Trust and Coordination in Offshore Outsourcing: An Account of Intercultural Collaboration in a Danish and Indian IT Context

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Abstract. This paper reports from an empirical study of one of the largest IT and BPO offshore outsourcing endeavors embarked upon by a Danish company. Based on observations of structured, video-mediated handover meetings and follow-up interviews with the involved stakeholders, it presents an account of how the implementation of handover meetings affected Danish employees´ perception of their Indian counterparts in terms of work attitude, competence and reliability – and ultimately how these handover meetings increased the Danish employees´ willingness and ability to trust their Indian counterparts. Contemporary research on trust in virtual teams is used to provide a theoretical framing of the empirical findings. The paper furthermore draws on Sabherwal's (2003) categorizations of coordination as being either biased towards organic mutual adjustments or towards a priori structures. Through this perspective the findings suggest that formal coordination can be seen as a catalyst for building trust in virtual teams.

Keywords: Outsourcing, Offshoring, Cross-Cultural Management, Trust, Virtual Teams, Coordination, Intercultural Collaboration.

1 Introduction

Over the last two decades western firms have increasingly offshored IS activities to Asia; and success in such endeavors is significantly dependent upon the participants' ability to work in distributed teams. A large body of research within a variety of fields has been dedicated to understanding the complexities of virtual collaboration. Distance and use of collaboration technologies have been in focus (Olson and Olsen, 2000); shared meaning as well as conflicts in virtual teams (Bjørn & Ngwenyama, 2009; Hinds & Bailey, 2003) have been studied; and attention has been devoted to understanding the inherent difficulties of managing a distributed team (Hambley et al., 2007). Furthermore, the challenge of managing intercultural collaboration; and communicating and collaborating in virtual teams has received a great deal of attention (See Maznevski, 2012 for an elaborate literature review).

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Much of this research mentions the importance of *trust* in virtual teamwork, but without making much of it. On the other hand, there exists a large body of research on trust (see Saunders et al., 2010 for an elaborate review), but within trust research only limited attention has been devoted to virtual teams – and even less research has taken on the challenge of doing ethnographic research on trust in virtual teams.

In this paper I take upon me the challenge of looking closer at how a specific coordination practice, namely task handover meetings, contributes to the establishment of trust in virtual teams, seen from the perspective of the client-side employees. Theoretically this paper is a contribution to the trust literature as it empirically explores how formalized coordination activities can affect trust levels positively. Furthermore, the paper aims at inspiring practitioners who are challenged by lack of trust within their virtual teams.

2 Literature Review: Coordination and Trust in Virtual Teams

Over the last 25 years a substantial amount of attention has been given to coordination mechanisms, within IS research as well as other areas (e.g. Daft & Lengel, 1986; Bjørn & Ngwenyama, 2009). Broadly speaking coordination can be regarded as the practice of "integrating or linking together different parts of an organization to accomplish a collective set of tasks" (Van de Ven, Delbecq, & Koening, 1976; 322). Within IT, coordination is about sharing system knowledge, making sure that the responsibilities are clearly divided and adequately specified and understood by all parties in order to avoid rework and redundant work, among other things. In an article on coordination of outsourced software development projects, Sabherwal finds that coordination mechanisms can be classified into four distinct types, namely standards, plans, formal mutual adjustment, and informal mutual adjustment (Sabherwal, 2003).

Standards and plans both rely on a priori definitions, but differ as standards are defined irrespective of the concrete project or task (such as ISO standards, ITIL and CMMI); and plans are project or task specific (such as project management plans and delivery schedules). Both standards and plans are impersonal and "once they are implemented, their application does not require much verbal communication between participants" (Sabherwal, 2003: 156). In contrast, both formal and informal mutual adjustment rely on interpersonal interaction, where the formal mutual adjustments are characterized by being structured with regards to purpose and frequency (such as status meetings) and the informal mutual adjustments are characterized by being ad-hoc and having a more reciprocal character (such as collocated colleagues talking in office, impromptu communication via e.g. phone, email or chat).

Sabherwal's (2003) analysis shows that coordination is likely to be increased when uncertainty such as "performance problems, changes in project responsibilities, and unilateral actions or perceived opportunism by the vendor" (p. 178) is experienced. Uncertainty is also addressed by Rosen et al. (2005) who conclude, that it "can have serious and long lasting consequences for the team's performance" (p. 259) if uncertainty leads to erroneous attribution of the motivation of virtual team members and find that "the quantity and quality of knowledge sharing is influenced by the levels of trust among team members" (p. 262). Thus, there seems to be two opposing modes in play, where on one hand high uncertainty leads to implementation of coordination mechanisms and on the other hand successful coordination is dependent on a certain level of trust. Paul & McDaniel (2004) state that "trust is a psychological state based on confident expectations and beliefs that another party will act in a certain manner, and that the trusting party must in some way be vulnerable under conditions of risk and interdependency to actions by the other party" (p. 186). Much similar to this Mayer defines trust as "a willingness to be vulnerable to another party based on both the trustor's propensity to trust other in general, and on the trustor's perception that the particular trustee is trustworthy" (Lewicki & Brinsfield 2012: 31). Thus, there is a clear similarity between trust and what Sabherwal labels as 'uncertainty'.

This willingness to trust is what Möllering (2006) calls a "leap of faith", which very well describes the somewhat paradoxical situation: uncertainty is reduced by implementing coordinative measures, but the success of coordination is dependent on the parties' ability and willingness to accept risk and uncertainty.

Greenberg et al. (2007) suggest that in order to overcome such barriers in virtual teams it is important that "even before team members first interact, managers need to take steps to create a foundation for trust" (p. 328); or as Schaubroeck et al. (2011) would label it: a sense of psychological safety. Greenberg et al (2007) state that trust traditionally arises in two ways. "One is based on rational or calculative assessments and is called cognitive trust. It is the result of an evaluation of evidence of performance reliability and competence. Cognitive trust has been modeled as a function of the other person's integrity and ability" (p. 327). Secondly, trust can be affective, characterized by emotional bonds and based on "assessments of benevolence" (ibid). As we see, both types of trust are based on evaluations of attributes of the trustee; and consequently there is an indication that the leader's role in establishing trust is primarily related to creating a context in which the team members repeatedly are exposed to the integrity, ability and benevolence of their virtual team colleagues.

These fundamental challenges to establishing trust are not solely related to virtual teams, but as Rosen et al. (2005) point out mediated communication "reduces opportunities for virtual team members to have useful conversations, identify common interests, and engage in self-disclosure; all important elements in building trust" (p. 262) and "without the ability to observe reactions of virtual teammates to requests for information, virtual team members may fear that such requests might be seen as indicators of incompetence" (ibid).

3 The Case: Organizational Setup and Task Handover Process

The empirical case is an *offshore outsourcing* (Pfannenstein & Tsai, 2004) engagement between the IT-organization in a large Danish company (from here: The Client) and an Indian service provider (from here: 'The Vendor'). The engagement was started up in 2006 and has since then grown to be one of the largest IT offshoring endeavours taken on by a Danish company.

The offshore outsourcing engagement is a *virtual captive* center (Lacity & Rottman 2008) in which The Vendor is responsible for the physical setup of the offshore development center (ODC) in India. The consultants work on physical machines provided by The Vendor, which are connected to virtual machines belonging to The Client: this way the consultants work within the client company's technical infrastructure and no data is allowed to be carried outside this infrastructure due to their sensitive nature.

The ODC is a mirrored organization in which the various departments in The Client's organization are replicated in the ODC. This structure cascades down from nine areas directly under the responsibility of The Client's CIO to the various system management areas and development projects. The Indian consultants are allocated to departments and projects where they participate as if they were employees of The Client. Thus, the utilization of the vendor staff resides under the line and project managers from The Client; and Indians and Danes interact directly with each other on a daily basis. The department in which the observations and interviews are conducted consists of 90 Danes and 25 Indians.

As the tasks being performed in The Client Organization vary significantly with regards to type, complexity, size, duration and business importance, the mirrored ODC organization also experiences a significant variance. This, combined with a Danish tradition of self-organization and empowerment (Gertsen & Zølner, 2012) within the various departments residing under the CIO's office, results in a non-standardized collaboration between The Client Organization and the ODC. The programme which the task handover process is a part of is aimed at collecting best practices across the organization and hereby improving the utilization of the ODC.

The purpose of the structured task handover meetings is according to the process description to "ensure common understanding of the content of a task that [the ODC team] is working on; that expectations are aligned; that there is mutual agreement on deliverables; that interaction and means of communication has been agreed upon; and that time lines and dependencies are communicated". It is not a standalone procedure, but rather an amendment to the task management process framework. This framework was implemented some years ago to structure how tasks were handled, but without taking offshore collaboration into consideration.

Thus, the handover meetings were designed with the intention of bridging a coordination and knowledge gap that was experienced when transferring the execution responsibility of tasks from Denmark to India and putting it in the hands of the ODC task manager. After receiving a specific task, this manager would be responsible for assembling a team to handle the task; inviting for a video meeting where both the assigned ODC team and the subject matter experts (SMEs) in Denmark would participate; and finally making sure that the task would be estimated and from here handled according to the already established task management framework.

The cornerstone of this process is thus the formalized handover meeting which is typically attended by two Danish SMEs and three to five Indian consultants. The meetings are always held as video meetings making room for the participants to see each other, and they always follow a standard agenda with predefined topics for discussion, namely 1) a walk-through of the task by the SMEs where they account for the purpose of the task, lay out what work had already been done, assess criticality, and address the associated risks and 2) discussion and agreement on time constraints and deliverables. After the meeting the minutes, taken by an appointed Indian consultant, are distributed among the participants and subsequently the team of Indian consultants drafts a detailed estimation of the task. From here the task follows the ordinary task management process framework.

4 Methodology, Research Design and Data

The study of the task handover process I am reporting on in this paper succeeds a larger research project on offshoring collaboration. At this time I was an employee of the client company and expatriated to their offshore development center in Bangalore India as a Liaison Officer. I was engaged in the research project alongside two scholars from Roskilde University.

This project led to a company-internal collaboration improvement initiative referred to as *CoP*, which was instigated shortly after I had repatriated to Denmark. CoP is an abbreviation of *Collaboration Project* in which I was, among a vast variety of other responsibilities, charged with the management responsibility of designing and implementing initiatives to better the collaboration between one of the departments in Denmark and their Indian ODC-staff. One of these initiatives is the task handover process.

Thus, the research presented here is an auto-ethnographic account involving "self-observation and reflexive investigation in the context of ethnographic field work and writing" (Maréchal, 2010: 43). The study consists of observations of five instances of a task handover process executed over a period of three weeks. In total seven Danish SMEs and nine Indian consultants participated in the five meetings, as some on both sides participated in more than one meeting.

I was both a driving force in the establishment of these handover meetings, but also charged with the task of evaluating the perception of effectiveness of this initiative among both Danish employees and Indian consultants. More precisely, my role was to observe the discussions and provide guidance to make sure that the formalized agenda points were covered adequately. Furthermore, I was engaged in evaluating the meetings based on subsequent interviews with the meeting participants, where they were asked to reflect on the usefulness of the meetings and on how the agenda could be improved. In total, this led to eight interviews; Four with Danish employees and four with Indian consultants. All interviews were conducted as semi-structured, and the answers were written down during the meeting. Finally, my role was to evaluate these task handover meetings and present to the department director my recommendations on how to proceed.

As a consequence of being an employee of The Client I also had the opportunity to observe in situ the Danish participants, as well as those of the Indian consultants working onsite in Denmark as well as speak with the offshore consultants via a broad range of communication technologies at my convenience; and hereby observe the daily routines in the office and informally discuss the benefits and challenges of the task handover process.

Doing research and at the same time being an employee in the same empirical context with management responsibility in the department and of the pilot, and later on implementation, of the task handover process; and furthermorebeing a former Liaison Officer in the ODC in India is indeed a special situation.

Like any other kind of ethnography, auto-ethnography is indeed a matter of interpretation (Maréchal, 2010). Drawing on the hermeneutical school of thought Alvesson & Sköldberg (2000) I acknowledge that one cannot free oneself from past experiences. Thus, this research paper is an interpretation based on what I experienced over the years – and the choice of looking into the role of trust is based on this. Also, there is a risk that my personal positive attitude towards implementing task handover meeting may have resulted in me neglecting negative side effects, simply because I have not had a focus on this. Finally, there is a potential risk that being involved as a manager, may have affected the participants in the pilot test to express a more positive attitude towards the results of the pilot test. However, I have chosen the working "potential risk" deliberately, as it is my clear impression that the meeting participants were both encouraged and used to speak their mind (which I believe the initial reluctance I describe later is a clear sign of) and also that my relationship with them was not characterized by power inequalities in this matter.

5 Empirical Findings

5.1 Pre-implementation Analysis of the Collaboration

The handover meetings were aimed at bridging coordination and knowledge gaps and in line with Sabherwal (2003) constitute an increase in coordination activities as an answer to performance problems and perceived vendor opportunism. But the idea was at first not well received by the Danish SMEs, who found the Indians to be too dependent on asking for advice and pointed to that the level of system knowledge in the ODC was too low. When the new process was introduced to the Danes at a department meeting, one of them argued that *"we don't have time to spend two hours two persons to explain how to do a simple task that should not take more than forty hours in total"*. Several of his colleagues agreed and one elaborated that *"this means that we have to do our own work in less time"*.

Clearly, there was a notion that aiding the Indian consultants in understanding the complexities of the system portfolio was not a part of their job. But at the same time the SMEs were indeed helpful people that gladly sat down with a Danish newcomer to spend time on getting this person up to speed and they were usually very accommodating when a newcomer came by their desks to ask for clarification.

Among the Danes there was a pronounced insecurity of the Indian consultants' ability to contribute to solving the department's tasks. Because of my previous experience of working in the ODC, I was approached on several occasions by Danish colleagues who enquired about whether a graduate degree in IT or engineering from India was worth anything, implying that the Danes did not think much of the skills of the Indian developers. Others would ask if the Indians were *always* having coffee breaks, implying that they thought that the Indians did not put enough effort into their job. On many occasions such remarks were made in a joking manner, but it was my impression that the Danes had a genuine concern about whether the Indians were able to contribute adequately and if they were at all inclined to do so. On several occasions the Danes proposed that if they were to be sure that a task was handled efficiently and with a good quality they had to attend to it themselves without involving the Indian consultants.

Many Danes were telling that when a task was handed over to India they were constantly disturbed and that *"they [the Indian consultants] are sending emails with questions that they should know the answer to, all the time"*. Some attributed this to lack of competences; some to lack of proactivity; and some to *"a tendency to show off […] they Cc their manager on every little thing they do"*.

Summing up, in the words of Sabherwal (2003) the coordination prior to the introduction of the handover meetings was based on informal mutual adjustment. Also, the Danes were reluctant to accept the vulnerability of handing over important or urgent tasks to the Indians; and they doubted both the integrity and ability of their Indian counterparts. Thus, drawing on the definition of Paul & McDaniel (2004) the collaboration was characterized by lack of cognitive trust, seen from the Danes' perspective.

5.2 Outcome of a Pilot Test

From the outset the Indian consultants were supporting the idea of having task handover meetings and voiced the opinion that this could help them significantly. Despite of the Danes' reluctance, a pilot test of the task handover meetings was agreed upon. Five meetings were to be conducted and evaluated to decide on whether to incorporate the process on a bigger scale. This evaluation had three significant findings: there were indications that redundancy in work was lowered; transparency and efficiency was increased; and the Indian consultants were perceived as more proactive and independent in their approach to the work. The three findings will be elaborated below.

Indications of Lower Work Redundancy. Through the pilot task handover meetings there were several occasions where the increase in coordination activities indicatively catered for less redundancy. For instance, during the discussion at the very first meeting one of the Indian consultants mentioned that there would be a huge task in creating test cases to properly test the change to the system to which one of the Danish SMEs responded that such test cases were already established and that it was merely a question of reusing them. This particular example exhibits how something that the Danes considered common knowledge and therefore had not put in the specification surfaced as a knowledge gap (Madsen et al., 2010). When asked about this particular finding after the meeting, one of the Danish SMEs said that *"we would have caught this eventually anyway"* and thus, it seems that from a Danish point of view that this was not a case of lower redundancy. On the other hand, when asked about the same issue, one of the Indian consultants said that it was very helpful as they would have spent a lot of time looking through and translating the system documentation (which was in Danish) to find out whether such test cases existed *"and would probably have found nothing [because the] documentation is never maintained"*.

Another example surfaced in a meeting, where an Indian consultant questioned whether they could finish within the required time frame as drawing up the architecture would take time. This was countered by a comment by the Danish SME who explained that there were plans to discard the system in near future and thus the solution *"doesn't have to be pretty – it just has to work for now"*.

Increased Transparency and Coordination Efficiency. While the lower redundancy may be contested (as it was by the Danish SMEs) there is a strong indication that the task handover meetings led to a higher level of transparency. The Danes expressed univocally that the meeting had helped them to better understand what the Indian consultants were struggling with, though there were different opinions on whether the challenges that the Indians had pointed to through their questions were reasonable, ranging from complete understanding to rather harsh statements about the lower competences of the Indian consultants. Nonetheless, throughout the meetings the Danish SMEs readily and thoroughly answered the Indian consultants' questions and on several occasions the questions posed by the Indians were discussed among the Danes afterwards. The situation of the Indian consultants sitting more than 7000 kilometers away with limited access to expertise help and with a heavy reliance on documentation, sometimes deficient, sometimes even written in Danish, was acknowledged as being challenging. Also, the Indian consultants' effort to contribute was recognized.
The perception of the efficiency of the coordination was equally univocal among the Danes, who all found that the meeting sessions had, if not minimized then at least caused the subsequent email queries to be more to-the-point.

Perception of Higher Proactivity and Independence. However, most remarkable was the Danes' perception of the increased level of proactivity and independent problem solving among the Indian consultants. During evaluations several comments were made relating to this subject. For instance, one Dane explained precisely what he expected to be informed about and what he expected the Indians to solve themselves. It had dramatically reduced the number of mails the Indians send *"to have me [the Danish SME] approve, and this way take the responsibility"*. Several of the Danish SMEs expressed that they felt that the Indian consultants were taking more responsibility now and that they were more 'proactive' thereby referring to a commonly accepted value in the department.

Among the Indians, interviews revealed that the fact that the Danes had spent so much time on explicating what they perceived as important to be kept informed about and what they would rather prefer the Indian consultants to handle themselves had given them a new insight into how the Danes preferred to work, but also established a sense of being important and trusted. As one of the Indian consultants puts it: *"I feel more like a real member of the team now"*.

The most significant sign of a change came about a week after one of the handover meetings, where I overheard two of the Danish SMEs discussing a mistake that one of the Indian consultants had made. They agreed that they had to put in an effort to help him out, because even though they found it to be a stupid mistake, they knew that he was struggling and that they had to help because it was very late in India and he needed to go home to his family.

6 Concluding Remarks and Implications

"Does a failure to make a promised entry in the team's web archive mean that a teammate is struggling with a complex issue […] or just slacking off?" (Rosen et al., 2005: 259). This quote coins very well the experience of the Danish SMEs in the case I have been reporting from.

I have exemplified how the Danish SMEs were questioning both the ability and the integrity of their Indian counterparts, and how the implementation of video-based task handover meetings with a formalized agenda improved the Danes' perception of the Indian's integrity significantly. The perception of the Indian consultant's ability also seemed to be improved, however not as remarkable as the Danes' perception of their integrity.

Indeed a solid trusting relationship cannot be expected to flourish overnight. Bearing in mind that this study is conducted on a pilot test where most of the stakeholders has only participated in one meeting, I conclude that there is an indication that formalized task handover meetings have a positive impact on the level of trust.

Additionally, using the vocabulary of Sabherwal (2003) one can characterize the implementation of task handover meetings as a movement from coordination chiefly relying on informal mutual adjustment towards relying on a standard, namely the task handover process and on formal mutual adjustments, namely the execution of the task handover meetings. Thus, the findings in this paper indicate that a higher level of formalization and standardization in the coordination activities is beneficial for the development of trust between the parties.

Finally, the findings in this paper suggest that management, as Greenberg et al. (2007) point out, has a significant role in establishing the foundation for trust and facilitating the leap of faith (Möllering 2006), as this does not necessarily happen unaided.

Theoretically this paper contributes to the body of literature on trust by exploring how formalized coordination activities can affect trust levels positively. In addition, the paper suggests how practitioners may approach challenges related to negative perceptions of the abilities and the integrity of virtual team members.

Two limitations of this research should be recognized. First of all the case study is limited in both size and duration, and further research is needed to establish a more in-depth understanding of the relationship between coordination activities and trust building. Second, this study has primarily been focusing on the client side and research including the vendor-side would be beneficial.

References

1. Alvesson, M., Sköldberg, K.: Reflexive Methodology: New Vistas for Qualitative Research. Sage Publications, London (2000)
2. Bjørn, P., Ngwenyama, O.: Virtual team collaboration: building shared meaning, resolving breakdowns and creating translucence. Information Systems Journal 19(3), 227–253 (2008)

3. Daft, R.L., Lengel, R.H.: Organizational information requirements, media richness and structural design. Management Science 32(5), 554–571 (1986)
4. Gertsen, M.C., Zølner, M.: Recontextualization of the Corporate Values of a Danish MNC in a Subsidiary in Bangalore. Group & Organization Managemen 37(1), 101–132 (2012)
5. Greenberg, P.S., Greenberg, R.H., Antonucci, Y.L.: Creating and sustaining trust in virtual teams. Business Horizons 50(4), 325–333 (2007)
6. Hambley, L.A., O'Neill, T.A., Kline, T.J.: Virtual team leadership: The effects of leadership style and communication medium on team interaction styles and outcomes. Organizational Behavior and Human Decision Processes 103(1), 1–20 (2007)
7. Hinds, P.J., Bailey, D.E.: Out of sight, out of sync: Understanding conflict in distributed teams. Organization Science 14(6), 615–632 (2003)
8. Lacity, M.C., Lacity, M.C., Rottman, J.: Offshore outsourcing of IT work: Client and supplier perspectives. Palgrave Macmillan (2008)
9. Lewicki, R.J., Brinsfield, C.: 3 Measuring trust beliefs and behaviours. Handbook of Research Methods on Trust 29 (2012)
10. Madsen, S., Bødker, K., Tøth, T.: Knowledge Transfer in Outsourcing – From theory to Tooling in SourceIT: Balancing sourcing and innovation in information system development. In: Hertzum, M., Jørgensen, C. (eds.), Trondheim, Norway (2011)
11. Maréchal, G.: Autoethnography. In: Mills, A.J., Durepos, G., Wiebe, E. (eds.) Encyclopedia of Case Study Research, vol. 2, pp. 43–45. Sage Publications, Thousand Oaks (2010)
12. Maznevski, M.: State of the Art: Global Teams. In: Gertsen, M.C., Søderberg, A.M., Zølner, M. (eds.) Global Collaboration: Intercultural Experiences and Learning, pp. 187–206. PalgraveMacmillan, New York (2012)
13. Möllering, G.: Trust: Reason, routine, reflexivity. Emerald Group Publishing (2006)
14. Olson, G.M., Olson, J.S.: Distance matters. Human-computer interaction 15(2), 139–178 (2000)
15. Paul, D.L., McDaniel, R.R.: A field of study of the effect of interpersonal trust on virtual collaborative relationship performance. MIS Quarterly 28(2), 183–227 (2004)
16. Pfannenstein, L.L., Tsai, R.J.: Offshore outsourcing: Current and future effects on American IT industry. Information Systems Management 21(4), 72–80 (2004)
17. Rosen, B., Furst, S., Blackburn, R.: Overcoming barriers to knowledge sharing in virtual teams. Organizational Dynamics 36(3), 259–273 (2007)
18. Sabherwal, R.: The evolution of coordination in outsourced software development projects: a comparison of client and vendor perspectives. Information and Organization 13(3), 153–202 (2003)
19. Saunders, M.N., Skinner, D., Dietz, G., Gillespie, N., Lewicki, R.J.: Organizational trust: a cultural perspective. Cambridge University Press (2010)
20. Schaubroeck, J., Lam, S.S., Peng, A.C.: Cognition-based and affect-based trust as mediators of leader behavior influences on team performance. Journal of Applied Psychology 96(4), 863 (2011)
21. van de Ven, A.H., Delbecq, A.L., Koenig Jr., R.: Determinants of coordination modes within organizations. American Sociological Review, 322–338 (1976)