SEKT
SEmantic Knowledge Technology
http://www.sekt-project.com/
• addressing the semantic knowledge technology research agenda
• EU 6th framework Integrated Project
  • start date 1/1/2004
  • 36 months, €12.5m
The Goal

• To deliver next generation semantic knowledge technology through:
  • **Foundational research**
    • (Semi-)automatic ontology generation and population
    • Ontology management (mediation, evolution, inferencing)
  • **Innovative technology development**
    • A suite of knowledge access tools
    • Open source ontology middleware platform
  • **Validated** by 3 case studies and benchmarking/usability activities
  • **Supported** by a methodology
The SEKT partners
In three words …

Semantic knowledge management classifies, finds, distributes, shares and uses knowledge based on meaning not the particular words used to represent meaning.
Semantic knowledge management classifies, finds, distributes, shares and uses knowledge based on **meaning** not the particular **words** used to represent meaning.
Words and meanings

same word, different meanings
Jaguar

different words, same meaning
disability legislation
equal opportunity laws

different words, related meaning
organisations
company charity public sector organisations
XYZ announced profits in Q3, planning to build a $120M plant in Bulgaria, and more and more and more and more and more and more text.
Semantic Browsing

BBC NEWS | Business | South Korea fines Microsoft $32m - Microsoft Internet Explorer

Last Updated: Wednesday, 7 December 2005, 09:56 GMT

South Korea fines Microsoft $32m

Microsoft has been fined 33bn won ($32m; £18.4m) following an antitrust ruling by South Korean regulators.

The US software giant was ordered to unbundle its messaging service from its Windows software by South Korea's Fair Trade Commission.

Regulators ordered Microsoft to introduce a version of Windows which enables the embedding of services by other software companies.

The news came as Microsoft announced plans to invest $1.7bn in India.

Chairman Bill Gates said the company planned to increase its workforce in the country "to 7,000 over the next three to four years".

http://sekt.semanticweb.org/
Microsoft has been fined $3bn (
32m; £18.4m) following an antitrust ruling by South
Korea’s Fair Trade Commission.

Regulators ordered Microsoft to introduce a version of Windows
which enables the embedding of services by other software
companies.

The news came as Microsoft announced plans to invest $1.7bn
in India.

Chairman Bill Gates said the company planned to increase its
workforce in the country “to 7,000 over the next three to four
years.”
Precision in Semantic Search

• Semantic Search can match
  • a query: Documents concerning a telecom company in Europe, with John Smith as a director,
  • With a document containing: “At its meeting on the 10th of May, the board of Vodafone appointed John Smith as CTO”

• Traditional search engines cannot do the required reasoning:
  - Vodafone is a mobile operator, which is a kind of telecom company;
  - Vodafone is in the UK, which is a part of Europe;
  - CTO is a type of director
XYZ announced profits in Q3, planning to build a $120M plant in Bulgaria and more and more and more and more and more and more text.
Major research challenges

- Improve **automation** of ontology and metadata generation
- Research and develop techniques for **ontology management and evolution**
- Develop highly-**scalable** solutions
- Research sound **inferencing** despite inconsistent models
- Develop semantic **knowledge access tools**
- Develop **methodology** for deployment
Real-world case studies

- helping newly-appointed judges
- helping IT consultants
- a corporate digital library

• Use/refinement of SEKT methodology
• Usability, business benefits and benchmarking
SEKT applications