Understanding Sources of Conflict in Near and Offshore IT Outsourcing Projects

Katharina Vogt
Johann Wolfgang Goethe Universitat Frankfurt am Main, katharina.vogt@email.de

Roman Beck
Johann Wolfgang Goethe Universitat Frankfurt am Main, beck@itu.dk

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Understanding Sources of Conflict in
Near- and Offshore IT Outsourcing Projects

Katharina Vogt
Goethe University Frankfurt
katharina.vogt@email.de

Roman Beck
Goethe University Frankfurt
rbeck@wiwi.uni-frankfurt.de

ABSTRACT
The research objective is the development of a theoretical model depicting sources of conflict in near- and offshore outsourcing projects. As previous research in the IT outsourcing conflict domain is scarce, we draw on the literature stream on global virtual teams as a conceptual basis. We transfer an existing model of conflict in global virtual teams to the IT outsourcing domain and enhance our understanding of conflict in global IT outsourcing projects by additional near- and offshore outsourcing specific characteristics. A key finding is that conflict in global IT outsourcing projects is caused by antecedents that go beyond technology mediation. Furthermore, subtle differences exist between near- and offshoring projects concerning the relevance and effect of individual antecedents.

Keywords
IS Project Management, Outsourcing of IS, Nearshore, Offshore, Global Virtual Teams, Conflict, Conflict Antecedents

INTRODUCTION, MOTIVATION & RESEARCH OBJECTIVES
The increasing amount of global information systems and services outsourcing is an apparent trend that is expected to continue in the foreseeable future (King and Torkzadeh 2008). This is not surprising, considering the expected benefits and cost advantages that client firms can achieve due to significant differences in labor costs between Western countries and offshore locations in Middle and Eastern Europe or Asia (Apte and Mason 1995; Rottman and Lacity 2004; Schaaf 2004).

However, these cost advantages do not materialize easily since “inter-country outsourcing” is accompanied by unique challenges that can offset the expected benefits (King et al. 2008). In particular, global IT outsourcing projects are highly receptive to specific forms of conflicts (Holmström Olsson, O Conchhúir, Agerfalk and Fitzgerald 2008). The management of these conflicts is demanding, e.g., due to the multi-faceted distance between client and vendor such as geographic distance and time zone differences which make direct communication difficult to apply to conflict handling and resolution strategies (Hinds and Bailey 2003; Kankanhalli, Tan and Wei 2007).

We still have a limited understanding of potential conflict in global IT outsourcing projects. This perception is in line with calls for additional theory-building research in the area of conflict and conflict management in organizations in general (De Dreu, Evers, Beersma, Kluwer and Nauta 2001). Thus, more research is needed in order to increase our knowledge on conflict in global IT outsourcing projects leading to the following research questions (RQ):

RQ1: “What are potential sources of conflict in near- and offshore IT outsourcing projects?”

RQ2: “What is the influence of conflict on the performance of near- and offshore IT outsourcing projects?”

As there is a lack of literature in the IT outsourcing conflict domain, we draw on research findings from a contiguous research stream, i.e. global virtual team (GVT) research. Global virtual teams working across cultural, geographical, and time boundaries (Kankanhalli et al. 2007) have been found to be more affected by conflict than traditional teams and are therefore subject to respective research activities (Hinds et al. 2003; Kankanhalli et al. 2007; Martins, Gilson and Maynard 2004). As global IT outsourcing project teams can be understood as a specific form of GVT (Vlaar, Fenema van and Tiwari 2008), the findings from this research area will be used as a theoretical basis for the conceptualization process. The resulting research model will be operationalized as Structured Equation Model (SEM) and tested applying the Partial Least Squares (PLS) approach.

Our work aims at contributing to the research and practice of near- and offshore outsourcing projects by (1) enlarging our understanding of the respective project teams, (2) depicting the relationship between conflict antecedents, moderating factors, conflict and project performance in global IS outsourcing projects, and (3) disposing project managers for the conflict sensibility of global IS outsourcing project and their specific sources.
The remainder of this paper is structured as follows: in the next section we will provide the study’s theoretical foundation. Subsequently, we will introduce the research methodology, followed by the current status of the research project (model development). The paper ends with an outlook on the workshop presentation.

THEORETICAL FOUNDATION

Conflict and Conflict Management in the IS Outsourcing Domain

In the domain literature a consensus has been reached that business relationships are inherently conflict laden and that the various forms of conflict have implications on the overall business collaboration in the future (Anderson and Narus 1990; Bradford, Stringfellow and Weitz 2004; Dwyer, Schurr and Oh 1987; Mohr and Spekman 1994; Uzzi 1997). With regards to global IT outsourcing arrangements, it is striking that only sporadic recognition has been given to conflict and its management in previous research. For example, cultural differences have been shown to account for conflict in offshore software development projects when not properly managed (Winkler, Dibbern and Heinzl 2008). Another study examining a two-stage IT offshore relationship identifies conflict management to be a central process constituting this type of a client-vendor-relationship (Holmström Olsson et al. 2008).

This is in line with research results on information technology outsourcing (ITO) emphasizing the importance of conflict management as a significant success factor for relationship quality (Blumenberg, Beimborn and König 2008; Goles and Chin 2005; Lee 1999; McFarlan and Nolan 1995; Sun, Lin and Sun 2002). With regards to outsourcing contracts, researchers stress the necessity of formalized conflict resolution routines (Gellings 2007; Goo, Kishore, Nam, Rao and Song 2007). Furthermore, empirical studies on business process outsourcing (BPO) have revealed the importance of conflict management as an effective mitigation factor to performance risk (Wuellenweber, Jahner and Krcmar 2008).

In summary, the few existing publications covering conflict and conflict management clearly indicate the importance of this research area. Thus, we investigate this topic by reviewing findings from research on GVT to complement and extend the existing information systems literature on conflict in IT outsourcing projects.

Characteristics of Global Virtual Teams

As the increasing globalization is accompanied by the disappearance of global work boundaries, virtual teams are growing in number and importance (Hinds et al. 2003; Kankanhalli et al. 2007). However, despite its comprehensive use, a consistent definition has not yet emerged (Dubé et al. 2004). Basically, virtual teams can be understood as teams “whose members use technology to varying degrees in working across locational, temporal, and relational boundaries to accomplish an interdependent task” (Martins et al. 2004).

Global virtual teams refer to an increased geographical and cultural distance, implying that team members of GVT work in different countries and hence are culturally diverse (Powell, Piccoli and Ives 2004). For this research we adopt the view of Dubé et al. who call for a more differentiated view on virtual team configurations and therefore provide an extensive set of key characteristics allowing for a categorization of virtual teams according to the perceived degree of complexity (Dubé et al. 2004). Table 1 provides an overview on these characteristics.

Current research activities on GVT focus but are not limited to team inputs, socio-emotional processes, task processes, and outcomes (Powell et al. 2004). Based on research results indicating that GVT experience a higher level of conflict than traditional teams and that these conflicts have a negative impact on team performance (Hinds et al. 2003; Hinds and Mortensen 2005; Kankanhalli et al. 2007; Montoya-Weiss, Massey and Song 2001), conflict as well as conflict prevention and management have been receiving increasing research attention.

Conflict and Conflict Management in Global Virtual Teams

Several studies have set out to identify conflict antecedents that are specific to GVT as well as the related preventive measures (Hinds et al. 2003; Hinds et al. 2005; Kankanhalli et al. 2007). Others have evaluated various moderating effects either aiming at reducing the amount of conflict or aiming at mitigating the negative impact of conflict on GVT performance (Hinds et al. 2005; Kankanhalli et al. 2007; Montoya-Weiss et al. 2001). Nearly all researchers have pinpointed the important role of communication: in contrast to traditional teams, GVT need to rely on technology mediated communication as face-to-face meetings are scarce due to the geographic dispersion (Martins et al. 2004; Powell et al. 2004). Especially spontaneous communication has been shown to be important for facilitating conflict identification and handling (Hinds et al. 2005). Moreover, the way virtual teams manage conflict has been identified as a crucial success factor (Montoya-Weiss et al. 2001).
Even though global IT outsourcing project teams represent a specific form of GVT (Vlaar et al. 2008), the results from GVT research have not yet been transferred to and evaluated in the context of the global IS outsourcing domain. We will address this gap with our research and thus enhance our understanding of conflict in near- and offshore outsourcing projects.

<table>
<thead>
<tr>
<th>Key characteristic</th>
<th>Definition</th>
<th>Degree of teamwork complexity…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic dispersion</td>
<td>Geographic distance including time zone differences</td>
<td>increases with increasing geographic dispersion</td>
</tr>
<tr>
<td>Task or project duration</td>
<td>Duration of project team: temporary versus permanent teams</td>
<td>decreases with increasing task or project duration</td>
</tr>
<tr>
<td>Prior shared work experience</td>
<td>Common experience in the sense of existing work routines</td>
<td>increases with increasing prior shared work experience</td>
</tr>
<tr>
<td>Membership stability</td>
<td>Permanent members versus fluid members (&quot;joining in response to task requirements, availability, emergencies, or opportunities&quot;)</td>
<td>increases with decreasing membership stability</td>
</tr>
<tr>
<td>Task interdependence</td>
<td>No definition given</td>
<td>increases with increasing task interdependence</td>
</tr>
<tr>
<td>Cultural diversity</td>
<td>Cultural differences in the sense of national culture, organizational (= cross-organizational) culture and professional (=cross-functional) culture</td>
<td>increases with increasing heterogeneous team culture</td>
</tr>
<tr>
<td>Team Size</td>
<td>Number of team members</td>
<td>increases with increasing team size</td>
</tr>
<tr>
<td>Members’ assignments</td>
<td>Assignment of project team members on a full-time or on a part-time basis</td>
<td>increases with increasing part-time assignments</td>
</tr>
</tbody>
</table>

Table 1: Key Characteristics for the Categorization of Virtual Teams (Dubé et al. 2004)

RESEARCH METHODOLOGY

As target population for our study we will focus on project managers responsible for near- and offshore outsourcing projects in the financial services industry using Germany as the clients’ home country. We decide for India as primary offshore location, whereas nearshore locations will include several countries from Central and Eastern Europe.

For data collection, we will submit a questionnaire-based survey with questions that are derived from our research model. The research will be conducted in a positivistic, quantitative fashion. However, we are aware that research in nearshore outsourcing projects is still under researched wherefore a qualitative exploratory study would also be imaginable. Since we build our research on literature from adjacent research areas which has tight relations to the object of our analysis, it can be argued that the planned quantitative study is an appropriate step to reveal new insights from global IS outsourcing projects.

With regards to data analysis, the research model in the paper will be operationalized as Structural Equation Model (SEM) and tested using the Partial Least Squares (PLS) approach. We prefer PLS to covariance-based techniques since firstly, the research model has not been tested before and secondly, since we use a survey to collect the data the data sample might not be normally distributed (Cohen, Cohen, West and Aiken 2003). Thus, PLS is an appropriate technique as the least squares algorithm is relatively immune to instances where the sample data is not normally distributed.

CURRENT STATUS OF THE PROJECT

Our goal is to develop a model of conflict in global IT outsourcing projects based on the findings of GVT research. Therefore we apply a two-step approach: first, we evaluate the nature of near- and offshore outsourcing project teams based on the understanding of global IT outsourcing project teams as a specific form of GVT. In a second step, we deductively develop a conceptual model of conflict in global IT outsourcing projects leading to several tentative propositions.

A Challenging Virtual Team Configuration: Global IT Outsourcing Project Teams
In this section we elaborate on specific configuration of near- and offshore outsourcing project teams. For this purpose, we apply a classification scheme from virtual team research to guide the identification of those attributes of near- and offshore IT outsourcing project teams that fit with existing research in IS. We therefore draw on the above presented set of key characteristics and interpret each key characteristic from the perspective of near- and offshore outsourcing projects. Since we base our analysis on the understanding of global IT outsourcing project teams being a specific instance of GVT we are convinced that the application of the classification scheme from virtual team research to the IT outsourcing research is legitimate. At this point, we attach importance to the distinction between near- and offshore outsourcing projects as the domain literature increasingly points to the differences between the two (King et al. 2008).

In the IT outsourcing domain, there have been several studies focusing on geographic dispersion between client and vendor (Carmel and Agarwal 2002; Espinosa, DeLone and Lee 2006; Rao 2004). In contrast to offshore locations which are by definition anywhere outside the client’s home country and therefore mainly associated with a significant spatial distance, nearshore locations are mainly associated with geographical proximity to the client’s home country (Carmel and Abbott 2007; Dibbern, Winkler and Heinzl 2008). Thus, in the context of global IT outsourcing projects geographic dispersion is likely to increase the complexity for offshore outsourcing project teams to a greater extent than for nearshore outsourcing project teams.

This cause-effect-relationship also holds true for national culture diversity being a largely discussed phenomenon in the IT outsourcing research (Carmel et al. 2007; Heeks, Krishna, Nicholson and Sundeep 2001; Krishna, Sahay and Walsham 2004; Nicholson and Sahay 2001; Rao 2004). Frequently, cultural differences in the offshore context are perceived to be more significant than in the nearshore context (Carmel et al. 2007; Rao 2004). However, organizational culture diversity can be expected for both nearshore and offshore arrangements, based on the fact that global IT outsourcing projects per definition involve multiple organizations, i.e. the client and the vendor organizations.

Based on this argumentation, we also presume a lack of prior shared work experience for both nearshore and offshore outsourcing project teams; moreover, the team building process may be exacerbated through the in many cases disparate goals of the parties (Holmström Olsson et al. 2008), resulting in an increased degree of complexity for both project teams likewise.

With regards to professional culture diversity arising in cross-functional teams we have not found any indications in the domain literature. However, concerning the team size, preliminary findings from a longitudinal case study in the banking industry indicate the risk of an unplanned increasing team size due to unforeseen efforts and insufficient competence level of the service provider (Gregory and Prifling 2008). Taking into account that nearshore locations often lack appropriate professional experience as they are just evolving to become a well-developed market for IS outsourcing services (Rao 2004), we presume the risk of an oversized project team to be higher in near- than in offshore outsourcing projects resulting in a potential increase in the degree of complexity especially for nearshore outsourcing projects.

Referring to the stability of the team setup we have not found any suggestion regarding in- or decreased membership stability in project teams being involved in nearshore arrangements. However, for offshore outsourcing projects there are in fact indications for decreasing member stability. India, for example, has established itself as an offshore outsourcing market featuring professional know-how in the outsourcing business since many years. Nevertheless, due to an increased competition for qualified resources the countries’ firms are now facing high turnover rates (Lacity, Iyer and Rudramuniyaiyah 2008) which may also negatively impact the resource continuity in offshore outsourcing projects with this country and thus increase complexity for project teams.

We expect same increasing effect in the degree of complexity from task interdependence due to the complexity of technology as well as the level of detail in the contracts (Holmström Olsson et al. 2008). Furthermore, task interdependence has been found to effect global IT outsourcing projects on various levels (Slepniov and Waehrens 2007).

Finally, we assume a decreasing effect on the degree of complexity from the characteristic task or project duration as IT outsourcing relationships are usually intended to be long-term relationships (Goles et al. 2005).

To our knowledge, the IT outsourcing literature does not contain any statements regarding members’ assignments in global IT outsourcing projects. Nevertheless we include this characteristic into the subsequent model development as it obviously constitutes an important characteristic of virtual teams and we have no reason to believe that this is not valid for a special form of virtual teams, i.e. global IT outsourcing project teams.
In summary, the results of the analysis essentially suggest that nearshore and offshore outsourcing project teams represent not only a specific, but a notably complex configuration of a GVT configuration. A probable lack of prior shared work experience, high task interdependence, and different organizational cultures increase the degree of complexity for both near- and offshore outsourcing projects, only mitigated through task or project duration. Comparing the attributes of near- and offshore outsourcing project teams, we find geographic dispersion and national culture differences being more favorable in a nearshore outsourcing arrangement. However, there might be a bigger risk of oversized teams. Offshore outsourcing projects on the other hand seem to be especially prone to a lack of membership stability.

Conflict Antecedents in Global IT Outsourcing Projects

In order to deductively develop a model of conflict in near- and offshore outsourcing projects, we use Hinds et al.’s dynamic model of conflict and performance on distributed teams as a starting point. Evaluating conflict in distributed teams the researchers focus on distance and technology mediation as the two primary conflict antecedents (Hinds et al. 2003). We intend to broaden this view based on our above analysis indicating that a couple of other factors may also contribute significantly to the emergence of conflict in near- and offshore outsourcing project teams. Thus, we transfer the existing model of conflict in distributed teams to the IT outsourcing domain and enhance our understanding of conflict in global IT outsourcing projects by additional near- and offshore outsourcing specific characteristics from our analysis above. Figure 1 depicts the resulting model.

Addressing our first research question (RQ1), we interpret the key characteristics with an increasing effect on the degree of complexity as conflict antecedents being specific to near- and offshore outsourcing projects. Generally speaking our analysis indicates that geographic dispersion, lack of prior shared work experience, lack of membership stability, task interdependence and cultural diversity cause conflict of all types in near- and offshore outsourcing projects. This understanding is captured in the following propositions (see also Figure 1).

**Proposition 1a:** Geographic dispersion causes conflict in near- and offshore outsourcing project teams.

**Proposition 1b:** Lack of prior shared work experience causes conflict in near- and offshore outsourcing project teams.

**Proposition 1c:** Lack of membership stability causes conflict in near- and offshore outsourcing project teams.

**Proposition 1d:** Task interdependence causes conflict in near- and offshore outsourcing project teams.

**Proposition 1e:** Cultural diversity (national, organizational, and professional) causes conflict in near- and offshore outsourcing project teams.

![Figure 1: Conflict in Global IT Outsourcing Projects](image-url)
The remaining characteristics ‘task or project duration’, ‘team size’, and ‘members assignments’ are incorporated into the model in form of moderation effects between conflict antecedents and project conflict. Based on our analysis above we thereby expect task or project duration to mitigate the emergence of conflict. Hence, we presume that the characteristic ‘task or project duration’ moderates the effect of the identified conflict antecedents on the different types of conflicts such that the effect of the conflict antecedents is stronger, when ‘task or project duration’ is short than when it is long, as is reflected in our next proposition (see also Figure 1).

**Proposition 2:** The shorter the task or project duration the stronger the project team perceives negative the of the conflict antecedents on project conflict.

A likewise moderating effect we expect also from the characteristics ‘team size’ and ‘members assignment’: both, an increasing team size as well as an increasing number of members working on a part-time basis in the project, increase the negative effect of the identified conflict antecedents on conflict, as is captured in our final propositions (see also Figure 1).

**Proposition 3a:** The bigger the team size the stronger the project team perceives the effect of the conflict antecedents on project conflict.

**Proposition 3b:** The more team members have a part-time assignment the stronger the project team perceives the effect of the conflict antecedents on project conflict.

With regards to the influence of conflict on project performance, we expect a negative effect based on the above presented findings from GVT research. Therefore we introduce the following proposition in order to address our second research question (RQ2).

**Proposition 4:** Conflict will negatively influence the performance of near- and offshore outsourcing project.

**Limitations**

There are several limitations to be taken into account. First, it should be recognized that the model depicted above has been deductively derived from the existing literature. No empirical data was at our disposal to challenge and complement the concept. Thus, the findings may miss dimensions that are influencing the model in practice but are not captured in the scientific literature yet. Second, it should be kept in mind that we have based our analysis on a scarce literature basis with regards to both conflict in global IS outsourcing projects as well as the nearshore phenomenon.

**Conclusion**

This paper is the first attempt to develop a comprehensive model to understand the origins and impact of conflict when managing global IT outsourcing projects. To our knowledge this topic has only been discussed marginally in previous literature. By applying findings from GVT research, we are able to offer a deeper understanding of near- and offshore outsourcing project teams being a specific and highly complex form of GVT. Furthermore, we provide insights into project-specific conditions that may cause conflict in global IT outsourcing projects. By doing so, we hope to lay the grounds for the development of a comprehensive framework on conflict in global IT outsourcing projects.

The paper makes two main theoretical contributions: firstly, it illustrates the specific configuration of global IS outsourcing project teams against the background of GVT. Secondly it deductively develops a model depicting the cause-effect-relationship between near- and offshore-specific conflict antecedents, moderating factors, conflict, and project performance.

In addition, the paper offers a set of practical contributions. First of all, based on the understanding that near- and offshore outsourcing projects are particular receptive to conflict as to their specific configuration, project managers in global IT outsourcing projects are well advised to enhance their project management skill set with appropriate conflict handling strategies. Moreover, knowing the potential sources of conflict in near- and offshoring projects facilitates the identification of the project-specific conflict risks and enables the project manager to take an initial preventive action by creating the respective awareness within the project team.

**OUTLOOK ON WORKSHOP PRESENTATION**

In the course of the workshop we would like to present our view on near- and offshore outsourcing project teams as a highly complex form of GVT as well as the current status of the research model. Particularly, we seek for feedback and support in
order to validate and further explore today’s model. Furthermore, we consider the workshop participation to be a highly interesting opportunity in order to discuss the model and its propositions with regards to the relative importance of the individual conflict antecedents as well as their interplay between each other and with the moderating variables.

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