Antecedents of ISD Offshoring Outcomes: Exploring Differences between India and China

Kai Spohrer
University of Mannheim
spohrer@uni-mannheim.de

Armin Heinzl
University of Mannheim
heinzl@uni-mannheim.de

Yan Li
ESSEC Business School
liyan@essec.fr

Abstract

Prior research in IS offshoring has highlighted issues in software development projects arising from differences in culture, from status differences and resource inequalities, as well as from asset-related characteristics. Based on Practice Theory and Transaction Cost Economics, we integrate these three perspectives into a single research model explaining the relation between the outcome of offshore ISD projects and cultural, social, and asset-related characteristics of the projects. We substantiate our model with a multiple-case study in two settings in which German companies have offshored ISD projects to India and China. Thereby, we also address a severe drawback of contemporary intercultural IS offshoring research: the neglect of China as the most rapidly growing IS offshoring location at present.

1. Introduction

Attempting to benefit from low wages and the availability of large pools of skilled IS professionals, numerous firms have been transferring labor-intensive IS functions such as information systems development (ISD) to internal and external offshore partners in countries on different continents, first of all to India [1,2]. While India is by far the most popular IS offshoring location for Western firms at the moment, there are also other big players like Brazil, China, and Russia competing for organizations willing to spend money there. In fact, China is regarded as the most rapidly growing market for IS offshoring at present [2]. Consequently, comparative IS offshoring market analyses of India, China, and other countries have emerged in science and practice evaluating their current states of development and providing governments as well as firms with useful information on market level [2].

However, research has widely neglected that the appearance and growth of a variety of new offshoring locations and the thereby increased need for cross-cultural collaboration on project level also pose new challenges for research. The majority of contemporary scholarly contributions on IS offshoring are lacking generalizability across cultures and cannot thoroughly explain the effects of cultural diversity on offshore ISD projects. Nevertheless, it has been acknowledged to be an important and influential aspect of IS offshoring [1,3,4]. For instance, cultural differences have been identified as an important source of extra-efforts specific to offshore IS projects [3]. Despite the fact that many of such projects have failed to achieve their goals due to extra-efforts, little recognition has been given to the questions how and why the effects of cultural and social factors may vary between projects. One possible answer is that these effects do not stem from cultural and social factors only but are also dependent on factors related to the projects’ IS assets [3]. While the need for project management practices adapted to cross-cultural settings has been recognized early in IS offshoring literature [1], many scholars focused on descriptive research approaches and the collection of best practices [4]. Recently, a more theory-driven and detailed analysis of socio-cultural aspects and their consequences for offshore ISD projects has emerged [5-7]. While some scholars have explored their effects on collaboration [6] and financial structures [3], we agree with others that the dependent variable should be the outcome of the IS projects [5,7]. A variety of theoretical lenses has been proposed to base such research on. In this paper, we apply Practice Theory (PT) and Transaction Cost Economics (TCE) as complementary theoretical lenses. While the latter emphasizes the danger of opportunistic behavior, the former focuses on social interaction based on resource distribution as well as learnt ways of thinking and acting. Accordingly, this paper builds on both theories to explain variations in offshore ISD project outcome from the viewpoint of German onshore partners in settings with Indian and Chinese offshore partners. In detail, the research objectives of this paper can be summarized by the following question: In which way is the outcome of offshore ISD...
projects influenced by cultural, social, and asset-related characteristics of the projects?

In the following, the theoretical foundations of this paper will be elaborated. A research model is developed. Substantiating the model, four case studies are presented in which two Germany-based strategic business units (SBUs) of multinational enterprises offshored two ISD projects to China and another two projects to India. The findings are discussed under the light of TCE and PT and help to provide a better understanding of the influence of cultural diversity, social factors, as well as task characteristics in offshore ISD projects. Finally, implications are highlighted and conclusions are drawn.

2. Theoretical foundation

IS offshoring comprises the partial or entire provision of an IS function such as ISD by an offshore partner to an onshore partner within or outside the same company while the partners reside far away from each other, i.e. typically on different continents. There are cultural and social boundaries which can impact offshore ISD projects [3,6].

Scholarly research on these factors and their effects has been maturing over the last decade. Starting from conceptual models of cultural differences as a challenge specific to IS offshoring [1], researchers proceeded in search of techniques and management practices to alleviate negative impacts on project success [4]. These studies definitely provide fruitful findings. However, they lack detailed analyses of the prevailing cultural influences [5,8]. Subsequently, studies have been conducted addressing cross-cultural collaboration in offshore ISD projects based on different theoretical lenses. On the one hand, this led to a better understanding about the way in which cultural differences between onshore and offshore employees can impact the relationship between the partner organizations and lower project success [5]. On the other hand, new theoretical perspectives have helped to understand that negative implications for project success are not only rooted in cultural differences but also stem from status and resource inequalities between the organizations and between the respective employees [6]. However, only little empirical research can be found addressing the question of effects of cultural diversity in an explanatory manner.

Building on the complementary theoretical lenses of TCE [9] and PT [10,11], we aim to contribute to the further maturation of this stream of research by explaining the relation between the outcome of offshore ISD projects and cultural, social, as well as economic antecedents drawing on cases in two specific settings: German onshore partners offshoring ISD projects to Indian and Chinese offshore partners.

Figure 1 presents our research model. Essentially, it suggests that success on a project level is contingent on the quality of the relationship between the partner organizations as well as between the respective teams of employees. This relationship quality, in turn, is argued to be dependent on factors on three levels: task level, organizational level, and team level. On a task level, the specificity of the knowledge to be transferred between the partners is proposed as the main contingency factor. On the organizational level, the offshore partner’s capacity to acquire and integrate external knowledge arguably improves the relationship quality. On the team level, differences in ways of thinking and acting (cultural distance) as well as status differences and competition (social distance) between onshore and offshore partner teams are proposed as inhibitors of high relationship quality. In addition, our research has yielded two management practices which moderate the negative influences on team level and organizational level: boundary spanning, i.e. activities to foster and improve personal relationships between onshore and offshore team members, and the empowerment of the offshore partner, i.e. a transfer of responsibilities.

Investigating into the outcome of offshore ISD projects from an onshore partner’s perspective, we build on the basis of the majority of prior contributions in this field [12]. In domestic IS outsourcing research, success is usually measured along three dimensions [12]: satisfaction, realization of expectations, and performance. Prior research on ISD offshoring outcome has adapted this perspective for outsourced as well as for internal projects [13] and so do we.

Our propositions on the contingencies of the project outcome are deduced from PT and TCE based on prior research. TCE states that production processes not only lead to production costs but also to transaction costs, e.g. for controlling external partners. Based on the behavioral assumptions of bounded rationality and possi-
ble opportunism, TCE suggests several transaction characteristics as contingencies of occurring transaction costs [9]: frequency, uncertainty, and specificity of assets and production sites. While TCE findings in IS research on uncertainty are inconsistent and investigations into frequency or production sites are rare [3], asset specificity is of great influence in ISD. In particular, human asset specificity, i.e. special characteristics of the professionals involved, has proven great explanatory power [12]. In offshore ISD projects, it refers to the knowledge specific to the onshore partner. Such knowledge is known to its employees but is required by the offshore partner to develop the IS. It is knowledge about “unique work procedures and business processes as well as unique software systems” [3, p.339]. We examine three dimensions of this knowledge specificity as elaborated by [14]: technical, functional, and business process specificity. The effort made by the offshore partner and its employees to acquire this knowledge must be seen as a specific investment. TCE suggests that this results in a higher propensity of opportunistic behavior [9] which the partner has to safeguard against. Thereby, TCE suggests that a high level of required specific knowledge should decrease the quality of the relationship between the partners.

In contrast to TCE, the unit of analysis in PT is not an economic transaction but rather social interaction inside grown social structures – so called fields of struggle [10]. These fields can vary in their nature from groups of individuals, such as teams, to collective ones, such as the economic field in which the interacting parties may be organizations. Basically, PT suggests that all actors strive for domination in the fields they act in. Doing so, their status in relation to others is determined by the resources they dispose of. PT distinguishes four types of resources, so-called capitals: economic capital -i.e. monetary resources-, human capital (also called intellectual or cultural capital) -i.e. knowledge and education-, social capital –i.e. social connections to draw on-, and symbolic capital –i.e. influence on other actors. However, actors are not free in their struggle to acquire these resources. They are constrained by their current positions in relation to others as well as by their learnt ways of thinking and acting, i.e. their habitus [11]. Thereby, TCE and PT implicitly agree on the assumption of bounded rationality. Moreover, what is regarded as opportunistic behavior in TCE may be seen as a natural struggle for domination in PT. Consequently, the theories appear well compatible. However, while TCE emphasizes the need of actors to safeguard themselves against opportunistic behavior, PT emphasizes behavioral constraints created by being part of fields of struggle and by having to rely on historically grown patterns of thinking and acting [11,15].

From a PT perspective, employees of the onshore partner in possession of highly specific knowledge own human capital, a valuable resource. Transferring this knowledge to the offshore partner means losing a source of power to the offshore partner staff and can reduce their status inside their own company [15]. Assuming constant struggle for domination, onshore partner staff are expected to oppose to this transfer thereby reducing the quality of the relationship to their offshore peers. Moreover, working in a highly specific domain for years can influence the habitus of the onshore partner employees. For externals such as the offshore team members it can be hard to understand or even align to such a specific habitus. Consequently, we make the following proposition based on TCE and PT: (1) The higher the level of required onshore partner-specific knowledge, the lower the relationship quality between the organizations and between the respective teams.

We draw on relationship quality as a well established predictor of success in IS outsourcing and offshoring research [5,16-18]. It is defined as the degree of connectedness between the parties in order to achieve a specified goal [5]. Adhering to definitions by [18], we examine the parties’ commitment, consensus, trust in each other, and conflict resolution activities as aspects of relationship quality. Moreover, we include the work-related communication quality [19] in our analysis as it is an important requirement for successful collaboration across teams and an integral part of high quality IS offshoring relationships [17,18,20]. From a TCE point of view, a good relationship between onshore and offshore partner reduces their propensity for opportunistic behavior and thereby the occurring transaction costs [13]. From a PT perspective, having a good relationship means accumulating social capital so that all the actors can draw on it later. We therefore propose: (2) The higher the relationship quality, the better the outcome of the project.

Based on PT, an offshore ISD project can be seen as an inter-organizational field of struggle encompassing all stakeholders who influence it [6]. However, these actors are not exclusively active in this single field but also in a variety of others. This is assumed to influence their behavior in the project. Figure 2 outlines our assessment of fields of struggle in which, we argue, individual team members of the partner organizations act in [cf. 6]. On the one hand, there are fields of struggle all the individual team members are actors in, regardless if they are members of the one or the other partner. These fields are the project itself, the global labor market for ISD, and the field of global politics which encompasses all international political relations. On the other hand, there are fields of strug-
gle, the employees of one of the partners are actors in while those of the other’s may be totally unaffected by them. Such fields are the national cultures, local labor markets, and the partner organizations themselves. Where actors are members in the same fields, PT suggests competition between them by means of capital accumulation [15]. At the same time, each actor has got a specific habitus that has been developed during the actor’s history in social fields [11]. It serves as a lens to interpret situations and provides a set of acceptable actions. Thereby, PT suggests habitus differences between actors due to their activities in different fields reduce their understanding for each other. This may be regarded as a cultural difference. Consequently, we focus on two different properties of the two categories of identified fields: where onshore and offshore team members act in the same field, status differences are emphasized; where they act in mutually exclusive fields, the differences in their habitus are emphasized.

Status differences have often been found to create social boundaries and to inhibit effective collaboration in IS offshoring [6] especially due to their negative influences on knowledge sharing as well as on employee satisfaction and loyalty [21]. The construct of social distance refers to social boundaries between onshore and offshore teams due to resource inequalities and competition for resources. Several dimensions of social boundaries exist in offshore ISD projects: geographic and temporal separation inhibits communication across teams and common understanding [8, 22] and can be used—typically by the onshore employees—as a source of power over the remote team in the project as a field [6]. Moreover, it has been found that exclusive access of onshore staff to business users reduces the attractiveness of the jobs of offshore employees [21] and can make them feel illegitimately dominated [6, 23]. In another common field of struggle, the global ISD labor market, onshore staffs have arguably status advantages of higher remuneration and being at the location where development is used to be done for high-value tasks [21]. Competition in this field can discourage onshore teams from collaboration [6] and make offshore teams try to perform extraordinarily good in tasks that enhance their status [21] which can lead to underperformance in low-status work [15]. Finally, political frictions between the partners’ home countries can yield social boundaries that impact IS offshoring relationships [19]. All in all, this leads to the proposition: (3) The higher the social distance, the lower the relationship quality.

In contrast to social distance, cultural distance refers to the social boundaries between onshore and offshore team members caused by habitus differences which result from their memberships in mutually exclusive fields. This is consistent with current IS offshoring research which states culture has many interacting layers which influence IS projects [6]. Onshore and offshore partners can differ in their organizational culture which impacts the project success via work practice differences [7]. Moreover, local labor markets can shape team members’ habitus differently, e.g. their general attitude towards turnover [21]. This is important especially higher personnel turnover at the offshore partner has been found to inhibit effective collaboration [3]. The most obvious habitus differences with strong impact on offshore ISD projects rooted in national culture are language differences. Moreover, while we acknowledge the general limitations of models of dimensions of national culture [24], we examine two such dimensions identified by prior research. Differences in the attitude towards hierarchy or power distance, i.e. the acceptance of unequal distribution of power in groups, is the most cited cultural dimension in IS offshoring literature and is argued to inhibit effective collaboration and project success [5, 6]. Moreover, we expect the same effect for differences in the relative valuation of social capital to human capital, i.e. the relative value of who you know to what you know. This is closely related to the dimension of collectivism which has been found to impact the development of trust as well as offshore ISD project outcome [5]. Thus, we come to the proposition: (4) The higher the cultural distance, the lower the relationship quality.

Finally, prior research has shown that capabilities of the offshore partner affect relationship and success of an offshore IS project [25]. An offshore partner’s absorptive capacity refers to its ability to integrate and exploit knowledge external to its organizational boundaries based on knowledge that it already disposes of. Knowledge integration works best if the existing knowledge has been gained from prior work with the same partners, industries, and technologies [25]. From a TCE perspective, a high absorptive capacity reduces transaction costs by enabling the offshore partner to integrate specific knowledge more easily. From a PT perspective, the offshore partner may have developed relevant habitus similarities to the onshore partner during activities in the same fields such as the same types of projects [3], the same industry [26], or even in

![Team members' fields of struggle](image-url)
projects with the same onshore partner [25]. Therefore, we propose: (5) The higher the offshore partner’s absorptive capacity, the higher the relationship quality.

3. Research methodology

We apply a qualitative, multiple-case study approach [27] which enables the examination of our a-priori deduced propositions while also allows further refinement of the framework. This research design does not aim at statistical significance but rather at analytical generalization [27, pp.35-39]: the model is used as a template that is tested against each individual case where false predictions lead to modifications until the model is able to explain all cases. We analyzed four cases of two Germany-based SBUs (IS-SERVICES1 and HEALTHCARE1) of large multinational enterprises offshoring ISD projects - one to China and one to India.

Data were collected in late 2009 from six interviews. Four interviews were conducted with project managers with more than five years of job experience and two interviews with German managers who had had leadership responsibility in the SBUs during years in the offshore countries. The semi-structured interviews followed guidelines composed along the constructs and dimensions presented above and their operationalizations, most of them were derived from prior research [3,5-7]. The average duration of the tape-recorded interviews was 92 minutes resulting in 194 transcribed text pages which were structured and coded using the qualitative research software NVivo.

All responses to questions directly or indirectly addressing our constructs were coded by the first author. Codings were created along our model and any recurring patterns emphasized by the respondents. The resulting 230 codings were scanned for statements about the single dimensions of our constructs, allowing us to rate their presence and salience in the cases on a low-medium-high scale. To illustrate this, we provide exemplary codings used to create ratings for the three single constructs with our salience ratings [28,p.144].

The validity of the codings and salience ratings was controlled by the second and third authors who examined the coded data set independently. Where the opinions did not match, the authors discussed and resolved the discrepancies. Following this process, we ensured that all evidence was being attended to and the most significant aspects of all the cases were addressed [27,pp.160-161]. With these aspects in mind, we aggregated the ratings for single aspects to salience ratings for the constructs on a five-point ordinal scale. An example for this procedure can be found in section 5.

Table 1. Overview of single cases

<table>
<thead>
<tr>
<th>Onshore Partner</th>
<th>BIS1</th>
<th>BIS2</th>
<th>WFM1</th>
<th>DEVICE1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore Partner</td>
<td>IS-SERVICE1, external</td>
<td>IS-SERVICES1, internal</td>
<td>HEALTHCARE1</td>
<td>HEALTHCARE1</td>
</tr>
<tr>
<td>Country</td>
<td>China</td>
<td>India</td>
<td>India</td>
<td>China</td>
</tr>
<tr>
<td>Offshore Partner</td>
<td>Chinese SBU of common parent</td>
<td>Indian SBU of common parent</td>
<td>External supplier, majority share owned by parent</td>
<td>Joint venture with small Chinese organization</td>
</tr>
<tr>
<td>Project Type</td>
<td>Business IS of external client care &amp; enhancement</td>
<td>Internal business IS care &amp; enhancement</td>
<td>Domain-specific workflow management system</td>
<td>Software for medical imaging device</td>
</tr>
<tr>
<td>Offshore Team</td>
<td>40</td>
<td>80</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

4. Case descriptions

The single projects were conducted by two SBUs of two of the world’s largest companies for IT service provision and engineering. IS-SERVICES1 provides its customers with IT, software, and related services. HEALTHCARE1 is a large provider of medical hardware and software. Table 1 offers a short overview of the single cases. In BIS1 and BIS2, maintenance and add-on development tasks for existing ISs, namely enterprise resource planning and supply chain management standard software, were offshored. In BIS2, these services had previously been provided by IS-SERVICES1 from Germany to internal clients. However, small cooperative development projects had also involved the offshore partner during this time and the partners had existing relationships and communication...
structures. In the project manager’s opinion, this was the main reason why the project went very well and the partners were able to “deliver high value from the start”. The only reported issue that arose during the project was an initial dissatisfaction of some key users regarding the response time. IS-SERVICES1 reacted by establishing personal contacts between those users and the offshore team which led to a faster resolution of issues and high satisfaction.

In BIS1, the offshored services were part of a new outsourcing contract with an external client of IS-SERVICES1 who had not had any contacts with the offshore partner on a project level before. Although the developed add-ons were rather simple and “maintenance-related”, as the informant said, several issues came up during the project. The client had several problems with the new formalism of the outsourced tasks, language differences, and with personal conflicts between onshore and offshore employees. Nevertheless, the offshore partner demonstrated professionalism and good knowledge of the offshored standard systems and the partners’ target industries. The desired cost reduction was achieved.

As a leading engineering company in the healthcare sector, HEALTHCARE1 provides highly innovative hardware and software to its customers. In the scope of WFM1, an extendable, domain-specific work flow management system was developed. It deals with specific types of data, connects and distributes them to different actors, and finally provides integrated access for manipulation and further processing. In the beginning, the Indian offshore partner was mainly engaged in single testing and development tasks but received increasing responsibility for test strategy and management. However, business knowledge and customer contact are still strongly concentrated onshore while the offshore partner’s lack of business knowledge is seen as a strategic problem:

“If a test failed: here you can simply say it is a software bug whereas over there they are not clearly aware of the use case itself.” (WFM1 project manager)

As HEALTHCARE1 relocated large parts of its production facilities for medical imaging devices to China years ago, also more and more software development activities for these devices were offshored. In the scope of DEVICE1, an ISD department was built up offshore to support the German partners in the development of such imaging software. The offshore team primarily consisted of recently graduated developers without prior work experience who were to develop parts of this highly specific product:

“Such a DEVICE is quite a special thing. [...] there are very specific technological things: how to access the system, how to do the image reconstruction. That is very, very specific knowledge. [...] That is a medical device. [...] There are quite a lot of regulations to be compliant to. [...] Those are about five million lines of code. You do not rewrite them every year. So you need specific knowledge about the architecture.” (DEVICE1 project manager)

To close this enormous gap, an extant training was provided with several months stay in Germany. For two involved onshore departments, the outcome of this project was seen very differently. One of them approached the new relationship openly, supported the developers to establish personal contacts, and transferred responsibility from the beginning. In connection with visits of onshore partner staff and the German head of the offshore partner’s software department tightly controlling all communication between the sites, this led to a good relationship, reduced prejudices, and finally caused a positive outcome of the project from this department’s point of view. On the other hand, by the second department, the relationship was not seen as a success.

“The other department has actually been collaborating with the Chinese colleagues for a much longer time. However, its management has strong reservations. It is very skeptical. And although the department [in China] has been existing for nearly four years now, there are still frictions and skepticism of the employees here in Germany.” (DEVICE1 project manager)

Consequently, there were two conflicting opinions on the outcome of the project. On the one hand, there were supporters of the relationship who were quite satisfied. On the other hand, there were opponents of the relationship who were not satisfied at all with the communication and quality provided.

5. Case analysis

The data gathered during the interviews were coded following the procedure described above. As a first step of analysis, we examined all causal statements [28,p.144] if they contradicted our propositions. No such references could be found. On the contrary, we found at least one statement per proposition explicitly confirming single aspect, e.g. in the following labor market competition from proposition (3) and functional specificity from proposition (1) in case DEVICE1:

“They are full of fear. When I build up a new location in China, the colleagues naturally get frightened.
And therefore, initially there is actual skepticism about Chinese colleagues."

"The development of DEVICEs started in 1985 and there are many colleagues who have been working together since that time. When they talk, they talk on a very high level. What is obvious for them is absolutely not obvious for newcomers.[...] And then one in Germany says, 'You must test it this way!' but the one in China gets it completely wrong and does it differently." (both DEVICE1 project manager)

As a second step, we rated the onshore partners' satisfaction, the realization of expectations as well as the projects' performance to finally aggregate these values to the overall outcome measure. Table 2 contains some exemplary excerpts used to create the single dimension ratings. Subsequently, we created the salience ratings for the rest of the constructs as described before and tested them against our model. Table 3 demonstrates the aggregated ratings for the single constructs. However, with the initial model, excluding the management practices assessed ex post, we could not explain how one of the onshore departments in DEVICE1 could create a medium-high outcome despite such negative antecedents as having inexperienced employees (low absorptive capacity) develop a software for a medical imaging device (high knowledge specificity), facing strong language differences and different attitudes towards hierarchy (high cultural distance) and onshore employees who had exclusive access to business users fearing for their jobs (high social distance).

The further inspection of the data revealed that two management practices were emphasized by the respondents across the cases which were especially present in the positive sub-case of DEVICE1: first, the empowerment of the offshore partner, i.e. the transfer not only of work but also of responsibility:

"There is a basic level of trust in the partner you have to bring up a priori. It will not work without that. The decision [to offshore to India] has been evaluated more positively with more independent responsibility assigned to our partner." (WFM1 head of project management)

This empowerment had several effects. Transferring delimited work packages and attaching the respective responsibility to them led to a situation where responsibility and work resided at the same site. This reduced the need to control and coordinate all the single activities across geographic and temporal boundaries. Moreover, the collaboration between onshore and offshore partner teams was thereby reduced, also mitigating the effects of global dispersion between individual team members.

"[...] they were suddenly at 120% of the German productivity. That was because of the independent responsibility and consequently because of the lower overhead for international communication and also because our development team [size] had shrunk [...] This was what decreased interaction complexity." (WFM1 head of project management)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Exemplified Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction (M)</td>
<td>&quot;Quite content. As I said, we are not done, yet.&quot; (WFM1 head of project management)</td>
</tr>
<tr>
<td>Realization of Expectations (L)</td>
<td>&quot;I don’t know, I have always got the impression that the expectations are too high.&quot; (DEVICE1 project manager)</td>
</tr>
<tr>
<td>Performance (H)</td>
<td>&quot;The performance of the employees, I would say that is nearly 100%, the entire project at least 95%.&quot; (BIS2 project manager)</td>
</tr>
</tbody>
</table>

The second important management practice we found is boundary spanning, i.e. the intent to improve the personal relationships between onshore and offshore team members in order to yield effective collaboration. Different strategies were applied in differing intensities in the cases. However, at least rudimentary intents were made in all projects. The most common practices of boundary spanning are visits at the partner's offices. Table 3. Aggregated salience ratings

<table>
<thead>
<tr>
<th>Dimension</th>
<th>BIS1</th>
<th>BIS2</th>
<th>WFM1</th>
<th>DEVICE1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Specificity</td>
<td>L</td>
<td>L-M</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>Social Distance</td>
<td>M-L</td>
<td>L-M</td>
<td>M-H</td>
<td>H</td>
</tr>
<tr>
<td>Cultural Distance</td>
<td>M-H</td>
<td>L</td>
<td>M-H</td>
<td>H</td>
</tr>
<tr>
<td>Absorptive Capacity</td>
<td>H</td>
<td>H</td>
<td>M</td>
<td>L</td>
</tr>
<tr>
<td>Boundary Spanning**</td>
<td>L</td>
<td>M-H</td>
<td>M</td>
<td>M/H*</td>
</tr>
<tr>
<td>Offshore Partner Empowerment**</td>
<td>H</td>
<td>M-H</td>
<td>M-H</td>
<td>L/H*</td>
</tr>
<tr>
<td>Relationship Quality</td>
<td>M-H</td>
<td>H</td>
<td>M</td>
<td>L/M-H*</td>
</tr>
<tr>
<td>Outcome</td>
<td>M-H</td>
<td>H</td>
<td>M</td>
<td>L/M-H*</td>
</tr>
</tbody>
</table>

* different results for two departments of the onshore partner ** assessed and integrated ex post

Transferring responsibility leads to a reduction of the power imbalance between onshore and offshore partners. Thereby, it weakens the effects of social distance between the partner teams that stems from unequal access to resources. However, this is not the only effect of empowerment on the relationship. By reducing the need for collaboration, the cultural distance between team members loses part of its impact as they have less contact than before. Instead, there is a higher potential to define clear interfaces and to reduce the number of communication channels that are prone to negative impacts of social and cultural distance between individuals.

The second important management practice we found is boundary spanning, i.e. the intent to improve the personal relationships between onshore and offshore team members in order to yield effective collaboration. Different strategies were applied in differing intensities in the cases. However, at least rudimentary intents were made in all projects. The most common practices of boundary spanning are visits at the part-
ner’s site which can differ in frequency, duration, and the range of participants. While site visits in BIS1 were restricted to few people for knowledge transfer during transaction phase, they took up to one year of on-site training in DEVICE1 while in WFMI only dedicated interface employees travelled regularly to their peers. Cultural trainings constitute a second type of boundary spanning which can also vary along the same dimensions. Moreover, individuals rooted or experienced in several cultural fields can act as individual boundary spanners like the project manager in WFMI who was Indian by nationality but lived and worked in Germany. Boundary spanning had three major effects on the projects: first, the cultural distance between the team members was decreased as they learned to know the environment their colleagues were working in, their behaviors, their work practices, in short, their habitus. Second, the absorptive capacity of the offshore partner was increased by experiences of its staff with the onshore partner, its processes, and its systems. Third, the social distance between the teams was reduced as the team members established personal connections, rethought prejudices, and grew a feeling of collaboration rather than competition.

6. Discussion

Prior research has highlighted issues in IS offshoring projects arising from differences in the learnt ways of thinking and behavior [4,8], from status differences and resource inequalities [6], as well as from asset- and offshore partner-related characteristics [3]. We were able to integrate these three perspectives based on TCE and PT into a single framework. Whilst doing so, PT provides us with a dynamic concept of culture comprised by many interacting and constantly evolving layers. We proposed an integrated research model and tested it in a multiple-case study. We found two management practices which moderated the negative influences of social and cultural distance: boundary spanning and offshore partner empowerment. Boundary spanning and its effects on the project outcome have been addressed in research before [13] and it is usually found in all offshore ISD projects, albeit different intensities. The empowerment of the offshore partner with more responsibility for delimited work packages creates the possibility of establishing a restricted number of clear roles and communication partners, which has been found to improve project success before [5]. Reducing the points of contact, a subsystem of team members of both partners is built where it is easier to agree on common behavior and reasoning [29]. Moreover, the empowerment can have an appeasing effect on the struggle for resources between the teams: clear communication of separate responsibilities can reduce competition for the same jobs and balance status inequalities. Findings of prior research on the empowerment, however, are inconsistent. In agreement with this paper, some scholars argue that high quality relationships include more shared responsibilities [30,p.137], others find the opposite [17]. This can be seen in the light of two aspects: first, as we show, not all tasks and responsibilities are suitable for being transferred to any partner. Second, especially in outsourcing relationships, the transfer of responsibilities must be fine-tuned to prevent negative strategic impacts for clients. As this paper only examined relationships where both parties were strategic partners aiming at long-time cooperation, such negative impacts were not found.

Finally, this paper contributes to the body of knowledge in IS offshoring research by analyzing and comparing ISD projects offshored from Germany to China and India. We provide our observation of differences between these two countries as a post hoc analysis of our findings.

Regarding national culture, our findings largely match what is to be expected based on intercultural research [31]. The proficiency in English was seen to be much lower and a severe problem for Western firms in China. Moreover, in both countries, a higher power distance than in Germany was perceived to be a key source of issues. The most prominent differences always were a reluctance to ask questions and to address problems openly. All the informants were aware of such issues which have also been discussed in scholarly IS literature [5,6].

In contrast, the local labor markets in China and India yielded more interesting findings. Offshore ISD projects in India traditionally suffered from high personnel turnover rates in the past [3]. Although they are lower at the moment - “under control” as one informant said - we found consensus of the respondents that turnover rates in China were very low for similar projects. This can be seen as a consequence of different habitus resulting from the fields’ different histories. While the Chinese IS market is only starting to develop at present, many IS employers have been hunting for skilled staff in India during two decades. This has impacted employers and employees:

“I mean, if a person is continuously doing the same job for two or three years, one thing, it gets boring. Second thing, it becomes a kind of disqualification for the next job.” (WFMI project manager)

As a consequence of such thinking, ISS-SERVICES1 introduced a series of new job positions to its globally standardized career paths only for India, so the employees could change their job titles more frequently. Even without increased salaries or respon-
sibilities, this decreased the turnover. In China, in contrast, it mainly tried to foster interpersonal relationships between the employees to make them stick together at the firm. This might be seen as a first evidence for a generally higher valuation of social capital in China compared to a higher valuation of human capital in India.

Moreover, there are some interesting findings regarding the social distance. First, temporal and geographic distance impacted all projects but we did not find strong differences between projects in China and India. One informant pointed out that even a travelling time advantage to India was neutralized by bad Indian infrastructures. This finding is consistent with [13] who state that it is not geographic distance but only distribution effects impacting collaboration. Second, while many organizations refrain from providing offshore partners with access to onshore business users because of time and language differences, the respondents stated they would like to do so for offshore business users. However, for many final products, China and India lack local target markets and users. This was perceived to inhibit the offshore partners from gaining industry experience and from accumulating the desired business knowledge. Consequently, it was very hard for them to provide innovative ideas that built on such knowledge. However, it must be mentioned that several informants stated that projects had been offshored to China to gain easier access to the Chinese market. This was not the case for any projects offshored to India. One may speculate that the rapidly growing and diverse Chinese economy is more interesting to many firms as a target market than the IS-focused [2] Indian one. Moreover, it might enable Chinese offshore partners to gain more industry experience and to increase their absorptive capacities.

Finally, projects in China seem to be very prone to the influence of global politics and country frictions. While political relations between China and several Western countries temporarily worsened due to the Westerners critique on China’s internal politics during the 2008 Tibetan unrest, also personal relationships suffered from prejudices of the German and emotional reactions of the Chinese side:

“[…] during the Chinese incursions, there were loads of e-mails from the [Chinese] colleagues in which they drew the attention to content-related errors in the reporting [of German peers].” (BIS1 informant)

Moreover, several informants pointed out that the image of China in Germany was strongly negatively impacted by the media and politicians who heavily criticized China for the restriction of civil liberties. These frictions and the perceived labor market compe-

7. Limitations and future research

We acknowledge that the concept of national culture has several shortcomings and is prone to stereotyping [24]. Especially in countries as big as China and India, it can only be a helpful abstraction unlikely overcoming the issues of heterogeneity and subcultures [24]. Our proposed view based on PT and TCE accounts for the multiple layers of culture that overlap, interact, and evolve dynamically and are different for each individual. Inherently, we cannot claim to have found general static characteristics of offshore ISD projects in China and India. However, we provide first findings that can be used to identify more detailed fields of struggle in offshore ISD projects and offer hints where to look for critical differences. We contribute to the body of knowledge aiming at the improvement of project settings to make individuals with different backgrounds collaborate effectively.

Moreover, our findings are based on a restricted number of case-studies which reduces generalizability. Future research could be built on the present findings and tested in larger and broader qualitative and quantitative studies across different cultures. Another interesting research stream to follow in the future is to interview leaders or employees from both onshore and offshore partners to gain a holistic view of the situation under investigation.

8. References


