Strategies for Realizing the Semantic Web

David Martin

SRI International

Current status of the Semantic Web:
Industry, Public Organizations, Research Community

- Research community alive and well
  - Easily-recognized opportunities, challenges
- Don't see much evidence of industry uptake
- Probably will happen more incrementally than the Web
- Piggyback on Web services
  - Data/knowledge management efforts?

Strategies

- A tough challenge: Designing for machines; seeking massive uptake by humans
- Think about the user
  - Developer-user
  - End-user
- Think about near-term (relatively simple) deployment opportunities
  - Less attention to the ideal (full automation)
  - Explore the middle ground (human-in-loop)
    - Service construction & composition
    - EAI

Strategies (2)

- Make the language easy to "read"
  - Skeptical about visualization
  - Get clear about the "surface language" story, and put it in the forefront
- Make it easy to think about
  - Get on to rules
    - Avoid more convoluted DL-based ways of expressing things
  - Don't ignore special-purpose processing

Strategies (3)

- Make it easy to work (& play) with
  - Tools!
  - User interfaces!
  - Don't forget about query languages / interfaces

Research

- User interfaces
- Enlarge the conversation about the practical implications of tractability results
- Clearer statements about the types of reasoning that are really needed, in the context of use cases