The geo-(r)evolution in e-government: web 3.0 trends, gis and their governance potential

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Content

- My view on e-government and technology
- Changing nature of technology
  - The future internet: 4 trends
- The role of Geo Information and GIS
- Understanding the governance potential of e-government
  - The intelligent state
  - The intelligent society
- Some questions

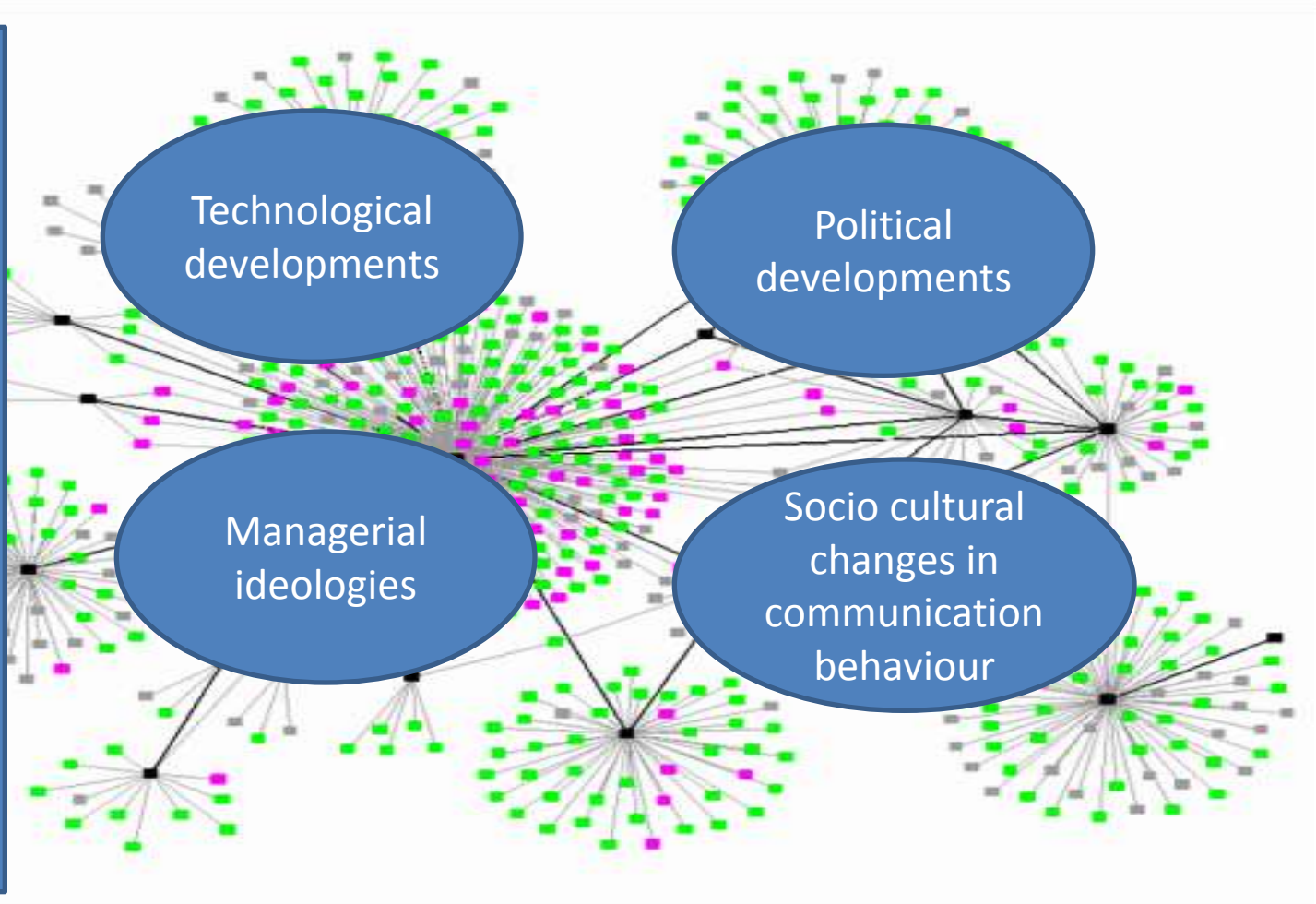
The information ecology of e-government

Co-evolution of trends in different environments

Stakeholders, interests and resources

ICT as power resource

Strategic framing

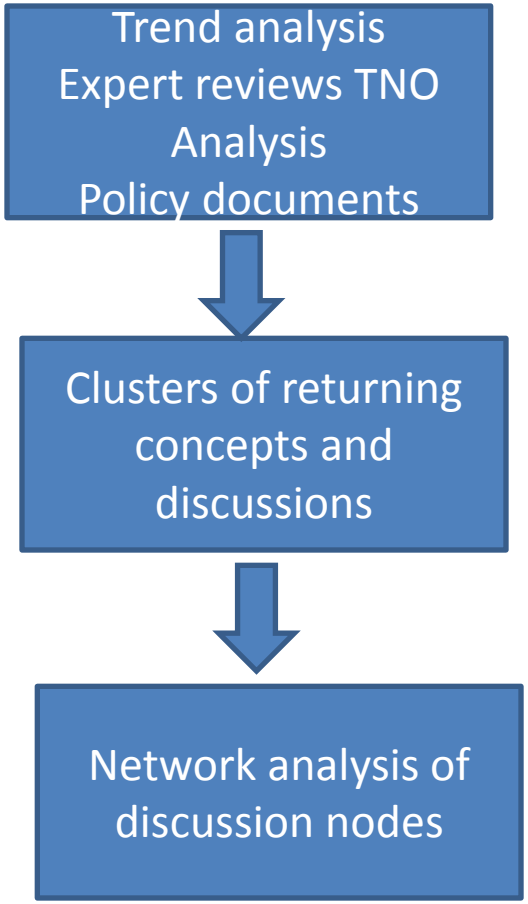


Changing nature of technology

- Small and mobile
- Multimedia: the power of the image
- Biometrics
- Location-based
- From ‘automating’ to ‘informating’: reflexive technology
- Interactive
- Personalized

The future internet

- Basic trends
  - Privacy
  - Internet of things
  - Role of government
  - Data explosion
  - Web 2.0
  - Intelligent web
  - Human enhancement
  - Mobile internet



The future internet: the big 4

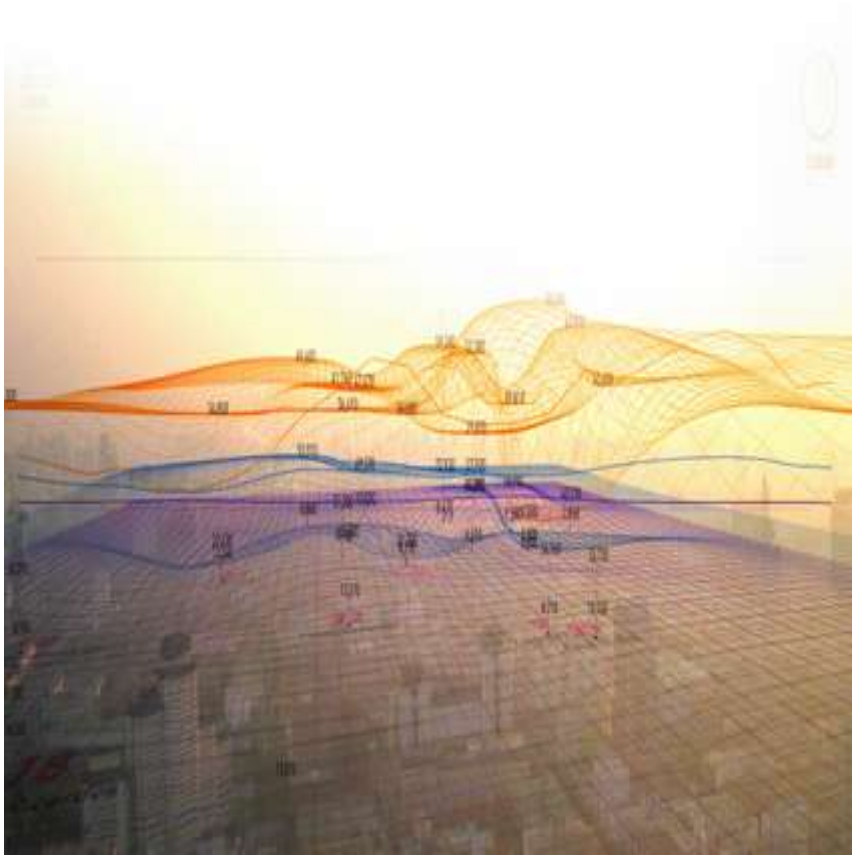
- Mobile identity
  - Combination of social media, participation and mobile internet focusing on creating an identity (sense of belonging)
- Location based social networks
  - Data explosion of user generated content in combination with linked data that can be accessed and exploited through sensoring (internet of things)
  - Location awareness: global positioning systems: navigation, way finding
  - Augmentic reality: creating a real-world environment whose elements are *augmented* by computer-generated sensory input such as sound, video, graphics or GPS data.

Augmented reality

The future internet: the big 4

- Empowerment and enhancement
  - Ubiquous computing: powerful computing capacities available for everybody
  - Bio social networking and user generated research

Empowerment and enhancement



The future internet: the big 4

- Regulation by design
  - New, value sensitive design principles focusing on the front of technology and trying to create (end user) control and privacy enhancing technologies

The future internet: some smaller clusters

- In his book, Weaving the Web, Tim Berners-Lee described his dream for the I have a dream for the Web . . . and it has two parts.

  (…) In the second part of the dream, collaborations extend to computers. Machines become capable of analyzing all the data on the Web - the content, links, and transactions between people and computers. A "Semantic Web," which should make this possible, has yet to emerge, but when it does, the day-to-day mechanisms of trade, bureaucracy, and our daily lives will be handled by machines talking to machines, leaving humans to provide the inspiration and inuition. The intelligent "agents" people have touted for ages will finally materialize. This machine-understandable Web will come about through the implementation of a series of technical advancements and social agreements that are now beginning….

- Semantic economy: smart and commercial use of data that is free
- Internet and self services
- Open internet
- Fragmented societies
- Open platform innovation

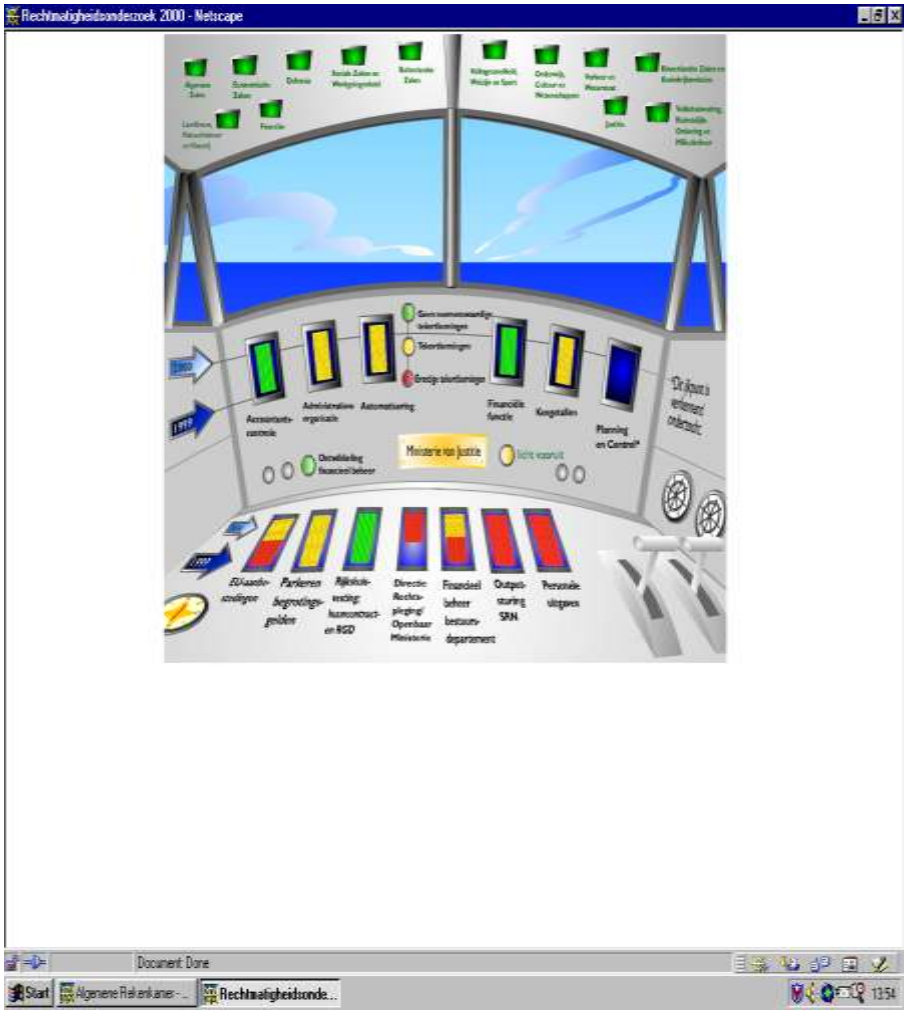
The role of GIS

- Strong presence of GIS
  - To personalize
  - To locate
  - To visualize
  - To create transparency
    - Registrative transparency
    - Analytical transparency
    - Integrative transparency
  - To monitor and to control
  - To alert
- Effect in terms of
  - Empowerment
  - Control

The governance potential of e-government the intelligent state (1)

The intelligent hierarchy

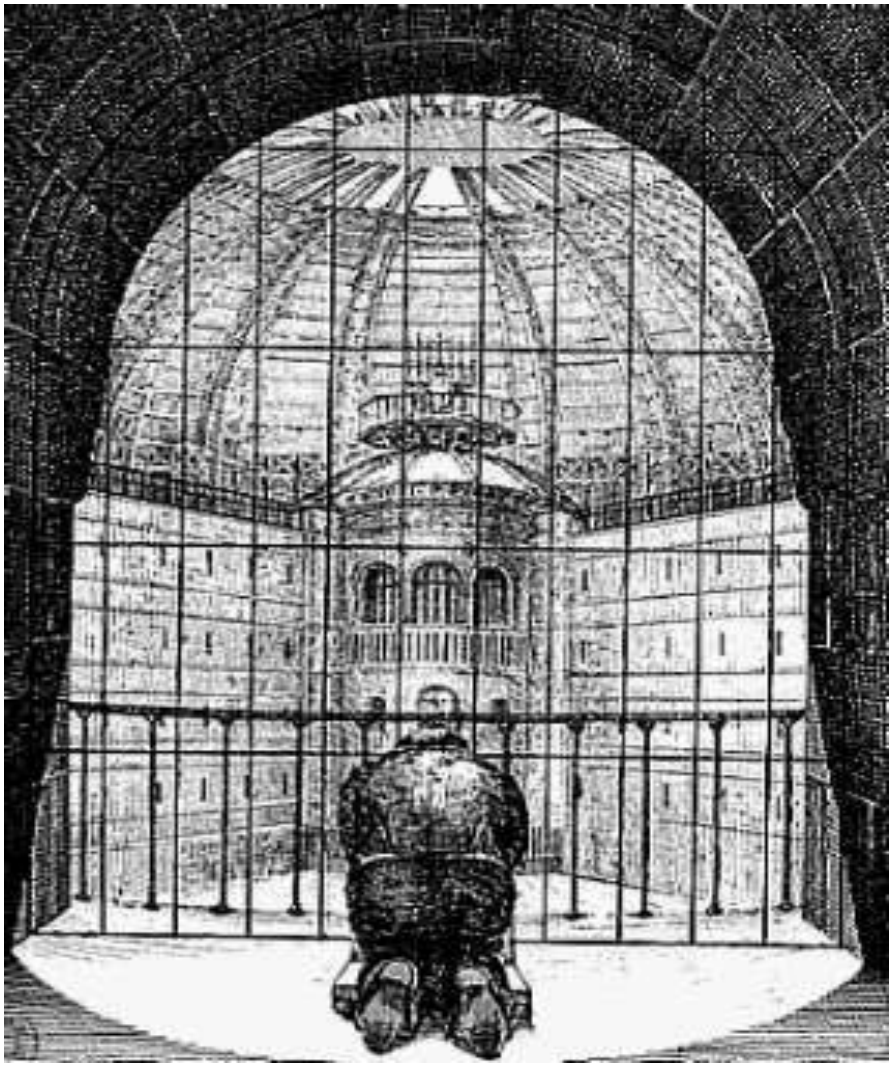
- ✓ Government centric position
- ✓ Transparency as necessary condition for control
- ✓ The machinery of government
- ✓ To measure is to know
- ✓ Database technology, coupling of databases, electronic files, refer indexes



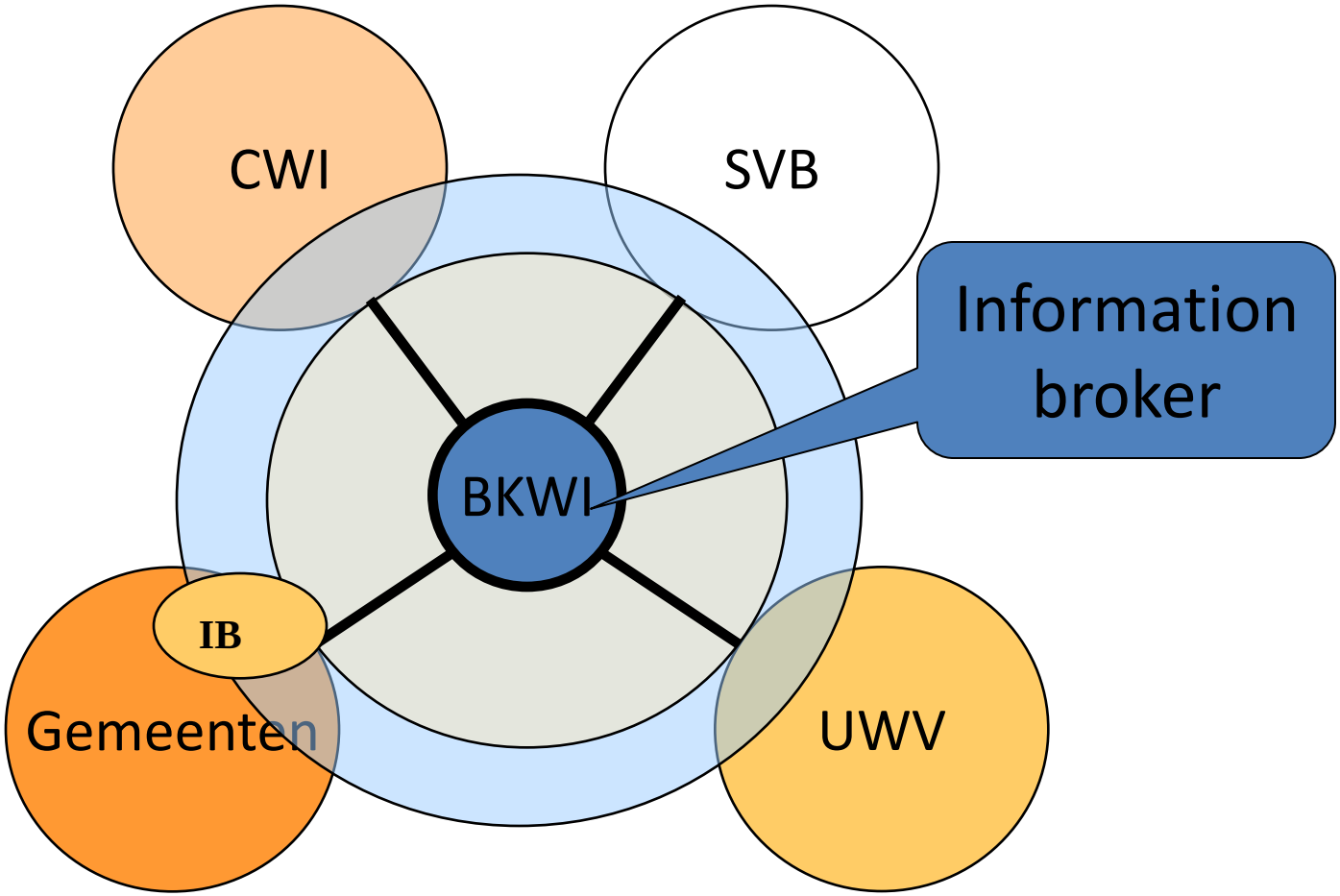
The governance potential of e-government the intelligent state (2)

The intelligent hierarchy

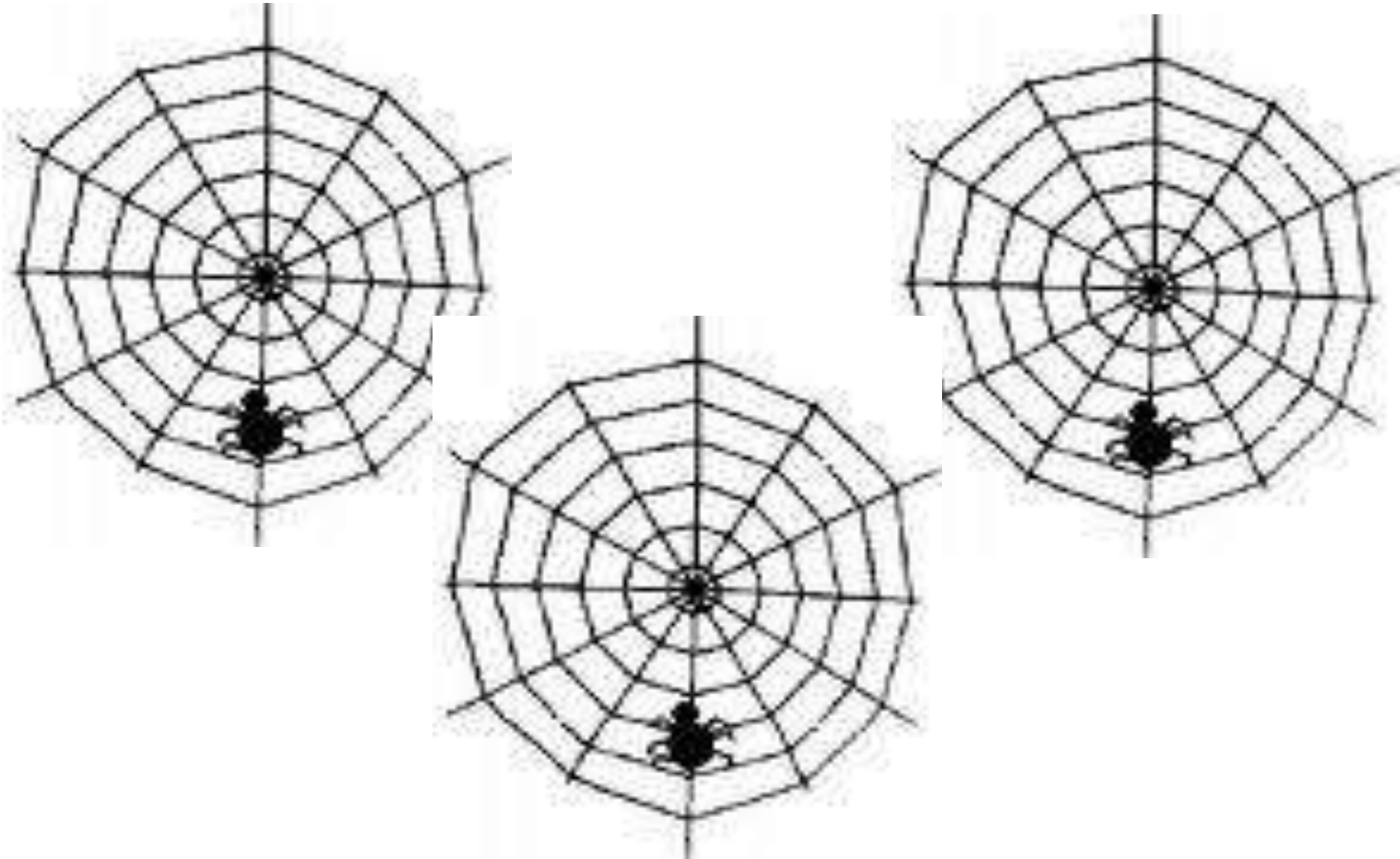
- ✓ Business process redesign
- ✓ Big Brother and Little Sisters
- ✓ The panoptical networks and chains: whole government
- ✓ Information infrastructure
- ✓ Ownership of data
- ✓ Quality of the data



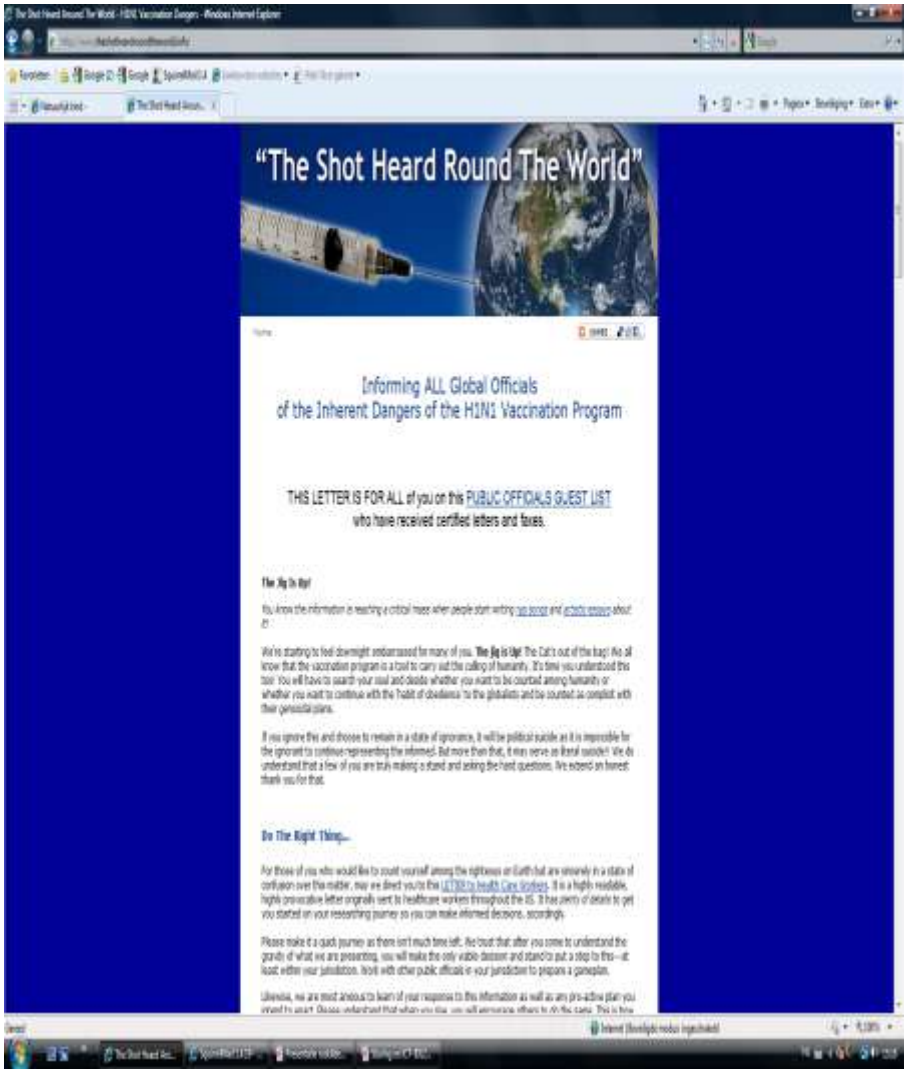
The intelligent state: the concentric organization



The intelligent state: loosely coupling of different spiders web (5)



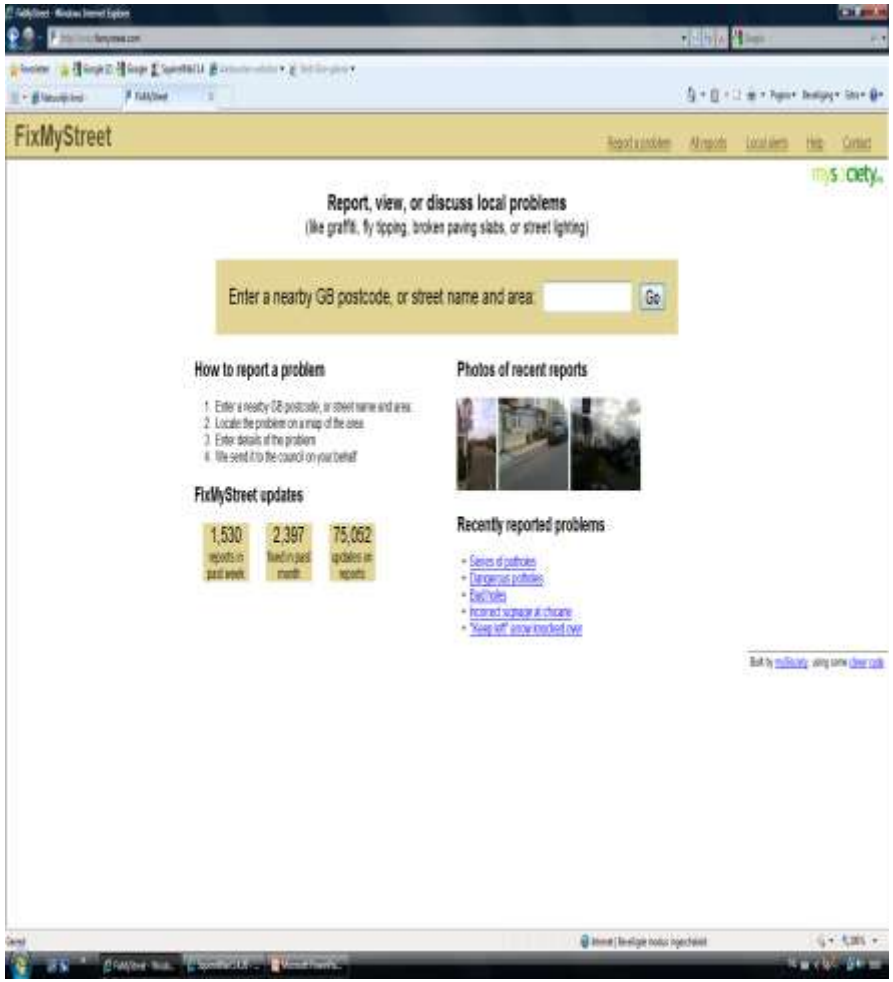
The governance potential of e-government: the intelligent society (1)



The intelligent society

- ✓ Citizen centric
- ✓ Transparency and communication as necessary condition for (monitorial) citizenship
- ✓ Self-organization in social networks
- ✓ Collective intelligence (the power of sharing)

The governance potential of e-government: the intelligent society (2)



- ✓ Open social networks and open data
- ✓ Checks and balances
- ✓ Realtime presence and participation

Some questions

- Are these technology trends and the role of GIS in favor for the intelligent state or the intelligent society
- How can the intelligent state and the intelligent society be linked? Is it proper to link?
- What do these technology trends imply for our thinking about the type of gis infrastructure we want to have?

Some questions

- How open or how closed?
- The role of the private sector?
- The role of the public sector?
- The role of privacy?
- The role of transparency?

- Who wins and who looses?