Information standards through and for collaboration

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Collaboration and information infrastructures

- there is a need for collaboration between authorities in order to develop e-services
- a prerequisite for this is an information infrastructure which can be used by different authorities to exchange information
- in order to accomplish this the information have to be standardised

Characteristics Open, Shared, Standardised, Installed base application infrastructure infrastructure rausport infrastructure Registers of identifiers of important institutional objects The Swedish PID-number system

The social welfare project

Municipalities in collaboration with state authorities

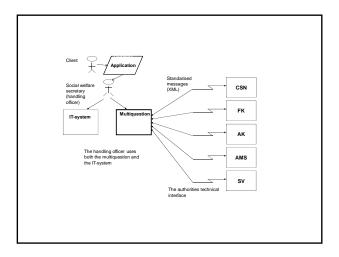
Objectives

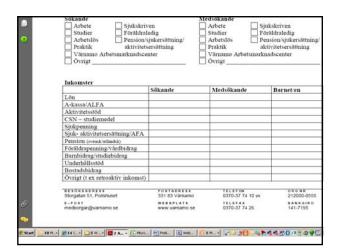
- Renewed Application (e-service)
- Better decisions
- Avoid mistakes in giving out money
- Efficiency (a lot of telephone calls)

The social welfare project

Types of collaboration

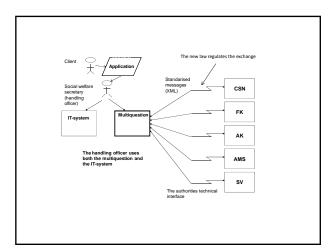
- Vertical (municipalities-state authorities)
- Customer (municipalities-clients)
- Commercial (municipalities- suppliers of IT-systems)
- University (municipalities- universities)
- Horizontal (municipalities-municipalities)
- + Political (municipalities- political bodies)
- * Legislation (municipalities legislation bodies)





Prerequisites

- A new law
- Five state authorities must inform the municipalities about the citizens social situation as it is presented in the social security systems
- CSN, Försäkringskassan, Riksskatteverket, Arbetsförmedlingen och Arbetslöshetskassorna



Standardisation issues

What is a valid question? What is a valid answer? This is regulated by the law so it should be easy and straightforward to standardise

1 § Denna förordning innehåller närmare föreskrifter om vilka uppgifter som Centrala studiestödsnämnden, Försäkringskassan, arbetslöshetskassorna, Arbetsförmedlingen och Skatteverket ska lämna till socialnämnden enligt 11 kap. 11-11 b §§ socialtjänstlägen (2001:453). 2 § Socialnämnden har rätt att hos Centrala studiestödsnämnden ta del av följande uppgifter om enskilda: 1. namn, personnummer och i förekommande fall samordningsnummer, 2. att en ansökan om studiestöd eller lån till hemutrustning för flyktingar och vissa andra utlänningar har lämnats in, 3. vilken form av studiestöd som har sökts, beviljats respektive betalats ut, 4. för vilken tidsperiod studiestöd har sökts, beviljats respektive betalats ut, 5. omfattningen av studiestöd i form av studiemedel,

 $6.\ med\ vilket\ belopp\ studiestöd\ har\ beviljats\ eller\ betalats\ ut$ fördelat på form av stöd,

What is a valid question?

When it is put forward by a Swedish Municipality

When it is asked by an authorised handling officer

When it concerns an open case for social wellfare based on the rules for the welfare office at the municipalities

When it concerns a client within an houshold that concerns an open errand

When the question is put forward to an authority who has relevant information and has the right to answer

When it concers a limited period of time

Problems

The definition of an open case and how it is identified is unclear

The defintion of a household and how it is identified is unclear

The PID-number is used for identifying (cases, clients, housholds)

The problems is due to how these important institutional objects are created and defined in the IT-systems used

What is a valid answer?

- When the answer contains the information asked
- When the authority has the right to answer
- When it is given in due time

Conceptual model Answer



Problems with the law

The information specified in the law does not cover the information needs

How fast the authorities should answer is not explicitly expressed in the law

Problems with the installed base of IT-systems

The answers are not fully based on the requirements of the law and handling officers, it is based on what the information infrastructures of the authorities can present

Information is not well documented and standardised

Design of the informations infrastructure (standardisation process)

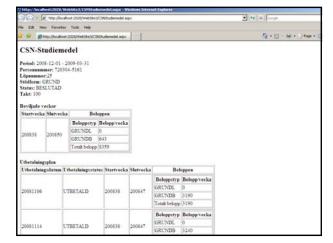
- Process modelling (analyse the workpractice)
- * Interpret laws and regulations
- Analyse user requirements
- *Analyse the installed base and the information it can present
- Conceptual modelling (analyse important institutional objects and their identifiers)
- Design of standardised messages (questions and aswers)
- Method used: modelling workshops and prototyping
- * Information prototype based on XML-messages and XSL-scripts
- Implementation XML-Schemas, XML-messages
- Design the technical part of the information infrastructure (data transfer and authorisation techniques)

Findings so far

- The law is unclear (lack of information modelling competence and IT-competence when it was written ?)
- No one really knows how to perform this type of project
 - how to organise it
 - no methods (system development methods have no II perspective)
- Restrictive interpretation of the law from the side of the state authorities
- If we did not have the research funding no one have had the time or money to bother with the standardisation process and II aspects although this is the core of the collaboration
- The installed base of systems restricts what can be presented to the users
- The defintion of basic institutional objects and how they are identified is unclear, overuse of the PID-number (conceptual modelling methods and ontologis does not recognise institutional objects and facts)
- The installed base of systems are not i line with the legislation
- The lack of documentation of the installed base (inefficient metadata management)

The research can contribute to

- develop methodology
- identify competence needed
- open source, open data definitions



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