# MANAGING IT OFFSHORING PROJECTS: AN IT GOVERNANCE APPROACH

Mumin Abubakre, Nottingham Business School, Nottingham Trent University, Nottingham, UK, <u>mumin.abubakre@ntu.ac.uk</u>

#### Abstract

IT offshoring is often carried out by different stakeholders with different working practices in complex and highly politicized settings, creating team boundaries between the stakeholders. Therefore, IT offshoring requires significant governance and coordination across the different teams. The information technology (IT) governance literature suggest that organizations apply IT governance mechanisms to oversee and coordinate IT-related activities to ensure the attainment of business objectives. Thus, on the basis of IT governance theory, this study seeks to better understand the nature of IT governance mechanisms and how they could be effective in bridging boundaries created during IT offshoring projects. These insights would contribute to the existing IT offshoring and IT governance literature, and help organizations have better understanding on how to manage the different boundaries that may arise during IT offshoring projects in order to achieve favourable offshoring outcomes.

Keywords: IT offshoring, Boundaries, IT governance, Case study.

#### **1 INTRODUCTION**

Due to increasing significance of globalization, many organizations' offshore parts of their IT functions/processes to foreign countries to support their global business strategies. This offshore arrangement is normally to facilitate multi-party enterprise knowledge sharing and collaboration to allow organizations deliver innovative and synergistic products/services to their customers. The IT functions/processes that are carried out in an offshore context involves stakeholders (i.e. local and global IT units) with different working practices (Levina and Vaast, 2008). Therefore it may be difficult to achieve the required multi-party enterprise knowledge sharing and collaborative work (Kotlarsky et al., 2014). Multi-party enterprise knowledge sharing and collaborative work is usually poor due to the complex and highly politicized nature of managing globally distributed IT functions/processes. For many organizations, this would usually lead to global-local tension, creating team boundaries between stakeholders (Levina and Vaast, 2008).

Bidwell (2012) investigated how organizational and functional boundaries pose challenges to disaggregated teams. Further, Cummings et al. (2009) and Krishna et al. (2004) show how cultural boundaries negatively impacts the workings of distributed teams. The aforementioned boundaries would hinder communication between expert groups, consequently undermining multi-party enterprise knowledge sharing and collaborative efforts, required for enhanced organizational performance. Therefore, IT offshoring requires significant governance and coordination across the different teams, so as to reduce lead-time and improve quality of work outputs. Organizations apply information technology (IT) governance mechanisms via unit of senior executives to oversee and coordinate ITrelated activities to ensure the attainment of business objectives (Jewer and McKay, 2012). Existing literature on IT offshoring-IT governance suggest that the application of governance and control models of management as possible solutions to tackle IT offshoring difficulties (e.g. Luo et al., 2013; Oshri et al., 2015). While the aforementioned prior research support and acknowledge the beneficial effects for organizations applying IT governance to IT offshoring projects, empirical examination of the nature and influence of the application of IT governance in bridging boundaries created during IT offshoring projects remain rather limited. To this end, the primary research objective of this study is to better understand the nature of IT governance mechanisms and how they could be effective in bridging boundaries created during IT offshoring projects. The understanding of this is vital for the improvement of organisational functions/processes that are implemented in offshore contexts and delivery of innovative products/services, which are vital prerequisites for success in a highly competitive and turbulent business environment.

Further, despite the literature suggesting how boundaries (i.e. organizational, cultural and functional) are created and how they inhibit effective collaboration in global offshoring projects, it remains to be seen, how these or other boundaries impact the IT governance approach required to blur the manifested boundaries. Equally, it is also important to examine the IT governance approach that is most suitable for a specific boundary. This is vital because it would prevent organizations taking a one-size fit all approach to IT governance but allow better management of the different boundaries that may arise during IT offshoring projects.

Thus, on the basis of IT governance theory, this study seeks to address the following research questions: how do manifested boundaries during IT offshoring impact an IT governance approach? And how can IT governance blur boundaries and establish effective collaboration during IT offshoring? An in-depth case study of a global information and communication technology company's IT offshoring projects to address these questions.

The remainder of this paper is arranged as follows. First is the theoretical background of the study, which reviews a body of literature to present supporting perspectives on the link between boundaries in offshore collaborations and IT governance mechanisms. Next, is the discussion of the proposed research design and methods, which highlights how data will be collected and analysed. Finally, is the discussion of the study's anticipated contribution to knowledge.

# 2 THEORETICAL BACKGROUND

## 2.1 Boundaries in IT Offshoring

The manifestation of firm boundaries during IT offshoring are becoming increasingly complex (Bidwell 2012), making it ever more important for us to understand how offshoring organisations can blur manifested boundaries. Boundaries, which demarcate fields, arise from differences in practices across fields (Levina and Vaast, 2008). This would likely cause disorganization in teams' responsibilities and their relationships with each other. Boundaries, which impede work collaboration, will arise within shared collaborative work when differences among people's interests and practices begin to manifest as status markers (Metiu, 2006). Thus boundaries can influence how knowledge is "transformed" to become an integrated part of a synergistic solution (Vlaar et al., 2008).

As highlighted by Espinosa et al. (2003), there have been numerous studies on team boundaries, including geographic, temporal, functional, identity-based, organizational, expertise-related (i.e., novice and expert team members), cultural (i.e., multiple nationalities), historical (e.g., different versions of the same product). Bidwell (2012) also studied team boundaries along social and political lines. Nonetheless, it would be too onerous to investigate all boundary issues in a single study. Therefore, it is perhaps practical to study the specific boundaries that are prevalent and salient in organizational teams impacted by the implementation of IT projects.

IT project, as an example of an organizational practice implemented across fields' highlights potential pre-existing differences in the work practices of different stakeholders involved in IT project. Thus, practices surrounding the development of a new IT can produce a unique distinction between agents who govern the design and those who do not, a differential development effort, which may create boundaries (Levina and Vaast, 2008).

Taking the premise to study team boundaries due to the impact of IT implementation, prior literature have discussed how boundaries are manifested in offshore collaborations, along the lines of organizational, functional (Espinosa et al., 2003) and cultural (Cummings et al., 2009; Walsham, 2002), boundaries that create impediments to effective collaboration in IS projects. Walsham (2002) found out that differences in cultural norms had to be renegotiated during the development and

implementations of software projects to arrive at a shared set of norms. Further, previous studies highlight how organizational boundaries are manifested due to agents having different organizational affiliations based on their different identities, interests, and practices (Jarzabkowski, 2004; Levina and Vaast, 2008). It can be argued that organizational affiliations and boundaries are due to the building of internal capital (intellectual, social, and symbolic resources), which facilitates the creation of shared systems of meaning (Nahapiet and Ghoshal, 1998) and would differentiate one organization from another. The capital sharedness is a necessary condition for achieving successful collaborative work as without shared engagement and, common understanding collaboration is unlikely (Levina and Vaast, 2008). Thus, in an IT offshoring project, organizational boundaries may manifest due to lack of shared intellectual, social, and symbolic resources, leading to power dynamics that undermines collaboration (Nicholson et al., 2006). Nonetheless, given the high status (higher intellectual resources and symbolic significance) of large western client organizations, offshore vendor employees may be keen to affiliate with the processes of their offshore clients (Ravishankar and Pan, 2006), leading to possible blurring of organizational boundaries. This highlight that despite the existence of boundaries, different stakeholder may still have some shared interests and purpose (Levina and Vaast, 2008). Perhaps, another plausible reason for this might be the governing mechanisms put in place by the western client to manage and coordinate the processes and relationships across the teams. In a more recent study, Ceci and Prencipe's (2013) highlight that distance creates knowledge boundaries during offshoring, thereby increasing the intrinsic complexity of the international division and coordination of innovative work. They further argue the need for new organizational practices to blur such knowledge boundaries. To this end, we conclude that effective governance of the IT offshoring projects is necessary to blur boundaries and establish effective collaboration and knowledge transfer.

# 2.2 IT Governance

The IT governance literature identifies two distinct streams to define and explain IT governance: IT governance contingency analysis and IT governance structure.

The first stream - IT governance contingency analysis is concerned on "how and why" of IT governance fit (Brown and Grant, 2005). This research emphasizes the contingencies of IT governance structures to identify, which option is best for which organization, through an analysis of factors (e.g. organizational structure, firm size, and business strategy) that affects individual IT governance framework success. For example, Bowen et al. (2007) found that achieving effective IT governance is connected with direct involvement of IT steering committees, alignment of IT and business views during IT decision making, and well-communicated IT strategies and policies. IT Governance contingency analysis perspective resonates with studies that explore how effective IT governance can be deployed via the mechanisms of alignment processes and communication approaches (Weill and Ross, 2004).

Brown and Grant (2005) argue that the second stream of IT governance i.e. IT governance structure deals with the direct relationship between decision-making structures that IT organizations adopt and IT governance. They further suggest that this perspective highlights the centralized and decentralized nature of IT governance. A centralized IT governance design emphasis that the decision-making authority is strictly in a central IS organizational body, while the decentralized governance approach suggests that all decision-making authority is the responsibility of the individual business units or processes (Brown, 1997).

The centralized form of IT governance provides greater control over IT functions and processes, consequently providing greater opportunity for improving productivity. On the opposite side of the scale, the decentralized form allows business units to adapt functions and processes to respond to their requirements (Wetherbe, 1988). The centralized and decentralized form of IT governance resonates with the vertical (i.e. top down approach) and horizontal (bottom-up approach) IT decision-making structure respectively. Studies taking this perspective is concerned with a mix of decision-making structures, processes and relational mechanisms.

This study will adopt Brown and Grant's (2005) IT governance structure perspective to argue that IT governance can be deployed via a mix of structures (i.e. roles and responsibilities of organizational

units), processes (activities of strategic decision making, and monitoring to ensure IT policies are consistent with business needs), and relational mechanisms (IT/ business interactions vital to the IT governance framework) (Weill and Woodham, 2002). Taking this approach would allow the exploration of how IT offshoring, which involves different stakeholders with different working practices are governed and the understanding of the appropriate IT governance mechanisms required to blur boundaries that are created during IT offshoring projects.

# **3 RESEARCH DESIGN AND METHODS**

The qualitative case-study method is proposed to undertake the study. As argued by Yin (2009), the case study method is beneficial to providing deep insights to complex socio phenomena in real-life contexts. This will be achieved by taking the single case study approach to explore the research objective. This exploratory approach would help bring fresh insights on the research topic. Ericsson is the organisation that will be studied. Ericsson, a world leader in the manufacture of ICT equipment, provision of software and ICT services that deploy virtual IT teams in an offshore context. Thus, provides an ideal context to generate rich insightful data to explore the proposed research aim.

Case access to Ericsson was negotiated via a senior IT staff of the organisation by proposing the research proposal, and he and his manager extended their full support to the proposed reserach and they show keen interests in getting an independent perspective of the organisational consequence of implementing IT operations/functions in an offshore context. I have had informal conversation via email and telephone with my contact to gain an understanding about Ericsson, its ICT departments and ICT processes. This helped provide some insights on the problems Ericsson is facing regarding their IT offshoring projects.

## 3.1 Data Collection

In order to understand the emergent properties of the relevant IT governance mechanisms in relation to IT offshoring and to counter potential biases in the research process (Wynn and Williams, 2012), this research propose to employ the multiple data collection methods. First, a total of 30-35 individual, semi-structured field interviews is proposed to be conducted with key Ericsson staff involved in IT offshoring projects. The interviews would start by interviewing onsite staff (Stockholm) with a standard interview guide and would evolve based on informants insights and prior findings (from the literature) and identifying changes, to develop an understanding of the organizational structure of how IT work/process are implemented in an offshore context. Subsequently, there would be interviews of team members based offshore (via video calls), and managers from supporting functions. The interviews will be digitally recorded with informants' permission and transcribed verbatim. To ensure each interview accurately captures the participant's thoughts, each will be given a copy of their interview transcripts to check for accuracy.

In addition to interviews, attending of relevant meetings will be made to serve as unobtrusive observations. Extensive field notes will be taken during all observations and later electronically transcribed. Other data collection methods will include review of archival data, and informal conversations with key participants. The proposed fieldwork is to commence in July 2016 for a fourweek period.

# 3.2 Data Analysis

The analysis will commence by reading several times the interview transcripts (i.e. data-reduction process). This data-reduction process will facilitate the identification, categorisations and descriptions of the themes that informants frequently, spontaneously or concisely conceptualised. Data coding will be based on codes related to the research questions and concepts being examined (data reduction).

Reliability for the coding process and developed codes will be established using inter-rater assessment (Boyatzis 1998; Miles and Huberman 1994). To check for bias, an academic conversant with qualitative data analysis but not associated with the research project will be given the coding template, a summary of the research project and a brief description of the case. Thus, there would be a

comparison and check for any inconsistencies in the coding to established the appropriate code. This approach is to provide a strong support for the reliability of the data coding and findings (Lapointe and Rivard 2005).

The second stage of the data analysis will involve creating a series of conceptually ordered displays in order to study in more depth, the emergenet themes from the codes. The final stage, will be the identification of common, unique and causal features in the data that would present fresh insights into the different processes that occurred during the IT offshoring projects and the role IT governance played. To achieve this, the literature will be revisited to help synthesize the findings with existing literature. This will help the satify the requirment of external validity of the study.

## 4 ANTICIPATED CONTRIBUTION TO KNOWLEDGE

The study from the IT governance perspective, will provide important new contributions to the understanding of how boundaries across IT offshoring projects can be blurred to achieve effective collaborative work. Further, this study would contribute to the extant literature on IT offshoring by demonstrating how global team boundaries (i.e. organizational, cultural and functional) or other boundaries may impact an IT governance approach and highlight the IT governance approach that is most effective to manage specific team boundaries. These insights should help organizations have better understanding on how to govern and manage the different boundaries that may arise during IT offshoring projects in order to achieve favourable offshoring outcomes.

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