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Project teams: an untapped resource?

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Abstract

Alignment has been identified as an important criteria for successful project teams. However, we need more knowledge on how alignment is achieved in project teams and also about potential negative effects of focusing alignment. This paper responds to a call for more in-depth empirical accounts of what goes on in projects and project management. More specifically, it provides insight into practices of achieving alignment in an inter-organizational project collaboration. The paper addresses potential negative effects of alignment, as findings show how these practices reduce the potential for diverse discussions over ideas, risks and solutions leaving project teams as an untapped resource.

The empirical material originates from a PhD project studying the appeal, use and effect of the risk matrix in an inter-organizational project within the petroleum sector in Norway using a qualitative approach.

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1. Introduction

Organizing work as projects are becoming ever more common, and much focus has been on how project teams can obtain high performance. Alignment between stakeholders on project objectives, and how these objectives should be achieved have been one important focus in research [1], and benefits of aligning project stakeholders are well-known [2,3,4,5,6,7]. Potential problems with alignment in projects are less focused on. A few studies address conflict and divergence as valuable e.g. for avoiding complacency and group think [e.g. 8, 9] and this is suggested as an avenue for further research [1]. This paper intends to contribute by providing insights on alignment practices in an inter-organizational project collaboration and potential negative effects.

Few have actually studied project teams over time to uncover work processes in a real life setting [e.g. 10]. Critical project management scholars call for more in-depth empirical accounts of “what goes on in social construction of projects and in project management” [11, 12].

This research has implications for scholars and practitioners as it gives insight on alignment processes and potential negative effects that can leave project teams an untapped resource.

The remainder of the paper is structured as follows. The next section discusses relevant literature. Then the research context and methodology are explained. Next, the findings are presented, then discussed. Finally, the paper is closed with conclusion, implications and limitations.

2. Theory

Projects are often hectic, and very closely monitored against their milestones and budgets [13]. This will arguably result in a pressure to work efficiently. In this setting, it becomes very important to reach decisions within the right timeframe, or else the progress could be jeopardized. The benefits of aligning project stakeholders are well-known within areas such as Stakeholder literatures [5], Management literatures [7], Project Management literatures [2,4], Construction [3] and Information Systems literatures [6]. How alignment is achieved and potential negative effects are less addressed in this literature.

Members of high performance teams are jointly responsible for the results and evaluated for the total performance of the team instead of individual work packages [14,15]. This infers that project members discuss issues, provide input and help each other as part of the work process. One main purpose of inter-disciplinary teams is the potential for enhancing collective skills [9] and their potential to provide different perspective on ideas, problems, solutions. This is regarded as promoting a mindful infrastructure important for reliable operations [16].

From psychology we know that social groups highly affects us. Being aligned with a group we feel comfortable, safe, and trust other members [17]. However, a certain level of disagreement and conflict is important to test out ideas, discuss assumptions, different opinions and perspectives and make better decisions [18]. If this never occurs, there is a possibility that groupthink has evolved [9].

3. Case description and methodology

A qualitative approach was chosen as it is particular suitable when prior knowledge of the phenomenon is limited [19]. The longitudinal research design allowed the researcher to become embedded, follow the process, get the project member’s trust, and collect data through observation, interviews and documents over time. Qualitative, process-oriented studies are called for in project studies [11, 12, 20]. I used a case study approach [21] and followed a specific upgrading project within two gas processing plants in Norway during a two-and-a-half-year period.

In accordance with EU requirements from the late 1990s, the Norwegian petroleum sector is organized to ensure independency within the gas-value-chain and secures third-party access to the infrastructure for transportation of natural gas to the market. This requirement resulted in a separation of ownership, operatorship, and daily operations (Technical Operator Company, TOC). The inter-organizational collaboration between the actor groups in the project under study is illustrated in Figure 1.

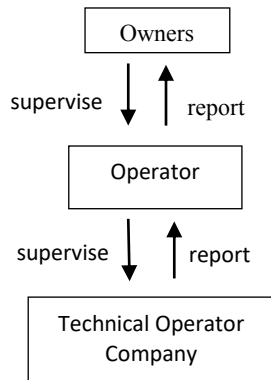


Figure 1: Main actor groups and their inter-organizational relationship

The studied project went through four project phases. The feasibility phase concerns specifying the problem and looking for three possible solutions. These solutions are worked on to a point of ‘maturity’, where the owners have enough information to make a decision in the concept phase. In the definition phase, the concept chosen is matured, and everything is developed further in preparation for the execution phase, which, in this case, is the actual upgrading taking place in the plants. Figure 2 gives an overview of the way in which the project was studied and projects in general are commonly organized [13].

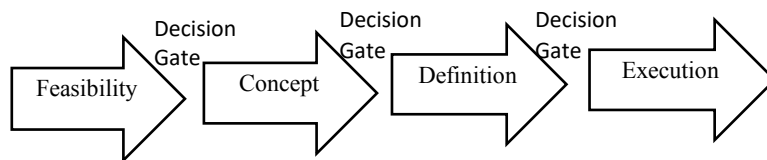


Figure 2: Blueprint of project phases (D-TOC-1)

The researcher had access to all project meetings, within the Operator organization and the TOC, and all inter-organizational meetings. Access to all relevant procedures, guidelines, and project documents was also provided. The most relevant documents (52) were analyzed in order to understand how management in projects and project execution in general were defined and regulated. The most important inter-organizational arenas were the monthly meeting between the Operator and the TOC, the base-line updates, the IPRs (Independent Project Review at each decision gate) and risk reviews (six-monthly). Within each organization, different updates and reviews were all connected to project activities described in project governing procedures. In total, 50 project meetings were observed. Depending on the agenda, between three and twenty people were present. I chose a non-participative role in order to allow the work process to unfold as naturally as possible. After each meeting, the observation notes were written up and uploaded into NVIVO, a software program that helps to organize qualitative data and facilitates the marking and coding of text. I conducted 17 interviews of project team members. The observations and the analysis of documents informed the interviews. Having first-hand knowledge of many of the issues actually occurring in the project helped me to devise questions and to some extent become aware of possible face-saving activities of the informants in the interviews. Taking observed incidents in the project meetings as a starting point for the interviews provided rich and full descriptions, explanations and many examples. The trustworthiness of the research was ensured by addressing the quality criterias of credibility, transferability, dependability and confirmability in qualitative research [19].

The data is organized as follows: The first part of the data source code refers to where the data originates from (D: document, I: interview or M: meeting observation). The second part indicates whether it is collected in a single company (operator or TOC) or in an inter-organizational setting. The last part of the code is a serial number.

4. Findings

The findings in this study show that alignment was a highly focus. To be aligned within the team and between inter-organizational teams were regarded as highly positive. It was important to *align* the perspectives and activities of different project stakeholders with regard to the most relevant challenges:

Project team member: You need to remind yourself of what you agreed on. The risk matrix helps align people on what the challenges are, either within a group or across groups. (...)

Interviewer: What does alignment mean?

Project team member: Alignment means that you agree, at least, on what the major challenges are. It's an agreement on what the main challenges are of the project, what the agenda should be, and what we should be looking at. (I-OP-2)

Also during meetings, some project members associated notions of alignment with an successful inter-organizational meeting as illustrated in the following conversation at the end of a risk review meeting:

PM operator: I think this has been a good review, it is a good thing that we are aligned.

PM TOC: We are well aligned, that's true. (M-OP-TOC-9)

Not all stakeholders regarded alignment of viewpoints as desirable, however. Alignment was also seen as problematic in the sense that collective attention could too quickly converge towards the issues on the table, for instance mapped risk objects, while disregarding other potentially relevant aspects (e.g., M-OP-12).

In meetings, to ask questions or ask for more background information was often framed as lack of trust (e.g. M-OP-TOC-04, M-OP-TOC-11b, M-OP-TOC-15b, M-OP-06, M-OP-10).

In most project meetings, there were few discussions and they followed the agenda for the meeting rather swiftly. In each of the points on the agenda, the person in charge of that particular issue (the discipline representative) held a briefing and had lot of delegated freedom to handle the assigned project tasks individually. In some occasions, discussions came up, but the issues and problems were seldom resolved. Referring to the agenda and time pressure, the project manager said that they had to back to the issue at another time and place.

When preparing for inter-organizational meetings great effort were made to try to foresee critical remarks and questions from another stakeholder. When working on documents that would be reported to another stakeholder, actors voiced concerns over reporting exactly the right level of details to make another party happy and discourage them from asking follow-up questions or requesting more background information. This was particularly the case when reporting to the owners. Too few details and too many details would also raise questions and generate more work. Concern over this was observed in both the Operator (M-OP-05, M-OP-06, M-OP-07, M-OP-08) and the TOC (M-TOC-01, M-TOC-03, M-TOC-09) and in inter-organizations between the Operator and the TOC (M-OP-TOC-04, M-OP-TOC-11b, M-OP-TOC-13, M-OP-TOC-15b), as the following citation from an inter-organizational meeting illustrates:

PM (Operator): "The owners will probably ask questions about this cost figure [presented at portfolio level instead of per project]. All questions that can be stopped beforehand is a good thing." (M-OP-TOC-11b).

On some occasions, information that was believed would make the owners confused or suspicious was withheld. An example of information that was withheld was that this particular project was given less priority due to another, more challenging project in the same project portfolio, which could indicate that it was not receiving enough attention (M-OP-08). In another case, the operator and TOC planned jointly how to present the project to prevent the owners from looking at the opportunity to organize this project as a stand-alone project, instead of part of the project portfolio. Many questions and too much uncertainty could, in the worst case, result in a lack of approval for further funding and thereby a lack of acceptance to enter the next project phase (M-OP-TOC-15b), as obtaining decisions and approvals at the right time were described as the greatest risk in every project (I-TOC-02). A less serious consequence of questions and discussions could be prolonged meetings and a request for follow-ups, for example more tests and extra reviews. Questions and discussions would result in prolonged meetings, which informants said

they tried to avoid for several reasons: the extra time spent and extra work would negatively affect cost and schedule (M-OP-TOC-04, M-OP-05).

5. Discussion

Efficient, uncomplicated project development seemed to be an overall objective in the case under study. The management system has defined a comprehensive process to ensure project management of good quality, involving inter-disciplinary teams in different reviews and committees, important for enhancing collective cognitive skills [9, 15], enhancing processes that promote mindful infrastructure, important for reliable operations [16]. However, when these inter-disciplinary teams met in the studied project, there was not much focus on discussing divergent views and alternatives. On the contrary, most of the time, issues were not discussed in much detail; the main focus was on alignment between different stakeholders such as team members and actor groups [10, 1, 2, 3, 4, 5, 6, 7]. The project teams in this sense reminded more of work groups than high performing teams [14].

Findings also show that a practice had developed in preparation for inter-organizational meetings, in which much effort was put into adapting information in order to avoid questions, discussion, prolonged meetings and possible follow-up activities that could slow the project down and increase costs. The commonly referred to trade-off between cost and safety [15, 22] materialized. This practice resulted in missed opportunities for discussions of assumptions made, reflection and learning. This stands in contrast with the practices identified in High Reliability Theory, which argues that mindfulness involves questioning assumptions, worldviews and decisions [16], and the practice thus failed to exploit the potential of cognitive skills in an inter-disciplinary team [9, 15].

Alignment promotes trust and confidence that partners are committed to the project and competent in the work assigned to them and it facilitates cooperation. When questions were raised and more underlying information requested, this was not appreciated and framed as lack of trust and inconvenience as in adding to costs and work. The expert opinion of team members representing the different disciplines based on experience, overall understanding of the plant and its processes and gut feeling were respected and held in high regard. These collective habits can help keep an open mind and avoid simplification of interpretations, where new data contradicting worldviews, mindsets and frameworks are ignored [16].

6. Summary and conclusion

Do these findings imply that the project teams involved in this study are ‘mindless’ and on ‘automatic pilot’? No, not at all. This project went well. The installations were performed without any injuries to personnel or other significant unwanted incidents. The track records and international reputation of the involved plants are very good. On the other hand, this paper describes project team practices where the potential of inter-disciplinary project teams and meetings between different stakeholder groups are not fully utilized.

There was a need for alignment in inter-disciplinary teams and across stakeholder and actor groups in the project. However, inter-disciplinary teams and different committees are not in first hand established to be aligned, but to see risks, problems and alternatives from different perspectives and to discuss them in order to enhance quality in projects in general, and especially in risk management and decisions making processes in particular. Alignment ensures efficient, smooth collaboration, and that everybody is in agreement on what the main objectives and the main challenges in the project were. Alignment facilitated the collaboration and increased the trust in each other as competent, reliable project partners. By ensuring that the project had all collaborating partners on board, aligned over project goals and risks, and that good progress was made through the different project phases, the project manager and his team have attended to two of the major tasks and potential risks in all projects: cost and schedule. The paradox is that, by doing so, several possibilities for discussions of assumptions, of risks and of their mitigation have been missed both within each of the organizations and in inter-organizational settings leaving project teams an untapped resource.

7. Limitations and implications

We need more empirical accounts of project practices linked to alignment and related consequences. This study has several limitations. Only one project has been studied, and it would have been interesting to study projects within different contexts. A quantitative approach could add new dimensions and focus on quantitative aspects of this social phenomena. The practical implications of this research are several. Top management, project managers and other practitioners within this field should be aware of the potential danger in prioritizing alignment, smooth cooperation and project progress. These practices could result in careful, mindful, project management fading away at the expense of a focus on cost and schedule.

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