

# SOFT ELEMENTS IN COLLABORATIVE PROJECT DELIVERY METHODS

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# Introduction

## Research purpose

- Presenting an empirical investigation into how a public client view and monitors the soft elements in projects using a collaborative project delivery method.
- The purpose of this study is to investigate soft elements through the following research questions:
  1. Why do clients use collaborative project delivery method?
  2. What soft elements characterize a collaborative project delivery method?
  3. How can clients better facilitate the soft elements in projects?

## Project Delivery methods

The project management literature uses a variety of terms for defining project delivery methods.

- Wearne (1989) uses the more generic term contract strategy describing the process of procurement and the organizational and contractual policies chosen for the execution of a project.
- Expanding contract strategy, this paper adopts the following definition of a project delivery methods:

*“A system for organizing and financing design, construction, operations and maintenance activities that facilitates the delivery of a good or service”  
(Miller et al., 2000).*

Wearne, S. H. 1989. *Control of engineering projects*, Thomas Telford.

Miller, J. B., Garvin, M., J., Ibbs, C. W. & Mahoney, S., E. 2000. Toward a New Paradigm: Simultaneous Use of Multiple Project Delivery Methods. *Journal of Management in Engineering*, 16, 58-67.

# METHODOLOGY

## Research design

- A case study with the intent to report on and explore the phenomena of collaborative project delivery methods through the lens of project managers
- The case study was perceived a suitable research design for exploring this particular phenomena
- The unit of analysis was a large professional public client in Norway

## Data collection

- The study was initiated by a literature review
- A document study was conducted
  - General guidelines for using collaborative project delivery methods
  - Internal guideline used by the public client.
- Semi-structured interviews: 10 interviews
  - The interviewees were selected due to their experience and interest in collaborative project delivery

# Background & Theoretical Framework

## Project delivery methods

The *horizontal axis* represents the continuum of delivery methods measured by the degree to which typical elements are segmented or integrated.  
The *vertical axis* represents the continuum of financing methods measured by the degree to which the client assumes the financial obligation for the project

## Relational contracting

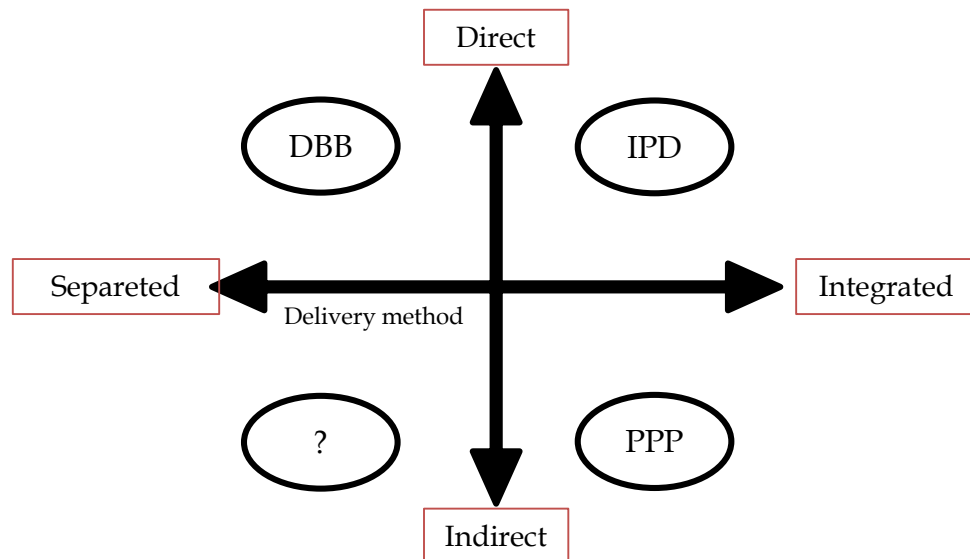
The discrete contract aims to cover as many contingencies as possible in order to reduce the possibility of claims and disputes

Discrete contracts ↔ Relational contracts

Relation contract theory proceeds from two propositions:

1. that a contract is fundamentally about cooperative social behavior
2. that contracts containing significant relational elements are the predominant form of contracting

*my interpretation: contracts are incomplete, so we need trust among the contracting parties to successfully deliver projects*



# Background & Theoretical Framework

## Collaborative PDMs

- Evolved from being a more generic concept (i.e., Partnering), into real-world methods such as the Australian Alliancing approach and the American Integrated Project Delivery approach
- Some fundamental concept seems to be similar:
  1. Collaboration between actors and organizations
  2. Aligning interest (common objectives)
  3. Shared risk/award
  4. And more

## Challenges

- Soft parameters (trust, communication etc.)
- Building effective construction teams
- Aligning project objectives with the interests of key participants
- Alternative compensation forms
- Avoid conflicting with procurement laws- or standards

# Findings & Discussion

## Why do clients use collaborative project delivery methods?

- The study found that the motivation varied significantly within the organization
- The PM's initiated and conducted collaborative project delivery differently:
  - On one side there was the result-driven motivation
  - On the other side there was the process-driven motivation through changing the management method from *controlling* to *including*.

For example:

- Project manager 1 wants better and closer collaboration with the participants in the project (focusing on the soft elements)
- Project manager 2 wants to involve the contractor as early as possible (focusing on the hard elements, changing the contracting method) -> Hoping to "harvest" result enhancing effects

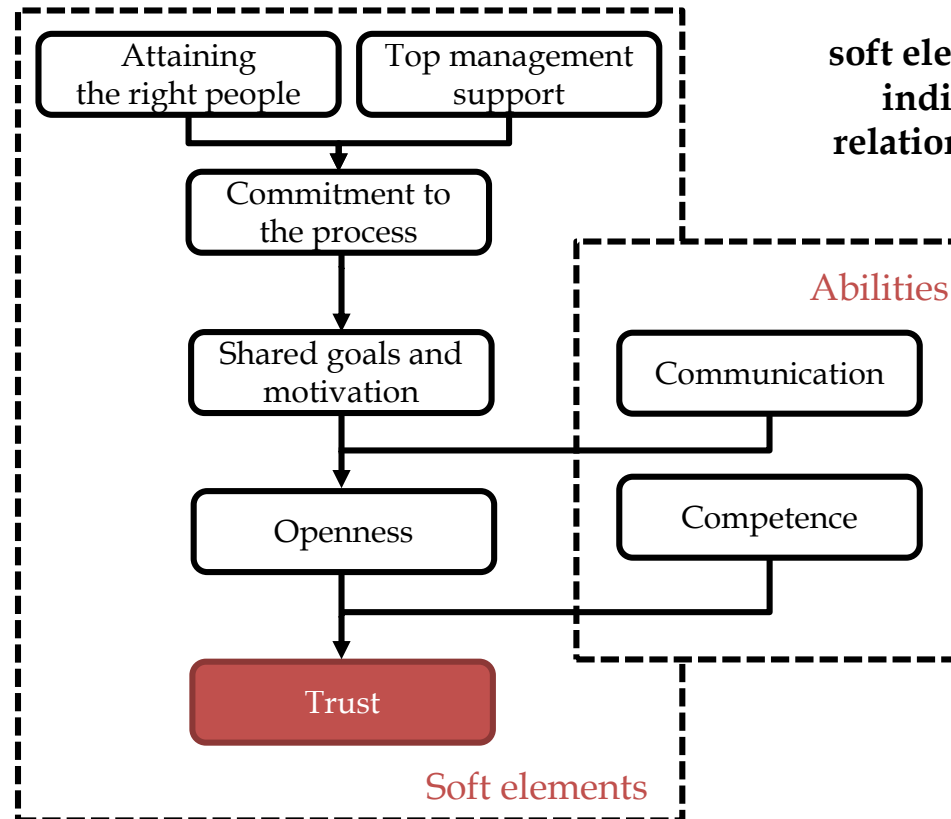
# Findings & Discussion

What soft elements characterize a collaborative project delivery method?

The interviews indicated that there was a connection between the soft elements

For example:  
The connection between openness and trust was the clearest

- Openness over time results in trust



soft elements may be described as qualitative indicators (e.g., trust) of the continuous relationship between members of the project organisation.

*“The project managers stated through the interviews the following as being the most critical soft elements for collaborative project delivery:  
Top management support, trust, shared goals and motivation, ownership of the collaboration process, attaining the right people and openness.”*

# Findings & Discussion

How can clients better facilitate for the soft elements in projects?

## The start-up is essential

- The project managers indicated that they were not given enough time (*at the initiation phase*)
- Actors need time together to:
  - Get to know each other
  - Discuss the form of collaboration
  - Clarify expectations (Client ↔ contractor)
  - Training actors in collaboration

## Top management support

- The organisation did not go beyond handing out a strategy document to the project managers:
  - They wanted more involvement
  - More encouragement to use of collaborative tools such as
    - start-up seminars
    - Teambuilding
  - More follow-up
  - More emphasizes on soft elements



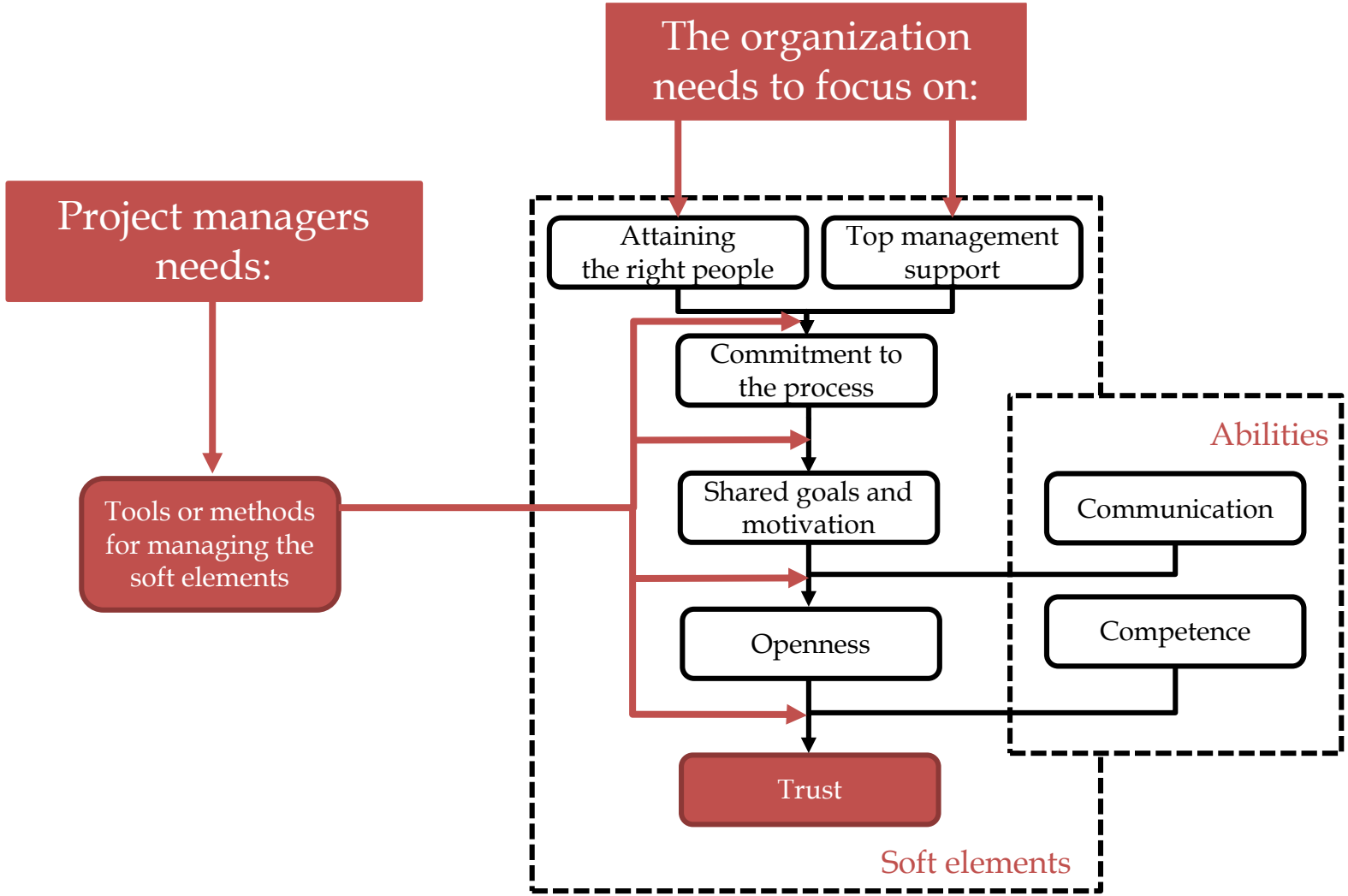
# Practical implications

## Implications for PM's

- Current practice implicates much responsibility for the project manager.
- Organisational guidelines for collaborative project delivery provide a broad framework as to how to conduct collaborative project delivery, but the project managers are often left to themselves.
  - This results in the project managers being largely entrusted to themselves in the establishment of specific game-rules for their projects
  - Guidelines emphasizes hard elements
  - Soft elements are often left for the PM to figure out

## Implications for organisations

- For the organisation, this leads to a large degree of variability from project to project in portfolio.
- On the positive side,
  - Provides PM's with autonomy and influence (projects matches their personal qualities as managers)
- On the negative side,
  - PM's use a lot of resources to plan and design the project rules- and systems for each project.
  - Lack of attention in the project start-up and initial phase impact the whole project
  - Sometimes such issues had to be solved by bringing in external advisors to clarify and facilitate the project rules.



# Conclusion

**A collaborative project delivery method put specific demands on the client organisation, particularly on how they should view and monitors the soft elements.**

- The most prominent soft elements were *Top management support, Trust, Shared goals and motivation, Attaining the right people,* and finally *Openness/ transparency.*
- The right PM's for such projects are those who understand the relationship-aspect of project delivery
- Soft elements are indicators. They are needed to sustain a relationship in the project organization.
- A success factor is whether the client's management has enough resources to follow-up.
- Contractual elements have a significant impact on the soft elements, but we know little about the connection and effects.

## Further work

This research has identified that collaboration is carried out on a different basis, which leads to significant differences in project delivery. Consequently, further research should:

- include other clients as this may identify substantial differences in how various organisations emphasise the importance of soft elements
- additionally, there is a field open to study the effect specific contractual, organisational and technological elements have on the soft elements.

## Some reflection

- Soft elements are “hard” to research. Maybe due to traditions (paradigms) in construction research. We focus on process, organization etc. not the soft elements, humans and culture. (i.e. we are often engineers not social scientists or psychologists)
- No coherent or easily applied method for measuring effect, or even separate variables i.e. the soft elements. Not reliable method to measure quantitatively
- Is soft elements such as trust an effect or outcome or an element that can be “engineered”?