Offshoring attitudes and their consequences for relationships in transnational teams. Reflections from a field study of German information technology developers

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OFFSHORING ATTITUDES AND THEIR CONSEQUENCES FOR RELATIONSHIPS IN TRANSNATIONAL TEAMS. REFLECTIONS FROM A FIELD STUDY OF GERMAN INFORMATION TECHNOLOGY DEVELOPERS.

ABSTRACT

With reference to the literature on offshoring and on transnational teams (TNTs), we present a qualitative study of 30 German IT developers’ attitudes towards the transfer of tasks to an Indian subsidiary. Respondents reported contrasting attitudes concerning offshoring consequences for the organization, TNT performance, as well as German employees’ workload, tasks, jobs, and intercultural learning. These offshoring attitudes affected some Germans’ relational behaviors towards their Indian colleagues, in terms of forming subgroups, pinpointing mistakes, communicating, transferring knowledge, and avoiding task transfer. The findings are interpreted from a configurational perspective, leading to recommendations for managers and suggestions for future research.

Keywords:
Offshoring, transnational teams, IT
INTRODUCTION

At the present time, there exists a great deal of unresolved controversy about the benefits and risks of offshoring. Offshoring commonly refers to the provision of goods or services, previously supplied in-house, from subsidiaries or other firms in different countries (Harrison & McMillan, 2006). Discussions about offshoring tend to revolve around economic and employment effects that offshoring bears on countries, industry, and employees. Although offshoring arrangements often operate through transnational teams (TNTs) which are composed of onshore and offshore members, little is known about the attitudes that Western, onshore TNT members hold towards the transfer of tasks to an offshore destination, typically in a developing or emerging economy. In this article, we argue that such ‘offshoring attitudes’ can have a potentially crucial influence on the functioning of TNTs, because they influence how onshore team members behave towards their offshore colleagues, thus affecting interpersonal relationships between these team members. In what follows, we develop this argument in more detail, by referring to public and academic offshoring debates as well as TNT research. Whilst the offshoring debate does not examine team level dynamics, TNT studies have highlighted the importance of several aspects of relationships in TNTs, such as subgroup formation and knowledge transfer, without considering the influence of offshoring attitudes.

We support our claims by a qualitative study of German IT developers working with offshore Indian colleagues, which captured offshoring attitudes in terms of perceived advantages and disadvantages that the transfer of tasks to India created for the firm, the team, and themselves. We identified factors that explained different attitudes, and examined how offshoring attitudes affected relational behaviors of Germans towards their Indian colleagues. The discussion highlights vicious and virtuous circles that lead to particular attitude-factor-behavior configurations. To conclude, we provide recommendations for managing the
offshoring process, in particular with regard to strategies of task distribution and ownership. We then outline limitations of the study and indicate directions for future research.

**OFFSHORING BENEFITS AND RISKS**

The most prominent reasons for firms to offshore their operations are cost savings through lower wages, and potential efficiency gains through focusing on core competences. However, lower wages have to be weighed against the potential hidden costs of additional coordination needs, and risks of losing important business skills and intellectual property (Bidanda, Arisoy, & Shuman, 2006). The gains for offshoring countries include benefits for shareholders, price reductions for customers, and job creation in areas where savings are spent (Harrison & McMillan, 2006). Perhaps the most discussed country-level risk is that of job losses. Whilst some researchers argue that offshoring leads to an overall increase of employment in the home country (Mankiw & Swagel, 2006), others demonstrate that offshoring of low end jobs correlates with a decrease in low end jobs (Harrison & McMillan, 2006). In conclusion, economic analyses often stress that developed countries can benefit from offshoring, but only if they invest in education and innovation to ensure that higher level skills and jobs are retained and new skills are developed (United Nations, 2005). Paralleling this scholarly research, a major political debate has centered on the danger of job losses. In several Western countries, trade unions campaigned against offshoring, arguing that offshoring leads to the loss of home country jobs. This campaign was often supported by the popular press (Downey & Fenton, 2007) and may therefore have influenced many Western citizens.

**OFFSHORING ATTITUDES IN TRANSNATIONAL IT DEVELOPMENT TEAMS**

While a lot is known on the potential benefits and risks of offshoring activities, we know little about the attitudes that employees working in TNTs, such as IT development teams, hold towards the transfer of tasks to an offshore destination. Their views may be
shaped by economic and political debates, but could also be based on other sources such as their own experience or socialization through colleagues. From the public offshoring debate, it appears that TNT members are likely to evaluate the transfer with regard to consequences for the organization, the TNT, and themselves. With regard to the organization and the team, they may be concerned about cost advantages and performance. For themselves, they may see risks of additional coordination efforts and losing their own jobs. In support of this view, Cohen and El-Sawad (2007) demonstrate that British call center staff perceived their Indian counterparts as threatening their own jobs. However, it has also been shown that TNT members can experience the international collaboration as a personally enriching opportunity for intercultural learning (Stahl, Maznevski, Voigt, & Jonsen, 2009), independent of the offshoring debate. Hence, it is not apparent what range of attitudes are held by TNT members and how attitudes are associated with relational behaviors. Attitude research (see Aijzen & Fishbein, 2005) even suggests that individuals can hold contradictory attitudes at the same time, leading to cognitive conflict. We therefore need to establish under what conditions TNT members develop certain offshoring attitudes.

When consulting the TNT literature, it becomes clear that offshoring attitudes are likely to have an impact on relational behaviors between onshore and offshore team members. Most importantly, team members’ offshoring attitudes are likely to influence the strength and the dynamics of national subgroups. Subgroups are usually seen to emerge along ‘faultlines’, i.e. hypothetical dividing lines that create a split along team members’ shared core attributes, which can become more or less salient in different contexts (Lau & Murnighan, 1998). In TNTs, nationality and location tend to be such salient attributes, splitting the team into national subgroups (Earley & Mosakowski, 2000). Positive and negative offshoring attitudes may influence which attributes of members of another nationality in the team become salient. For example, onshore team members may perceive their offshore colleagues either as
members of another culture who contribute interesting new insights and important support to the team, or as outgroup members who threaten their jobs.

Strong subgroups can have negative effects, such as members withholding information from each other (Cramton, 2001). As knowledge tends to flow along pre-existing social ties (Fulk, Monge, & Hollingshead, 2005), it can be inhibited by strong subgroup divides (Gibson & Vermeulen, 2003). Conversely, a strong shared team identity can motivate team members to contribute effort and knowledge to the team (Fulk et al., 2005). However, if subgroups are moderately strong and an inclusive atmosphere is maintained, subgroups can also promote knowledge sharing and team learning (Gibson & Vermeulen, 2003). Hence, negative attitudes towards the offshoring collaboration are likely to reinforce negative intergroup dynamics, such as withholding information, whilst positive offshoring attitudes may go hand in hand with a more inclusive atmosphere that promotes knowledge sharing.

Previous studies have demonstrated the difficulties of knowledge sharing in TNTs, particularly within offshoring arrangements. For example, researchers have demonstrated how difficulties are created by cultural differences (Staples & Webster, 2008; Zaidman & Brock, 2009) and by virtual communication through electronic media (Warkentin & Beranek, 1999). Moreover, knowledge sharing has been shown to rely on other aspects of relationships in TNTs, such as a shared understanding (Bjorn & Ngwenyama, 2009), transactive memory (Oshri, Fenema, & Kotlarsky, 2008), trust (Warkentin & Beranek, 1999; Williams, 2010), and power relations (Levina & Vaast, 2008; Mir & Mir, 2009; Zimmermann, 2008; Zimmermann & Sparrow, 2007). However, these studies do not investigate the influence of employees’ offshoring attitudes on knowledge sharing or other aspects of relationships. This effect may not be straightforward, because attitudes are not necessarily consistent with behaviors (Aijzen & Fishbein, 2005). We therefore need to establish whether and how offshoring attitudes...
influence relational behaviors, and what factors are responsible for this influence. On the basis of these theoretical considerations, our study aimed to explore:

- Offshoring attitudes of onshore TNT members; in terms of perceived advantages and disadvantages that the transfer of tasks created for the firm, the team, and themselves.
- Factors that caused these attitudes.
- Effects of these attitudes on relational behaviors towards offshore colleagues.
- Factors influencing the attitude-behavior link.

METHODS

This research examines offshoring attitudes and their effects on relational behaviors in TNTs, both complex and largely unexplored social phenomena. For this reason, a qualitative methodology was chosen. The inquiry was guided by our initial expectations based on the offshoring and TNT literature, but was at the same time highly inductive.

Research setting and respondents

The fieldwork was conducted in a major German electronics firm outsourcing parts of its IT development to Indian subsidiaries. The main espoused reasons for offshoring of IT are cost savings and a shortage of qualified software engineers in Germany. We thus chose a common organizational offshoring context, given that German firms are increasingly offshoring their software operations to India, even in face of the recent economic crisis (Mueller, 2009). The company develops and produces automotive technology as its core business, followed by industrial technology, consumer goods and building technology, as well as engineering and IT services. The company has close to 300000 employees worldwide, with about 300 subsidiary and regional companies around the world. In India, the company set up production plants as early as the fifties, and has built up software development sites rapidly
since the early nineties, with an explicit aim of further offshoring in the future. The company now employs over 18,000 employees in India.

30 German IT developers were interviewed at German headquarters in Stuttgart (Germany), all working in virtual teams with Indian colleagues that were located in a wholly-owned subsidiary in Bangalore (India). We included only the German side and not their Indian counterparts, because Germans were bound to have a much better insight into their own and their German colleagues’ offshoring attitudes.

Respondents had different levels of experience in collaborating with Indians, having worked with the Indian subsidiary from 1-10 years. All of the participants were male, apart from one, like the vast majority of employees of this industry in Germany. Five organizational departments participated with three or more representatives in each (see Table 1). Additionally, we included nine other departments with one respondent each. These respondents could not be treated as representative of their department, but nevertheless allowed for a comparison of the emerging patterns across a broader range of departments.

Of the five main departments, Department 1 was tasked with developing and maintaining software functions for electronic control units (ECUs) to be implemented in car engines. Department 2 and Department 3 were responsible for the interface to different customers in the car manufacturing industry, and adjusted generic ECU software functions to particular customer needs. Department 4 produced software for new automotive safety systems. Department 5 was involved in software development for automotive safety systems as well, by generating electronic test methods and equipment. Each of the interviewed respondents worked in a different Indian-German team. The other nine respondents were involved in various tasks relevant to the German-Indian collaboration, including function development, customer support, managing the interface between software development and manufacturing sites, coordinating the collaboration with India for all ECU development
departments, sales for an Indian customer, and software tool development for various firm-
internal departments. Table 1 gives an overview of the departments and the numbers of
respondents per department.

Data collection

Data were collected by the author through semi-structured interviews that lasted between
40 and 70 minutes, with an average of 58 minutes. All interviews were conducted in German
and tape-recorded. At the beginning of each interview, it was explained to all respondents that
the research investigated respondents’ attitudes towards their collaboration with Indian
colleagues and how these attitudes affected the collaboration (see the Appendix for the final
Interview guide). They were informed that a feedback report would be written and sent to
respondents, and that none of the respondents’ names would be mentioned. All respondents
were given identical starter questions. They were asked to state the number of German and
Indian colleagues in their team and the tasks of each side. They were then requested to rate
the performance of their German-Indian team using a scale developed by Gibson, Zellmer-
Bruhn, and Schwab (2003). This scale uses a seven point Likert-type scale to assess goal
achievement and effectiveness in terms of achieving team goals, team objectives, meeting the
requirements set for the team, fulfilling its mission, and serving the purpose the team is
intended to serve. Given the small respondent number, this rating served only to elicit
attitudes towards performance, rather than as a statistical device.

Respondents were further asked to describe their offshoring attitudes in terms of
perceived advantages and disadvantages that the transfer of tasks to India created for the
company, the TNT, and German employees. Respondents were allowed to answer these
questions with respect to themselves as well as their colleagues. Moreover, they were
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requested to describe relationships between Indians and Germans in their teams. If required, they were given more specific probes, for example with regard to team identity (how strongly colleagues felt they were part of one team) and knowledge transfer (how well information and knowledge was provided to the other side). They were also asked directly whether they thought that attitudes towards the collaboration affected the way in which Germans and Indians worked with each other. To establish determining factors that had not yet been named spontaneously, respondents were further asked about the influence of the type of task transferred, task interdependence, frequency and kind of contact, and the captive arrangement.

Respondents were encouraged to speak freely about points of concern not included in the initial interview schedule, to allow for additional items to emerge. These items were then added as probes in subsequent interviews.

**Data analysis.** The interviews were transcribed and coded using the NVivo 8 software, following a procedure of template analysis (King, 2004). The initial coding tree was constructed from those initial interview items that had been maintained up to the end of the interviewing stage, and those that were added by respondents. During the process of coding, the tree was refined by merging similar codes, adding codes to capture emerging additional themes, and re-defining codes to better match respondents’ explanations. Initially, the author coded half of the interviews to develop the coding scheme to some maturity. Then, two collaborating researchers, both specialised on knowledge transfer in TNTs, acted as second coders. They used the scheme to code three interviews. After each coded interview, the three researchers compared their codes and discussed differences. For the first two interviews, this led to some modifications of the codes to eliminate sources of misunderstanding and incorporate additional meanings observed by the second coders. No further code modification was seen as necessary for the third interview. The coding scheme was therefore deemed saturated and used for the analysis of all interviews.
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Respondents’ views on attitudes, effects on relationships, and determining factors were analysed through node lookups and coding queries in NVivo. Respondents’ reports were synthesised to gain summaries. Attitudes were categorised into overall positive, negative, and neutral. To transcend mere description, causal explanations were sought. The respondents’ own interpretations were used as the primary source of explanation. Secondly, contrasting perspectives were compared, to establish determining factors from the researcher’s perspective, and thus triangulate respondents’ explanations. Thirdly, the five main departments were clustered into overall positive or negative in terms of their members’ attitudes. For this purpose, a score was calculated by dividing all positive by all negative attitude summaries. A score below 1 was thus classified as negative and a score above 1 as positive. This clustering allowed for a useful comparison between departments, to determine the factors that could explain the different tendencies of these departments. This served as a further triangulation of the factors named by respondents and those identified by comparing individuals’ attitudes. The analysis led to an explanatory model that captures attitudes, factors, and effects on relationships across respondents and departments. A feedback report was sent to all respondents, which outlined the main components of the model. Nine participants responded, all confirming that their views were represented in the report.

RESULTS

Most respondents held offshoring attitudes that could be classified clearly as overall positive or negative. However, some preferred to remain undecided, even when asked explicitly for their general evaluation. A number of respondents further differentiated between their own (typically more positive) and their colleagues’ views. In the following, we will describe respondents’ offshoring attitudes in relation to the factors that can explain them, covering factors within the socio-economic environment, organizational strategies,
managerial strategies, and individual differences (see Figure 1). We also mention two more
generic factors, time and personal acquaintance, which affected a broad range of attitudes
(Figure 2). We will then describe how these attitudes affected German employees’ relational
behaviors.

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Insert Figures 1 and 2 about here
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**Offshoring Attitudes**

*Advantages and disadvantages for the organization.* Respondents named similar
aspects of consequences of the transfer for the organization, namely: costs, additional
workforce, flexibility, and presence in the Asian market. However, respondents differed in
their judgments of some of these effects.

Most respondents named cost benefits as the main reason for the organization to
transfer tasks to India. However, they differed in their views on whether this advantage was
realised. The majority of respondents estimated that the organization did gain a cost
advantage. For example, some projects had been gained only due to a price advantage created
through the transfer. The remaining respondents were more negative, estimating that there
was no significant or no benefit for the organization. Employees also stressed that at a higher
level, managements’ cost calculations were not transparent and employees could therefore not
know the actual financial outcomes of the transfer:

“...Here you just have to say: ‘How can that pay off?’ Hardly any of us understand it.
Then you content yourself with it and say: ‘OK, someone has decided it, and hopefully they
know what they are doing.’”

The overall cost benefit was seen to be tied to the TNT’s perceived work performance,
which is discussed in a later section. Most respondents further explained that the transfer

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1 Translations by the author
created an additional workforce not available in Germany, because the firm had restricted its recruitment in Germany. Another perceived advantage for the organization was increased flexibility due to different employment laws. Indian work hours were more flexible, allowing for longer hours in pressured phases of a project. Moreover, the Indian workforce could be increased or decreased more easily:

“Here in Germany, we have something like upper limits of personnel. That means even if I had the money, I can sometimes not increase my workforce, and that is a very, very big advantage of India... Within three months ...they build up any capacity for me. So that’s an advantage: ...this flexibility in building and de-building capacity, to deal with peaks.”

A skilled local Indian workforce was by many seen to be necessary for supporting the increasing number of Indian and other Asian customers, therefore creating a competitive advantage:

“If you are in India and suddenly every Indian buys a car and you are in the market, then it is a massive advantage, again.”

**Advantages and disadvantages for TNT performance.** The respondents described consequences of the transfer on team performance in terms of quality and efficiency, again arriving at contrasting evaluations. Many respondents stated that the quality of work produced in India was now satisfactory, whilst others pointed to severe quality problems, mostly in terms of software faults (‘bugs’). In both positive and negative cases, participants emphasised that output quality depended on the complexity of the transferred task and the level of knowhow of particular Indian colleagues. Frequent support and monitoring were seen to be vital for achieving high quality. With regard to efficiency, most respondents found that it commonly took longer to get the same output from the TNT than from a purely German team. This was attributed mainly to coordination and communication efforts, and to insufficient knowledge and skills of Indian colleagues, particularly when employee turnover in India was
Submission #10248

high. Many Indians’ lack of understanding of the software environment required Germans to answer queries, check the Indians’ work, and rework results. Moreover, some respondents complained that too much time had to be spent on administration, task specification and documentation, and these procedures could take even longer than task completion itself:

“For one Indian colleague to do a task which is really only a flick of the wrist, I have to produce paper for hours over here for him to know what to do. ... this is in no longer in any proportion, the coordinative and planning effort and the actual task. ...The actual task, that’s sometimes a matter of a few minutes - and we have to spend hours over here to organise it.”

Another source of inefficiency was intercultural communication. Germans often learnt about problems only shortly before a deadline when it was too late to fix them. This was attributed primarily to language barriers, the Indians’ indirect communication style, and Indians withholding information on difficulties. Most respondents explained that performance could improve over time, with increasing training and personal acquaintance with Indian colleagues, however only if employee fluctuation in India was not too high. Germans got to know their Indian colleagues primarily through training visits. During these visits, Indians worked alongside their German colleagues in Stuttgart for typically three months, and took part in shared social events, such as going out for evening meals. Many respondents also stated that their team was efficient only because Indians worked on routine, non-innovative tasks, requiring little coordination and communication.

Advantages and disadvantages for German team members. The transfer was seen to affect individual German team members in terms of workload, changes in work tasks, job security, professional learning, and intercultural experience. The respondents came to strikingly contrasting evaluations.

Many respondents thought the transfer had increased their workload, by creating additional tasks, such as coordination, support, and reworking Indians’ results:
“In the end, you sit down and do everything yourself, and you are hopping mad that you have this burden on top of everything else.”

Other respondents came to an overall positive calculation of such effort in comparison to the amount of time saved through delegating tasks to India. Moreover, respondents agreed that their work could no longer be done without Indian support, due to the shortage of new German recruits. The perceived workload depended on the same factors that determined work efficiency. For example, the amount of workload was seen to vary with the level of complexity of the transferred tasks:

“If we hand something over to India, we always have the reservation that we can go only ... up to a certain degree of knowhow, and above that it gets difficult. Then people are concerned that it won’t be done conscientiously, ... and this is leads you to say: ‘If they end up inquiring about all sorts of things, then my workload is not decreased’.”

The transfer of tasks to India also affected the nature of German employees’ work tasks. Whilst half of the respondents saw the transfer as an opportunity for more interesting tasks, the other half perceived a threat to such tasks. About half of the respondents believed that despite the transfer, higher-end tasks would stay in Germany and new, conceptual tasks would be gained:

“... given the increasingly scarce resources, we can concentrate on conceptual work, developing test concepts, plan tests, I’d like to call it test philosophy. There is the chance that you can offshore standard tasks or that you have more time for those tasks that go into more detail, require more experience.”

In contrast, the other half of respondents complained that they increasingly had to pursue coordinative and fragmented tasks:

“Well, our problem is that regarding tasks, we are pushed into a corner where we coordinate, check specifications, write a little bit. We do not create anything any more. If you
were doing a craft: We are not building anything any more. No one over here writes a line of code any more or goes deeply into testing... That does frustrate us. ... occasionally you also want to see what it is that you are coordinating, or also do it yourself. This separation of different aspects is quite limiting.”

These contrasting views can be explained by the amount of challenging, conceptual tasks available in different departments. In the department responsible for highly matured platform solutions (Department 1), Germans and Indians were competing for the few new development tasks. In contrast, many German customer departments (Departments 2 and 3) had to continuously find new software solutions in response to customer demands, and in the department for highly innovative safety systems (Department 4), respondents experienced a wealth of highly interesting new tasks for German employees. In the department responsible for testing (Department 5), the new focus was on developing innovative testing methods.

In addition, respondents’ views varied with different individual preferences. Whilst some respondents were delighted to focus on more conceptual and coordinative tasks, others complained that they could no longer do the technical tasks they had been trained for. Moreover, over time, more experienced respondents had observed that higher end knowhow and complex tasks were not fully transferable, due to the high fluctuation in India, and this would secure German jobs. Where the task alternatives were less clear, respondents stressed that management had to provide very clear perspectives for the future of German tasks, and had to accurately allocate tasks between Indian and German colleagues.

The attitudes concerning interesting tasks were closely linked to perceptions of job security. About half of the respondents did not think German jobs were threatened at all. Most of them, particularly more experienced colleagues, explained that less new jobs would be created in Germany, but existing jobs were not in danger. In some cases, the cost benefits of the transfer were even seen to lead to additional projects, and to secure German jobs:
“I do believe that in sum, this contributes to preserving jobs. ... I do think that it secures jobs over here. Not exactly the same tasks, as I said, but in total, we are better off.”

On the negative side, respondents explained that German jobs would be increasingly threatened with the developing skills of Indian employees, causing a transfer of more demanding tasks. The perceived danger of losing jobs also seemed to depend on the recent growth or stagnation of the headcount in particular departments. A few respondents mentioned that with the recent economic crisis in 2008, the number of new projects and open German positions had decreased, and this had reinforced fears that jobs would be transferred. An unclear managerial strategy for preserving German jobs could reinforce insecurities about future jobs.

“My people had fundamental fears: ‘... How much more will disappear? ... Will I still have my work the way I liked doing it? ... What comes next? There are partly no clear perspectives. It was only said: ‘This and that goes to India. ... There was a bit of a hole ...’”

Despite such fears, some respondents perceived new opportunities for professional and intercultural learning arising from working in a TNT. Respondents described specific skills they had gained, such as coordinating and managing a larger, distributed team. The experience of working cross-nationally was regarded as an advantage when applying for jobs externally, and for progressing to leadership positions within the firm. The majority of respondents stated that they had benefited from practicing their English and interacting with another culture. For example, several respondents had been inspired by the greater enthusiasm of Indian colleagues at work:

“... on the level of communication, I learn incredibly much, of course.... I also think it is good fun. I sometimes think, okay, there are good qualities that German colleagues have, but there are also good qualities that the other colleagues [Indians] have, which you can’t learn from the Germans over here. ... ...I am for example really impressed by how disciplined
they are and how eager to learn, and that they simply rejoice when receiving further training.”

At the same time, however, about one third of respondents pointed out that cultural differences led to difficulties, such as the aforementioned language barriers and lack of open communication about difficulties. The different focus on intercultural learning versus difficulties depended partly on individual preferences for speaking English and interacting with another culture. Moreover, those Germans who had got to know their Indian colleagues personally, particularly on visits to India, had developed a greater interest in intercultural encounters. The openness to communicate across cultures was also seen to increase over time, with growing intercultural experience.

Effect of Attitudes on Relationships

The respondents’ offshoring attitudes had an impact on German team members’ relational behaviors towards their Indian colleagues. More specifically, a combination of offshoring attitudes concerning performance and German employees affected the strength of national subgroups in some teams, with consequences for subgroup dynamics in terms of pinpointing mistakes, communicating and transferring knowledge, and avoiding task transfer. The attitudes concerning organizational effects of offshoring did not appear to have any impact on TNT relationships.

Some respondents explained that perceived performance problems and a frustration with the need to support Indians had led many Germans to prefer treating Indian colleagues as suppliers rather than equal team members, indicating a weak shared team identity and strong subgroups. This would allow them to request independent working, exert pressure when performance was not satisfactory, or even to blame Indians for mistakes:
“In the sense of: They have to deliver, and if it does not work, then it’s India again who delivers bad quality.”

Accordingly, it was mentioned that negative attitudes towards Indian performance, and the perceived threat to tasks and jobs led some Germans to judge Indian performance more critically than German performance, and pinpoint mistakes:

“There is criticism concerning efficiency, there is criticism concerning quality. However, ... only if you are looking for a scapegoat. ... If it comes to problems, you start to point a finger.”

Some Germans who were frustrated about additional training and coordination needs, and those who feared intercultural communication, were seen to lack motivation to communicate and to transfer knowledge to Indian colleagues beyond the necessary. For example, they would not make new telephone appointments for those cancelled. Respondents also explained that fears of losing tasks or even their job could cause employees to block knowledge transfer:

“... once ... people’s substance is threatened, this influences the decision to support this transfer ... there must be someone who receives the knowhow, but there also has to be someone you hands it over, and a forced hand-over of knowhow does not work ...”

In a few cases, respondents had even observed that colleagues actively contributed to Indian failure by not providing sufficient technical explanations, even if they knew that this support was necessary:

“Maybe you have noticed that he [the Indian colleague] hasn’t really understood, but you do not tell him. Then he will take forever. You get no output, and in the end you do it yourself. That’s the solution: ‘I’ll just do it myself then, even if I work overtime.’. Then you will be able to say afterwards: ‘This doesn’t work, does it.”
Submission #10248

On the opposite end, several respondents described how employees who believed that the TNT could perform well spent huge amounts of extra effort on training Indian colleagues, for example by running workshops in India:

“Until one or two years ago, ... they identified the knowhow on the Indian side as a great problem. Then at that time, Mr. A. [pseudonym] flew over and conducted a week long training event. That had an incredibly positive effect on the collaboration. He does of course approach this with a generally positive attitude... That has a strong effect.” / [Interviewer:] You think he would not have done that if he did not have such a positive attitude? / “Not in that form. He invested incredibly, that was very exhausting for him.”

However, several respondents held the contradictory view that negative offshoring attitudes did not reduce employees’ efforts of communication and knowledge transfer, because such effort was a condition for better future performance and therefore in all Germans’ own interest.

Another consequence of negative offshoring attitudes was to counteract the task transfer. Some respondents had experienced that colleagues had avoided the transfer of tasks, if they believed the transfer caused worse quality, additional workload or threatened German tasks and jobs:

“Partly, colleagues have the desire to do everything themselves, and when this does not work any longer at all, to transfer what is left to India. I would attribute that to them thinking (1) you can do it better, over here and (2) fearing that the job will go off to India, completely.”

Some Germans were even seen to actively seek evidence for Indian mistakes in order to argue against the transfer:
“...and then you are always glad if the Indian colleagues have made a mistake, because then you can say: ‘Look, they have made a mistake, again.’. You have one more reason against having to work with them.”

In a more subtle manner, other employees had reportedly formulated the task requirements in a way to ensure that Indians could not declare themselves competent to perform the task:

“... in some cases, people refuse to collaborate with India. You can do that in a very subtle way, of course. ... there are many possibilities to avoid it or to make sure that it does not happen. That is relatively easy. ... just by means of the task description, you can work towards getting the answer from India: ‘We don’t have anyone who can do this.’. There are many possibilities. It’s easy.”

Whether or not offshoring attitudes affected relational behaviors appeared to depend partly on the personal acquaintance between German and Indian colleagues, primarily through training visits (see Figure 2). After such visits, some respondents perceived team cohesion to be strong and relationships between subgroups as friendly, despite problems of performance, workload, or threats to German tasks and jobs. Respondents also explained that after getting to know Indian colleagues in person, Germans were more self-critical and fairer in their judgement of Indian performance, and the fear of losing their job would no longer lead to reduced support effort.

DISCUSSION

Theoretical contributions

Our in-depth, qualitative study allowed us to identify a range of offshoring attitudes in German TNT members. Interestingly, the attitudes reported by our respondents reflected many of the arguments found in the offshoring literature. Similar to the literature, respondents
named costs, additional workforce, flexibility, and presence in the local market as the main potential organizational benefits (see Bidanda et al., 2006). The respondents’ contrasting views concerning the future of German tasks and jobs corresponded to the literature’s arguments for and against job benefits for employees in the country of origin (Mankiw & Swagel, 2006; Harrison & McMillan, 2006). The results also support the claim that conceptual and high-tech tasks, as well as intercultural communication and virtual project management skills will become more important in the countries of origin (Bidanda et al., 2006; United Nations, 2005).

Perhaps the core finding of our study is that offshoring attitudes matter to TNTs, because offshoring attitudes can influence several relational behaviors of onshore team members (Figure 1). The reported destructive relational behaviours were tied to strong subgroups along nationality faultlines, and weak interpersonal relationships between members of different nationalities, whilst constructive relational behaviours implied the opposite. The study therefore demonstrates that offshoring attitudes have to be taken into account in order to understand and optimise the functioning of TNTs. However, the results also confirm that attitudes do not always correspond directly to certain behaviors (Aijzen & Fishbein, 2005). We found that negative attitudes could cause negative relational behaviors. However, this was only the case for some German employees and not for others. Moreover, with increasing personal acquaintance of Indian colleagues, the negative attitude-behavior link was in many cases seen to be broken.

Our findings further indicate an interdependence between several offshoring attitudes and behavioral outcomes (see Figure 1), implying that German employees’ offshoring attitudes were tied into vicious and virtuous circles. For example, negative offshoring attitudes regarding effects on performance and workload could cause Germans to avoid the transfer of non-routine, complex tasks, in order to reduce quality issues and additional
workload. However, such a limitation of the task transfer also inhibited the development of technical skills on the Indian side, thereby setting boundaries to better future Indian performance, which in turn perpetuated negative attitudes and led to a continuing restriction of task transfer. Similarly, employees’ frustration by performance, workload, and intercultural interactions could lead to decreased effort in communicating and transferring knowledge, making it impossible for performance to improve, workload to decrease, or intercultural competence to grow. By contrast, employees who believed in the Indian’s ability to perform well and who spent extra amounts of effort in training did experience performance and workload improvements over time, which in turn reinforced their positive offshoring attitudes.

We can take this analysis a step further by developing a configurational perspective of offshoring attitudes, relational outcomes, and determining factors. The configurational perspective within organizational theory posits that organizational reality cannot be explained by unidirectional, causal relationships between isolated variables, but only in terms of variable configurations, i.e. ‘multidimensional constellations of conceptually distinct characteristics that commonly occur together’ (Meyer, Tsui, & Hinings, 1993: 1175). The effect of single variables depends on their interaction with the multitude of other variables in a configuration. Organizational configurations are thought to be formed due to ‘orchestrating themes’ (Miller, 1996) such as environmental constraints, organizational structure, or leadership (see Zimmermann, 2010).

The aforementioned vicious and virtuous circles can be regarded as configurations of interrelated offshoring attitudes and relational behaviors. Moreover, our results allow us to identify broader configurations which encompass determining factors at several levels, including the socio-economic environment, organizational strategy as well as managerial strategies and individual differences (see Figure 1). Taken together, these factors were
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responsible for offshoring attitudes and their behavioral consequences and the related vicious and virtuous circles. Particular configurations were apparent in different departments. We will select two contrasting configurations for means of illustration.

In department 4, responsible for developing software for automotive safety systems, we identified a configuration that we can characterise as ‘contributing effort to offshoring as an opportunity for personal and organizational growth’. Respondents in this department held overall positive views regarding all offshoring consequences, i.e. with regard to the organization as well as team performance and German team members. These attitudes were tied into a virtuous circle, with positive relational behaviors in terms of a strong German-Indian team identity, fair criticism, great effort in communication and knowledge transfer, and active support of task transfer. This virtuous circle was embedded in a combination of mostly conducive factors. Due to the leading-edge product, the workforce was growing, and abundant new, innovative tasks were available to German employees, who were also keen to take on these new tasks. At the same time, primarily routine tasks were transferred to India, which matched Indian skills. The managerial strategy for the future task distribution was explicit and clear. German engineers had worked with their Indian colleagues in person on training visits, and they were interested in getting to know members of another culture. Respondents used varying degrees of monitoring, depending on the experience of their Indian colleagues. Germans had worked with Indians between one and three years, which can be classified as a medium length of experience.

A contrasting configuration can be identified in department 1, responsible for function development for electronic control units in car engines. We typify this configuration as ‘minimising the negative consequences of offshoring for team performance and German team members.’ Respondents in this department were overall undecided about the consequences of offshoring for the organization. However, they came to clear overall negative evaluations with
regard to consequences for team performance and German employees. Negative attitudes were interrelated with a weak German-Indian team identity and cases of pinpointing mistakes and avoiding task transfer. Employees’ effort in communication and knowledge transfer was described as sufficient, but in some cases limited. In line with this configuration, hardly any new, challenging tasks were available for German employees, which was attributed to the mature product. New tasks tended to be coordinative, which did not meet the interests of German employees. More and more non-routine tasks had to be transferred to India to motivate the increasingly skilled Indian workforce. German employees had met their Indian colleagues in person, but some employees held reservations against the intercultural experience. The levels of monitoring were generally high. Germans had worked with Indian colleagues for up to ten years, a factor that would have supported positive attitudes if combined with other favourable conditions. These examples support the view that elements of a configuration should not be examined in isolation, but the effect of each element depends on its interaction with other elements.

Some of the factors responsible for the offshoring attitudes resemble those that have previously been identified as relevant for TNT success. However, previous research has not recognised their effect on offshoring attitudes, or taken a broader, configurational perspective. For example, it is well known that the success of TNT’s depends partly on the nature of the task. For instance, creative tasks have been suggested to benefit from cultural diversity of team members, whilst coordinative tasks may suffer from such diversity (Hambrick, Davison, Snell, & Snow, 1998). However, the importance of providing challenging tasks for TNT members’ offshoring attitudes has not been recognised before. Moreover, it has been observed that a match between transferred tasks and the skills of offshore colleagues is necessary in order to achieve high performance of IT offshoring teams (Govindarajan & Gupta, 2001). However, the consequences for offshoring attitudes have not been considered. Similarly,
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intercultural communication barriers (e.g., Erez & Earley 1993; Hambrick et al. 1998) and the importance of face to face meetings (e.g., Maznevski & Chudoba, 2000; Oshri et al., 2008) have often been highlighted as crucial for the functioning of transnational and virtual teams, but again without any reference to offshoring attitudes.

**Implications for practitioners**

Our findings on organizational, managerial, and individual factors suggest that the way the transfer is managed can affect employees’ offshoring attitudes and therefore the success of the transfer itself. For this reason, managers in the onshore country have to reduce employees’ fears of losing tasks or jobs, by providing clear and explicit plans for acceptable alternative tasks, the allocation of tasks between onshore and offshore colleagues, and for securing jobs. Managers can also highlight professional learning advantages by making successful TNT management a condition for obtaining higher leadership positions.

Managers could further promote an exchange of best practice between departments. More experienced departments could advise others on successful task distribution between onshore and offshore locations and means of knowledge transfer. In our study, the same mistakes were seen to be made in different departments over time. Moreover, if managers are to take their employees’ offshoring attitudes seriously and foster positive attitudes, they have to try to achieve as much ownership of the transfer as possible. Employees’ reservations of any kind should be discussed, and their individual needs taken into account. For example, managers could listen to employees’ fear of losing interesting tasks and negotiate acceptable future tasks. Through such discussions, TNT members may become more conscious of their own offshoring attitudes and more able to suggest constructive solutions.

**Limitations and suggestions for future research**

This research had a number of limitations that raise questions for future research. Firstly, there were some indications that respondents’ attitudes were situated, and would have
been uttered differently in different contexts. A number of respondents differentiated between their own (typically more positive) and their colleagues’ attitudes. This distinction suggests that in the interview situation, respondents may have presented a more rational, sensible evaluation of the transfer than in informal conversations with their colleagues. Accordingly, they would have been more familiar with the less rational views that their colleagues voiced in such informal situations, and therefore reported their colleagues’ views as more negative. In addition, respondents may not have been as sure of their own evaluations as they appeared in the interview, but may have tried to come to evaluative conclusions when asked for it. This would again show a situational bias. These attitudes may thus have been a product of a process of social construction. We did not examine this process, but focused only on the resulting attitudes. Future research could examine the mechanisms of social construction, for example by using not only interviews, but also observations of meetings and social interactions between TNT members, and analyse the discourse that concerns offshoring and relationships with offshore colleagues. Such research should also consider several potential sources of social construction, such as the public offshoring debate, discussions with colleagues, and employees’ first-hand experience.

Our study aimed to establish offshoring attitudes, their determinants, and relational outcomes. For this purpose, it was sufficient to investigate perceptions of onshore team members only. Nevertheless, it would be interesting to explore the perspective of offshore team members as well, in order to understand how onshore members’ relational behaviors are perceived and reacted to, allowing for a description of TNT relationships.

Finally, our configurational perspective can be advanced. Given our limitation to one organizational setting, we do not know whether the configurations we found are typical, i.e. whether they apply across various organizational setting. However, the principles of configurations, such as the interdependence between elements that commonly occur together,
are likely to apply to other organizational contexts. Given that our model of factors, attitudes, and relational behaviors was derived from five different departments, it is possible that similar configurations will emerge in other organizations, within and beyond the IT industry.
REFERENCES


Submission #10248


Williams, C. 2010. Client–vendor knowledge transfer in IS offshore outsourcing: insights
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from a survey of Indian software engineers. *Information systems Journal*, early view, doi:10.1111/j.1365-2575.2010.00354.x


### TABLE 1

**Respondents per Department**

<table>
<thead>
<tr>
<th>Department</th>
<th>Tasks</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respondents in five main departments:</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Function development for electronic control unit (ECU)</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Customer support for electronic control unit</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Customer support for electronic control unit</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Software development for automotive safety systems</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Software test development automotive safety systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Respondents in other departments:</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Function development for electronic control unit</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Customer support for electronic control unit</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Customer support for motor control</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Interface between ECU development and manufacturing sites</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Coordinator of the collaboration with India for ECU development</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Sales department for Indian customer</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Software tool development for various internal software departments</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Software tool development for heavy motor vehicles</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Software tool development for various internal departments</td>
<td>1</td>
</tr>
</tbody>
</table>
FIGURE 1
Model of factors, attitudes, and relational behaviors

Factors

Socio-economic environment:
- Economic crisis
- Turnover of Indian employees

Managerial strategies:
- Monitoring of Indian work
- Nature of transferred task
- Nature of remaining/new tasks
- Transparency of managerial strategies

Individual differences:
- Knowledge and skill levels of Indians
- Individual preferences

Organizational strategies:
- Recruitment restrictions in Germany
- Increase/ decrease German workforce

Offshoring Attitudes concerning:
The organization:
- Costs
- Additional workforce
- Flexibility
- Presence in Asian market

Performance and workload:
- Quality
- Efficiency
- Workload

German team members:
- Tasks
- Job security
- Professional learning
- Intercultural learning

Relational behaviors:
- Forming subgroups
- Pinpointing mistakes
- Communicating
- Transferring knowledge
- Avoiding task transfer
FIGURE 2
Influence of time and personal acquaintance

Factors

<table>
<thead>
<tr>
<th>Time</th>
<th>Offshoring Attitudes concerning:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>Efficiency</td>
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<tr>
<td></td>
<td>Workload</td>
</tr>
<tr>
<td></td>
<td>Tasks</td>
</tr>
<tr>
<td></td>
<td>Job security</td>
</tr>
<tr>
<td></td>
<td>Intercultural learning</td>
</tr>
<tr>
<td>Personal acquaintance</td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>Efficiency</td>
</tr>
<tr>
<td></td>
<td>Workload</td>
</tr>
</tbody>
</table>

Degree to which attitudes influence relational behaviors
APPENDIX

FINAL INTERVIEW GUIDE

- Introduction of interviewer
- Introduction of topic: I examine participants’ attitudes towards international team work, and how these attitudes affect the collaboration in the team.
- Information about confidentiality and feedback report

1. How many German and Indian members does your team have?
2. How long has your team existed? How long have the German and the Indian colleagues been working in the team?
3. What are, briefly, the tasks of your team, and the tasks of German and Indian colleagues?
4. How would you, spontaneously, rate the performance of your team? Could you please answer this question by filling in the questionnaire [Gibson et al. (2003) scale].

[Attitudes towards the collaboration:]

5. What are, in your opinion, the advantages and disadvantages of the transfer of tasks to India: For the company, for the transnational team, and for German employees.

[Probes:]

- Does the firm overall save costs?
- Do German employees have other tasks than before the transfer?
- Does the transfer affect your career in any way?
- Do you think the transfer has an effect on German jobs?
- Do you learn anything through collaborating with Indian colleagues?

6. What is your gut feeling: Does the transfer of tasks to India overall create more of an advantage or a disadvantage for the firm/the team/German employees?

2 Translated by the author; explanations are provided in italics
7. How would you, spontaneously, describe the relationship between German and Indian colleagues?

[Probes:] When you think of:

- How the German and the Indian side define each other’s role [members of the same team versus customers and suppliers]
- How well information and knowledge is transferred
- How much German and Indian colleagues trust each other [followed by an explanation of trust with regard to (a) intentions and (b) competence]
- Whether the two sides compete with each other
- Whether there are any conflicts in the team
- How friendly the relationship is
- How satisfied people are with the collaboration

[Effect of attitudes towards the collaboration on relational behaviors:]  
8. Do you think the attitudes towards the collaboration that you have described affect your or your German colleagues behavior towards Indian colleagues?

[Factors:]

9. Does it make any difference what kind of tasks are transferred to India?

10. Does it make any difference how much the tasks of German and Indian colleagues are interdependent?

11. Does it make any difference how often people meet each other or talk to each other, e.g. through visits, telephone, or e-mail?

12. Do you think it is rather an advantage or disadvantage that … [name of the subsidiary] is part of the firm rather than an external firm, if you consider that many German firms transfer tasks to external Indian suppliers?