The “WebGIS” as a Tool for Territorial Diagnostic and Dialogue Among Territorial Actors: What is the Optimal Format within a Socio-Ecological Transition Context?

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Agenda

1. Context and Objectives
2. Framework Description: WebGIS-IT Concepts
   - WebGIS: Notions and Definitions
   - IT: Context of Territorial Actions
3. Observations and Analyses Based on WebGIS-IT Examples
4. Conclusions and Future Perspectives
1. Context and Objectives

Optimal WebGIS format

 Territorial intelligence principles
2. Framework Definition

• What is a WebGIS?

“Online geographic information diffusion”
2. Framework Definition

• Spatial data server: notion of centralisation and distribution of geographic information

• Advanced open source software solutions (for example, the solution: PostGIS - GeoServer - OpenLayers)

• International standards and organisations (OGC and OSGEO)

• Many advantages (data updates, dynamic mapping; indicators combination; representation customisation; collaboration among actors... )
2. Framework Definition

• Technical elements:
  o A few key rules
    ▪ Don’t feel confused.
    ▪ Three clicks rules;
    ▪ A function = A need ;
    ▪ …
  o Interface development
    ▪ Identification of 9 indicators to describe a WebGIS-IT
2. Framework Definition
2. Framework Definition

• “Territorial intelligence is a process where information technologies are organised to produce”:
  o Knowledge related to the understanding of territorial structures and dynamics,
  o Tools to be used by territorial actors to create, use and share knowledge for sustainable territorial development.
2. Framework Definition

- Territorial resources organisation
- Common results control
- Knowledge and competency pooling
- Participants accountability
2. Framework Definition

**Territorial resources organisation**
- Seek resources of the targeted territory
- Partnership organisations

**Knowledge and competency pooling**
- Multi-dimensional project
- Co-learning

**Participants accountability**
- Organise collaborative project management
- Participant’s deontology and autonomy

**Commun results control**
- Valuation of territorial impact
- Sustainability of actions
3. Observations and Analyses

• What is the optional format of a WebGIS-IT?
• An application must fulfill its objectives;
• A “User friendly” application ;
  o Satisfaction level ;
  o Usage level (Gap between the expected and actual use);
• An application integrates IT principles.
3. Observations and Analyses
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WebGIS-IT usage and satisfaction

Technical rules

Users context
3. Observations and Analyses

• Users context :
  o Their needs: *WebGIS-IT = a tool*
    The application must be developed according to the users needs (investigation among them).
  o Their efficiency: *WebGIS-IT = an opportunity*
    The application must reinforce users efficiency within their field of practice
3. Observations and Analyses

- 6 WebGIS-IT examples (C3IT and SEGEFA projects)
3. Observations and Analyses

WebGIS complexity level

Users specialisation level

LOGIC 2.0
ArcelorMittal
Sistema Comunitario de información territorial
CartoLOGIC
Observatoire des territoires

Non-user-friendly zone

Hypothesis
3. Observations and Analyses

- Analysis and evaluation of 6 examples taking into account their finalities

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4. Conclusions and Perspectives

• Towards a quality agreement including rules for WebGIS-IT settings

• Examples of rules:
  – WebGIS-IT= geographic data sharing space. This requires both spatial data bases and OGC standards (WMS, WFS ...).
  – WebGIS-IT = known and recognised. Orientation must be ensure through reference maps and information search tools.
  – ...


4. Conclusions and Perspectives

WebGIS-IT

Users

Developpers

Lateral dialogue

Top-down development
4. Conclusions and Perspectives

WebGIS-IT

Territorial representation