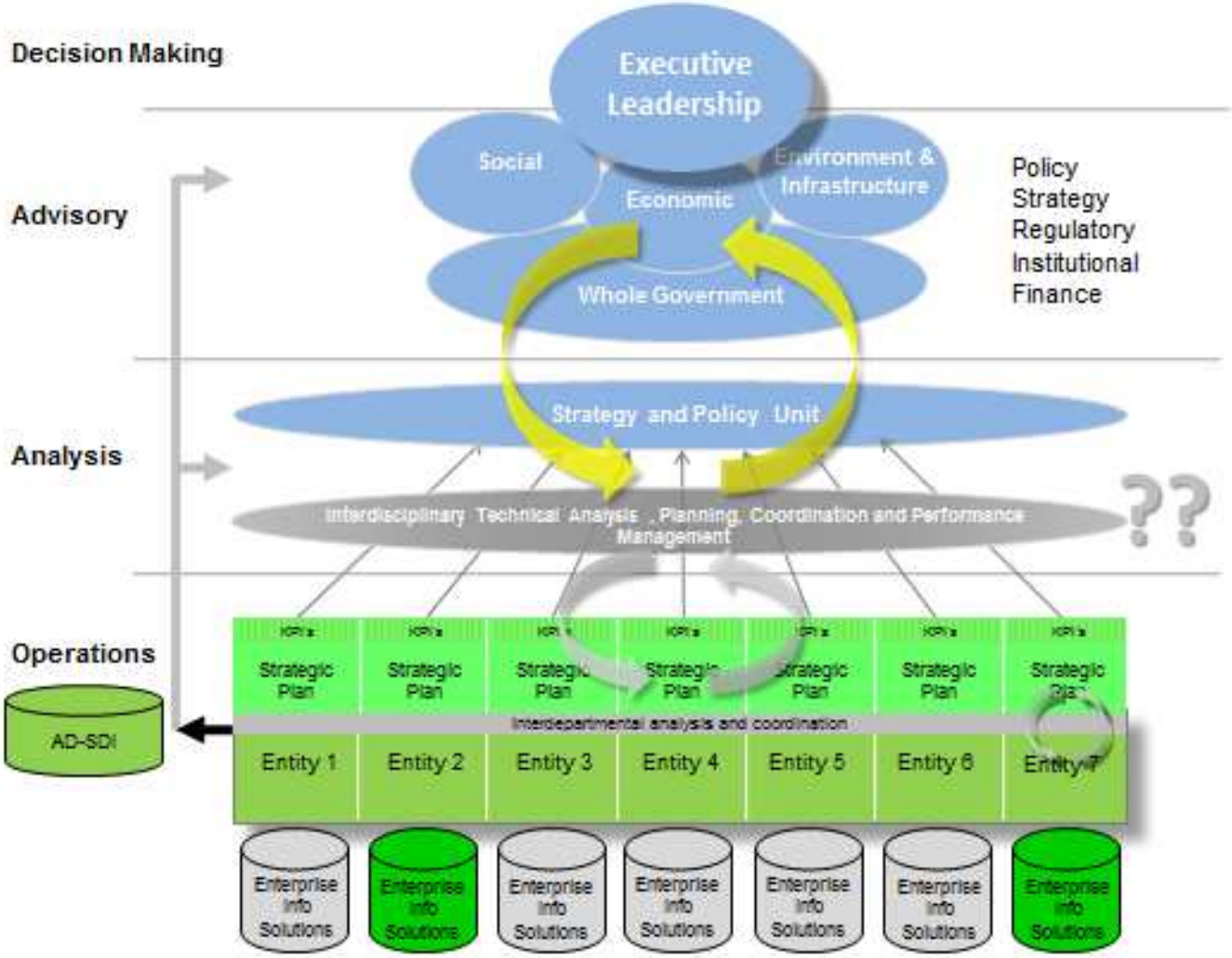

The process of analyzing government business, conducting gap analysis and preparing well considered program design can be shaped to provide technology assisted structural improvements

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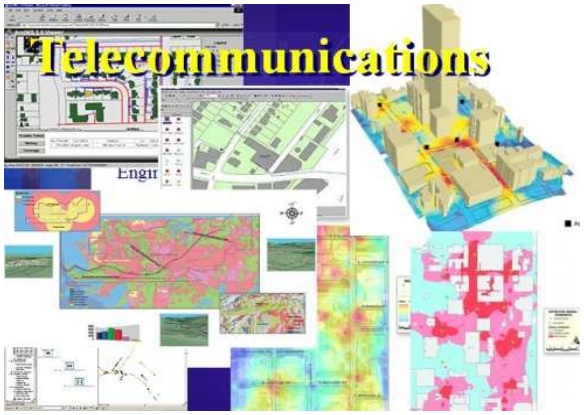

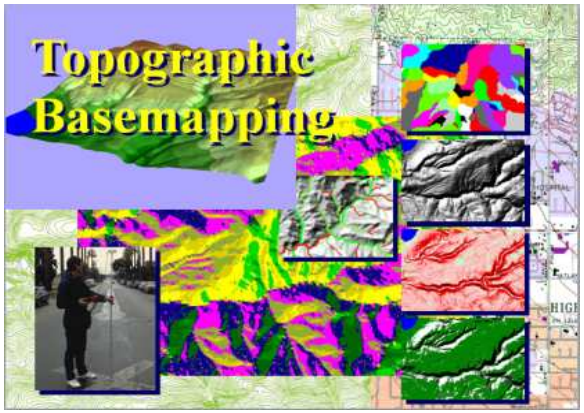

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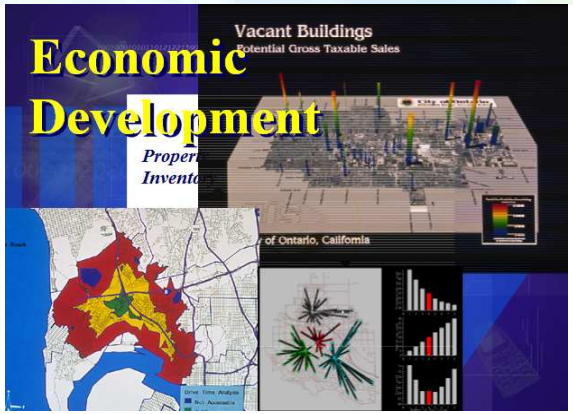

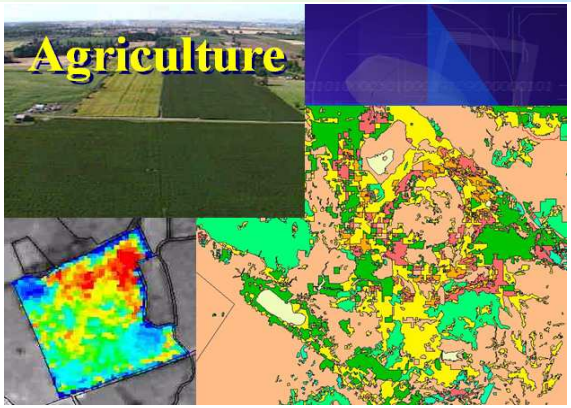

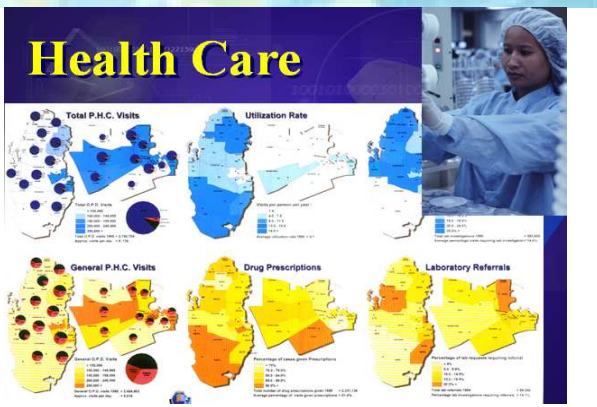

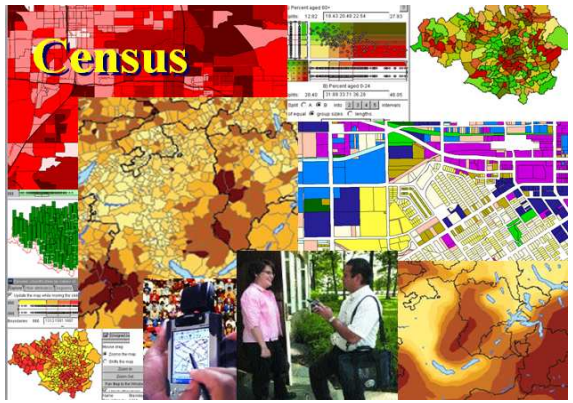

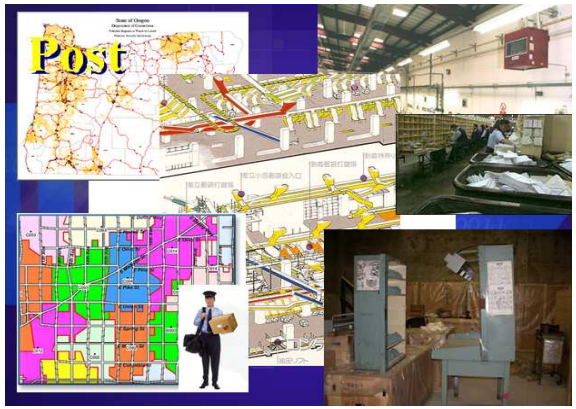

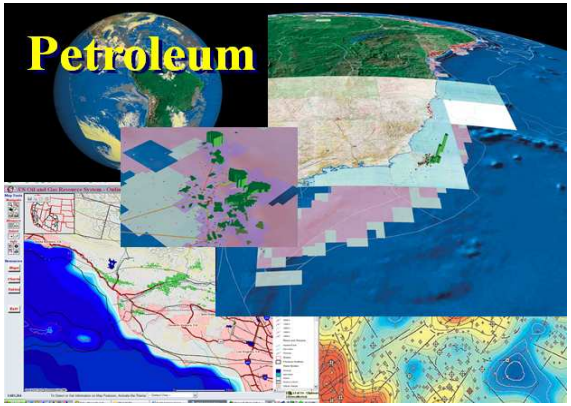

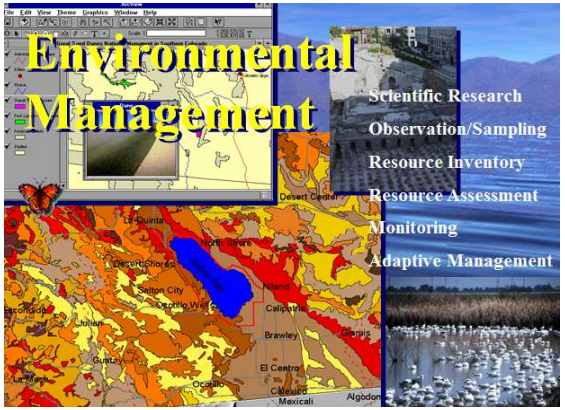

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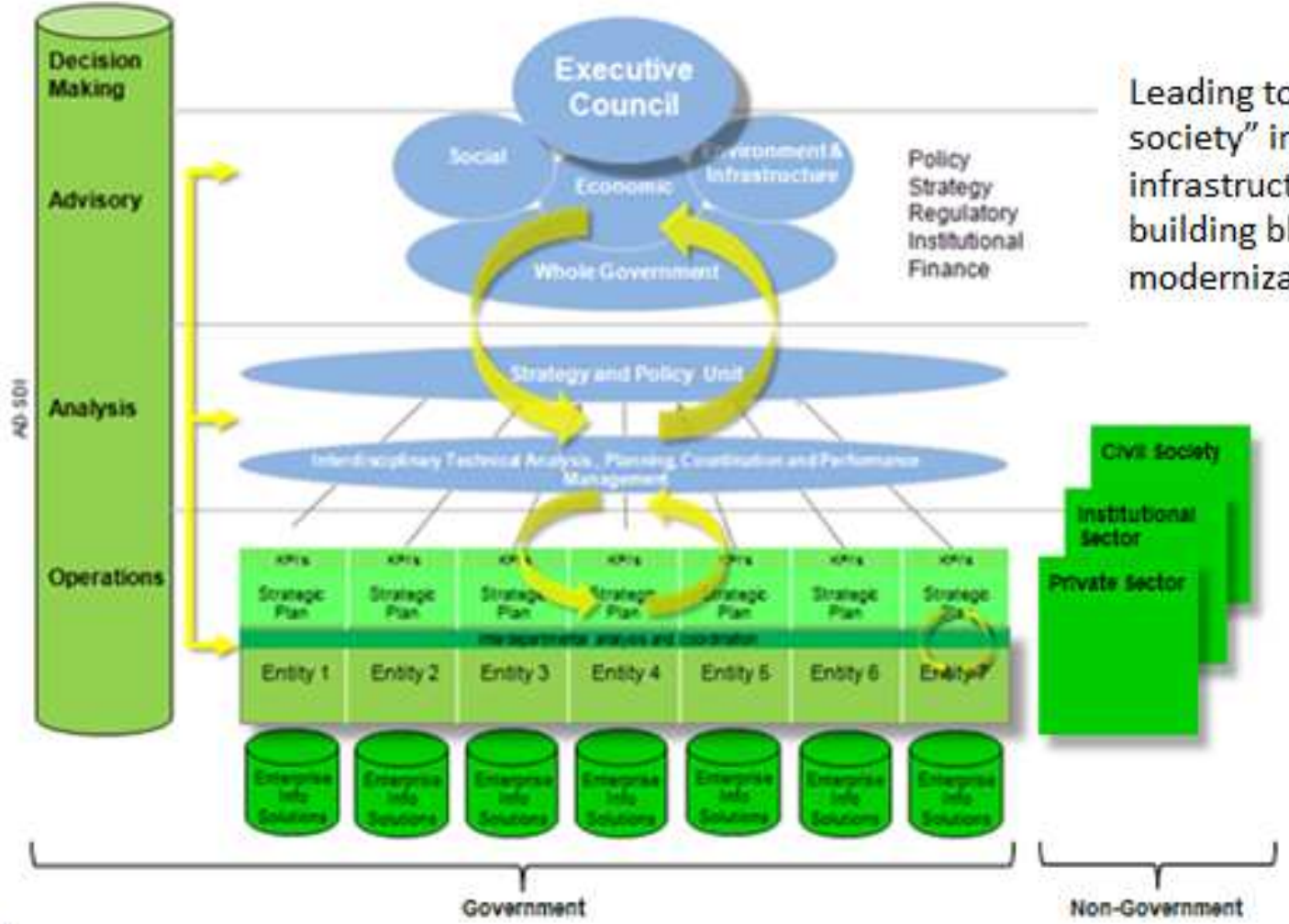
What is Spatial Data Infrastructure (SDI)? 3.0

SDI 3.0 continues operational functioning for data clearinghouse management. Accurate, up to date, reliable data provides enabling environment for informed decision making. Also builds on interdisciplinary foundations towards more collaborative and systemic planning, policy making and coordinated interventions. Location-enabled social networking, global connectivity and free flow of information, opinions and ideas provides a fertile opportunity to recraft and retool government engagement with constituencies.

SDI Can Be Integrated with Government Transformation Planning



Leading to "whole society" information infrastructure as a key building block for modernization.

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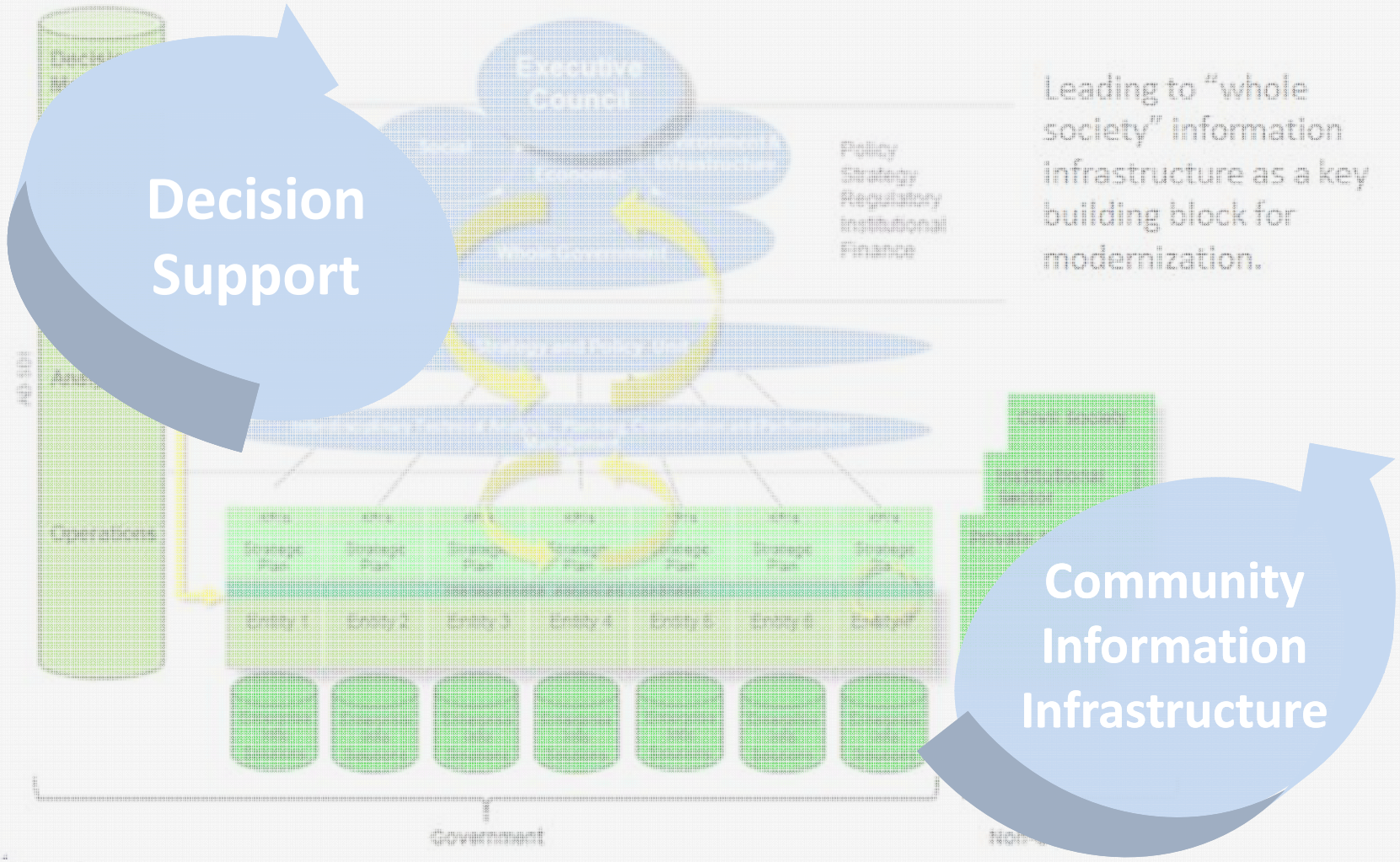
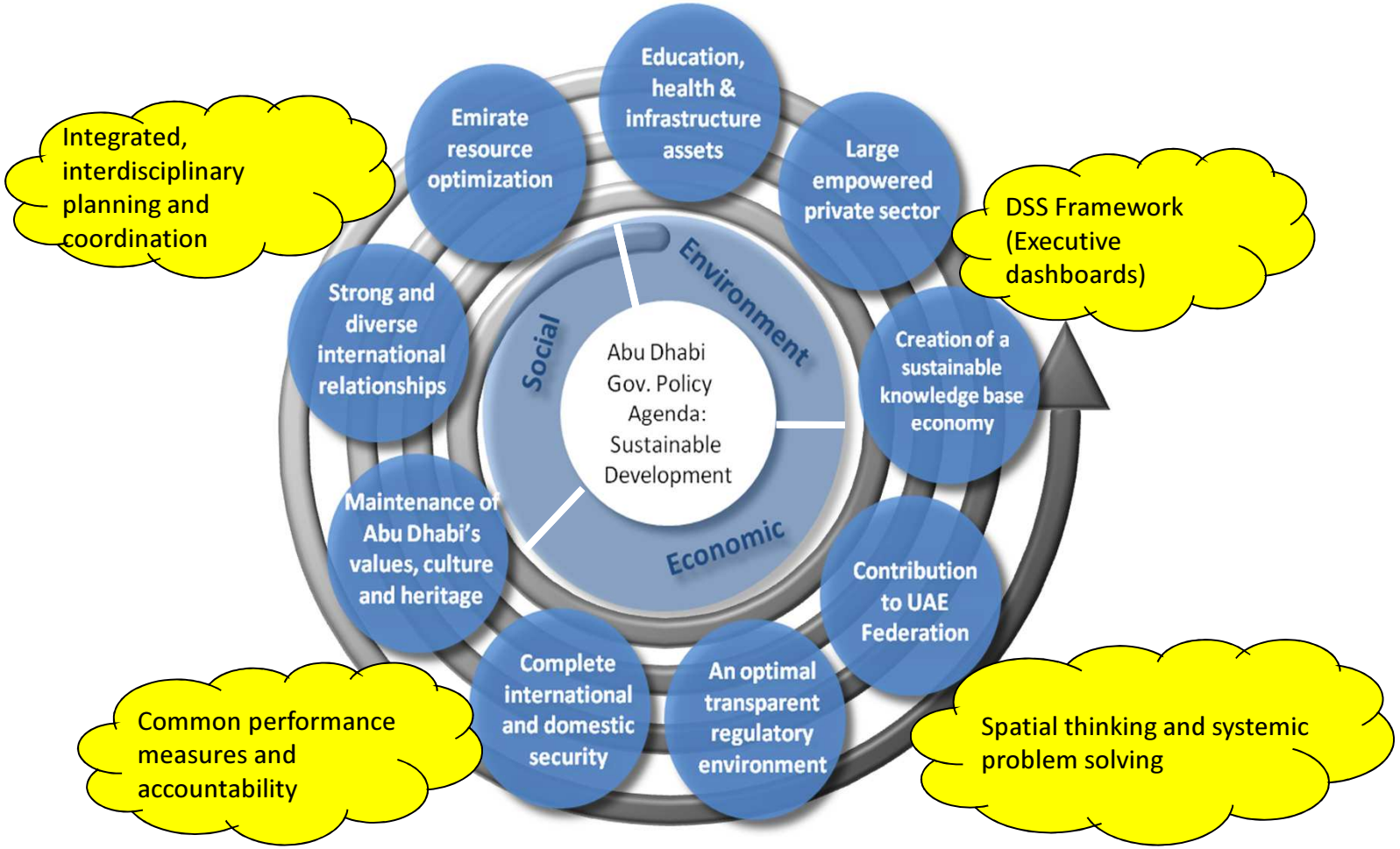
Two Emerging Frontiers



DSS will empower GeoIntelligence and GeoDesign…



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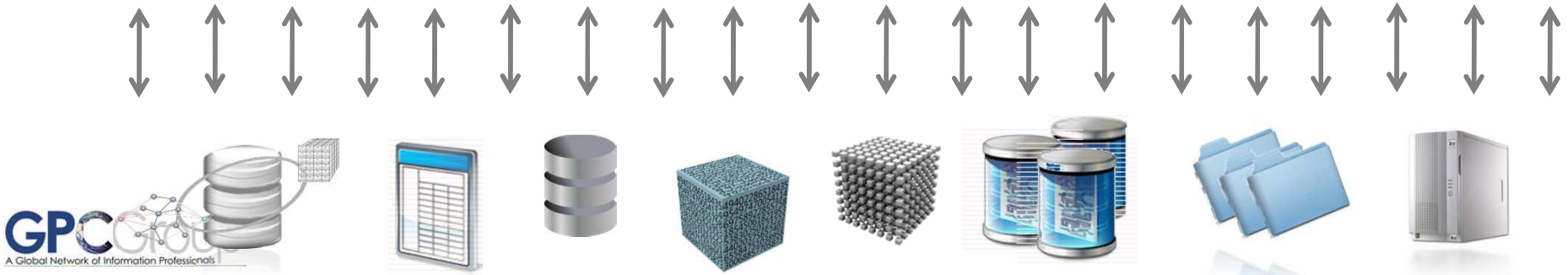
Executive Dashboard Framework



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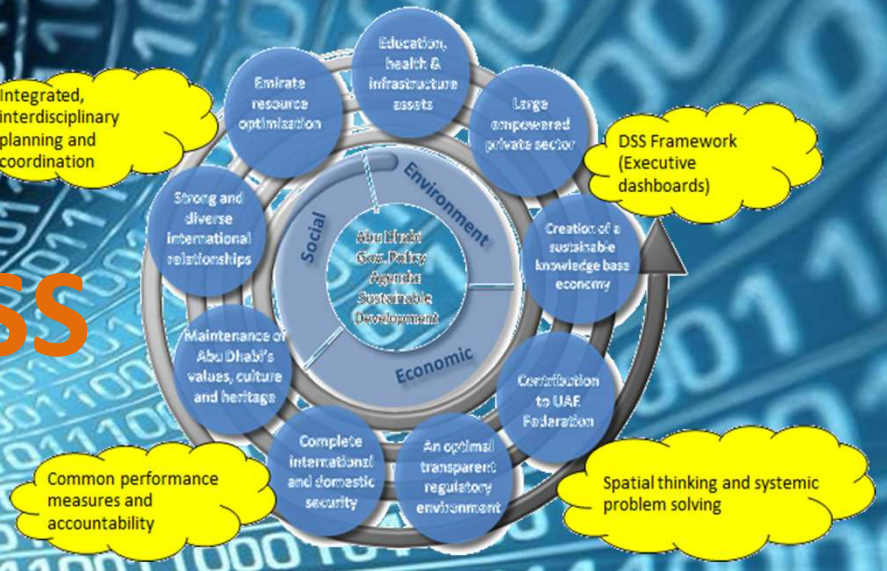
DSS



Social Media

???

Big Data

SDI3.0

ICT4D and the informal economies of the world

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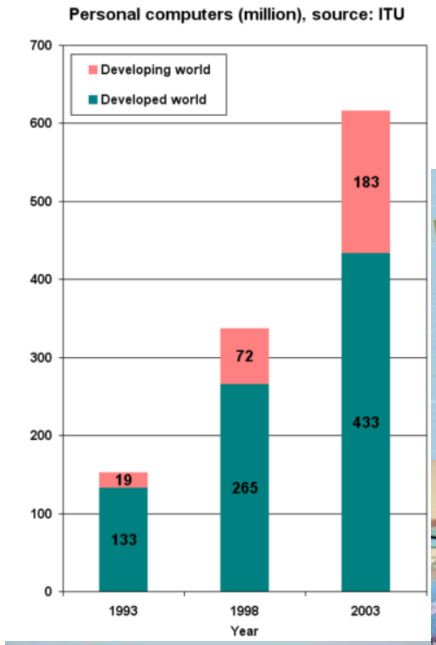

- Cell phone adoption faster than any other technology adoption in history;
- Mobile telephony and basic computing in wide usage in the developing world and growing rapidly;
- Basic technology only requires basic literacy, but encourages increased literacy and technology familiarity through usage for practical purposes.

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Many Challenges

- Basic infrastructure often lacking
- Semi-literate members of community
- Financial instability
- Lack of local capacity to operate and maintain
- Lack of government ability to invest
- Lack of critical mass to attract private sector investors
- …….etc.

GeoVillage

Community Information Infrastructure

Putting Information and Communications Technologies to Work for Local Community Development

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Earth Council Alliance
Envisioning a Sustainable, Just and Peaceful Earth

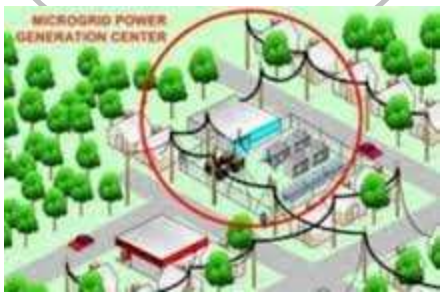
GeoVillage

Community Information Infrastructure

Telecommunications

Foundation Enabling Infrastructure

Renewable Energy Power Generation



MicroGrid

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GeoVillage

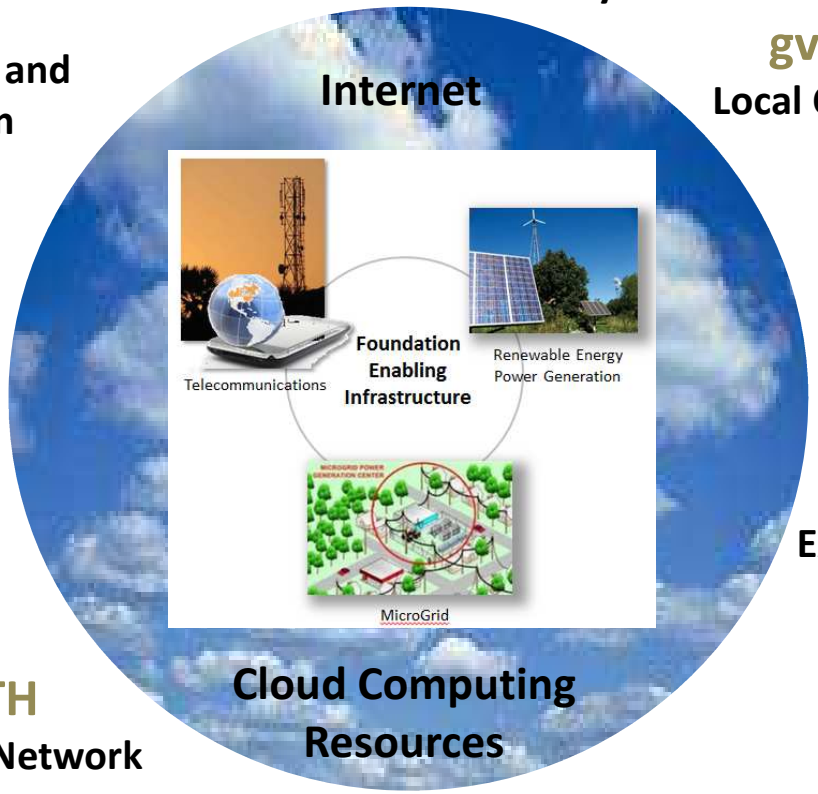
Community Information Infrastructure

gvNET
Mobile Phone, Internet, Email and VoIP

gvVIEW
Geographic Information System

gvPROJECT
Project Management and Monitoring System

gvCOMMUNITY
Local Community Website



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Best Practices and Success Stories

gvFINANCE
Access to Microfinance Networks

gvBANK
Electronic Banking Services

gvTRADE
Market Prices, Barter, Exchange, Local and Export Sales

gvHEALTH
Remote Health Network Services

gvJOBS
Employment Opportunities

gvLEARN
Remote Learning Network Access

gvGROW
Agriculture Extension Services

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Onward!!....

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