

Governing mobile service innovation in co-evolving value networks

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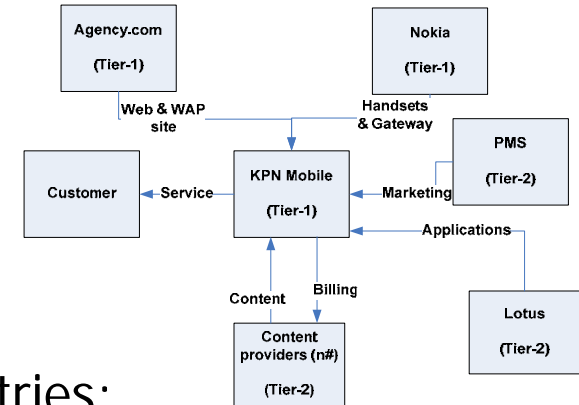
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1

Problem description



- Value networks: Many actors; differing industries; resource dependencies; no accepted role division; novel roles; external drivers and dynamics
- → Governing collective action is important business model design issue (Methlie & Pedersen 2007)
 - Trend: From operator-controlled walled gardens to open models (Ovum 2006)
- What governance mechanisms work best in different phases of mobile service innovation?



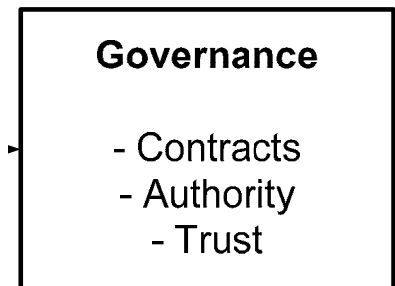
Knowledge gap

- Existing research
 - Governance (Powell 1990; Jones et al 1997; Heide 1994)
 - Value networks (Allee 2000; Stabell & Fjeldstad 1998; Li & Whalley 2002)
 - Resource dependence theory (Pfeffer & Salancik 1978)
 - Service innovation phasing models: e.g., innovation management (Tidd et al 2001); venturing (Burgelman 1983; Mason & Rohner 2002); diffusion (Rogers 1962)
 - Co-evolution of networks (Monge & Contractor 2001; McKelvey 1999)
- But:
 - No theory on governance dynamics
 - Do theories still hold in complex next-gen value networks?

Research question

- What governance mechanisms are used in value networks during different phases of next generation mobile service innovation?
 - Value networks that co-evolve with their environment, i.e. technology, market and regulation drivers
 - During mobile service innovation phases (De Reuver et al 2008)
 - Development / R&D phase
 - Roll-out / Implementation phase
 - Commercial / Market phase

Conceptual model



Uzzi (1997)
Contractual Governance (Macneil & Williamson 1985; Williamson 1979; Hennart 1993)
Resource dependence (Pfeffer & Salancik 1978)
Reciprocity (Bachrach & Barzelay 2000; Elfrink et al 2006; 1990; Jones et al 1997)
Mental models (Uzzi 1997; Poppo & Zenger 2002)
Institutional isomorphism (DiMaggio & Powell 1983)

Uzzi 1997)
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Survey ↔ Case studies

	Survey	Case studies
Main function	Broad, statistical validation	In-depth insights
Level of analysis (Marsden 1990)	Egocentric	Population
Level of data collection (Mizruchi & Marquis 2006)	System-level	Dyadic level
Measurements (Straub et al 2004)	One-sided	Two-sided
Boundary conditions (Marsden 1990)	As perceived by respondent	Those actors providing specific and / or non-substitutable resources for the service offering

Case study selection

- Cases should be on mobile services ...
 - ... that are offered by value network of actors (i.e. >3)
 - ... that have first be developed since at least one year ago
 - ... on which informants and written documents are accessible
- Theoretical sampling dimensions (Yin 1984)
 - Domain, i.e. commercial vs business services
 - Dominant actor, i.e. operator vs content provider centric

	Operator centric	Content provider centric
Business service	WijkWijzer (National police)	Attenderingsservice (Police region Gron)
Commercial service	I-mode → KPN Vandaag (KPN)	Event Assistant (Log On)

Information sources & field procedures

- Information sources
 - Interviews as primary
 - Documents for corroboration
 - On current and past situation
- Finding cases
 - Existing industry contacts
 - Check the match on selection criteria (website; key informant)
- Interview participants
 - Working at organizations in value net
 - Strategic or operational position
 - Involved currently or in past
 - Found by snowballing
 - If applicable, multiple interviews over time
- Interviews
 - Semi-structured
 - Questions based on constructs conceptual model
 - Subjective performance measures on service and governance
- Case database includes
 - Interviews
 - Transcript → Summary → Conceptual summary
 - Analyzed documents
 - Intermediary reports
- Case database includes
 - Interviews
 - Analyzed documents
 - Intermediary reports

Data analysis: Defining the phases of service innovation

Transition	Indicator	Date
Start Phase I	Conception service idea	
I → II	Launch on market	
II → III	Critical mass	
	Focus on customer retention	
	Launch of version 1.0	
	Targeting new markets	

Phase	Activity	Start date	End date
I	Researching technology		
	Deciding service concept		
	Finding partners		
	Focus group sessions		
II	Alfa/beta version		
	Implementing technology		

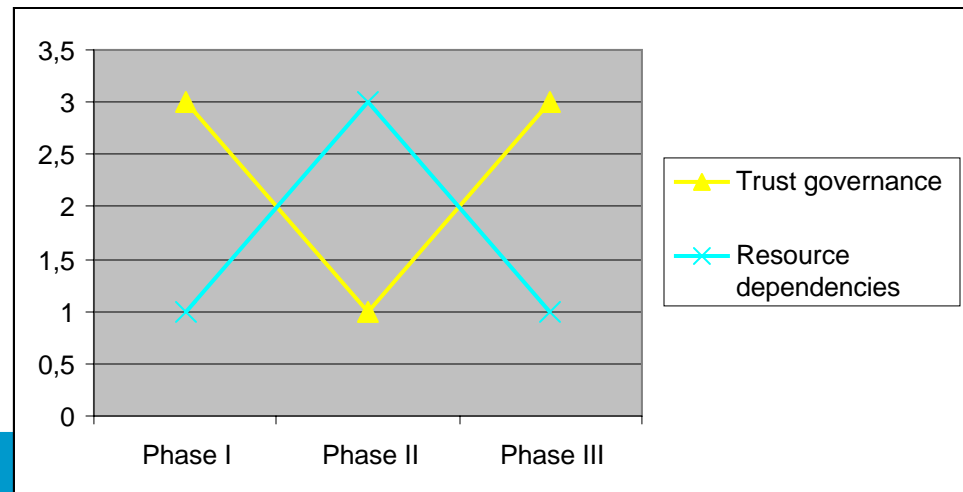
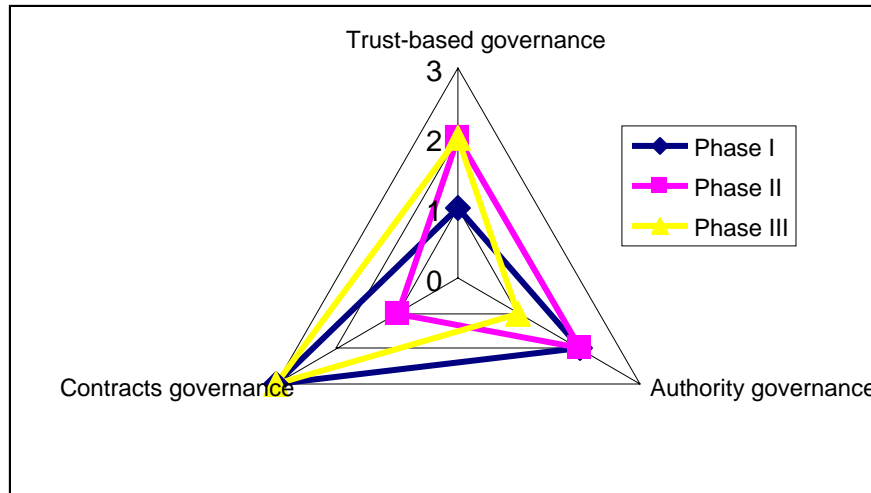
Data analysis: Value network level

	Phase I	Phase II	Phase III
Market drivers			
Technology drivers			
Regulation drivers			
Structural embeddedness			
Performance			

Data analysis: Dyadic level

	Phase I			Phase II		
	Actor A – B	A – C	B – C	A – B	A – C	B – C
Relational embeddedness						
Resource dependencies						
Trust-based governance						
Contracts-based governance						
Authority-based governance						
Performance						

Data analysis: Fictitious results



Data analysis: Issues & solutions

- Conflicting answers
 - Going deeper into the issue
 - Constructing a disagreement index
- Missing data
- Data overload: How to come from rich descriptive data to aggregate measures?
 - Recording decision rules for coding the rich data
- Differing number of interviews per case