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Managing risk in subcontractors’ business relationships with client and competitors

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Managing risk in subcontractors’ business relationships with client and competitors

Projects are complex networks of several independent business actors. Project contractors are often dependent on the performance of their subcontractors, but have only limited control over them. For example, subcontractors may co-operate with several competing contractors or in some cases they may offer their services directly to the client and become a competitor of the contractor. In this paper we analyze what kind of project and business related risks arise from subcontractor’s interorganizational relationship with competitors and end clients in two global system supplier firms. In addition, we also identify different approaches that can be used for managing these risks. The results of the paper demonstrate that these relationships may have a direct impact on project performance on short term, but in addition, relationships are also a potential source for longer term business related risks. We suggest a new risk management approach, in which such relationship risks are actively taken into account in subcontractor selection and management. Using this approach, the impacts of risks are considered on two levels: project performance and long-term business performance across several projects.

Introduction
Projects are complex networks of several independent business actors. From a project contractor viewpoint, subcontractors form one important actor group. Subcontractor selection and effective management of subcontractor relationships are critical for project success. These processes also have an impact on the long-term success of a project-based firm because good, long-term relationships with subcontractors are important for the viability of a project-based firm (Walker and Rowlinson, 2007). However, each subcontractor has a number of relationships with other project network actors, which makes the management of subcontractor networks a challenging task for a contractor.

The research question of this study is:

What kinds of risks arise from subcontractors’ relationships with client and competitors in project networks and project business networks?

We argue that the dynamism and complexity of risk effects is of more importance in today’s projects in which there are several heterogeneous organizations involved, decision-making and coordination is more and more decentralized due to interrelated tasks, and the roles of actors are changing from one project to another. Therefore, inter-organizational relationships between different actors are also constantly in flux, as they are transformed, altered and dissolved in each individual project.

In this paper we are considering the risks that originated from inter-organizational business relationships that introduce indirect impacts and dynamism to both projects and project business. For such risks, we use the term relationship risk. This alternative to the existing risk management and subcontracting literature suggests new avenues and extensions to the existing project risk management discussion. The purpose of this paper is to introduce a need for new approaches for risk management in complex project actor networks.

Subcontractors’ inter-organizational relationships as risks for the contractor
In recent years, the variety of levels of analysis concerning the study of projects has expanded considerably, one of the new focus areas being the relationships between firms. The ‘project business’ definition by Arto and Wikström (2005) emphasizes the business network aspect by referring to the business of ‘several firms’: “Project business is the part of the business that relates directly or indirectly to projects, with the purpose of achieving objectives of a firm or several firms.” Project contractor firms are engaged in a specific type of project business where customer delivery projects are in the firms’ production lines (Artto et al., 1998).

In project risk management literature, risk is defined as the possibility that events, their resulting impacts and dynamic interactions, may turn out differently than anticipated (Ward and Chapman, 2003). Accordingly, in this paper we consider the concept of risk to include the possibility of both favorable and unfavorable outcomes, but in situations where the favorable outcomes of risk are emphasized, the term opportunity may be used in lieu of risk. The extant literature on project risks and their management over recent decades recognizes the importance of external actors, such as...
subcontractors, in the project as important sources of risk (Pinto, 1997).

In the purchasing and procurement literature, subcontractor risk assessment from the viewpoint of a contractor, is intertwined mostly with the actual subcontractor selection process and subcontractor capability evaluation process. Mainly the discussion in terms of subcontractor risks within projects relates to procurement risks, which are typically categorized as technical, quality, schedule, delivery and cost performance of subcontractor (e.g. Fleming, 2003; Hallikas et al., 2004).

However, discussion on risks and risk management related to project subcontractors has mainly been concentrating on an individual subcontractor’s capabilities and on dyadic contractor-subcontractor settings, almost completely ignoring the relationship aspects in a network of multiple actors and the impacts of the actual relationships. As such, current risk management approaches do not fully recognize other effects caused by subcontractors interorganizational relationships, which in previous research have been termed secondary, indirect or networks function effects (Ritter, 2000). Therefore, we argue that the current risk management literature does not fully appreciate the complexity and dynamism of the whole network of project actors. Furthermore, a more long-term strategic viewpoint of risk beyond projects is lacking in the current risk management literature.

Empirical study with two project firms
We conducted an empirical study with two project contractor firms serving in the position of a first-tier subcontractor: a telecom system contractor and an automation system contractor. The applied research strategy was a multiple case study strategy (Yin, 1994). The data was collected in eleven semi-structured interviews in the two firms. The method of the empirical study was based on identifying the different triadic settings of three actors, where each triad represents a sub-network of a larger project or business network.

Results from the empirical study
As a result of the data collection, we identified triadic situations from both case companies related to subcontractor relationships with competitors and clients that were evaluated as risks or opportunities for the contractor. Furthermore, by identifying and analyzing triadic situations, we further divided identified risk sources based on whether they had an impact on contractors’ short-term project performance or long-term business performance.

Contractor-subcontractor-client triad
In this triadic situation, according to the empirical evidence, the relationship between a subcontractor and a client can pose risks and opportunities for the contractor. The analyzed triad is presented in Figure 1.

In general, project contractors try to avoid situations in which subcontractors are dealing directly with clients. It is a standard practice that communication within individual projects mainly takes place via the contractor. Furthermore, between projects subcontractors’ dealings with clients are usually monitored. Table 1 summarizes different triadic situations related to subcontractors’ relationships with client that were found to possess either risks (-) or opportunities (+) for the contractor in the empirical analysis. Both the impact on the contractor’s project performance and business performance are presented in Table 1.

<table>
<thead>
<tr>
<th>Risk or opportunity for project contractor</th>
<th>Impact on contractors’ project performance</th>
<th>Impact on contractor’s business performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client forces the contractor to select or favor certain subcontractors</td>
<td>- Contractor has to choose subcontractor that has low performance.</td>
<td>- Contractor’s potential to use project as a tool in creating competitive subcontractor networks for future projects is decreased.</td>
</tr>
<tr>
<td>Subcontractor communicates directly with client during the project execution phase</td>
<td>- Contractors’ ability to control and coordinate project execution is decreased. + Subcontractor can work more independently and efficiently to meet client requirements.</td>
<td>- Subcontractor uses a project as an enabler to build a direct business connection to a client, with an intention of by-passing the contractor in the following projects or service agreements.</td>
</tr>
<tr>
<td>Subcontractor’s relationship with client is used to support marketing and sales activities</td>
<td>+ Subcontractor’s good relationship with the client and reputation assures the client that the contractor’s project will be well-resourced.</td>
<td>+ Contractor’s potential to use other subcontractors in the future is decreased, increasing subcontractor’s bargaining power in future negotiations.</td>
</tr>
</tbody>
</table>

Table 1. Subcontractor’s relationship with a client as a risk or opportunity for a project contractor
The empirical data indicates that different kinds of approaches are used by the contractor to manage risks related to subcontractors’ relationship with clients. A common approach is the avoidance strategy: the contractor does not tender in a situation in which a client forces the contractor to select or favor a certain subcontractor. Another approach is to employ persuasive strategies in which the contractor aims to assure the client that the competitiveness and performance advantages of its selected subcontractors are favorable. However, in a situation in which a potentially low-performance subcontractor is insisted upon by the client, a contractor can aim to utilize the situation by, for example, trying to establish a working relationship with the subcontractor and then using this relationship to support project marketing and sales activities.

In some cases subcontractors’ relationships to the client can also be utilized during projects in, for example, conflict solving during project execution. However, it was emphasized that, in a situation in which the client and subcontractor have an established relationship, a contractor needs to make sure that the roles and responsibilities between actors are clearly defined and unambiguous communication structures and guidelines are in place. This way, if a subcontractor fails to perform at the required level, the contractor can ensure that the client does not blame the contractor for the situation due to the clarity of their roles and responsibilities.

Organizing a project in a way in which subcontractors and clients do not directly interact, but rather all communication takes place through the contractor, is a strategy that is often employed to ensure that a subcontractor is not able to dictate project by directly interacting with the client. It also decreases the risk that a subcontractor utilizes a project as an enabler for building a direct business relationship with the client, which enables to by-pass the contractor in the next project. Furthermore, building long-term relationships with subcontractors is seen as an important managerial approach in ensuring the loyalty of subcontractors in their relationship with the contractor from one project to another. Contractual, for example non-competitive, clauses are also used as a means to ensure the commitment of the subcontractor to the contractor.

Contractor-subcontractor-competitor triad

In this triadic situation, according to the empirical evidence, the relationship between a subcontractor and a competitor can pose risks and opportunities for the contractor. The analyzed triad is presented in Figure 2.

<table>
<thead>
<tr>
<th>Risk or opportunity for subcontractor</th>
<th>Impact on contractors’ project performance</th>
<th>Impact on contractor’s business performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcontractor co-operates with competitor during the project marketing and sales phase</td>
<td>- Subcontractor may use its relationship with competitor to increase its bargaining power and to claim a bigger share of the project profit. &lt;br&gt;+ Subcontractor gives contractor better price as compared to the competitor.</td>
<td>- Subcontractor's co-operation with competitors weakens contractor’s network position. &lt;br&gt;- Subcontractor's business relationship with a competitor causes a risk that the contractor's know-how is transferred to the competitor to benefit the competitor's business. &lt;br&gt;+ An opportunity for the contractor to acquire competitor know-how and utilize subcontractor's know-how as a reference in the marketing of the project to the client.</td>
</tr>
<tr>
<td>Subcontractor delivers its services to competitor</td>
<td>- Contractors' project performance is decreased due to subcontractor’s insufficient resources in project execution.</td>
<td>- Subcontractor learns to work efficiently with competitor and may prefer competitor in future projects. &lt;br&gt;+ In case contractor is not able to provide work for subcontractor, it can stay in business by doing work for the competitor.</td>
</tr>
</tbody>
</table>

Table 2. Subcontractor’s relationships with a competitor as a risk or opportunity for a project contractor
It is typical of the nature of networked projects that subcontractors are dealing with different contractors in different projects. In general, project contractors try to avoid situations in which subcontractors are dealing with project contractors’ competitors in a single project. Here the challenge is identified as ensuring that the subcontractor is committed to a certain contractor already in the tendering phase. However, in between projects, contractors often encourage their subcontractors to establish relationships with other contractors, since this ensures work load for subcontractors and this way keeps them viable. Hence, in general, subcontractors’ relationships to a contractor’s competitors are accepted as long as the “subcontractor is more committed to us”.

Table 2 summarizes different triadic situations related to subcontractors’ relationships with competitors that were found posing either risks or opportunities for the contractor in the empirical analysis.

The empirical data indicates that different kinds of approaches are used by the contractor to manage risks related to subcontractors’ relationship with competitors. Firstly, contractors are aiming to tie the subcontractors to the project in the early tendering phases of a project in order to make sure that subcontractors are committed to the contractor and not to its competitors. Further, building long-term embedded relationships with subcontractors is seen as an important means of ensuring the commitment of subcontractors. For example, active communication and interaction with subcontractors between projects are essentially seen to contribute to the success of building the commitment on a project business level. Contractual means are also used to prevent inappropriate knowledge transfer between subcontractors and a project contractor’s competitors. However, in some cases, the contractor may also benefit from a situation in which subcontractors have competitor know-how.

**Discussion**

Managers need to identify, analyze and manage risks as well as potential opportunities, from a more diverse range of sources and contexts (Harland et al., 2003). The empirical analysis recognizes that effects of subcontractors’ inter-firm relationships include both unfavorable risks and favorable opportunities. Further, a clear distinction between risks and opportunities of different nature can be made, as based on their short-term impacts on project performance and long-term impacts on business performance, which has to be taken account to effectively manage these risks. Table 3 summarizes different approaches employed in managing the risks that arise from subcontractors’ relationships with client and contractor’s competitors.

<table>
<thead>
<tr>
<th>Risk or opportunity for project contractor</th>
<th>How to manage to improve project performance</th>
<th>How to manage to improve business performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLIENT POWER RISK</strong></td>
<td>Ensure that the roles and responsibilities of different actors are clearly and visibly defined in order to avoid situations in which the client blames the contractor for its subcontractors’ performance problems.</td>
<td>Establish well-working relationships which ensure that critical resources and competence is not outsourced to subcontractors in order to maintain good negotiation position with the client and to reduce by-pass risk.</td>
</tr>
<tr>
<td><strong>SUBCONTRACTOR POWER RISK</strong></td>
<td>Establish clear interfaces between the companies and organize the project in a way in which only trusted subcontractors can communicate directly with the client.</td>
<td>Ensure that subcontractors do not tender with better prices to competitors.</td>
</tr>
<tr>
<td><strong>SUBCONTRACTOR REFERENCE OPPORTUNITY</strong></td>
<td>Utilize subcontractor’s good relationship with the client as a reference opportunity in the project marketing and tendering stage.</td>
<td>Create an image of a winning team with a subcontractor to gain better position in the market.</td>
</tr>
<tr>
<td><strong>COMPETITOR FAVOURING RISK</strong></td>
<td>Involve subcontractors early to the project in order to ensure the commitment to the project and/or use non-competition clauses.</td>
<td>Establish relationships and guidelines which ensure that subcontractors do not tender with better prices to competitors.</td>
</tr>
<tr>
<td><strong>PRIORITIZATION RISK</strong></td>
<td>Establish contractual arrangements and performance measures to ensure that the subcontractor is committed to the relationship during the single project.</td>
<td>Establish guidelines and long-term subcontractor relationships in order to ensure that subcontractors are committed to favor contractors in a case of resource shortage.</td>
</tr>
</tbody>
</table>

Table 3. Managing risks arising from subcontractors’ relationships with the client and competitors.
Naturally, the magnitude of risks and their potential and appropriate management approaches in presented triadic situations are contingent on diverse exchange and network related factors. These factors include frequency of exchange, criticality of exchange, history of the relationship, state of the project contractor’s relationship with the client, state of inter-personal relationships, network positions and the power of project contractor, role stability of network actors from one project to another and relationship-specific enablers and barriers. For example, in a situation in which project exchange between the contractor and subcontractor is rather frequent, the contractor has a greater possibility of developing an embedded long-term relationship with the subcontractor. Also, in a case in which the project contractor’s relationship to the client is embedded the risks in terms of subcontractors, for example, by-passing the contractor are not as significant. Further studies should have a more in-depth examination of the impacts that these different situation-specific factors have on appropriate risk management practices in triadic settings.

Conclusions
In existing research, the focus of subcontractor risk considerations has remained mostly at the level of evaluating an individual subcontractor’s capabilities ignoring the risks and opportunities arising from subcontractors’ current and potential inter-organizational relationships. The paper thus extends the traditional focus on dyadic relationship risks by identifying effects that project subcontractors’ inter-firm relationships have on a contractor.

Single projects are not isolated entities, but their risks are introduced and influenced by the long-term business networks and their inherent relationships.

An important foundational observation of the paper is that single projects are not isolated entities, but their risks are introduced and influenced by the long-term business networks and their inherent relationships. Risks with project performance impacts relate to the functionality of temporary project networks that enable successful project sales and delivery process. Risks with business performance impacts relate to the structure and functionality of the long-term business network, which increases the contractor’s ability to create further business through projects in a profitable manner. In order to get a holistic view on the risk related to subcontractors’ inter-organizational relationships, the relationships had to be analyzed in the context of both network layers.

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