

# FACILITATION OF INTERORGANIZATIONAL TEAMS: AN EXPLORATORY LITERATURE REVIEW

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Collaboration is important in a project-based industry like construction. The deterministic approach to project management implies the possibility of planning, managing and controlling the construction project phenomena and project actors' roles. This belief is dominant in the industry and the practice of collaboration will be influenced by it. The need to improve collaboration and move the project forward can be addressed a facilitation, however, it is unclear how facilitation takes place in inter-organizational project teams. This study is part of a larger project, which aims to address the skills and competencies needed for professionals in the industry to encourage collaboration and co-configuration between the actors to minimize the effect of the fragmentation within the industry. An earlier study in a Danish school setting suggests that the deterministic approach towards project management contradicts with the need for disruptive breaks from routines, which encourages co-configuration as seen in knotworking. The deterministic approach demands a certain mind-set among the actors, when delivering a known product in a known production process with a known division of labour, while the mind-set of co-configuration entails upsetting these relationships. It is possible to organize the breaks from the deterministic approach and it has previously been demonstrated, how a facilitator can help making the switch between the two mind-sets. A literature review is carried out to investigate which perspectives facilitation theory can bring to improving collaboration in the construction project. The literature presents a belief in facilitation as a way to improve collaboration although no single unified recipe for facilitation was found. A further investigation into how to approach facilitation of collaboration so focus can become on how to share critical resources for project efficiency as well as learning is recommended.

Keywords: facilitation, literature review, project management

## INTRODUCTION

Collaboration is important in the mainly project-based construction industry, which depends on the collaboration from many actors. Collaboration can be perceived as a strategic process of sharing critical knowledge or as a process to create learning and produce synergistic solution argues Hardy et al., (2003) and stresses that little attention has been paid to the relationship between the two different perspectives.

From an organizational perspective construction projects “are multi-actor projects in which a broad range of actors with different competences and specialties are

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involved" (Eriksen 2013: 336). The actors in the projects are each performing their unique set of activities although ideally these activities should become integrated with each other to generate optimal value. However, Baiden et al., (2006) find that full integration is challenged by the traditional drivers for project success as well as project culture, the need for behavioural change and the lack of measurement of integration.

The traditional drivers for project delivery are cost, time and quality. They are used to measure how well projects performed. This form of evaluation is part of the deterministic approach to projects (Padalkar and Gopinath 2016). They found in their review of project management that the deterministic approach is the dominant view of the project management. It leads to an underlying belief that project phenomena can be planned, scheduled and controlled. The primary object of the deterministic project management approach is to plan and control the project and the project processes (Padalkar and Gopinath 2016). A finding supported by Blomquist et al., (2010). The deterministic approach also argues for a need for clear roles and responsibilities to ensure efficiency in the project, reports Gustavsson (2015).

However, Tuckman's (1965) team development model suggests that a team must go through the phases forming, storming, norming before it can enter the performing stage. In the storming phase, the actors will challenge each other on how to perform the tasks as well as each other's authorities. This seems contradictory to the primary objective of the deterministic project management perspective's belief in defining a plan for the collaboration including how to use the actor's resources. The plan will encourage the team to perform their task in the 'usual manner', which in turn can create a static situation. The use of facilitation may assist the team in performing their duties while developing as a team. The objective of facilitation is dependent on the context. Rasmussen (2011: 389) finds that "the primary objective of facilitation [for change] is to support participants to transcend 'business as usual' conventions", which in turn may lead to the existing structures and routines being questioned to ensure a continuous development and avoid a stand-still situation.

The contradiction between the challenges of the storming phase and the planning of project management is successfully overcome in knotworking, a new form of collaboration which shows promising results (Kerosuo 2015, Buhl et al., 2017). The participating actors form what is called 'a knot'. The knot is formed as a way to reach an object. An object can be defined as 'the raw material' or 'problem space' at which "activity is directed" (Engeström and Sannino 2010: 6). Knots are thus formed spontaneously and dissolved in a similar way when an object arises. In this way knots differ from teams as knots do not necessarily collaborate over a longer time period. Teams are also characterised by having well defined roles which can be defined by contracts, another major difference to knots. Collaboration within the knot is of "vital importance, yet it takes shape without rigid, predetermined rules or a fixed central authority" (Engeström 2008: 20). However, the actors may find this form of collaboration difficult, so in our previous study, we introduced the use of a facilitator to functions as a catalyst helping the actors to achieve full integration and collaboration (Klitgaard 2017). The study showed that it is possible to help the actors to move away from old routines and enter into a questioning stage of the old routines. It became clear that the existing way of doing things was a barrier to questioning the existing way of doing things - but with the use of a facilitator, these questions could be addressed.

The unwillingness to question the existing can be explained by practice theories. There are no unified practice theory traits and so no unified definition (Nicolini 2012). For the purposes of this study, we will follow Gherardi's (2012: 03) definition "Practice is [...] a practiced, habitual, taught and learned activity that constitutes the job and requires expertise", where knowing is not separate from doing. However, all the practice theories have common traits. One of these is the assumption that a practitioner will be absorbed in or being absorbed in a practice and this "implies certain norms of correctness (what is right and wrong)" Nicolini (2012: 5). This means that once an actor becomes engaged in the project, he will also become absorbed in a practice of project management. In the industry, it seems that the deterministic project management approach is dominant and so this becomes the "right way" of doing things and the actors become less likely to challenge it with questions.

The move to consider the project from a practice-based understanding is recognized by Blomquist et al., (2010: 9), who considers that "it will contribute to a more reflexive, mature and contextualized understanding of project management". Bygballe and Jahre (2009: 702) supports this and call for a shift in the focus on "economic or production-oriented perspective" towards a focus on "handling different types of interdependencies". An example of a practice-based approach is Boyd's (2013: 1145) work on knowledge management, where he identifies the importance of "supporting people to act better in practice" rather than "to think better about practice". Inspired by these approaches, we set out to investigate if the two different approaches also are evident in the facilitation literature; we call them the deterministic approach and the contextual approach. The deterministic facilitation approach we define as having a strategic perspective on collaboration with a focus on the critical distribution of resources. The contextual approach we define as having a learning perspective on collaboration with focus on learning and synergetic problem solving.

On this background, we carried out a provisoric literature review to discover the role of facilitation in an inter-organizational project. We ask the questions:

How are the deterministic approach and the contextual approach to facilitation represented in the literature?

How have these approaches developed since the turn of the century?

Furthermore, we investigate:

What is the relationship between the approach to facilitation and the objective for the facilitation?

What is the relationship between the approach to facilitation and the method of facilitation?

What is the relationship between the objective for facilitation and the method of facilitation?

This paper is organized as follows. In the next section the method is described including a description of how the sample was generated. It is followed by a section with the findings of the study, where the above questions are addressed. In the final section with concluding remarks the implications and limitations of the study can be found.

## **METHOD**

To determine from which approach or perspective the facilitation literature has been written, we set out to investigate the literature on facilitation. Inspired by Kokkonen

and Alin (2015: 516), who use their review to “make sense of a set of extant research in a meaningful way”, we review the literature and present it in a meaningful way, although we due to time constraint only investigate literature from the turn of the century to the present day.

**Generating the sample**

We conducted a literature search in the EBSCO database Business Source Complete, which covers all disciplines of business. It is the intention of the researchers to complement the database search with a snowballing search back and forth from one of the articles identified in the database search. The article chosen is Ludwig Bstieler and Martin Hemmert’s “Increasing Learning and Time Efficiency in Interorganizational New Product Development Teams” from 2010, which puts emphasis on the adverse relation between learning/creativity and time efficiency. This problematic relationship is facing many construction projects; although it may be reduced by facilitation. Unfortunately, this snowball search hasn't been conducted at the present stage due to time constraints.

A search of four blocks for 'free text' was conducted, see table 1.

*Table 1. Four block literature search*

Phenomema of interest	Objective	Desired Result	Context
to achieve	for	in a	
Facilitation	Collaborat*	Practice Development	Project Team
<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>
Intervention	Learn	Product Development OR Innovation	Inter-organizational

The first block sets out the phenomena of interest, the second block is the objective of the phenomena, the third block is the desired result of the objective while the fourth block sets out the context of the phenomena. The results were limited to articles from the turn of the century, peer-reviewed articles in English and full-length articles. The Phenomena of interest block was created by using the search words: facilitate\* or intervention and gave 132.609 hits. The Objective block included the words: collaborat\* OR learn and gave 181.672 hits. The third block, the Desired Result consisted of the words: practice development or product development or innovation and gave 409.041 hits. The Context block included the search words: Project team or Inter-orga+ational or interorgni?ational or construction and gave 99.796 hits. The four blocks were combined with and, this gave 91 hits. By limiting the articles from the turn of the century and full-text peer-reviewed articles the number of articles was reduced to 33 articles. Six articles were deemed irrelevant. The rest of the articles contained some element of facilitation although it may not be the main topic of the article.

The articles were read and categorized after their approach. Furthermore, the objective and method of facilitation were noted of each article was noted. These were later sorted into categories with similar characteristics. The findings are presented in the next section. The articles have been entered into table 1. The articles written in

bold are under influence from the deterministic approach and the rest are influenced by the contextual approach.

## FINDINGS

At first, we set out to discover, how the deterministic approach and the contextual approach to facilitation is represented in the literature.

Out of the total of 28 articles, the deterministic perspective was clear in 13, while the contextual approach was apparent in 15 articles. This level distribution might be explained by the second block of the search, where the words ‘collaborate’ and ‘learn’ are present. By including ‘learn’ in block two the search may have found literature about facilitating for learning rather than only about collaboration. Hardy et al., (2003) argues that in strategic literature collaboration is viewed as a way of sharing critical resources and facilitation used to enable knowledge transfer; while in learning literature collaboration is viewed as a way to transfer knowledge, but also facilitates the creation of new knowledge and produce synergistic solutions. Using the original search and combining it with NOT to a fifth block containing the word ‘Learn’, the search was limited to 18 articles. In this way, the block searching for the objective was reduced from ‘collaboration and ‘learning’ to only include ‘collaboration’. In this search, the division between deterministic and contextual approach is 8 under the deterministic approach and 10 under the contextual approach, which still is a level distribution between the two approaches. It appears that in facilitation literature the deterministic and the contextual approach is both represented and in almost level proportions.

The next step was to investigate if a trend towards one or the other approach is clear over time. The articles’ approach was entered into a timeline, see table 2. We find that the two approaches carry the same interest over time since the beginning of the century.

Although the number of articles in the sample is very limited it appears that both approaches have attracted the same interest over the investigated time period. The researchers wondered if this level pattern also applies for facilitation within the construction industry. Of the 28 articles, ten articles clearly identified the researched industry as construction. Out of these 10 articles, seven were written from the deterministic approach and 3 from the contextual. It seems that the construction industry favours the deterministic approach, although it is difficult to conclude on such a limited number of articles.

Table 2: Timeline over the use of the two approaches

Approach	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Deterministic	x	x					x		x			x	xx	xx		x	xx	x
Contextual				xx		x	x			xxx	xx		x	x		x	xx	x

Furthermore, we would set out to investigate the relationship between the approach to facilitation and the objective for the facilitation. We use table 3 to investigate as the columns represent the objective of facilitation, while bold lettering for the authors’ names indicate the deterministic approach and normal lettering indicate contextual approach.

Table 3: Findings

Method for facilitation	Objective of facilitation					
	Knowledge sharing/ transfer/ Communication	Organisational redesign/ procurement	Innovation	Improving performance of project teams/ Self-sustaining	Interorganisational collaboration (firms)	Learning/ Creation of knowledge
IT system	Rehm et al (2017) Senescu et al (2013) El Ghazail et al (2012)	Otte-Trojel (2017)			Wang et al (2006)	Scott (2000)
Social system (Trust)	Mabey, Zhao (2017)					
Radical flank					Truelove, Kellogg (2016)	
Boundary spanner/ object	Lawson et al (2009)		Harty (2005) Holmes, Smart (2009)	Blake, Foster (2016)	Soeparman et al (2009)	
Spatial Proximity						
Conveners					Dettmann et al (2015)	
Strategic management/ formal function	Mathur (2008)	Bowles, Morgan (2016)	Cui, O'Conner (2012)	Davis, Love (2011)		
Theory design			Tanskanen et al (2015)			
Management intervention/ actions		Rosenkopf et al (2001)	Peansupap, Walker (2006)		Thamhain (2013)	
Using metaphors as catalyst	Shelley (2012)					
Newcomers						
Procurement			Skilton, Doolley (2010) O'zorhon (2013)			
Interorganisational collaboration / facilitating knowledge creation						Hardy et al (2003)
Problem solving etc.						
						Besteler, Hemmert (2010)

It appears that facilitation with the objective for organizational design is mainly performed under the deterministic approach. This can be explained by the deterministic approach implied belief in clear role and responsibilities. Facilitation with the objective of knowledge transfer and communication is considered from both the deterministic and the contextual approach. Facilitation for improving team performance is considered from the contextual approach. It is difficult to make a general conclusion, other than the objective of facilitation can be many; and the same objective can be viewed from both the deterministic and contextual perspective.

The relationship between the approach to facilitation and the method of facilitation was also investigated. This time, the results are read from table 3 using the rows for method and the bold/normal lettering for the approaches. There is a clear correlation between the use of IT systems/databases for facilitation and a deterministic approach. This may be due to the deterministic belief in planning, managing and controlling the process. The use of boundary object/spanners is mainly approached from a contextual perspective, which indicates how the use of boundary objects/spanner demands regard of the context.

Finally, we investigate the relationship between the objective for facilitation and the method of facilitation. Facilitation for the objective of innovation seems to be approached by a range of different method. However, if the objective is to facilitate communication and knowledge transfer the preferred method seems to be the use of IT tools.

## **CONCLUDING REMARKS**

In this literature review, we set out to investigate the role of facilitation in literature, although the limited number of articles reviewed put some limitation on the value of the review. We intend to continue with the study using the snowball search method to generate a larger article sample.

In the facilitation literature, we discovered the same deterministic approach as in the project management literature although it is not as dominant. Furthermore, we discovered that facilitation is a wide concept used for many different collaboration objectives and in many different ways.

The literature presents a belief in facilitation as a way to improve collaboration although there no single unified recipe for facilitation was found. The amount of research from the contextual approach also indicate an accept from much of the literature that such a recipe cannot ever be created, which contrasts to the deterministic belief in planning all events and processes at an early stage of project followed by managing and controlling these as close as possible to the original plan.

In this way, we discovered an acceptance in the facilitation literature of both the deterministic and the contextual approach. We consider that facilitation may be the key to introduce new collaboration forms, like knotworking in the construction industry. We would like to investigate this further as we expect that awareness of both approaches towards facilitation of collaboration will generate collaboration with focus on both sharing critical resources to gain project efficiency as well as learning during the project. Practice Theory can generate an understanding of facilitation and how it influence different practices. We expect that the project management practice in particular will be influenced by the facilitation practice.

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