

Workshop 5b

Issues in interoperability

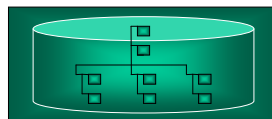
Results from the Semicolon-project

Terje Grimstad
Karde
Norway

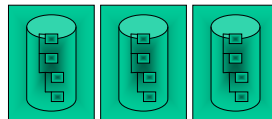
Karde AS

Semicolon

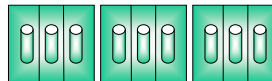
Semantic and Organisational Interoperability in Communicating and Collaborating Organisations



**Collaboration between
public sector organisations**



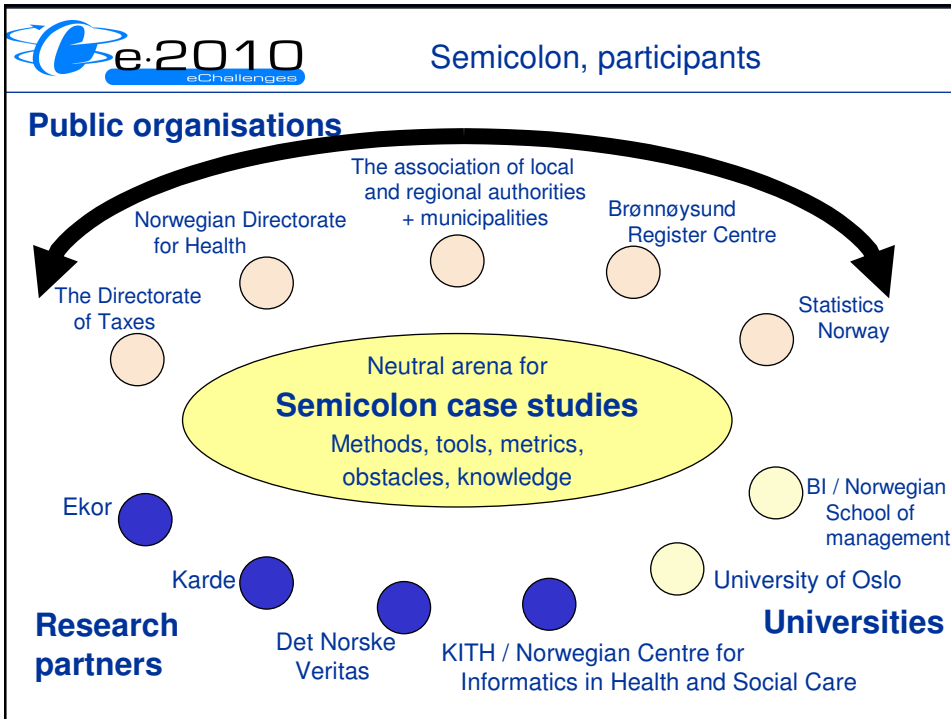
Collaboration inside public
sector organisations



Fragmented public sector:
isolated information models

Public sector organisations

Karde AS



e:2010 eChallenges **Main goal of Semicolon**

- Develop and test ICT-based **methods, tools and metrics** to obtain faster and cheaper semantic and organisational interoperability both with and within the public sector.
- Establish a set of useful recommendations for public sector as an aid to increase interoperability
 - To be maintained by *The Agency for Public Management and eGovernment (DIFI)* and the *Council of Public Sector Standards*

Karde AS

Workshop 5b, 28th October 2010 eChallenges e-2010 Copyright 2010 Karde AS

To be presented in this workshop:

- an analyses of organisational barriers to interoperability and recommendations for correcting measures (Hellman)
- the importance of information governance and metatdata strategies for cross-sector services (Grimstad)
- contributions to cross-sector services to citizens and businesses (Thorstensen)
- a growth model indicating the level of maturity for organisational interoperability (Solli-Sæther)

Other:

- a methodology and a technology for publication and reuse of open public service information
- a methodology and indicators to predict societal effects of common components in the public ICT infrastructure

Karde AS

- User directed innovation projects
- Verdikt-programme in the Norwegian Research Council
- Web-site: www.semicolon.no
- 3 years, Oktober 2007 – December 2010
- 3 postdoctors, 2 from UiO and 1 from BI
- Total budget: 7,5 mill euro (60 million NOK)

- Financing from Research Council: 2,25 mill euro (17,65 mill NOK - 35%)
- Contributions from public sector (money): 1,25 mill euro (9,8 mill NOK)
- Contributions from public sector (labour): 4 mill euro (18,4 mill NOK)

- Contact person:
 - terje.grimstad@karde.no (project leader)
 - Tel: + 47 - 908 44 023

Karde AS

Information Governance and Metadata Strategies as a Basis for Cross-sector e-Services

pezoqoje
Terje Grimstad
Karde
Norway

Karde AS

In most countries it is an important goal is to provide a public sector which is

- Open
- Transparent
- Accessible (e-inclusion)
- Accountable
- User-friendly
- Service-oriented
- Efficient and effective
- Innovative
- Adaptable to change
- Satisfying rule of law principles

One important element

- Increased interoperability

Karde AS

The Government emphasises:

- *To modernise public sector*
 - Services of good quality are vital for the acceptance and support of public service solutions
 - Public service production needs to be more efficient due to ageing of the population and the ability to meet increased demands and expectations to public services
- *To support innovation in businesses and public sector*
- *Simplification of public law and regulations*
 - Simplification and electronic services contributes to the reduction of administrative costs, to increased predictability for the users and to more efficient execution of public activities

Karde AS

- Public sector is based on information
 - capture, processing, decisions, production of new information
- Automatic decision processes requires high quality information
- Good or excellent Information Governance is a critical success factor for public administration
 - Simplifies the development of cross-sector public services
 - Necessary requirement for the reuse of Public Service Information
 - The re-use of Public Sector Information, e.g. Review of Directive 2003/98/EC – [COM(2009) 212 final]
 - PSI represents a commercial value of 27 billion euro per year in the EU
- Systematic work with metadata and semantics is a prerequisite for good information governance
- Local, national and international metadata strategies supports systematic work
- There is a need to be able to predict effects, both quantitative and qualitative

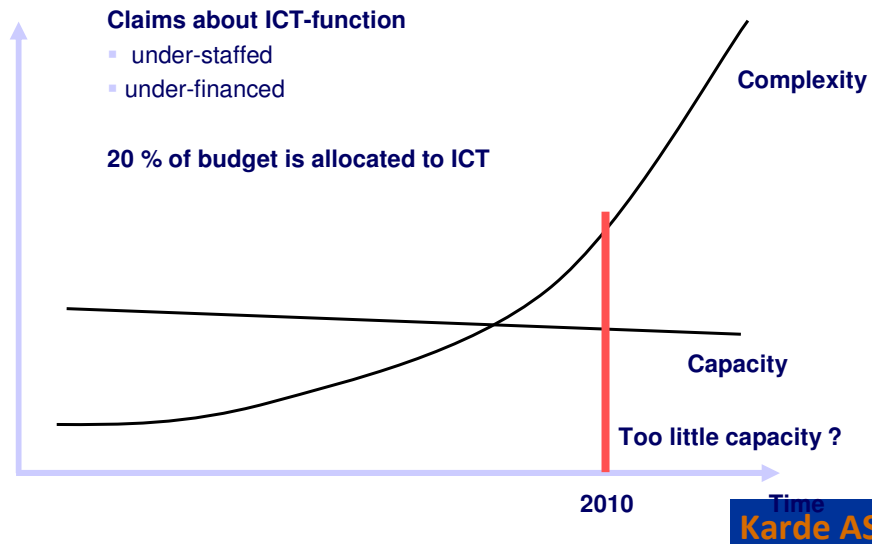
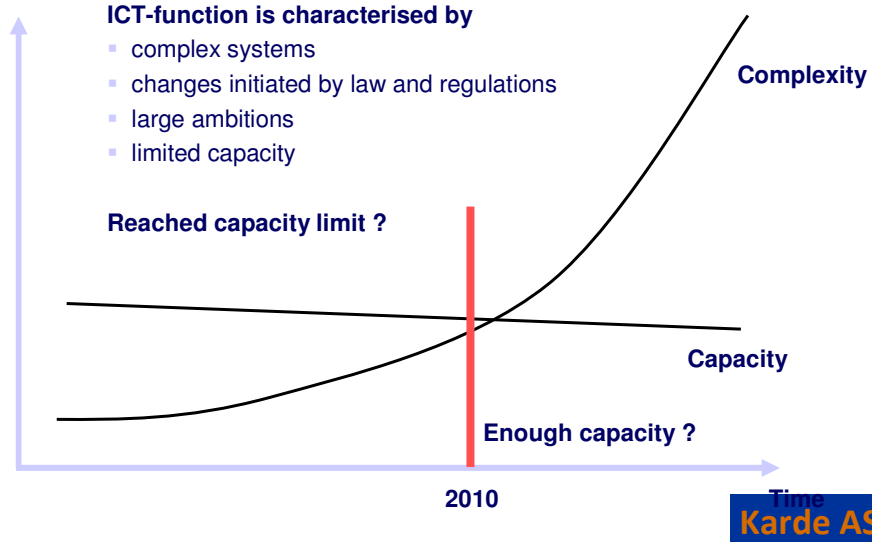
Karde AS

- Control of metadata and semantics is not the only answer to all the challenges
- However, it is difficult to imagine good and rational solutions without a conscious considerations of metadata and semantics
- Other important issues:
 - Enterprise model for the description of production processes, which systems supports which processes, the relation to laws and regulations, and responsibilities
 - Metadata and semantics defines the information on which the processes operates
 - Competence development
 - Involvement of business
 - Adequate service development tools and methods

Karde AS

- Strategies are also about collaboration with others, national and international
- In practice – Rather poor collaboration with others
- Quality challenges in the production
- Capacity challenges (claim: ICT is under-staffed and under-financed)
- Not adequate overview of own systems and information
- Huge maintenance costs due to complicated systems
- Stove-pipes inside large public organisations and externally between organisations

Karde AS



The following initiatives and activities have been used as Background and inspiration:

1. Altinn, portal and infrastructure for businesses and citizens
2. MyPage, portal and infrastructure for citizens
3. SERES, national semantic register
4. eDialogues, a concept for the implementation of cross-sector services to citizens and businesses.
5. Experiences from Statistics Norway
6. Two preliminary efforts to provide requirements for a national metadata strategy.
7. Ongoing work to define a national metadata strategy.

Karde AS

- We need to convey a convincing, trustworthy and understandable message in order to get the necessary management attention and financial support for metadata and semantic exercises.
- The effects of systematic use of metadata across the public sector must be expressed in a language understood by top management, with qualitative and quantitative measures.
- The effects, which are both internal and external for the public organizations, have to be clearly documented.

Karde AS

- **About Openness:**
 - The organisation should be the preferred source for information;
The organisation must protect privacy.
- **About Innovation:**
 - The organisation should provide Better services for citizens and businesses.
- **About a User friendly public sector:**
 - The organisation must take the initiative and take part in cross-sector service development
 - The organisation should contribute to service developments in other sectors.

Karde AS

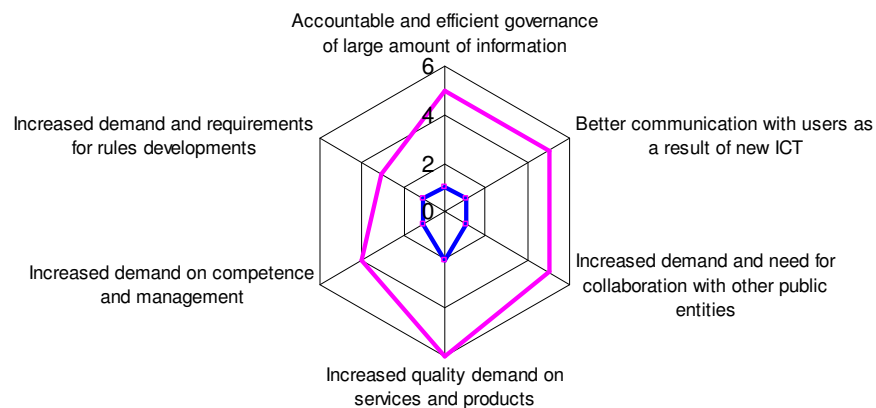
- **About Quality culture:**
 - The organisation should improve existing services
 - The organisation should work more effective and efficient.
- **About Competence culture:**
 - The organisation should develop competence in a systematic way
 - The organisation should transform individual knowledge to common knowledge
 - The organisation should build, use and share knowledge

Karde AS

Typical requirements to a public service organisation

- It must provide accountable and efficient governance of large amount of information.
- It must provide better communication with users as a result of new ICT.
- It must position itself to support increased demand and need for collaboration with other public entities.
- It must position itself to increased quality demands on services and products.
- It must position itself to increased demand on competence and management.
- It must position itself to increased demand and requirements for rules developments.

Karde AS



Karde AS

1. By working with Information governance in a structured manner, business becomes deeply involved in the definition of concepts. This in turn leads to better alignment between the business processes and the ICT-solutions and the ability for businesses to develop services with lower degree of ICT.
2. Individual knowledge is transformed to common knowledge. This is due to better documentation, i.e., overview of information, systems and processes.
3. Due to better documentation, the organization becomes more independent of specific resources and more robust to the exchange of personell.
4. Less production errors, this, as a side effect, implies less negative attention in media.
5. More efficient service development, more efficient systems development and maintenance, easier adaptation of systems to new rules and legal constraints.
6. As a consequence of all effects, the competence and capacity in staff increases without employing more people. The ability for innovation increases.

Karde AS

1. The publication of own information in such ways that it can be reused both for cross-sector services and for commercial services.
2. Avoidance of double reporting obligations for citizens and businesses.
3. More effective and efficient cross-sector service development.
4. Improved implementation of rule of law principles.
5. Improved interoperability.

Karde AS

- Increase the understanding of national and international metadata strategies.
- Visualize important elements of information governance and metadata strategies so that they are understood by top management.
- Visualize the importance of metadata strategies for the re-use of Public Sector Information, e.g. Review of Directive 2003/98/EC – [22], which claims that PSI has the potential for an immense commercial value.
- Predict effects of systematic work with metadata and semantics.
- Visualize the necessity of metadata strategies for the development of cross-sector services.
- Visualize the need for a new or existing public agency with the role of operating a national metadata service with a clear mandate from the ministries.

Karde AS

- National budget for 2010
 - 4 million euro allocated for metadata work
 - 3 million for Brønnøysund Register Centre, to build SERES
 - 1 million for Tax Authorities, to support Altinn
- National budget for 2011
 - 4 million euro allocated for metadata work
 - 2 million for Brønnøysund Register Centre, to operate SERES
 - 2 million for Tax Authorities, to use SERES for internal Information governance

Karde AS

Thank you for your attention !

Karde AS