

**Business processes, the missing
link in the SDI network?**

Ezra Dessers

Overview

1. Relevance of business processes for SDI research
2. Theoretical framework for analysing business processes and organisational structures
3. Main research hypothesis
4. Methodology

**1. Relevance of business processes
for SDI research**

Geo-information streams



- Information streams
 - Run through the network of business processes
 - Receive their significance from these business processes
- The workflow which transforms resources into products, services or policies

Consequences for SDI research



- Design of the business processes may influence geodata access, use and exchange, and should therefore be studied
- But also: SDI performance should take business process goals into account.



2. Theoretical framework for analysing business processes and organisational structures
(based on social systems theory, social network theory and transaction cost approach)

Division of labour

Division of Labour



- Fundamental choice
 - Division by function
 - Functions are concentrated, processes are divided in functional steps
 - Division by process
 - Processes are kept together, functions are deconcentrated
- Result: organisational structure, i.e. allocation of functions to organisational units
- Business processes run through these organisational structures

Example: bakery



■ Function based organisation:

- Dough making
- Baking
- Packaging

→ Every cookie passes through these departments

■ Process based organisation:

- Cake
- Shortbread
- Brownies
- Muffins

→ Every department does dough making, baking and packaging of one type of cookie



Environment



- No “one best way of organising”
- Changing environmental demands
 - Dynamic environment
 - Flexibility becomes crucial
 - Predictability, routine and transparency decrease
- Process-based organisational structures are expected to offer better opportunities for handling flexibility demands.

Why is this relevant for SDI?



- Growing number of business processes, facing new demands, use and process geodata
- Increasing geodata-exchange and –use makes mutual alignment and cooperation between and within organisations ever more important. This increases the amount of flexibility which is expected from the business processes.
- SDI-initiatives seem to demand a level of flexibility that most organisations can't provide.



4. Main research hypothesis

Hypothesis



- Process-oriented organisational structures can be linked to high performing integration of geodata in the business processes

Methodology



- Relation organisational structures – SDI performance
 - Organizational structures: division of labour
 - SDI performance:
 - geodata access, use and sharing
 - contribution to business process performance
- Methodology: comparative case studies

Case studies



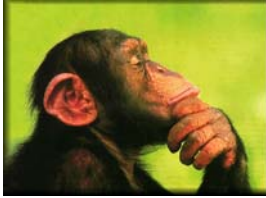
- 4 cases (= business processes)
 - Spatial implementation plans
 - Flood maps
 - Traffic accidents registrations
 - Address locations registrations
- Embedded cases
 - organisations in each business process
 - selection based on variation in organisational structure / division of labour
 - In-depth interviews

Challenges



- Operationalisation of theoretic concepts
- Determining relation between organisational structures and SDI performance

The missing link?



- No previous research has been found addressing business processes as a major factor influencing SDI performance
- Business processes are the (proverbial) missing link in the SDI network

Thank you for your attention



Ezra Dessers
Centre for Sociological Research
University of Leuven (Belgium)
Tel: +32 16 32 34 57
ezra.dessers@soc.kuleuven.be
www.spatialist.be
