Governance of Interorganizational Project Networks

March 28, 2022

Prof Ralf Müller
Prof Nathalie Drouin
Assoc Prof Christine Unterhitzenberger
Agenda

• Part 1 - Background (Nathalie Drouin)
  • Background, aims and research questions
  • Concepts and definitions
  • Methodology and research team

• Part 2 - Framework (Ralf Müller)
  • Network governance
  • Governance of networks
  • Metagovernance

• Part 3 - Conclusions (Christine Unterhitzenberger)
  • Answers to research questions
  • Implications for practice
  • Most important take-away’s
Part 1

Background

Nathalie Drouin
Learning objective

→ New perspective to governance

- The governance of interorganizational networks happens at three levels
- The link between hierarchical and networked organizations in a network is dynamic
- The three governance levels impact project success
An example
Background, aims, and research questions

**Background:** Interorganizational networks for joint projects

- Dominate organizing for large projects
- Are a critical factor influencing project results and performance

**Governance vs Management:** the means by which organizations / projects are directed and managers are held accountable for their conduct vs the goal-oriented activity to accomplish project or organizational objectives

**Network:**

- Group of three or more organizations connected in ways that facilitate repetitive achievement of a common goal [1]
- Characterized by
  - Long-term, re-occurring collaborations [2],
  - Continuously evolving and redesigning themselves [3]
  - Made up of autonomous actors, motivated by access to scarce resources, business opportunities, lower transaction costs in repetitive collaborations
Background, aims, and research questions

Aims:

• Identify the **variety of network designs** and their governance approaches for long-term interorganizational networks established for multiproject execution over time.

• Identify the **situational and contextual contingencies** in the design of these networks and their governance approaches, their strengths and weaknesses, as well as related performance implications.

• Develop a **practitioner-ready framework** of practices and theories, together with their contextual contingencies, to better understand, design, adjust, and govern these networks for the benefit of the organizations and their projects.
Background, aims, and research questions

RQ1: How are longer-term interorganizational networks formed and governed for joint large and megaprojects?

RQ2: Which theories, structural designs, and governance practices are used in different contexts?

RQ3: How does interorganizational governance influence project success?
Methodology and research team

Methodology: Sequential Mixed Method

Theoretical perspective: Multilevel governance theory [5]

Teams and data collection:
- 8 country teams (13 researchers) in 10 countries
- 28 cases with 124 interviews
- 1 global survey with 225 responses
Methodology and research team

- CANADA
  - Nathalie Drouin
  - Mylène Mongeon

- ICELAND
  - Inga Minelgaite

- UK
  - Christine Unterhitzenberger

- NORWAY
  - Anne Live Vaagaasar

- SWEDEN
  - Ralf Müller

- LITHUANIA
  - Raimonda Alonderienė
  - Alfredas Chmeliuskauskas
  - Margarita Pilčienė
  - Saulius Šimkonis

- CHINA
  - Linzhuo Wang
  - Fangwei Zhu

- AUSTRALIA
  - Yongjian Ke
Part 2
Framework
Ralf Müller
Network governance

<table>
<thead>
<tr>
<th>Type I governance</th>
<th>Type II governance</th>
<th>Clubs</th>
<th>Agencies</th>
<th>Boards</th>
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<tbody>
<tr>
<td>Hierarchical part of project's organizational structure</td>
<td>Networked part of project's organizational structure</td>
<td>Informal grouping of individuals to solve a minor issue</td>
<td>Formal, led by Type I and staffed with Type II representative to solve issues</td>
<td>Formal oversight of legal, ethical and other compliance by authoritative representatives from inside and outside the project</td>
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Governance of networks

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<thead>
<tr>
<th>Structuring</th>
<th>Forming</th>
<th>Accountabilities</th>
<th>Responsibilities</th>
<th>Modes of collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritative to democratic structure</td>
<td>Orchestrated, emergent or hybrid formation</td>
<td>Transparency in roles and answerabilities, escalation procedures</td>
<td>Working in compliance with accepted professional standards</td>
<td>Interfaces between networks</td>
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</tbody>
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Metagovernance

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<th>Meta-solidarity</th>
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<td>Organizations</td>
<td>Network structures</td>
<td>Ways to collaborate</td>
<td>Priority of dimensions</td>
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Governance of Interorganizational Project Networks

Framework

Metagovernance

Governance of networks

Network governance

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## Network governance: Multi-level governance theory [10]

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<th>Characteristic</th>
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<td><strong>Orientation</strong></td>
<td>Project-orientation and project-wide governance</td>
<td>Task-orientation and task-level governance for technical proficiency and knowledge application; Embedded in Type I governance</td>
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<td><strong>Structure</strong></td>
<td>Clearly structured, typically hierarchical, with non-overlapping responsibilities across organizations</td>
<td>Fluid, sector-specific structures, often as networks with members intersecting across levels</td>
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<td><strong>Accountability</strong></td>
<td>Clear lines of accountabilities, e.g. to prime-contractor</td>
<td>Less clear lines of accountability, as dynamics of task fulfillment and issue solving take precedence</td>
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Network governance: Multi-level governance theory [10]

Type I governance

- Ministry
  - Steering Grp (Beneficiaries)
  - Project management (Tier One Supplier)
    - Tier 2 Supplier
    - Tier 2 Supplier
    - Tier 2 Supplier

Type II governance

Interface organization(s)
- Boards
- Agencies
- Clubs

Tier 3 and 4 Suppliers

[Diagram showing the hierarchical structure of the governance network.]
**Network governance: Multi-level governance theory** [10]

### Clubs

- *Emerge* as a group of volunteers from different disciplines [11]
- Aim to *jointly solve ad-hoc a shared issue*, such as being behind schedule, machinery not working, installing unplanned equipment, etc.
- Relationships characterized by *mutual trust* in capabilities and skills
Network governance: Multi-level governance theory [10]

Agencies

- Formed by the prime contractor/investor
- Led by prime contractor representative and staffed with people from subcontractor companies
- Agency leaders may be members of the project management group, providing for mutual transparency between Type I and Type II governance
- More formal than clubs, as shown through the formal appointments and roles and their frequent and regular meetings
Agencies - example

Railway project

- Steering Group
- Project mgmt Main contractor
- Contractor
- Supplier

... 10 working groups
... 11 companies involved

Leadership team:
- Team members, 120 people

Representatives of the beneficiaries of the project plus 4 government units

Working Group
Leader from benefit grp.
Members from subcontractors
Network governance: Multi-level governance theory [10]

Boards

• *Formed* for handling of project internal and external governance-related issues

• Address Type I and Type II governance issues *simultaneously*

• *Align closer with the project owner* than the agencies or clubs

• Often concerned with *process compliance and overall correctness*

**Government agency**

- **Between projects**
  - Knowledge sharing network: Update network organizations on latest BIM developments

- **Tendering**
  - Information sharing network: Identify possible specialized advisors and entrepreneurs

- **Project execution**
  - Service provision network: EPC contract execution

Time

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Governance of Interorganizational Project Networks

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**Orchestrated:** by prime-contractor or investor
- Deliberate process of evaluation and selection
- Networks vary in their topology depending on players and their power base → i.e. more powerful Type I governance organizations
- Typically hierarchies at the top and networks reporting into them

**Emerging:** by ‘knowing someone who knows someone’
- Preferred for networks with broader power distribution
- Typically show more democratic governance regimes → i.e. more powerful Type II governance organizations
- Participation motivated through trust in the capability to jointly master the upcoming project with the partner organizations
Governance of networks: Structure and modes of collaboration

Structure
• Defines the relationship between actors in networks
• Ranges from authoritative to democratic
• Influenced by metagovernance
• More democratic in emerging networks
• More authoritative in orchestrated networks

Modes of collaboration
• Defines the ways networks cooperate, coordinate, and potentially integrate when required
Governance of networks: Accountabilities and responsibilities

**Accountabilities**
- Roles, rights and responsibilities of individual networks
- Ability to achieve objectives by holding individual networks and their roles accountable for performance or results

**Responsibilities**
- Defines the professionality expected from a network
- Its conformance with professional standards, laws and accepted professional practice
Network governance

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Governance of networks

Network governance
Metagovernance

→ Sets the boundaries for the self-governance of governed entities like networks [12]
→ Aims to avoid governance failures, e.g. [13]
  • Oversimplification of conditions of actions and/or deficient knowledge about causal connections affecting the object of governance
  • Coordination problems between interpersonal, inter-organizational, and inter-systemic level
  • Coordination problems due to inconsistent definition of the objects of governance, time and space horizons of actions and their association with different interests and power levels
Metagovernance modes [12]

- **Meta-exchange**: Reflexive design of markets or subdivisions thereof
  
  *For projects*: Investment decisions, like smart cities, new power generation, etc.

- **Meta-organization**: Reflexive design of organizations, intermediating organizations, and organizational ecologies
  
  *For projects*: Legitimacy and accountabilities of SPVs

- **Meta-heterarchy**: Reflexive design of the conditions for self-organization
  
  *For projects*: Network formation (emergent or orchestrated)
Metagovernance modes [12]

• **Meta-solidarity**: Promotion of opportunities for collaboration, creation of social capital etc.

  *For projects*: Knowledge sharing networks, tendering events, etc.

• **Modification of the balance between the four modes**

  *For projects*: For example, more emphasis on meta-exchange in the early stages, followed by emphasis on meta-organization, and finally emphasis on meta-heterarchy and solidarity in order to address the issues at hand
Part 3
Conclusions
Christine Unterhitzenberger
**RQ1: How are longer-term interorganizational networks formed and governed for joint large and megaprojects?**

- The ground rules for project execution are set by governments or investors through Meta-governance and its elements.
- Meta-governance influences Governance of networks and Network Governance
- Governance of Networks fully mediates the impact of Meta-governance on Type I network governance
- Governance of Networks moderates the impact of Meta-governance on Type II network governance
**Answers to research questions**

**RQ2: Which theories, structural designs, and governance practices are used in different contexts?**

<table>
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<th>Layer</th>
<th>Theories</th>
<th>Structural designs</th>
<th>Governance practices</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meta-governance</strong></td>
<td>Metagovernance theory (meta-exchange, -organization, -heterarchy, -solidarity, balancing)</td>
<td>Hierarchical</td>
<td>Authoritative investors, policies, formal processes</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Democratic</td>
<td>More democratic practices</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Governance of Networks</strong></td>
<td>Governance of networks theory (formation, structure, accountabilities, responsibilities, modes of collaboration)</td>
<td>Orchestrated Emerging</td>
<td>Set by metagovernance: Formal settings Sponsoring</td>
<td>Meta-governance: Authoritative Democratic</td>
</tr>
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<td><strong>Network Governance</strong></td>
<td>Multilevel governance theory</td>
<td>Hybrid</td>
<td>Type I and Type II governance plus clubs, agencies and/or boards</td>
<td>Set by meta-governance and Governance of Networks</td>
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Answers to research questions

**RQ3: How does interorganizational governance influence project success?**

- Overall, 51% of success can be traced back to the three governance layers.
- Meta-governance has a direct positive effect on success.
  - Authoritarian governance of network structures amplify the meta-governance effect.
Answers to research questions

**RQ3: How does interorganizational governance influence project success?**

- Clear definitions of responsibilities at governance of networks level have a direct and positive impact on success
  
  → Strong Type II governance absorbs poor definition of responsibilities

- Clearness of accountabilities at governance of networks level directly and positively impacts success
Implications for practice

1. Range of options in structuring interorganizational networks
   • E.g. different topologies, modes of formation, conscious evaluation of metagovernance modes and their implications

2. Proactive management of dependencies between the layers
   • E.g. awareness that authoritarian metagovernance leads to stricter process compliance, more hierarchical structures, which might not be appropriate for a given project

3. Clear Accountabilities
   • E.g. awareness that is is the responsibility of governance of networks to ensure a balance between formal and informal governance structures, clear definition of roles and responsibilities, accountabilities at all levels, and the modalities of collaboration between networks.
Implications for practice

4. Avoid an “Iron Cage”
   • E.g. by avoiding being trapped in either Type I or Type II structures. Emphasize the freedom for Type II networks to self-organize, establish flexible and resilient working environments, including democratic structures

5. Define standards
   • E.g. coordinate networks (at the governance of network level) by defining “standards”, such as for the network to use only firms that provide fully trained employees, as opposed to the network training the employees
Most important take-away’s

• Interorganizational networks for projects are governed at three levels
• Most impactful is Metagovernance, as it provides the rules for setting up all subsequent layers
• The impact of Metagovernance on Network Governance (and with it project success) can be balanced through strong Governance of Networks
• Network governance requires a good balance of Type I and II governance and its appropriate interface units.
• Type II governance is especially important for flexibility and resilience, paving the way for trust-based governance
Thank you

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- Christine Unterhitzenberger, c.unterhitzenberger@leeds.ac.uk
References


References


