Knowledge Management: To Share or not to Share!

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Coming together is a beginning, staying together is a progress, cooperation is a success.
Henry Ford, 1863–1947

Abstract Knowledge is a key asset for any organization and knowledge sharing represents the best strategy both for creating more knowledge and for applying that existing to improving efficiency and adding value to the business. However, knowledge is also power and its sharing becomes correspondingly difficult as a direct result reflected in the many barriers and walls that require overcoming. Trust, motivation, collaboration are core drivers for a supportive organizational culture coupled with effective leadership successfully nurturing the sharing of knowledge within the organization; communities of practice are powerful vehicles for promoting a culture of learning and sharing of knowledge. This chapter sets out an overview of knowledge sharing, knowledge sharing barriers and perspectives on knowledge sharing behaviours to better overcome the barriers.

1 Introduction

Knowledge is key to any strategy for successfully ensuring the competitiveness of a business or organization in the current global economic environment.

The deployment of the knowledge stored in organizations is, in fact, a real competitive advantage able to clearly add value to the business, its products or services as well as improving the efficiency of business processes.

Hence, the reason the Knowledge Management (KM) process has become the main focus of so many studies and analysis by many of today's most important academics and researchers. From capture and creation, to diffusion and contribution

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or assessing the usage of organizational knowledge, every phase in the KM process has been subject to widespread analysis and study.

As a business asset, knowledge has very special and paradoxical characteristics as its usage does not result in its consumption and with knowledge transfer also not leading to its loss. However, on the other hand, much of an organization's most valuable knowledge walks out of the door at the end of the day on every single day (Dalkir 2005).

In the new digital world, where simple systems and tools can allow anyone to quickly access so much data and information, how can we deploy the right information, in the right way and at the right time to, by converting simple data and information into the right knowledge and wisdom, increase our efficiency, our productivity and add value to our products and services, crucial to winning the struggle for competitiveness in the global marketplace?

Will managing the knowledge of our business or organization based on strong information technology (IT) systems, collecting and storing large amounts of data, as well as all of our documents and files in a very complex document management system, or even implementing a new talent recruiting and management strategy, be enough to foster and properly apply the organization's real knowledge?

We should be able to create and maintain so much important knowledge within our organizations. However, what is its purpose if individuals or their teams are not able enough to apply it to leading the respective market? Additionally, how can we manage and deploy all of the tacit knowledge of our highly mobile employees, or those on the cusp of retirement, which are commonly an essential part of the organization's competitive advantage if there is not the appropriate and timely leadership for sharing it?

When we are unable to share all this knowledge with our team and beyond, the purpose of such knowledge to organizations fails to extend beyond filling a large number of highly secure and sometimes very confidential folders, whether classified and organized in large and restricted-access rooms or stored in very expensive IT systems, with equally expensive IT experts managing them. In either case, only a few organization members will be able or allowed to access and use such knowledge for the creation of value to the business. In fact, knowledge will always be of only extremely low value whenever organizations lack the capacity to promote its sharing and application for the success of the business and its organizational goals.

However, is this an easy task? For many people, knowledge means power! And tacit knowledge (knowledge individuals do not know they have) is always going to be difficult to share! In these circumstances, how can organizations ensure their team members and partners share knowledge?

In accordance with the findings and principles set out above, our proposal in this paper involves discussing the importance of knowledge sharing to the competitiveness of any organization.

After this introduction to knowledge sharing, we describe some of the main barriers and incentives, followed by the identification of particular measures and strategies for overcoming the organizational barriers to improving the implementation of successful strategies through focusing on organizational culture and leadership styles.

2 Barriers and Incentives to Knowledge Sharing

2.1 Sharing Knowledge Within the Knowledge Management Process

Nowadays, the corporate memory is a real and important issue to any organizational strategies and practices. However, does this go far enough? With all the data, information and experiences stored in important and certainly expensive IT systems, this will not itself be enough to maintain healthy and profitable organizations faced with the competitiveness of global markets.

Any first approach to these problems certainly incorporates the importance of storage and the transfer of knowledge. However, organizations equally need to consider what results from all of this stored knowledge when nobody (or only a few) are able to actually access and use it. This especially applies when a part or even the entire workforce do not really understand the content/format.

In today's overly complicated world, success normally stems from the integration of different knowledge, skills and experiences. Indeed, this means not only deploying the data, experiences and knowledge of the past but also the ability to make it different, mostly (and adopting a buzzword of the moment) disruptively, extending to the continuous development and creation of new knowledge.

This only becomes possible due to all of the work and efforts of a very solid team in which all members use, discuss and especially share their own knowledge and experiences.

Organizations might be able to create, store and even transfer so much data, information and knowledge but, at the end of the day, whenever organizations are unable to apply and to transform all such knowledge and skills into added value for their clients, this is a pointless task and organizations end up losing money, opportunities, competitiveness and, as a final result, giving up market share.

Within the management cycle, knowledge transfers may be challengeable but this only constitutes an act of passage, from one person to another, a unidirectional act without any action or only brief participation by the recipient party. However, approaches to such sharing also perceive the transfer of knowledge in both directions (or in every direction), which means that in a sharing strategy both sides bring knowledge into the community. This hence reflects the reason sharing might also represent the right strategy for creating and acquiring new knowledge and the best approach to storing and reusing knowledge in very profitable ways across any organization.

There is a general consensus that knowledge sharing is critical to organizations seeking to deploy their knowledge as an asset to achieve competitive advantage (King

2006; Wang and Hu 2020; Ganguly et al. 2019). Bock and Kim (2002) consider knowledge sharing as the most important facet of knowledge management (KM), and Inkpen (2002) points out that "unless individual knowledge is shared throughout an organization, the knowledge will have a limited impact on organizational effect".

Knowledge interflows amongst individuals in working groups enable them to enhance their competencies and mutually generating new knowledge (Sveiby 2001; Wang and Hu 2020). This results in synergistic effects. Hence, social capital is created as those who share knowledge refine it through dialogue while those who receive knowledge learn from it. Furthermore, this also implies that organizations need to assist their employees in becoming better aware of their tacit knowledge.

However, what is knowledge sharing or how can we really define it? As happens with KM, there have also been difficulties in establishing a consensus around a single definition for knowledge sharing.

We may however define knowledge sharing as the actions by which employees diffuse relevant information to others across the organization (Bartol and Srivastava 2002), which reflects how the ultimate goal of sharing employee knowledge is its transfer to organizational assets and resources (Dawson 2001).

As such, we may conclude that the major focus of knowledge sharing falls on the individual who can explicate, encode, and communicate knowledge to other individuals, groups, and organizations while also extending to the teams that have become so prominent in management thought and practice (King 2006),

We must also point out the sharp distinction between knowledge sharing and knowledge transfer, mainly because transfer implies a focus, a clear objective, and unidirectionality, while knowledge may be shared in unintended ways, multiple directionally, without any specific objective (King 2006), such as when teams attempt to develop mutual knowledge, common ground or establish what knowledge the parties know they share in common (Cramton 2001; Ganguly et al. 2019).

Hence, knowledge sharing among individuals within teams is a particularly important focus, whether these teams are temporary sets of interdependent individuals bound by a collective aim, problem solving groups (also usually temporary in nature), self-managing teams, or cross-functional teams (Glassop 2002; Wang and Hu 2020). Virtual teams, those in which individuals primarily communicate through electronic means, are now also becoming a more important focus of knowledge sharing.

There is widespread agreement that knowledge assets are difficult to replicate and constitute fundamental sources of competitive advantage in open economies. Furthermore, company competitive advantages seem increasingly predicated on the ability to identify and share knowledge to ensure its effective exploitation (Teece et al. 1997; Wang and Hu 2020).

Research in the field of knowledge sharing and transfer (Szulanski 1996; Jensen and Szulanski 2004; Ganguly et al. 2019) indicates that sharing and transferring knowledge processes are both very difficult and sticky. Szulanski (1995) introduced the concept of stickiness to knowledge transfer in order to highlight the difficulties involved. Stickiness emerges as an important determinant of the degree of diffusion and application of superior knowledge and more broadly of the abilities of companies to grow and prosper by replicating existing assets and capabilities (Szulanski 1995).

2.2 Barriers to Knowledge Sharing

Should knowledge be such a crucial asset to any organization and when sharing is so essential to their competitiveness, why is it so difficult to implement?

Many researchers, organizations and managers that strive to encourage knowledge sharing have focused on how they might best motivate individuals to share their most valuable personally held knowledge. However, we must first grasp the reasons people and organizations do or do not share their knowledge.

Knowledge sharing barriers are caused by social factors, technology issues and a combination of the two. The barriers related to social issues divide into two major categories: barriers attributable to the individual and barriers attributable to the organization.

At the individual level, the power of knowledge, trust, motivation and job security are crucial issues for bringing about successful knowledge sharing.

Some people presumably tend to share knowledge just as some people tend to be talkative. Others, nevertheless, follow the *knowledge is power* dictum, probably learned in organizational settings; these people may hoard knowledge and be reluctant over sharing.

Wah (2000) states that a major obstacle to KM is the propensity of people to *hoard knowledge*. Hoarding knowledge does seem to be natural, particularly under conditions of economic competition in which "knowledge is power". For example, sales staff may face quota pressures and strong competition from each other. Partial transfers of knowledge may be a more common type of hoarding in which sharers disclose selected circumstances about a case rather than the entirety of its information (Goh 2002).

One of the most important factors for enhancing knowledge sharing encapsulates the level of trust prevailing among co-workers. Most people are unlikely to share their knowledge and experience without a feeling of *trust* in the person in front of them. Any negative prior experiences with knowledge sharing shall certainly impact on their willingness to share their knowledge. Last but not least, the intrinsic motivation of the employee is another factor. They need to trust people will not misuse their knowledge while also trusting that the information received is accurate and credible due to its source.

The level of trust existing between the organization, its subunits and its employees greatly influences the amount of knowledge that flows both between individuals and from individuals into the firm's databases, best practices achieves and other records (De Long and Fahey 2000; Ogunmokun et al. 2020).

Knowledge is power and may lead to inequalities in status. Sharing one's knowledge can bring about a perceived *lack of job security*. People may regard sharing their knowledge and experience as weakening their corporate position and power within the company. Working environments often contain the fear that sharing their knowledge reduces individual job security because of the uncertainties about the intent of those with whom they are sharing their knowledge. Organizations may also contain employees that intentionally take ownership of their knowledge and experience so they receive recognition from their colleagues and peers.

Also of interest are the concepts and issues put forward by Yang and Wu (2007) to discuss what they identify as the "the social dilemma and prisoner's dilemma". Accordingly, the motivations for individual behaviour deserve first consideration and with the sharing of knowledge a personal behaviour. Based on different motivations such as competition, reciprocity, reputation, ego satisfaction, organizational climate and so forth, people may or may not share knowledge with others. In economics, the primary personal motivation of behaviour is self-interest. People do their best to maximize individual utility. When the knowledge they own is valuable to themselves, they are unlikely to share with others.

According to Miloff and Vogelstein (2012), there are many natural barriers to people and organizations sharing knowledge, specifically:

- Failure to appreciate the value of sharing knowledge,
- Lack of understanding how to effectively share knowledge,
- Lack of incentives or rewards (material or psychic) for knowledge sharing,
- Staff are busy and even with the best of intentions fail to develop knowledge sharing habits,
- Professionals are afraid to reveal they do not know something; do not want to take risks or be shown wrong out of embarrassment,
- Concern that sharing knowledge will reduce one's own value, prestige or recognition. Competition—real or perceived—for limited resources decreases the motivation for and the safety in sharing,
- The perceived benefits of knowledge hoarding make people feel secure, safe or powerful; people hope to benefit (financially, in power and credibility) from having exclusive access to knowledge,
- Lack of clarity over issues of confidentiality may lead to either withholding otherwise helpful information or sharing it inappropriately.

Some of the key examples of knowledge barriers involving individuals as identified by different authors are:

- The view of knowledge, whether as experience or as expertise, as a source of individual power (Disterer 2001; Ardichvili et al. 2006; Castellani et al. 2019),
- A lack of time either for sharing knowledge with colleagues or for identifying colleagues in need of knowledge (Riege 2005; Castellani et al. 2019),
- Trust related concerns, such as the fear that colleagues may take credit for knowledge shared by an individual or that an item of knowledge may either not be reliable or from a credible source (Riege 2005), and
- Lack of any motivation to share knowledge, such as understanding the benefits this may bring (Disterer 2001; Castellani et al. 2019).

Organizations have also taken different approaches to knowledge sharing. Some, believing in dangers of disclosing secrets or in viewing sharing as a diversion from the primary tasks of individuals, have never encouraged sharing. Others have rendered support out of a belief in the great potential benefit in disseminating knowledge within an organization and perhaps beyond its boundaries. Of course, the tenets of KM presume that sharing is generally both beneficial and necessary to organizations attaining their potential.

The knowledge barriers attributable to the organization range from the physical layout of working areas to hierarchical organization structures, which thwart knowledge transfers across functions and between hierarchical levels (Disterer 2001; Riege 2005).

Some key examples of the knowledge barriers attributable to the organization are:

- The observation that explicit knowledge tends to be shared to a greater degree than tacit knowledge, inhibiting the spread of certain knowledge types, e.g. experience (Riege 2005),
- Culture and background (Riege 2005; Ardichvili et al. 2006), language differences (Disterer 2001; Riege 2005; Ardichvili et al. 2006), gender differences (Riege 2005), and levels of education (Riege 2005).

Barriers related to technology often involve the very technology intended to facilitate knowledge sharing. According to Riege (2005), such barriers include:

- poor integration of IT systems and processes which compromise workflows,
- incompatibilities between different information systems,
- tardy maintenance of communication and collaboration support systems,
- inadequate user training,
- IT systems that fail to meet user requirements,
- the reticence of people over using systems they are unfamiliar with,
- overzealous expectations of a particular technology,
- and, an absence of organizational efforts to "sell" the benefits of the system to its users.

In extremely competitive environments, the tendency for people and organizations to build barriers to sharing their own knowledge is understandable. Knowledge is power and it is natural human behaviour for people and organizations to tend to protect themselves against new entrances into their market and to counter, whether individually or collectively, their competitors by saving all their knowledge as secrets and confidentialities in "strong safety boxes" available only to a select few.

3 Overcoming Organizational Barriers to Knowledge Sharing

3.1 Incentives and Motivation for Knowledge Sharing

In the global market, yesterday's knowledge is never enough. New and innovative knowledge needs to undergo continual production and application to keep organizations sustainable. Furthermore, this only becomes possible in an appropriate environment in which knowledge sharing forms the basis of the organization's culture and leadership.

As already set out, knowledge sharing implies a predisposition to interact with third parties over accessing knowledge considered useful or necessary for a given situation. From the literature and research review, we learn that knowledge sharing fundamentally occurs through interactions among groups (Nahapiet and Ghoshal 1998; Castellani et al. 2019).

Riege (2005) maintains that the efficient and focused sharing of pertinent knowledge results in faster learning for both the organization and the individual.

A remarkably interesting study developed by Yang and Wu (2007) relates to appropriate leadership roles and the collaborative culture for knowledge sharing. According to Yang and Wu, "successfully knowledge sharing or knowledge transferring relies on neither document nor information techniques. Knowledge sharing in an organization involves interactions between people. Under these conditions, an individual would consider the trade off between individual and organizational interests when making the decision to share knowledge with others. Since knowledge is powerful and a scarce resource in a knowledge-intense firm, people possessing important knowledge about an organization occupy a strong position and acquire some benefits in an organization. If people share their knowledge with others, their current advantages might suffer, or even be transferred to others. A rational individual would not easily share knowledge with others in these circumstances" (Yang and Wu 2007: 4).

Furthermore, individual behaviours also affect the utility of opponents and the final results of any team or organization. Hence, research findings conclude that organizational environments must provide a stimulus for employees to become active agents and contribute to the development of organizational knowledge. Assuming people are driven by motivations of self-interest, they "are likely to share their knowledge with others in an organization if they can gain additional payoff through doing so. People potentially benefit when they share knowledge with each other, by gaining or creating new specific knowledge, thus increasing the exclusive benefit in an organization. Due to the possibility of obtaining additional payoff, people are driven to share their valuable specific knowledge, even if there is a potential risk of losing their own knowledge advantages" (Yang and Wu 2007: 5).

In the contemporary world, any profitable organization needs to consolidate its competitiveness by instigating innovation processes in which people share their knowledge unselfishly so that this gets utilized effectively.

This requires a appropriate *organizational culture* and a strong *leadership style* in knowledge sharing processes, supported both by communication and trust and motivation and collaboration, which are primary and critical components to “unlocking” and stimulating sharing processes.

Communities of Practices (CoP) represent one example of how knowledge sharing may enhance and consolidate organizational knowledge as well as develop new and innovative knowledge.

3.2 A Supportive Organizational Culture

Placing the focus on fostering collaborative climates, in which collaboration encapsulates ‘mutually sharing norms of behaviour’, Yang (2007) starts out in his study by recalling that organizational culture was described by Robbins and Barnwell (1994) as the shared values, beliefs or perceptions held by employees within an organization or organizational unit that are not only agreed on by a significant proportion of members but also largely taken for granted by them. As expressed by the author, “culture is socially learned and transmitted by members, and can be found in any fairly stable social unit, of any size, as long as it has a reasonable history. In summary, culture provides norms/rules for behaviour in organizations.”

An effective organizational culture is a key component influencing the capacity of organizations to survive and succeed over the long term (Schneider et al. 1994). Gupta et al. (2000), and Al-Kurdi et al. (2020) maintain that an organizational culture containing themes of openness and incentives successfully facilitates the integration of individual competencies (including skills, knowledge and experiences) into organizational knowledge through learning and knowledge creating and sharing.

According to many different studies, fostering the following components of organizational culture is susceptible to accelerating the implementation of KM practices:

- a ‘collaborative, not a competitive’ climate (Cameron 2006; Goh 2002; Ruggles 1998; Sveiby and Simons 2002; Oyemomi et al. 2019; Al-Kurdi et al. 2020),
- a trusting and trustworthy work environment (Goh 2002; Rowley 2002; Soliman and Spooner 2000; Sveiby and Simons 2002; Wenger et al. 2002),
- top management commitment (Hislop 2010; Mrinalini and Nath 2000; Rowley 2002; Oyemomi et al. 2019),
- mentoring programs (von Krogh 1998),
- accountability for sharing within a team (Bollinger and Smith 2001; Sawhney and Prandelli 2000),
- a focus on innovation, problem-seeking and problem-solving (Goh 2002; Oyemomi et al. 2019), and
- an opportunity for spontaneous and voluntary sharing (Dixon 2002).

Sveiby and Simons (2002) describe how the development of information systems and technologies fails to be successful without an individual willingness to share.

These authors identify the two major impediments to sharing as an “internal culture of resistance to sharing” and “a culture of hoarding knowledge”. The components of ‘collaboration’ and ‘trust’ must be incorporated into the organizational culture for successful KM practices, focusing this culture on “the values, beliefs and assumptions that influence the behaviours and the willingness to share knowledge.”

They identify the following ‘enabling’ characteristics of organizational culture:

- fostering trust in the workplace,
- encouraging knowledge sharing in action not words,
- promoting the introduction of new knowledge into the organization and developing insights and innovations for future success,
- stimulating employees to say what they think, and
- building open communication channels throughout the organization.

However, implementing knowledge sharing practices requires consideration of certain aspects of organizational culture (McDermott and O’Dell 2001), in particular:

- highlighting the relationship between KM initiatives and daily organizational routines. This means making visible the link between knowledge sharing and the practical results in terms of achieving business objectives and/or solving concrete problems,
- making knowledge sharing a “natural process” requires understanding just how information and knowledge exchanges really occur. Hence, visible KM activities – events, meetings, language, web sites – need to reflect organizational habits and routines even when the intention may be to promote new behaviours or approaches,
- defining values for knowledge sharing consistent with organizational values and not expecting people to share their ideas and contributions simply out of moral obligation. Once again, the language and practices adopted must be consistent with these values,
- fostering a culture of sharing through existing networks of relationships and interactions. This involves providing the tools and resources necessary for sharing to occur during these interactions and, above all, legitimizing these relational networks as a critical factor of success for knowledge sharing,
- seeking the support of people in the organization who stand out for sharing ideas and knowledge or influential managers who can influence the behaviours of other organization members. These people may serve as a type of “knowledge activist”,
- KM initiatives also need to align and be consistent with other organizational practices (e.g. human resource management practices).

By its nature, organizational culture should be supportive and an enabler of knowledge sharing behaviour within an organization. Especially when the top management set the example, this becomes an enabler of motivations to share knowledge with other people within the workplace (Wang and Noe 2010; Al-Kurdi et al. 2020).

3.3 Leadership Styles

However, organizational culture is not in itself enough. Organizational culture and leadership are always in mutual accompaniment. Any cultural environment seeking progress will not survive without a strong leader coupled with total senior management commitment to teamwork and engaged in improving knowledge sharing just as no leader can lead successfully without the support of an organizational culture for teamwork and knowledge sharing.

Team leaders play important roles in nurturing healthy working atmosphere among their subordinates (e.g. Grandori and Kogut 2002; Hendriks 1999; McDermott and O'Dell 2001; Castellani et al. 2019; Moreno et al. 2020). The traditional view of management states that organizational members act as the instruments of their superiors (Roth 2003). However, this perspective is no longer seen as appropriate to securing long-term success and managers are increasingly required to stimulate subordinates to voluntarily transfer talent and experience into organizational assets. This involves leadership rather than management and facilitating and coaching roles correspondingly requiring more attention (Roth 2003). The studies of Chourides et al. (2003), Goh (2002) and Castellani et al. (2019) demonstrate how coaching leadership roles can positively facilitate KM. Mentoring programs enable senior members to assist juniors with senior staff members needing motivation to share their knowledge and experience with juniors and newcomers (von Krogh 1998).

Several scientific studies have concluded that leadership provides a crucial factor for facilitating processes of knowledge creation and sharing (von Krogh et al. 2012). In understanding leadership as the ability to influence the organization's members over achieving for the KM strategic objectives, it becomes the responsibility of organizational leaderships to promote the dissemination of their vision for KM through theirs commitment to knowledge sharing objectives and initiatives (McDermott and O'Dell 2001; Moreno et al. 2020). According to Kukko (2013), leadership plays a fundamental role in knowledge sharing, especially when firms are able to integrate the KM purposes into organizational goals. Senior managers must be the creators of a knowledge sharing culture within their strategic leadership as well as responsible for supporting knowledge development initiatives by facilitating the resources and means necessary for the implementation of these initiatives (von Krogh et al. 2012). Hence, leadership activities must also involve structural components that enable the management and development of the organization's knowledge assets (Nonaka et al. 2000a, b; Moreno et al. 2020), including aspects such as facilitating communication through information technologies (ITs), organizational structures and routines (promoting efficient horizontal and vertical communication channels) and providing the physical spaces for meetings.

However, the role of leadership in facilitating knowledge sharing is not limited to senior management. Nonaka (1994) maintains that a "top-down" perspective is not the most appropriate for KM. The top management does play a central role in promoting the KM vision but intermediate managers (supervisors, department and unit managers, project managers) are essential to stimulate shared contexts and boost the knowledge development processes (Nonaka et al. 2000a, b; Moreno et al. 2020) especially because they are the effective link between vertical and horizontal information and communication flows.

Approaches to leadership normally consider this a position, process or activity controlled by a central authority (von Krogh et al. 2012) as easily understandable from different studies on strategic leadership (and leadership styles) undertaken by various researchers (e.g. Lakshman 2007; Srivastava et al. 2006). However, a distinctive way of perceiving leadership involves assuming the distribution (and sharing) of control, authority and influence among different team members. Within this framework, leadership emerges through the mutual and constant interactions between the behaviours both of leaders and of all other team members (Drath et al. 2008), through dialogue and attribution, in what Drath and colleagues termed as "a view of leadership as dialogue and sense-making (Drath et al. 2008: 651)". In keeping with the dynamic nature of KM processes and their dependence on contextual factors (cultural and structural), knowledge sharing is likely to be best facilitated by leaders able to reconcile centralized and shared leadership styles (Nonaka et al. 2000a, b; von Krogh et al. 2012; Moreno et al. 2020).

Facilitating the leadership of learning improves an organization's ability to absorb knowledge (Simonin and Özsomer 2009), Facilitator leaders, assuming their roles as coaches or mentors, focus on the development of those around them, encouraging them to overcome barriers to learning, delegating responsibilities and motivating employees. Yang (2007) reports similar results in terms of the positive correlation between the "facilitator" and "mentor" leadership styles and the effectiveness of knowledge sharing. In this study, this positive correlation also extends to the "innovative" leadership style. In contrast, leadership styles involving excessively rigid policies and procedures negatively affect knowledge sharing. According to this same author, control and overly strict rules negatively influence the sharing of knowledge and with employees potentially perceiving them as coercive factors with associated punishments, understood and anticipated as the individual costs associated with knowledge sharing.

Furthermore, learning processes in an organizational context often occur based on "trial-error". Commonly, positive attitudes towards error associate with positive effects in terms of collaborative work and reinforcing a culture of sharing (e.g. Lindner and Wald 2011). Thus, managers should foster their openness to new ideas and changes (Cabrera et al. 2006; Sun and Scott 2005), perceiving at errors as development and learning opportunities rather than punishing team members for such mistakes.

Despite the importance of shared leadership in favouring formal relationships associated with experimentation and the sharing of personal experiences, this does not exclude the need for formalized roles or leadership activities. Both strands complement and reinforce each other and structural components such as vision, job layout and the formal definition of roles and responsibilities are able to reinforce the prevailing cultural values and collaborative working practices.

3.4 Communities of Practice

Communities of Practice (CoPs) have been highlighted as an effective method for knowledge sharing in KM practices and strategically applied by many organizations (Kim et al. 2012) as powerful mechanism for improving knowledge sharing among project managers, both within and between organizations (Lee et al 2015). CoPs receive particular recognition for their promotion of knowledge sharing within the scope of improving organizational innovation (Harvey et al. 2013).

The "*communities of professionals*" and "*communities of practice*" (CoP's) concepts provide a splendid conceptual instrument for recognizing how groups of professionals organize themselves at work, how they share knowledge, and how they learn, innovate and collaborate in ways that organizations often ignore in their descriptions of functions, professional training curricula and evaluation rules.

Organizations may draw significant value from them whenever actually prepared to recognize the existence of such communities, analyze their functioning, and create mechanisms, procedures and online tools that facilitate and improve the work of each such community. This should also target the innovation potentially resulting from their cross-sharing of explicit and tacit knowledge.

The issue of "professional communities", in the context of business activities, displays a long tradition, especially in the studies of industrial anthropology (Burawoy 1979) and the ethnography of organizations (Van Maanen and Barley 1984).

According to Van Maanen and Barley (1984) the "definition of an occupational community contains four elements, a group of people who consider themselves to be engaged in the same sort of work, who identify (more or less positively) with their work, who share with one another a set of values, norms, and perspectives that apply to, but extend beyond, work related matters, and whose social relationships meld the realms of work and leisure." However, not all occupations come to hold clearly decipherable contours as the degree to which knowledge, practices and values are shared among practitioners varies across occupations, across time, and across settings. "However, some occupations display a rather remarkable stability in social space and time and, hence, can be decoded. It is for them that the idea of an occupational community is most relevant since it draws attention to those occupations that transmit a shared culture from generation to generation of participants." (Van Maanen and Barley 1984).

Nevertheless, among many different authors, Wenger most contributed to the elaboration of the "CoP's" concept, evolving it from an analytical perspective to a prescriptive understanding and disseminating this throughout organizational and educational contexts (Wenger et al. 2002; Wenger 1998).

As Depalma (2009) describes: "Wenger provides this rigorous treatment, defining CoP's in terms of mutual engagement in a shared practice, negotiation of a joint enterprise, and the development of a shared repertoire"

And despite some criticism of Wenger's work, Depalma recalls how "Alinsu helped to make a useful point at the time: CoP's are indeed everywhere, even under the most dull and repressive regimes, whether managers want them or not. Yet this useful metaphor, as metaphors always do, involved a trade-off, and some of the breadth and complexity of Wenger's ideas have become lost in theoretical abstraction, overshadowed by the particular "reality" of Alinsu".

4 Conclusion

Knowledge is a key asset for any organization and knowledge sharing represents the best strategy both for creating more knowledge and for applying that existing to improve efficiency and add value to the company. However, with so many barriers to sharing knowledge, is this an easy task? No, it certainly is not!

Economic, behavioural and social factors all require consideration when assessing the issues around how to motivate individuals, or groups of individuals, to contribute their most valuable personal asset, transferring and sharing their own powerful knowledge to others who they may not even know as happens when contributing to KM systems.

Most of the interest and research on knowledge sharing have focused on this supply-side issue: that is, how to motivate people to share. However, some researchers have concentrated on the demand side: the knowledge seeking and knowledge-acquisition behaviours of individuals. This perspective addresses the potential users of knowledge and how they search for this when facing questions or problems. Expert networks have been established in organizations to enable such searches and with communities of practice clearly also facilitating this demand-side viewpoint of sharing.

No matter what individuals are apt to misunderstand, forget, filter, ignore and/or fail to pass on or whether this kind of withholding behaviour is unintentional or deliberate, organizational performance may nevertheless be affected. The incomplete transfer of knowledge incurs 'knowledge depreciation' or organizational forgetting even while deterring hoarding behaviours seems difficult. Inspiring individuals to share thus becomes crucial and organizations have to maintain healthy collaboration based climates.

Furthermore, the issues around how best to motivate individuals to share their most valuable personal knowledge are not completely resolved. Conventional wisdom states that nurturing a knowledge-sharing culture provides the best means even though this is not empirically well validated.

Among the other research findings on knowledge sharing that appear to achieve some consensus are the following:

- Knowledge sharing involves both costs and benefits (not necessarily economic),
- Contrary to certain popular wisdom, supervisory control appears to be more important than perceived organizational support in terms of both the frequency of submissions and the perceived effort expended on contributing to KM systems,

- Concerns over self-interest generate a negative effect on sharing-related attitudes. This might suggest that organizations fostering highly competitive cultures, such as policies of counselling 10% of the lowest performers out of the organization each year, might have difficulties in motivating knowledge sharing,
- Dispersed (not concentrated) computer-mediated teams encounter difficulties in knowledge sharing that are greater than those experienced in concentrated teams in part because of the difficulties in establishing a social presence — the degree to which the medium facilitates awareness of other people and the development of interpersonal relationships,
- Systems variables, such as use and usefulness, appear to have important moderating effects on individual sharing behaviours through KM systems.

While is no doubt about the importance of knowledge to the competitiveness of any organization, that knowledge only attains importance when able to apply it to the continuous improvement of process efficiency and in adding value to the marketed products and services.

Furthermore, in the contemporary world, yesterday's knowledge is never enough in the global market context and we therefore also need to be able to continuously create new and innovative knowledge.

However, knowledge is power and its sharing becomes so difficult as a direct result alongside the many barriers and walls that require overcoming.

As knowledge is power, just how might it be effectively shared? Trust, motivation, collaboration are the core drivers for a supportive organizational culture coupled with effective leadership successfully nurturing the sharing of knowledge within the organization.

Communities of practice as groups of people who share concerns or passion in something they do, regularly interacting to learn how to do this better, are also powerful vehicles for promoting a culture of learning and sharing of knowledge within domain of expertise and capable of providing benefits whether for organizations or each member/participant.

"***Build bridges. Not walls!***", Pope Francis said. Let us indeed build bridges instead of walls to share our knowledge and improve the quality of our own lives as well as that of our societies.

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