

Analyzing and Managing the Impact of Cultural Behavior Patterns on Social Capital in Multinational IT Project Teams

A Case Study Approach

Cultural diversity in multinational IT project teams or in near- and offshoring arrangements can lead to serious problems. This research explores the cultural reasons for certain culture-specific behaviors such as face maintenance by Indian or post-communism by Czech team members. Case studies using software projects from different German firms reveal what collaboration problems may arise from these cultural behavior patterns and how management actions might help to understand and mitigate such problems.

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1 Introduction

The prevalence of cross-national collaboration in the IT domain has drawn an increasing amount of attention from IS academics and practitioners to the impact of cultural differences in multinational teams. As early as 1997, Watson et al. (1997, p. 99) found national culture to be one of the four key issues in IS management next to economic structure, political/legal environment, and technological status. Ten years later, Ranganathan and Balaji (2007) and Dibbern et al. (2008) posited that a mismatch in national cultures or “cultural distance” is a common challenge in offshore outsourcing. More recently, Sarker et al. (2010, p. 212) suggest that cultural differences constitute a key issue in global software development projects.

There are two ways in which most of the existing literature looks at the influence of culture in IS projects. The first

strand draws on the widely applied dimensions of national culture (Ford et al. 2003; Leidner and Kayworth 2006, pp. 388–398), such as power distance, uncertainty avoidance, or individualism vs. collectivism (Hofstede 1980; House et al. 2004), but which has very rarely been applied to multinational IT project teams. The second group of work considers cultural differences in the context of multinational teams and proposes various management actions to be taken to overcome resulting problems among team members (e.g., Brett et al. 2006; Govindarajan and Gupta 2001; Krishna et al. 2004; Maznevski and Chudoba 2000; Nicholson and Sahay 2001; Sarker and Sahay 2004; Sarker and Sarker 2009). Yet, this perspective rarely uses multi-dimensional models of culture and does not provide a deep analysis of the impact or role of culture dimensions (e.g., Dibbern et al. 2008; Rai et al. 2009; Rao 2004).

We aim to embrace both perspectives by identifying country-specific patterns of culture dimensions and related managerial challenges in the context of multinational IT project teams. Theoretically, we suggest using a social capital lens in order to understand how different culture dimensions impact on collaboration performance in multinational teams. The basic premise is that national culture behavior patterns¹ influence the generation of social capital in a

¹It is our goal to analyze the impact of culture-specific behaviors in multinational teams and not in cross-company teams. Consequently, our analysis will focus on the concept of national culture and not on the concept of organizational culture for analyzing the impact of cultural differences.

team. Severe problems arising from cultural differences include miscommunication, conflict, and mistrust (Salk and Brannen 2000, p. 191). This in turn hampers the creation of social capital within the team and, thus, leads to sub-optimal knowledge exchange, collaboration, and finally low project performance. This approach responds to the caveat of Walsham (2002) that “there is normally a poor link between these characteristics [i.e., culture dimensions] and detailed work-related attitudes and actions” (Walsham 2002, p. 376), indicating poor explanatory power of single culture dimensions. This is easy to comprehend since a subject’s (e.g., team member’s) particular behavior cannot simply be traced back to a single culture dimension. Instead, we believe that the explanatory power of culture dimensions will strongly increase if they are applied in a combined manner. Combining multiple culture dimensions leads to the formation of “cultural behavior patterns”. This will make the value of conceptualizing culture as a multidimensional concept tangible since it links a bundle of culture dimensions (in their specific occurrences in a certain culture) to behavior which finally is the relevant object of analysis (→ understanding the impact of culture-specific behaviors) and of action (→ management of the impact stemming from such culture-specific behaviors). Furthermore, this contributes significantly to better understanding and managing negative effects of typical culture-specific behaviors on social relationships in multinational IT project teams. Moreover, by combining characteristics of culture dimensions (in which cultural differences are rooted) into cultural behavior patterns or “culture gestalts”, that in turn are able to explain a certain country-specific behavior, we react to Walsham’s (2002) suggestion that “it may be possible, in theory, to make a connection between Hofstede-type dimensions and detailed work [behaviors] and attitudes [which however] is not easily found in the literature” (p. 376). Consequently, our research questions (RQ) are:

RQ1 How do country-specific cultural behavior patterns impact on the creation of social capital in multinational IT project teams?

RQ2 Which management actions can be applied to better handle these pattern-specific negative consequences?

In the following, we develop a conceptual framework that links culture dimensions to cultural behavior patterns which in turn affect the social capital inherent in an IT project team. This framework will guide the exploration of six case studies in different IT-related contexts and cover team members from Germany, Czech Republic, and India. From these case vignettes, we will consolidate and extract two particular exemplary cultural behavior patterns and show how they are caused by culture dimensions and how they impact on social capital (RQ1). Furthermore, management actions are identified that help to mitigate those negative consequences (RQ2).

By answering these research questions, our work covers the three waves of culture research mentioned by Leidner (2010, p. 71). First, cultural behavior patterns of team members are identified; second, these patterns are explained against the background of the concept of culture dimensions, and third, activities for managing the negative effects of these cultural behavior patterns are derived.

2 Theoretical Background and Related Research

2.1 Dimensions of (National) Culture

When cultural differences are investigated in detail, researchers draw on values which humans “belonging to” a certain culture share with each other but not or much less with people from another culture. According to Schein (2004, p. 27), those values cause the creation of visible artefacts (such as dress codes) and lead to certain congruent behaviors of individuals. While these behaviors are the visible “layer” of culture, the values, such as individualism, power distance or uncertainty avoidance, are layered below the surface and represent the concept which has been proven to be appropriate to describe and differentiate cultures.

Well-known examples measuring facets of culture based on values include Schwartz (1992) or Trompenaars (1994). However, the concept most frequently applied in IS research stems from Hofstede (1980). Drawing on Hofstede’s work, but being a more up to date study, the GLOBE project (House et al. 2004) collected rich data from more than 17,000 participants in 62 societies. It was initiated in 1991 and refined Hofstede’s and others’ models of culture towards nine culture dimensions (Table 1)

that were measured in terms of practices (“the way things are”) and values (“the way things should be”). In the following, we use this GLOBE model (House et al. 2004) as the theoretical basis for our research work because it builds upon and further improves Hofstede’s well-founded conceptualization of culture, and because it is, compared to any other culture framework, strongly supported by rich empirical data.

2.2 Social Capital

Our aim is to analyze the negative consequences of culture-specific behaviors on social relationships in multinational IT project teams. In order to conceptualize those social relationships, we chose social capital as a theoretical lens for our research. Social capital represents the “networks of interpersonal relations upon which an agent can draw [on]” (Levina and Vaast 2008, p. 309) and has been used frequently in research on IT collaboration, particularly in the context of outsourcing and offshoring relationships, both explicitly (e.g., Chou et al. 2006; Kelly and Noonan 2008; Levina and Vaast 2008; Rottman 2008) and implicitly (e.g., Han et al. 2008; Lee and Kim 1999). The formation of social capital positively influences knowledge exchange (Ghosh and Scott 2009; Nahapiet and Ghoshal 1998) and social exchange (i.e., commitment and joint problem solving) (Goo et al. 2009; Rai et al. 2009) among individuals involved and thereby drives project performance (Kelly and Noonan 2008), project outcomes (Spohrer et al. 2011), collaboration effectiveness (Levina and Vaast 2008), strategic alignment (Ye and Agarwal 2003), or overall outsourcing success (Rottman 2008). This strong evidence for the importance of social capital regarding collaboration effectiveness makes social capital both a valid and suitable endogenous variable when investigating social phenomena in teams (such as the influence of cultural differences).

Although the literature lacks agreement on a precise definition of social capital, of its measurement and its interpretation, there is a broad consensus among researchers from different disciplines about the significance of interpersonal relationships as a resource for social action (Yang et al. 2009, p. 186) and, furthermore, about “the ability of actors to secure benefits by virtue of membership in social networks or other social structures” (Portes 1998, p. 6).

Table 1 Definitions of the culture dimensions of House et al. (2004)

Uncertainty Avoidance (UA)	Extent to which members of a society strive to avoid uncertainty by relying on established social norms, rules or bureaucratic practices
Power Distance (PD)	Degree to which members of an organization or society expect and agree that power should be stratified and concentrated at higher levels of an organization or government
Institutional Collectivism (I/C 1)	Degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action
In-group Collectivism (I/C 2)	Degree to which individuals express pride, loyalty, and cohesiveness in their organization or families
Gender Egalitarianism (GE)	Degree to which an organization or a society minimizes gender role differences while promoting gender equality
Assertiveness (AS)	Degree to which individuals in organizations or societies are assertive, confrontational, and aggressive in social relationships
Future Orientation (FO)	Degree to which individuals in organizations or societies engage in future-oriented behaviors such as planning, investing in the future, and delaying individual or collective gratification
Performance Orientation (PO)	Degree to which an organization or society encourages and rewards group members for performance improvement and excellence
Humane Orientation (HO)	Degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others

While they share characteristics such as the centrality of relations, definitions of social capital can be divided into three groups depending on whether they focus primarily on (1) the relations an actor maintains with other actors, (2) on the structure of relations among actors within a collectivity, or (3) on both types of linkages (Adler and Kwon 2002, p. 19). The first group emphasizes social capital as a resource that inheres in the social network tying a focal actor to other actors and thus potentially facilitates the actions of individuals or groups (“external view”). The second group focuses on collectivities’ (e.g., organization, community, or nation) internal characteristics or structures whereby the social capital lies in linkages among individuals or groups within the collectivity (“internal view”). The third group encompasses both the external and the internal view on social capital helping to eliminate certain weaknesses of the other two groups of definitions. First, distinguishing between an external and an internal dimension is basically a question of the perspective or unit of analysis. Second, these dimensions are not mutually exclusive. The behavior of a collective actor (e.g., an organization) is influenced by both its external linkages to other collective actors and the structure or characteristics of its internal linkages (e.g., relationships between employees within the organization). As a consequence, its capacity for effective action is dependent on both dimensions (Adler and Kwon 2002, pp. 19–21).

Nahapiet and Ghoshal (1998), who provide one of the most commonly used

conceptualizations of social capital in organizational research (Robert et al. 2008, p. 318), define it as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit” (p. 243). This definition covers both the external and the internal view on social capital and thus belongs to the third group of definitions. Drawing on the concepts of Burt (1992) and Coleman (1990), Nahapiet’s and Ghoshal’s perspective on social capital encompasses four characteristics: (1) as a socio-structural resource, social capital is inherent in the relations between persons and is owned jointly by the parties in the relationship; (2) social capital cannot be passed from one person to another; (3) it enables the achievement of objectives that would be impossible without it or that would only be achieved at extra cost; (4) and it increases efficiency of action (e.g., due to efficiency of information diffusion) and reduction of transaction costs (e.g., the probability of opportunism is reduced as a result of high levels of trust which decreases the need for monitoring processes).

The authors specified three dimensions of social capital: the structural, the cognitive, and the relational dimension. The structural dimension is defined as “the impersonal configuration of linkages between people or units [...] [or] the overall pattern of connections between actors” (Nahapiet and Ghoshal 1998, p. 244) and refers to the ties among actors which reflect the potential resources accruing to an individual or a group from those ties (i.e., “who knows

whom” and “how do you reach him”). The cognitive dimension describes “those resources providing shared representations, interpretations, and systems of meaning among parties” (Nahapiet and Ghoshal 1998, p. 244) and is embodied in attributes that facilitate common understanding of collective goals and proper ways of acting in a social system. In this context, shared representations, interpretations, and systems of meaning serve as a bonding system and can reduce inter-partner conflict and facilitate the negotiation and establishment of common goals (Tsai and Ghoshal 1998, p. 467) as well as shared language and codes. Finally, the relational dimension corresponds to “the kind of personal relationships people have developed with each other through a history of interactions” (Nahapiet and Ghoshal 1998, p. 244) and relates to the quality of relationships among entities conceptualized by trust, norms, obligations, expectations, and identification.

2.3 Culture-Bound Relationship Problems in Cross-Cultural IS Project Teams

Many IS researchers have emphasized the problem of cultural differences in cross-cultural collaboration (e.g., Carmel 1999; Krishna et al. 2004; Sarker et al. 2010). For instance, Walsham (2002, pp. 363–368) reports on cross-cultural contradiction and conflict within a Jamaican-Indian software development team, caused by, among others, a laid-back attitude of Jamaicans with regard to deadlines in comparison to their

Indians colleagues. Although Walsham (2002) did not focus on approaches for solving such culture-bound problems, he raised cross-cultural education and open discussions about cross-cultural issues as possible actions (Walsham 2002, p. 378). The high importance of hierarchy, status, and power for Indians has been identified as a reason for conflict in cross-cultural teams by Krishna et al. (2004) and Nicholson and Sahay (2001). In deference to authority, Indians did not raise critical issues in face-to-face meetings, a fact which caused frustration among British managers (Krishna et al. 2004, p. 65). Among others, the authors propose cross-cultural training, establishing a negotiated culture, and using bridgehead teams/cultural bridging to better manage global software teams in general (Krishna et al. 2004). In addition, extreme conflict prevention by Indians resulted in shyness and a tendency to say ‘yes’ which again created confusion among the British (Nicholson and Sahay 2001, p. 36). On the other hand, the colleagues from the UK were seen as much more aggressive and assertive by the Indians (Nicholson and Sahay 2001, p. 35). Sarker and Sarker (2009, p. 452) also emphasized that saying ‘no’ in certain situations is culturally unacceptable in India which “can have a negative impact on [cross-cultural] relationship/linkages and could cause unexpected delays in responding to changes” (Sarker and Sarker 2009, p. 452). Cultural competency training and onsite exchange visits helped deal more effectively with this issue (Sarker and Sarker 2009, pp. 452–453). Earley and Mosakowski (2000, pp. 31–32; 36) identified a myriad of cross-cultural problems in US-Thai teams including a general lack of cross-cultural empathy and understanding, low levels of team identity, and an ‘us-versus-them’ atmosphere resulting in confrontation and relational conflict. It was also stressed that communication was difficult due to a conflict avoidance style adopted by Thai team members (Earley and Mosakowski 2000, p. 32). Openly acknowledging and discussing cultural gaps and working around them was the key to overcoming barriers to effective teamwork in different multinational settings in another study (Brett et al. 2006, p. 88). Team performance suffered from interpersonal conflict and reduced information sharing as a result of different communication styles (indirect in Japan vs. direct in the

US; p. 86), differing attitudes toward hierarchy and authority (more hierarchical in Mexico and South Korea as compared to the US; p. 87), and conflicting norms for decision making (more quickly in the US than in South Korea; p. 88).

Problems arising from cultural boundaries emerge within the Western cultures as well. Sarker and Sahay (2004, p. 12) found that uncertainty evolved among Americans as they perceived their Norwegian colleagues speaking in a short, abrupt, and blunt manner. Among other actions, being culturally more sensitive contributed to improving relationships between the two sides (Sarker and Sahay 2004, p. 12). Maznevski and Chudoba (2000) attest to regular face-to-face meetings (p. 486) and non-work socializing activities like having lunch or dinner together (p. 481) for positively affecting relationship difficulties in teams with members from the US and Western European countries. Cross-cultural conflict in these settings was mainly caused by miscommunication in general and different assumptions about responsibilities (oneself vs. group) and appropriate task approaches (careful planning vs. quick action; Maznevski and Chudoba 2000, p. 480).

One thing which all the above-mentioned papers have in common is that national culture is not conceptualized based on theoretical culture models, such as those of Hofstede (1980), House et al. (2004), or Trompenaars (1994), which help to capture and structure the multi-dimensionality of “culture.” This is in sharp contrast to other areas of cultural research in IS (culture in IS adoption research, in particular) (e.g., McCoy et al. 2007; Srite and Karahanna 2006; Straub et al. 1997). Researchers investigating relationships in cross-cultural contexts (e.g., offshoring or international project management), if they mention these culture models at all, only use them as background information. For instance, Rao (2004, pp. 18–19) points to possible consequences of specific characteristics of some of the culture dimensions of House et al. (2004). Accordingly, high power distance may result in problems “to question or freely discuss opinions with superiors” (Rao 2004, p. 18), and “differences in future orientation can lead to distinctly different attitudes toward deadlines and pace of work” (Rao 2004, p. 19). However, these statements are only presumptions which are not analyzed empirically. Likewise, Dibbern et al.

(2008, p. 358) briefly broach this subject in their discussion by referring to the possible negative effects of high power distance (high level of conformism; obedience to and dependence on rules and obligations) and high collectivism (problems to openly communicate and exchange tacit knowledge) in India for IS offshoring. Potential problems with regard to decision making resulting from differences between individualistic and collectivistic cultures are mentioned by Govindarajan and Gupta (2001, p. 65). However, empirical evidence for this assumption is again not given. Thus, our work intends to contribute to existing research by explicitly examining the role of different culture dimensions in cross-cultural working relationships.

3 Conceptual Framework

Prior literature has shown that national culture has an impact on social relationships in cross-cultural teamwork and indicates that this impact is – to a certain degree – manageable. However, as highlighted above, prior studies do not elaborate on theoretical models of culture dimensions. We address this gap by analyzing culture-bound relationship problems in cross-cultural IT project teams applying the culture dimensions of House et al. (2004). To achieve this, we conduct an exploratory case study analysis which is structured and guided by a conceptual framework (as suggested, e.g., in Carroll and Swatman 2000, pp. 237–238; Yin 2009, p. 18) displayed in **Fig. 1**. First, this framework presumes that a specific characteristic of any culture dimension could affect any dimension of social capital. Second, we argue that social capital is not (primarily) influenced directly by the culture dimensions themselves (in terms of specific values and beliefs), but that the team members’ behavior stemming from their cultural imprint is responsible for problems in collaboration and thus for hampering the creation of social capital. Those cultural behavior patterns can be rooted in the value-based dimensions of the particular culture and thus form “culture gestalts,” since certain configurations or bundles of culture dimensions that explain the behavior pattern are identified. Finally, the conceptual framework guides our exploratory analysis by asking for management actions that might help to mitigate negative consequences within a project team.

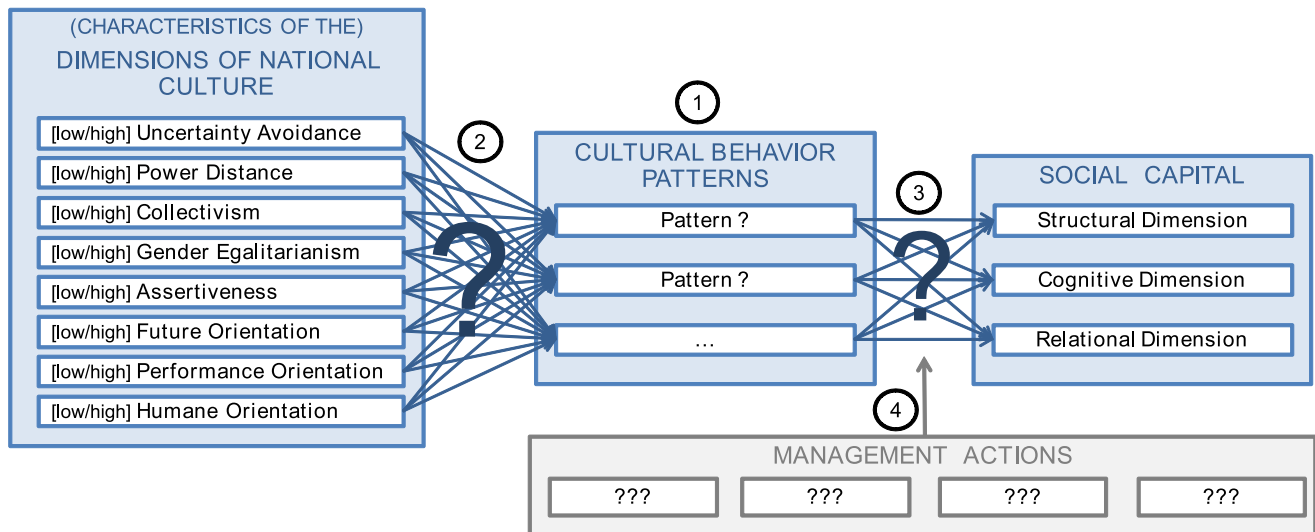


Fig. 1 Conceptual framework

As **Fig. 1** shows, the exploratory approach is targeted at (1) identifying cultural behavior patterns, (2) linking those patterns to the culture dimensions which cause them (i.e., conceptualizing culture gestalts), (3) uncovering the patterns' impact on the dimensions of social capital, and (4) identifying management actions that help to effectively dampen negative effects. Formally spoken, this approach reduces the set of possible links between culture dimensions, cultural behavior patterns, and social capital dimensions to those actually existent in the cases.²

4 Research Approach

Kaplan and Duchon (1988, p. 15) assert that case studies provide “a source of well grounded, rich descriptions and explanations of processes occurring in local contexts” making them well suited for investigating emergent phenomena. In line with Kaplan and Duchon (1988), Yin (2009, p. 8) points out that case studies are ideally suited when “how” or “why” research questions are posed, when the investigator has limited control over the events and boundaries of a contemporary, complex social phenomenon (i.e., cultural differences and social capital)

within its real-life context (i.e., multinational IT project teams), and when the phenomenon and the context in which it is investigated are unclear or closely related. Challenges in understanding the relationships between the dimensions of national culture and the dimensions of social capital within multinational IT project teams as well as the critical question of how to manage this relationship meet these criteria.

We adopted a multiple case study design because “theory building from multiple cases typically yields more robust, generalizable, and testable theory than single-case research” (Eisenhardt and Graebner 2007, p. 27). Since random sampling is “neither necessary, nor even preferable” (Eisenhardt 1989, p. 537), we followed Patton (2002, pp. 237–244) and applied a mixed purposeful sampling strategy when selecting the cases for our research and the interviewees for the cases. This strategy consisted of a sequence of convenience, criterion-based, and snowball sampling. The starting point was our institute's database of industry partners which comprises of a variety of large, medium, and small enterprises from different industries. Based on this initial convenience sample, we applied criterion-based sampling. In doing so, we asked our contact people in those

companies whether any current projects in their company fulfilled both of the following criteria:

- projects with an IT context (IT projects, e.g. software development, IS rollout etc.)
- projects with team members from different nations (multinational projects)

If the contact person was able to identify such a multinational IT project, s/he was asked to establish contact between the authors of this paper and key members of these project teams. These project key members were asked if they would agree to serve as interview partners within a case study about their specific multinational IT project and if they could identify further appropriate interview partners within their project team (snowball sampling). This procedure finally resulted in six different multinational IT projects which served as our cases and are described in **Table 2**. The projects belong to four different firms from various industries and range from software development to replacement and roll-out of ERP systems. The companies as well as the project teams vary in size. The corresponding 12 interview partners are described in Electronic Supplemental Material, **Table A-2**. Interview partners A1, B1, C4, and D1 were key project members and served as entry points for identifying

²**Figure 1** looks a bit similar to a causal model, but we want to clarify that we follow a purely exploratory approach. This conceptual framework does not reflect a derived theory to be tested but serves as the starting point of our exploratory case analysis. Furthermore, we used social capital as our dependent variable rather than project success in general, because, first, as outlined in Sect. 2.2, many studies have already shown a positive relationship between these two variables and, second, social capital represents the more precise and appropriate variable for analyzing the impact of cultural issues on project team internal relationships, since it is the “natural” mediator (or: main explanation factor) between cultural aspects and project success.

Table 2 Case study projects (no exact numbers are given to ensure the firms' anonymity)

	Project 1 (Company A)	Project 2 (Company B)	Project 3 (Company D)
Project type	Replacement of legacy ERP system by ERP standard software in a plant in the Czech Republic	Replacement of legacy ERP system by ERP standard software in a plant in the Czech Republic	Software development project for client firm (finance industry)
Initiator	German parent company	German sister company	–
Geographically distributed?	Team distributed between Germany and the Czech Republic	Team distributed between Germany and the Czech Republic	Team distributed between Switzerland and India
Team configuration	15 team members (9 Czechs, 6 Germans)	23–29 team members (16–22 Czechs, 7 Germans)	62 team members, organized in several sub-teams in Switzerland (17 Swiss consultants from Company D, 30 Swiss employees from client firm, and 1 German project manager) and 1 sub-team in India (14 Indians)
Project start	Beginning of 2008	April 2007	November 2009
Project success	Project still in progress; time delays	Project successfully (in time) completed in March 2008	Project still in progress; project completion planned in 2011
Firm demographics	Construction industry; sales: 1–5 bn €; 5,000–10,000 employees	Manufacturing industry; sales: <1 bn €; <5,000 employees	Consulting industry; sales: >15 bn €; >50,000 employees
	Project 4 (Company C)	Project 5 (Company C)	Project 6 (Company C)
Project type	Ongoing software development project with release cycles of 6 months	Software development project	Ongoing software development project with release cycles of 3 months
Initiator	–	–	–
Geographically distributed?	Team distributed between Canada and India	Team distributed between Germany and India	Team distributed between Germany and India (since summer 2008)
Team configuration	About 50 team members, organized in 5 sub-teams; 4 sub-teams located in Canada (members from various countries); 1 sub-team located in India (10 Indians)	4 team members (3 Indians, 1 German)	10 team members (5 Indians, 5 Germans)
Project start	Beginning of 2007	Summer 2009	Project start: 1998; start of staff distribution: summer 2008
Project success	Project still in progress	Project successfully (in time) completed in spring 2010	Project still in progress; distribution of the project was stopped by the end of 2008; relocation on-site back to Germany due to time and quality problems
Firm demographics	IT industry; sales: 5–15 bn €; 10,000–50,000 employees		

further interviewees as described above. We only included interview partners who had already worked for at least one year in a multinational team setting.

Conducting interviews is a very effective way of gathering rich empirical data in a case study (Eisenhardt and Graebner 2007, p. 28). Complementary insights of multiple investigators add to the richness of data, enhance the creative potential of the study, and the convergence of observations increases confidence in the findings (Dubé and Paré 2003, pp. 611–612; Eisenhardt 1989, p. 538). Accordingly, a team of two researchers conducted twelve semi-structured interviews

(Electronic Supplemental Material, **Table A-1**) following the recommendations from Myers and Newman (2007, pp. 16–17). Each interview lasted between one and two hours and was recorded and fully transcribed. For all projects, except project 4, we were able to gain perspectives from multiple managers involved. Moreover, four interview partners were from countries other than Germany (two from India and two from the Czech Republic), ensuring balanced perspectives.

Within the data analysis, the transcribed material was systematically coded into categories to generate hypotheses

(Brodbeck et al. 2007; Kohlbacher 2005). Cultural differences and social capital were coded based on the culture dimensions of House et al. (2004) and the conceptualization of social capital according to Nahapiet and Ghoshal (1998). As the first goal was the identification of cultural behavior patterns and to explore their roots in culture dimensions as well as their impact on social capital, the authors proceeded as follows: First, open coding was applied to identify certain culture-specific behavior patterns. Second, the authors thoroughly analyzed the identified patterns against the background of the rich and detailed descrip-

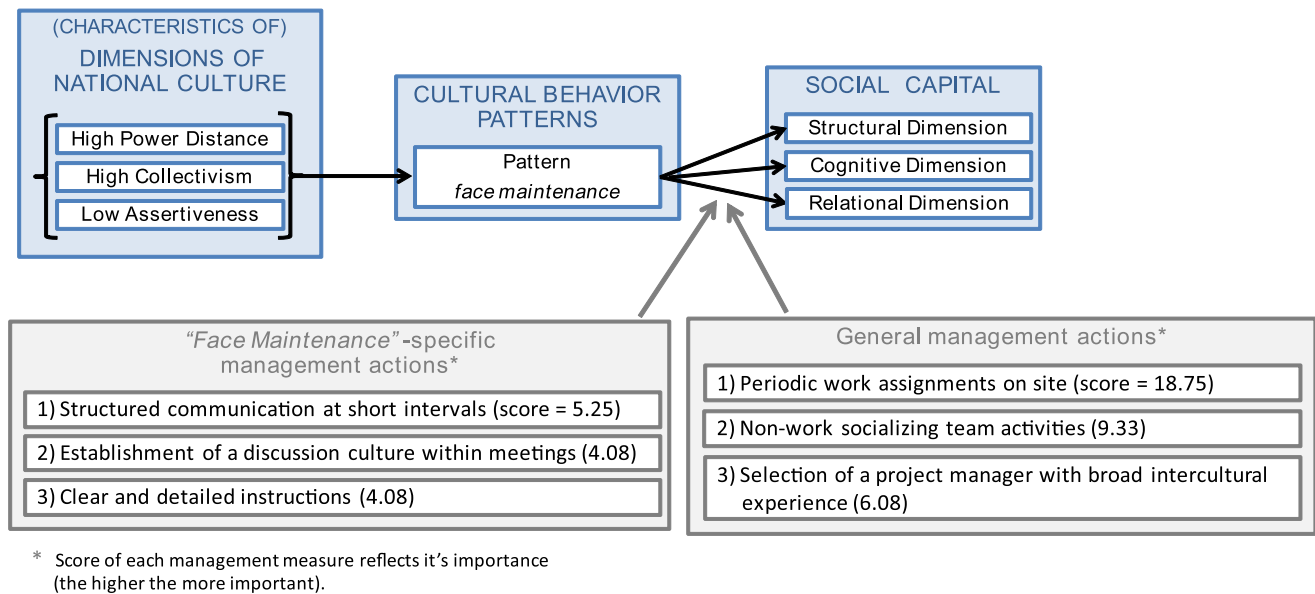


Fig. 2 Cultural behavior pattern *face maintenance* for IT projects with India

tions which are offered for each single dimension in the GLOBE study (House et al. 2004). In this way it was worked out in which culture dimensions the previously identified behavior patterns are actually rooted. This happened by axial coding which relates categories to their subcategories (Strauss and Corbin 1998, p. 123). Third, relationships between the cultural behavior patterns and social capital were analyzed. Thereby, the authors investigated in detail whether the identified patterns impacted on the different social capital dimensions (axial coding). Finally, inductive category development (open coding) was applied to extract management actions – fitting to the context of our research model – from the interviews. Within several feedback loops between the researchers, all results (cultural behavior patterns; relationships between the culture dimensions and the patterns; relationships between the patterns and the social capital dimensions; management actions) were revised and checked with respect to their reliability. This process finally resulted in 163 codes. An example for the coding procedure can be found in Electronic Supplemental Material (Table A-2). Data analysis was conducted by using MAXQDA.

Additional analyses were performed on the identified management actions to indicate the importance of each action with regard to project performance/success. For this purpose, two of the authors rated all codes on a scale from 0 (“no effect”) to 3 (“strong effect/very important”) for each management action that was identified before.³ Then, the two different codes for each action were compared. In case of a mismatch higher than 1.0, the two coders discussed the respective coding. This happened with less than six percent of the codes and always resulted in a quick consensus (resp. adjustment of the “wrong” code) as usually one of the authors had merely overlooked a relevant issue within a statement or misunderstood the context. After that, the mean values of the two different scores were calculated for each code and normalized between 0 and 1. Finally, the normalized scores were aggregated for each action in case multiple interviewees stated it. This resulted in final scores representing the respective action’s importance, covering both the consistency among multiple raters and the qualitative expression concerning the effectiveness of the particular action.⁴ These final scores are displayed behind the management actions in Figs. 2 and 3.

5 Results

Projects 1 and 2 face cultural differences between team members from the Czech Republic and Germany while projects 3 to 6 consist of team members from India and various Western nations (mostly Germany, Switzerland, and Canada). These different settings provided two different results which are analyzed separately in the following.

5.1 India-Specific Results

The interviews with the German and Indian team members from projects 3 to 6 revealed a cultural behavior pattern on the Indian-side which had negative effects on all three dimensions of social capital. To address this impact, dedicated pattern-specific actions were applied in the projects while further general actions were stated to help mitigating cross-cultural problems in general. The linkages displayed in Fig. 2 result from consolidating the conceptual framework (Fig. 1) to those relationships identified in the interviews within the Indian-Western IT project teams.

The major behavior found to be culturally different and repeatedly stressed by our Indian and German interviewees was face maintenance (Goffman 1967; Ting-Toomey and Cole 1990; Ting-Toomey et

³In doing so, the authors took into account whether a management action was only suggested by the interviewee (or whether s/he was unsure about its effectiveness) or if it was actually and successfully applied.

⁴Combinations of qualitative and quantitative approaches for transcript analysis can frequently be found in case study research. Comparable examples from the offshoring domain are Dibbern et al. (2008, pp. 346–347) or Kotlarsky and Oshri (2005, p. 44).

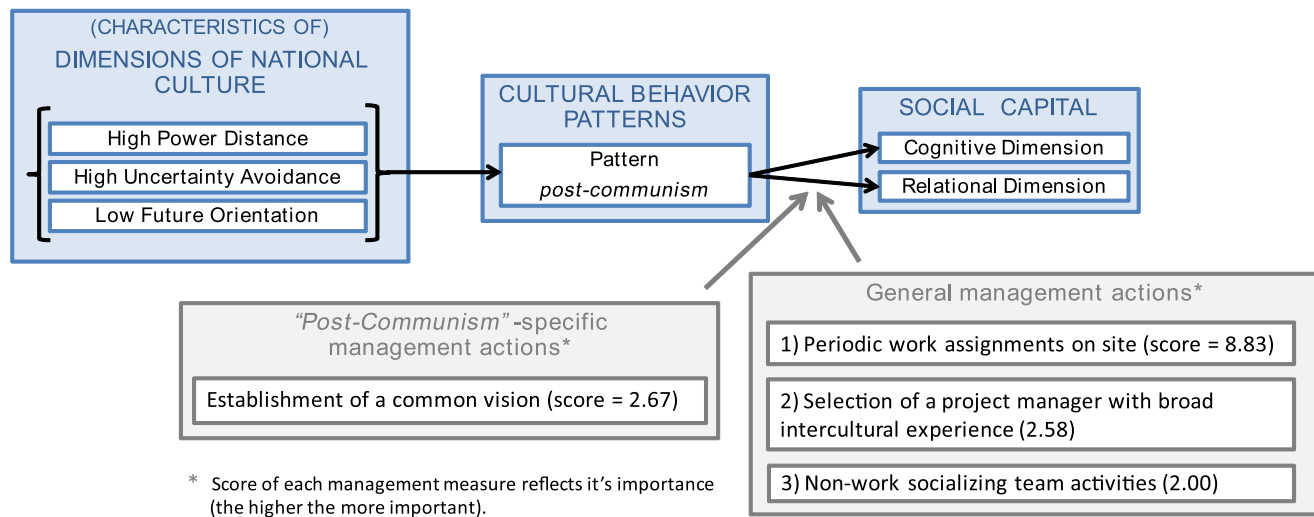


Fig. 3 Cultural behavior pattern *post-communism* for IT projects with the Czech Republic

al. 1991). Typical characteristics of this cultural behavior pattern which could be identified within the interviews include a tendency to say 'yes,' to express oneself indirectly and through concealment, or to avoid open criticism. Correspondingly, House et al. (2004, p. 131) bring face-saving into relation with avoiding negatives and being indirect and evasive.

The results in Fig. 2 reveal that this cultural behavior pattern is rooted in a combination of relatively higher power distance, higher collectivism, and lower assertiveness of Indian team members compared to their respective German and Western colleagues. These three dimensions and their characteristics on the Indian side are highly interdependent and cannot be considered separately when it comes to explaining face maintenance. Neither our interviews nor the detailed descriptions in the GLOBE study (House et al. 2004) allow for a clear and exclusive assignment of face maintenance to only one culture dimension. Elaborating on the theoretical background first, high power distance is found to be associated with face-saving (House et al. 2004, p. 554) as well as with being evasive and indirect (House et al. 2004, p. 555). However, indirect, ambiguous, and subtle language is also a consequence of low assertiveness (House et al. 2004, pp. 403; 405), which likewise contributes to face-saving (House et al. 2004, p. 404–405). Finally, high collectivism is considered to result in indirect communication (House et al. 2004, pp. 452; 454; 460), face-saving (House et al. 2004, pp. 452; 460–462; 500–501), and conformism (House et al.

2004, p. 461). These ambiguities corroborate the findings from our interviews that face maintenance cannot be traced back to a single culture dimension but instead is rooted in a bundle of specific occurrences of these three culture dimensions (i.e., high power distance, high collectivism, and low assertiveness). In our interviews, Mr. D1 indicates that a high level of power distance contributes to the face-saving behavior of Indian team members: "It's a cultural thing. If [the Indian colleagues] can't accomplish a task, they are afraid to tell their superior because hierarchies are very strong in India." Accordingly, Mr. C4, a leader of two German-Indian teams, states: "Authority is definitely a very important issue. I have to be very cautious when I talk to my Indian subordinates because everything I say is considered as the absolute truth. [...] They would never disagree. Or at least they would never openly show it." Low assertiveness of Indians compared to their Western colleagues plays a major role with respect to face maintenance as well, as Mr. D3 and Mrs. D2 from India point out: "Problems occur especially if we are onshore because the Swiss colleagues are much more direct than we are. That's difficult for us. [...] We should become more self-confident and direct. That should come with experience, but it's a long way. We will not become offensively-minded from one day to the next" (Mr. D3). "Some of the colleagues in Switzerland, mostly seniors, are very, very direct in what they want or what is not good; or when they explain how they want something to be done. [...] We sometimes have problems with

this kind of assertiveness or directness or being pushy because we do not know such a behavior here in India" (Mrs. D2). Finally, face-saving behavior can also be a result of high collectivism, for instance when Indians refrain from criticizing a colleague on behalf of the whole team: "[The Swiss colleagues] sometimes openly criticize within a meeting if someone in the team made a mistake. They are used to pointing this out. [...] We would never criticize someone in such an open form in front of everybody as this discredits both her/him and the whole team" (Mrs. D2).

With regard to social capital, we identified a negative impact of the face maintenance pattern on the structural dimension and even stronger on the cognitive and the relational dimensions. Further elaboration of the relational dimension shows that trust was the subcomponent which had repeatedly been reported as negatively affected by face maintenance. The German interview partners working in German-Indian teams had difficulties trusting their Indian colleagues for quality reasons as they never asked for assistance even if they had serious trouble when accomplishing work, and because they would not raise concerns against anything or admit not to be able to fulfill a given task. For instance, Mr. C1 mentioned: "You cannot rely on each spoken word. If you ask them something like 'Are you able to do this?' they will always reply 'Yes' no matter if they are able or if they are not. [...] When it then comes to a milestone or a deadline, we discovered too often that they

had not been able to handle their workload.” Mr. D1 takes a similar line: “If they are not able to fulfill a task, they usually won’t ask another colleague even if they are pretty sure that one of their colleagues knows how to fulfill this particular task. They will try on their own again and again even if they go round in circles. [...] I am always a bit skeptical concerning the results.” Our Indian interview partner Mr. D3 confirms time delays as a consequence of Indians communicating indirectly: “[Indirect communication from our side] created some issues in the project, basically concerning the deliverables. We have project schedules, and everything is planned. [...] [But] sometimes, people did not come up with certain issues at the right time. [...] They did not escalate at the right time. As a consequence, we faced issues in the deliverables. [...] Yes, this basically resulted in time delays.” With regard to the opposite perspective, all our German interview partners in projects 3 to 6 felt that the Indian colleagues trusted them, which was confirmed overall by our Indian interviewees. However, this trust is highly vulnerable when it comes to criticism: “In their culture, criticism is never expressed openly and directly. If you do so, they won’t complain or anything alike but become even quieter as they already are. [...] Their confidence in the person criticizing will decline. [...] If you want to criticize them you have to be very cautious because we seem offensive to them quite fast” (Mr. C3). Mr. D3 takes the same line from an Indian perspective: “I think Indian people are quite sensitive in nature. Sometimes, if some criticism comes up, we feel bad. I agree that the criticism will be correct sometimes, but as we are sensitive we still feel bad at least for some time [...] [especially] when we are criticized within a meeting.” However, though both of our Indian interviewees found it beneficial to be more direct in general with regard to the overall project success, they also mentioned that their Western colleagues, especially the older ones, may be a little too direct or sometimes even aggressive in some situations, which again results in younger Indians becoming even shyer than before.

Concerning the cognitive dimension of social capital, creating a shared understanding between Indian team members and their foreign colleagues is problematic because of the Indians’ indirect and convoluted enunciation: “You have

to learn to interpret what they say. For instance, if it exceptionally happens that an Indian colleague makes a remark about a very small issue concerning the task to be accomplished, it means that s/he has absolutely no idea about how to accomplish this task and that it will never be accomplished in time” (Mr. C3). Another example, resulting from the Indian team members’ conformism is given by Mr. C4: “A big problem is that [the Indian colleagues] don’t inquire, for instance, when a business process is explained to them but they don’t understand it. They never say something like ‘Please wait a moment, I didn’t understand this.’ You always get this stereotypical answer ‘Everything is fine, no problem.’ And if we subsequently ask them to explain it in their own words they cannot, and we realize they didn’t understand it. That’s really a big problem and we had to learn how to deal with it.” Our Indian interviewee Mrs. D2 recognizes problems of this kind mainly among young Indian colleagues who just graduated. She also points out that corresponding difficulties in understanding arise not only in cross-cultural teams but in solely Indian teams as well: “There are not only problems with the Swiss colleagues. It can be anyone. If you are not very open to the other people or if you say ‘yes’ but you cannot complete the task given to you, [...] then problems can arise among Indian colleagues as well. [...] You have to be very sure what you are saying. If you say it is one hundred percent then it has to mean one hundred percent and not that some reviews or some testing is still required. Then I would not say one hundred percent. [Problems arise if] you are not sure what one hundred percent really means. Consequently, issues can always arise if young and inexperienced colleagues have problems saying what they really mean.” However, she also emphasizes that she, as an Indian team leader, can deal better with this behavior than Swiss colleagues can: “Yes, I can definitely deal better with these situations. I would know where the issue is as I am from India myself. I can handle it.” The negative effects of face maintenance on the relational and the cognitive dimension of social capital have been confirmed by all interviewees working in projects 3 to 6. They claimed that it is of the utmost importance to manage the negative consequences of what can be labeled face maintenance.

Finally, we identified negative effects of face maintenance on the structural dimension of social capital as well which

were, however, less obvious in comparison to the cognitive and relational dimension. One example of how the structural dimension of social capital is negatively influenced by face maintenance has been given by Mr. D1. As this statement revealed a negative effect on the relational dimension as well, it was already cited in the corresponding section above, saying that Indians refrain from contacting a colleague whom they think might be the most likely to help solve a certain problem because this would mean a loss of face. Mr. C4 points in a similar direction with regard to feedback talks: “I am the person responsible for the performance evaluation of all team members. [...] I offered the team members one-to-one feedback talks. [...] But, in contrast to the German team members, none of our Indian colleagues took this opportunity.” Furthermore, Mr. C3 pointed out that Indian team members will become even shyer if they are openly criticized, something which again means that they will contact the person who is critical less frequently than they did before. Basically, these insights are confirmed by the Indian side as well, for instance by Mrs. D2, who demands that her colleagues be more proactive: “We should not be shy. And we should ask more questions face-to-face.”

To overcome the abovementioned difficulties arising from the face maintenance pattern, certain pattern-specific management actions were employed in the projects. Additionally, general management actions were taken to help mitigate cross-cultural problems in general. In the following, we will first elaborate on the pattern-specific actions because these were dedicatedly implemented to address problems resulting from face maintenance. Afterwards, we discuss the general actions (though these had a stronger mitigation impact).

Among the face maintenance-specific management actions, structured communication at short intervals was rated as most important (Fig. 2). The high significance of this action is emphasized by both Indian and German interview partners: “Regular meetings in short intervals – if possible in a daily rhythm – enhance transparency and thus trust on our side as they give us the opportunity to check the work progress and address possible issues promptly” (Mr. C3). “One thing I would be missing are the daily calls. But this is happening now. This has

been a part of our learning. It is effective now. [...] Every day we have calls on status update for each functional block. So if we have any issues, we talk about them. So all are on the same page, what is happening at onshore and what is happening at offshore” (Mrs. D2). “We use to have daily calls between the onshore and offshore team. [...] This daily communication definitely helps to resolve any issues that have occurred” (Mr. D3). Within those meetings, interviewees emphasize that the monologues of the European team members are not very helpful. Everything is about real discussions in which all team members participate. To achieve this, an open and discussion-oriented culture has to be established: “The first thing is, not to give them the opportunity to answer with ‘Yes’ or ‘No’. To get a real discussion started you have to ask something like ‘What has changed since our last conversation?’ or ‘What do you think about the progress against the background of the next milestone?’” (Mr. C3). Another advice is given by Mr. C4 who underlined “to over and over again encourage and ask them to give their own opinion. However, this will not result in an Indian colleague saying anything like ‘No, it is not possible’, but at least an expression of opinions like ‘Yes, but...’ is realistic. [...] However, it is definitely not our goal to have Indian colleagues behaving like Germans. But if both sides approach each other a little bit, different interpretations and systems of meaning are better understood, and misunderstandings become less likely.” Finally, giving clear and detailed instructions was rated to be as important as the establishment of a discussion culture within meetings. A typical statement concerning this management action is given by Mr. D1 who explains that “[the Indian colleagues] require highly detailed and perfectly clear instructions as they would not inquire if something is ambiguous.”

Learning how to deal with such cultural differences between German and Indian

colleagues implies becoming more familiar with the other culture. This again is indispensable for any kind of cultural management, which always pursues the objective to manage cultural differences and not to reduce them. To create such a comprehensive awareness of the other culture and to better understand it, several general management actions (beside the pattern-specific ones presented in the previous paragraph) were employed in the investigated projects. Those actions were not raised by the interviewees as dedicated action items to handle issues resulting from face maintenance, but to help create a broader understanding of the other culture in general, and thus to potentially reduce or mitigate any inter-cultural problems (including problems resulting from face maintenance). In this context, periodic (if possible bidirectional) work assignments on site were deemed the most crucial. Such assignments enable the gaining of insight into a colleagues’ foreign culture and clearly contribute to better understanding each other. The interview partners emphasized that on-site employment in India and vice versa – for a certain time – is indispensable regardless of the costs. Second, non-work socializing team activities like outings or having dinner together were rated important as well, followed by the selection of a project manager with broad intercultural experience who takes a mediating role and operates as a global bridgehead.⁵

5.2 Czech-Specific Results

Having presented the India-specific results, we focus now on the Czech-specific results gained from five interviews with members of the Czech-German IT project teams (projects 1 and 2). **Figure 3** shows the results of combining specific characteristics of culture dimensions to cultural behavior patterns and identifying effects from those patterns to social capital dimensions (**Fig. 1**)

on the basis of our interviews. Relationships other than the ones displayed here could not be identified by the researchers.

Our interview partners (A1, A2, B1, B2, and B3) reported cultural differences between Czech and German team members but also underlined that those differences are in most cases not large enough to cause serious problems within the teams. However, they indicated negative effects of a Czech-specific characteristic which we have labeled post-communism. This pattern is manifested in a preservation of past and current conditions. Changes of state, caused, e.g., by the implementation of a new software system which might be essential to stay competitive, are perceived as unfavorable and unnecessary. Consequently, individual initiative is scarce. If changes must be implemented, an official instruction or “command” by a superior is very important. Without an instruction from an authority nothing will happen, as only such a formal order will reduce personal responsibility and consequently uncertainty among subordinates.

When thoroughly analyzing our interview data against the theoretical background of the GLOBE study’s culture dimensions (House et al. 2004), we found post-communism to be caused by a combination of high power distance, high uncertainty avoidance, and low future orientation. Indicating high power distance and high uncertainty avoidance, Mr. A1 mentions: “In the Czech Republic, everything is very formal. Nothing will happen without the signature of the superior. Everything needs to be signed or at least stamped. [...] Documents which are signed by an apprentice here in Germany have to be signed by an executive in the Czech Republic.” According to House et al. (2004), this reflects high uncertainty which manifests itself in verification of communications in written form (e.g., pp. 618; 640) and a generally high degree of formalization (e.g., pp. 603; 618; 640; 645). Furthermore, it reflects high power distance because subordinates depend on

⁵Beside face maintenance, we found another India-specific behavior pattern raised by our German as well as Indian interview partners. However, it has been rated as less important compared to face maintenance. High in-group collectivism of Indians also means a very strong relationship to the wider family circle which, for instance, can result in Indian team members traveling thousands of kilometers overnight in case of (not even serious) illness of a more or less closely related family member and staying there until the ill relative feels better, while completely neglecting any urgent project deadline etc. As a consequence, some distrust exists on the German side if important deadlines or milestones are imminent since it is always possible that an Indian team member disappears without prior warning. Thus, high in-group collectivism of Indian team members hampers the creation of social capital (relational dimension) because of a “sudden disappearance” behavior pattern. Mr. D1 comments as follows: “If there is any problem in the wider family, they are gone. From one day to the next. They say they need a four week time-out and then they just leave. [...] As a consequence, skepticism on our side is rising the closer a deadline comes. [...] Yes, possibly this could also result in declining confidence on our side.” However, our German interview partners did not employ any management action to handle this issue: “In my view there is nothing you can do. [...] You have to get used to it” (Mr. D1).

their superiors for direction and decision making (House et al. 2004, e.g., pp. 529; 534). With regard to low future orientation, Mr. B1 mentions a lacking acceptance of certain projects: “Most of the Czech team members didn’t see the necessity of a system change. They wanted to keep the old system. [...] As they didn’t consider the system implementation as necessary they became very passive. [...] Individual initiative was rare” (Mr. B1). This was also acknowledged by our Czech interviewee Mr. B2: “The willingness to embrace change is definitely stronger in Germany than in the Czech Republic. This is our mindset. [...] If something works, we do not want something else or new. [...] [In the project,] the users did not want to cooperate with us as they did not want the new ERP system but keep their existing solution. [...] In other projects, I noticed higher resistance to change in the Czech Republic than in Germany, as well.” These statements corroborate the existence of low future orientation against House et al. (2004), who link low future orientation to individuals being less intrinsically motivated in general (p. 302) and lacking the ability to associate present actions and future outcomes, resulting in low achievement motivation (p. 293).

Not surprisingly, however, the interviewees stated that post-communism is only related to older Czech colleagues, who had witnessed the previous political system. Consequently, post-communism has a negative impact on the relationships not only between German and Czech team members but also between old and young Czechs. Regarding social capital, we identified this negative impact as affecting both the relational and cognitive dimension but not the structural dimension. Building trust was hindered by the older Czech team members’ rejection of the project both by their general resistance to change (opinion of both Czech and German interviewees) and by continuous time delays which again were caused by the much more distinct formality on the Czech side as compared to the German side (primarily opinion of the German interviewees). Moreover, the older Czechs people’s resistance to change impeded the creation of shared norms and objectives (i.e., cognitive dimension).

To respond to this specific difficulty by dedicated pattern-specific management actions, our interviewees emphasized the

importance of establishing a common vision within the project team – and if this is not accomplished – even leading to staffing consequences: “Every team member should be involved in the project from the very beginning, be aware of the project objectives and agree to them. [...] If someone in the team does absolutely not agree with the project s/he has to be removed from the team. Otherwise serious problems are to be expected. We experienced exactly such a case. A Czech member did not agree to the necessity of the project and constantly put obstacles into the way. Eventually, he was removed from the team. From that point, the project ran smoothly” (Mr. A2). Of course, it is always of the utmost importance to have a generally accepted project goal and common visions within the project team, regardless of the team members’ cultures. But, such features seem to be even more important in former communist countries like the Czech Republic to handle this kind of post-communism behavior. Our Czech interview partner Mr. B2 made a suggestion towards this direction: “All team members have to pull together. [...] A common objective which is shared by everybody in the team is always the most important thing. This could be even more important in the Czech Republic than in Germany because of our mindset.”

With regard to further general management actions, results are quite similar to the India-specific results. The highest importance is assigned to periodic work assignments on site followed by the selection of a project manager with broad intercultural experience. Moreover, the interview partners recommended non-work socializing team activities as well.

6 Discussion

Our research contributes to existing theory and provides interesting and helpful results for practitioners. In the following, we initially elaborate on our finding’s implications for theory. Afterwards, we show how our results can help managers of multicultural teams better deal with culture-specific behaviors and resulting cultural differences. Finally, we discuss the limitations of our work.

6.1 Implications for Theory

In their interesting work on the impact of cultural differences on offshoring success in a German-Indian setting, Winkler

et al. (2008) identify face-saving behavior on the Indian side as having a negative influence on relationship quality. However, in doing so, the culture-specific behavior (in this case: face-saving) is traced back to only one single culture dimension, namely power distance. In contrast, our approach goes one step further by carefully analyzing a certain culture-specific behavior and tracing it back not to only one single culture dimension but to a bundle of several dimensions. This approach represents our main contribution to existing research and provides a new path that should be followed by researchers in the future analyzing cultural differences in multinational team settings as it allows for a deeper and more thorough understanding of what is really behind a certain culture-specific behavior and thus encourages better management of the relationship problems resulting from such a behavior.

This approach also contributes to existing research by bridging two different strands of IS culture research. In the first strand, which covers topics such as IT adoption, culture is analyzed based on well-known models of culture dimensions like the ones of Hofstede (1980) or House et al. (2004). By contrast, a strictly interpretive lens is chosen in the second research stream in which culture is mostly analyzed in the context of cross-cultural IS working relationships. The main reason for not using Hofstede- or House-type culture dimensions within this second research stream is given by Walsham (2002, p. 376) who stresses that the connection between these dimensions and actual work-related attitudes or actions is normally weak. We acknowledge this argument but, by our approach, build a bridge between the two strands: we propose and apply an approach which identifies links between culture dimensions and specific behaviors appearing in multinational IT project teams. We agree with Walsham (2002) to the extent that a specific behavior often cannot be traced back to one single culture dimension. It is neither appropriate nor sufficient to squeeze a certain (possibly culture-related) behavior into a single, a priori defined variable or dimension. However, we found that a bundle of certain characteristics of multiple culture dimensions indeed results in a specific culture-bound behavior and can explain it accordingly. This argument and the corresponding new approach applied in this paper contributes to IS culture research in general

Abstract

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Analyzing and Managing the Impact of Cultural Behavior Patterns on Social Capital in Multinational IT Project Teams

A Case Study Approach

This paper contributes to a better understanding and to mitigate negative consequences of cultural diversity in multinational IT project teams. Our research explores how culture-specific behaviors impact social capital among team members and how firms can manage the strains. In the existing IS culture literature, culture-specific behaviors are – if at all – traced back to single culture dimensions. In contrast, the approach proposed in this article goes one step further suggesting that it is necessary to combine several culture dimensions to better understand a certain culture-specific behavior and consequently be able to better manage resulting relationship problems in multinational settings. Conducting exploratory case studies in six multinational IT projects, two exemplary cultural behavior patterns (face maintenance in India and post-communism in the Czech Republic) are identified, and management actions to avoid project performance problems are derived. The results contribute to a better understanding and management of the negative impact of culture-specific behaviors in IT project teams and corroborate that research based on culture dimensions, such as those conceptualized by Hofstede or House et al., is valuable for understanding multi-country IS projects. The findings in particular suggest that aggregating these dimensions to cultural behavior patterns improves their explanatory power and consequently the management's capability to mitigate the negative consequences of cultural diversity.

Keywords: Cultural behavior patterns, Differences in national culture, Social capital, Multinational IT project teams, Exploratory case studies, Face maintenance, Post-communism, Management actions

as it provides a link between the two research strands. Elaborating on our approach, we argue that culture dimensions which are well-known and have often been applied in other areas of IS culture research are a reasonable theoretical concept that allows a better understanding of a specific culture-bound behavior as well – though only through a combination of multiple dimensions to cultural behavior patterns (like for example face maintenance or post-communism). Thus, it is important to understand both the culture dimensions and their compound effect on (culture-specific) behavior patterns.

Finally, our work provides a new perspective by linking culture-specific behaviors to social capital. To our knowledge, we are the first to consider the influence of culture-specific behaviors on interpersonal relations in multicultural teams from a social capital perspective, although applying social capital as dependent variable in this context is apparently quite coherent since it has been defined as “the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit” (Nahapiet and Ghoshal 1998, p. 243). Using the three social capital dimensions helps better structure and capture more completely the effects of both cultural differences and management actions on the “social state” within a cross-cultural team.

6.2 Implications for Practice

Our findings show that it is important for project managers to know in which culture dimensions a certain culture-specific behavior (e.g., face maintenance or post-communism) is rooted because this increases their understanding of how to react appropriately. The resulting deeper understanding of a culture-specific behavior in conjunction with behavior-specific as well as general management actions helps to deal more effectively with this behavior and its negative effects on social capital in a multinational team. In doing so, it is, however, not sufficient to take only behavior-specific actions. As our results show, the general actions – with a few exceptions – have been identified to be more important than the behavior-specific ones. This is hardly surprising as general actions, like for example work assignments on site or the selection of a project manager with broad intercultural experience, serve as

a basis for better dealing with problems resulting from any conceivable culture-specific behavior derived from any kind of cultural difference. Such actions help improve the management of the fundamental problem that cultural differences might in general negatively affect social relationships in multinational settings, and are therefore always of the utmost importance in such situations. Elaborating on our results, periodic work assignments on site have been rated most important in both the Indian-Western and the Czech-German teams. This makes absolute sense as one can imagine that culture-bound relationship problems of any kind might be best solved when people meet and talk face-to-face. In contrast, behavior-specific actions (like for instance the establishment of a discussion culture within meetings if existing problems are rooted in face maintenance) are only helpful if the respective behavior really occurs. Thus, such actions help to solve behavior-specific relationship problems, but do not substitute general actions which first and foremost are essential and indispensable for an appropriate management of culture-bound problems in multinational settings.

Summarizing, a more precise understanding of the negative consequences of culture on social capital, along with appropriate management actions (general and pattern-specific ones) to deal with, allows organizations to recognize how such negative consequences could be mitigated and to handle them in a more structured way. Our empirical results might be even more valuable for managers dealing with Czech-German teams since there has been up to now almost no literature that considers relationships in such nearshore settings (in contrast to India-based offshore settings).

6.3 Limitations

The main limitation of our research – as of any case study-based exploratory research – is that our results cannot claim to be exhaustive. Other culture-specific behavior patterns drawing on different bundles of culture dimensions will exist and have a certain impact on social capital within multicultural teams. However, since we investigated multiple cases and tried to capture a high variation among the case contexts, we can be quite sure that we identified those patterns that have a comparably strong impact on social capital.

Another potential issue refers to the question of whether the observed negative consequences on social relationships within the multinational teams are indeed a result of the cultural differences between the two sides (e.g., higher Power Distance, higher Collectivism, and lower Assertiveness of Indian as compared to German team members resulting in face maintenance) or of the characteristics of the culture dimensions per se (e.g., high Power Distance, high Collectivism, and low Assertiveness respectively face maintenance in India). Taking our India-specific results, Mrs. D2 confirmed that face maintenance (especially among young Indians who recently graduated) creates some issues in solely Indian teams as well. However, she also points out that resulting problems are not as serious as in multinational teams because the Indians know “how to play the game” and thus have adapted their management styles to their own cultural behavior. By contrast, people from Western cultures will naturally have larger problems because they have to a lesser extent “internalized” how to deal with such “foreign” phenomena. Consequently, a culture-specific behavior pattern like face maintenance may per se result in relationship problems, but more significant issues can be expected in multinational teams where the characteristics of the culture dimensions underlying this behavior pattern (e.g., high Power Distance, high Collectivism, and low Assertiveness in India resulting in face maintenance) are different to the characteristics of the same dimensions in the other culture(s) being part of the team (e.g., lower Power Distance, lower Collectivism, and higher Assertiveness in Germany as compared to India).

Furthermore, the results could suffer from potential respondent bias as we had the possibility of talking to only one (project 4) or two interview partner(s) (projects 1, 5, and 6) in four of our cases respectively. However, the presence of respondent bias seems to be rather unlikely since the results gained within these cases absolutely confirm the findings from the other cases in which more than two people had been interviewed. Moreover, we have a wide

variation among our cases with regard to various contextual aspects which reduces the likelihood of respondent bias as well. More importantly, our findings are limited to the specific cultural settings investigated (German/Swiss-Indian and German-Czech teams). The results may provide some ideas of how to deal with culture-bound relationship problems for managers from other cultures as well, but they are definitely not generalizable to other cultural settings.⁶ Conversely, it should be emphasized that the reported cultural behavior patterns are not necessarily country-specific although we just talk about “Indian” or “Czech” patterns. Similar patterns will occur in other countries of the same cultural region. For instance, post-communism will also be likely to appear in other Eastern European countries. On the other hand, culture is usually not consistent within one single country. Cultural heterogeneity (Walsham 2002) or “Within-Culture Variation” (Srite et al. 2008) result in individuals from the same country acting in a different manner because they come from different cultural sub-areas. Eventually, the generalizability of our findings might be constrained due to cultural author bias because all the researchers involved in collecting and analyzing the data were Germans.

7 Conclusion

Extending our earlier work (von Stetten et al. 2011a, 2011b), this research provides in-depth insights into the relevance of cultural-specific behaviors in multinational IT project teams and how to manage resulting problems in order to achieve high project performance, by uncovering the relationships between culture-specific behavior patterns, culture dimensions, and social capital. Importantly, we empirically substantiate our argument that culturally driven behavior patterns are rooted in a bundle of different culture dimensions and that a structured analysis of these relationships is necessary for understanding how cross-cultural differences affect the social relationships in a team and thus project work, and how

this impact can be mitigated by proper management actions.

Future research should further elaborate on the relationships between culture dimensions and resulting behaviors. The new approach proposed in this paper of enabling a more thorough analysis of culture-specific behavior by tracing it back to a certain combination of culture dimensions, seems to be helpful for this purpose and, thus, will hopefully be applied by other researchers in the future. Dwelling on specific cultural settings, especially the cultural differences between Germany and typical nearshore destinations in Eastern Europe (e.g., Czech Republic, Poland, Russia) deserve more attention in the future as these differences have rarely been investigated compared to the abundant research on “traditional” offshore destinations like India. Although cultural differences between Germany and typical nearshore locations in Eastern Europe (i.e., the Czech Republic) are less significant, they nevertheless exist, can result in team problems, and should therefore be mitigated. Conducting more research in other nearshore destinations in Eastern Europe may also improve generalizability since a phenomenon like post-communism will possibly be existent in some neighboring countries as well. A further ground for encouraging more research in this area is implicitly given by the GLOBE study (House et al. 2004): comparing the differential scores for the single culture dimensions between Germany and Russia vs. Germany and India⁷ shows that the cultural differences between Germany and Russia are larger (average delta of scores⁸ = 1.1) than between Germany and India (= 0.7). Our research indicates that rather than single culture dimensions but bundles of them (or: culture *gestalts*) might be the appropriate unit of analysis (also for quantitative studies) when comparing cultures and examining the impact of cross-cultural differences.

Finally, the investigation of the Czech-specific behavior pattern (i.e., post-communism) showed that culture can quite significantly change from one generation to the next. In times of globalization, this phenomenon deserves more attention. Socio-political changes, such

⁶We also want to emphasize that our findings must not be understood as blaming Indian or Czech team members as solely responsible for the relationship problems that were reported, nor do we claim that the Indian- or Czech-specific behavior is inappropriate or adverse. The German/Swiss side may indeed also show certain behaviors which contribute to relationship issues; we briefly elaborate on this in Sect. 5.

⁷The result from this comparison could be labeled as “Cultural Distance” between the respective countries (Kogut and Singh 1988).

⁸Scores for evaluating the different culture dimensions are scaled from 1 to 7.

as the Arab Spring, can have a disruptive impact on national culture, and those disruptions often happen in countries which already serve as offshore/nearshore destinations or will be among them in the near future. Subsequent research on the impact of culture should incorporate these exciting dynamics and develop adequate research approaches. In this way, we can be sure that culture will remain a fascinating and important facet of IS research.

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