

# How Do Planned and Actual Interaction Structures Differ in Global Outsourcing Arrangements?

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**Abstract.** How and why do actual interaction structures in global outsourcing arrangements differ from those originally planned? We use a social network perspective to analyze the structure of social interaction networks among operational staff and management of vendor and client firm in an outsourcing arrangement. We apply a case study approach to understand which interaction structures appear and whether they are in accordance with those structures formally defined in the outsourcing governance. We found that real interaction often differs from the plan and we provide theoretical explanations for understanding these deviations, thus contributing to the understanding of outsourcing governance and outsourcing relationship management.

**Keywords:** IT Outsourcing, interaction structures, social network analysis, outsourcing governance.

## 1 Introduction

Inter-organizational and international collaboration are common in most day-to-day working relationships in general and in the IT domain in particular. Offshore outsourcing arrangements are a prevalent instantiation of cross-organizational and international collaboration in the IT domain. Previous research has identified relationship management as an important outsourcing success driver and suggests further research on the role of relationship issues in outsourcing on the individual and team level [1, 2]. Relational issues on the organizational level have been examined by various researchers (e.g., [3, 4]). However, the individual level of outsourcing relationships, focusing on the interactions between vendor and client personnel, has rarely been considered (few exceptions are, e.g., [5–7]), although we all know that any organizational relationship is animated by the people and their interactions. Therefore, the investigation of inter-personal relationships promises to be a rich field for uncovering important factors of outsourcing success [8, 2]. In this context, we need to understand which interaction structures between client and vendor are successful (and why they are successful) in order to validate them as best practices. Some researchers highlight the role of social relationships between client and vendor, e.g., to address cultural issues in offshoring scenarios [9] or as driver for tacit knowledge exchange between

client and vendor [10]. However, none of these works focuses on the interaction structures themselves and how the “right” structures can be achieved and maintained. Formally defined processes, such as boundary spanning [11] or certain control mechanisms [12] provide an initial framework for interaction in outsourcing relationships, albeit the actual interaction structures in practice develop over time and often deviate from the originally intended ones. Therefore, we need to explore: *How and why do real interaction structures in global outsourcing arrangements differ from those originally planned? What are the resulting consequences?* In order to find answers for this research question, we conduct a rich case study by examining the cross-organizational interaction between the employees of a global software company and an Indian outsourcing vendor, taking a social network perspective on the client-vendor interface.

We provide some background on offshore outsourcing in the next section. Afterwards, we present our case study methodology. The subsequent section introduces the case study context and describes the specific challenges of the analyzed outsourcing relationship. We then present the adjustments of interaction structures in the case. Finally, we discuss the implications of the case study findings and conclude with an outlook on further research.

## 2 Global Collaboration in Outsourcing Situations

Offshore outsourcing refers to an organization turning over certain of its activities to an external vendor located in another country, often in overseas [13]. Our research focuses on the outsourcing relationship, which is defined as “*an ongoing, long term linkage between an outsourcing vendor and customer arising from a contractual agreement to provide one or more comprehensive IT activities, processes, or services with the understanding that the benefits attained by each firm are at least in part dependent on the other*” [14]. In the offshore outsourcing context, the actors involved need to overcome organizational as well as geographical and cultural boundaries in their interaction [15], which makes it a comparably complex and intense B2B relationship. Social relationships help to overcome these boundaries, e.g. by “embedding” of offshore personell to improve the information flow between client and vendor [10] and by addressing cultural issues potentially driving “vendor silence” [9].

Only few works have shown that different interaction structures in outsourcing relationships have varying advantages and disadvantages, depending on the context (e.g., [5], [15]). For instance, a centralized interaction structure [5] vs. a decentralized interaction setup between vendor and client [15] exhibit different potentials and shortcomings from vendor and client perspective. In social network terms, these interaction setups differ in the density of the network at the client-vendor interface. Network density refers to the “*the proportion of links present relative to those possible*” [16]. The density at the interface between client and vendor lies on a continuum between a centralized interaction setup, where all interaction is channeled through one “gatekeeper” [17], and a decentralized setup, which equals a fully interconnected network with high density.

### 3 Methodology<sup>1</sup>

The focus of our research is the evolution and adjustment of complex interaction structures between people at the client-vendor interface. The objective is to understand how and why the actual interaction structures deviate from initially planned processes. Following Yin [19] we therefore conduct an exploratory case study, which allows us to elicit rich data on how communication happens, why certain interaction structures do appear and which effects they have. We use a single case design because we want to reveal new ideas and can include a longitudinal perspective from the recollections of the interviewees. The case study focuses on interaction structures and social exchanges in outsourcing relationships. In preparation of the case study, we defined our research questions and data collection methods in a research design as suggested by Yin [19]. The unit of analysis in our case study is the interface between client and vendor employees in an IT outsourcing arrangement.

**Table 1.** Case study instruments

	<b>Participants/ Explanation</b>	<b>Goal</b>	<b>Number</b>	<b>Dura- tion</b>
<b>Pre-case discussion</b>	Client team lead (primary contact)	Understand background; obtain access to additional data sources (not recorded)	1	~1 hour
<b>Ground setting interview</b>	Responsible managers on client side (one was replaced during the data collection phase)	Understand context and history of outsourcing arrangement; define scope of case study; collect case data from interviewee	2	Ø 52 minutes
<b>Case inter- views</b>	Vendor and client team members having direct contact to the other party	Build hypotheses on specific network structures, understand role and influences on social exchanges	15 (2 inter- viewed twice)	Ø 43 minutes
<b>Question- naire</b>	Additional vendor team members	Obtain information from participants not available for interviews	4	15-20 minutes
<b>Additional data</b>	Meeting participant lists, organizational charts	Prepare interviews; validate information	n/a	n/a

We obtained the core data from semi-structured interviews following open-ended questions, which allows to deeply understand the participant's experiences, views and their context [20]. Table 1 gives an overview of the case study instruments used for data collection. We conducted the interviews with people involved in the investigated outsourcing relationship on client and vendor side, which yielded a dual perspective on the outsourcing relationship and the client-vendor interface.

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<sup>1</sup> A first outline of the methodology applied for gathering the data used in this paper was presented at the International Research Workshop on IT Project Management (pre-ICIS workshop) [18].

We conducted 17 phone interviews with 15 interviewees between October 2010 and March 2011. The interviewees' positions ranged from operational level to middle management (see details in Table 2). On average, the interviews lasted 44 minutes, providing us with 12.5 hours of interview material and 197 pages of interview transcripts, in total. The social network data was gathered from each interviewee's perspective. The resulting individuals' ego network data was combined in order to obtain a picture of the overall social network. For each interviewee, we focused on the team they belong to and their relationship to fellow team members to scope the network. The network data from the interviews was complemented by a list of attendees to regular meetings and a questionnaire filled by four additional vendor team members, who were not available for interviews. Based on this data from multiple perspectives, we reconstructed a comprehensive view on the interaction structures around the client-vendor interface.

**Table 2.** Overview of interview partners (q = questionnaire-based data collection)

# of interviewees	Management level	Department heads	Operational level (team leads and team members)	Total
Client	3	2	5	10
Vendor	2	1	2 + 4 q.	5 + 4 q.
<b>Total</b>	<b>4</b>	<b>4</b>	<b>7 + 4 q.</b>	<b>15 + 4 q.</b>

We recorded and verbatim transcribed the interviews, followed by an open coding procedure using MAXQDA [21] to explore the patterns of interaction structures and their evolution. In the interview transcripts, we coded

- Descriptions of interaction structures,
- Adjustments or evolution of interaction structures,
- Positive and negative criticism of interaction structures,
- Topics mentioned by the interviewees in the context of or as reasons for changes,
- Characteristics of the outsourcing relationship.

During the coding process, we thus identified how and why the interaction structures (were) changed over time and how this helped to address the challenges of the outsourcing arrangement.

### 3.1 The Case: Outsourcing a Global Firm's Data Processing Activities

The subject of our case study is the outsourcing relationship between GlobalClient, a global software company, and their IndianVendor, a rather small outsourcing vendor specialized in data management services and headquartered in India, but with service centers in India, China, and Eastern Europe. The goals of the outsourcing contract include cost reduction, reduction and consolidation of multiple service contracts with various vendors, and improved quality and consistency in data management services. GlobalClient's unit managing the outsourcing relationship is the data management

unit (DMU), which provides and maintains the data needed by the worldwide sales units. Their tasks include optimization of data management processes, manipulating data in customer relationship management, revenue management and sales commissions systems and matching data from different systems. GlobalClient has outsourced several operational DMU tasks to IndianVendor. The operational data management tasks mainly originate from service requests (SRs) from the sales units. Besides the handling of SRs, the DMU permanently works on simplifying and automating their processes and on improving their service offerings to the business. The client team members jointly take care of this part of the DMU activities, sometimes supported by IndianVendor<sup>2</sup>.

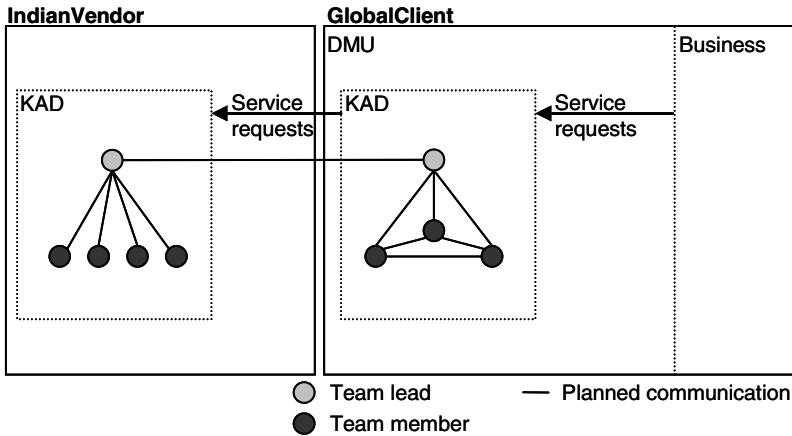


Fig. 1. Initially planned interaction structures for one topic (example of KAD)

Within DMU, we analyzed two subgroups: the teams responsible for the key account data (KAD) and for customer segmentation (CS) data. Each team on client side consists of one team lead and several team members in different countries. The counterpart on vendor side is a similarly structured team for each topic (KAD, CS), consisting of a team lead and a group of team members, as well. The interaction structures, as they were initially planned to be established between vendor and client for a certain topic (KAD as representative example) are illustrated in Figure 1. The standard process starts with a SR sent from business via a ticketing tool (not part of this analysis). In the DMU, either a client team member handles the request or forwards it to IndianVendor via the ticketing tool. Depending on the time zone and the resource allocation by the vendor team lead, a vendor team member from India, Eastern Europe or China handles the request. The team leads coordinate the work of KAD teams on vendor and client side, the vendor team lead being the “single point of contact” for

<sup>2</sup> Within data management, GlobalClient is also supported by 3rd party vendors who work on GlobalClient’s sites in a “body leasing” model. As they are fully integrated into GlobalClient’s team and have usually worked there for a long time, we make no difference but treat them as client team members in the following.

her topic from client perspective. Coordination includes, e.g., the forecast or resource requirements as well as the alignment of processes to be handled by the vendor. For the sales unit as eventual service recipient the outsourcing scenario is intended to be completely transparent. The interaction between IndianVendor and GlobalClient is based on the service requests and knowledge exchange for further development of the services. Client team leads assign requests to vendor team members and client team members assist when needed by sharing their more advanced knowledge of processes and the requests' background.

### 3.2 History and Current Situation

GlobalClient's DMU has gone through several stages of reorganization in the past years. In the beginning, all data management activities took place in the different sales units of the business organization. In 2007, the data management activities were moved to the IT organization, but remained decentralized. At this point, an international vendor supported GlobalClient to prepare the transition to a shared services model with a centralized DMU. In 2009, the current, centralized model was launched, with IndianVendor and two vendors in Europe and the US. Language barriers and skepticism on the business side were the reasons not to move all vendor operations to India at once. Internally, GlobalClient organizationally integrated all local data management teams into one business unit: the DMU. However, geographically this team of around 30 people was and is still dispersed worldwide. In the current stage, which we cover in the case study, IndianVendor has taken over the operations from the European vendor after establishing a subsidiary in Eastern Europe in mid-2010. The contract between GlobalClient and IndianVendor has been growing steadily over the past years, starting with around 20 vendor employees growing to almost 90 vendor employees serving GlobalClient today. GlobalClient currently plans to move the US operations to IndianVendor, thus further increasing the business volume in the near future. During these reorganization activities, the inter-personal interaction structures between the client and vendor teams have substantially changed compared to the initially planned structures in Figure 1. Specific requirements of the outsourcing setup such as remote collaboration pose challenges that drive the evolution of interaction structures. In the following, we describe the major challenges the GlobalClient has faced and how they influenced the interaction structures.

### 3.3 Challenges in the Outsourcing Relationship

This section examines three core challenges, which affected the investigated outsourcing relationship: global dispersion, vendor turnover and need for business understanding. GlobalClient's DMU personnel is **spread globally**, as Table 3 exemplifies by listing the interviewees' locations. Most DMU employees had been working in data management before the shared service model was set up and thus simply have stayed in their home countries, now specializing on certain topics. Especially in comparison to the previous decentralized model, the IndianVendor account manager sees a challenge for their Global client:

*“It’s a mixed thing. Earlier, [...] if I was a stakeholder in GlobalClient, I would have had people in my team who were sitting right next to me and I could get work done through them. Now, I do not have a local team but there is one central [team] that I can send my request to and it gets done. So, it’s a mental change, it’s a change of comfort. You don’t have that same level of comfort compared to having people sitting next to you anymore.” (IndianVendor’s AccountManager)*

**Table 3.** Interviewees' locations

Interviewees' locations	Management	Department heads	Key account data teams (KAD)	Customer segmentation teams (CS)
<b>GlobalClient</b>	UK, Germany, France	Australia, Brazil	France, Argentina	South Korea, UK
<b>IndianVendor</b>	India (2 interview partners)	India	India	India

Since GlobalClient’s sales unit is also globally dispersed, the intent is to keep the geographically distributed DMU team for cultural and organizational reasons (e.g., 24/7 support and support in Asian countries). Therefore, even the client team members by themselves work together in a remote setup, e.g., on process improvements. Additionally, the external vendor’s staff is also distributed over three locations (India, China and Eastern Europe). GlobalClient’s former vendor manager of the outsourcing contract with IndianVendor summarizes the challenges of this high dispersion mode:

*“It’s tough because multiple companies are involved, because the world is changing everyday, because we are all remote, not all sitting in the same room but sitting in different time zones. We all come from different cultures. So all of that makes it a challenge and a very challenging atmosphere, as well.” (former vendor manager at GlobalClient)*

A member of the CS team explains why this remote setup can be difficult for everyday work in the operational teams, particularly for conveying the business background to the vendor team members:

*“It’s difficult when you’re sitting in a country far away and you’ve got a process flow to follow – really understanding why that process flow is so important to the business of GlobalClient. That’s the big issue which is always difficult in an out-sourced model.” (CS team lead at GlobalClient)*

Once or twice a year, GlobalClient’s DMU employees meet personally in a joint summit to get to know each other better. However, there is no comparable meeting on the vendor side bringing together vendor team members from different locations, nor are there any joint physical meetings between client and vendor team members.

Another challenge is the **turnover** of personnel on the vendor side. Being typical for offshore vendors in India, which have problems in retaining qualified people, there is a significant turnover of people, who get hired by competitors as they want to

further develop in their job. However, IndianVendor claims that they are handling the turnover better than comparable companies:

*“In India, there is an attrition problem. It's not too huge and I think we do very well as compared to the rest of the companies in India. But yes, we do have some turnover in India. And we've seen a little bit in China, in Eastern Europe as well, but [...], there is adequate notice period that people give, there is adequate training period that we can train a new person on, so it doesn't really affect GlobalClient. So from a client perspective, they don't notice anything different.” (IndianVendor's AccountManager)*

GlobalClient has a very different perspective on this, as the ramp-up of new employees is time consuming and also involves client personnel's time and effort.

*“[...]The reality is that we're investing a lot of our time and money to get IndianVendor people up to speed, with big picture training, coaching – not only for their tasks but helping them to understand what's left, what's right. So the investment of education is pretty high which means that the turnover impact is high as well.” (Former vendor manager at GlobalClient)*

The third challenge that showed up in the interview series is the need for **business understanding** on the vendor side. Since IndianVendor operates on SRs from the sales people of GlobalClient, they need profound knowledge about the context of the SRs. The operational staff at GlobalClient expects this business understanding from IndianVendor's employees:

*“[...] they have to understand our business. Having that business knowledge is critical to being able to help us drive forward and to make the process improvements that we want to make.” (CS team lead at GlobalClient)*

In the past, GlobalClient's DMU manager identified exactly this aspect of the relationship as important area for improvement:

*“I think having an understanding of our stakeholders in the field and their expectations was where it didn't work so well. We needed to go through quite a solid training program in order to bring them up to the standards necessary in order to be able to deal with our [sales] people.” (DMU manager at Global-Client)*

The three challenges described here (global dispersion, vendor turnover and need for business understanding) drive changes in the interaction structures in order to reach effective and efficient collaboration and thus make the outsourcing relationship successful. In the following, we describe how and why the interaction structures have changed in response to these challenges.

## **4 Results: Overcoming the Challenges through Fitting Interaction Structures**

As introduced above, the case study focused on two teams (KAD and CS). In this section, we present the actual interaction structures for both and explain reasons for the deviation of the actual structures from the initially planned ones.



#### 4.1 Key Account Data Team

The KAD teams have shrunk over the past months due to increased automation of their activities. On IndianVendor side, there is only one data analyst left, while it used to be six in 2010. The client team consists of a team lead and three team members. In contrast to the initially planned interaction model, the actual interaction is less channeled through the team leads but rather involves all client team members. While the KAD vendor team lead is still the defined main contact person on vendor side, called misleadingly “single point of contact” (SPOC), a dense interaction between all members of the vendor and client teams exists. The “SPOC” has a coordinating function in this setup, as the client team lead explains:

*“Normally, he is my SPOC, but to be honest I have a daily call with all [IndianVendor KAD] team [members]. [...] My relation with the SPOC is more about organizational and planning topics and sometimes a weekly sync and sensing regarding the ‘climate’ if there are some ‘people issues’ present. But usually I directly contact the [IndianVendor team members] to get myself the correct feeling.”*  
(KAD team lead at GlobalClient)

A KAD team member further explains how the interaction among the client and vendor team members works:

*“Yes, we do have [direct] interaction with vendor team members. For instance, when they work on reports and something is not clear, they come directly to me asking for assistance [...]”* (KAD team member at GlobalClient)

Thus, the dense interaction pattern is mostly directed from IndianVendor to GlobalClient to clarify open questions. Reversely, GlobalClient takes initiative when new or changed processes need to be explained. This knowledge transfer is necessary to give the IndianVendor employees an understanding of the business context:

*“From our side, it is more passive. Only if we have a change on any tool or process, we schedule a particular meeting with the [vendor team] members who are concerned with the change and try to explain and give examples, screen shots, demonstrations; everything we can do to make the explanation as clear as possible. [...] From our side, we don’t initiate a continuous or daily interaction with the [vendor team] members unless we have something specific to communicate.”*  
(KAD team member at GlobalClient)

This is also supported by the vendor team lead, who acknowledges the open communication model:

*“I would say that it [the interaction structure between client and vendor] is transparent. I don’t think there is some channel because everyone is very free. The client team members always say that we are free; if we have any questions, we can contact any person. [...] I think it is good. It gives transparency to communication, which is always very beneficial for a business. We obtain a certain level of understanding.”* (KAD team lead at IndianVendor)

This dense interaction structure was intentionally promoted through regular joint team calls after it emerged that the initially planned structures were not sufficient to ensure effective collaboration and high service quality. The goal of this revised interaction

structure clearly is knowledge transfer and improving business understanding on the vendor side:

*“We have an official team meeting once a week. Everyone is there [client and vendor team members]. We share best practices: how we can improve the current way of execution. It's a very open sharing session. And in this session I also provide some guidance, because we have to follow some guidance to execute the tasks.” (KAD team lead at GlobalClient)*

Additionally, client and vendor team members frequently interact via phone or instant messaging. The client team lead explains how she communicates with client and vendor KAD team members through these channels every day:

*“I have different kinds of contact. It could be an instant messenger discussion, a quick question. ‘Hey, I'm not sure about this, how can I resolve it?’ So I answer. Sometimes it's quicker and more efficient to have a call, if the team member asks questions.” (KAD team lead at GlobalClient)*

Additionally, the KAD vendor team members not only interact frequently with all client team members, but also directly with the business, i.e., people from GlobalClient's sales unit who send SRs. This is another adjustment to the initially planned interaction structure, where the outsourcing arrangement should be completely “invisible” for the business. The GlobalClient KAD team lead explains the reason for this and how she supports new vendor team members in this communication:

*“Sometimes, the [SR] is not clear. In such cases, they need to ask for clarification and write an email to get some more information to make sure [they] correctly understand the request.[...] In other cases, they have to send some reminder to the business because we need to get approval before applying the change to the system. The reminder should be polite and gentle because we need to have a very smooth communication with the business. So, at the beginning we provided some standard emails to the vendor and client team members, which they could use as templates for their communication. And now I don't have to prepare these standard emails anymore because they know how to speak to the requestor.” (KAD team lead at GlobalClient)*

Due to this direct interaction with the business, the client team members must ensure sufficient business knowledge as background for the vendor team members. The client's vendor manager explains the content and importance of this knowledge transfer:

*“We provided them more insights of specific tools, applications, and toolsets as well as of the business side of GlobalClient because quite often they directly interact with GlobalClient employees from the business side. They need to understand all these calls and the nature of the business and why certain people turn to them with specific requests.” (New vendor manager at GlobalClient)*

We can summarize that the KAD team has applied several measures for denser interaction structures than initially planned in order to achieve sufficient knowledge exchange and collaboration efficiency. These include team calls with all team members, allowing or even motivating direct interaction between client and vendor team members, and additional coaching sessions. Figure 2 illustrates the adjusted interaction model between the KAD vendor and client teams.

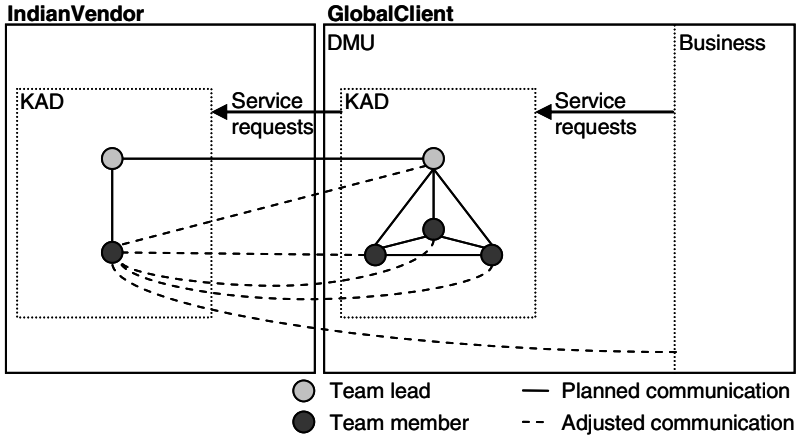


Fig. 2. Actual interaction structure in the KAD team

## 4.2 Customer Segmentation Team

The client and vendor CS teams are bigger than the KAD teams because the tasks are less automated and the process improvements are still ongoing to a larger extent than in KAD. The client CS team is divided into three sub-teams, each being similarly structured as the KAD team: a client team lead and 2-4 team members. The supporting IndianVendor team is significantly bigger, consisting of almost 20 team members, coordinated by the vendor team lead. The initially planned interaction structures between IndianVendor and GlobalClient in CS (Figure 3) are identical to the KAD planned structure. The actual structures, however, are also denser than initially planned. Similar to the KAD team, the CS team has a weekly joint online team meeting. In CS, it is voluntary for the vendor team members to participate while the vendor team lead is a mandatory participant:

*“We have a virtual meeting every week, for about an hour. [In] that meeting, our [client team] members participate and also all [vendor team] members that might be interested. The [IndianVendor] single point of contact (SPOC) is required to attend. Also, if some [vendor team] members want to share very specific issues, surely [they are] very welcome to join this meeting. Usually we have 20 to 25 attendees [including vendor team members].” (CS team lead at GlobalClient)*

In contrast to the KAD team, interaction between the CS client and vendor teams is more channeled through the team leads (besides the open virtual meeting described above), however not as completely as initially planned.

*“I would say, [the communication] is probably channeled through specific people [but not only through us as the team leads]. Some people that work in my team take a coordination role, too. [...] They are responsible to be the interface towards the [IndianVendor] team, and to be the first point for escalating any issues or to work with those individuals of IndianVendor that got any problems or that are not performing the way they should perform. So there is certainly a relationship at this layer and above that there is the relationship that I have with the vendor team lead.” (CS team lead at GlobalClient)*

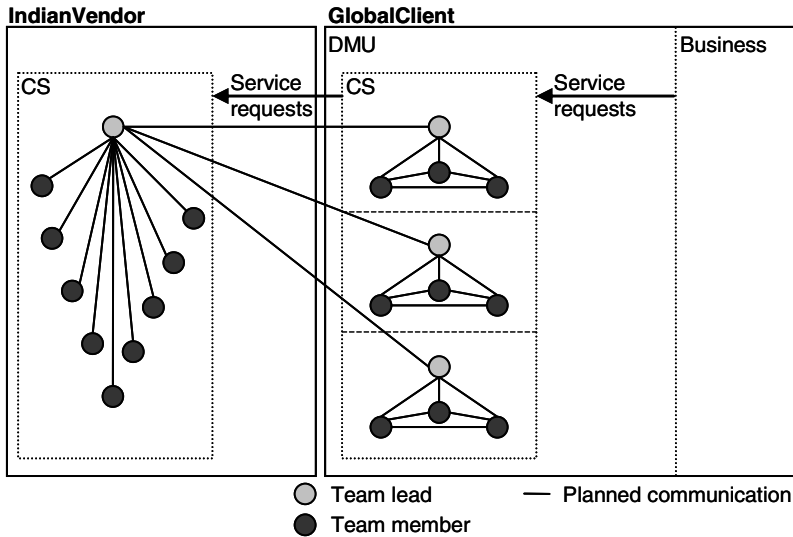


Fig. 3. Planned interaction structure in the CS team (illustrative)

Moreover, the client team lead also accepts being contacted by staff from IndianVendor:

*“Anyone [from vendor CS team] who needs to contact me is free to do so. Somehow, we are an open society: anyone can call me or email me; that’s okay. However, the important thing is that the [IndianVendor] SPOC is the main person who is responsible for CS on the vendor side.”* (CS team lead at GlobalClient)

The vendor team lead supports the perception that the vendor team members can contact the client team members whenever necessary:

*“If a team member at GlobalClient and a team member at IndianVendor have to share a piece of information, they are very free to talk to each other directly. They do not need to follow the official channel. [...] They can directly talk to each other without restrictions.”* (CS team lead at IndianVendor)

Given the size of the CS teams, they have set up a coaching model for better knowledge exchange. The coaching takes place both within the vendor team and across firm borders from client to vendor team.

*“Most of the time the IndianVendor team works well and independently, but in case of new processes, when there is new work coming from GlobalClient, our analyst will act as mentee and a GlobalClient team member will be the mentor.”* (CS team lead at IndianVendor)

Across the firm borders, the coaching model involves different groups having regular coaching calls. These calls are led by a client team member and each vendor team member participates in a call every week.

*“We have subject matter experts [client team members] for particular topics, who are supporting us and helping our analysts to understand it all. It is like an open forum, where there is one subject matter expert from GlobalClient and 4-5 of my*

*team members will participate. In that forum, they can share their concerns, they can openly ask their questions [while the subject matter expert supports them].” (CS team lead at IndianVendor)*

The vendor team members usually attend the same forum every week, but they can rotate across the groups in order to get to know each other better and thus improve their collaboration:

*“We decided that from time to time the vendor team members will be moved between the groups so that they know each other well. We think that helps in their work.” (CS team member at GlobalClient)*

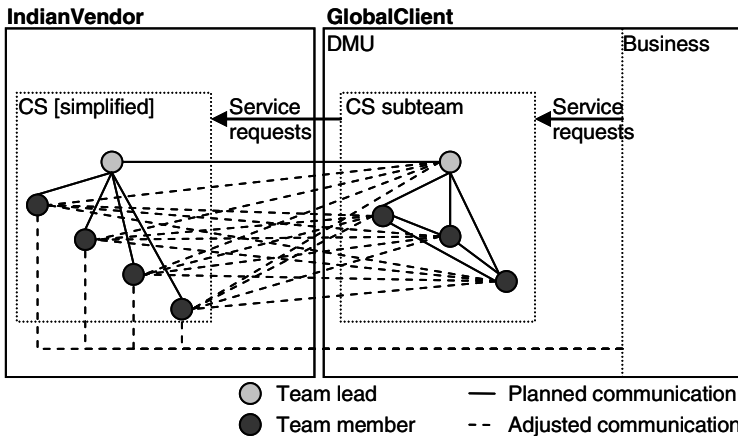
The client team member also explains how the closer collaboration helps in her team’s daily work:

*“The closer the approach we have with each other and the more communication we have, [...] the better their work will be. We [the client team members] have understood that we have to care about how they [the vendor team members] feel, how they do, or how they act. Being the vendor doesn’t mean that they just deliver their tasks and nobody cares of how they did it. These conference calls and the collaboration help in every aspect. They help them to do their work properly and effectively, and it helps us to see how everything is going on.” (CS team member at GlobalClient)*

Similar to the KAD team, the vendor team members from the CS team also interact directly with the sales people, for clarification of SRs:

*“So in case they need more information about particular SRs, they can and do directly interact with the requestors from business side, asking for the necessary information.” (CS team lead at IndianVendor)*

We can summarize that the CS team has made similar adjustments to the initially planned structures as the KAD teams with joint team meetings and establishing an open interaction structure between the client and vendor team members. Additionally to the KAD scenario, they have introduced the coaching model with formal online sessions to exchange experiences. Figure 4 shows the actual interaction structures of one CS sub-team.



**Fig. 4.** Actual interaction structure in one CS subteam (illustrative)

### 4.3 Department Level: Integrating KAD and CS Teams

The differences between the KAD and CS teams regarding size and organizational structure are due to varying maturity of the processes and reorganization of the departments. GlobalClient's department head, who is responsible for both teams, explains how his own involvement differs between the two teams because of this:

*„[I participate in the CS team meetings more often] because in CS we haven't made as much progress regarding automation and streamlining as in KAD. KAD has reached a very high level, it runs like clockwork. CS on the other hand has some major difficulties. There is more work to be done to bring that area into the right 'format' to work smoothly by itself. There is still much potential for optimization. Therefore I like to participate in the calls, just to see what the problems are, where we are in the development, and to get some feedback.” (Department head at GlobalClient)*

Given the different stages of maturity, GlobalClient also implemented client internal knowledge exchange measures between the different teams (KAD, CS) for sharing experiences.

*“Now we have started to get rid of some gaps we had between the internal teams, to say 'let's take a broader perspective and see what we can learn from KAD, from CS, or from [internal] teams A, B, and C.' [We discuss] all these things where you say: 'Hey, it makes sense to align this [across the internal teams].' [...] We even have KAD client team members participating in the CS weekly call. So it's getting better. In the beginning it was a silo mentality, but now it is quite good.” (Department head at Global-Client)*

GlobalClient continues to further adjust the interaction structures between the different teams (such as KAD and CS) towards closer collaboration and more interaction between the actors at all levels.

## 5 Discussion of Results

Based on the results presented above, we now discuss the findings in the context of extant outsourcing research. The initially planned interaction structures between client and vendor teams in our case were adjusted through four mechanisms to improve efficiency and effectiveness of collaboration (as illustrated in Figure 5):

1. Direct interaction of vendor team members with the business improves the efficiency of the collaboration because it reduces communication effort.
2. Direct interaction between vendor and client team members improved the effectiveness of vendor services as vendor team members gain more knowledge of the business context and thus can fulfill more advanced tasks and get engaged in problem solving.
3. Joint team calls of vendor and client team members improved both efficiency of problem solving and effectiveness of knowledge exchange as they reduce time consuming one-to-one explanations.

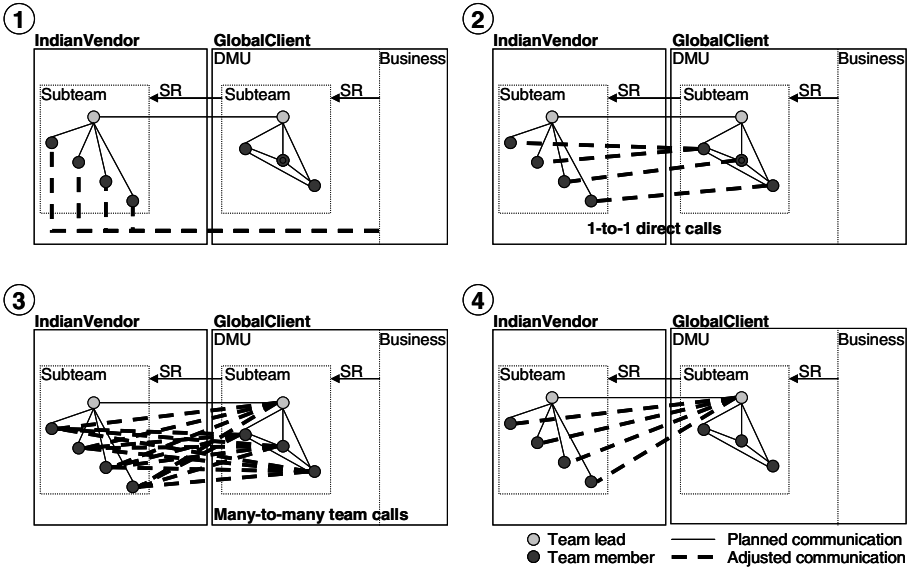


Fig. 5. Four mechanisms of adjustments in interaction structures

4. Direct interaction of client team leads with vendor team members allowed more efficient instructions, especially in the starting phase, and thus more effective vendor services.

In addition, the internal alignment between client teams was improved through team lead meetings, which also include discussions of interaction modes with the vendor.

Our results show that in both client teams interaction structures were adjusted in order to improve knowledge exchange between client and vendor. This is in line with previous studies in the software development domain, which elaborate on comparable mechanisms for knowledge exchange between client and vendor (e.g., [22, 23, 10]). These authors discuss measures for socialization such as client representation in vendor teams, rotation, or onsite/offshore visits – especially in the context of tacit knowledge which needs to be transferred between the vendor and client team members. Our case study extends this perspective into IT-based process outsourcing and shows that this principle appears here, as well. However, besides the positive effect on knowledge exchange, the adjustments to the interaction structures come with disadvantages as well. Our analysis shows that the vendor team members’ direct interaction with the business affords a comprehensive training of new vendor team members. The coaching models cover part of this, but they are time consuming on client side. Another potential disadvantage was raised by Williams [10] who suggests that managers should monitor potentially inappropriate informal discussions in the offshore location, though he could not support his hypothesis that they have a negative effect on knowledge transfer. By contrast, informal discussions were not found to be negative in our case, but are rather seen as helpful to quickly find solutions. Williams [10] argues, that especially “localized” discussions in an offshore location could be an issue because of missing documentation and use of second-hand knowledge.

A possible explanation is the difference between IT-based process and software development outsourcing, as one could argue that software development outsourcing requires (generally) a deeper understanding of the business domain, with a thorough documentation of problem solving routines and where transfer of tacit knowledge is highly required for developers. Another possible explanation that this did not show up in our case is that the team is fully dispersed, thus, informal discussions take place across all locations and between client and vendor team members equally.

The dispersed and multi-cultural setup in this case might trigger the question, which impact cultural differences have on the collaboration. While this was not in focus of our case study, we could still see differing opinions on this between our interview partners. Some mentioned the “typical” differences between Indian and Western cultures (e.g., Indian team members being very accommodating and unlikely to say “no”) and the multicultural atmosphere was described as challenging. However, the cultural gap was not seen as a major problem as it could be addressed by long-term experience in a multicultural setup, by standard processes and the intensified communication. This is in line with Jain et al. [9], who found that higher interaction served to build trust between client and vendor and thus addressed the cultural gap which might lead to vendors not talking openly. We can also see parallels to Dibbern et al. [24], who argue that a common knowledge space enables open communication between the groups, addressing the cultural distance.

Most of our interview partners, especially at the operational level, appreciated the adjusted, dense interaction structures. In contrast, the vendor department head would have preferred people to maintain the planned structures because from her perspective direct calls from the client team lead to the vendor team members disrupt their work and confuses them. Furthermore, the client management was not aware of the extent of open communication and does not expect the vendor to build additional interaction links but rather to simply deliver their service. Obviously, the management misconceives the interaction needs and actual structures at the operational level. Differing opinions on a dense vs. channeled interface setup also occur in previous research, focusing on project-based software development or engineering tasks outsourcing [25, 15, 5]. Leonardi and Bailey [5] and Levina and Vaast [15] find that vendors prefer high density while clients prefer a more channeled interaction setup. Our case shows that in the domain of IT-related process outsourcing dense interaction structures can well be in the interest of both client and vendor, even if the management might not perceive the advantages. The goal of dense interaction structures, however, is the same for all contexts: knowledge transfer from the client towards the vendor. Leonardi and Bailey [5] and Levina and Vaast [15] identify the two differing views of advantages of dense vs. channeled interaction structures on client and vendor side, i.e. the organizational boundary corresponds to the boundary between the perspectives. However, the boundary in our case runs orthogonally and differs between the different organizational levels: on the operational level both client and vendor team members prefer a dense communication setup, while the management level at least on vendor side sees more advantages in the channeled interaction. Our case shows advantages of high density especially in the phase of vendor learning. Due to ongoing development and changes in the processes, this phase lasts and the interaction structures stay dense. Generally, we would hypothesize that network density between the vendor and client service teams will decrease over time because the need for knowledge transfer towards the vendor decreases after the relationship has



been settled and routinized. However, our observation showed that the initially unplanned interaction between vendor and *business* is likely to persist, as it serves to clarify questions on individual SRs and thus improves service efficiency regardless of the phase of knowledge transfer.

In summary, the initially planned interaction model was channeled through certain interface actors, while the adjusted model has high network density. This model was preferred to ensure better understanding on the vendor side and thus to improve their services. The need for dedicated knowledge transfer measures was driven by global spread of client and vendor team members, vendor turnover and the need for business understanding on vendor side. Furthermore, the ongoing process transformation required dynamic adjustments of interaction structures. Table 4 gives an overview of the results. Our case study revealed new insights into the individual level of interactions and relationships in offshore outsourcing arrangements. Our findings support the notion, that management measures which increase interaction between client and vendor team members improve knowledge exchange between the parties. We could also see that interaction structures between the individuals involved develop over time, adapting to new needs and circumstances of the outsourcing arrangement. This evolution of structures is likely to be found also in other outsourcing and offshoring situations, as the people acting on both sides shape the interactions and thus the client-vendor relationship. We can argue that relationship management needs to be flexible and must not treat initially planned and formalized structures as “carved in stone” but rather as an initial framework of collaboration. Over time, managers should be aware of changing needs and allow corresponding changes in the interactions structures. It is important to keep in mind that these changes might also require new skills or knowledge from the team members, e.g. for direct interaction between vendor and business.

**Table 4.** Overview of results: how and why do real interaction structures differ from planned ones?

How do interaction structures differ?	Why do they differ?	Case Context
Direct interaction of vendor team members with business side (initiated from vendor side)	More efficient handling of service requests, reduced communication effort	Team members handle service requests from business and directly contact them for additional information (KAD and CS).
Direct interaction between vendor and client team members	Need for knowledge transfer for more effective vendor services	KAD: one-on-one mentoring approach CS: Open coaching sessions with several vendor team members
Joint team calls of vendor and client team members	More efficient problem solving and effective knowledge exchange between vendor and client team members	KAD: <i>all</i> client and vendor team members participate to share best practices and to get instructions from client team lead. CS: team members join by own choice in case of specific questions.
Direct interaction of client team leads with vendor team members	More efficient instruction of vendor team members and thus more effective vendor services	KAD team lead directly instructed vendor team members in the starting phase. CS team lead is open for questions from vendor team members.

## 6 Conclusion

This paper presented an exploratory case study of a global outsourcing relationship and the changes to initially planned interaction structures. The case shows that fitting interaction structures are an important prerequisite for knowledge exchange within and across organizations. Therefore client and vendor in outsourcing relationships should refrain from strictly adhering to planned interaction structures. Instead, they should dynamically adjust them to changing knowledge exchange requirements given the circumstances of the outsourcing relationship. Our case study revealed four mechanisms that changed the interaction structure between client and vendor: a coaching model, direct communication with the client's business, joint vendor and client team calls, and direct interaction of client team leads with vendor team members. The right interaction structures can thus contribute to the success of outsourcing arrangements. Especially in global setups they are important as knowledge sharing does not happen as naturally as in shared work spaces with face-to-face interaction.

Our work is based on one case study and thus has limited generalizability. However, in an explorative approach a larger number of cases is desirable but not necessary, as we aim at revealing new insights. We investigated two different teams, covering both the vendor and client sides, which gave us rich insights through multiple views. We therefore believe that our research is highly relevant for practice and research and points to relevant areas for further research on the role of interaction structures in outsourcing relationships: Future research should broaden our findings by (1) extending the list of drivers behind changes in interaction structures, (2) understanding the context variables relevant for choosing the right interaction model, and (3) deriving more specific management recommendations on how to adjust interaction structures in outsourcing relationships.

As even the analysis of our rather manageable scenario shows, outsourcing relationships are complex social phenomena with rich and manifold aspects to be explored. It is up to future research to shed more light into the social networks and to increase our understanding about which structural patterns lead to superior outsourcing effectiveness.

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