



Aalto-yliopisto
Kauppakorkeakoulu

Holistic model of innovation network management: Action research in elderly health care

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Symposium

Practice-based innovation: Something for you?

23 November 2010, 10:00-11:40, Sibelius Hall, Lahti

Research task

- Research question: What should a manager do to improve the efficacy of an innovation network?
- Research aim: to formulate a holistic model of network management that managers can follow to improve the effectiveness and efficiency of an innovation network
- Empirical context: elderly care in Finland
- Although we search for a model of network management, we maintain the understanding that the phenomenon of networking is inherently complex and networking situations are idiosyncratic (Hibbert et al. 2008)

Research method

- Action research: network management interventions and learning from the interventions
- A three year (2008-2011) project on creating elderly care networks and improving their functioning in two cities in Finland
- More than 100 workshops in 8 different networks
 - 10-100 participants per workshop
 - Target: to develop new services, to solve problems in new ways, and to improve network functioning
- Data: individual and focus group interviews, field notes, researchers' diaries, survey questionnaires
- Analysis: finding patterns in the data concerning factors that are related to the research aim



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Action research project: Driving change in welfare for the elderly

Research project funded by
the European Social Fund

Vipuvoimaa
EU:lta
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Empirical context: elderly care

- Vantaa city
 - City level elderly care strategy (new strategic targets, network building)
 - Home care (problem-solving, technology strategy, better relationships to other units)
 - Informal care (new service development)
 - Senior info and senior wellbeing clinic (new service development)
 - Day care services for the elderly (problem-solving, new service development, new regional networks)
- Espoo city
 - Home and disabled care (problem-solving, new service development, relationship building)
 - Acute care value chain (problem-solving, network building)
 - Geriatric quick response teams (new service development, problem-solving)

Background: Categories of inter-organizational management studies (Hibbert et al. 2008)

Categories that help to conceptualize the nature of collaboration and identify management challenges		Categories that offer prescriptions or responses to management challenges	
Category	Examples	Category	Examples
Category I: Life-cycle, stages, and phases	Phases such as problem setting, selection, direction setting, getting engaged, learning to collaborate, structuring, stabilization, dissolution.	Category IV: Competencies, behaviors, and tasks	Network building capabilities; activities such as consensus building and problem solving
Category II: Analytical conceptualizations: typologies, models, and diagnostics	Network typologies with different categorizing variables, such as hierarchical levels, and degree of risk or trust	Category V: Guidelines and process steps	Descriptions of best practices, contingencies of best practices, steps of effective networking
Category III: Success and failure factors	Lists of success factors promoting or inhibiting networking success, measurements using single or multiple criteria	Category VI: Tools and facilitation	Techniques for categories IV and V, such as project management techniques and group work facilitation

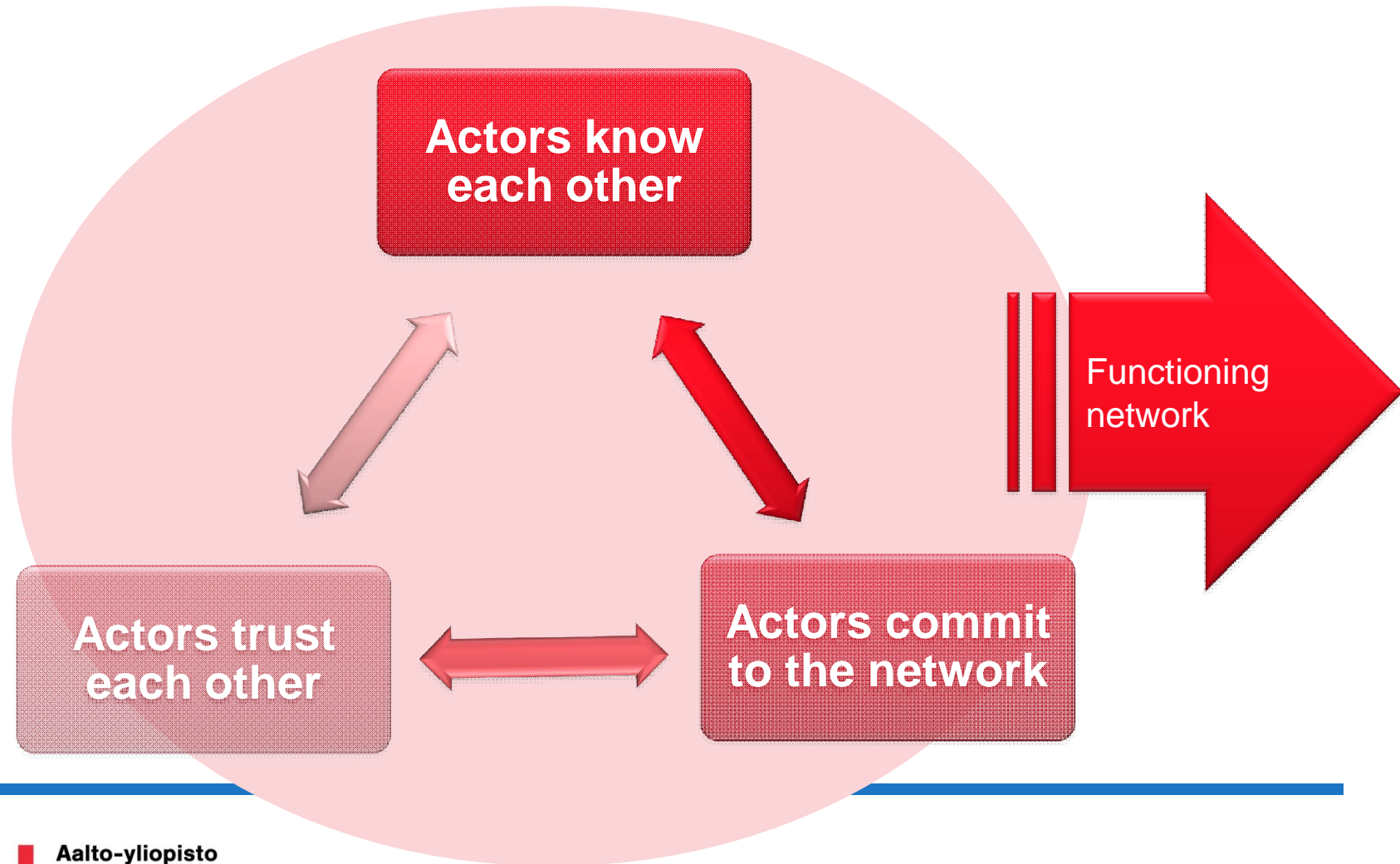
7th category that combines the previous six categories

- A summarizing, holistic framework
- This holistic framework is neither fixed nor precise
 - “Collaboration is too complex and idiosyncratic for precise prescriptive remedies.” (Hibbert et al. 2008)
 - The holistic framework is useful precisely because it provides the network manager with a general typology of research contributions that can be used as “handles for reflective practice” (Hibbert et al. 2008)

Innovation networks and their functioning

- Instability arising from uncertainty regarding future behavior, absence of an authority (Parkhe, 1993)
 - Innovation network management involves (Dyer and Nobeoka 2000):
 - Using appropriate governance mechanisms
 - Developing inter-firm knowledge sharing routines
 - Making appropriate relationship-specific investments and
 - Changing the partnerships as they evolve, while managing partner expectations
 - Innovation networks need knowledge management, including sense-making of dispersed knowledge and emerging new ideas (Möller & Rajala, 2007; Harmaakorpi & Melkas, 2005)
 - Innovation network management is more an activity of orchestrating a group of independent actors rather than tight coordination (Dhanaraj & Parkhe, 2006). Three key tasks:
 - Ensuring knowledge mobility
 - Managing innovation appropriability, and
 - Fostering network stability
 - Innovation network success depends on size and diversity of members and density of connections between them (Dhanaraj & Parkhe 2006; Doz et al. 2000; Lorenzoni & Baden-Fuller, 1995)
-

Trust and commitment as the basic elements of a functioning (innovation) network



Trust and commitment

- Basic elements of a functioning network (e.g. Morgan & Hunt 1994)
 - Trust evolves over time between actors (Inkpen & Currall 2004; McEvily et al 2003) and increases the likelihood of commitment in joint activities (Håkansson & Snehota 1995)
 - Trust and commitment grow over time as the actors learn to know each other and create shared values (Dwyer et al 1987; Hunt & Morgan 1994a)
 - At the beginning of a relationship trust and collaborative objectives create the climate for and shapes interaction between the partners, while later in the relationship learning and trust co-evolve (Inkpen & Currall 2004; Laaksonen et al. 2008)
 - As trust increases, so does the willingness to take risk and commit to collaboration. Commitment makes people more willing to invest their time, effort, and attention to collaboration (McEvily et al. 2003).
 - Trust has direct benefits related to communication, conflict management, negotiation processes, satisfaction, and individual and unit level performance (McEvily, Perrone & Zaheer 2003)
 - Trust induces positive interpretations of other's behavior, resulting in improved cooperation (McEvily et al. 2003)
 - Lack of trust induces concealment and distortion of information, increases the likelihood of misunderstanding and misinterpretation, and results in the lack of open discussion (Zand 1972)
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Results

- **Main result:**

A process model for managing development networks in the field of integrated care

- **Detailed results:**

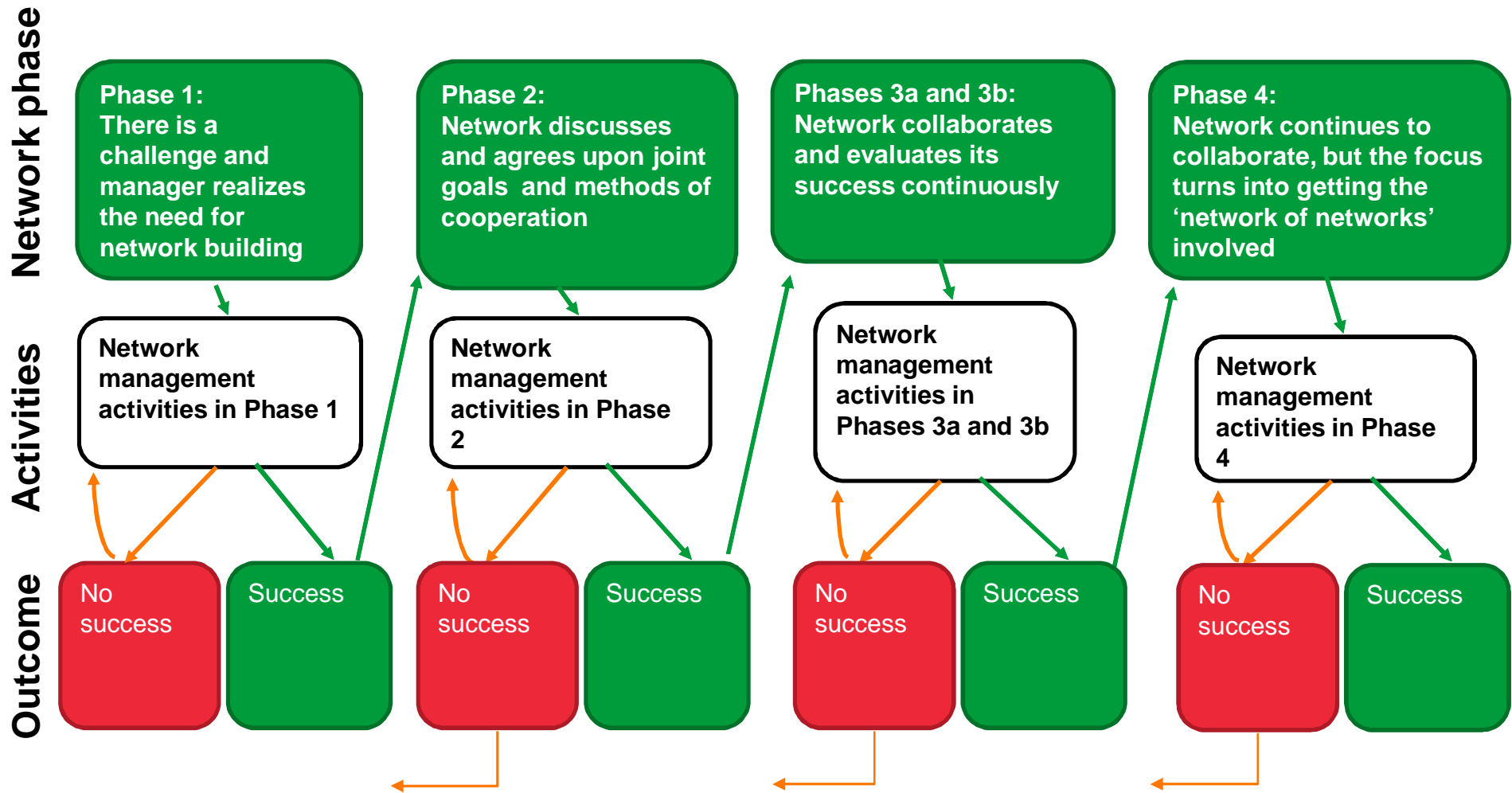
Dynamic interaction patterns between various elements that are related to the functioning of networks:

- Actor roles
- Teamwork/participative methods
- Planning, doing, evaluating etc. activities
- Resources and capabilities
- Trust and commitment
- Etc.

What is a "network management" and a "network manager"?

- Network management is something that people do
 - tasks that increase the level of trust and commitment or improve the functioning of a network in some other way
- Network management is not something done by 'managers' only (Järvensivu & Möller 2009)
- There can be a "network manager," but the creation of trust and other managerial functions can also be performed by others
- In other words, any or all actors in a network can perform network management tasks

Holistic model of network management



Holistic model of network management

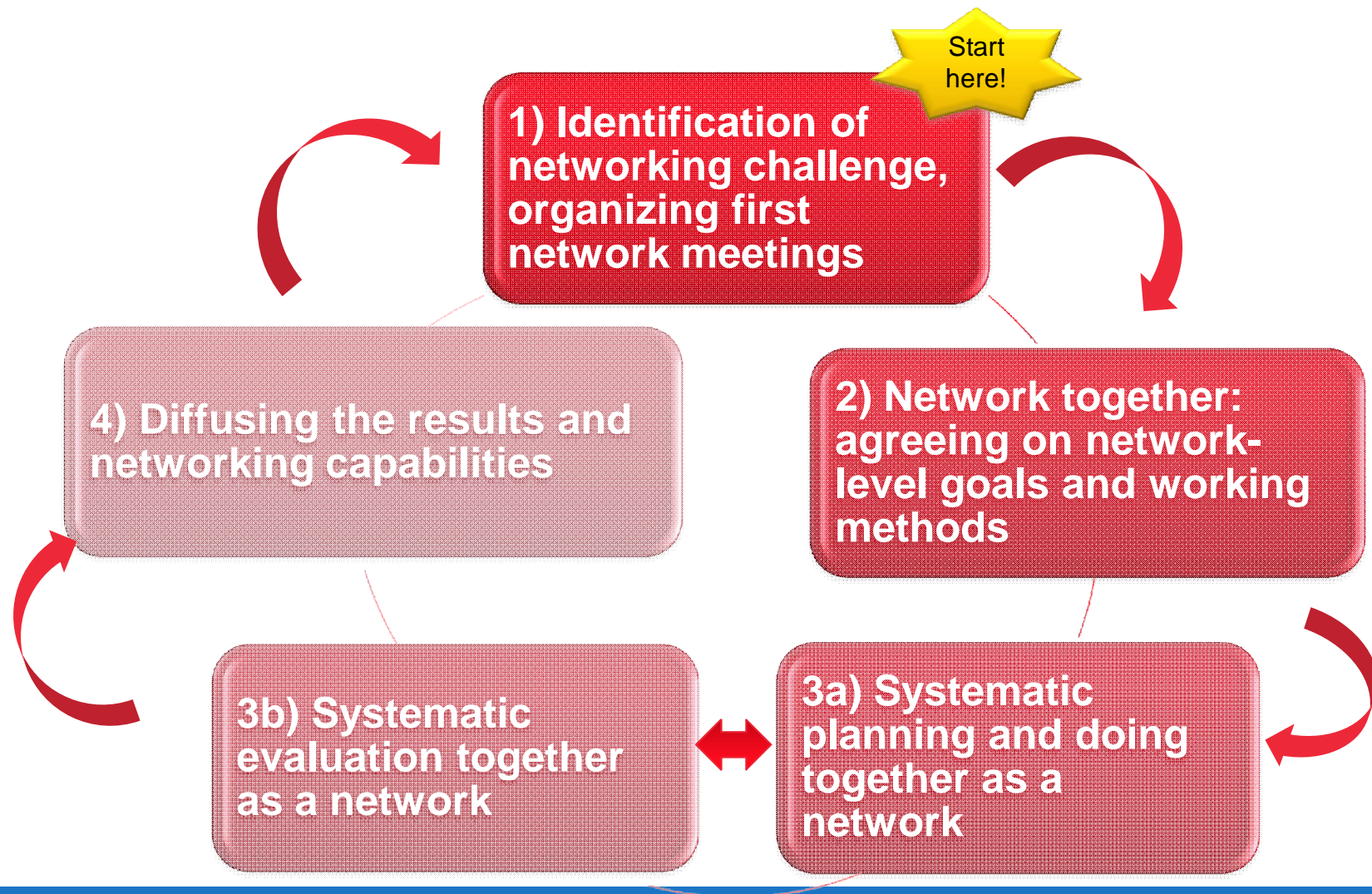


Table 2: Holistic model of innovation network management (first page)

	<i>Phase 1: Identification of challenge that requires a network, organizing first network meetings</i>	<i>Phase 2: Agreeing on network-level goals and means of collaboration</i>	<i>Phase 3a: Systematic planning and doing, according to agreed goals and means</i>	<i>Phase 3b: Systematic evaluation of collaboration and the developed innovation</i>	<i>Phase 4: Diffusing the innovation</i>
Activities	<ul style="list-style-type: none"> - The person that originally identifies the challenge is responsible for taking the first steps - Identifying the knowledge and knowhow required to solve the challenge - Identifying actors that have the required knowledge and knowhow - Organizing first network meeting(s) and inviting and motivating key actors to join meeting(s) - Discussing with the key actors to gain a better understanding of the situation - Initial planning of network goal and means - Choosing (a) network manager(s) to take on next steps 	<ul style="list-style-type: none"> - Coordinating the first network meeting(s) - Motivating the importance of a) the challenge and b) the need for network building - Allowing the network members to learn from/about each other - Facilitating open and honest discussion - Agreeing on the goals, means, and structure of the network - Re-evaluating required knowledge and knowhow and key actors - Inviting and motivating new network members - Network management now becomes the responsibility of the whole network; the network may choose to have one person or a small group to take the responsibility 	<ul style="list-style-type: none"> - Coordinating and facilitating recurrent collaboration forums for systematic planning and doing - Enabling the creation of trust and commitment: empowerment, openness, etc. - Coordinating and facilitating dialogue and communication within the network - Responding to member turnover: familiarizing new members into the network - Communicating with the 'network of networks' to gain a better understanding of its needs and requirements 	<ul style="list-style-type: none"> - Coordinating and facilitating recurrent evaluation forums - Agreeing on the means of evaluation - Collecting and evaluation information together - Re-evaluating: Is network meeting its goals? Is network functioning as planned? Does the network have required resources? Is there a need to change goals/means/membership? Is there still a need for this network? - Celebrating achievements and learning from mistakes - Agreeing on corrective measures together 	<ul style="list-style-type: none"> - Bringing the innovation to relevant diffusion forums/structures within the 'network of networks' - Discussing with the 'network of networks' to gain a better understanding of the situation - Fostering trust and commitment within the 'network of networks' - "Selling" the innovation", or motivating the need for adopting the innovation - Evaluating the success of innovation diffusion - If needed, building or improving the forums/structure of innovation diffusion

Table 2: Holistic model of innovation network management (continued, second page)

	<i>Phase 1: Identification of challenge that requires a network, organizing first network meetings</i>	<i>Phase 2: Agreeing on network-level goals and means of collaboration</i>	<i>Phase 3a: Systematic planning and doing, according to agreed goals and means</i>	<i>Phase 3b: Systematic evaluation of collaboration and the developed innovation</i>	<i>Phase 4: Diffusing the innovation</i>
Success criteria	<ul style="list-style-type: none"> - Key actors are involved and motivated to participate in discussions - Key actors are willing to trust that network building is a good way to solve this type of challenges, and this challenge in particular - There exists an initial vision of required knowledge and know-how to solve the challenge 	<ul style="list-style-type: none"> - Trust begins to evolve and support commitment - Required knowledge and knowhow, i.e. actors that have these, are brought together - Network members know each other and start to understand each others' needs - The network agrees on goals, means and structure of the network - The agreed goals concern both the collaboration progress (how the network functions) and the outcomes (amount and quality of expected innovations) 	<ul style="list-style-type: none"> - Trust and commitment continue to evolve; members are empowered - Members know each others' expertise, goals, and needs - Agreed goals (in terms of both collaboration progress and outcomes), means and structure of the network are followed - Network structure is stabilized; member turnover is taken into account - Network communicates effectively with the 'network of networks' 	<ul style="list-style-type: none"> - Members are motivated and empowered to execute the evaluation plan - Network collects and processes evaluation information together - Progress of the collaboration is evaluated: evolution of trust and commitment - Outcomes of the network are evaluated: has the network produced valuable innovations 	<ul style="list-style-type: none"> - Network members agree on and commit to a diffusion plan - The 'network of networks' is empowered in the diffusion process - The innovation(s) created by the network is (are) spreading in the 'network of networks'

Discussion and conclusions 1/2

- The practice of network management can be understood as a holistic ‘whole’
 - The model brings together complex concepts as trust, commitment, and management tasks – but does not reduce any of these into a particular (and thus inevitably partial) ‘variable’ of network success as previous research has tended to do
 - It is not any single element that counts, but the comprehensiveness and adaptability of the ‘whole’
- Attempts to reduce network management practice into particular theoretical models (phase models, success factors, managerial steps, etc) are inevitably imprecise, because none of these alone is able to capture the complexities and dynamics of reality
 - Any complete theory of network management has to account for the need to look at the reality simultaneously from several angles

Discussion and conclusions 2/2

- Much in line with existing innovation literature (e.g. Dhanaraj and Parkhe 2006), our model highlights the importance of fostering knowledge mobility and network stability.
 - Creating trust-supporting collaboration structures will open up knowledge sharing, enable collective learning, and help to stabilize the network
 - Innovation appropriability did not come across as a key issue in our study, perhaps due to the large role of the public sector in the studied context (i.e. non-profit orientation)



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Thank you!

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