

# Development of Organisational and Business Models for the Long-term Preservation of Digital Objects

**S u s a n n e L a n g**  
Bavarian State Library  
Munich Digitisation Centre

**M i c h a e l M i n k u s**  
University of the  
Federal Armed Forces, Munich

Deutsche  
Forschungsgemeinschaft

**DFG**

**BSB** Bayerische  
Staatsbibliothek

der Bundeswehr  
Universität  München

# Agenda

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- Objectives
- Approach
- Process Model
- Business Model
- Model Integration and Individualisation
- An illustration of some modelling elements on a running system

# Challenges

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**Digital objects represent added value**

**We need to secure the availability for the long term**

**➔ Long-term preservation of digital objects and metadata is an absolute necessity**

- The number of digital objects is growing fast
- Infrastructures change rapidly
- Funds run dry





**About 39 million files in September 2008**

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**2005**

**about 6 million files in September 2005 at the Bavarian State Library**

**2008**

# We need to build

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**innovative, reliable, and sustainable  
organisational and business models**

igital Objects





# **We need . . .**

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- **General Guidance**
- **Recommendations**
- **Decision Support**
- **Roadmap for further research, development, and funding**

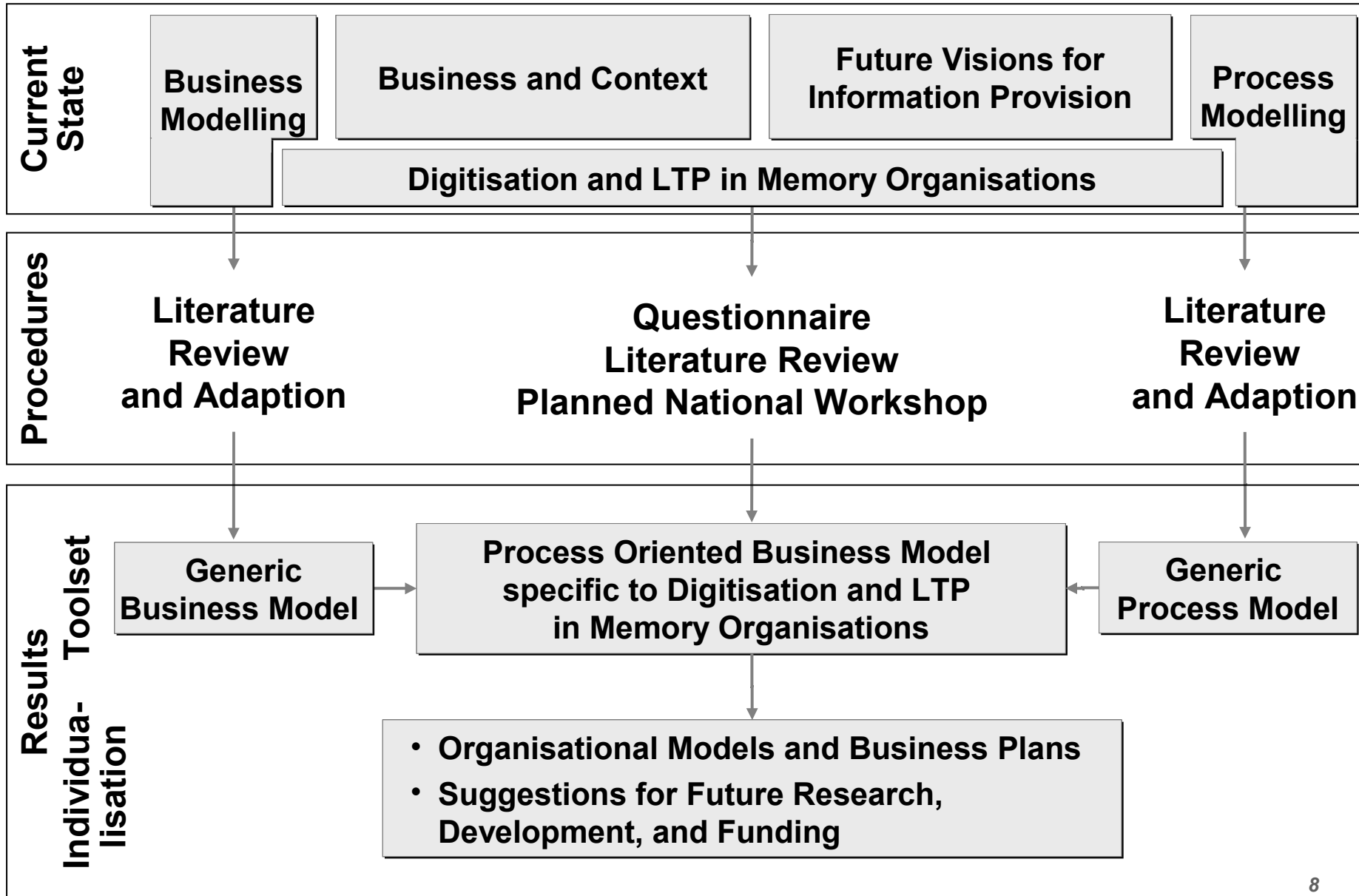
# The Study

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**Development of Organisational and Business Models for the long-term preservation of digital objects from digitisation projects**

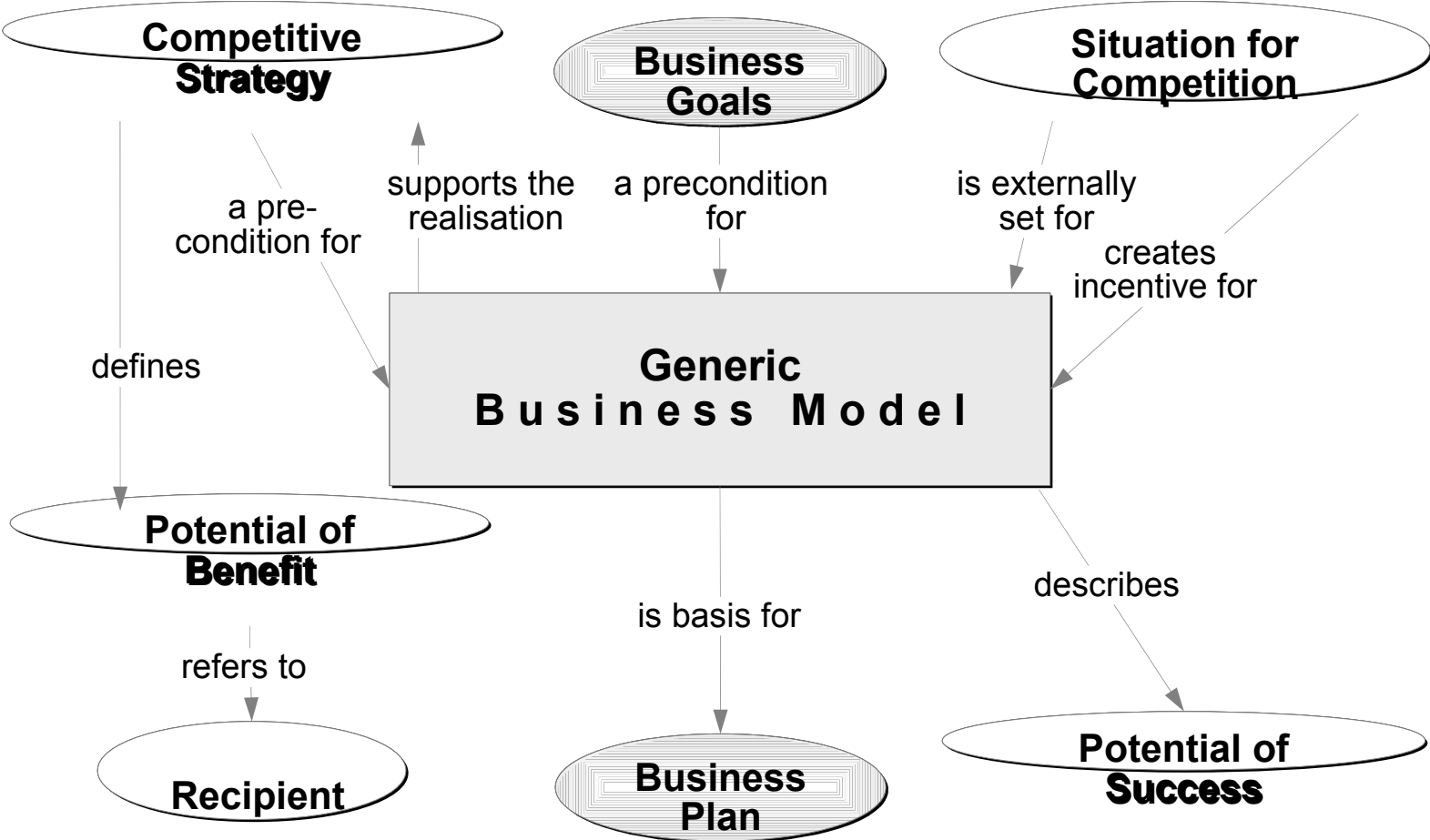
- **Duration: 1 year – 2008**
- **Partners: Bavarian State Library Munich,  
University of Federal Armed Forces, Munich**
- **Funded by the German Research Foundation**

# Methodological Approach





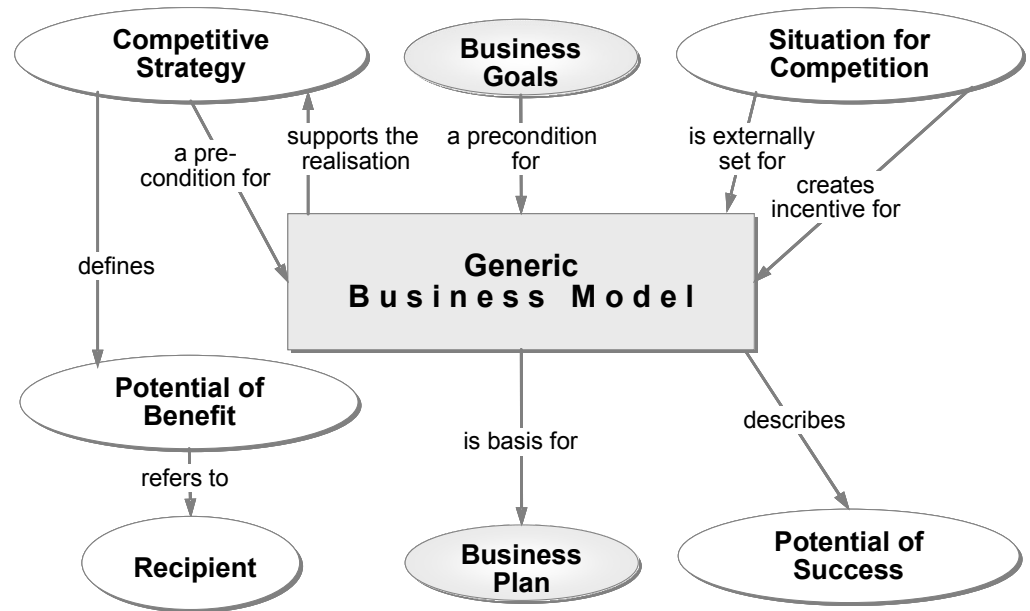
# Generic Business Model



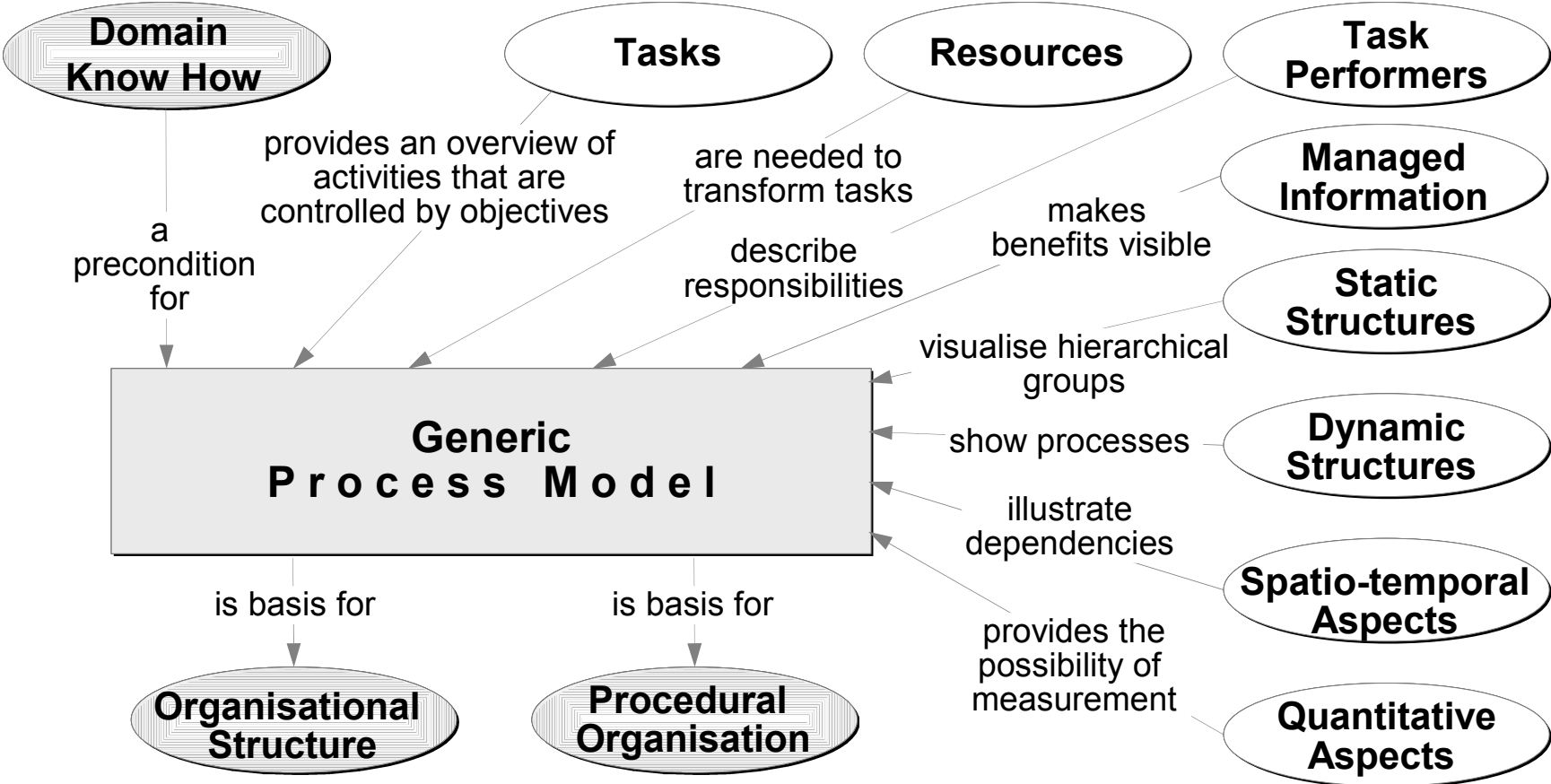
# Generic Business Model

**Business Modelling provides means for**

- informal and formal descriptions that represent various aspects of business, including purpose, offerings, strategies, infrastructure, organisational structures, trading practices, and operational processes and policies.
- checking implemented or planned systems.



# Generic Process Model

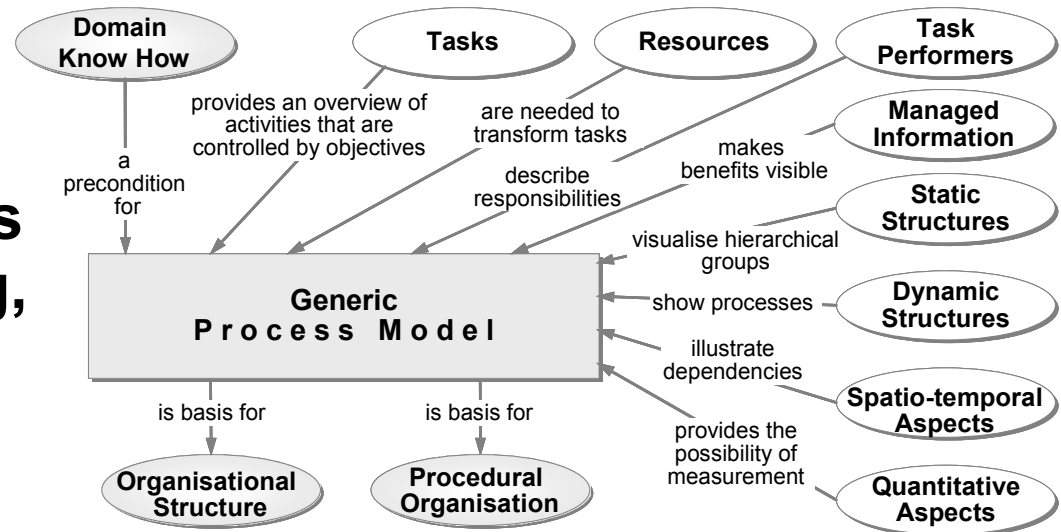




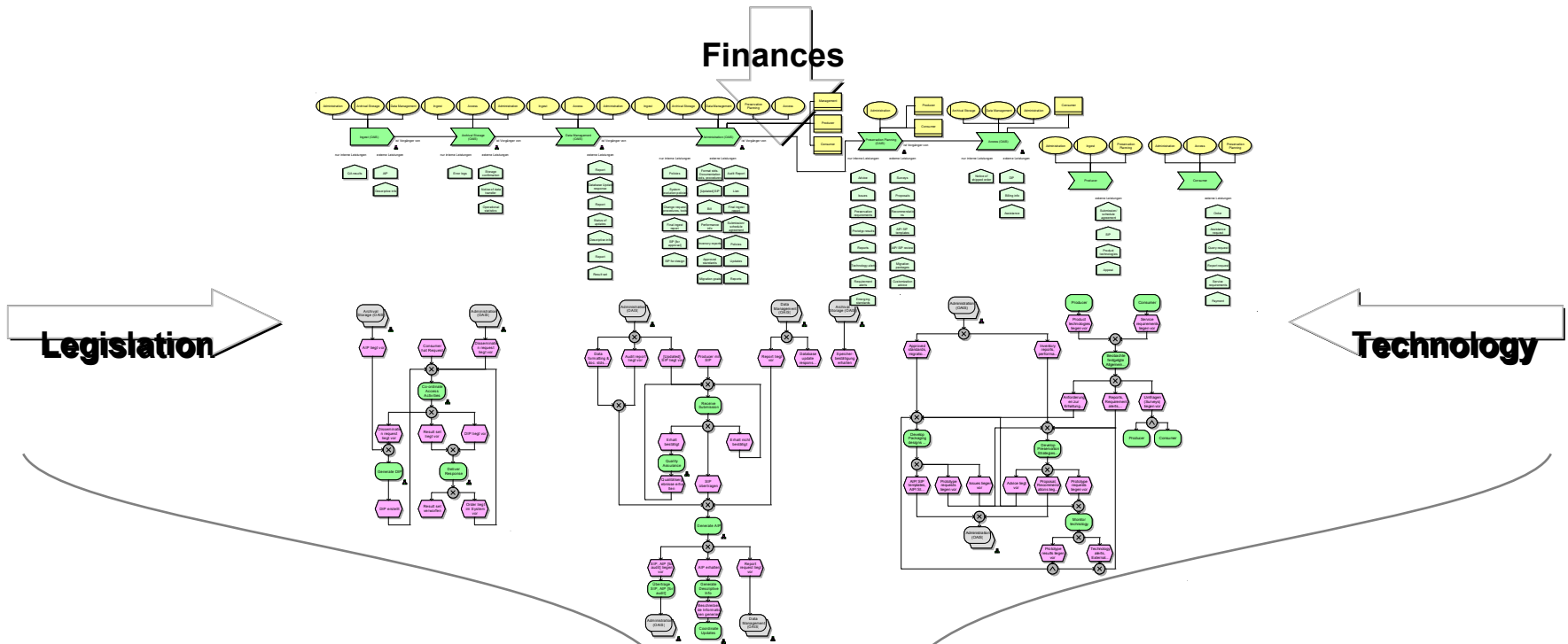
# Generic Process Model

Process Modelling provides means for

- analysis of operations
- definition, structuring, and integration of business processes
- design of process chains
- allocation of process responsibilities and resources
- process improvement and process management.



# Holistic and Integrated View



## Partial Models of the generic Business Model

- market model - incl. demand and competition
- product offer model
- production model
- distribution model
- utilisation model
- procurement model
- operating model
- capital model – incl. financing and revenue

## Model Integration

**Process Oriented Business Model  
specific to Digitisation and LTP  
in Memory Organisations**

## Individualisation

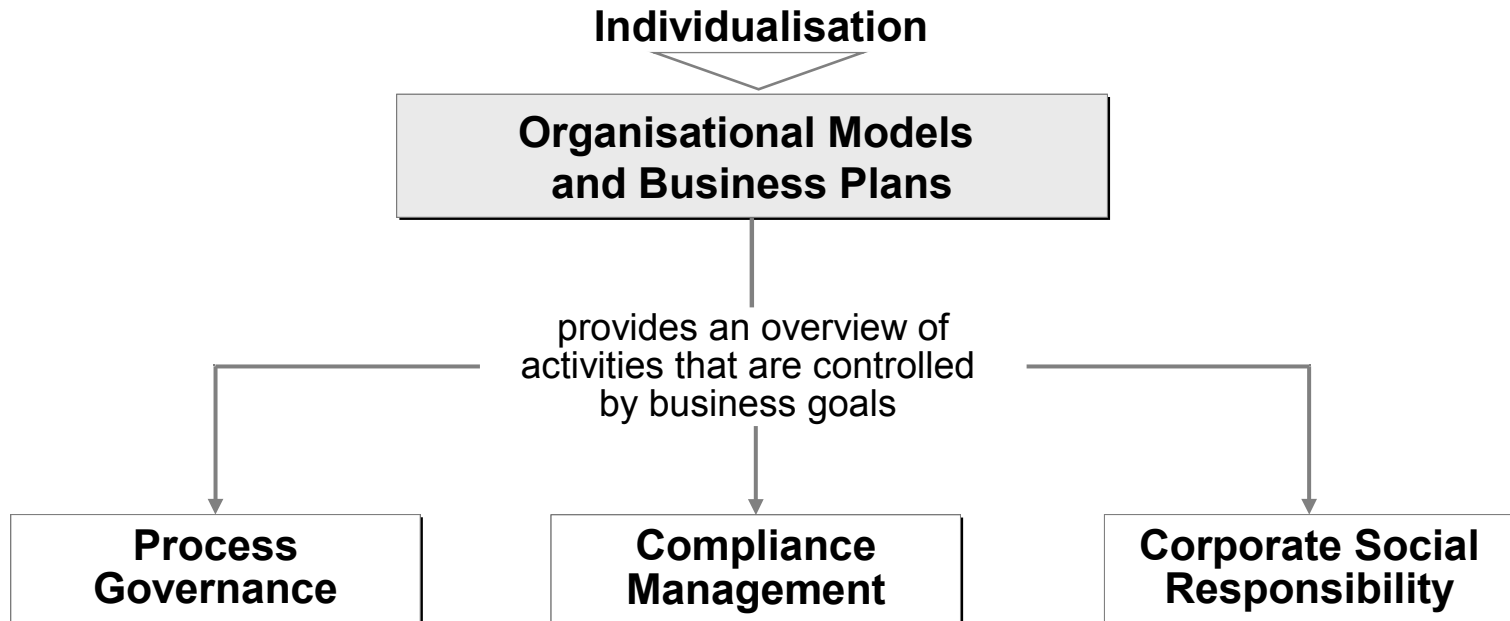
**Organisational Models  
and Business Plans**

## Partial Models of the generic Process Model

- value-added chain model
- role and organisational chart model
- objective model
- data model
- information model
- event-driven process chain model
- product tree model
- process selection matrix model

# Benefit for Your Specific Organisation

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# Benefit for Your Specific Organisation

## Benefits in the context of Digitisation and LTP

- establishing and operating a trustworthy digital archive
- design of a comprehensible risk management and quality management for information preservation
- description clear outsourcing scenarios
- definition of procedural requirements for information technology
- estimation of a liability risk for decision makers.



An illustration of some modelling elements on a running system

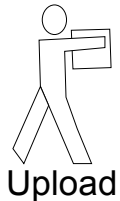
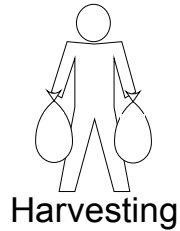
# Production and Distribution at the BSB

*Production*

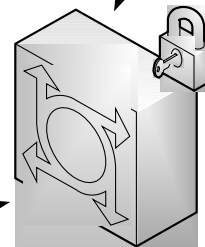
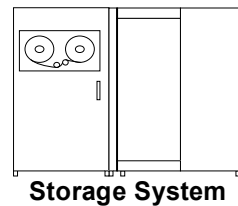
*Distribution*



*Ingest*

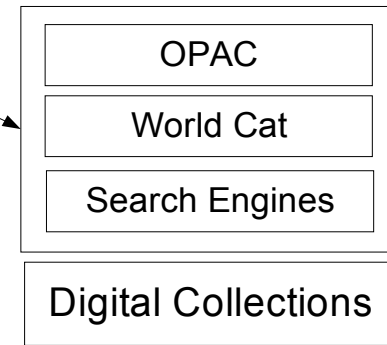


*Storage and Preservation*

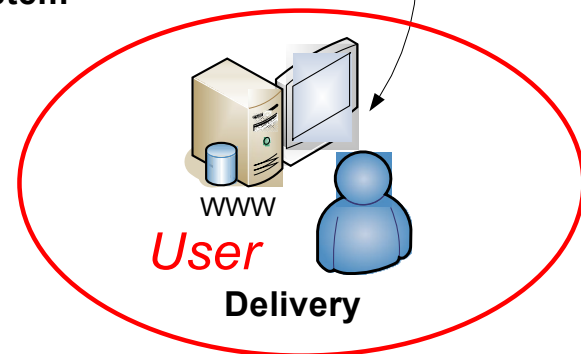


**Library Archiving and Access System**

Authentication



*Access*



# Outcomes

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## Expected Results

- **General guidance, recommendations, and decision support for high quality business plans and organisational structures / models**
  - **holistic approach**
    - **economical, technological, and legal aspects are integrated**
  - **flexibility**
    - **generic elements are provided**
  - **controlling complexity**
    - **engineering / reengineering methods are used**
    - **established and standardised modelling practices are applied**
  - **familiarity and efficiency**
    - **prior work is reused and adapted**
- **More precise formulation of further research, development, and funding**

## Current State of Our Study

- **First application of our approach**
- **Major reference models are already adapted, e.g., OAIS, DSEP**
- **Questionnaires are currently analysed**
- **Final report is scheduled for Q1/2009**



**Bavarian State Library, Munich**

**<FN>.<LN>@bsb-muenchen.de**

**Tobias Beinert, Susanne Lang, Astrid Schoger**

**University of the**

**Federal Armed Forces, Munich**

**<FN>.<LN>@unibw.de**

**Uwe M. Borghoff, Harald Hagel,  
Michael Minkus, Peter Rödiger**

**BSB** Bayerische  
Staatsbibliothek

der Bundeswehr  
Universität  München

**Project Team**