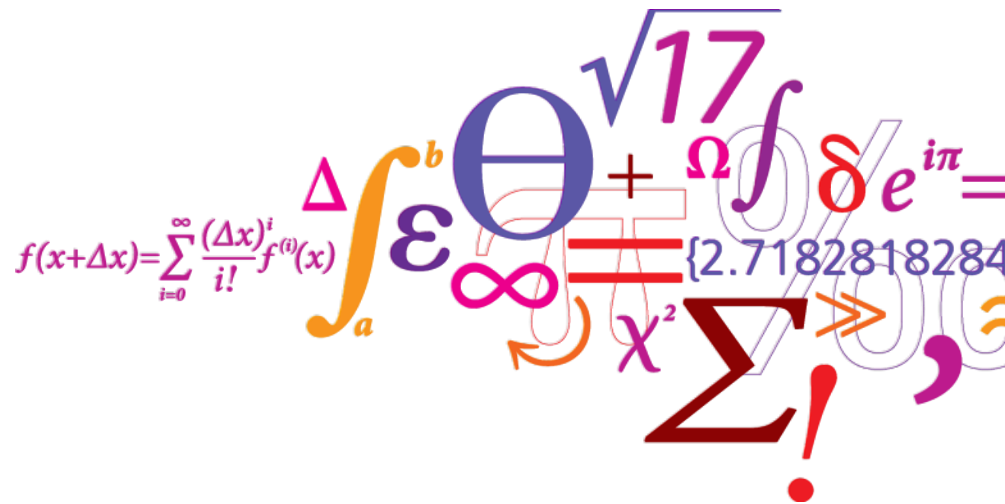


Identifying concepts for studying implementation of Information Technology in Facilities Management

Paper presentation

CIB Facilities Management Conference May 2014

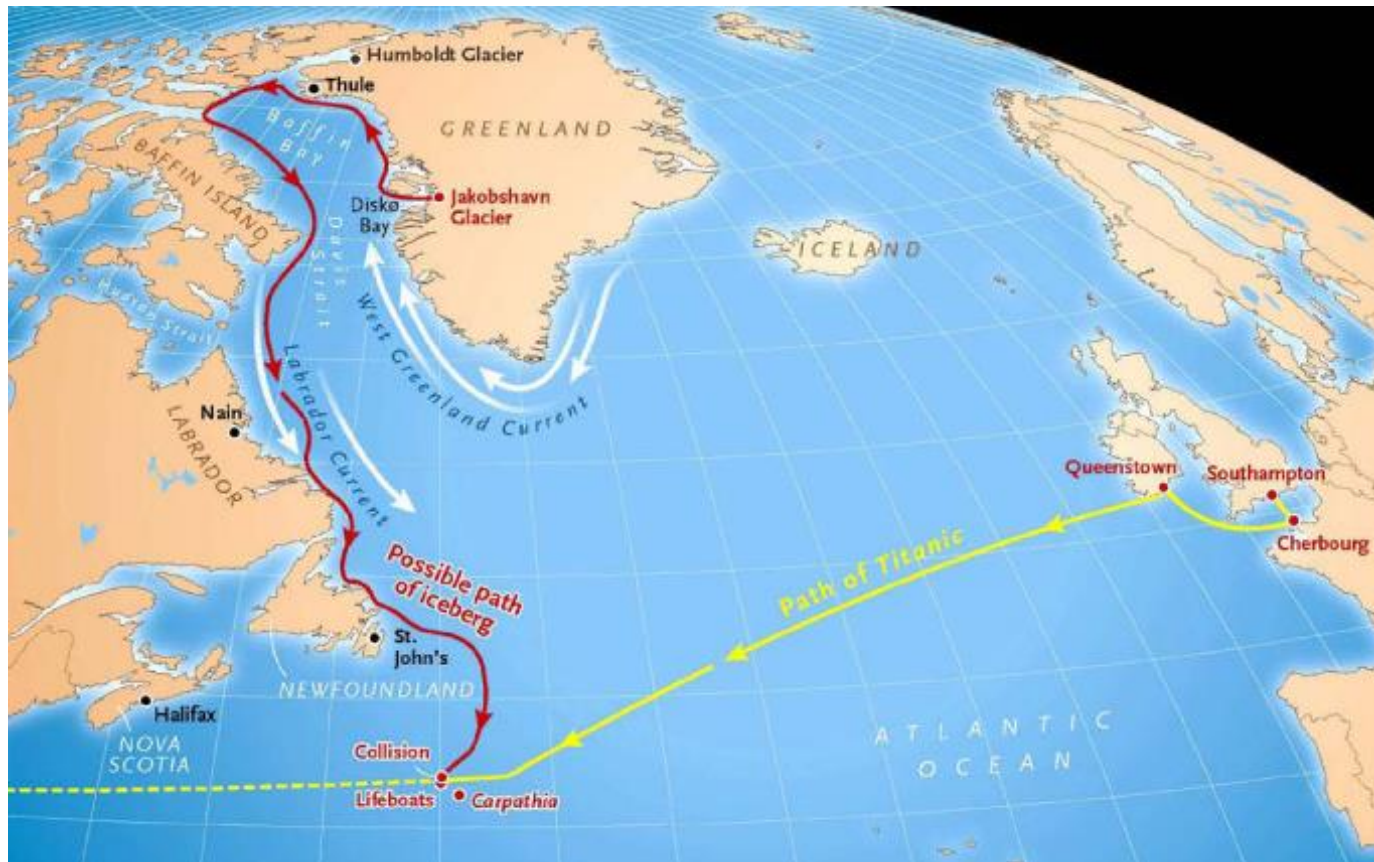
Poul Ebbesen and Sten Bonke





Only one way of seeing things makes us blind

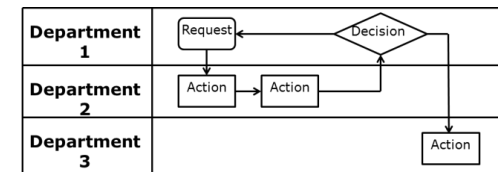
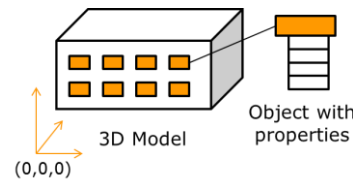
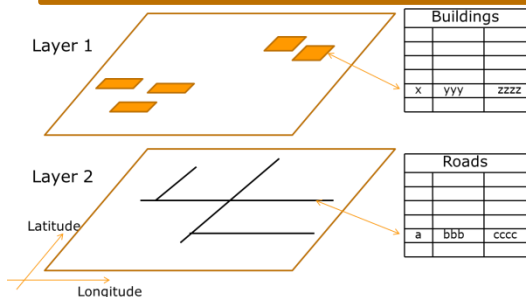
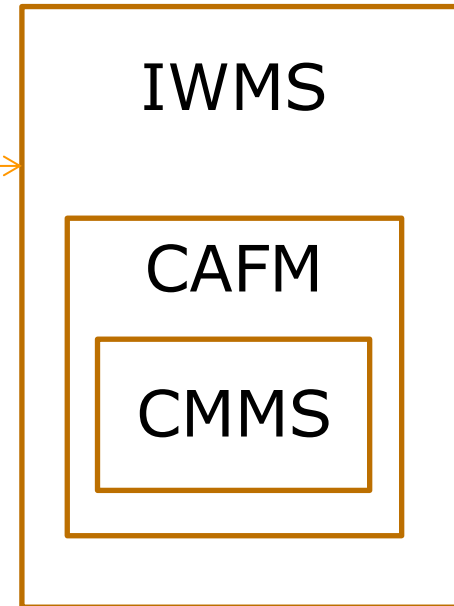
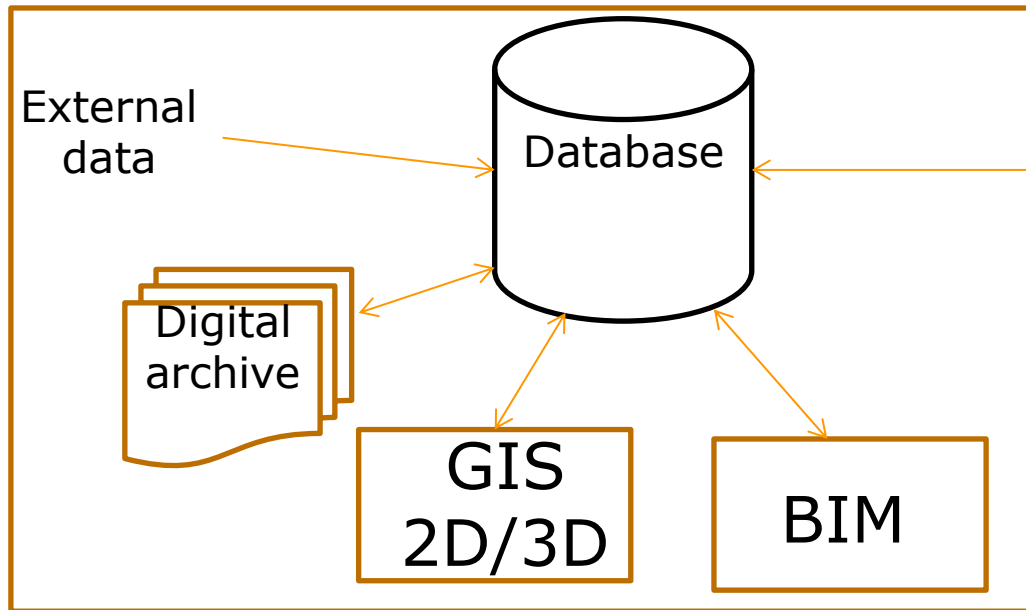
More than one process. Processes in parallel.



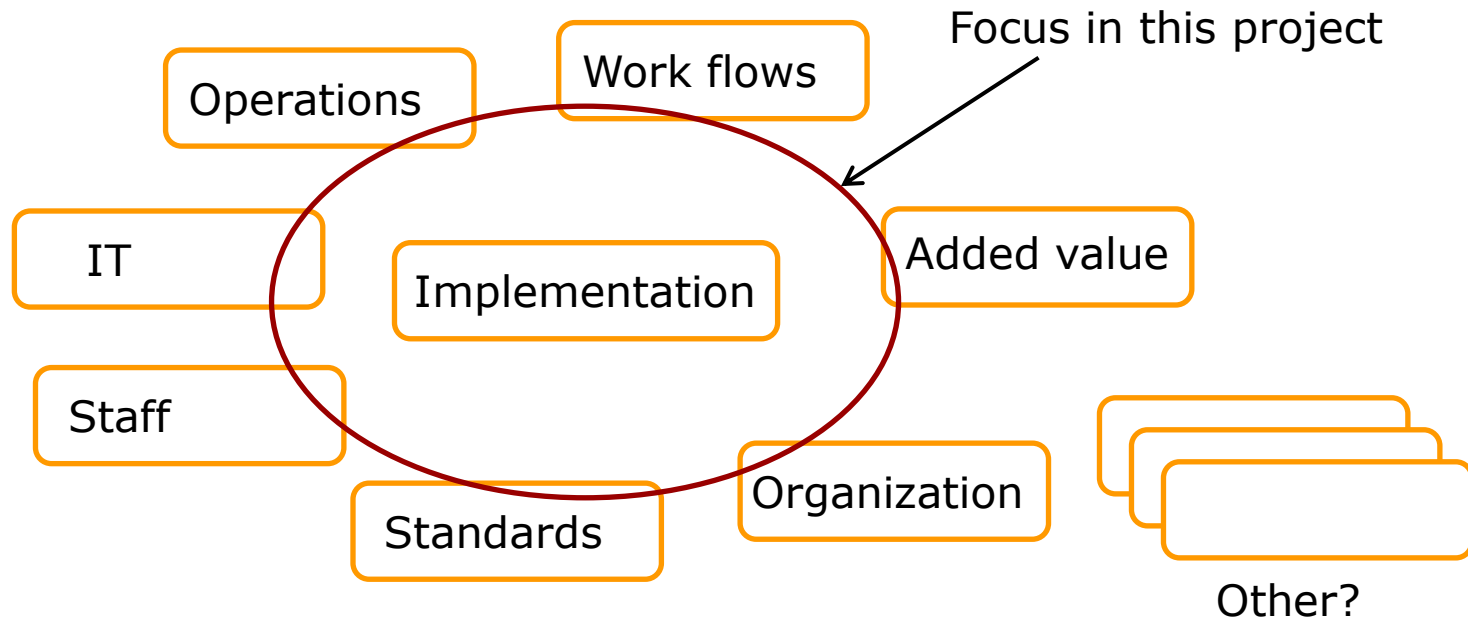
IT implementation processes in FM often fail

Data Containers

Workflow systems

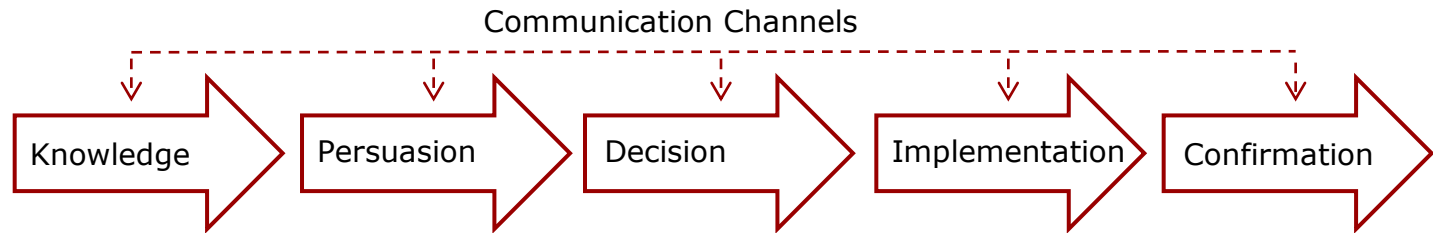


Where are the challenges?

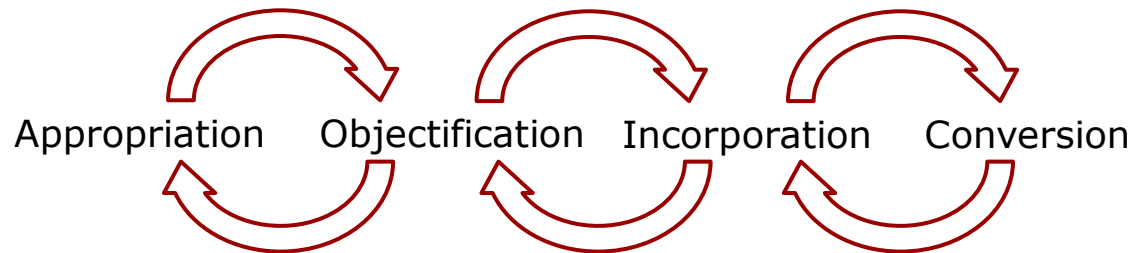


Implementing IT in FM. Many processes in parallel.

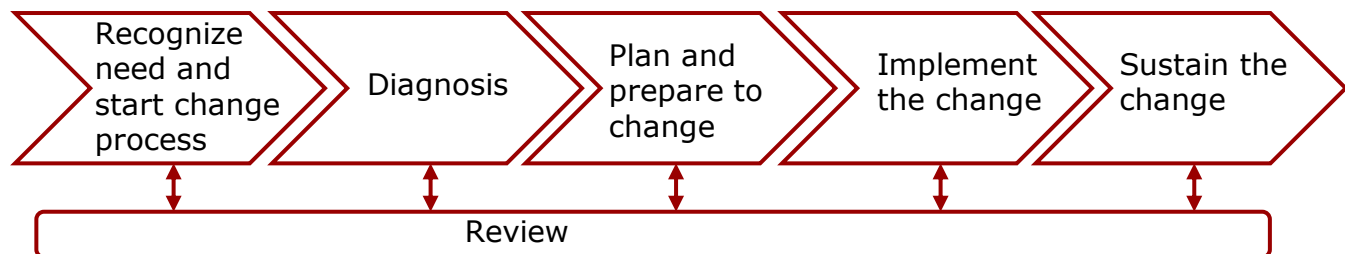
Innovation
Decision Process



Domestication
Process



Change
Management
process



My paper: Recommends a multi conceptual approach

Needed as a basis to study and fully understand the process

Concepts can be used in parallel

Can be established

To:

- Enrich the empirical data collected**
- Widen the scope of the data analysis**
- Shed light on central aspects of the process**

Criteria / filters for identifying theories and concepts

1. Process oriented theories and concepts



2. Suited for the setting



3. Applicable to this specific research



4. Not overlapping



Identified theories and concepts

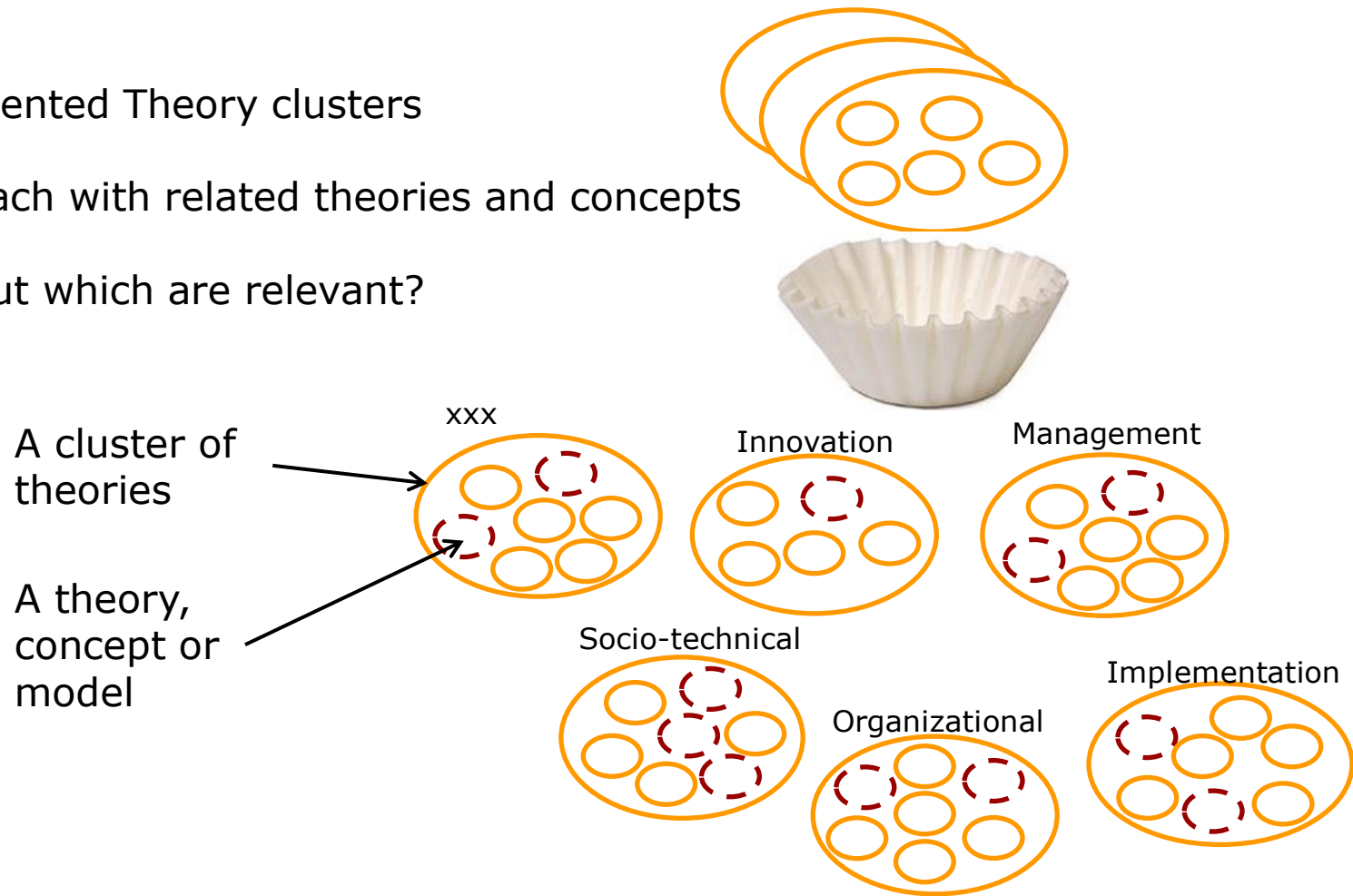


1. Process oriented theories and concepts

Process oriented Theory clusters

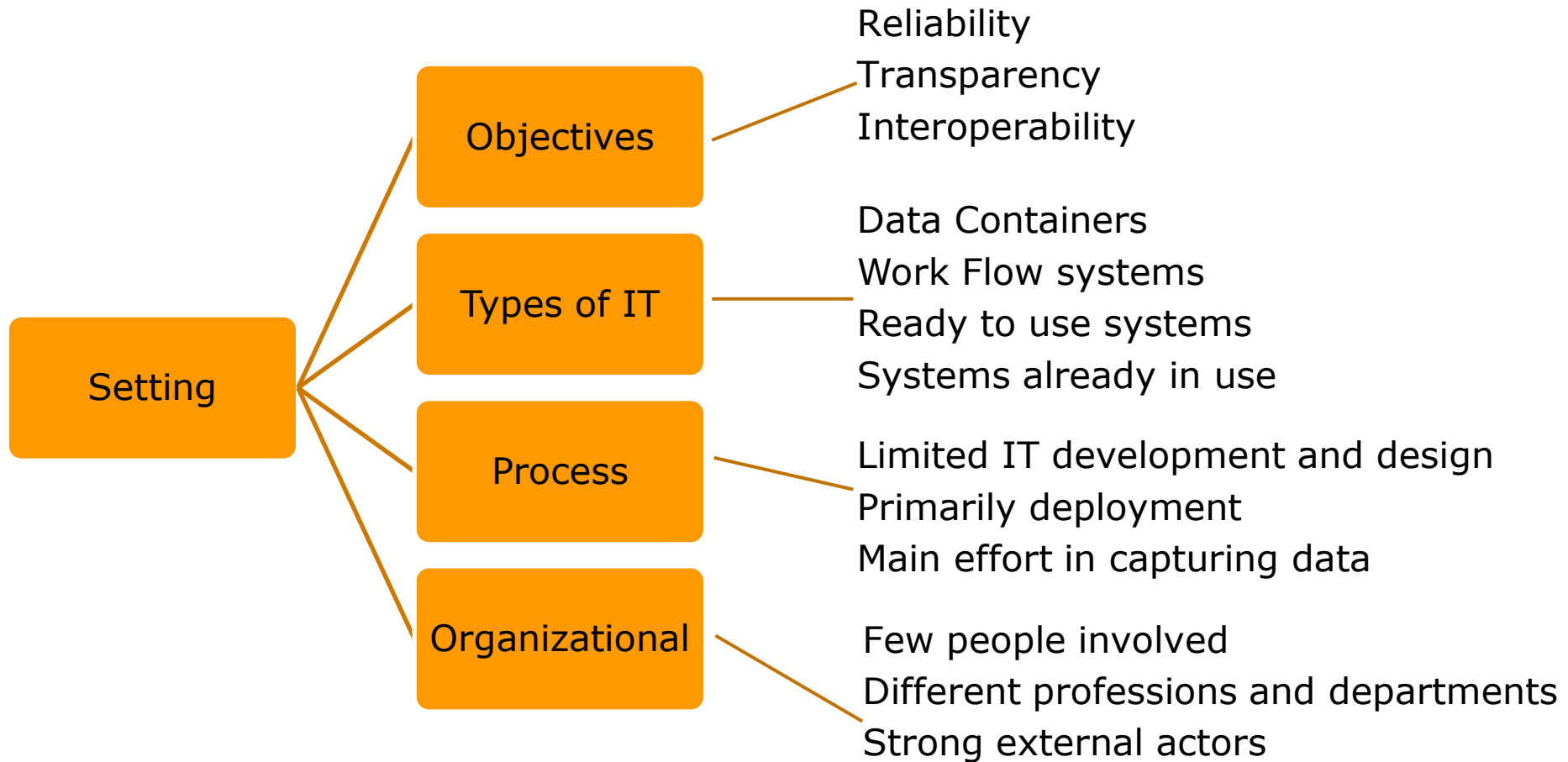
Each with related theories and concepts

But which are relevant?



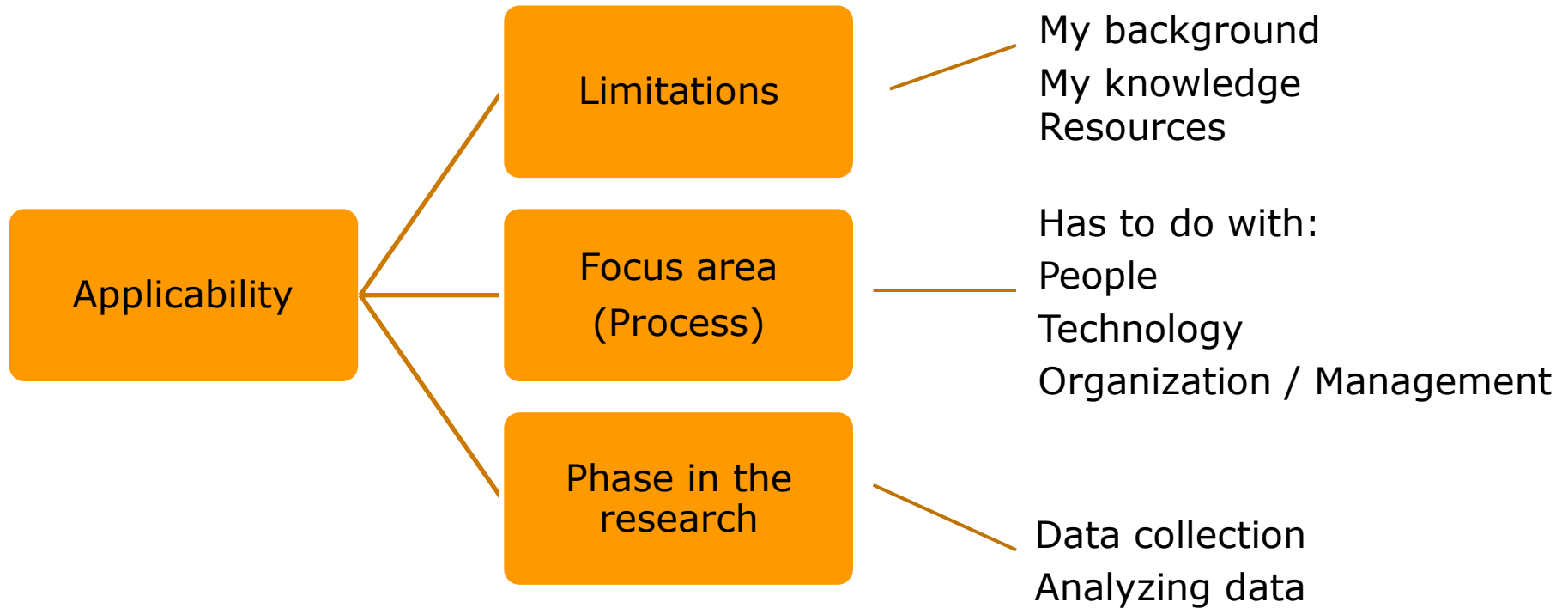


2. Suited for the setting





3. Applicability to this research





4. Not overlapping



Identified theories and concepts



- **Innovation**

- General Innovation Theory
- Diffusion of Innovations

- **Sociotechnical**

- Social Construct of Technology (SCOT)
- Actor Network Theory (ANT)
- Boundary Objects
- Domestication Theory
- Intermediaries

- **Organizational**

- Configuration models
- Diagnostic models

- **Management**

- Project Management Theory
- Change Management Theory

- **General Implementation Theory**

- Structural model of technology
- Technology acceptance model (TAM)
- Success and failure models

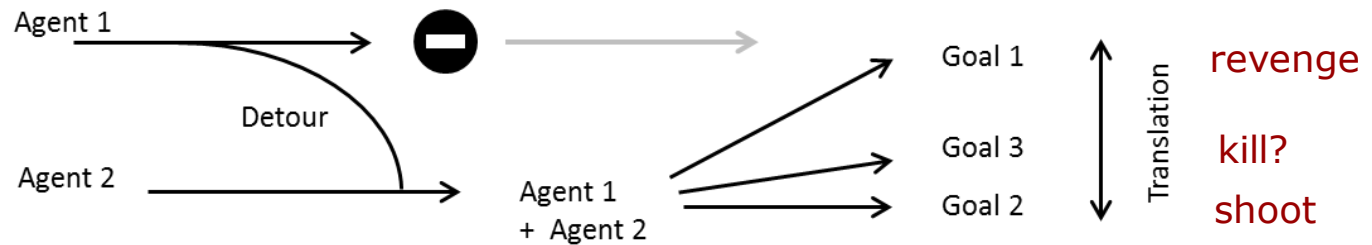
Each theory offers approaches, concepts, dimensions and variables for studying, understanding and describing the phenomenon in focus:

Implementation process

Focus in this project

Example: The concept of Translation from ANT 1/2

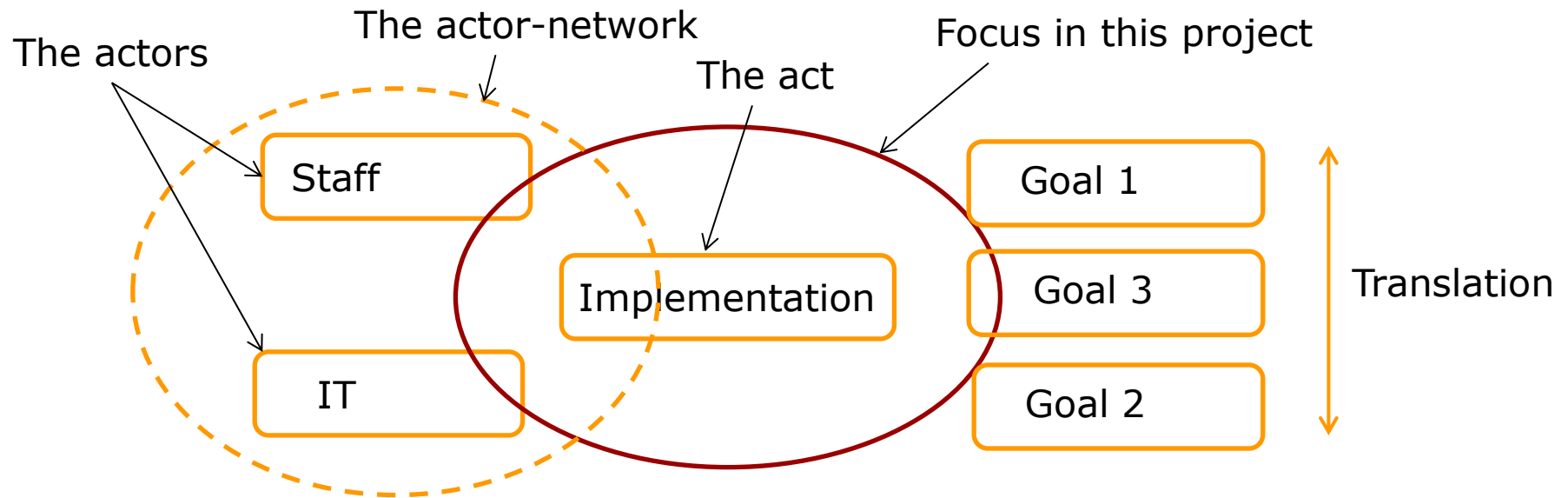
- Focus on connections between human and non-human entities
- connections creates new entities not necessarily practicing the sum of characteristics of the original entities
- Humans and non-humans are treated equally
- Non-human entities may be be inscribed by the creator



First meaning of mediation : Goal translation (Latour 1999, Fig. 6.1)

woman + gun = gunwoman or womangun

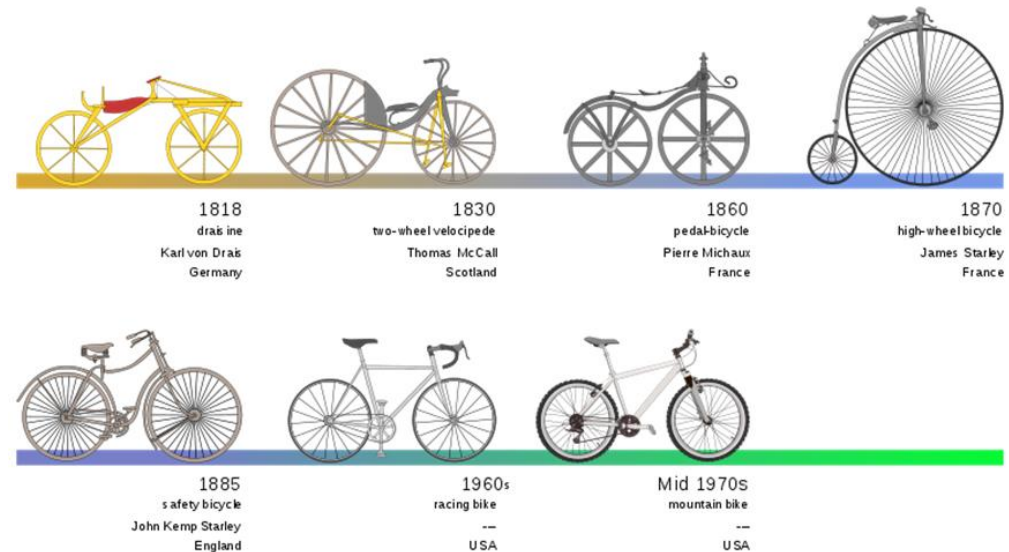
Example: The concept of Translation from ANT 1/2



- When people interact with IT a new hybrid entity is created (IT-people or People-IT).
- The original goal for the people was Goal 1.
- The IT is inscribed by the designer with a goal or functions: Goal 2.
- The hybrid actor-network may choose another Goal 3

Example: “Humans shapes technology” from SCOT 1/2

- Technology does not determine human action
- Human action shapes technology
- For any technical problem there are a range of solutions
- Which technology is chosen depends on
 - social factors
 - the relative power of social actors
- Key terms:
 - Interpretive flexibility
 - Attribute of meanings
 - Closure

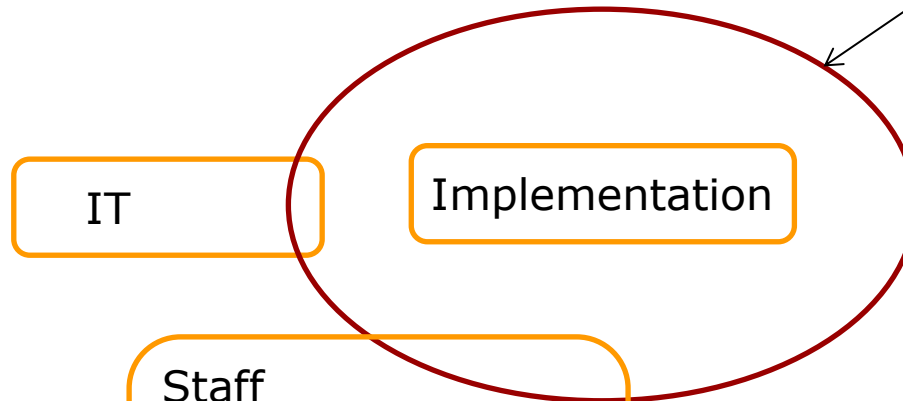


Example: "Humans shapes technology" from SCOT 2/2

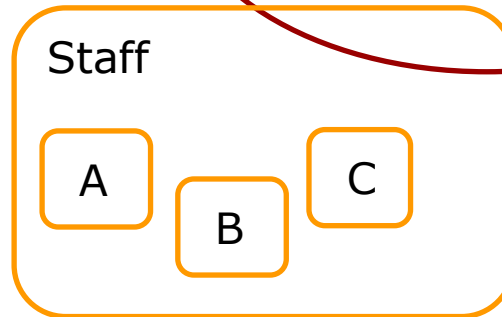
A problem:
Overview of facilities is needed

Focus in this project

1. CAD
2. BIM
3. GIS
4. 3D GIS



A range of IT solutions are available



Social groups defined by the meaning they attach to / attribute the technology

If actors in social groups B are the most power full, and they attach a specific culturally / socially accepted meaning to technology 2, then it most likely to be chosen

My Paper: Recommends a multi conceptual approach

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Can be established

To:

- Enrich the empirical data collected**
- Widen the scope of the data analysis**
- Shed light on central aspects of the process**

Thereby:

- Finding elements in the process which should be improved in order to add value**

