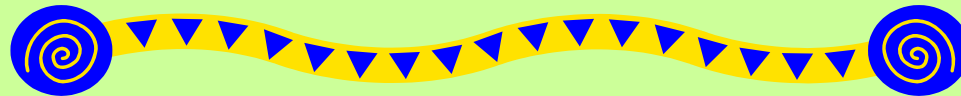


**11th AGILE Conference on GI-Science, Girona, Spain**  
**Pre-conference workshop, 5 May, 2008**  
**Multi- and Interdisciplinary Research on Spatial Data Infrastructure Development**

# The Missing Links



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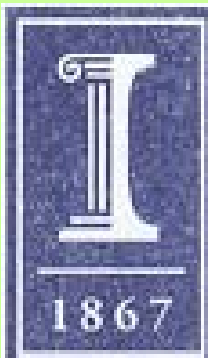
# SDI Research Challenges

(Budhathoki N. and Z. Nedovic-Budic. 2007. In Onsrud H. Research and Theory in Advancing SDI Concepts. ESRI Press)

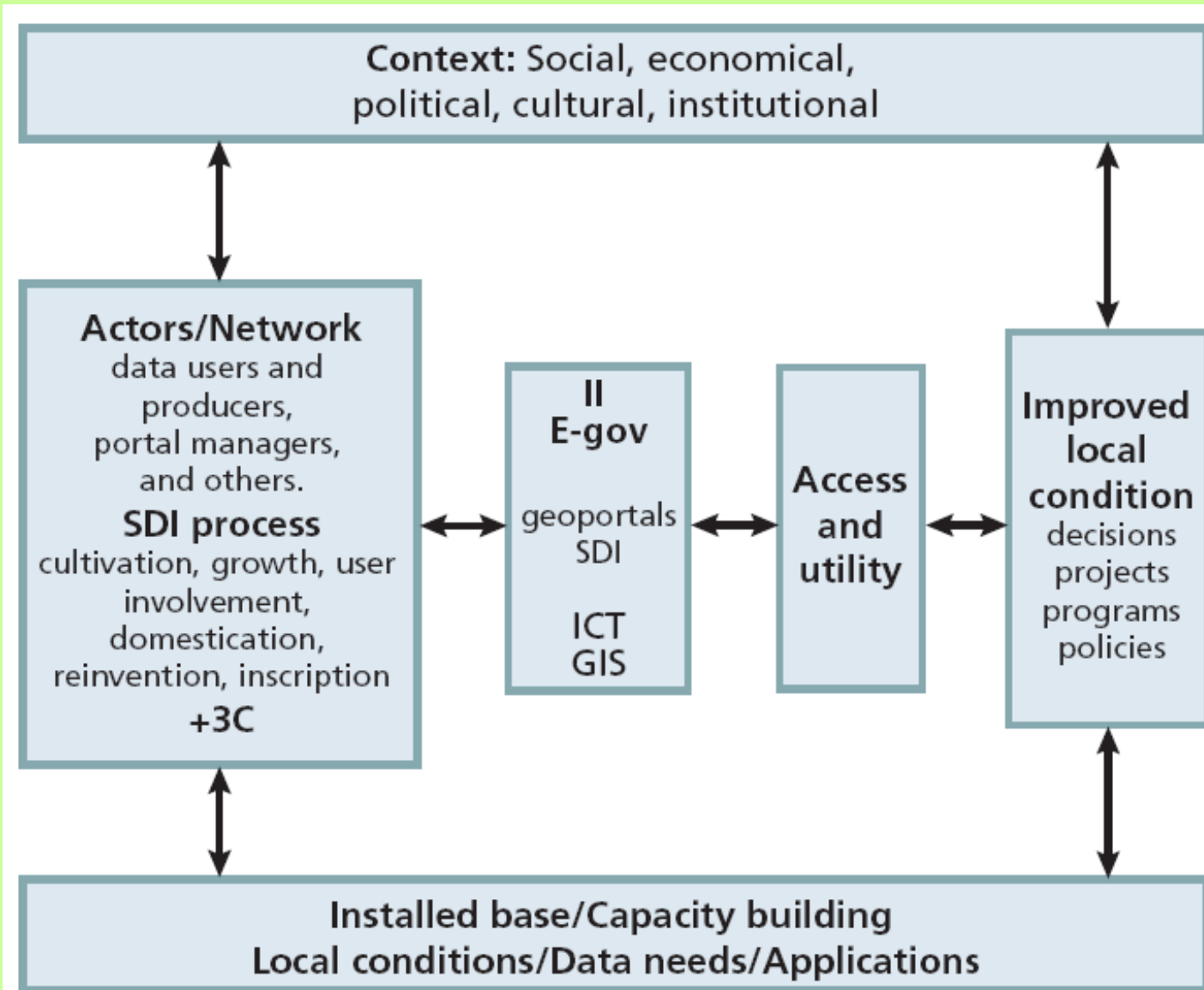
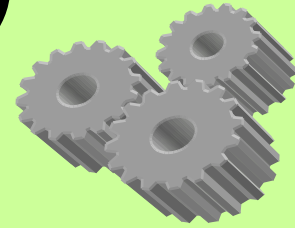
- **Definition and conceptualization**
- **Models**
- **Standards**
- **Monitoring and evaluation**
- **Balancing technical and social**
- **Politics and policy**
- **Culture**
- **Multi/interdisciplinary approach**

# Mind (Bridge) The Gap

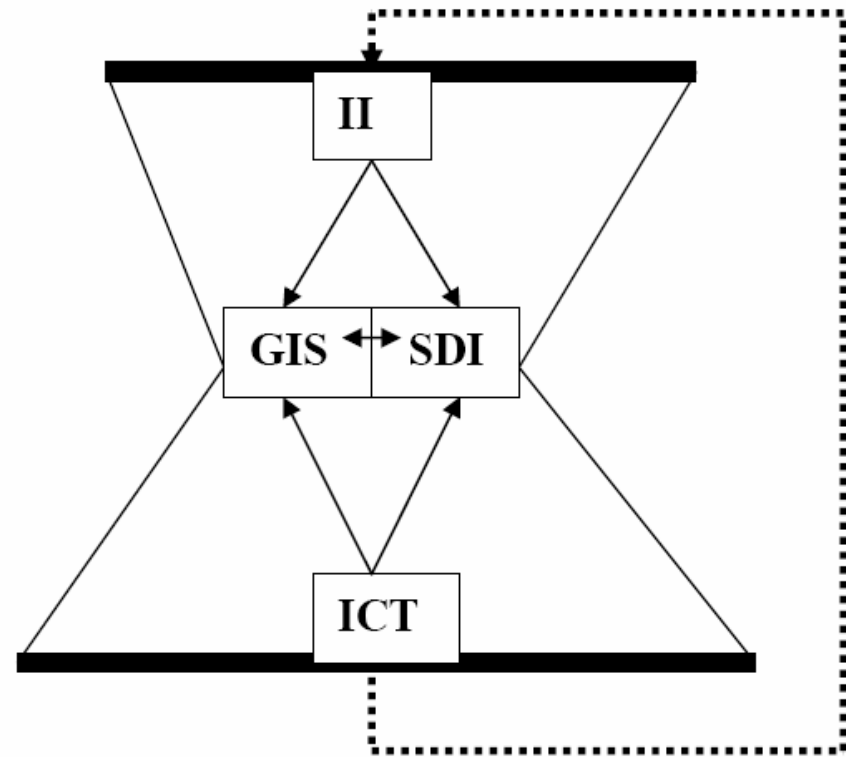
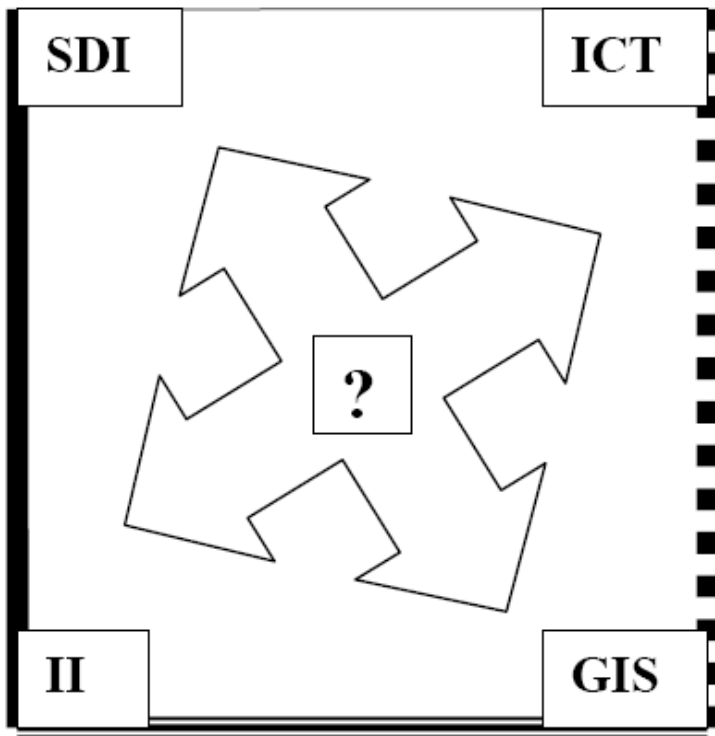
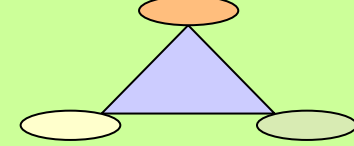
- **Between disciplines**
- **Between SDI, II, GIS & ICT**
- **Between theory and practice**
- **Between technical and social**
- **Between SDI and users**
- **Other...**



# Between disciplines: new truly (!) interdisciplinary frameworks



# Between SDI, II, GIS & ICT: installing, embedding, supporting



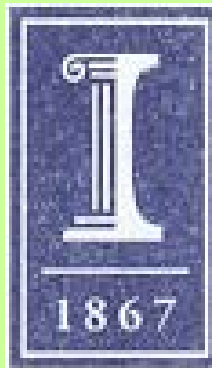
Nedovic-Budic, Z. & N. Budhathoki. 2006. Technological and Institutional Interdependences and SDI – The Bermuda Square? IJSDIR 1: 36-50.



# Between theory and practice: **link academic research and applications**



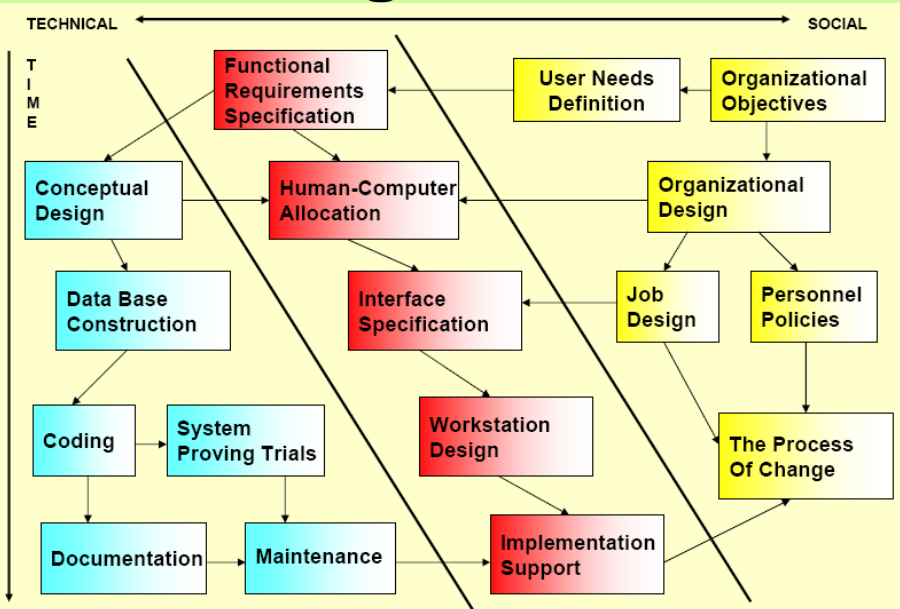
- **Closing the loop – we learn from theory and practice – need to advance both**
- **Use of research? How?**
- **Translation of research into pragmatic frameworks, guidelines, models, learning modules, awareness-raising activities, ...**
- **Early involvement of end beneficiaries**
  - **link during the research process**
- **Who is responsible?**

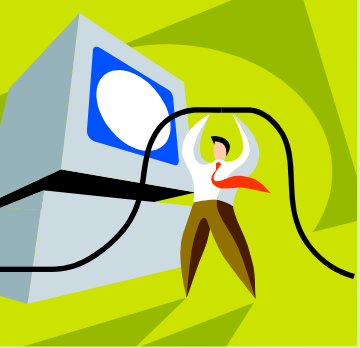


# Between technical and social: fully socio-technical



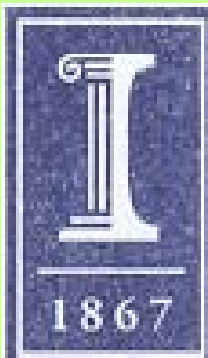
- Balancing act?
- Actor Network Theory (ANT) – focus on relations, undoing artificial boundaries; inscription of ideas into technological processes
- Learning





# Between SDI and users: **generic SDI vs emphasis on the user perspective**

- **Focus: SDI use and users**
- **Usability -- general intelligibility of systems, particularly at the interface; usefulness -- a system's functionality actually makes sense and adds value in relation to a particular work setting (Blomberg et. al. 1994)**
- **Effective use -- capacity and opportunity to successfully integrate technologies to achieve the users' self- or collaboratively-defined goals (Gurstein 2003)**
- **Utility -- “a measure of the relative satisfaction from or desirability of consumption of [goods](#)” (Wikipedia) or as “the quality of being of practical use“ (Google)**
- **Passive vs active users, innovators, “sensemakers”, “domesticators”; appropriation of technology and construction of meaning by its situated use**
- **Two way infrastructure**
- **Double-loop learning (more than feedback) – Argyris (1976, 1999)**
- **Bottom-up, user-driven SDI**
- **Target users**



**Other...**

**Conclusion:**

**paying (or not) attention to gaps**

**bridging them**