### Generational approach to SDI assessment

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#### Presentation outline

- Evaluation purposes
- Developmental evaluation
- Generational approach
- Indicator candidates and values



#### **Evaluation**

- Three main purposes of doing evaluation (Chelimsky, 1997):
  - accountability
  - knowledge
  - developmental

**developmental** – assessment purpose is to measure and recommend changes in organization activities and to monitor how projects are being implemented across a number of different sites

## Developmental evaluation

- Flexible tool that works both prospectively and retrospectively to:
  - measure and recommend changes
  - develop performance indicators and targets (to improve institutional effectiveness and responsiveness)

#### Potential benefits of developmental evaluation for SDI

- position individual SDIs on worldwide arena
- determine whether SDIs develop into the right (intended) direction
- determine whether SDIs develop according to the set agenda
- judge if SDIs develop according to international trends of GI-SDI developments
- recommend changes in SDI activities.
- verify the past activities (possibly the success and the failure factors)

## Generational approach

- SDI generations
  - Masser (1999) reviews eleven national SDIs that constitute the first generation of SDI. Lessons for second generation.
  - Rajabifard (2003) discusses the development patterns of 1<sup>st</sup> and 2<sup>nd</sup> SDI generations
  - Rajabifard (2006) discusses the emerging trends after 1<sup>st</sup> and 2<sup>nd</sup> SDI generations ("future generation")
- Why generational understanding of SDI development?
  - well recognized
  - reflect advancements in SDIs
  - identifiable in most of the countries

# Transitions through generations are most visible in the following areas (based on SDI literature)

- User/producer orientation
- Governance/players roles
- Technology
- Standards

## From 1<sup>st</sup>, through 2<sup>nd</sup> to future SDI generations

- From less to more user oriented/driven infrastructure
- Decrease of National and increase of subnational and private roles in SDI activities
- Technological indicators From database to services oriented applications
  - Conversion datasets (analogue to digital)
  - Clearinghouses (with data web services)
- Steady harmonization of International (ISO, CEN) GI standards (e.g. metadata)

## Indicators (proposition)

	First SDI generations	Second SDI generations	Future SDI generations
User/Prod. driven	producer	User/producer	user
Centralized vs. decentralized	Centralized, main national player	National as well as sub-national and private	National sets a framework, sub-national and private create heterogeneous SDI
Data format	Analogue	Analogue-Digital	Fully digital
Access and use	Metadata databases	Web services for data sharing and data communication	Fully operational possibility of access, processing and application of data (on-line)
<u>Standards</u>	National standards	National standards compliant with international	Full interoperability between heterogeneous actors

#### Discussion

- List of indicators
  - finished?
  - any others indicators?
  - different ones?
- Are they applicable in most of the countries?
- Which indicators indicate the generational change best?