1

Knowledge Overlap in Nearshore Service Delivery

# **Knowledge Overlap in Nearshore Service Delivery**

Research-in-Progress

J.W. Brooks

Loughborough University j.w.brooks@lboro.ac.uk

M.N. Ravishankar

Loughborough University m.n.ravishankar@lboro.ac.uk

I. Oshri

Loughborough University i.oshri@lboro.ac.uk

#### Abstract

Multinational organizations now increasingly source tasks from nearshore units. While, offshore locations promise superior opportunities for cost savings and access to large scale, flexible workforces, organizations are increasingly distributing work much closer to home (Deloitte 2014). One of the biggest attractions of nearshore locations is proximity. In principle nearshore units are geographically, temporally, and culturally closer to their onshore counterparts reducing the cost and coordination effort to manage distance. Despite the anticipation that onshore units and nearshore units will operate effectively from distinctive and separate knowledge bases, they continue to be bogged down by knowledge overlaps. Knowledge overlaps (KOs) are a duplication of information and know-how of specific migrated activities that allow onshore units to retain control of nearshore units. In this paper, we draw on data from an on-going qualitative case study to demonstrate how nearshore units manage KOs and relinquish control of processes.

**Keywords:** Nearshoring, Knowledge overlaps, Service delivery, Control

## Introduction

Multinational organizations now increasingly source tasks from nearshore units. Nearshoring describes the transfer of business process or technology tasks to a location that is relatively close to, or shares borders with, the organization's home country or its primary market (Softek 2015). The main attraction of nearshoring is its proximity, the nearness in space, time and relationship (OxfordDictionaries 2016), to the organization. Organizations use nearshoring to overcome some of the challenges of offshoring such as geographic and temporal distances, high employee attrition rates, and cultural differences (Levina & Vaast 2008; Srikanth & Puranam 2011). In offshoring relationships, onshore units mitigate boundaries by retaining employees with knowledge of offshored processes. Thus, they are able to monitor and control as well as bridge gaps in understanding with offshore units (Gregory et al. 2013; Tiwana & Keil 2007). However, duplicating resources can be both costly and ineffective (Dibbern et al. 2008). Retaining duplicate knowledge onshore can reduce the benefits of offshoring. It can stop onshore units from better utilizing local resources and offshore units from gaining control and mastery over processes. Therefore, it is not surprising that organizations are turning to nearshore locations in the hope that proximity will reduce the costs and difficulties of doing work, and reducing the need for duplicated resource.

However, in this paper we show that proximity does not intrinsically mitigate the challenges of offshoring. Onshore units tend to continue retaining employees with knowledge of nearshored processes. Consequently, despite their proximity, nearshore units continue to experience difficulties in gaining control of those processes. We draw on knowledge overlaps (KO) to conceptualize the duplication of information and know-how of specific activities across two distributed locations (Sears & Hoetker 2014; Tiwana & Keil 2007) and consider the consequences they have for nearshore units. With very few exceptions (Levina & Ross 2003; Mao et al 2008; Palvia et al 2010; Gopal et al. 2011) the challenges of distributed service delivery is told from the client or onshore unit perspective. We know far less about the nearshore delivery unit's perspective and how they cope with knowledge overlaps.

We draw on preliminary data from a nearshore finance shared service unit (SSU) of a global logistics organization to answer our main research question: How do nearshore units experience and manage knowledge overlaps? Preliminary data suggests that process KOs result in misaligned expectations with the onshore unit resisting process changes. As a consequence, the nearshore unit is unable to implement process changes and realize cost savings, efficiencies and process improvements. In answering our main research question this paper makes two main contributions. First, we explore KOs in the context of nearshoring. In theory, when barriers are relatively low, incorporating KOs are not necessary because there is a greater cultural affinity as well as geographical and temporal closeness. We make a case that this close distance-cultural affinity argument is overstated. Our results suggest that onshore unit's controlling behaviors continue because of the perceived risks of knowledge loss, ownership and trust. Second, prior literature on KOs has focused on the effect of KOs from the onshore perspective (Sears & Hoetker 2014; Tiwana & Keil 2007). This paper addresses this gap by exploring how nearshore units are affected by and manage KOs. In doing so we show how KOs can be detrimental to a nearshore unit's ability to transform services and realize the potential benefits of nearshoring. We anticipate practitioners may find the paper useful for designing supplier management capabilities, or building retained organizations. This paper may also help nearshore units manage knowledge overlap scenarios.

## **Nearshoring**

Geographic and temporal distances prove a difficult challenge to overcome in offshoring relationships (Levina & Vaast 2008). Different time zones and long distance travel can be costly and inconvenient. Geographic distances can impact the frequency of face-to-face communication, an important facet of developing cross-border relationships, common understanding and trust between distributed teams (Zimmerman & Ravishankar 2014). Cultural differences pose a further set of problems (Ravishankar et al. 2010; Ravishankar 2015). While cultural affinity enables onshore-offshore teams to have shared meaning, shared frames of reference, and similar expectations about how work is done (Su 2015; Zimmerman & Ravishankar 2011), overcoming such complex cultural barriers to collaboration is challenging and can add to the extra costs involved (Dibbern et al. 2008). Similarly, offshoring scenarios can create particular difficulties for knowledge sharing. In a recent study of offshoring relationships, Zimmerman and Ravishankar (2014), show how an absence of social capital can have a detrimental impact on the ability and willingness to share knowledge. In response to these problems, onshore units rely heavily on monitoring and controls to combat potential opportunism and to drive value from offshoring ventures (Dibbern et al. 2008). They retain experts onshore to manage and coordinate offshore units as well as create an interface for shared understanding (Lacity & Fox 2008). However, research suggests such strategies (e.g., retaining process experts onshore) are an expensive duplication of resources and contradictory to the principles of distributing work - to reduce costs and better use local resources (Tiwana, 2009; Tiwana and Keil 2007).

Given these inherent problems and contradictions with offshoring, nearshore locations are rapidly becoming an attractive alternative for distributed work (Strasser et al 2015). Typical examples of nearshoring include the transfer of work from the UK to Europe, or from US to Mexico. Multinational organizations now increasingly source tasks from nearshore locations in order to overcome some of the challenges and costs of offshoring (Abbott & Jones 2012; Strasser et al. 2015; Hahn 2011). Nearshore units offer proximity to their clients and relatively easy boundaries to distributed work. For example, nearshore locations have the advantage of reduced time differences as well as lower mobility costs compared to offshore arrangements (Abbott & Jones 2012). Nearshore locations, which have the advantage of relative proximity, are less likely to experience such severe knowledge asymmetries. Further, do not suffer the same stigma of high attrition rates and potential knowledge loss. Instead, nearshore units offer onshore units the reassurance of comparatively stabile workforce with less risk to the predictability or quality of service delivery. Proximity enables nearshore units to offer cultural affinity between them and their onshore counterparts. In theory, nearshoring enables a clear division of work and

processes between onshore and offshore units reducing the need for expensive and harmful knowledge controls.

## **Knowledge overlap and Nearshoring**

Existing research suggests that, without difficult geographic and cultural boundaries to contend, the cost and effort needed to coordinate, manage and control work or compensate for knowledge and cultural asymmetries is reduced (Carmel & Abbott 2007; Levina & Vaast 2008). In a nearshoring relationship the onshore unit has less need to duplicate resources and retain knowledge of processes delivered by the provider. Instead, processes are likely to be clearly demarcated and split between the onshore and nearshore unit. However, despite these efforts to maintain separate and distinctive knowledge bases, nearshore units can experience knowledge overlaps. Knowledge overlap (KO) describes the degree to which the knowledge base of one unit is similar or overlapping with another (Sears & Hoetker 2014). KOs usually manifest in the duplication of information and know-how of specific activities across two distributed units (Tiwana & Keil 2007). KOs represent duplicate and obsolete knowledge that can become costly for the organization (Bloodgood 2015; Tiwana 2007; 2008). In effect an organization is employing two people with the ability to do the same task when only one is required to perform the process. Here, along with the economic traps of duplicating resources, organizations are face the danger of stifling their learning potential (Whitaker et al. 2010). Obsolete or duplicate knowledge limits the ability to recognize the value of new knowledge and to come out of dogmatic routines (Bloodgood 2015). For example, in a study of technology mergers Makri et al. (2010) show how duplicate knowledge reduced the quantity and quality of novel recombination. Organizations relying heavily on KOs are less likely to realize a key opportunity of distributing work: freeing up onshore resources to focus on core-capabilities or those that have the potential to generate more strategic value (Tiwana 2007; 2008).

However, knowledge overlaps are often seen as necessary in the offshoring context. KOs can help to ease the challenges of working across complex boundaries that inhibit effective collaboration and coordination in offshoring (Levina & Vaast 2008). Typically, onshore units retain some employees with knowledge, specific to offshored processes, which allows them to monitor and measure the performance of their offshore counterpart and reduce the potential for opportunism (Tiwana & Keil 2007). KOs also act as an insurance against high staff-turnover, a widely reported problem in the offshoring context, and consequential knowledge loss (Dibbern et al. 2008). Research has also recognized the importance of KOs to reduce knowledge and status asymmetries that can inhibit cooperation and performance (Levina & Vaast 2008). KOs result in a shared technical lexicon, frames of reference, and common understanding (Su et al. 2015). Consequently, two separate units, with separate knowledge bases, are able to communicate, translate meaning, build relationships (Levina & Vaast 2008; Zimmerman & Ravishankar 2011) and problem solve (Brusoni et al.2005) across boundaries. In doing so, knowledge is recombined in novel ways creating opportunity for learning and transformation of the knowledge base.

More recent studies of KOs have addressed this paradox by looking more thoroughly at the nature of KOs. For example, Bloodgood's conceptual paper (2015) compares the need for KOs to absorb new knowledge versus its potential to limit creativity and create new knowledge by asking: 'how much is too much?. Sears & Hoetker (2014) study of the innovation in technological acquisitions suggests that the direction of asymmetrical KOs, where the acquirer may know more about the target or vice versa, is important. However, we have yet to understand why nearshore units, whose proximity assumes boundaries will be reduced, continue to experience KOs. Further, while a plethora of research into KOs, considers the impact for the onshore unit, we have very little understanding about how they impact their counterpart. The following sections of the paper outline the methods we used in addressing our research question, 'How do Nearshore units experience and manage knowledge overlaps?', before presenting the finding of our case. Next the paper discusses those findings in light of our current understanding of the literature, identifying our contributions and making recommendations for future development.

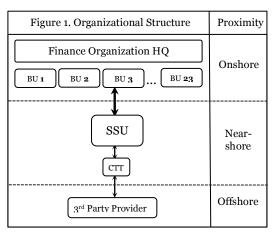
## Field Research

The research is based on the preliminary data of an on-going qualitative case study (Mayasandra 2006; Walsham 1995; 2006), which aims to understand the challenges of transforming services in distributed work. The three key criteria for case selection were: Provider maturity (provider has been operating for

over 3 years), they are a subsidiary of the parent organization, and they operate offshore. As a result of the criteria, and the virtue of opportunity, the Financial SSU of a global logistics firm has been selected.

The research is set in a global logistics firm who currently employ over 490,000 people. The firm, whose HQ is based in central Europe, centralize their finance operations into a European Finance Shared Services (SSU) based in the Netherlands. The SSU constitutes the nearshore units in this case. The firm selected the Netherlands as a nearshore location due to its proximity to the firm's HQ, as well the organization's 23 European country level business units (BUs). The Netherlands provides the SSU with access to highly educated employees with strong language capabilities. Service Level Agreements (SLAs) are in place between each country BU and the nearshore SSU. Each SLA has specific country level requirements and different levels of service provision. All BUs have a Chief Financial Officer (CFO) based onshore in the country. Some BUs also retained team of onshore 'controllers' who manage the work delivered by the nearshore SSU.

A major part of the SSUs role is to transform processes and provide new tools. It is anticipated that this will reduce costs of finance for the BUs and the finance organization. Consequently, The SSU outsources transactional Accounts Payable (AP) activities to an offshore, third-party provider, in Bangalore. At the time of data collection they had a contract for 80 FTEs. Some AP activities are context specific or more complex and require the SSU to support the offshore unit. Further, although the offshore unit is responsible for the delivery of activities, the SSU is accountable under contract to the onshore BUs. To support and the offshore team and manage the work they deliver, the SSU has developed a small "Control Towner Team" (CTT) also based in the SSU Netherlands office. Figure 1 depicts the structure of the distributed finance organization.



# **Data Collection and Analysis**

The first two rounds of data collection took place in the Netherlands based head office over a week in March 2015 and in January 2016. During these two weeks, we conducted 17 interviews with a range of management positions including: Global Process Owners, Process Experts, BPO Managers, Transition and Transformation Managers. All but one interview presented in the paper are from SSU informants. Interviews were one-to-one and lasted between 60-140 minutes. The interviews began with an introduction to the informant, their position, and an 'average day' in their role. The rest of the interview was largely unstructured – although informants were prompted to talk about the 'change' and 'challenges' of their work. The intention was to let interesting themes emerge from the data collection whilst beginning to understand the distribution of work, challenges, and change over time. Documentation was also collected including: internal communications, performance dashboards and employee opinion surveys as well as photographs of the offices and award schemes.

Data analysis was conducted in two phases following each round of data collection. Data analysis from Phase 1 helped to inform the data collection in Phase two. Analysis of each phase was conducted in the same way and in four stages. First, we transcribed each of the interviews, studied the data and made extensive notes to identify emerging themes of each interview individually. Second, we identified common themes or ideas across the dataset. The notion of knowledge overlaps – the retention of process knowledge emerged organically from the data across interviews (Strauss & Corbin 1998). Third, we coded all information referring to KOs and organized them by sub-theme (Strauss & Corbin 1998): Perceived causes, consequences, and how they were being managed. Fourth, we iterated between the data and the literature exploring KOs in distributed work. From the table we coded management activities into second-order interpretive concepts: convincing, migrating, and proving. Broad coding and sub-coding was undertaken in Nvivo 9.

## **Analysis**

The empirical material shows that KOs occur where work is moved, or split across, the onshore business unit and the nearshore SSU. The SSU acquires process knowledge from the onshore business units during migration. However, where process experts are retained or redeployed, the same process knowledge can also exists in the onshore unit. Members of the SSU describe the consequences of KOs when the onshore teams use that knowledge to control the SSU. Below, we present an analysis of the results of the interviews conducted during our fieldwork. We begin by outlining KOs and the consequences they had for the SSU. We then identify some of the ways in which the SSU reduced the impact of KOs and gained the support of their customers, which enabled them to transform processes. This analysis is followed by a detailed discussion section.

## **Knowledge Overlaps**

As with many transition projects, where work is moved from an onshore business unit to an offshore unit processes are partitioned or split across between units. Often, when activities are transferred, the process experts who had previously performed the activities are also transferred, or more typically, are dismissed. In this case of nearshoring, a large number of process experts were also redeployed into controlling roles – monitoring and managing the activities delivered by the SSU.

You need to hire the guys who did the job before. Your works council will not accept that you just fire everybody and hire new people. So you end up with these people in-house that do not have the right profile and may not be the best people to do the controlling work P.1.2

The above suggests that the overlap in knowledge may happen as a 'side-effect' or by-product of redeploying employees which resulted in a residual, or 'left-over', knowledge. However, SSU members suggest that in some cases the BUs chose to retain 'a local team with a lot of knowledge' (P.1.4) in order keep control of processes. A BU member explains why his BU wants to understand the process in detail:

When a person understands the ins and outs of a process then they are perfect to go into project management. If a guy in the operations team says: "No, things should be done like this, this and this," You can challenge them. You understand it and you don't just take their word for it. P.2.3

#### Consequences of Knowledge Overlaps

The nearshore SSU members describe the two main challenges they face as a result of process KOs: misaligned expectations and the inability to transform processes. One SSU member suggests that controllers, who had previously been 'process experts', had expectations based on how they had performed the process. This often led to them being overly critical, becoming involved or taking over:

Even if we enhance the process they compare it with three years ago...They will always criticise what the other person is doing because they think did a better job before. One person even took over and did the complete activity herself! How on earth? 'P.1.2

The SSU also report difficulties in convincing CFOs to allow them to transform processes. Changes in the activities or the way they are performed meant that BUs would have less understanding of the process. Consequently, the SSU is not permitted to change processes:

We are doing the same activities for 10 business units but we were still doing it in the same way as each individual unit used to do it before. P.1.1

SSU members describe how the BUs did not enable the SSU to transform processes. However, at the same time, they were dissatisfied with the lack of value the SSU was providing:

I think because they had to pay for services they feel like it's their money. BUs are continuously pressuring us to drive costs down, whilst at the same time they are not allowing us to change and to optimise the process, which will allow us to decrease the costs. On one hand they want us to drive cost reductions and on the other hand they won't allow us to make the changes to do that. Its... interesting. P.1.9

SSU team also describes their frustration at the conflicting demands of the BUs, who resist change and dictate what services they require, and the wider Finance Organization who require process standardization for efficiency and cost saving:

If the business unit didn't want to change then they didn't change. We were delivering a service and that service had to be what the business unit needed. The Finance organisation said: "Your role as a shared service centre is to standardise". We try to standardise but the business unit doesn't want to change. It did not get anywhere. P.2.1

#### Managing Knowledge Overlaps

As Table 1 shows, the nearshore SSU put several practices in place to encourage the onshore BUs not to utilize their process knowledge and to relinquish the control of process. However, without a top-down mandate from the finance organization, a big part of the SSUs job was convincing CFOs of the benefits of migrating activities and proving their capabilities.

We did not have the stick or the backing to make them. That's not really our company's way. So we spent a lot of time discussing it and convincing them to bring the services here. P.1.2

However, several respondents suggested that convincing was not enough. Once they had convinced CFO's to migrate activities the SSU had to prove their ability to stabilize the process before BUs would relinquish control and 'forget':

Once it's here, and its working, then business units start to let it go. After 2 years they don't understand the processes anymore because they are not involved in the day to day. If things are going well then they are very hands off. P.1.2

One way in which the SSU members proved their value was to promote the ways in which the SSU was able to assist BUs in a wider scope. One SU member describes how, "They started to realize that because of the centre, they got Tools"...

Technology could be implemented that they would never manage on their own. For example, the Workflow Tool, which manages invoice approval. It's not easy to deploy that. Now the countries don't have to build their own project teams and can focus on other stuff. So more and more we have examples of the centre adding value in the area of technology and process change. P.1.1

The SSU also leverages success stories, or other BU entities as proof points to continue to convince more challenging BUs to accept changes and to relinquish controls over activities:

So if you go to a next country you can say "Look, these are the results from the countries where we have implemented it," and it becomes a little bit easier to sell, if you want, the solutions even though we're still at the moment where we're making a switch from pushing the solution, which usually people don't like. P.2.4

A member of the BU collaborated the importance of trusting the capabilities of individuals in the SSU when handing over control. This was an important challenge the SSU faced when convincing the BUs of the value of further offshoring processes to a third-party provider in Bangalore:

When the manager in the SSU understood the process as well as I did it was a lot easier for me to hand over. Now I don't have to worry because the Manager can control it. If it gets out of hand they would know how to put it back into alignment...If the Manager is not going to be there, that would frighten me. I've had this good relationship. I know that person and I know they're controlling. If the SSU outsource that puts a question mark over it. Would that person be the same calibre? Have the same commitment? Would they have the same interpersonal skills and communication level? A lot of things come into play. P.2.3

One way in which the SSU team reduces this anxiety is to convince BU members that the SSU will remain accountable for offshore activities. The SSU retain people with knowledge of the processes they offshore in order to maintain a trusted, knowledgeable interface for the BUs and, reduce the risk of knowledge loss.

We try to explain it. We know the IT, the systems and the processes very well. The third-party are very weak in handing over knowledge and most of those original people will have left. But the people are still here [SSU] and we have captured it and gained and built experience. P.1.9

Another way the SSU prove themselves is to be actively transparent. SSU members describe the extent to which they have open and honest conversations, thorough reports, and regular review meeting to keep CFOs and their teams involved on a more broad level:

We meet with CFOs on a monthly bases and explain what was the process, what was done. Give visibility, show results. But it is not easy. The trust is not there it takes time to build. P.1.4

You really need to go and meet with the people personally and then what you'll find out in the shared service centre community is nobody's hiding. P.2.8

SSU members they found that putting aforementioned measures in place meant that knowledge duplication naturally reduced where BUs allowed them to transform. They no longer understood processes in detail and therefore were no longer equipped to leverage it for control. For example:

They did not have visibility of the daily activities anymore. They could not influence these daily activities. The good things was that the quality improved because we were able to change the process and standardise. P.1.6

| Table 1: Managing KOs |                                  |  |   |  |
|-----------------------|----------------------------------|--|---|--|
| Knowledge<br>Overlap  | Consequence<br>of KOs on<br>SSU  | SSU<br>Management<br>Practice              | Examples from the data  |  |
| Residual<br>Knowledge | Misaligned<br>expectations       | Encourage to forget                        | Most of them left because they didn't like the job anymoreThey did not have visibility of the daily activities anymore and could not influence them. The good thing was that the quality improved because we were able to standardise. P.1.6  |  |
| Retained<br>knowledge | Inability to transform processes | Convince                                   | So a lot of the time was a discussion and the convincing we had to do to bring the services here. P.1.2  They see 'oh they also went to university, they have read the books, and they already did a bit for work for us or for the country next door' P.1.1  |  |
|                       |                                  |  | It's like a mourning process. If we change processes it's exactly the same. They need to say goodbye to something that they've been using before and it very difficult to get people over that first hill. People go "Yeah, yeah. Yeah, yeah," still believing it never will be P.2.2  We have to talk, talk and talk with them face-to-face to |  |
|                       |                                  |  | explain the benefits and what happens if we don't do it. <i>P.2.7</i>   |  |
|                       |                                  | Make results<br>transparent<br>and visible | We meet with CFOs on a monthly basis and explain what was done. We give visibility by showing the results. But it is not easy. The trust is not there it takes time to build. P.1.4   |  |
|                       |                                  |  | We try to with communication that is very structured and is regular and keep them up-to-date. We do to try to keep them involved and informed. P.2.7  |  |

| Pro and trus | 0        | If things are going well then they treat it like – this is not my problem anymore. They are very hands off. P.1.2  Once it's here, and it's working, then they start to let it go, and then they are not involved anymore. After 2 years they don't understand the processes anymore because they are not involved in the day to day. All the knowledge in the countries after 2-3-4 years is just gone P.1.1  "They started to trust us, so 'Oh yeah. They can do that'. Trust is difficult to build. It took really a long time. P.1.1 |
|--------------|----------|--|
| offe         | note and | We show them results from the countries where we have already implemented it and it becomes a little bit easier to sell. We are making a switch from pushing the solution, which usually people don't like, to selling the solution. P.2.4  Technology could be implemented that they would never manage on their own. P.1.1   |

## **Discussion**

Knowledge overlaps (KOs) occur where duplicate knowledge exists across two or more distributed units. It can be the case that instead of fully handing over knowledge to their counterparts, onshore units retain employees who understand how a process is performed in order to monitor or control migrated processes. It can also be the case that onshore units redeploy staff which used to perform the processes within the organization, which results in residual, or left over, knowledge. In both cases, the onshore units duplicate knowledge of distributed processes resulting in KOs. The above analysis shows the consequence of KO for nearshore service units. First, KOs, particularly from residual knowledge, can result in misaligned expectations based on how the process has previously been performed onshore. Data shows that misaligned expectations can result in the onshore unit being overly critical of the service delivery and the nearshore team. Consequently, the nearshore unit is not able to satisfy their onshore counterpart despite their commitment to process improvement. Second, KOs, from retained knowledge, enables the onshore unit to deliberately monitor and control the nearshore unit. Changes to the process inevitably limits the onshore unit's understanding of the process and their ability to enforce controls (Kirsch 2004). Therefore we see that the onshore counterpart maintain KOs by resisting change. Our analysis shows that this can have a detrimental impact on the nearshore unit's ability to deliver services effectively or provide value for the wider organization. Results show the SSU team were frustrated by the onshore unit who anticipated that the SSU would transform processes and yet they were reluctant to relinquish the control of process to actualize it. The SSU moved to defend their value in the network by balancing these paradoxical tensions. Our case shows how the SSU went to great lengths to give visibility (of results not how the processes are performed), to convince (through persuasion and communication), to prove (by stabilizing activities and gaining trust) and by selling ideas (using self-promotion of their capabilities and offering new services) to their onshore counterpart. The first two management practices, visibility and convincing, required them to better communicate the potential cost-saving benefits and reassure their onshore counterparts. Analysis shows that the nearshore unit recognizes the importance of proving their capabilities to reassure onshore units that transferred knowledge is not lost knowledge. The SSU leverages past success, trust, personal relationships, and offer a track record of stability to reassure the onshore counterparts and encourage them to relinquish control. Lastly, the SSU endeavored to offer new tools and solutions for their internal clients (where no overlaps existed) to showcase their abilities and value within the network. Our research addresses a gap in our current understanding of KOs by focusing on the nearshore unit's perspective. Our research shows how the SSU augment processes and realize the wider value potential of nearshoring to provide benefits for the organization, the onshore BUs and secure their own position in the network. Our exploration of the case has also brought to light two surprising elements. First, the analysis shows a difference in the types of KOs, retained knowledge and residual knowledge, and the impacts they have on the nearshore unit. Retained knowledge describes employees with specific process knowledge deliberately kept onshore to manage work across boundaries (Levina & Vaast 2008). Residual knowledge

refers to understanding of processes that is left onshore as a by-product of redeploying employees who had previously performed processes. Our analysis shows that residual knowledge will decay overtime as processes change and visibility is reduced. While onshore units cannot actively manage 'forgetting', they can ease this process by not relying on onshore counterparts for support and stabilizing activities until they disengage in daily operations and lose interest. However, onshore units facing retained KOs are required to actively manage them to relinquish control. Second, prior research shows that one of the main attraction of nearshoring is it proximity to the organization. The nature of proximity means that organizations do not face the difficulties or costs of negotiating severe geographic and cultural boundaries. Therefore, the need for boundary spanning KOs is reduced. However, results show that nearshore units continue to face KOs. Our research shows that the tendency for onshore units to leverage KOs for control transcends both geographic proximity and cultural affinity. Instead, ownership, anxiety over knowledge loss and personal resistance are key influences over the use of KOs. This paper argues that transparency, a track record of capabilities, and personal relationships are more influential in encouraging onshore units to reduce KOs than proximity alone. Managers may find the paper useful when designing or building suppler management capabilities, or retained organizations by having more understanding of how KOs impact supplier units. This paper may also assist nearshore units by offering examples of how our example case coped under such conditions.

## **Future Developments**

In the next two months we will complete the third round of data collection with 4 CFOs and their teams in 4 BUs. We intend to expand the paper by developing our argument in two ways: First, develop the case that competency, trust and transparency play a bigger role in encouraging onshore units not to maintain KOs than proximity (geographic and cultural). Second, to draw out the dynamic elements of the study. Our data shows that KOs imposed by the onshore unit change over time. We intend to develop theory by arguing that KOs are not a static phenomenon but need to be managed overtime.

#### References

- Abbott, P., and Jones, M. 2012. "Everywhere and nowhere: nearshore software development in the context of globalization", *European Journal of Information Systems*, (21:5), pp. 529-551.
- Bechky, B. 2003. "Sharing Meaning Across Occupational Communities: The Transformation of Understanding on a Production Floor," *Organization Science*, (14:3), pp. 312-330.
- Bloodgood, JM 2015. "Acquiring External Knowledge: How Much Overlap is Best?", *Knowledge & Process Management*, (22:3), pp. 148-156.
- Brusoni, S., 2005. "The Limits to Specialization: Problem Solving and Coordination in 'Modular Networks", *Organization Studies*, (26:12), pp.1885-1907
- Carmel, E., and Abbott, P., 2007. "Why Nearshore Means that Distance Matters", *Communications of the ACM*, (50:10), pp. 40-46.
- Dibbern, J., Winkler, J., and Heinzl, A. 2008. "Explaining Variations in Client Extra Costs between Software Projects Offshored to India", *MIS Quarterly*, (32:2), pp. 333-366.
- Gopal, A., Espinosa, J., Gosain, S., and Darcy, D. 2011, "Coordination and Performance in Global Software Service Delivery: The Vendor's Perspective", *IEEE Transactions on Engineering Management*, (58:4), pp. 772-785.
- Gregory, R., Beck, R., and Keil, M. 2013. "Control Balancing in Information Systems Development Offshoring Projects", MIS Quarterly, (37:4), pp. 1211-A4.
- Hahn, E.D., Bunyaratavej, K. and Doh, J.P. 2011. "Impacts of risk and service type on nearshore and offshore investment location decisions", *Management International Review*, (51:3), pp. 357–380.
- Kirsch, L.J. 1996. "The Management of Complex Tasks in Organizations: Controlling the Systems Development Process', *Organization Science*, (7:1), pp. 1-21.
- Levina, N., and Ross, J 2003, "From the Vendor's Perspective: Exploring the Value Proposition in Information Technology Outsourcing", MIS Quarterly, (27:3), pp. 331-364.
- Levina, N., and Vaast, E., 2008. "Innovating or Doing as Told? Status Differences and Overlapping Boundaries in Offshore Collaboration", *MIS Quarterly*, (32:2), pp. 307-332.
- Makri, M., Hitt, M., and Lane, P., 2010, "Complementary Technologies, Knowledge Relatedness, and Invention Outcomes in High Technology Mergers and Acquisitions", *Strategic Management Journal*, (31: 6), pp. 602-628.
- Mani, D., Kannan, S., and Bharadwaj, A. 2014. "Efficacy of R&D Work in Offshore Captive Centers: An Empirical Study of Task Characteristics, Coordination Mechanisms, and Performance", *Information Systems Research*, (25:4), pp. 846-864.
- Mao, J., Lee, J., and Deng, C. 2008. "Vendors' Perspectives on Trust and Control in Offshore Information Systems Outsourcing', *Information & Management*, (45:7), pp. 482-492.
- Mayasandra, R., Pan, S.L. and Myers, M.D. (2006) Viewing information technology outsourcing organizations through a postcolonial lens. In Trauth, EM, Howcroft, D, Butler, T, Fitzgerald, B, De Gross, JI (ed) *Social Inclusion: Societal and Organizational Implications for Information Systems*, Springer, pp.381-396.
- OxfordDictionaries. Proximity. Oxford University Press. Website: http://www.oxforddictionaries.com/definition/english/proximity. Accessed 30th August 2016.
- Palvia, P., King, R., Xia, W., and Palvia, S. 2010. "Capability, Quality, and Performance of Offshore IS Vendors: A Theoretical Framework and Empirical Investigation", *Decision Sciences*, (41:2), pp. 231-270.
- Ravishankar, M.N., Cohen, L., El Sawad, A. (2010) Examining resistance, accommodation and the pursuit of aspiration in the Indian IT-BPO space: reflections on two case studies, *Industrial Relations Journal*, 41(2), pp.154-167.

- Ravishankar, M.N., 2015. "The realignment of offshoring frame disputes (OFD): An ethnographic 'cultural' analysis", *European Journal of Information Systems*, (24:3), pp.234-246.
- Tiwana, A., and Keil, M. 2007. "Does Peripheral Knowledge Complement Control? An Empirical Test in Technology Outsourcing Alliances', *Strategic Management Journal*, (28:6), pp. 623-634.
- Tiwana, A. 2008. "Does Modularity Substitute Ignorance? A Study of Alliance Performance in Software Outsourcing", *Strategic Management Journal*, (29:11), pp. 1241-1252.
- Tiwana, A. 2009. "Governance-Knowledge Fit in Systems Development Projects", *Information Systems Research*, (20:2), pp. 180-197.
- Sears, J., and Hoetker, G. 2014. "Technological Overlap, Technological Capabilities, and Resource Recombination in Technological Acquisitions", *Strategic Management Journal*, (35:1), pp. 48-67.
- Softek. 2015. Nearshore Outsourcing. Website: http://www.softtek.com/approach/nearshore-outsourcing. Accessed 4th April 2016.
- Srikanth, K., and Puranam, P. 2011. "Integrating Distributed Work: Comparing Task Design, Communication, and Tacit Coordination Mechanisms", *Strategic Management Journal*, (32:8), pp. 849-875.
- Strauss, A. L., and Corbin, J. M. 1998. *Basics of Qualitative Research (2<sup>nd</sup> ed.)*, Thousand Oaks, CA: Sage Publications.
- Strasser, A. and Westner, M. 2015. "Information Systems Offshoring: Results of a Systematic Literature Review". *Journal of Information Technology Management*. (26:2), pp.70-142.
- Su, N. 2015. "Cultural Sensemaking in Offshore Information Technology Service Suppliers: A Cultural Frame Perspective", *MIS Quarterly*, (39:4), pp. 959-983.
- Walsham, G. 1995. "Interpretive case studies in IS research: nature and method," *European Journal of Information Systems*, (4:2), pp. 74–81.
- Whitaker, J., Mithas, S., and Krishnan, M. 2010. "Organizational Learning and Capabilities for Onshore and Offshore Business Process Outsourcing", *Journal Of Management Information Systems*, (27:3), pp. 11-42.
- Yin, R.K. 2003. Case Study Research: Design and Methods. London: Sage Publications.
- Zimmermann, A. and Ravishankar, M.N. 2014. "Knowledge Transfer in IT Offshoring Relationships: The Roles of Social Capital, Efficacy and Outcome Expectations, *Information Systems Journal*, (24:2), pp.167-202.
- Zimmerman, A., and Ravishankar, M.N., 2011. "Collaborative IT Offshoring Relationships and Professional Role Identities: Reflections from a Field Study', *Journal of Vocational Behavior*, (78:3), pp.351 360.