A Conceptual Exploration of a Collaborative Environment in the Construction Industry When Working with Temporary Socio-Technical Processes

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Why this study?
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The Issue

- Low productivity
The Issue

- Low productivity
- A project is complex in itself
The Issue

- Low productivity
- A project is complex in itself
- Technology needs transparent information flow
The Issue

- Low productivity
- A project is complex in itself
- Technology needs transparent information flow
- Focus on collaboration
The Issue

- Low productivity
- A project is complex in itself
- Technology needs transparent information flow
- Focus on collaboration
- Contribution: industry level
Research Question:

Can we talk about a collaborative environment in the construction industry when working with temporary socio-technical processes?
Research Question:

Can we talk about a collaborative environment in the construction industry when working with temporary socio-technical processes?

Objectives:

1. Assess the characteristics of temporality in the relationship between a project and the construction industry as a network.

2. View integrated project delivery (IPD) through the boundary theory of loose and tight couplings.
Methodology

- Semi-structured literature review
  - Scott (2006)
  - Theoretical and empirical papers
Methodology

- Semi-structured literature review
  - Scott (2006)
  - Theoretical and empirical papers
- Organizational theory
Methodology

- Semi-structured literature review
  - Scott (2006)
  - Theoretical and empirical papers

- Organizational theory

- Issues with the paper
  - Extensive literature
  - Not the only solution
Context

Complex nature of construction
Complex nature of construction

- Complex components
  
  *Baccarini (1996), Gidado (1996)*
Context

Complex nature of construction

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- Temporality explained through network theory
  - Biesenthal et al. (2015)
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  - Creates a multilevel of networks in the industry

- Socio-technological system approach (STS)
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  - Raises need for collaboration within the network
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- Boundaries
  *Kerosuo (2006)*
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- Boundaries
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- Bridge projects and network: open system theory
  *Scott (2006)*
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  - There can not be a collaborative project in a non-collaborative industry
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- Loose and tight couplings
  Dubois and Gadde (2009), Scott (2006)
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- Loose and tight couplings
  $Dubois \ and \ Gadde \ (2009), \ Scott \ (2006)$
  - Integrated Project Delivery model (IPD)
Discussion

THE CHARACTERISTICS OF TEMPORALITY IN THE RELATIONSHIP BETWEEN A PROJECT AND THE CONSTRUCTION INDUSTRY AS A NETWORK
Discussion

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1. Impossible for a multilevel understanding
Discussion

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1. Impossible for a multilevel understanding
2. Re-think boundaries working in the industry today
Discussion

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1. Impossible for a multilevel understanding
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**Does IPD tighten couplings in the permanent network?**
Dynamic boundaries
Dynamic boundaries

Stable relations get stronger
Can we talk about a collaborative environment in the construction industry when working with temporary socio-technical processes?
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- We need collaboration *because* of socio-technical processes
Can we talk about a collaborative environment in the construction industry when working with temporary socio-technical processes?

- We need collaboration *because* of socio-technical processes
- IPD – a solution for temporality?
Implications

Contribution

- Knowledge on where we should place our focus
Implications

Contribution

- Knowledge on where we should place our focus

Future research

- Empirical studies
Implications

**Contribution**
- Knowledge on where we should place our focus

**Future research**
- Empirical studies
- Negative effects
Implications

**Contribution**
- Knowledge on where we should place our focus

**Future research**
- Empirical studies
- Negative effects
- Practical need for the industry
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