Managing the Knowledge Data Base in Banks

Dr. Gagan Deep Marken,
Assistant Professor, Vidaya Sagar College of Management and Technology,
Punjabi University, Patiala, Punjab, India

Abstract: Knowledge is something which has only intrinsic value and its extrinsic value only lies in properly managing and utilizing it. Human being was first living in a agricultural economy and after the breakthrough of technology, human first enter into industrial economy and land and labor was the two factors of prime importance in that economy. But as time passed it was found that only land and labor are not enough another important thing to be considered is the knowledge that resides in the mind of human being.

Keywords: *Knowledge Data Base*

I. INTRODUCTION

In a highly demanding business world today, an organization's competitive edge almost wholly depends on how well it can manage and deploy its corporate assets. These assets can be categorized into tangible and intangible assets. Traditionally, tangible assets like plant, equipment, inventory and financial capital are considered the most fundamental corporate assets. Intangible assets play a very little or vague role in any organization regardless from which industry it comes from (Vorbeck, Heisig, Martin & Schutt, 2001). Generally, many organizations untill today still downplay the importance of their intangible assets. However, despite managing and giving prime focus to all their tangible assets, organizations are still finding it very hard to gain the advantage to beat their competitors. Eventually, organizations have found out that tangible assets can only help them to a certain extent. It is now becoming clearer that organizations require a much broader range of resources to be able to compete and succeed in the current competitive market. This is shown by an increasing number of organizations giving more emphasis to their intangible assets, which was mostly left idle, unexplored and unmanaged (Vorbeck *et al.*, 2001).

To compete and become successful in their own market, organizations must now learn to manage their intangible asset, that is "*Knowledge"* and this practice is generally known as Knowledge Management or sometimes is referred to as business intelligence. Knowledge management is the concept in which an enterprise consciously and comprehensively gathers, organizes, shares, and analyzes its knowledge in term of resources, documents, and people skills (Lyons, 2000). The emergence of this "*knowledge era*" is radically changing what creates value in organizations (Carlisle, 2002), whereby the long-term viability and prosperity of an organization increasingly depends on its ability to leverage the hidden value of its intangible assets.

Therefore, knowledge management is now becoming an undeniably important component in an organization's intangible asset. The continuous change in market expectations and the demands for new products have been gradually replacing the capital and labor-intensive firms by knowledge intensive firms, and routine work by knowledge worker.

II. KNOWLEDGE MANAGEMENT IN THE BANKING SECTOR

For the past 20 over years, banks have been actively automating their manual processes. This has resulted in the creation of many information systems even within one bank. While these information systems were able to help banks to better manage their processes and resources, they also have created a number of setbacks. One major setback of past information system is that it has resulted in the creation of huge volumes of data and information, resulting in a phenomenon like information explosion or information overload. This phenomenon occurs when we are faced with over whelming amount of information, and we have to take time to go through the bulk of information and select the best one to use. When there is the loads of information it could result in less reactive responses and decline of capacity. With huge amount of information being created consistently, inefficiency occurs. Consequently, efficient and effective recovery of resource and knowledge has increasingly becoming an imminent research issue in recent times.

Without proper management information systems, plans, procedures and tools, information has become a very serious and annoying problem in many banks to the extent that most of the time information is regarded as noise. Nonetheless, realizing the important roles they play in the economy, banks are trying to make it a priority to capture and manage their data and turn it into organizational knowledge or business intelligence. However, the lack of process definition, classification, a comprehensive knowledge management model, and suitable knowledge based business model make the efforts futile in the last decade.

The application of knowledge management in the banking industry does not really differ from other industries but the increasing complexity of bank's environment makes its implementation more difficult. Banks have realized the crucial role of knowledge management in gaining an edge in this competitive field, but there have been laggards in the adoption of knowledge management usually due to wait and see attitude of what will be the true benefits and pitfalls from early adopters. According to an International Data Corporation's (IDC) survey conducted accross more than 600 banks in Western Europe, only 20% of banks are currently apply a knowledge management principles (Blesio & Molignani, 2000). This trend is actually more prevalent among large banks. With greater awareness of the importance of knowledge management, IDC expects this situation to change in the near future, and knowledge management will become a priority for the banking sector.

Then, what is new in knowledge management in banking sector? Apart from large volumes of knowledge, the use of information technology (IT) in managing knowledge has given knowledge management a new dimension.. It is important that the use of technology and the "*social process of technology use*" are harmonized (DeSanctis & Poole, 1994). With appropriate strategies, IT could help to carry out and maximize the benefits of many of the management initiatives, including knowledge management.

Knowledge is the main element that inspired the knowledge management initiatives in any sector. The knowledge-based era forced the banking institutions, to put knowledge as one of the main competitive advantages. The issues discussed in corporation are somehow relevant to banking institutions although "*it gets tougher in financial landscape because it is such a knowledge-oriented environment"* (Davenport, 1998; ISIS, 2002).

By mentioning knowledge management, the interpretation of knowledge itself must be clarified. Allee (1997) explains in detail the knowledge archetype that relates data, information, knowledge, meaning, philosophy, wisdom and union. Basically, the archetype defines data as if there are so many whitecaps in a larger sea of information. It is consider as information when data are linked to another. As conjunction to that matter, information becomes knowledge when it is analyzed, linked to other information and compared to what is already known.

There are researchers who define knowledge in the context of know-why, know-what, know-how, know-who, know-where and know-when, in order to relate it with managing knowledge concepts. For instance, Van den Bosch and Van Wijk (2001) present a conceptual framework of managerial knowledge integration. Know-what can be defined as something people carry around in their head and pass between each other but in contrast, know-how embraces the ability to put know-what into practice (Brown & Duguid, 2002). On the other hand, Japanese researchers like Nonaka, Toyomo and Konno (2002) defines knowledge by emphasizing on the relative, dynamic and humanistic dimension rather than traditional Western epistemology (the theory of knowledge) that focus on absolute, static and non-human view of knowledge.

III. APPLICATION OF KNOWLEDGE MANAGEMENT IN BANKING

There are several examples of knowledge management application successfully implemented in banking sector such as:

- World Bank is renowned as one of the champions in knowledge management application. She has an extensive knowledge management approach in action. Relevant know-how was identified that could then be captured and entered into the knowledge base so that it was accessible by all staff. Relevant parts of the system are now becoming attainable externally, so that clients, partners, and stakeholders around the world will be able to have access to the know how of the organizations. For example, an Indonesian official needed to know the international experience on private sector involvement in vocational training. Through the help of the Human Development Network, the relevant task team leader was able to give to the official within a short time frame a comprehensive analysis of the international experience.

- When Swedish Insurance giant Skandia expanded its "points of sale" from 5,000 to 50,000 in less than five years, senior management began looking for a more effective and efficient manner of transferring knowledge and increasing its use throughout its global operations. It has leveraged internal know-how to dramatically reduce start-up time for new ventures to seven months, compared to an industry average of seven years.

- Bank of Montreal (BMO) is the oldest bank in Canada. It is also a Canadian third largest bank with sales of $US12.23 billion in 2000 (Dzinkowski, 2001). BMO is a leader in customer centric knowledge based solution. This bank wanted to change the status quo of the traditional knowledge discovery lifecycle and capture the potential benefits of improving the efficiency of turning models into production. As a result, during 2000/2001 the Bank of Montreal participated in a multimillion dollar project that would help make the knowledge discovery process more economical, error-free and faster.

- Deutsche Bank is the biggest Euro zone bank and the world's second largest bank (Dzinkowski, 2001). Deutche Bank has embraced the strategy of continuous, concentrated corporate learning and intellectual capital branding through its creation of the Deutsche Bank University (DBU). DBU is in initial stage of development and to a large degree follows the thinking of what are recognised by industry experts as best practices in developing a corporate university as an umbrella organization for learning.

IV. RESEARCH MODEL - BANKING KNOWLEDGE MANAGEMENT MODEL (BKMM)

Based on the literature review, we have come up with a model to describe the knowledge management progress. The environment forces such as the importance for an organization to maintain its competitive advantage by managing knowledge well or the requirement of the organization to distribute its knowledge among its geographically dispersed human resources may compel the organization to initiate a knowledge management programme. Through a combination of people and technology, information and energy are transformed into knowledge progress and structures that produce products and services. There are mainly three components in the knowledge progress. They are knowledge creation, knowledge retention and knowledge sharing. Each of these components is discussed below.

A. Environment

In any work environment most jobs are imprecise: best decisions depend on circumstances and available knowledge, which drive the need to rethink current approaches to problem solving and decision-making. Time pressure demands that organizations capitalize on lessons learned. However, this approach has many limitations as the decisions made based on past experience may not be the most appropriate one. Consequently, there is a need for a sophisticated level of "*know-how*", "*know-what*", "*know-who*", "*know-where*" and "*know-why*". Organizations need to have high performance to respond to market demands such as the right product at the right time, customer focused service and marketing strategies, high performance organizational practices and access to high value of information and knowledge.

A high performance organization pursues its goals in a changing environment by adapting and enhancing its behavior according to what it knows about itself and the world in which it needs to succeed. It is therefore a learning organization that is skilled at creating, acquiring, organizing and sharing knowledge that can gain competitive advantage. Two major components influencing the success of organization in adopting knowledge management are people and technology.

B. People

A challenge for knowledge management is managing and training people to embrace a knowledge management oriented culture. According to Duffy (1999), sharing knowledge especially proprietary or individual knowledge could result in power redistribution and face cultural resistance. Many studies emphasized the importance of corporate culture in successful knowledge management (Earl& Scott, 1999; Havens & Knapp, 1999). Some even claim that knowledge management can be successful only with a change in culture. Furthermore, the new culture must be integrated with existing business processes and practices. Communication, reward systems, and leadership are important cultural factors in implementing knowledge management.

C. Technology

Knowledge in today's organizations can be characterized as "*fragmented*" (Duffy, 1999). There are extremely large volumes of knowledge dispersed in organizations with ever-increasing size. Accompanied with mergers, acquisition and alliances, banks are becoming more and more diversified in the type of businesses they operate. Information technology is only effective if used properly in data management. Now the question is whether information technology can do the same for knowledge management to enhance knowledge management initiatives.

To allow knowledge sharing anytime anywhere, several types of technological tools are available. Mobile technology, portable hardware and software, networks, email, teleconferencing and intranets are some of the commonly used technologies for knowledge creation and sharing. Knowledge repositories and data warehouse are some of the technologies used for data retention.

The people and technology are the elements contribute to knowledge progress. Knowledge progress can be divided into three components namely knowledge creation, knowledge retention and knowledge sharing.

D. Knowledge Progress

Inkpen (1996) characterizes knowledge management progress as "*a set of organizational actions thet established the basis for accessing and exploiting knowledge*". Knowledge related work, categorized by Davenport and Prusak (1998) are accessing, generating, imbedding and transferring. Three major components are involved in knowledge progress: knowledge creation, knowledge retention and knowledge sharing. The essence of knowledge management is to manage those components for organizational effectiveness.

1. Knowledge Creation

This is the progress in which knowledge is captured and defined. Explicit knowledge can be easily captured and put in the form of a manual, booklet, or document. On the other hand, tacit knowledge is imbedded in social structures, and therefore, it needs to be extracted, codified, and made explicit. Through this codification process, tacit knowledge is transformed into explicit knowledge.

2. Knowledge Retention

Another important knowledge progress component is the retention of knowledge. The main purpose of retention is to allow reuse of knowledge. Knowledge retained can be readily shared. Protection of knowledge is equally important. Without security measure, the integrity of the knowledge could be at stake. Erroneous knowledge is just as damaging as inaccessible knowledge if not more.

3. Knowledge Sharing

When we communicate knowledge, it is the process of sharing. Both explicit and tacit knowledge can be shared. However, explicit knowledge can be shared more easily and will have little risk of creating error in the process. Tacit knowledge, which is hard to articulate, is the challenging part of knowledge sharing. In any case, sharing should be as direct as possible with few intermediaries (Buckman, 1998).

CONCLUSION

The rationale behind conducting this research is to have in-depth analysis of the sound factors of Knowledge Management. And after adopting a well administered approach of collecting data we reach at valuable results and concluded that Banking sector is like a house of knowledge where no one feel hesitation in sharing their knowledge with their co-workers.

It is found that Leaders in banks are the main stream to support knowledge flow in and between organizations. Also very prominent source of knowledge sharing is Culture which represents that people have attitude of sharing not hiding and behavior of individuals is supportive in organization .Also its pertinent to note that in this competitive world banks in Pakistan are using a well functioning technological system which support effective Knowledge management.

References

[1] Bell De Tienne, K., Dyer, G., Hoopes, C. and Harris, S. (2004). Toward a model of effective knowledge management and directions for future research: culture, leadership, and CKOs. Journal of Leadership and Organizational Studies, 10(4), 26-43.

[2] Bonner, D. (2000). Leading Knowledge Management and Learning, American Society of Training & Development, Alexandria: VA.

[3] Bolloju, N., Khalifa, M. and Turban, E. (2002). Integrating knowledge management into enterprise environments for the next generation decision support. Decision Support Systems, 33(2), 163-76.

[4] Blackler, F. (2000). Collective Wisdom. People Management, 6(13), 61-63.

[5] Bratianu, C., Jianu, I. & Vasilache, S. (2007). An integrative perspective on the organizational intellectual capital in international conference on Business Excellence, Brasov: Romania

[6] Baker, M., Baker, M., Thorne, J. and Dutnell, M. (1997). Leveraging human capital. Journal of Knowledge Management, 1(1), 63-74.

[7] Cleveland, H. (1985). The Knowledge Executive, E.P. Dutton, New York: NY.

[8] Duke, S., Makey, P. and Kiras, N. (1999). Knowledge Management 1999 Report Series, 1: Butler Group Hull.

[9] Dunn, J. and Neumeister, A., (2002). Knowledge Management in the Information Age. E-Business Review Fall, 37-45.

[10] Gupta, A.K. and Govindarajan, V. (2000). Knowledge Management's Social Dimension Lessons from Nucor Steel. Sloan Management Review, 42(1), 71-81.

[11] Gummer, B. (1998). Social Relations in an Organizational Context: Social Capital, Real Work, and Structural Holes. Administration in Social Work, 22(3), 87-105.

[12] Kulkarni, U.R., Ravindran, S., & Freeze, R. (2007). A knowledge management success model: Theoretical development and empirical validation. Journal of Management Information Systems, 23(3), 309-347.

[13] Lopez, S.P., Peon, J.M.M., Ordas, C.J.V. (2004). Managing knowledge: the link between culture and organizational learning. Journal of Knowledge Management, 8(6), 93-104.

[14] Malhotra, Y. (1997). Knowledge management in inquiring organizations. Proceedings of 3rd Americas Conference on Information Systems (Philosophy of Information Systems Mini-track), Indianapolis, 15(17), 293-5.

[15] Miller, K. (1995). Organizational Communication: Approaches and Processes. Belmont, California: Wadsworth Publishing Company.

[16] Nonaka, I. and Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York, New York: Oxford University Press.

[17] Novins, P. (2002). Knowledge Management for Competitive Advantage and Shareholder Value. E Business Review, Fall2002, 33-36.

[18] Probst, G., Bu¨chel, B. and Raub, S. (1998). Knowledge as strategic resource. In Krogh, G., Ross, J. and Kleine, D. (Eds), Knowing in Firms. Understanding, Managing and Measuring Knowledge (pp.240-52). London/New Delhi: Sage.

[19] Vicky Dougherty, (1999). Knowledge is about people, not databases. Industrial and Commercial Training, 31(7), 262 – 266.

[20] Wallach, E. J. (1983). Individuals and organizations: The cultural match. Training and Development Journal.

[21] Wiig, Karl M. (1993). Knowledge Management Foundations: Thinking about thinking How people and organizations create, represent, and use knowledge. Arlington, TX: Schema Press.