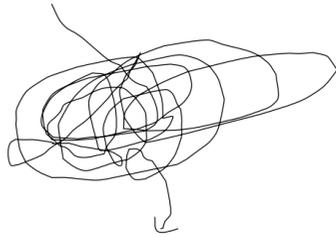


Please quote as: Li, M. M.; Peters, C.; Ernst, S. -J. & Leimeister, J. M. (2018):
Towards Bridging the Gap between Business Model Innovation and Practice Using
Hypergraph-based Modeling. INFORMS Annual Meeting poster presentation.
Phoenix, Arizona, USA.

Towards Bridging the Gap between Business Model Innovation and Practice Using Hypergraph-based Modeling

Situation

Business Model Innovation



difficult task

Enterprise Systems

Aim

Make transition of business model innovation into Enterprise Systems easier.

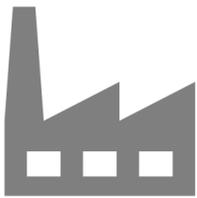
Foundation

Hypergraph Theory (Berge 1989)

Service Systems Perspective

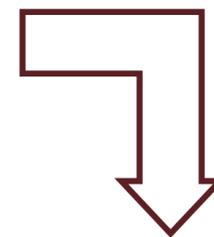
(Maglio & Spohrer 2008)

Business



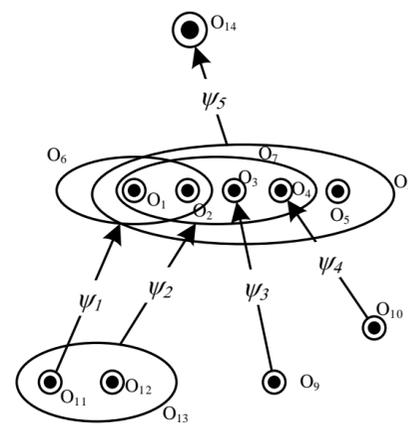
Service Systems Perspective

Service System Concepts	Visualization	Mathematical Notation
Resource	nodes/vertices	$r \in R$
Actor	hyperedge	$a_i \subset R$ and $R = \bigcup_{i=1}^n a_i$
Service Object	hyper graphs	$o \in O(R, A)$,
Service Activity	mapping ψ	$\psi : O \rightarrow O$
Service System	service graph	$S(R, A, \psi)$



We apply a service systems perspective and map them to hypergraph theory concepts to model a CRM implementation project.

Hypergraph-based Modeling of Business Model



- O₁ System Integration and Setup
- O₂ Training Support Service
- O₃ Implementation & Testing Service
- O₄ After Sales Service
- O₅ Internal domain-knowledge service
- O₆ Solution A: Basic Support Service
- O₇ Total Solution Service
- O₈ Tum-Key Service
- O₉ Consulting Practices
- O₁₀ Hotline Service
- O₁₁ Solution A: Basic Support Practices
- O₁₂ Solution B: Implementation Practices
- O₁₃ Solution C: Total Solution Practices

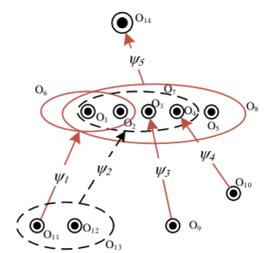
- psi₁ Solution A: Configuration
- psi₂ Solution C: Configuration
- psi₃ Consulting Configuration
- psi₄ Hotline service Configuration
- psi₅ Tum Key service provisioning

O₁₄ Project Success

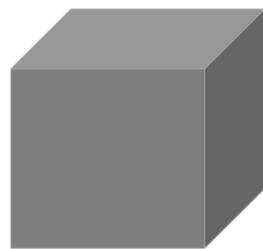
Analysis



By illustrating a business model, decision makers can decide which „path“ to choose to produce the end result.



Implementation of innovation



Resolution