

# Value Creation Role of Knowledge Management: a Developing Country Perspective

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**Abstract:** Knowledge is seen as a driver for the definition and development of an organizational strategy and a key determinant of sustainable organizational competitiveness. The shift to knowledge as the primary source of value means that knowledge plays a key role in the organizational effectiveness. This paper highlights the importance of developing and managing the intangible assets and intellectual capital of organizations to create distinctive and sustainable value. It sets forth the concept of Knowledge Circles to enhance activities along the Knowledge Value Chain. Some of the factors that will impact knowledge management initiatives in Pakistani organizations have also been identified.

**Keywords:** knowledge circles, knowledge management, Pakistani, intellectual capital

## 1. Introduction

The present milieu of business is characterised by fast, volatile, high-value competition. To survive, organizations must be agile, responsive and flexible. The new economy is characterized by the shift to knowledge as the main determinant of economic growth and success (Hamel et al, 1994). The shift to knowledge as the primary source of value means that knowledge plays a key role in the definition, functioning, and performance of firms.

This paper highlights the importance of developing and managing the intellectual capital of organizations to create distinctive and sustainable value (Kaplan et al, 2004:30). Drawing upon the knowledge-based view of organizations, it seeks to further the discussions on capturing tacit, socially embedded knowledge, its externalisation (Nonaka et al, 1995:19) and codification and, the knowledge creation pathways that exist within organizations. It sets forth the concept of Knowledge Circles to enhance the sharing and transfer of knowledge among employees to ultimately create strategic advantage for the organization. The authors have provided a perspective on knowledge management initiatives within Pakistani organizations.

Learning is always situated in the sphere of social interaction; knowledge and knowing capacity may remain relatively hidden from individual actors but social interactions increase the degree of accessibility and sustainability of this knowledge (Spender, 1998:15). Organizations provide an enabling environment for learning by virtue of being a social collectivity: since knowledge by nature is collective and it is through a process of communal development that a body of knowledge develops (Wenger et al, 2002:10).

From an organizational standpoint, knowledge is available both within and outside an entity, thus 'what' and 'why' become important questions in the quest for organizational knowledge. Organizations strive to capture knowledge as well as employ knowledge management initiatives for quality improvement, innovation, efficiency, improved decision-making, change management, alignment with customer needs, and the like. Increasingly, organizations are cognizant of the fact that espoused practices (canonical practices) blind an organization to the actual, valuable practices of its members (noncanonical practices) which are often tacit (Brown et al, 1991). To avoid developing 'blind spots' as a result of this conceptual outlook, organizations are looking to increase employee communications so that the transfer of valuable experiences and the accompanying knowledge can be transferred.

## 2. Redefining corporate value

The new economy has introduced a new lexicon in which knowledge capital, intellectual capital, learning organizations, intangible assets, and human capital describe new forms of economic value (Bontis, 2001). For decades, the trend has been shifting away from a product-driven economy based on tangible assets to a knowledge economy based on intangible assets (Kaplan & Norton, 2004). This shift means that the knowledge component of products and services becomes an important strategic resource (Quinn, 1992) and the dominant component of customer value. Thus, it can be said that the only source of competitive advantage which can be leveraged (Davenport et al, 2000) is the ability to create, find, and combine knowledge into new products and services faster than the competition.

We now recognize knowledge as a key source of competitive advantage in the business world, but we still have little understanding of how to create and leverage it in practice. Traditional knowledge management approaches attempt to capture existing knowledge within formal systems, such as databases. Whether tacit or explicit, knowledge needs to be updated constantly; this requires social structures which can assume responsibility for fostering knowledge, developing competencies and managing knowledge. (Wenger et al, 2002:9)

### **3. Intangible assets and corporate strategy**

Changing markets, growing stakeholder expectations, and defining success by using non-traditional measures of success (Neely et al, 2002:17) clearly showed that in the era of globalization the rules of the game had changed. Organizations realized that those intangible assets which support the organization's value proposition had to be mobilized and aligned with corporate strategy in order to maintain and refresh core competencies for continuous process and product innovation. It is when those core competencies (Prahalad et al, 1994) which are the underpinnings of the customer value proposition, are developed can value creation be sustainable. In order to allow core competencies to continuously develop, knowledge assets that support the organization's key capabilities must be aligned with corporate strategy, managed, and measured.

Innovative knowledge is what firms require to dominate an industry by changing the basis for competition. Organizations need to innovate to create new processes and products in order to sustain competitive advantage for without innovation, a company's value proposition will eventually be imitated, eroding competitive advantage.

In order to innovate and create new value, employees must be equipped with the right learning and given the right information about their organization. Therefore, it is critical for organizations to identify their knowledge assets and have the ability to leverage them. Competitive advantage emanates from the ownership of knowledge assets, the underpinnings of organizational competencies, which in turn pave the way for process improvement and product innovation. (Sveiby, 1997) increasingly, companies are transforming themselves into 'learning organizations' (Senge, 1990) so that their knowledge assets can be continually developed and performance capacity can be enhanced.

### **4. Knowledge creation pathways**

Organizations are better positioned to accumulate and disseminate knowledge because they can mobilize the social capital embedded in human relations to create intellectual capital. Organizational advantage is obtained through the networks of relationships within firms that combine to form the firm's "social capital" that is in turn harnessed to produce the firm's "intellectual capital" (Nahapiet et al, 1998:245). Knowledge creation begins with socialization (Nonaka et al, 1998). It is through interaction between individual perspectives that social capital is created and accumulated. Learning of individuals has to be transferred to groups and from groups to organization to harvest knowledge management benefits.

Organizations learn as a result of the individuals learning within them (Senge, 1990) and a healthy organization is characterized by a robust culture of formal and informal learning, and by abundant internal communication in all media. Organizations provide the "ba" (Nonaka et al, 1998) that fosters human interaction, forges a shared identity and supports individual learning through human interaction, ultimately increasing its wealth creating capacity (Savage, 1999). Organizations provide institutional settings for human interactions, a precursor to the formation of social capital. These institutional settings encourage the horizontal and vertical diffusion of knowledge across the organizational structure, since knowledge of an organization's products and processes is not found in any one individual but is distributed across its members and hierarchies.

The diffusion and transfer of knowledge across hierarchies takes place largely through informal relationships that exist outside formal organizational structures. These relationships are initiated as a result of employees with a common goal, 'shared identity', gravitating towards fellow employees who are perceived to be experts on issues which may arise during the production process. The catalysts for forging these relationships are therefore, 'know who', 'know what', 'know why' and 'know how'. Unfortunately, tacit knowledge is frequently overlooked. Most companies have elaborate systems to capture and share their explicit knowledge but much less attention is paid to implicit knowledge.

These networks, described in various literature as “communities”, “worknets”, “knowledge networks”, etc. encourage dynamic learning that in turn positively impacts the organization’s intellectual capital by increasing its depth and breadth. Informal relationships lend certain ‘fluidity’ to the formal organizational structure; employees have the freedom to share knowledge, discuss views, and improvise.

## **5. Knowledge circles**

For an organization to enhance performance, it must be able to create new knowledge by combining knowledge with knowledge and knowledge with resources, as well as change internal processes and structures (Kaplan et al, 2001).

Knowledge Circles seek to engage employees for creating and sharing knowledge. This concept envisages establishing tighter links between groups with a common objective; to achieve group intelligence where people reason and think collectively (Senge, 1990), to empower employees by creating cross-disciplinary teams and to create an enabling environment typified by a high degree of collaboration.

Because knowledge is spread across hierarchies, these circles traverse horizontally to connect individuals and groups in functional areas and vertically to connect production activities along the value added chain. This high degree of inter-connectivity ensures that employees are fully engaged within their environment, have an intimate understanding of the organization’s core competencies and the contribution they make to the development of these core competencies.

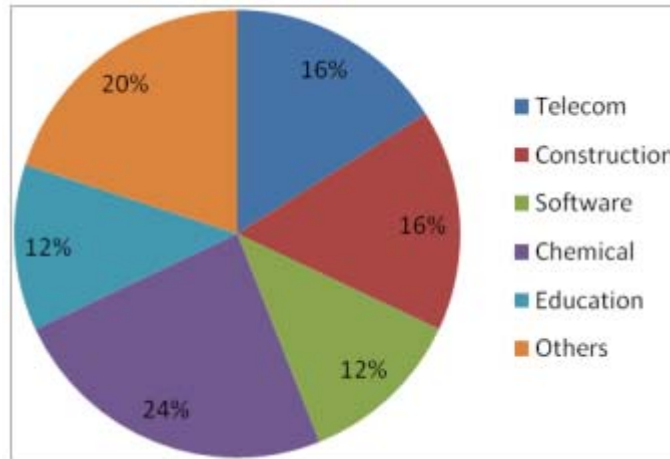
As noted above, knowledge networks tend to form naturally around common problems or where there is shared identity. Knowledge Circles focus on the informal relationships that exist within functional areas, on how these networks overlap between functional areas to stretch across organizational hierarchies. These overlaps are the points at which diverse knowledge intersects and help to build social capital.

Networks within any functional area will have a group moderator, a position determined by a person’s degree of centrality on the network map. The ‘stickiness’ (Von Hippel, 1994) of tacit knowledge makes it best transferred over shorter paths within the network; the group moderator will manage the diffusion of tacit knowledge within the network, ensure the conversion of tacit knowledge to explicit knowledge, its subsequent codification and transfer to other networks in the form of shared artefacts (see e.g., Boland et al 1995, March et al 1996, Cook et al 1996) and methodologies, resulting in increased network benefits. Group moderators will also ensure that inertial forces interfering with innovation such as routines, behaviour patterns or beliefs are minimized by eliminating redundant knowledge, encouraging the adoption of more effective methods and maintaining a high degree of interconnectivity with other intra-organizational networks.

## **6. Pakistani perspective on knowledge management**

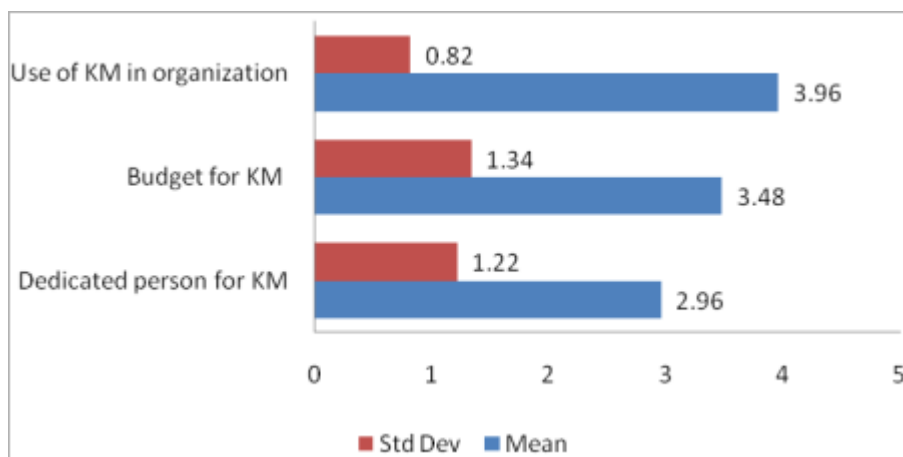
It can generally be observed that cultures which do not nurture openness and knowledge sharing cannot provide the appropriate human inputs needed by organizations for their knowledge management initiatives. The present societal culture in Pakistan does not support open sharing of knowledge because sharing knowledge is considered akin to sharing of power. Historically, dominant thinking has been against sharing and transfer of knowledge. The traditional teacher-disciple concept is prevalent in this society, where knowledge and skills of some disciplines are transferred to a trusted disciple by word of mouth and not through formal means of education. For this reason alone, many useful disciplines died along with the individual holding knowledge because the knowledge was not codified. For instance, the Ayurvedic, a potent system of medicine, failed to flourish as a science taught in universities because the practitioners were reluctant to transfer the knowledge in a formal manner.

A survey of organizations in the manufacturing and the service sectors of both the public and the private sector was conducted to have an insight into the Pakistani perspective on knowledge management. The average number of employees in an organization surveyed for this study is approximately 500. The three major aspects covered in the questionnaire include organizational efforts for knowledge management, transfer of knowledge and competencies amongst employees and learning from customers, and to ascertain organizational methods put in place for personnel to capture and share knowledge. A questionnaire having ten questions framed upon 5 point Likert scale was prepared and sent to 32 organizations to collect the responses. 25 responses were found usable providing an effective response rate of 78 percent. Figure 1 shows a pie chart of the type of respondent organizations. Others include general engineering manufacturers and banks.



**Figure 1:** Type of respondents

Figure 2 shows the results of the organizational efforts for knowledge management. These include having an exclusive person in-charge of knowledge management activities, having dedicated budget for knowledge management, and using knowledge management practices in the organizational operations.



**Figure 2:** Organizational commitment to KM

As is typical of nascent and evolving organizations in the developing world, a significant number of Pakistani organizations (over 72 percent of the respondents) do not have the congruous under-structure required for implementing knowledge management initiatives. In the absence of such an enabling environment, organizations have to make greater efforts so that employees can rise above such socio-cultural influences which might impede the sharing and transfer of knowledge and experiences. Almost all organization structures in local organizations were created in hierarchical traditions that did not help the cause of free flow of communication. The flow of communication was strictly based on step wise progression through the hierarchical channel.

Figure 3 shows the second aspect covered by the questionnaire and that being the implementation of KM in an environment characterized by the prevalent organizational culture.



**Figure 3:** Implementation of KM

The mean responses for the four characteristics have been between neutral to agree (between 3 and 4 points) as evident in Figure 3. Majority of the organizations (over 85 percent of the respondents) lag far behind in the actual implementation of KM although they agree to and strongly desire that their prevalent processes and operations make use of formal knowledge management systems and practices.

While this will help to highlight some of the weaknesses in our organizations in their being incapable to fully employ KM systems, it reiterates the stance that the prerequisites for the success of knowledge management initiatives reside firmly in the domains of organizational culture, leadership, organizational structure, power structures, employee involvement and empowerment, management models, and business process management. Organizations have to provide an environment that encourages social interaction because sharing and creating new knowledge happens through social, collaborative processes.

The third aspect of the questionnaire was to determine the level of use of various KM facilitators. Table 1 shows the various levels of use of KM process facilitators in the Pakistani organizations. Official electronic email and meetings have emerged as the most widely used means of KM processes. Very few organizations have other systems in place that make full use of information technology infrastructure. Decision support tools, enterprise portals, video conferences, data warehousing, and visualization solutions have a great potential in KM but the organizations are not yet fully aware of employing these facilitators in KM endeavours. This turns out to be the primary difference between KM in Pakistan and the developed world.

**Table 1:** KM facilitators in use

Percent use	KM Facilitator
28	Official email / internal discussions
23	Coordination Meetings / 1-1 discussion / group meetings / presentations
13	Training sessions / staff get-together
11	Central server where shared material is kept
10	Performance review conferences / Annual sales conference
7	Brainstorming sessions
5	Records of Lessons Learnt
3	Community of Practices (CoP) using the intranet

An employee shares tacit knowledge when he finds supportive culture that is open and places value on knowledge. It may be said that the real challenge faced by Pakistani organizations is the conversion of tacit knowledge into explicit knowledge. It is evident from Table 1 that the most widely used facilitators of KM in our organizations do not have the full potential of capturing the tacit knowledge, since these are primarily used as communication tools for routing organizational and business operations. To move ahead in the

knowledge management terrain, organizations will have to provide conducive environment, collaborative management styles, appropriate leadership and, supportive organizational configuration making full use of the information technology infrastructure as well.

## **7. A cultural perspective on knowledge management**

It has been highlighted continually that lack of supportive organizational culture and structure may hamper KM initiatives in any organization. Therefore, it is imperative to also study the cultural aspect as a key dimension of KM and to link KM initiatives or their lacking with cultural factors and issues. To do that, a basic understanding of Pakistani national culture is essential since this will serve as a rationale for the attitudes, behaviour and values exhibited by the people who eventually become employees of local organizations. The Pakistani culture, with specific reference to KM is analyzed in the light of a cultural model as follows.

## **8. High and low context cultures**

Hall has defined the concept of high and low context cultures (Morden, 1999). Individuals from high context culture become well informed about the facts associated with a matter before they make a decision. Information is sought and spread usually through discussion with friends, co-workers, relatives and rumours at times. On the contrary, those from low context cultures will prefer consulting a research base before making a decision, and will emphasize on the use of reports, databases and other electronic forms of information. Based upon this definition, the Pakistani culture is a high context culture. The Indians, Japanese, and the Chinese also have a high context culture. On the contrary, most of the European and North American regions have a low context culture. Since high context cultures are more relationship oriented and have less explicit communication and formal information and knowledge, they are bound to hinder transformation of tacit knowledge to explicit knowledge for use in organizational KM systems. That explains why knowledge of certain disciplines of arts and sciences in the Chinese, Japanese, and Indian societies has only been carried forward by teachers to students or family members only by word of mouth and not through formal educational systems. There is relatively a low understanding of KM concept in Pakistani organizations and even if the KM concept develops and is well understood and practised, the lack of required cultural transformation and support will be a major obstacle to its success in these organizations for years to come.

Problems in implementations of KM in a survey of Indian manufacturing industry have been highlighted (Singh, 2006). Since the culture of the two countries is similar as both being high context, the problems identified are alike in Pakistani organizations too. The two main obstacles identified in this survey are unwillingness of people to disclose and share knowledge, and people's consideration that knowledge sharing will have an adverse affect on their jobs. It can be said with certainty that amongst many others, these two factors form the root cause of non-implementation of KM systems in their true spirit in the Pakistani organizations.

A culture of fear can hamper success since employees may feel they may no longer be required since they will share everything and keeping knowledge will no more be a source of job security. In this case, it is important to establish a rewarding culture where trust among teams and business units is the highest. The employees should be rewarded for knowledge sharing, collaborative problem solving, and knowledge development. It is the leadership which inspires employees and which can change the culture to that of knowledge sharing by empowering employees and making them members of an interconnected business system. This must not be slogan based but action based. The employees must be shown that sharing knowledge will reward them. Often mistakes are hidden and ideas for improvement are lost when these mistakes could have helped learn and improve the system. Similarly, not taking action or maintaining status quo should be discouraged and even penalized since it goes against the spirit of continuous improvement particularly when it is characterized with issues related to the business value and the customers.

KM System success factors available in literature have been identified (Murray, 2006). Two factors among them relate to the obstacles identified above. These success factors include motivation and dedication of users including incentives and training, and an organizational culture that supports learning and sharing of knowledge. However, with the inherent restrain exhibited by high context cultures toward knowledge sharing through formal KM systems, it will be a challenge to gain maximum benefits out of a KM system even if an enterprise-wide knowledge strategy and processes exist along with the required technical infrastructure.

## **9. Conclusion**

The agility and competitiveness of organizations is dependant upon their ability to leverage their intangible assets. Knowledge is a key determinant of corporate value therefore, organizations must be able to identify, manage, and measure it.

To maintain their competitive edge, organizations need to build their intellectual capital and mushroom their knowledge management initiatives. These initiatives require an enabling environment that encourages employee involvement in social processes of knowledge creation. Pakistani organizations should:

- Construct KM structures/models
- Create culture of employee involvement
- Communicate company strategy clearly
- Align knowledge networks within the organization with corporate strategy
- Align HRM processes – starting with recruitment and selection processes - with knowledge management philosophy
- Build an inclusive culture that encourages employee participation across all hierarchies (e.g. TQM, BPR, IT, process-centric structures)
- Provide appropriate IT/IS infrastructure and other media to facilitate the codification, diffusion and transfer of knowledge

Though the authors do not preach the creation of Chief Knowledge Office role in most Pakistani organizations they do recommend having someone oversee the knowledge management function.

Knowledge Circles encourage knowledge creation through employee interaction and overcome organizational silos to provide opportunities for the cross fertilization of knowledge within the organization. Knowledge Circles cut across horizontal, vertical, and organizational boundaries to facilitate continuous process improvement and innovation. Since this tool builds upon informal relationships which are strong in high context cultures, it has the potential to build the critical mass required for continual improvisation and innovation thereby, launching the organization on a prolonged growth trajectory.

Knowledge Circles will not work in isolation and would need the critical elements of right leadership and supportive culture. Each implementation of Knowledge Circles and knowledge management initiatives has to be organization specific because of socio-cultural differences that are experienced between various organizations.

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