



A stakeholder network perspective on unexpected events and their management in international projects

Kirsi Aaltonen

Aalto University School of Science and Technology, Espoo, Finland

Jaakko Kujala

*Department of Industrial Engineering and Management,
University of Oulu, Oulu, Finland*

Päivi Lehtonen

Project Institute Finland Ltd, Espoo, Finland, and

Inkeri Ruuska

*BIT Research Centre, Aalto University School of Science and Technology,
Espoo, Finland*

Abstract

Purpose – While earlier literature has focused on the management tactics of unexpected events, this paper employs an inter-organizational network perspective to the study of unexpected events in international projects. The paper aims to illustrate how a focal project's local stakeholder relationships are associated with the emergence and management of unexpected events in the context of international projects.

Design/methodology/approach – A qualitative, multiple case study of three international projects conducted in challenging institutional environments.

Findings – The findings of this paper reveal the different mechanisms through which the local stakeholder relationships affect the emergence and management of unexpected events in international projects. Owing to differences in the amount and quality of local stakeholder relationships, the management, nature and number of unexpected events that are encountered differ from project to project. The findings of this paper reveal a paradox – both the existence of and the lack of local stakeholder relationships with salient actors may generate unexpected events in international projects. Based on the findings, two types of unexpected events related to local stakeholder relationships were identified: unexpected events that were due to misunderstandings, and diverging practices, processes, values and norms of the focal project organization and the local stakeholders; and unexpected events that emerged due to the challenges in the establishment of direct and indirect relationships with salient external local stakeholders. Furthermore, the results demonstrate how local stakeholder relationships can be utilized in dealing with and managing the unexpected events that are encountered.

Originality/value – Stakeholders are a significant source of unexpected events. Limited research attention has been directed at how the local stakeholder relationships affect the project's behavior and interior processes. The research advances project stakeholder research and uncertainty management research both theoretically and empirically.

Keywords Stakeholders analysis, Uncertainty management, Project management

Paper type Research paper



1. Introduction

International projects are increasingly carried out as networks of different organizations, namely project networks (Hellgren and Stjernberg, 1995; Artto and Kujala, 2008), multi-organizational (Grün, 2004) or inter-firm projects (Söderlund, 2004). Unforeseen and unanticipated influences from an international project's environment have been identified as a major source of uncertainty during project implementation (Florice and Miller, 2001). Research evidence has indicated that a project's exposure to the host country's institutional influences, through local stakeholder relationships, may generate unexpected events in international projects (Florice and Miller, 2001; Cova *et al.*, 2002; Orr, 2005; Aaltonen *et al.*, 2008; Orr and Scott, 2008). Owing to the inherent interaction with local stakeholders that have diverse socio-cultural backgrounds, international projects are seldom implemented as planned but encounter various unexpected events from the project's stakeholder environment that occur during project execution (Orr, 2005).

While earlier research has acknowledged project stakeholders as a major source of unexpected events (Söderholm, 2008), limited research attention has been paid to the detailed study of how local stakeholder relationships are associated with the emergence and management of unexpected events in international projects. Since international projects interact with diverse local stakeholders and are embedded in complex stakeholder networks, it is necessary to understand how these inter-organizational relationships, external to the focal project organization, affect the project's behavior. The specific research question of this paper is:

RQ1. How are the focal project's local stakeholder relationships associated with the emergence and management of unexpected events in international projects?

Since research on the subject is limited, an explorative multiple case study was conducted. We examined three international projects that were delivered to emerging market environments, two of them in China and one in the former Soviet Union country. In each project case, the project's local stakeholder relationships and stakeholder network, consisting of different stakeholders and relationships between them, are described and analyzed qualitatively from the viewpoint of the focal organization that is engaged in an international project. The focal project organizations and their parent organizations all have the same nationality. With regard to the host country and its local actors, in all of the three cases, the host country is, in a cultural sense, very different from the delivering company's national culture.

The objective of this paper is to increase the understanding of how a project's local stakeholder relationships are related to the occurrence of unexpected events and their management during the project execution. Hence, the results of the study contribute to the knowledge of unexpected events, their emergence and management and to the knowledge of stakeholder management in international projects. With regard to inter-organizational relationships, the analysis focuses in particular on the amount and the quality of the focal project's local stakeholder relationships. Furthermore, our analysis expands the traditional view to examine project stakeholders through dyadic relationships by taking into account the influences of relationship structures of project networks and the impact of stakeholders who may affect the behaviors of the project indirectly. Overall, our study highlights how and why it is necessary for managers to

pay attention to the configuration of the stakeholder network and its association with unexpected events in international projects.

2. Literature review

2.1 *Unexpected events in projects*

Unexpected events have been conceptualized in a variety of ways in the existing literature, such as deviations (Hällgren and Maaninen-Olsson, 2005; Hällgren, 2007), exceptions (Orr and Scott, 2008), surprises, unforeseen events and emergent events (Florice and Miller, 2001; Weick and Sutcliffe, 2001; Sommer and Loch, 2004). What is common to all conceptualizations is the idea that unexpected events are events that were not originally planned and expected to take place as part of the project. According to Söderholm (2008), unexpected events are created when things do not unfold as planned or because conditions change over time. Therefore, unexpected events occur due to uncertainty and lack of knowledge, inherent in projects. Risks in turn are events whose probability distribution and impacts are considered to be known, that can be identified a priori, and that can therefore be taken into account in the project plans.

Existing research seems to agree that unexpected events are incidents that emerge and evolve during the project and can therefore be considered as dynamic. However, unexpected events differ in how crucial their implications are considered to be. While Florice and Miller (2001) view unexpected events as situations which pose major challenges for the project, e.g. Hällgren and Maaninen-Olsson (2005) describe unexpected events as anything from small to large deviations from the original plans. Hence, unexpected events have been examined on a wide number of levels ranging from rather small-scale operative exceptions and routine events to strategic level exceptions and even disruptions and crises that can threaten the existence of the project (Loosemore, 1998). In this paper, we follow the conceptualization of Hällgren and Maaninen-Olsson (2005) and define an unexpected event as any event that can be considered as a deviation from original project plans.

Additionally, the majority of the research on unexpected events has focused on identifying the different response tactics and approaches used to deal with the surprising events. This research has been conducted from the perspective of the project manager and the team (Hällgren and Maaninen-Olsson, 2005; Hällgren, 2007; Söderholm, 2008) and from a higher, project system level perspective (Florice and Miller, 2001; Miller and Lessard, 2001). The main finding in this stream of research has been that unexpected events are mainly managed and dealt with through informal mechanisms and governance structures and that formal methods, such as formal risk management processes, are oftentimes abandoned when unexpected events arise. However, research evidence shows that the approaches to deal with unexpected events may also differ due to the nature and scale of the unexpected events: in a major crisis situation the formal organizational structures and processes are more likely to be abandoned (Weick and Sutcliffe, 2001). Findings have further revealed that there are, indeed, differences in how project managers cope with and respond to uncertain events (Florice and Miller, 2001; Söderholm, 2008): some reactions are beneficial for the project while others may accentuate the problem.

2.2 *Local stakeholder relationships in international projects*

Stakeholders can be conceptualized as any group or individual who can affect or are affected by the project (PMI, 2004). Project stakeholders and inter-organizational

relationships between the stakeholders form the stakeholder network in which the focal project is embedded. Internal stakeholders are stakeholders who are formal members of the project coalition and hence usually support the project (Winch, 2004). External stakeholders are not formal members of the project coalition, but may affect or be affected by the project. Such groups are often referred to as non-business stakeholders (Cova and Salle, 2005).

International projects are typically implemented in challenging institutional environments and involve a variety of internal and external local stakeholder organizations each with their own institutionalized values, norms, practices, expectations, socio-cultural backgrounds and demands (Turner, 1999; Aaltonen and Sivonen, 2009) that may differ from those of the focal entrant organization. In other words, such projects are typically embedded in a network of local actors such as local customers, local regulators, suppliers or other partners. These entities and the relationships between them constitute the local stakeholder network in which the focal project is embedded. Cova *et al.* (1996) refer to "milieu" as the local network of business and non-business actors with which the firm has relationships. Earlier literature has revealed challenges related to local stakeholder relationships in projects (Orr, 2005; Aaltonen *et al.*, 2008), but, on the other hand, highlighted the crucial role of local stakeholder relationships in anchoring the project to its institutional environment (Oliver, 1991; Orr and Scott, 2008).

Inter-organizational relationships between project network actors have been discussed from various viewpoints by several authors (Hellgren and Stjernberg, 1995; Bresnen and Marshall, 2000; Dubois and Gadde, 2000; Skaates *et al.*, 2002). Especially, The International Network for Project Marketing, a research community, which is loosely affiliated with the Industrial Marketing and Purchasing Group, has highlighted the importance of analyzing relationships between the project actors. Work in the project marketing field has focused, for example, on the development and maintenance of long-term inter-organizational relationships between project actors (Cova *et al.*, 2002).

The concept of embeddedness has been used by a number of scholars to define an organization's network (Granovetter, 1985; Håkansson and Snehota, 1995; Uzzi, 1997). Granovetter (1985) introduced the concept of network embeddedness by arguing that a firm's behavior can be understood through the study of the overall structure of relationships in which firms are embedded. Two aspects of embeddedness are identified by Granovetter (1992): relational and structural. While relational embeddedness refers to the quality and depth of the inter-organizational relationships between the actors, structural embeddedness relates to the network's overall architecture. According to Uzzi (1997), relationally embedded relationships are characterized by high levels of trust, fine-grained information sharing, commitment and joint problem-solving arrangements, in contrast to arms-length relationships. Inter-organizational relationships have been characterized as having also many other dimensions, such as frequency of interaction, interdependence, goal congruence, stability, conflict, legitimacy and adaptation (Ahola, 2009).

In this paper, we are particularly interested in the focal project's relationships to local stakeholders. Orr (2005) has defined local embeddedness as the number of direct relationships an organization has with local actors in the project's environment. Thus, Orr's (2005) local embeddedness conceptualization relates to structural dimensions of relationships. However, his analysis does not take into account the relational

embeddedness, quality and depth of the local stakeholder relationships, nor does it consider indirect relationships with local stakeholders. Andersson *et al.* (2005) discuss factors that affect a subsidiary's local embeddedness – embeddedness in relationships with local customers, suppliers and other partners. They focus in particular on the content of the firm's individual relationships, more specifically on the extent to which individual relationships with local customers, suppliers and regulatory agencies, among others, can serve as a source of local knowledge. Hence, the conceptualization by Andersson *et al.* (2005) focuses especially on the relational embeddedness aspect of local embeddedness.

2.3 The role of local stakeholder relationships in international projects

Previous research has highlighted both the challenges and the benefits that are brought up by local stakeholder relationships in international projects. The high level of distance between the focal project and local stakeholders due to differing values, culture, traditions and norms has been shown to contribute to co-operation challenges between the project network actors (Turner, 1999; Orr and Scott, 2008; Ruuska *et al.*, 2009). Therefore, distance between the focal project and local stakeholders can be considered as a source of unexpected events. On the other hand, the institutional perspective emphasizes the importance of local stakeholder relationships in embedding and anchoring the project in its host country's environment (Miller and Lessard, 2001; Flyvbjerg *et al.*, 2003; Grün, 2004). Therefore, local stakeholder relationships can be considered as a means of managing unexpected events and the lack of local stakeholder relationships as a source of unexpected events.

2.3.1 Collaboration challenges in local stakeholder relationships. Inter-firm collaboration between a host organization based in a developed country and a local organization in a developing country involves various barriers and challenges. Typically, values, traditions, behavioral patterns, procedures and taken-for-granted rules of local stakeholders deviate dramatically from those of the entrant organization (Orr and Scott, 2008). Research evidence both from the field of institutional theory and cultural studies has witnessed that these differences and problems of understanding are most probably highest in stakeholder relationships where the partners are distant on a variety of measures. In international projects, high-institutional differences and cultural distance typically exist in relationships between a foreign entrant and local stakeholders in the host country (Turner, 1999).

Differences between the foreign entrant and local stakeholders may take many forms. Ireland (2006) discusses the differences of cultural aspects, work habits, specification practices, customs and processes of local actors involved in international projects. Distance in an inter-organizational relationship has been discussed from various viewpoints: companies can have, for example, cognitive distance, social distance, cultural distance, technological distance and temporal distance. Foss (1999) uses the concept of cognitive distance to denote differences in buyer and supplier organizations' practices. Cognitive distance includes business culture and language differences between partners. Social distance measures the extent to which the individuals in the two organizations are familiar with each other's ways of thinking and working. Holmström *et al.* (2006) discuss the concept of socio-cultural distance and state that it reflects the level of understanding of another actor's values and normative practices. Cultural distance is the degree to which the norms and values of the two companies differ

due to their place of origin (Evaristo and van Fenema, 1999). Technological distance refers to the differences between technology activities (Bengtsson and Söderholm, 2002). Holmström *et al.* (2006) argue that temporal or time distance measures the dislocation in time experienced by two actors.

In conclusion, the level of inter-organizational integration is typically low in a relationship between a foreign entrant and a local stakeholder and calls for the use of various integrative mechanisms. Differences in culture, values, language and work practices between project actors produce challenges and disintegration in the relationships and therefore act as a source of unexpected events. Consequently, challenges in collaboration between distant actors, diminish the efficiency of the focal project when compared to a project network that consists of actors with similar backgrounds, the established history of relationships and repeated exchanges, where there are consistent joint routines, mutual adaptations, personalized relationships, trust and commitment.

2.3.2 Local stakeholder relationships as a means anchor the project to the institutional environment. Projects enter into inter-organizational relationships with various local stakeholders. Literature has identified diverse determinants that motivate organizations to establish inter-organizational relationships with certain actors (Oliver, 1990). Necessity is a typical reason for organizations to develop linkages or exchanges with other organizations. Necessity relates to the need to meet the necessary legal or regulatory requirements (Oliver, 1990). Organizations may, for example, need approval from authorities, such as government agencies, and therefore need to establish inter-organizational relationships to such local instances. Research on projects provides various accounts on necessity as a factor explaining the development of relationships to local actors. For example, Cova *et al.* (2002) argue for the need to develop embedded relationships with relevant regulatory agencies already in the project marketing phase in order for the project to receive crucial permissions. Many countries also have regulatory requirements for the use of local subcontractors.

The institutional perspective maintains that projects, in order to survive, must adapt to and be rooted in the environment, i.e. be knowledgeable of the environments' rules, practices and norms (Meyer and Rowan, 1977) – otherwise conflicts may arise (Miller and Lessard, 2001). Including local actors, such as subcontractors, in the project network may be considered a strategically viable option that will contribute to attaining project legitimacy. The improvement of an organization's legitimacy in its environment has also been presented as one reason for organizations to connect with each other. According to institutional theory, organizations encounter pressures from their institutional environment to which they must respond. These pressures encourage organizations to increase their legitimacy in order to appear in agreement with the prevailing norms, rules, beliefs or expectations of external constituents (Oliver, 1991). The targets of legitimating attempts may include other members of the organization's set, licensing boards, resource-granting agencies, the general public or external stakeholders (Galaskiewicz, 1985 in Oliver, 1991). Attempts to improve legitimacy through relationship formation will be directed towards organizations whose level of legitimacy is perceived by the focal organization to be considerably higher than its own (Oliver, 1990).

In addition to having a role in supporting legitimacy, local stakeholder relationships may also benefit the focal project in variety of other ways. For example, local

stakeholders may possess important local knowledge of the host country's norms and values and of other local actor's practices and preferences. The value of local knowledge for project operations has been highlighted in previous studies (Javernick-Will *et al.*, 2008). Additionally, local stakeholders oftentimes have crucial relationships with other salient local stakeholders in the project's environment that may be utilized for the benefit of the project. Interaction with local stakeholders has also been proven to produce beneficial innovations for the entrant organization (Andersson *et al.*, 2005).

To conclude, anchoring the project to the local institutional environment through the establishment of local stakeholder relationships may shield the project from unexpected events that are associated with the project's legitimacy in the local environment. An example of such unexpected event is local residents' resistance to the project. In addition, local stakeholder relationships may also support the management of unexpected events through the local knowledge gained through these relationships.

3. Methodology

Prior research on unexpected events is rather limited in terms of the analysis of the impacts of local stakeholder relationships on the occurrence of unexpected events during the project execution. Therefore, we decided to build the research on project case studies using a qualitative multiple case study research design (Eisenhardt, 1989). The case-based method is an ideal mode of inquiry for addressing research questions regarding how unexpected events actually occur (Yin, 1989). Additionally, the case-based method enables a rich, in-depth examination of unexpected events in the contexts where they occur in a way that is not attainable using survey methods.

International projects were selected as an empirical context due to their complexity in terms of local stakeholder relationships, and the range of stakeholder pressures and unexpected events present in them. For the purposes of the study three delivery project cases, implemented in challenging institutional contexts, were selected. We sought cases that were diverse with regard to the local stakeholder relationship settings from the viewpoint of the focal organization. Therefore, we selected one turnkey delivery (Case Localizer) with a high number of local relationships, one system delivery with a moderate number of local stakeholder relationships (Case Embedder) and one system delivery with a limited number of local stakeholder relationships (Case Domestic). The focal organizations in each case represent the same national background. In two of the cases the host country of the project was China and in one a former Soviet Union country. The host countries were culturally distant from the nationality of the focal organization. We gave the project cases names that correspond to the pseudonyms that were given to the focal organizations. Background information concerning the analyzed project cases is presented in Table I.

The data were collected primarily through interviews that were tape recorded and transcribed. The interviews lasted between 50 minutes and 180 minutes. Project related documentation such as risk analyses, project status reports and project plans were also utilized in the analyses as secondary archival data. Altogether 26 face-to-face interviews were conducted: In Case Localizer 13 interviews, in Case Embedder seven interviews and in case Domestic six interviews. All interviews were conducted with key project individuals. The interviewees included the project managers, project team members such as project engineers and controllers, as well as those in charge of risk management. First, the project managers of the project cases were interviewed. After this, we discussed the other potential informants with the project managers who then helped

Dimension	Case Localizer	Case Embedder	Case Domestic
Project scope, duration, monetary value	Turnkey project investment, five years, > US\$200 million	System delivery to an industrial facility, two years, US\$20 million	System delivery to an industrial facility, three years, > US\$10 million
Organization's position in the project network and project scope	Turnkey contractor responsible for the entire project implementation	System contractor responsible for design, equipment delivery and installation	System contractor responsible for design, equipment delivery and installation
Host country	A former Soviet Union country	China, near Shanghai	China, near Shanghai
Customer	A Southern European company with permanent operations in the host country	A Chinese company	A Chinese company
Nature of project-based firm's operations	Tens of projects implemented in parallel, turnkey projects, system deliveries, equipment deliveries, service projects	Tens of projects implemented in parallel. The majority of projects system deliveries	Tens of projects implemented in parallel. The majority of projects system deliveries
Project organization	Project team co-located in the host country. Part of the project personnel divided among different regions in the project's host country. At the beginning of the project, the majority of the personnel ex-patriates and representatives of the parent organization. Increasing number of local team members as the project progressed	Distributed. Project manager located in home country, part of the project team in China. Project manager's frequent visits to China, once in two months, for two to three weeks. Majority of the project team were the same nationality as the project's parent organization while part of the team was Chinese	Distributed. Project manager and project team in home country. Project manager's frequent visits to China, once in three months for two to three days. The majority of the project team were the same nationality as the project's parent organization while part of the team was Chinese
Project-based firm's experience from host country and from customer	Limited experience A new customer	Limited experience A new customer	Various industrial deliveries to China Customer known from earlier co-operation
Project manager's experience	An experienced project manager with experience from various countries	An experienced project manager without exposure to China before the project	An experienced project manager without exposure to China before the project
Stakeholder network	Highly complex	Complex	Low in complexity

(continued)

Table I.
Characteristics of analyzed case projects

Table I.

Dimension	Case Localizer	Case Embedder	Case Domestic
	Customer, two primary subcontractors, various local and regulatory agencies, local opponents	Customer, customer's Chinese engineering office, Chinese suppliers delivering critical equipment, Shanghai subsidiary, local authorities indirectly through subcontractor's exposure	Customer, domestic subcontractors, Shanghai subsidiary
Other contextual factors	Highly strategic project. Fast-paced sales phase. Challenging country environment due to constant changes in regulations and political climate	Intense sales phase Chinese subcontractors used for the first time in critical component delivery. Idea to shift more PM responsibility to Shanghai office	Project was considered as easy from the beginning. The project was a "copy project" of a previous delivery
Project success	Ongoing. Challenging with regard to stakeholder management and interfaces. Delays	Successful with regard to profitability. Delayed	Highly successful in terms of profitability, delayed due to customer's challenges with approvals

to organize the interviews. In all of the cases, a part of the interviews were conducted at the project site and a part of them in the host country of the project's parent organization. The researchers also participated in the lessons learned session of Case Domestic. There were always at least two researchers present in the interviews, which made it possible for them to discuss the findings afterwards.

The interviews were focused on unexpected events that were experienced in the analyzed projects. The interviews followed the guidelines of an ethnographic interview described by Spradley (1979). The general themes of the interviews were structured. In addition, the interview guide contained specific open-ended predetermined questions. Therefore, the same general areas of information were covered in each interview. However, the approach allowed a degree of freedom and adaptability. The general themes of the interviews included company and project-related background information, stakeholder relationships of the project, stakeholder management practices of the project, risk analysis practices in the project, unexpected events in the project and management approaches to those events. First, relevant background information about the case projects and their stakeholders were collected. At this stage, the interviewees were also asked to draw a stakeholder map of the project. The interviewees were encouraged to map all the stakeholders (both organizations and individuals) that they considered as having some form of a relationship with the project. Interviewees were also instructed to characterize the relationships between the stakeholders by describing them as relationally embedded or arm's-length relationships. Further questions about the history, trust, information sharing, atmosphere and commitment in the stakeholder relationships were posed in order to reveal the character of the inter-organizational relationships. After drawing the map, detailed questions about each identified stakeholder and their relationships were posed. Based on the pictures and characterizations of the interviewees, the stakeholder maps of the cases were created.

During the interviews, interviewees were also urged to go through the project's phases and focus on such events that were unforeseen and unexpected for them. These were events that the interviewees considered to be deviations from the project plans and had significant implications for the project's progress. In addition, the identified events were those that had not been identified in the original project risk analyses. Once an unexpected event occurred, we encouraged the interviewees to provide more details about it, i.e. describe what happened, why, when, who were involved and what were the actions taken to handle the event. Unexpected events were therefore detected when the interviewees brought them up and were based on the experiences of the interviewees. When stakeholder-related incidents in particular were revealed, the interviewees were asked to describe the events in more detail. In addition, the nature of unexpected events was further studied based on the project documentation and was subsequently discussed with other interviewees. In all of the cases, the drawn stakeholder maps were compiled into a single stakeholder map and the unexpected events were placed on a timeline after the interviews were complete. These documents were then sent to the project manager with whom the stakeholders and unexpected events were again discussed.

The data were content analyzed and the analysis overlapped with the data collection. First, the unexpected events that were identified in the interviews were mapped onto unexpected events matrix. This table entailed detailed information concerning the timing of each event, stakeholders that were involved, how each event unfolded, its impacts and the approach taken to manage the event. Particular attention was paid to

the potential involvement of local stakeholders in the events. Examples of unexpected events with regard to local stakeholders are described in more detail in the Appendix Table AI. In parallel, the stakeholder relationships of the focal projects were qualitatively analyzed. The qualitative analysis followed the process of Cova *et al.*'s (2002) milieu analysis that is affiliated with the industrial network approach (Håkansson and Snehota, 1995) to project networks. First, the analysis focused on identifying the meaningful stakeholders and their attributes based on what was brought up in the interviews. Then the interviewees' characterizations of the relationships between the stakeholders in the focal organization's network were analyzed by classifying the relationships to highly relationally embedded relationships and arm's-length relationships (Uzzi, 1997). In the analysis, particular effort was placed on further examining the local stakeholder relationships. The meaningful content of the stakeholder relationships and stakeholder network structure, to a large extent, emerged from the data analysis. While this approach generates empirically driven findings, it poses a natural challenge to the reliability of the analysis. After the coding of unexpected events and the analysis of stakeholder relationships, the analyses were combined and a cross-case analysis was conducted.

4. Case results

4.1 Case Localizer

Localizer's experience in the project's Eastern European host country was limited and the customer was new to Localizer. The number of stakeholder interfaces in Case Localizer was high with tens of relationships that needed to be nurtured by Localizer. Crucial local stakeholder relationships included those with local subcontractors, customer, regulatory agencies, regional and national governments, different types of permission authorities and local residents. Localizer's subcontractor structure changed constantly during the project but it involved a variety of local subcontractors from different regions of the country. Two primary subcontractors were in a position to take care of the other local subcontractors, but Localizer also had direct relationships with its local second-tier subcontractors. Relationships with a host of local permission authorities and governmental institutes were established in order for the project to obtain approval and receive information on how to follow the local permission procedures, norms and legislation. The relationships with local authorities were nurtured throughout the project, since the instability of the legislation and regulative frameworks in the host country, meant that permission procedures were in constant flux.

In Case Localizer, the relationships with local stakeholders, both with local authorities, residents and subcontractors, were considered strategically important from the early phases of the project. Not only did the cost structure and the customer favor the use of local entities as subcontractors, but their role was central in anchoring the project in its country environment, in managing the third-party relationships and in acquiring and interpreting local knowledge. As a turnkey contractor, Localizer was in charge of coordinating the relationships with different local authorities and local subcontractors, who, with their knowledge on local procedures, were considered to support this effort. Also, the country's legislation demanded the use of local subcontractors. The overall stakeholder network of Case Localizer is shown in Figure 1.

Various relationships with local stakeholder entities exposed the project to the institutional influences of the host country. The local stakeholder network of Localizer

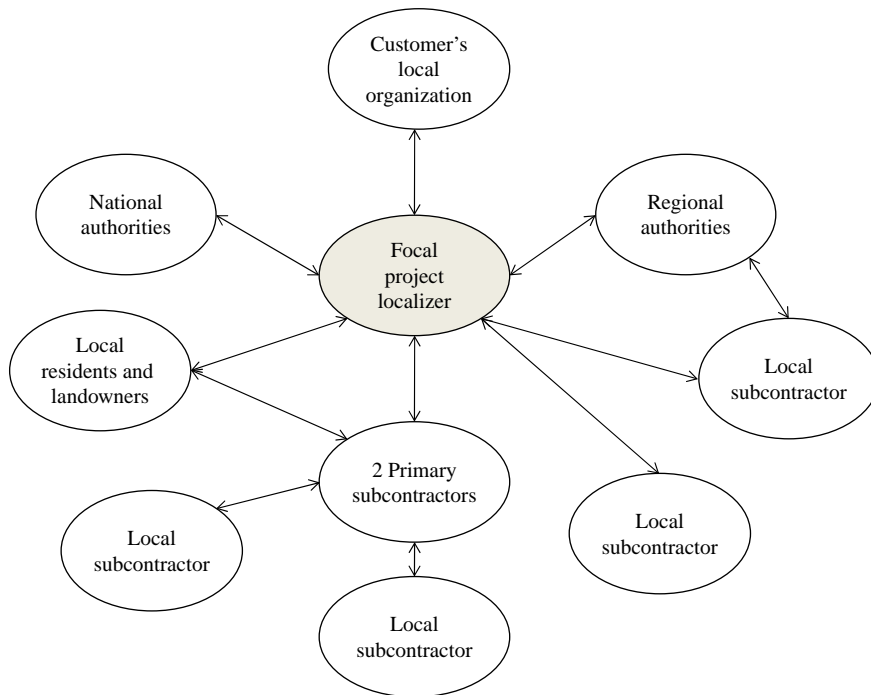


Figure 1.
Stakeholder network
of Case Localizer

was characterized by the project director as “highly complex with various interdependencies and relationships between the actors”. The diverging practices of the local stakeholders in the network required a lot of attention from Localizer and produced constant exceptions to the implementation of the project. In particular, local subcontractors required regular monitoring, supervision and training from Localizer, since subcontractors were not used to such strict processes that were demanded by Localizer. Furthermore, the procedures related to different permission processes in the country surprised Localizer. Therefore, Localizer could not predict the time that was required for the preparation of different documents and for negotiations with the various authorities.

Overall, there was a high number of unexpected events related to stakeholders diverging practices in Case Localizer. The project team described the daily life of the project as constantly dealing with surprising events related to the local stakeholders, their differing practices, habits and procedures and to the unpredictable interactions that rose from the local stakeholder network. Consequently, Localizer was directly exposed to the different institutional influences of the host country through its local stakeholder relationships. In Case Localizer, the unexpected events ranged from minor operational surprises to dramatic events. Most significant unexpected events were related to the challenges with local subcontractors’ operational procedures and authorization from the local authorities needed for the project. The local subcontractors were not used to the operating procedures that were required by Localizer; their work habits and process orientation differed from those of Localizer. For example, one local subcontractor resisted the use of certain site acceptance procedures and processes

promoted by Localizer. The battle over the use of these processes continued, until the local subcontractor finally bowed to Localizer's wishes. Overall, surprising challenges related to quality, commitment and interaction with subcontractors were experienced. This in turn led to significant delays, and, ultimately, Localizer was forced to change some of its subcontractors. Attempts were made to manage unexpected events that related to diverging practices by organizing emergency meetings, going on on-site tours around the different subcontractor locations, organizing team building sessions with subcontractors, communicating actively and regularly on the required procedures, and setting small-scale targets for subcontractors. Various unexpected events were also encountered with regard to authority permissions. On various occasions local residents also voiced resistance towards the project. Challenges with external local stakeholders caused significant delays for the project and required extra resources. For example, Localizer engaged in detailed permission procedure mapping, organized discussions and consultative sessions with authorities and local residents, and acquired knowledge related to local procedures. In these efforts, the local subcontractors proved to be a good source of support.

4.2 Case Embedder

In Case Embedder part of the project team and the project manager were located in the headquarters of the parent company and part of the team was located in a Chinese subsidiary. The strategic intent was to shift more and more project management responsibility to the Chinese subsidiary. Embedder had 15 direct relationships with different stakeholder organizations that required attention. The most important of these relationships was with the local customer. The Chinese customer was new to Embedder. However, an embedded and trusting relationship with the customer was formed in the early phase of the project. Additionally, Embedder had selected two new Chinese suppliers that were to deliver the most critical systems of Embedder's delivery. Gaining experience on the use of local suppliers and building local networks was considered important with regard to the potential for forthcoming projects in China. Consequently, in this project the strategy was to become embedded in the local environment by procuring complex and critical equipment from Chinese subcontractors. Embedder was also indirectly connected to regional authorities through its relationships with the Chinese customer and Chinese subcontractors. Otherwise, Embedder did not have direct dealings with the local authorities. One of Embedder's suppliers was strongly connected to the Chinese customer and to local authorities in the area, while the other supplier was from another province and did not have a strong network within the province where the site was located. The stakeholder network of Case Embedder is shown in Figure 2.

In Case Embedder, unexpected events related to the Chinese customer and subcontractors' differing procedures were encountered. For example, the scheduling practices differed dramatically from those that Embedder was used to. Planning was conducted on a much shorter time horizon, which complicated the anticipation of resource needs at Embedder. Additionally, all the documentation needed to be in Chinese, which caused a lot of confusing situations during the project. These unexpected situations were dealt with through intensive informal discussions, e-mails and face-to-face communications during informal meetings. In Case Embedder the most significant unexpected event that was encountered was when the local Chinese supplier faced challenges with the local authorities, media and residents concerning an

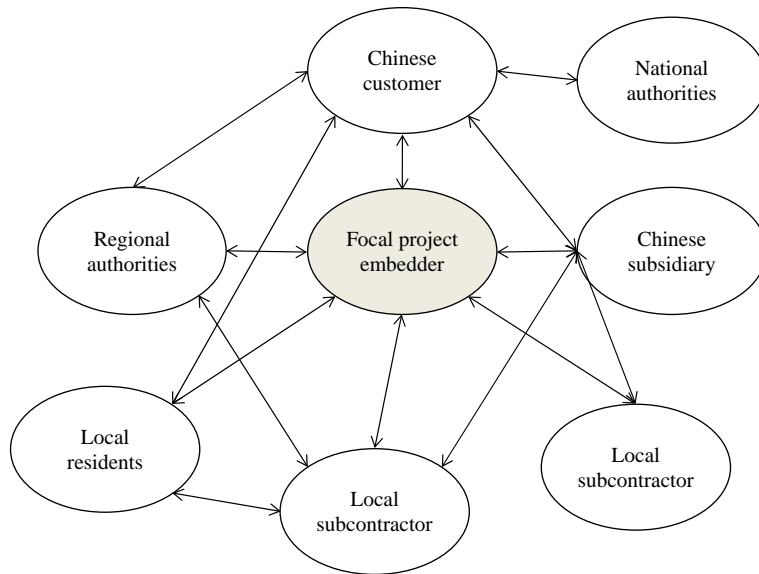


Figure 2.
Stakeholder network
of Case Embedder

environmental issue at the site. Apparently, the supplier’s manufacturing procedure caused a smell at the site that aroused public resistance and attracted authorities to the site. The situation evolved from a minor situation to a rather serious conflict in which Embedder was forced to become involved. It was presumed that the situation escalated because Embedder’s supplier was originally from another province and thus lacked established relationships with the salient authorities within the province of the project site. In other words, the lack of local relationships generated an unexpected event that evolved to a deeper stakeholder conflict. Owing to this challenge, work at the site was halted for almost two months. Ultimately, also Embedder’s own project personnel engaged in the negotiations with the local authorities, local residents and with the local subcontractor. Embedder was also able to persuade the Chinese customer to contribute to the resolution of the conflict by utilizing its own connections with the local authorities.

4.3 Case Domestic

The number of stakeholder relationships in Case Domestic was rather low. Altogether ten significant stakeholder relationships were identified. Overall, the local stakeholder network structure of the project was simple. Domestic had direct interfaces with its Chinese customer, domestic subcontractors and suppliers. The only direct local stakeholder interfaces were the relationships between the Chinese subsidiary and Chinese customer that in turn had an arms-length relationships with local authorities. Domestic’s own supplier relationships were highly embedded due to longtime joint co-operation. In Case Domestic, the strategic intent was to use the known domestic suppliers and subcontractors with whom the parent company had established embedded and long-term relationships in previous projects. A simple network structure with a low number of interdependences was considered to be the optimal choice to ensure efficient deliveries. Exposure to the host country environment was therefore

limited and took place mainly via the Chinese customer and the local subsidiary that supported the preparation process for the project. The stakeholder network of Case Domestic is shown in Figure 3.

In Case Domestic the number of unexpected encountered events was low. Daily operations proceeded as planned and co-operation with known subcontractors was easy. The most important unexpected events were indirect in the sense that Domestic's customer faced challenges with the local authorities. The project site was closed twice by Chinese authorities for an unspecified period due to problems related to land use issues which also involved local residents. Owing to this, the project was delayed for months. Domestic had to interrupt its shipments and inform the suppliers about the delay. As a consequence, suppliers did not receive their payments on time. The delays at the site caused a lot of internal disturbance and extra work for Domestic and its suppliers. Intense communication via letters, e-mails and telephone took place as well as internal clarifications and discussions at Domestic on the legal interpretation of the situation. The primary focus of Domestic's response was on how to explain the situation to suppliers in a way that would avoid extra costs. However, Domestic did not want to become involved with solving the conflict with its Chinese customer. This is evident in the following quote from the project manager:

I did not want to concern the customer anyhow or ask him questions related to the conflict. Instead I just decided to wait for a while and try to deal with the issue internally.

4.4 A comparison of unexpected events and their management between cases

In order to understand how the nature and frequency of unexpected events differs between the project cases with different local stakeholder relationship settings, characteristics of unexpected events in the cases were crosstabulated. Further, commonalities and differences across the cases were sought for. Table II reports the results of the cross-case analysis.

Owing to the differences in the amount and quality of local stakeholder relationships, the frequency, nature and management of the encountered unexpected events differed between the three cases.

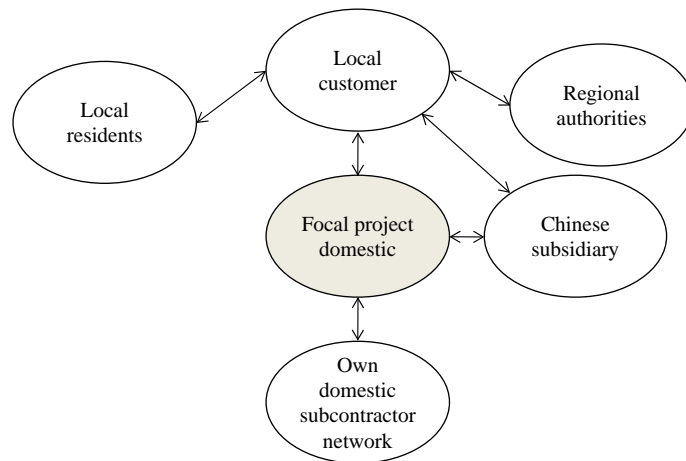


Figure 3.
Stakeholder network
of Case Domestic

	Case Localizer	Case Embedder	Case Domestic
Local stakeholder relationships	A high number of stakeholder relationships, tens with local stakeholders A lot of interdependencies between the local stakeholders Local customer, two local primary subcontractors, various local subcontractors, various local authorities and regulatory agencies, local residents that opposed the project	A total of 15 direct stakeholder relationships of which seven with local stakeholders A lot of indirect local stakeholder relationships through relationships with local stakeholders Local customer, customer's Chinese engineering office, Chinese suppliers delivering critical equipment, Shanghai subsidiary, local authorities indirectly through subcontractors	A low number of direct stakeholder relationships two of which were with local stakeholders Chinese customer, domestic subcontractors, Shanghai subsidiary
Frequency of unexpected events	Constant disturbances during project execution	Occasional disturbances during project execution	Rare disturbances during project execution
Nature of unexpected events	Unexpected events related to differing practices between Localizer and its local stakeholders Unexpected events related to challenging direct and indirect relationships and their development with local authorities such as permission authorities	Unexpected events related to differing practices between Embedder and its Chinese suppliers and Chinese customer Unexpected events related to the Chinese supplier's uneasy relationship with local authorities and residents. Indirect in nature	Unexpected events related to Chinese customer's challenges with local authorities and residents. Indirect in nature
Management of unexpected events	Local stakeholders' knowledge and relationships were utilized in the management of unexpected events	Local stakeholders' relationships were utilized in the management of the indirect stakeholder event	Internally oriented, focused on internal discussions and decision making

Table II.
Cross-case analysis

In the turnkey project, Case Localizer, there was a high number of local stakeholder relationships and the structure of the stakeholder network was also rather complex due to the interdependencies and interactions between the local entities. The system delivery cases Embedder and Domestic, in turn, featured a low number of local stakeholder relationships and simpler local stakeholder network structures due to the low number of interdependencies between stakeholders. Furthermore, the comparison between Case Domestic and Case Embedder reveals the differences between the two system delivery projects: in Case Domestic the number of local stakeholder relationships was low and the interactions with the institutional environment were therefore limited. In turn, in Case Embedder, the exposure to local environment through local subcontractors was more significant.

First, the analysis suggests that a high number of local stakeholder relationships of the focal project is associated with a large number of unexpected events. These events may be related to differing practices, norms and values among the project actors. For example, in Case Localizer the amount of unexpected events concerning differing operating procedures was high due to the large number of direct relationships with local entities. In turn, in Case Domestic, the relationship with the local customer was the only source of unexpected local stakeholder events, which limited the amount of potential unexpected events stemming from the differing practices among the actors. In Case Localizer, exceptions related to diverging practices between the entrant and the local actors were constantly experienced, and challenges related to the establishment and development of relationships with salient local stakeholders were also encountered. Consequently, Localizer had direct exposure to the different institutional influences from its local stakeholder environment that constantly disrupted the project execution. On the other hand, Localizer was able to utilize its local relationships in the management of unexpected events by acquiring local knowledge through them and engaging its local subcontractors in management efforts with regard to local authorities. In the two systems delivery cases, there were fewer direct relationships with local stakeholders. As a consequence, unexpected events due to local stakeholders' differing practices were less common, and were primarily indirect in nature. However, in both Case Embedder and Domestic, unexpected events were generated due to the challenges and lack of embedded relationships with important and salient external stakeholders, such as local authorities and residents. Therefore, weak anchoring of the project within the institutional environment because of a lack of direct local stakeholder relationships generated unexpected events as well.

Second, the data analysis indicates that unexpected events caused by challenging or non-existent relationships with salient local stakeholders can be both direct and indirect by nature. For example, in Case Embedder the subcontractor's non-existent relationships with provincial authorities caused an unexpected event with local authorities and residents in which Embedder had to become involved. Case Domestic featured a similar situation: the Chinese customer's challenges with the local authorities and residents halted work in the project for a while. The lack of direct or indirect embedded relationships with salient and important local stakeholders may therefore generate unexpected events in a project.

Third, our data analysis reveals how the management of unexpected events is related to the local stakeholder relationships of the focal project. Localizer was actively involved in the management of unexpected events and required its local subcontractors and suppliers to also be aware of unexpected stakeholder influences and their management. Embedder also engaged in the management of the unexpected stakeholder-related events by utilizing its previously established good relationship with its Chinese customer and persuading them to utilize its relationships in the management of the event. Moreover, Embedder was able to utilize the knowledge gained from its local customer in the decision-making process of the management strategy of the situation. In turn, Case Domestic illustrates a situation where an unexpected stakeholder related event affected Domestic indirectly, and where Domestic's own relationships with local actors were low in number. Consequently, Domestic's method of dealing with the unexpected event was more internally oriented and focused primarily on internal sensemaking.

5. Discussion and conclusions

Local stakeholder relationships are a salient source of unexpected events (Orr, 2005). In this study, a stakeholder network perspective on unexpected events is adopted when addressing the role of local stakeholder relationships in the emergence and management of unexpected events in international projects. Through the study of three case projects the paper illustrates how a focal project's direct and in-direct local stakeholder relationships are associated with the emergence and management of unexpected events in international projects.

Based on the findings, two types of unexpected events related to local stakeholder relationships were identified. First, our data revealed unexpected events that were due to misunderstandings between the focal project organization and the local stakeholders and the differing practices, processes, values and norms that they had. In other words, the distance between the project actors generated unexpected events. These unexpected events, lending support to earlier research findings by Orr (2005), Orr and Scott (2008) and Söderholm (2008), emerged in the interactions with local stakeholders who were actively involved in the project execution. Second, we found unexpected events that emerged due to the challenges in establishing direct and indirect relationships with salient external local stakeholders, such as authorities or local residents on which the project's survival was dependent. These unexpected events were due to challenges in rooting and anchoring the project in its institutional environment. Among others Oliver (1991), Miller and Lessard (2001) and Cova *et al.* (2002) have highlighted the importance of building attachments to the local environment in order to ensure legitimacy and the efficient and effective execution of the project. In conclusion, the findings reveal, paradoxically, that both the existence and the lack of local stakeholder relationships with salient actors, such as in cases Embedder and Domestic, may generate unexpected events in international projects. Therefore, when designing the structure of the project network, managers should take into account the need to engage local stakeholders to the project network in order to anchor the project to its institutional environment (Miller and Lessard, 2001; Flyvbjerg *et al.*, 2003; Grün, 2004). However, the need to create an integrated and cohesive project network that is capable for co-operation (Orr and Scott, 2008; Ruuska *et al.*, 2009) is equally important. In other words, engaging local stakeholders to the project network will contribute to rooting the project in the environment, but may, on the other hand, cause co-operation challenges within the executing project network due to the distance between the actors. The balance between the project network's internal integration and external adaptation to the institutional environment is an area that needs further research.

Earlier literature (Florice and Miller, 2001; Hällgren and Maaninen-Olsson, 2005; Hällgren, 2007; Söderholm, 2008) has primarily focused on the analysis of different strategies and tactics when dealing with unexpected events. Our findings provide new insight into unexpected events that originate with local stakeholders and better understanding of the role of local stakeholder relationships in their management. Furthermore, by introducing a stakeholder network perspective and considering indirect local stakeholder influences, the study challenges the traditional view of an individual project organization interacting with an individual stakeholder, which is an underlying assumption in the current project stakeholder management models (Yang *et al.*, 2009). Based on our findings, a stakeholder network perspective on a project during the whole project lifecycle, not just during project marketing phase

(Cova *et al.*, 2002), proves to be highly important. For example, in Case Embedder local Chinese subcontractors' arms-length relationships with local residents and authorities posed an unexpected event for the focal project. Therefore, managers should go beyond dyadic direct stakeholder relationships and when possible, also map potential indirect stakeholder influences by analyzing stakeholder networks of their stakeholders. Furthermore, changes in local stakeholders' positions may occur during the project. Therefore, continuous mapping of the evolution of the stakeholder network during the project lifecycle is also needed.

In addition, our findings demonstrate how local stakeholder relationships can be utilized in the management of unexpected events. This is an area that has deserved limited attention in prior literature. First, local actors may be engaged directly in managing unexpected situations. For example, Embedder persuaded its Chinese customer to offer support in the management of an unexpected situation. Second, local stakeholders may be used as a source of local knowledge as illustrated by Javernick-Will *et al.* (2008). This local knowledge can then be utilized in the sensemaking and decision-making processes that take place when an unexpected event is encountered. For example, for Localizer, the local stakeholders acted as an important source of local information concerning the management of unexpected events. However, relational embeddedness in relationships with local stakeholders is required to be able to exploit local knowledge and engage stakeholders in the management of unexpected situations. Creating relationally embedded relationships with local stakeholders obviously requires effort and does not happen overnight: as the project proceeds, actors learn and develop common ground for understanding the way each other works (Olson and Olson, 2000). Further empirical research on the effects of such learning between the actors in a project network and how it is related to the emergence and management of unexpected events is needed.

The results of the study describe how local stakeholder relationships are associated with the project's interaction with the local institutional environment. Therefore, our findings deepen our understanding of project-environment interaction; an area where more research has been called for (Engwall, 2003; Söderlund, 2004; Söderholm, 2008; Manning, 2008). Empirical studies have confirmed that some projects are more tightly linked with their environment, while others are more isolated (Johansson *et al.*, 2007; Lehtonen and Martinsuo, 2009). Based on the results, turnkey projects are more prone to exposure from the local environment because of their direct relationships with a variety of local stakeholders. In turn, system delivery projects most often face unexpected local stakeholder events indirectly through their relationships with other network actors. In turnkey project Case Localizer, the project was tightly linked to local stakeholders in the host country environment and constantly encountered unexpected stakeholder related influences. In the two system delivery cases, the interaction with the local stakeholder environment was more limited and indirect. The differences observed in the projects' interaction with their environment due to different local stakeholder relationship settings call for project management approaches that are adjusted to the focal project's degree of embeddedness in the local stakeholder network (Shenhar, 2001). Managers should take into account that projects that are constantly interacting with their stakeholder environment, such as turnkey projects, need different stakeholder engagement and management models than system delivery projects, which are more protected from external influences.

In conclusion, the study reveals the paradoxical nature of local stakeholder relationships in the context of international projects: whilst local stakeholder relationships generate unexpected events for the project due to differing practices, norms and values of the actors and by exposing the project to direct local institutional influences, local stakeholder relationships also enhance the project's external adaptation by supporting its anchoring and legitimacy in the institutional environment and by providing crucial local knowledge. These are considerations that managers should take into account when making decisions about the use of local actors.

While the study explicitly focuses on the case of unexpected stakeholder related events and local stakeholder relationships in the unique context of international projects, similarities with other types of behavioral and decision-making situations within project networks are seen. Therefore, further research should study the potential for explaining other types of project phenomena through the different dimensions of a project stakeholder network both theoretically and empirically.

References

- Aaltonen, K. and Sivonen, R. (2009), "Response strategies to stakeholder pressures in global projects", *International Journal of Project Management*, Vol. 27 No. 2, pp. 131-41.
- Aaltonen, K., Kujala, J. and Oijala, T. (2008), "Stakeholder salience in global projects", *International Journal of Project Management*, Vol. 26 No. 5, pp. 509-16.
- Ahola, T. (2009), "Efficiency in project networks: the role of inter-organizational relationships in project implementation", doctoral dissertation, Helsinki University of Technology, Helsinki.
- Andersson, U., Björkman, I. and Forsgren, M. (2005), "Managing subsidiary knowledge creation: the effect of control mechanisms on subsidiary local embeddedness", *International Business Review*, Vol. 14, pp. 521-38.
- Artto, K. and Kujala, J. (2008), "Project business as a research field", *International Journal of Managing Projects in Business*, Vol. 1 No. 4, pp. 469-97.
- Bengtsson, M. and Söderholm, A. (2002), "Bridging distances: organizing boundary-spanning technology development projects", *Regional Studies*, Vol. 36 No. 3, pp. 263-74.
- Bresnen, M. and Marshall, N. (2000), "Partnering in construction: a critical review of issues, problems and dilemmas", *Construction Management and Economics*, Vol. 18 No. 2, pp. 229-37.
- Cova, B. and Salle, R. (2005), "Six key points to merge project marketing into project management", *International Journal of Project Management*, Vol. 23 No. 5, pp. 354-9.
- Cova, B., Ghauri, P. and Salle, R. (2002), *Project Marketing: Beyond Competitive Bidding*, Wiley, Chichester.
- Cova, B., Mazet, F. and Salle, R. (1996), "Milieu as the pertinent unit of analysis in project marketing", *International Business Review*, Vol. 5 No. 6, pp. 647-64.
- Dubois, A. and Gadde, L.-E. (2000), "Supply strategy and network effects – purchasing behaviour in the construction industry", *European Journal of Purchasing & Supply Management*, Vol. 6 Nos 3-4, pp. 207-15.
- Eisenhardt, K. (1989), "Building theories from case study research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532-50.
- Engwall, M. (2003), "No project is an island: linking projects to history and context", *Research Policy*, Vol. 32 No. 5, pp. 789-808.

- Evaristo, J.R. and van Fenema, P.C. (1999), "A typology of project management: emergence and evolution of new forms", *International Journal of Project Management*, Vol. 17 No. 5, pp. 275-81.
- Florice, S. and Miller, R. (2001), "Strategizing for anticipated risks and turbulence in large-scale engineering projects", *International Journal of Project Management*, Vol. 19 No. 8, pp. 445-55.
- Flyvbjerg, B., Bruzelius, N. and Rothengatter, W. (2003), *Mega-projects and Risk: An Anatomy of Ambition*, Cambridge University Press, Cambridge.
- Foss, N.J. (1999), "Capabilities, confusion, and the costs of coordination: on some problems in recent research on inter-firm relations", DRUID Working Papers 99-7, DRUID, Copenhagen Business School, Department of Industrial Economics and Strategy/Aalborg University, Department of Business Studies, Aalborg.
- Galaskiewicz, J. (1985), "Interorganizational relations", *Annual Review of Sociology*, Vol. 11, pp. 281-304.
- Granovetter, M. (1985), "Economic action and social structure: the problem of embeddedness", *American Journal of Sociology*, Vol. 91 No. 3, pp. 481-510.
- Granovetter, M. (1992), "Problems of explanation in economic sociology", in Nohria, N. and Eccles, R.G. (Eds), *Networks and Organizations: Structure, Form and Action*, Harvard Business School Press, Boston, MA, pp. 25-56.
- Grün, O. (2004), *Taming Giant Projects: Management of Multi-organization Enterprises*, Springer, Berlin.
- Håkansson, H. and Snehota, I. (1995), *Developing Relationships in Business Markets*, Routledge, London.
- Hällgren, M. (2007), "Beyond the point of no return: on the management of deviations", *International Journal of Project Management*, Vol. 25 No. 8, pp. 773-80.
- Hällgren, M. and Maaninen-Olsson, E. (2005), "Deviations, ambiguity and uncertainty in a project intensive organization", *Project Management Journal*, Vol. 36 No. 3, pp. 17-26.
- Hällgren, B. and Stjernberg, T. (1995), "Design and implementation in major investments: a project network approach", *Scandinavian Journal of Management*, Vol. 11 No. 4, pp. 377-94.
- Holmström, H., Fitzgerald, B., Akerfalk, P.J. and Conchuir, E.Ó. (2006), "Agile practices reduce distance in global software development", *Information Systems Management*, Vol. 23 No. 3, pp. 7-18.
- Ireland, L.R. (2006), "Project quality management in international projects", in Cleland, D.I. and Gareis, R. (Eds), *Global Project Management Handbook*, 2nd ed., Ch. 15, McGraw-Hill Professional, New York, NY.
- Javernick-Will, A., Levitt, R.E. and Scott, R.W. (2008), "Mobilizing knowledge for international projects", *Proceedings of the 2008 ASCE LEED Conference in Lake Tahoe, California*, October 16-19.
- Johansson, S., Löfström, M. and Ohlsson, Ö. (2007), "Separation or integration? A dilemma when organizing development projects", *International Journal of Project Management*, Vol. 25 No. 5, pp. 457-64.
- Lehtonen, P. and Martinsuo, M. (2009), "Integrating the change program with the parent organization", *International Journal of Project Management*, Vol. 27, pp. 154-65.
- Loosemore, M. (1998), "Social network analysis: using a quantitative tool within an interpretative context to explore the management of construction crises", *Engineering, Construction and Architectural Management*, Vol. 5 No. 4, pp. 315-26.

- Manning, S. (2008), "Embedding projects in multiple contexts: a structuration perspective", *International Journal of Project Management*, Vol. 26 No. 1, pp. 30-7.
- Meyer, J.W. and Rowan, B. (1977), "Institutional organizations: formal structures as myth and ceremony", *American Journal of Sociology*, Vol. 80, pp. 340-63.
- Miller, R. and Lessard, D. (2001), *The Strategic Management of Large Engineering Projects: Shaping Risks, Institutions and Governance*, MIT Press, Cambridge, MA.
- Oliver, C. (1990), "Determinants of interorganizational relationships: integration and future directions", *The Academy of Management Review*, Vol. 15 No. 2, pp. 241-65.
- Oliver, C. (1991), "Strategic responses to institutional processes", *Academy of Management Review*, Vol. 16 No. 1, pp. 145-79.
- Olson, G.M. and Olson, J.S. (2000), "Distance matters", *Human-computer Interaction*, Vol. 15, pp. 139-78.
- Orr, R.J. (2005), "Unforeseen conditions and costs on global projects: learning to cope with unfamiliar institutions, embeddedness and emergent uncertainty", doctoral dissertation, Department of Civil and Environmental Engineering, Stanford University, Stanford.
- Orr, R.J. and Scott, R.W. (2008), "Institutional exceptions on global projects: a process model", *Journal of International Business Studies*, Vol. 39, pp. 562-88.
- PMI (2004), *A Guide to the Project Management Body of Knowledge*, Project Management Institute, Washington, DC.
- Ruuska, I., Artto, K., Aaltonen, K. and Lehtonen, P. (2009), "Dimensions of distance in a network of firms", *International Journal of Project Management*, Vol. 27 No. 2, pp. 142-53.
- Shenhav, A.J. (2001), "One size does not fit all projects: exploring classical contingency domains", *Management Science*, Vol. 47 No. 3, pp. 394-414.
- Skaates, M., Tikkanen, H. and Lindblom, J. (2002), "Relationships and project marketing success", *Journal of Business & Industrial Marketing*, Vol. 17 No. 5, pp. 389-406.
- Söderholm, A. (2008), "Project management of unexpected events", *International Journal of Project Management*, Vol. 26 No. 1, pp. 80-6.
- Söderlund, J. (2004), "On the broadening scope of the research on projects: a review and a model for analysis", *International Journal of Project Management*, Vol. 22 No. 8, pp. 655-67.
- Sommer, S.C. and Loch, C.H. (2004), "Selectionism and learning in projects with complexity and unforeseeable uncertainty", *Management Science*, Vol. 50 No. 10, pp. 1334-47.
- Spradley, J.P. (1979), *The Ethnographic Interview*, Holt, Rinehart and Winston, New York, NY.
- Turner, J.R. (1999), *The Handbook of Project-based Management*, 2nd ed., McGraw-Hill, London.
- Uzzi, B. (1997), "Social structure and competition in interfirm networks: the paradox of embeddedness", *Administrative Science Quarterly*, Vol. 42 No. 1, pp. 35-67.
- Weick, K.E. and Sutcliffe, K.M. (2001), *Managing the Unexpected: Assuring High Performance in an Age of Complexity*, Jossey-Bass, San Francisco, CA.
- Winch, G.M. (2004), "Managing project stakeholders", in Morris, P.W.G. and Pinto, J.K. (Eds), *The Wiley Guide to Managing Projects*, Wiley, Englewood Cliffs, NJ.
- Yang, J., Shen, Q. and Ho, M. (2009), "An overview of previous studies in stakeholder management and its implications for the construction industry", *Journal of Facilities Management*, Vol. 7 No. 2, pp. 159-75.
- Yin, R. (1989), *Case Study Research: Design and Methods*, Rev. ed., Sage, Newbury Park, CA.

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Further reading

Artto, K., Kujala, J., Dietrich, P. and Martinsuo, M. (2008), "What is project strategy?", *International Journal of Project Management*, Vol. 26 No. 1, pp. 4-12.

Rowley, T.J. (1997), "Moving beyond dyadic ties: a network theory of stakeholder influences", *The Academy of Management Review*, Vol. 22 No. 4, pp. 887-910.

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Corresponding author

Kirsi Aaltonen can be contacted at: kirsi.aaltonen@hut.fi

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	Most significant unexpected events	Consequences of unexpected events	Taken actions to manage the unexpected events in the case project
<i>Case Localizer</i> Events related to internal stakeholders	Challenges with local subcontractors quality, commitment and interaction management Misunderstandings related to communication with the local stakeholders	Significant delays Challenges with quality Challenges with processes Localizer needed to change subcontractors Localizer needed to acquire extra resources	Exhaustive meetings Extra meetings during weekends Site tours to build commitment among personnel Project manager change Intensive communications and negotiations Rearranged subcontractor structures Process mapping concerning the permission procedures Knowledge acquisition concerning the local practices in the form of extra discussions, meetings, e-mails with own local subcontractors and other experts Consultations with the local residents
Events related to external stakeholders	Local residents opposed the building of the network Authority permissions were needed for many different issues which was not taken into account and caused a lot of extra	Delays due to different permission processes Extra time and resources were needed Delays due to consultative processes	
<i>Case Embedder</i> Events related to internal stakeholders	Challenges with Chinese customer's and suppliers' practices related to project management (differences in, e.g. project schedule management procedures and design processes)	Delays Challenges with quality Challenges with processes	Extra coordination meetings Extra communication Extra visits to China Modifications to project management processes (continued)

Table AI.
Examples of unexpected events, their consequences and management actions in the analyzed cases

Table AI.

	Most significant unexpected events	Consequences of unexpected events	Taken actions to manage the unexpected events in the case project
Events related to external stakeholders	Chinese supplier's problems with manufacturing emissions that led to the involvement of local residents, local media, regional authorities and halt at the Chinese subcontractor's site	Supplier's work on critical equipment was stopped for 1.5 months and deliveries delayed Embedder's project personnel negotiated the situation with local authorities, Chinese customer, local resident and the subcontractor Resulted in decreased trust in supplier relationship Time-consuming efforts taken away from other project work Extra project manager's visits to sites	First the approach was to stay away from the problem Sensemaking on opponents motives and on how to deal with the situation, a lot of informal communication between the project manager and Chinese project team Embedder interpreted that the supplier could not handle the problem alone Embedder supported the supplier in the solving of the issue by engaging in negotiations with customer and local authorities
<i>Case Domestic</i> Events related to external stakeholders	Customer's challenges with Chinese authorities related to permissions Customer's challenges with local residents related to land use	Project site was closed by the authorities for an unspecified period Project was delayed with months Domestic had to interrupt shipments and inform about the delay to domestic's suppliers Domestic's suppliers did not receive payments and had to store equipment at their own cost Negative effects for supplier relationships A lot of internal disturbance and haste taking time from other work	Intense communications via letters, e-mails and phone with suppliers to inform deliveries needed to be delayed Internal clarifications and discussions on how the event should be interpreted from legal perspective Internal confusion and sensemaking on how long the halt will endure and what are the reasons behind it Primary focus on managing own suppliers and on how to explain the situation to them in order to avoid extra costs Consulting other project managers at Domestic about the situation based on their experience in China

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