Regulating Vendor-Client Workarounds: An Information Brokering Approach

Research-in-Progress

Introduction

Many organizations now source tasks from shared service units (SSUs). SSUs are dedicated centers, focused on a particular business function, which delivers common and standardized services, from a central point, to different parts of the organization (Fielt et al. 2014; Gospel & Sako 2010; Gartner 2013). Shared service models have become increasingly popular with large multinationals including General Electric, Unilever, and more recently Vodafone and Diageo (Davis 2005). A typical SSU provides services back to its internal clients more efficiently and at a reduced cost (Herbert & Seal 2012). SSUs are expected to improve existing processes and service delivery (Fielt et al. 2014), deliver new services (KPMG 2014), and even generate revenue (Lacity & Fox 2008), whilst at the same time continuing to drive down costs for the larger organization. Increasingly, many SSUs themselves are turning to outsourcing to gain benefits of labor arbitrage, access to new skills, and to free up internal SSU resources for value-adding activities (KPMG 2014).

SSUs are, thus, in the interesting position of being a provider to their internal clients and a customer to their external vendors. Increasingly, SSUs face a particularly difficult challenge in performing their role effectively. Internal clients and external vendors, in violation of formal procedures, tend to accomplish tasks by exchanging information with each other, completely bypassing them (the SSU) in the process. The opening up of such vendor-client communication back channels for straightforward queries can be quicker, easier and result in more efficient resolutions. However, serious problems arise when communication processes and exchanges become invisible to the SSU. The use of such illegitimate communication channels lead to what we refer to in this paper as Vendor-Client (V-C) workarounds.

Drawing on the notion of 'workarounds' (Davison & Ou 2013; Ferneley & Sobreperez 2006) we define V-C workarounds as the information exchanges between external vendors and internal clients without official sanction. While some V-C workarounds improve information flow, many others cause disruptions resulting in inefficiencies in operational processes and loss of strategic control. The difficult but important problem of managing V-C workarounds, to limit detrimental impacts whilst encouraging or accommodating those of potential benefit, has been largely understudied in the IS literature (Rivard & Lapointe 2012; Safadi & Faraj 2010). This paper draws on preliminary data from the shared finance unit of a global logistics organization and addresses the question: How do SSUs regulate existing V-C workarounds to benefit information flow? In answering the question we take an Information Brokering perspective to help explain the how SSUs leverage their position as intermediaries and manage information interfaces to regulate workarounds.

This research contributes to a growing body of IS literature on workarounds. It considers how, in practice, workarounds can be regulated to limit detrimental impacts whilst exploiting positive impacts in globally distributed work. The paper aims to add to the growing body of research on shared services. It draws attention to the challenges SSUs face as the use of shared services continue to evolve (Oshri et. al 2015). This research also contributes to our current understanding of Information Brokering which, to our knowledge, has not been explored in the context of shared services. The SSU context illuminates challenging scenarios in which Brokering is adopted to overcome additional barriers to effective information flow. The study contributes to the literature on Brokering roles and practices by providing further insight into the challenges Brokers face and how they continue to regulate information channels to assists the overall flow of information. The preliminary results show how one SSU, through specific brokering practice, was able to reduce confusion, increase process visibility and control, and promote end-to-end process improvement. Practitioners managing SSU or similar forms of intermediary units may find the results useful when managing workarounds in their own organizations.

Workarounds

Workarounds are a deliberate act of non-compliance with official policy (Alter 2014; Alvarez 2008) in order to overcome real or perceived obstacles to workflow (Davison & Ou 2013; Yang et al 2012). In order to work around obstacles, individuals or groups diverge from formal procedures or systems put in place to manage and control processes (Alvarez 2008; Ignatiadis & Nandhakumar 2009). The impacts of workarounds can be hinderous, harmless or essential to workflow (Ferneley & Sobreperez 2006).

The detrimental impacts of workarounds have been widely explored. For instance, studies in medical settings have shown how employees working around protocols and established procedures can cause serious risks to patient safety (Azad & King 2008). Similarly, in a study of user-resistance to ERP implementation Boudreau and Robey (2005) show how to 'save time', employees worked around a desktop automatic 'log-off' security feature by asking other employees to 'click' on their screens frequently, thus posing risks to information security.

Workarounds are known to have negative impacts on interrelated or subsequent activities (Alter 2014; Azad & King 2011). They are also known to result in disengagement with systems and information protocol. For example, studies have demonstrated how employees ignore new ERP packages, relying instead on shadow and feral systems (see. Ferneley & Sobreperez 2006; Ignatiadis & Nandhakumar 2009). Such informal systems can damage the quality and security of data through data loss, data duplication, data misuse or inconsistencies (Ignatiadis & Nandhakumar 2009). They can also encourage resistance to new technology or formal systems by way of providing an alternative (Boudreau & Robey 2005; Orlikowski 2005). Broadly, this group of studies has shown how workarounds lead to low adoption rates, misaligned system objectives and reduce returns on investment.

The key issue with workarounds is that they overcome obstacles temporarily without really addressing the deeper issues of structure, process and culture (Kobayashi et al. 2005). They hide errors or inefficiencies that should otherwise be flagged and corrected (Gasparas & Monteiro 2009). As they do not have official sanction, workarounds are often hidden from management making them difficult to identify (Alter 2014). Consequently, problems with formal systems and processes may never be correctly identified (Gasparas & Monteiro 2009).

Some recent studies have focused on the advantages workarounds can have on information and workflow (Ferneley & Sobreperez 2006). The most immediate advantage of workarounds is that they assist the continuation of work (Ferneley & Sobreperez 2006; Kobayashi 2005). Ferneley and Sobreperez suggest that workarounds compensate for flaws in existing systems by creating 'idiosyncratic methods of data collection, data management or working practice, in effect ensuring essential task completion" (2006 p. 347). The continuation of work through workarounds can reduce the impact or bottleneck effect on subsequent activities. Therefore, some studies suggest that while workarounds do impact interrelated or subsequent stages of a process it may be to positive effect (Ferneley & Sobreperez 2006).

Workarounds signal obstacles in formal work practices that need to be overcome (Vassilakopoulou et al. 2012). For example, lack of user functionality or over-complicated processes may be a shortcoming of a formal system or process hindering the employee's ability to complete a task efficiently. Identifying where workarounds are happening is a way to identify issues in the formal process. Further, workarounds may help to provide a solution to formal process issues. Workarounds, by nature, point to an alternative, quicker, if not more efficient, way of getting things done (Ferneley and Sobreperez 2006; Safadi & Faraj 2010). In this respect, workarounds may be a source of creativity or innovation. Literature supports the notion that "hacks and workarounds are the soul of innovation" as they invite creative solutions from ground level beyond top down directives (Norman 2008 p.48). Consequently, workarounds often become adopted as formal, or recognized informal practice (Koopman & Hoffman 2003; Safadi & Faraj 2010). Organizations typically prevent, reduce or eradicate workarounds in order to control information quality and flow (Ignatiadis & Nandhakumar 2009; Orlikowski 2005). However, organizations may also need to leverage the positive impacts of workarounds, such as task completion and bottom-up process improvements, whilst limiting the disruption caused through invisible information and lack of control.

In short, existing studies explore workarounds from the perspective of user-resistance (Alverez 2008), explore the multiple impact of workarounds (Ferneley & Sobreperez 2006), and the efforts involved to discourage workarounds from emerging (Kobayashi et al. 2005; Orlikowski 2005). However, we know

less about how workarounds are regulated once they become routinized (Azad & King 2008; Rivard & Lapointe 2012). For example, Rivard & Lapointe note there is sparse literature that focuses on the implementers and their response to "dysfunctional" workarounds (2012 p.898). This research intends to address this gap by asking how workarounds are regulated to benefit information flow.

V-C Workarounds and Distributed work:

The need to manage and regulate workarounds is elevated in the shared service context. Organizations that coordinate distributed work are required to manage information across complex organizational, professional, political and cultural boundaries as well as geographical and temporal distance (Levina & Vaast 2008). Unless carefully managed, workarounds pose a threat to the visibility and predictability of information and information flow.

SSUs are under increasing pressure to deliver high-value services to their internal customers as well as continuing to drive down costs for the function. In order to benefit from lower labor costs, and allow them to focus on value-adding activities, SSUs increasingly outsource some activities they had originally performed in-house. This creates a complex internal market in which the SSU is both the provider to their internal client and the customer to the third party vendor. Information such as requirements and business data flow from the internal clients to the SSU. The SSU redistributes relevant information to allow third-party vendors to complete activities. Information in the form of completed activities flow back from the vendor to the SSU, who remain accountable for service delivery to their internal clients. Having a view over individual silos of information and an overview of the whole process allows the SSU to identify and resolve issues of information quality and information flow.

However, a big challenge SSUs face in negotiating information is where internal clients talk directly to external vendors. On one hand, direct communication between Vendor and Client allows some queries to be dealt with more quickly and efficiently. This acts to assists the SSU in maintaining information flow and process efficiency. However, ongoing information exchanges between the Vendor and Client can cause backchannels to open up. One consequence of unregulated backchannels is that information bypasses or becomes invisible to the SSU. In order that information flow can benefit from V-C workarounds SSU are required to regulate them effectively.

In this paper we draw on the notion of Brokering which illuminates the roles of intermediation and interface management in the management of information (Burt 1992; Leonardi & Bailey 2013; Pawlowski & Robey 2004). Brokers perform intermediary roles to collect, connect and disseminate information as well as manage interfaces to buffer and guard information. A Brokering perspective draws attention to the intermediary position of SSUs, as an important conduit of information between internal clients and external vendors, and provides useful vocabulary to explore how SSUs manage interfaces to regulate V-C workarounds.

Information Brokering

Brokering is the management of knowledge (Currie & White 2012; Hsu & Lim 2014), information (Leonardi & Bailey 2013), technology (Hargadon & Sutton 1997) or ideas (Leonardi & Bailey 2013) across otherwise disconnected groups (Burt 1992). Brokering has been studied by scholars across disciplines, with particular prevalence in Organization, Management Studies and Information Systems research, to understand how information can be mobilized and translated to different groups across an organization.

Information Brokers are intermediary units positioned to assist the flow of information across disconnected groups (Burt 1992; Pawlowski & Robey 2004). One task Information Brokers perform is to collect, connect and disseminate information (Leonardi & Bailey 2013). Brokers leverage their position to gain sight of multiple information silos allowing them to recognize and correct information inefficiencies or gaps as well as identify and sell good ideas (Leonardi & Bailey 2013; Pawlowski & Robey 2004). In order to do this, Brokers adopt two roles. First, Brokers are Scouts who identify information from otherwise disconnected silos (Ancona & Caldwell 1992; Leonardi & Bailey 2013). Secondly, Brokers are Ambassadors who lobby for resource, translate information across communities of practice (Bechky 2003; Carlile 2004) and promote the potential value of information connectivity (Leonardi & Bailey 2013). As external agents, Brokers are accountable for the quality and flow of information between groups (Pawlowski & Robey 2004). In order to monitor and protect the quality, direction and flow of information

across boundaries, as well as defend the value of their position within the network (Currie & White 2012; Mehta & Bharadwaj 2015), Brokers perform two additional gatekeeping roles. Brokers are Sentries, controlling the in-flow of information and Guards, protecting the unwanted out-flow of information (Ancona & Caldwell 1992; Mehta & Bharadwaj 2015).

Brokering literature helps to explain the intermediary and interface management practices SSUs adopt to regulate V-C workarounds to manage information. SSU's that outsource activities are in an intermediary position between their internal clients and the third-party provider. By virtue of their position, SSUs have access to multiple silos of information and are ideally positioned between vendor and client exchanges. Further, SSUs use a form of interface management, by way of 'gatekeeping' to protect information. SSUs are responsible for the delivery of processes to its internal clients regardless of the quality of information the clients provide. SSUs face the challenge of controlling the quality and predictability of information coming into the system in order to limit any detrimental impacts on subsequent processes. Brokering roles also helps to explain the importance of interface management in protecting information feeding back into the groups. SSUs, positioned as external agents often with their own SLAs and accountabilities, are also under increasing pressure to safeguard their position and ensure their own long-term survival.

Brokering literature has only recently been explored in the context of distributed work: including offshore software development (Mehta and Bharadwaj 2015) and offshore digital engineering services (Leonardi & Bailey 2013). In a study of offshore software development Mehta and Bharadwaj (2015) suggest that Sentry and Guard practices in particular are more complex in outsourcing scenarios due to the multiple organizational boundaries. SSUs, who are simultaneously a client, a vendor, and an intermediary, adopt different brokering roles. They are exposed to severe information silos and complex brokering challenges. The study contributes to the Brokering literature by considering how the role of the Broker will adapt or extend to accommodate such complexities and continue to manage information flow.

In sum, we have discussed how SSUs face the challenge of regulating V-C workarounds: SSUs need to limit detrimental impacts, whilst encouraging or accommodating those of potential benefit. We draw on Information Brokering literature, which illuminates the importance of intermediation and interface management, to explain how SSUs position themselves to regulate workarounds to benefit information flow. Next we present the preliminary stages of a qualitative case study that investigates how a SSU regulates a V-C workarounds.

Methods

The research is based on the preliminary data of an on-going qualitative case study (Walsham 1995; 2006). A qualitative case study is appropriate given the exploratory nature of this research (Eisenhardt 1989). It allows us to collect the in-depth data necessary to capture the complex contexts in which shared services operate and evolve – many aspects of which are under-researched (Yin 2003). It also allowed the notion of workarounds to emerge organically from the data. In order to explore the challenges shared services face the key criteria for case selection were SSU maturity (SSU has been in operation for over 3 years and is still in growth), they operate offshore, and that they outsource activities to a third party provider. As a result, the Financial SSU of a global logistics firm has been selected.

Research Site

The research is set in a large global logistics and communications firm who currently employ over 490,000 people worldwide. Finance operations for one of the largest service lines are centralized into a European Finance SSU (SSU). The SSU provides a range of financial operations, including Purchase-to-Pay, Record-to-Report and Order-to-Cash, to business units in 23 countries across Europe. The SSU provides services to the business units through a charge-back service and are accountable for the management and delivery of service. SLAs are in place between the SSU and internal business units.

Each business unit has specific requirements and different levels of service provision, from basic transactional work to process ownership. This means there is very little standardization of information coming in from business units. Informants describe their frustration at issues with incoming data as the same clients often complain that the services is not meeting their expectations. Further, and often as a consequence of dissatisfaction, clients show reluctance to hand over control to the SSU. Some country

units retained a small team to manage work delivered by the SSU and to keep sight of the process. In a drive to further reduce costs and demonstrate the potential future benefits of the SSU, to business units and the regional CFO, the SSU outsourced Accounts Payable (AP) activities from the Purchase-to-Pay service line. They now have a contract for 80 seats with a large third-party vendor in Bangalore. AP activities are largely transactional. However, some are context specific or more complex and the vendor often require the SSU to support them with queries. Further, although the vendor is responsible for the delivery of activities the SSU is accountable, under contract, to the internal-client.

Data Collection

So far we have conducted nine interviews with a range of management positions including Global Process Owners, Site Manager, and Transition and Transformation Managers. The data presented in this paper is formed only of SSU informants and took place in the Netherlands based head office over the course of a week in March 2015. Interviews lasted between 60 and 120 minutes. The interviews began with a brief introduction to the informant, their position and a walk through an 'average day' in their role. Informants were also asked how their roles had changed since joining the organization. The rest of the interview was largely unstructured – although informants were prompted to talk about the 'change' and 'challenges' of their work and asked to elaborate or give examples of 'how' situations or events occurred. The intention was to let interesting themes emerge from this first round of data collection whilst beginning to understand organizational structure, workflow, and change over time. While this paper offers a study from the perspective of the SSU, the next phase of data collection will include interviews in country business units as well as the SSU.

Data Analysis

We analyzed the preliminary data in four stages. First, we transcribed each of the nine 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 vendor-client workarounds, motives, impacts and management tools emerged organically from the data across all interviews (Strauss & Corbin 1998). Six interviews discussed workarounds in detail. Third, we coded all information referring to workarounds and created a table organizing them by theme (Strauss & Corbin 1998). The broad themes emerging where: descriptions of workarounds, causes, challenges and how they were being managed. Fourth, during a review of Workarounds literature, we turned our focus to the management theme. From the table we coded management activities into second-order interpretive concepts, (collecting information, connecting information, filtering information and protecting, hiding or guarding information).

Preliminary Findings

We will now present some of the preliminary findings[1]. First we provide a brief description of the V-C workaround and challenges the SSU face. Second we present a table of the management tools the SSU employs to regulate workarounds.

V-C Workaround description

The SSU are aware that some country units *"don't play the game"* and communicate directly with the vendor for a range of queries. One respondent acknowledges that some communication between vendor and client is unavoidable due to the lack of detail the SSU has about specific invoices:

> *You can't stop countries having direct contact to discuss a number of their issues. There was a very long issue lists and we are lost to discuss the things we didn't do ourselves anymore…It's difficult to have detailed conversations about an invoice that went totally 'belly-up' and why that was, because we didn't see it. We could see it on the IT infrastructure, we could get out the*

[1] We use the general term 'Vendor' to anonymize the case organization.

> *images or whatever, but there were no operational people doing this bit of work. (Head of BPO, Change and Business IT)*

Communicating directly means individual clients' issues can be resolved quickly. However, as issues are being resolved directly between each clients and the vendor, and on an ad-hoc basis, common issues are not being flagged or resolved in the long run:

> *If there's an issue they just go ask somebody [Vendor] to solve the issue but not look at the root cause. The people who need to be involved are not involved. The issue is solved but then it comes over and over and over again. (Process Expert / Control Tower Lead)*

Further, established back-channels cause confusion for the Vendor. They are often unclear about when to use formal and when to use informal information channels. Confusion and misaligned expectations often result in dissatisfaction from the Client and additional information challenges for the SSU:

> *The Vendor did not know 'should I go here', 'should I go there' and 'who should I involve'. (Process Expert / Control Tower Lead)*

The SSU also expressed their concerns over the impact back-channels have on their process control:

> *CFOs in all these countries were still holding us responsible for the service. We outsource it to Vendor but that's our decision - they still keep us accountable. And so we don't want 10 CFOs to speak to Vendor and influence them. If you allow that, Vendor starts to change processes to please one CFO, change the same process in another way for another CFO and it will go in all direction. Plus you cannot control that. (Transition and Transformation Manager)*

How the SSU regulates a V-C workarounds

In the following table (Table 1.) we draw on Brokering roles to help explain how the SSUs regulates workarounds through intermediary and interface management strategies.

Table 1. Preliminary Results

Role	Definition	Broker Practices	Supporting Data
Scout	Identify and collect silos of information	Improve visibility of information: Employ Systems and tools to assist Standardization	Last year we put in place an overall yield for P-to-P to measure performance. How an invoice goes from when it arrives to when it's paid and if there are some interventions…To look at the issues through the chain and not only to look at the issues at the Vendor agents side but also to look at what is required from the business (Process Expert / Control Tower Lead) The UK only have the view of one country. The Control Tower team see what is happening in the UK, and 'oh, it's also happening in Sweden and Norway and France and in the Netherlands. So Vender what's happening?' We are able to see this pattern happening…They will not look at the individual invoice but have an oversight of the whole European performance (Transition and Transformation Manager)
		Improve quality of information: Employ Systems and tools to assist Standardization	Requests were being sent by various tools. There were no standard tools in place and no standard approval process in place. So what they did was implement a workflow - which was used in other processes and this workflow helps to have approval upfront, so the right approval and also the people are forced into providing some restricted input…so the tools are also forcing the standardization. (Transition and Transformation Manager) Look at what is required from the business, what is required from the quality of the invoice, what is required from the quality of the process? (Process Expert / Control Tower Lead)

Ambassador	Connect information and sell ideas	Create Clear communication channels between SSU and Client and between SSU and Vendor	It's very important to have the communication with the business because any change done on finance field has a direct impact on or improvement for the business or for the CFOs and the rest of finance. (Process Expert / Lead on Control Tower) With an outsourcing provider shit in is shit out. If you do not give them good instructions you will not get good output in terms of quality so that means that we needed to put in place extra things (Global Deployment Manager new workflow approval tool / HR Project Manager) Client Regional CFO goes to one place and gets his answers. The country CFOs would not know the answers to his questions because they are not involved with the Vendor on that level (Process Expert / Transition Manager)
		Mediate information and relations across business units	If Vendor are saying we need a bit of information and they are not getting it from the country they can raise it through control tower - 'Hey country 'x' isn't doing this for us' and country 'x' says 'Hey these guys in Vendor aren't'...So it can go both ways (Head of Transitions and Transformation: Client Side) If you want to standardize the processes I think it is better to have it in a central place. In the countries that still have it there, the satisfaction is still around 5/10 because the process is still not running that well because they have expectation this team, on the vendor and their expectations are not aligned with the global approach and this is a big challenge (Process Expert / Lead on Control Tower)
		Create value through connecting information	The control Tower is there to continually look for process improvement opportunities…new tools, better processes, learning from other customers (Process Expert / Transition Manager) If you don't look at the end to end process you will not get the responsibility of these processes in the right location (Process Expert / Transition Manager)
Sentry	Buffer or filter incoming information	Create interface: Control Tower Team	Experienced people here act as an interface between our customers – the CFOs in all these countries who are still holding us responsible for the service (Process Expert / Transition Manager) We don't want 10 CFOs to speak to Vendor and influence them. If you allow that Vendor starts to change processes to please one CFO, change the same process in another way for another CFO and it will go in all direction. Plus you cannot control that. 'If you have a problem, talk to us and we will deal with Vendor' (Transition and Transformation Manager) Now if they had an issue they would go through the control tower. For Vendor the Control Tower do a number of countries otherwise they [Vendor] would have thousands of people calling (Head of Transitions and Transformation: Client Side)
Guard	Protect or Filter outgoing information	Hide information: Limit the retained unit in country increasing reliance on SSC	For some countries 3 years ago we looked at the process and for those countries what is left in the country is close to zero so they fully rely on the center here to manage with Vendor. And other countries, Ireland is an example, UK is another example where they kept this team and the expectation from those teams are not the same and they don't have full visibility on all the tools we have. The approach Belgium took was to say – 'no we don't have resources here anymore – make it happen' (Process Expert / Lead on Control Tower) (SSU) took everything except the controller. The country CFOs did not have visibility and could not influence the daily activities anymore. The good things was the quality improved (Head of Transitions and Transformation: Client Side)

The preliminary data begins to show additional Brokering practices. The SSU takes on a Regulatory role: controlling and directing according to rule. The SSU leverages its expertise, know who and know how, to

ensure that contractual information is directed through the SSU. The importance of such information is identified and directed in order to retain control:

> *You cannot just change something there are always consequences. So there are change control processes between us and Group. There is not a contract between Vendor and client. So whenever there was a change in the contract, the Control Tower Team [in SSU] knows what to do and who to contact (Process Expert /Transition Manager)*

In order to more effectively regulate information, the SSU utilizes the Control Tower Team (CTT), which has both positional and power advantage, to monitor information exchanges and challenge poor information flow.

> *The retained organization in country is working on a day to day basis with the Vendor to perform the activities whereas the control tower is less involved, or almost not involved in the day to day activities. They review on a weekly basis the performance of the Vendor, they challenge the Vendor, where the Client is less challenging to the Vendor (Program Manager / Head of Transitions and Transformation: Client Side)*

> *They now look at issues. They look at performance. They review on a daily basis with the Vendor and prepare a service performance review which happens with the Client units. They are really moving into reporting, analysis of information and challenging the Vendor (Process Expert /Transition Manager)*

Discussion

The preliminary data presented above begins to show how SSUs are able to regulate workarounds. Data suggests that the quality and predictability of information is important to the SSU who is responsible for processes and service delivery. In order to manage information effectively, the SSU adopts Brokering roles. Preliminary results show that the SSU acts as a Scout by utilizing its position as an intermediary to identify and collect information in a useful way: namely through visibility over disconnected groups and information standardization tools. The SSU takes on an Ambassador role by leveraging its position between Client and Vendor to connect information, mediate communication, and reduce status and relational issue. In doing so the SSU enable some communication between the Client and Vendor, allowing the continuation of work and issue resolution, without losing sight of the information being exchanged. By maintaining a presence between units they are positioned between vendor-client exchanges and can more easily step in where necessary. Preliminary results suggest that the SSU have created a client and vendor interface, a Control Tower, in order to buffer and filter information moving across the functional organization. They protect the vendor from information overload, and reduce confusion caused by workarounds. One way in which the SSU Guards information is to hide it from their clients. The SSU tries to reduce the knowledge clients retain in-house in order that they become increasingly reliant on the SSU for process delivery. Respondents suggest that countries that rely on the SSU, and in effect 'don't interfere', show greater satisfaction with the service. Further, the SSU sees improvements in the flow of information.

In addition, the preliminary data suggests that SSUs are extending the traditional Brokering role in order to overcome challenges arriving from its complex network. The SSU has created a Control Tower which has elevated its advantage from one of position to power. The Tower uses Regulatory practices, assisted by its view of Information and political gusto, to challenge units when information flow is disrupted, reducing the need for workarounds. Further, the SSU retains control over important information exchanges by promoting their own knowledge and limiting the groups' ability to avoid official channels.

In the next phase of data collection we will conduct further interviews, in the SSU and in country business units. In doing so, this research hopes to contribute to a growing body of IS literature on workarounds. The paper aims to add to the shared services literature by identifying the new challenges that SSUs' face as they evolve to take on multiple roles. More broadly, this ongoing research also extends our current understanding of Information Brokering which, to our knowledge, has not been explored in the context of shared services. The study provides further insight into the challenges units face and how they adopt brokering practices in order to continue to regulate information channels and assists the overall flow of information. Practitioners managing SSU or similar forms of intermediary units may find the results useful when managing workarounds in their own organizations.

References

Alter, S. 2014 "Theory of Workarounds," *Communications of the Association for Information Systems*, (34), pp. 1041-1066.

Alvarez, R. 2008. "Examining technology, structure and identity during an Enterprise System implementation," *Information Systems Journal*, (18:2), pp. 203-224.

Ancona, D. G. and Caldwell, D. F. "Bridging the Boundary: External Activity and Performance in Organizational Teams," *Administrative Science Quarterly*. (37:4), December, p634-665.

Azad, B. and King, N. 2012. "Institutionalized computer workaround practices in a Mediterranean country: an examination of two organizations," *European Journal of Information Systems*, (21:4) pp. 358-372.

Bechky, B. 2003. "Sharing Meaning Across Occupational Communities: The Transformation of Understanding on a Production Floor," *Organization Science,* (14:3), pp. 312-330.

Boudreau, M. and Robey, D. 2005. "Enacting Integrated Information Technology: A Human Agency Perspective," *Organization Science*, (16:1), pp. 3-18.

Burt, R. S. 1992. *Structural holes: social structure of competition*. Harvard: Harvard University Press.

Burt, R. S. 2005. *Brokerage and closure: an introduction to social capital*. Oxford: Oxford University Press.

Carlile, P.R. 2004. "Transferring, Translating, and Transforming: An Integrative Framework for Managing Knowledge Across Boundaries", *Organization Science*, (15:5), pp. 555-568.

Currie, G., and White, L., 2012. "Inter-professional Barriers and Knowledge Brokering in an Organizational Context: The Case of Healthcare", *Organization Studies* (33:10), pp. 1333-1361.

Davis, T.V. 2005. "Integrating shared services with the strategy and operations of MNEs," *Journal of General Management*, (31:2), Winter, pp. 1-17.

Davison, R.M. and Ou, C.X.J. 2013. "Sharing Knowledge in Technology Deficient Environments: Individual Workarounds amid Corporate Restrictions," in *21st European Conference on Information Systems in Utrecht*, June 5-8.

Eisenhardt, K. M. 1989. "Building Theories from Case Study Research," *Academy of Management Review* (14:4), pp. 532-550.

Ferneley, E. and Sobreperez, P. 2006, "Resist, comply or workaround? An examination of different facets of user engagement with information systems", *European Journal of Information Systems*, (15:4), pp. 345-356.

Fielt, E., Bandara, W., Suraya, M., and Gable, G. 2014, "Exploring Shared Services from an IS Perspective: A Literature Review and Research Agenda", *Communications of the Association for Information Systems*, (34), pp. 1001-104.

Gartner, 2013. "Shared Services or Shared Service Center (SSC)," *Gartner IT Glossary* http://www.gartner.com/it-glossary/shared-services. Accessed 01 September 2015

Gasparas, J., Monteiro, E. 2009. "Cross-contextual use of integrated information systems," *European Conference on Information Systems* 2009 Proceedings.

Gospel, H., and Sako, M., 2010. "The unbundling of corporate functions: the evolution of shared services and outsourcing in human resource management", *Industrial and Corporate Change*, (19:5), pp. 1367-1396.

Hargadon, A., and Sutton, R. 1997. "Technology Brokering and Innovation in a Product Development Firm," *Administrative Science Quarterly*, (42:4), pp. 716-749.

Herbert, I., and Seal, W., 2012. "Shared services as a new organizational form: Some implications for management accounting", *British Accounting Review*, (44:2), pp. 83-97.

Hsu, D., and Lim, K., 2014, "Knowledge Brokering and Organizational Innovation: Founder Imprinting Effects," *Organization Science*, (25:4), pp. 1134-1153.

Ignatiadis, I., and Nandhakumar, J. 2009. "The Effect of ERP System Workarounds on Organizational Control: An Interpretivist Case Study", *Scandinavian Journal of Information Systems*, (21:2), pp. 59–90.

Kobayashi, I. M., Fussell, S. R., Xiao, Y. and Seagull, F. J. 2005. "Work Co-ordination, Workflow, and Workarounds in a Medical Context. *CHI 2005*. Portland, Oregon, USA

Koopman, P., and Hoffman, R.R., 2003. "Work-arounds, make-work, and kludges," *IEEE Transaction on Intelligent Systems*, (18:6), pp.70-75.

KPMG, 2014. "Executive Report: The State of Services and Outsourcing in 2014". *KPMG and HfS publication*. https://www.kpmg-institutes.com/content/dam/kpmg/sharedservicesoutsourcinginstitute/pdf/2014/state-of-outsourcing-2014-exec-findings-hfs.pdf. Accessed 21 March 2015.

Lacity, M., and Fox, J., 2008. "Creating Global Shared Services, Lessons from Reuters", *MIS Quarterly Executive*, (7:1), pp. 17-32.

Leonardi, P. M., and Bailey, D. E. 2013. Recognizing and Selling Good Ideas: How Brokers Mediate Knowledge Transfer. In *Academy of Management Proceedings*, (1) pp. 10663. Academy of Management.

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.

Mehta, N, and Bharadwaj, A 2015, 'Knowledge Integration in Outsourced Software Development: The Role of Sentry and Guard Processes', *Journal Of Management Information Systems*, 32, 1, pp. 82-115

Norman, D.A. 2008. "Workarounds and Hacks: The Leading Edge of Innovation," *Interactions* (15:4), pp. 47–48.

Orlikowski, W. J. 2005. "Material Works: Exploring the Situated Entanglement of Technology Performativity and Human Agency," *Scandinavian Journal of Information Systems* (16:1), pp. 460-466.

Oshri, I., Kotlarsky, J., and Willcocks, L.P., 2015. *The Handbook of Global Outsourcing and Offshoring: The Definitive Guide to Strategy and Operations, 3rd Ed.* Hampshire, New York: Palgrave Macmillan.

Pawlowski, S., and Robey, D. 2004. "Bridging User Organizations: Knowledge Brokering and the Work of Information Technology Professionals," *MIS Quarterly*, (28:4), pp. 645-672.

Rivard, S., and Lapointe, L. 2012. "Information Technology Implementers' Response to User Resistance: Nature and Effects," *MIS Quarterly*, (36:3), pp. 897-A5.

Safadi, H., and Faraj, S., 2010. "The Role of Workarounds during an Opensource Electronic Medical Record System Implementation," *ICIS 2010 Proceedings*. Paper 47.

Strauss, A. L., and Corbin, J. M. 1998. *Basics of Qualitative Research (2nded.),* Thousand Oaks, CA: Sage Publications.

Vassilakopoulou, P., Tsagkas, V., and Marmaras, N., 2012. "Workaround identification as an instrument for work analysis and design: a case study on ePrescription," *Work*, (41), pp. 1805-1810.

Walsham, G. 1995. "Interpretive case studies in IS research: nature and method," *European Journal of Information Systems*, (4:2), pp. 74–81.

Walsham, G. 2006, "Doing interpretive research", *European Journal of Information Systems*, (15:3), pp. 320-330.

Yang, Z.B., Ng, B.Y., Kankanhalli, A., and Yip, J.W.L. 2012. "Workarounds in the use of IS in healthcare: A case study of an electronic medication administration system," *International Journal of Human-Computer Studies*, (70:1), pp. 43-65

Yin, R.K. 2003. *Case Study Research: Design and Methods*. London: Sage Publications.