



FOKUS

Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

A KNOWLEDGE-SHARING FRAMEWORK FOR PUBLIC ADMINISTRATION

-
- Jens Fromm
Dr. Olivier Glassey
 - ELAN Competence Center
Fraunhofer FOKUS
Berlin, Germany
-





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Fraunhofer FOKUS eGovernment Laboratory



Workshop



Show Case



Competence Node





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Conclusions and Outlook

Growing Complexity of Regulations

Germany

- Tax regulations: circa 70,000 paragraphs
- Juris database: > 10 millionen documents
- 1.5 million law suits / year

Euro-Lex Database

- 320,000 legal documents
- 20,000 new documents per year

US Code of Federal Regulations

- 1960: 20,000 pages
- 2000: 140,000 pages





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Lecture Outline

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- Modelling Knowledge

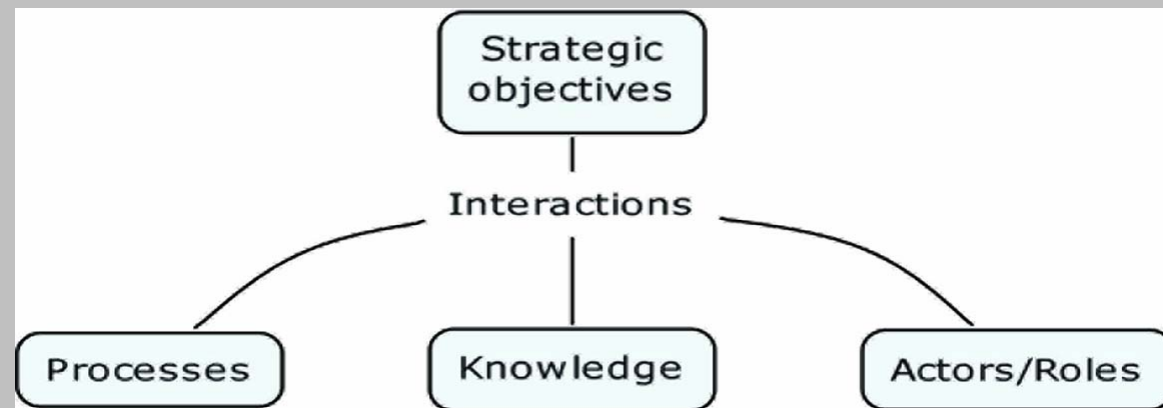
Case Study Herford

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- Knowledge Sharing System

Conclusions and Outlook

Objectives of MIMIK (Method and Instruments to Model Integrated Knowledge)



Goals of MIMIK are to identify:

- Strategic goals of an organization
- Actors and roles
- Knowledge resources
- Processes
- Interactions between these elements





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Lecture Outline

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Theoretical Background

- MIMIK

- Modelling Knowledge

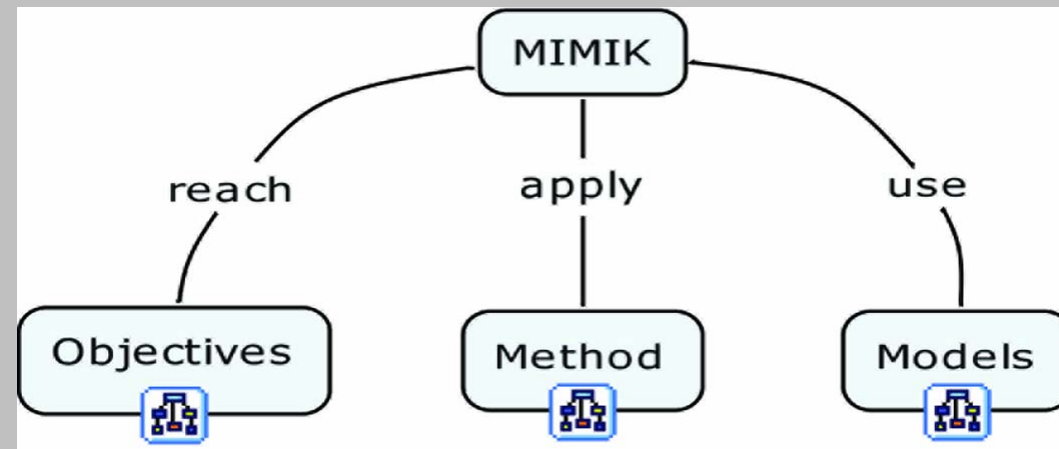
Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

MIMIK (Method and Instruments to Model Integrated Knowledge)



MIMIK is intended to reach given objectives by applying a defined method and using a set of existing models.





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A KNOWLEDGE-SHARING FRAMEWORK FOR PUBLIC ADMINISTRATION

Lecture Outline

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Theoretical Background

- MIMIK

- Modelling Knowledge

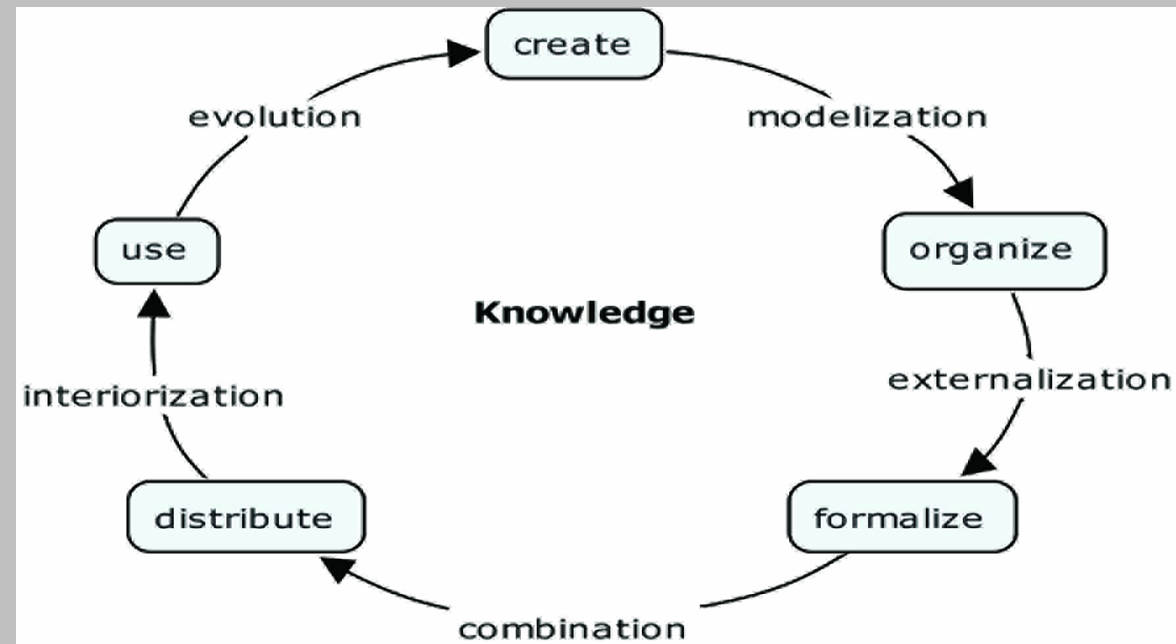
Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

Continuous Knowledge Creation Cycle



Nissen, Kamel, Sengupta 2000





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A KNOWLEDGE-SHARING FRAMEWORK FOR PUBLIC ADMINISTRATION

Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

Knowledge Typology

- Know-how: knowledge about how to make things (technical knowledge)
- Know-why: logical reasoning (scientific knowledge)
- Know-what: knowledge about the best means to achieve given goals, usually a combination of know-how and know-why (practical knowledge)

Difference between implicit and explicit knowledge

- Explicit means that it can be clearly observed and expressed (and then digitalized)
- Implicit can not directly formulated (skills, experience, insights, intuition, judgement)

Capurro 2004





Lecture Outline

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Theoretical Background

- MIMIK

- Modelling Knowledge

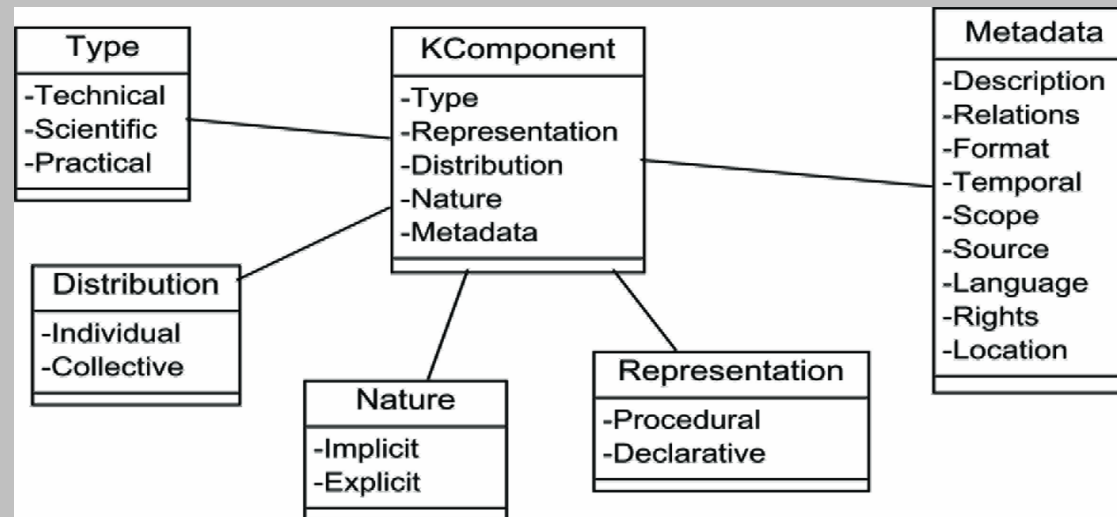
Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

Knowledge Components



“Knowledge is of two kinds. We know a subject ourselves or we know where we can find information upon it”.



Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

Feasibility Study in Herford to assess the potential of a knowledge based system

The goals were:

- to describe the actual work processes
- to evaluate the consistency and the quality of the actual work processes
- to propose optimized work processes
- to develop a prototype for a legal knowledge system





Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

The Problem: Recovering Social Benefits from Family Members

- The goal of the county administration: to recover social benefits paid by the county from family members obligated by law to pay support.
- The task of clerks: to decide whether a family member has obligations to pay and, if so, in what amount. Also: to provide a legally correct and clear justification (explanation) of the decision.





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A KNOWLEDGE-SHARING FRAMEWORK FOR PUBLIC ADMINISTRATION

Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

Strategic Goals

Using MIMIK we identified the three strategic goals in this administration:

- Monitoring the changes in law and regulations
- Integrating these changes into the daily work of the organization
- Handling the actual cases





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A KNOWLEDGE-SHARING FRAMEWORK FOR PUBLIC ADMINISTRATION

Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

1) Monitoring the changes in law and regulations

- There are about 20-25 different journals, magazines and publication which have to be observed by the clerks
- They all take part in training seminars about once a year.
- 40% of their work time is dedicated to doing legal research for particular cases, reading legal journals and publications.

2) Integrating these changes into the daily work of the organization

- No structured or formalized sharing and integration of knowledge observable
- The only knowledge creation process we identified was socialization, meaning exchange of knowledge during coffee breaks, clerks developed their own spreadsheets or form in order to acquire and keep data and knowledge.





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A KNOWLEDGE-SHARING FRAMEWORK FOR PUBLIC ADMINISTRATION

Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

3) Handling the actual cases

- To evaluate the handling of cases we designed two test-cases which were handled by the clerks.
- Between 75% and 79% of the clerks found the cases were clear, well formulated and realistic, they said they understood what they were expected to do and they believed they had all the necessary information.
- In case 1 20% of the solutions by the clerks were not defensible and they needed an average of 152 minutes; in case 2, 33% of the solutions were not defensible and they needed an average of 162 minutes.

We proposed to design a knowledge-sharing system
and a legal ruled based system





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A KNOWLEDGE-SHARING FRAMEWORK FOR PUBLIC ADMINISTRATION

Lecture Outline

Introduction

Theoretical Background

- MIMIK

- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

Family Support Assistant: Demonstrator

- we build a web-based demonstrator, with about 200 rules implemented. The rules can be easily validated by legal experts.
- Clerks are assisted step-by-step through the analysis of each case. Online help can be made available for each question. Only relevant questions are asked, depending on the facts of the case.
- Answers can be changed at anytime and the effect of these changes on the results is immediately apparent.
- Generates clear and understandable reports explaining how the facts and applicable law support the results.





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Lecture Outline

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- Knowledge Sharing System

Conclusions and Outlook

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Unterhaltsrecht 0.03 - Bericht über die Gründe der Schlußfolgerung - Microsoft Internet Explorer

Adresse <http://localhost/unterhalt/MasterTouch.aspx?UserIdVerify=id5&DictionaryNameVerify=Unterhaltsrecht&Action=DisplayHowReport&GoalFactId=11&GoalEntity=/> Wechseln zu Links >>

Fraunhofer Institut für Offene Kommunikationssysteme

Untersuchung: desmond Strator 2
[Antworten](#) | [Entitäten](#) | [Übersicht](#)

(+) Alle unterhaltspflichtigen Verwandten wurden ermittelt

Die Schlußfolgerung kam aus folgenden hierarchisch angeordneten Gründen zustande. Antworten, die Sie im Laufe der Sitzung gegeben haben sind aktive Links. Um die Antworten einzusehen oder zu ändern klicken Sie auf diese Links

Benutzen Sie und um mehr Details zu sehen oder zu verbergen.

Die Schlussfolgerung kommt aus folgenden Gründen zustande:

- 1. (+) Der Unterhaltsberechtigte hat ungedeckten Bedarf
 - p5. Ungedeckter Bedarf is € 600,00.
 - p58. Ausgezahlte Sozialhilfe an den Berechtigten is € 600,00.
- p345. Dementa Strator zu zahlender Betrag is € 0,00.
- p345. Alina Strator zu zahlender Betrag is € 0,00.
- p345. Brigitte Strator zu zahlender Betrag is € 600,00.
 - p68. Brigitte Strator zu zahlender Betrag Ehegatte is € 0,00.
 - p80. Brigitte Strator zu zahlender Betrag Kinder is € 600,00.
- 19. (+)
 - p10. [Brigitte Strator Familienbeziehung zum Unterhaltsberechtigten is Tochter.](#)
- 6. (+) Der {Unterhaltspflichtige} muss den Unterhaltberechtigten unterstützen
 - 12. (+) Der {Unterhaltspflichtige} ist verwandt mit dem Berechtigten in der geraden Linie § 1589 durch Abstammung
 - 2. (+) Der {Unterhaltspflichtige} kann den Unterhaltsberechtigten unterstützen
 - 21. Die Unterhaltsverpflichtung des Brigitte Strator does not fall nach § 1611 BGB weg.
 - 42. Die Unterhaltsverpflichtung des Brigitte Strator does not fall wegen Haerterfallregelung weg.

Lokales Intranet

Start | [Unterhaltsrecht 0.03 - ...](#) | EN





Lecture Outline

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Theoretical Background

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- Modelling Knowledge

Case Study Herford

- Legal Knowledge System

- Knowledge Sharing System

Conclusions and Outlook

Knowledge-Sharing System

- the prototype of a knowledge-sharing system is based on RSS (Really Simple Syndication). RSS feeds provide “items” containing short descriptions of web content together with a link to the full version of the content
- The prototype offers categories of content and by matching categories and interactions such as defined in the knowledge models
- The prototype has advanced users’ rights management and allows us to assign control over the content of single categories to given users.
- Matching knowledge components and prototype: RSS provides a description for content and integrates various tags





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- Knowledge Sharing System
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Mimik

This blog is a demo of how to use RSS in public administrations in order to share knowledge

RESOURCES:

- » case studies
- » glossary
- » newsletter
- » reports
- » surveys

CATEGORIES:

- » benchmarking
- » best practices
- » e-government
- » ehealth
- » eprocurement
- » general
- » knowledge management
- » open source

SEARCH:

LINKS

- » egov interoper
- » egovos
- » publicus

Knowledge Management Conference 0

posted by moderator in [general](#), [e-government](#), [knowledge management](#) (tuesday april 19, 2005 at 10:40)

The 6th Annual Knowledge Management Conference & Exhibition
 April 20-22, 2005
 Exhibition: April 21, 2005
 Ronald Reagan Building, Washington, DC

> [Register](#)

Swiss E-government Still Below Expectations, Survey Reveals 0

posted by administrator in [general](#), [e-government](#), [benchmarking](#) (tuesday april 19, 2005 at 10:16)

A survey published in late February 2005 by IT services company Unisys and the Bern University of Applied Sciences revealed a strong demand for e-government in Switzerland. However, the current offer of public e-services remains below the expectations of the population.

> [Report](#)
 > [Executive Summary](#)

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 The views expressed are not an official position of the European Commission.

Data Security Concerns Raised Over Austrian E-health Insurance Card 0

posted by administrator in [general](#), [knowledge management](#), [ehealth](#) (tuesday april 19, 2005 at 9:55)

According to Austrian privacy and data protection watchdog ARGE Daten, the Health Information Network due to support the operation of the country's electronic health insurance card may be vulnerable to data abuse.

JUNE 2005

M	T	W	T	F	S	S
			1	2	3	4 5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

<< [apr](#)

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Conclusions

- The feasibility study has revealed the need for knowledge management and knowledge sharing frameworks in Herford.
- MIMIK helps to identify knowledge sharing problems and reveals ways to improve it.
- Knowledge frameworks are an interesting tool for administrations.

Outlook

- Estrella (European Project for Standardized Transparent Representations in Order to Extend Legal Accessibility) just started.





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Further question and request to

jens.fromm@fokus.fraunhofer.de

Thanks for your attention!

