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KNOWLEDGE GOVERNANCE AND ITS EFFECTS ON KNOWLEDGE MOBILIZATION

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ABSTRACT:

The importance of knowledge mobilization has been stressed by many scholars; however the literature lacks understanding of how knowledge mobilization is governed and how governance affects knowledge mobilization. This paper proposes a research agenda for studying these two areas of interest. The questions will be researched in the context of two major knowledge mobilization strategies, Communities of Practice (CoPs) and the newly created Intellectual Property (IP) marketplace at an organization that is a global leader in water and wastewater treatment. First, to determine how knowledge mobilization is governed, major mechanisms, tools and strategies used within an organization will be identified and explored for their rationale. Second, to determine how governance affects knowledge mobilization, knowledge objects within CoPs and IP marketplace will be tracked for *creation, reach, renewal and transaction efficiency*. A multi-method analysis will be used to collect data from decision makers and users of the CoPs and the IP marketplace. As a result of this research, foundations to a theory of knowledge governance will be established.

KEYWORDS: knowledge, mobilization, governance

INTRODUCTION

The importance of mobilizing knowledge within organizations, so that knowledge is available to the people and projects that need it at the right time (Javernick-Will and Levitt 2010) is well known. Organizational and management scholars view knowledge as the most valuable organizational resource (Grant 1996), as it helps organizations innovate (Hildreth and Kimble 2004; Tsai 2002), gain competitive advantage (Spender 1996) and grow business (Carrillo and Chinowsky 2006). However, given the high failure rates of knowledge management strategies implemented in practice, the optimal ways to govern knowledge mobilization within an organization remains largely unknown.

Scholars have focused on a variety of factors that influence knowledge mobilization including the nature of knowledge (Nonaka 1994; Javernick-Will and Scott 2010), organizational boundaries (Kogut and Zander 1993), and human motivations (Bhagat et al. 2002; Osterloh and Frey 2000). While this work focuses on factors that stimulate knowledge sharing, little is known about how organizations regulate knowledge processes (Foss 2007) and the effects of different governance strategies on knowledge mobilization. As a result, this paper proposes a future research outline to answer: *(1) how is intra-organizational knowledge governed?; (2) how do governance mechanisms affect knowledge mobilization?* To research these questions, we will conduct a case study at an engineering organization, referred to as ‘EO’, that is a global leader in water and wastewater treatment that works intensely on improving their knowledge strategy.

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Once completed, this research is expected to build a theory of knowledge governance and determine the impacts of different knowledge governance strategies on knowledge mobilization. Also, this research is expected to offer insights to organizations that wish to evaluate governance strategies and manage the ongoing mobilization of knowledge within their project-based organizations. Furthermore, identifying a theory of governance is expected to impact the field of knowledge management greatly. It should deepen our understanding of the value and problems associated with different governance mechanisms and tools on knowledge mobilization.

POINT OF DEPARTURE

For decades, organizations have struggled to manage and mobilize knowledge within their firms. This is not due to a lack of understanding the value of mobilizing and exchanging collective knowledge within the organization. Indeed, knowledge has always been fundamental to organizations (Grant 1996). Achieving *knowledge mobilization*, where knowledge is delivered to the right projects and people at the right time, is particularly important for multi-national, project-based organizations (Javernick-Will and Levitt 2010). These organizations wish to acquire and share knowledge from each market in which they work (Miller and Chen 1996) and from each project in which they are contracted. As a result, many multi-national, project-based organizations have invested significantly in knowledge management efforts, with past studies finding that 81% of engineering design and construction organizations in the UK had a knowledge management strategy in place (Carrillo, Robinson, Al-Ghassani and Anumba 2004). However, managing knowledge in these environments can be particularly difficult, as the knowledge must transcend silos that form from the autonomy of projects (Sydow, Lindkvist and DeFillippi 2004) and faultlines (Lau and Murnighan 1998) due to spatial and time differences from geographically dispersed offices (Javernick-Will 2012). In order to mobilize knowledge in these environments, multiple knowledge processes that facilitate knowledge creation, reuse and transfer, must be in place and intersect to achieve these goals. For instance, an engineer may gain knowledge from another engineer but in the end will apply this knowledge by contextualizing it to her project's environment using her own knowledge of the context. Therefore, in this case knowledge reaches its final application through the intersection of both knowledge sharing and knowledge creation processes. As a result, knowledge processes form a confluence of processes called knowledge mobilization that enhances delivering the right knowledge at the right time instead of acting separately as often defined by the literature (Nonaka 1994).

The knowledge management strategies that organizations employ to transfer knowledge vary widely from information technology-centric strategies to people-centric strategies (Carrillo and Chinowsky 2006). Over the last decade, there has been increasing use of combinations of both strategies to create interactive online platforms (Javernick-Will and Levitt 2010) and Communities of Practice (CoPs) (Wenger and Snyder 2000). A CoP aims to connect employees with common professional interests. To facilitate knowledge transfer between CoP members, organizations provide online platforms, and sometimes funding, to enhance collaboration. Indeed, our past work has found that CoP governance strategies include combinations of organizational control, where knowledge sharing connections are strategically created and managed, and social governance, where knowledge exchange and connections are allowed to emerge organically and be governed by normative forces. Often, organizations rely heavily on Information and Communication Technology (ICT) tools for their knowledge management strategies. While ICT can facilitate communication across spatial boundaries, there are many

inefficiencies attributed to the use of ICT (Davenport and Prusak 2000) due to lack of human incentives. Knowledge mobilization includes knowledge sharing but also creation and reuse. To grow their knowledge absorptive capacity, organizations create knowledge reuse systems. A widely used tool for knowledge reuse is a template. A template allows practitioners to store knowledge in a universal, user-friendly format so it becomes available to another project in the future. However, often these templates fail to include knowledge and store information and data instead (Watson and Hewett 2006). To respond to these challenges, at least one organization is creating new governance structure—an internal knowledge marketplace. Compared to other governing systems, knowledge that closely follows the organizational needs and business goals is stored, packaged to a particular context, priced, and sold globally within the firm. However, despite the acknowledgement of the importance of mobilizing knowledge; the best way to govern intrafirm knowledge transfer is still unknown, and many knowledge management strategies failing in practice (Akhavan, Jafari and Fathian 2012). There are many reasons cited for these failures, with some attributing the failures to a lack of resources (Bresnen, Edelman, Newell, Scarbrough and Swan 2003), project-based versus organization-based focus (Ajmal and Koskinen 2008), potentially arduous relationships between the source and recipient (Szulanski 1996), and limitations in Information and Communication Technology (ICT) (Davenport and Prusak 2000). We approach this problem from the perspective of governance and explore its effects on knowledge mobilization – an understudied topic in the literature.

GOVERNING KNOWLEDGE MOBILIZATION

Knowledge mobilization, as any other firm activity, requires regulative mechanisms to ensure knowledge reaches the right people at the right time. The idea of governance and governance mechanisms has roots in Political Science, and, as a general rule, refers to forms of social coordination and patterns of rule (Bevir 2012). While the word is ubiquitous, it often provokes debates. Three powerful “ideal” (Weber 1978) mechanisms used for governing organizations include social (Jones, Hesterly and Borgatti 1997), control (Sundaramurthy and Lewis 2003) and markets (Williamson 1996) mechanisms. These mechanisms are similar to Ouchi’s (1980) idea of bureaucracies, markets and “clans”.

Social: this governance mechanism has roots in sociology and psychology. This mechanism is influenced by Durkheim’s (1933) philosophy, according to which people have norms, beliefs and values that lead them to act collectively by nature. These ideas lead organizations to frequently implement CoPs to achieve collaboration and knowledge sharing (Wenger 2011). Manville and Foote (1996) provided a practice-oriented definition of a CoP as “a group of professionals informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge”. Compared to hierarchies, which use authority to regulate behaviors, CoPs use trust to govern knowledge exchange due to the social nature of knowledge sharing and learning in a community setting (Brown and Duguid 1991; Lave and Wenger 1991; Borgatti and Cross 2003). CoPs can be a useful and cost effective tool to mobilize knowledge across geographic and organizational boundaries. However, incentivizing participation in CoPs and directing CoPs strategy is often difficult as communities are voluntarily created and managed.

Control: this mechanism for governing knowledge exchange draws from organizational economics, particularly transaction cost economics (TCE) (Williamson 1985). TCE submits that, compared to market governance, hierarchical governance provides strong administrative controls

and enhanced coordinated adaptation (Williamson 1991). At the core of this argument is the notion of fiat or authority that has its origin in the employment contract. Hierarchical governance can enhance knowledge exchange due to the use of various administrative control mechanisms. For example, to reduce information asymmetry and facilitate knowledge dissemination, firms can specify employment conduct rules that require extensive disclosure of knowledge within the organization. Firms can also adjust employees' job design to increase the sharing of knowledge between individuals or divisions, such as by assigning formal work groups or cross-functional teams to solve particular problems (Liebeskind 1996). While authority-based control mechanisms are used widely within organizations, they may not be effective for transferring knowledge in all situations, as individuals cannot be forced to share knowledge or learn. For example, the knowledge source may simply lack the motivation to transfer knowledge or the knowledge recipient may not be willing to learn (Szulanski 1996). Such problems are particularly acute in large multi-unit organizations where internal competition and the cost of social comparison is high (Williamson 1985; Tsai 2002).

Market: this mechanism has been traditionally stressed within economics. A major complication associated with knowledge exchange through markets is information asymmetry. As Arrow's (1962) famous "information paradox" indicates, a customer purchasing information wants to know about the information in sufficient detail before making the purchase; however, once the customer has obtained specific insight, the seller has effectively transferred the knowledge without receiving any compensation. A significant amount of research in economics has therefore focused on the delineation of property rights and related contracting issues in order to safeguard knowledge transactions. While the economics literature has historically focused on the external market (Coase 1937), recent research has given substantial attention to the formation and functioning of internal markets of various kinds—including labor (Williamson 1985), and capital (Shin and Stulz 1998). Such internal markets are often governed through a combination of economic incentives (e.g., price mechanism, managerial incentives) and administrative forces (e.g., monitoring, control, coordination). Despite substantial research on internal markets of various kinds, little work to date has investigated how an internal knowledge market functions, and when an internal knowledge market provides an advantage to facilitate knowledge exchange within an organization. Thus, the internal knowledge market created by 'EO' is novel and timely and provides an ideal context for our research to document a phenomenon of interest while addressing a gap in existing knowledge.

These governance mechanisms are being implemented in various tools and strategies which are used to regulate knowledge mobilization. A CoP is an example of a knowledge mobilization tool which functions based on a social mechanism. The question of "**how organizations govern knowledge mobilization**" can be dissected into two main sub-questions. The first step is to determine which mechanisms and tools are used for governing knowledge mobilization. The second step is to determine why organizations choose one mechanism and tool over another. That is, which factors are the most essential and influence governance? For instance, allowing autonomy to CoPs is different than establishing an employee contract where one is "forced" to share knowledge. However, we lack empirical results on what factors affect the intra-organizational knowledge strategy.

The literature does, however, stress certain essential factors for knowledge transactions, including the nature of knowledge, human motivations and costs of transactions.

Nature of knowledge: One of the most important and well-studied knowledge dimensions is knowledge codification and tacitness. The concept was first introduced by Polanyi (1967) to represent knowledge which is difficult to transfer both verbally and in writing and requires social interactions and live observations. A challenge associated with transferring tacit knowledge is that the transmitters often lack awareness of what they know. Additionally, they may not be aware that others need their knowledge. Conversely, codified knowledge is easily articulated, decomposable and stored, and thus can be easily transferred between people over time. Nonaka (1994) describes the interaction between tacit and codified knowledge and the mechanisms of converting knowledge. While the tacit and codified dimension has been studied extensively, there are other knowledge dimensions which are important to specific contexts such as institutional knowledge (Javernick-Will and Levitt 2010), complex knowledge (Tsoukas 2005) and nearly- decomposable knowledge (Simon 1982). While these types of knowledge can be equally influencing knowledge transactions, we lack understanding if organizations establish governance mechanisms and tools to account for the nature of knowledge.

Human motivation: The motivation literature focuses mainly on extrinsic and intrinsic motivations behind knowledge sharing (Javernick-Will 2012; Osterloh and Frey 2000). Intrinsic motivations exist within the individual and are driven by enjoyment. An example of intrinsic motivation is altruism. Extrinsic motivations are based on monetary compensations. Transaction cost economists advocate for studying extrinsic motivations and assume that individuals exhibit opportunistic behaviors (Osterloh and Frey 2000) and are driven by cost. An example of governing knowledge based on extrinsic motivation was observed by Javernick-Will (2012). A firm offered “points” to employees if they shared knowledge which could be used later for prizes. However, Javernick-Will found that most people indicated social motivations for exchanging knowledge, including obligations to reciprocate and ‘pay forward’ knowledge exchange.

Cost of knowledge transactions: Each knowledge transaction involves resources to facilitate the mobilization of knowledge. In fact, TCE (Williamson 1996) argues that organizations exist because they facilitate lower resource and knowledge transaction costs. That is, organizations will choose the strategy that achieves the desired outcome at the lowest cost. In the case of knowledge transactions, the cost can include the methods by which knowledge is transacted. Often organizations focus on facilitating knowledge mobilization through the use of technology. While they are aware of the advantages of providing face-to-face interactions through travelling, they are faced with cost limitations. As a result, many focus their efforts primarily on ICT. Since the idea of cost is often stressed in the literature, it becomes important to study empirically if organizations actually govern based on the cost of knowledge transactions. If not, are there other factors which are equivalent, if not more important in determining governance mechanisms and tools? In this research, we will determine why organizations govern knowledge mobilization in a particular way and which mechanisms are used to govern knowledge mobilization. This will establish the first steps towards a theory of knowledge governance.

KNOWLEDGE GOVERNANCE AND MOBILIZATION

While the importance of knowledge mobilization is theoretically well understood, we do not yet know how the deployment of governance mechanisms influences knowledge mobilization. As a result, a better understanding of how different governance forms affect the way individuals, project teams, and geographic regions mobilize knowledge is fundamental for organizations

interested in fostering knowledge exchange. To understand the effects of knowledge governance on knowledge mobilization we will contrast and compare two major tools and strategies at ‘EO’ which use various mechanisms (social, market and control). This will bring both theoretical and practical contribution to understanding which governance mechanisms most efficiently facilitate knowledge mobilization. Knowledge mobilization, as we define it, includes *knowledge creation and renewal*, where knowledge is created by converting knowledge from tacit to explicit form, and combined across multiple contributors to be accessed and used on projects and in organizations, and then continually updated to reflect project experience (e.g., Nonaka 1994); the capacity to *reach* multiple people, regions and projects with the collective knowledge of the organization, and *optimal transactions* whereby the knowledge is useful, easily identified and used, and applicable to the project need.

PLANNED RESEARCH SETTING AND METHODOLOGY

We chose to investigate knowledge governance at ‘EO’ because it has a strong knowledge management strategy and recently created a unique knowledge reuse system – Intellectual Property (IP) marketplace. ‘EO’ has focused on improving its knowledge sharing systems for the past decade. Their first knowledge strategy started in 1997 when the organization appointed the first Chief Knowledge Officer (CKO) to create a plan for facilitating knowledge sharing across the organization. Shortly thereafter, the CKO focused on creating CoPs. Within ‘EO’ ,CoPs are groups formed based on common interest (e.g. sustainability) and/or expertise (e.g. wastewater). As they advanced their knowledge sharing practices, the organization created the KnowledgeNet (KNet), which provided a virtual setting for CoPs, and provided tools such as expertise profiles of employees, a built-in search feature, instant messaging, discussion forums, and online conferences. Within KNet, the organization differentiates CoPs into Knowledge Centers and Knowledge Bases. Knowledge Centers are controlled by the organization, aligned with strategic business objectives and provided resources (US\$4 Million was invested into these Centers in 2001) to enhance participation within communities through travel, meetings and other interventions; while Knowledge Bases are formed voluntarily, less structured, and not provided funding.

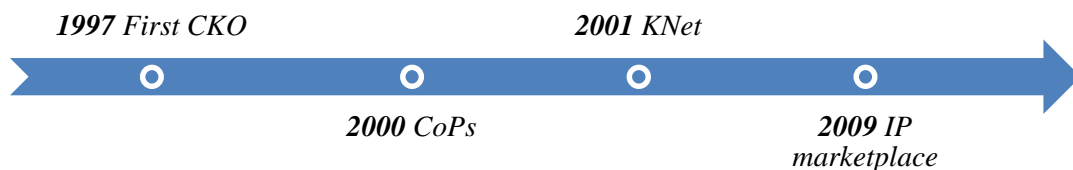


Figure 1: The evolution of KM system at ‘EO’

To test the efficiency of KNet, the organization delivered social network questionnaires that were analyzed using social network analysis. This analysis revealed the knowledge networks in the organization, which showed a lack of connectivity across expertise groups in each geographic location and an absence of employees from lower hierarchical levels in knowledge exchange (Singh, Hansen and Podolny 2010). The results also pointed out imbalances in the network structure, such as central individuals who were overworked and peripheral individuals who were most likely to leave the company. ‘EO’ addressed these issues by implementing strategic interventions, such as transferring key individuals to integrate disparate networks. As a result, from 2003 to 2008, the number of experts an employee was connected to increased from 52 to

82, and the information usage ties increased from 29% to 45% (Cross et al. 2010). However, other results found that only 25% of ‘EO’ employees were involved in CoPs (Parise et al. 2004). The organization realized that a new mechanism was needed to enhance knowledge sharing and increase competitive advantage and created the new “One Global Community” strategy, which created strategic efforts that continued the knowledge management strategies through KNet while simultaneously introducing a knowledge market (Figure 2).



Figure 2: The “One Global Community” Strategy

The current focus today is to maintain CoPs but also manage the IP marketplace in order to allow employees to update and continuously improve the knowledge in real time with collective knowledge from the organization’s global employees. This new knowledge market strategy will sell knowledge to internal project teams. This strategy will shift some of the costs of knowledge mobilization from overhead, which is traditionally used for knowledge management efforts, and allow the organization to profit from their collective knowledge, thereby increasing revenues within the firm. However, selling knowledge within a firm is a new concept that may shift the employee’s and collective organization’s perceptions of knowledge and knowledge exchange.

Empirically analyzing the proposed research questions requires a definition of knowledge and theoretical foundations to these research questions. It is well-recognized that knowledge is richer and broader than information which is simply data with relevance and purpose (Drucker 1988). To define knowledge, Davenport and Prusak (2000) offer a working definition, whereas knowledge is a “fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information”. A more simple way to conceptualize knowledge is by thinking of it as a “know-how” or means to how to accomplish a target. We will employ practice-oriented view (Alavi and Leidner 2001; Orlikowski 2002) where knowledge is information that affects belief and supports an individual’s ability to perform their job. Since knowledge resides in individuals and CoPs (Brown and Duguid 1991b; Davenport and Prusak 2000), we will focus on individuals as the subjects of knowledge mobilization who will describe their view of what constitutes knowledge and give examples of knowledge objects. Their view of knowledge will guide the researchers towards choosing knowledge objects and their constructs. To define knowledge mobilization constructs, we use knowledge-based view (KBV) and TCE as theoretical foundation. KBV (Grant 1996) argues that knowledge is the most valuable resource of the firm, as valuable as capital, and therefore facilitating knowledge transactions is essential to the firm. TCE (Williamson 1996) compliments KBV and argues that knowledge transactions also need to be efficient. We combine these two theories and create constructs that address both facilitating

knowledge mobilization processes (reach, creation, and reuse) and the efficiency of knowledge mobilization (transaction efficiency).

To answer “*how does an organization govern intra-organizational knowledge mobilization?*” we will focus on determining which mechanisms and tools the organization uses to mobilize knowledge and why they decide to govern knowledge in a particular way. We will document and analyze the creation of a knowledge mobilization tools through the triangulation of data collected from interviews, documents, and observations and the longitudinal analysis of this data over time.

First, we will request existing documentation (e.g. meeting minutes, organizational charts, policies, marketing materials) from the knowledge management team on existing knowledge management strategies and tools. We will search for, and code, descriptions of knowledge management systems, central actors, policies and processes employed, organizational structure, and decisions over time. As a result of this exploratory study we will build a list of knowledge governance tools and mechanisms that are used intra-organizationally. Next, we will focus on determining the rationale and factors which determine knowledge governance. We will collect qualitative data from decision makers who will be interviewed and asked to explain the rationale and process for creating the knowledge tools. Example questions that we plan to ask include: (1) *why was the knowledge tool created?*; (2) *who decided to create the tool?*; (3) *what processes and policies were created for the tool?*; (4) *what resources were used to create the tool?*; (5) *what barriers were faced during the tool creation?*; and (6) *what organizational changes had to be made to accommodate the new market?*. In addition to the interviews and documentation collected, we will observe meetings where the knowledge strategies are planned and decisions are made and maintain our observations in a project diary.

We will transcribe the interviews and import these transcriptions, along with the collected documentation and observations, into NVivo. NVivo helps to manage, code, and query data for analysis (Bazeley 2007). We will code the data obtained from the interviews, documents, and observations iteratively to determine *rationale, expected benefits, central actors, processes/policies, resources, barriers faced, key decisions, surrounding tensions, organizational structure* and *incentives* and analyze these for changes over time. During this process, we will triangulate the data obtained from the interviews, documents, and observations and obtain additional feedback from the organization to create a longitudinal history of a knowledge strategy creation.

To answer “*how does governance affect knowledge mobilization?*” we will compare and contrast two major knowledge tools and strategies (CoPs and the IP marketplace) and examine how different mechanisms affect knowledge mobilization. We will once again collect, analyze, compare and contrast data obtained through interviews and surveys with managers, contributors, and users of the CoPs and the IP marketplace. We will focus on the key constructs of: *knowledge creation and renewal*, which is based upon the number of employees that have contributed to the knowledge, used the knowledge, updated the knowledge and the frequency with which new knowledge is added to the knowledge object; the capacity to *reach* multiple employees, projects, and regions with the knowledge; and the *efficiency of knowledge transactions* based upon usefulness, resources required to identify, use and update knowledge, benefits accrued from knowledge transactions, knowledge uncertainty, and knowledge

specificity. To study knowledge mobilization, we will select knowledge objects for analysis within each tool and track it.

Knowledge creation (Nonaka 1994) is essential to organizational performance as it has the capacity to create new products and services (Smith et al. 2005). However, once knowledge is created it requires continuous update in order to keep up with the fast changes in technology and innovation. Knowledge *creation and renewal* includes the initial creation, including the number of employees who initially converted and combined knowledge to create the object, as well as the number and frequency of continuous updates to the knowledge object to protect knowledge loss. To calculate the renewal of knowledge we will track the objects at different knowledge flow phases from creation to use to renewal, checking for number of initial contributors, number of updates, and frequency of updates. In addition, interviews will provide the users' perceptions of uncertainty of knowledge accuracy and knowledge specificity, in addition to the half-life of knowledge (Javernick-Will and Levitt 2010). The data collected for these constructs, which consist of qualitative and quantitative data, will be triangulated and analyzed for each governance form. A cross-case comparative analysis will then contrast the data from each tool.

Next, we will investigate knowledge *reach* by identifying the numbers of contributors, reviewers, users, updaters and referrers of each knowledge object. Using this data, we will administer questionnaires to these individuals to determine attributes and contextual information, including the project, owner, and geographical location for which the knowledge was sought and used. This will determine reach in terms of not only numbers of individuals, but also projects, owners and geographical regions to determine if the knowledge objects are mobilized equally throughout the organization, or if regions are isolated from knowledge use and transfer to a greater extent in different tools. While achieving reach can be beneficial, there are other factors that contribute to the useful application of knowledge. This includes the context, the history and the social actors in the projects (Brown and Duguid 1991). Therefore in determining the reach of knowledge, we will ask users if knowledge was actually applied to their projects or if they feel that the knowledge object has strong potential in the future. If so, the users will be asked about key factors that influenced the successful application of it. Specifically, as suggested by Brown and Duguid (1991), we will focus on social factors such as homophily (McPherson et al. 2001), the context of knowledge transfer and the history of social actors to determine the reach and use of knowledge in addition to using CoPs and knowledge market. Finally, not all knowledge is useful. Also, certain knowledge transactions incur large costs that organizations may not be able to sustain. Thus, transaction efficiency as a variable of cost of transaction and knowledge usefulness cannot be neglected. Scholars argue that knowledge is useful when it is actionable (Ancona and Caldwell 1992; Argyris 1996). That is, knowledge that is useful will be disseminated within the company to a project, task or employees and will be applicable to that context. However, not all knowledge that is useful involves an efficient transaction. Each transaction comes at a cost incurred at the micro and macro level. At the micro level, this cost incurs the amount of time and energy that individuals allocate to transfer that knowledge. Individuals may choose not to transfer knowledge as knowledge offers them power (Carrillo and Chinowsky 2006). At the macro level, this cost includes cost of facilitating communication

through tools such as ICT. The *efficiency of knowledge transactions* will be determined through the same questionnaire and through follow-on semi-structured interviews. TCE represents the theoretical foundations for this construct. Within this concept, a large part of the literature focuses on the cost of transactions that are incurred by the organization while participants in these transactions are almost invisible. Since knowledge resides in individuals (Brown and Duguid 1991a; Davenport and Prusak 2000) and transactions are influenced by their motivations (Javernick-Will 2012; Osterloh and Frey 2000), neglecting them from the study of knowledge transactions leads to missing important perspectives. To get a larger picture of transaction efficiency, we will focus on both macro and micro levels. To obtain a micro perspective of knowledge transactions, participants in the transaction will be asked about the usefulness of the knowledge (Wanberg and Javernick-Will 2014), the time and personal resources required to seek, employ and update the knowledge, the benefits accrued from using the knowledge both personal and project based, the level of confidence/uncertainty in the knowledge object, the complexity of use, and the degree of specificity/context of the knowledge. To gain a macro perspective of knowledge transactions, decision makers determining the way transactions are being organized in CoPs and the knowledge market will be asked about the resources employed in creating and managing CoPs and the knowledge market. Consequently, both the macro and micro perspectives will be compared separately in knowledge objects to determine transaction efficiency within CoPs and knowledge market.

As a result of this research, we expect to determine how different governing mechanisms (control, social and market) affect knowledge reach, creation, renewal and transaction efficiency within the context of two major strategies, CoPs and IP marketplace.

CONCLUSIONS

Organizations wish to mobilize knowledge when and where it is needed—across geographical, disciplinary, and project boundaries—to avoid repeated mistakes and continually learn from past projects and markets. However, given the many failed knowledge management strategies (Akhavan, Jafari and Fathian 2012), many organizations struggle with how to govern knowledge in the organization. Organizations use a range of governance forms for sharing knowledge. Some create governing systems that enhance collaboration while others create systems that rely on control (Sundaramurthy and Lewis 2003). Although past work has conceptualized knowledge governance mechanisms (Grandori 2001, Foss 2007), little empirical work exists to determine different forms of governance and rationale for these governance choices.

This paper presents a plan for research that further explores knowledge governance. The goal of the research is to build theory of knowledge governance by identifying how organizations govern knowledge mobilization and the effects of different mechanisms on knowledge mobilizations. To answer this question we are focusing on three major sub-questions: (1) which mechanisms and tools are used to govern knowledge mobilization; (2) why are particular mechanisms and tools selected to govern knowledge mobilization; and (3) how do different governance mechanisms and tools influence knowledge mobilization, including creation, renewal, and efficiency of knowledge transactions. This research will compare and contrast two tools (CoPs and the IP

marketplace) for each governance mechanism. As a result, it will build an understanding of how knowledge is governed in organizations and how it influences knowledge mobilization.

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