



A Study on Knowledge Management in Business Opportunity to Industry

KEYWORDS

Knowledge Management, Industry, Motivations, Roles, Responsibilities, Implementation.

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ABSTRACT

Knowledge is largely cognitive and highly personal, while management involves organisational processes. Many knowledge workers do not like to be managed in the traditional sense. However, knowledge is increasingly recognized as a crucial organisational resource that gives market leverage. Its management is therefore too important to be left to chance. Knowledge Management has generated much interest in recent years and has become the latest management buzz in town. The purpose of Knowledge Management is to adapt business logic in response to environmental changes to sustain the ability of the business to value add. Now a day's Knowledge Management is very important to sustain business in competition hence knowledge of this technology is essential. This paper outlines the concept and types of knowledge. Why Knowledge Management is required, Motivations, roles and responsibilities of Knowledge Management, what are the tools essential for Knowledge Management. Finally implementation of Knowledge Management in Industry has significant opportunities to apply Knowledge Management practices to support every part of their mission.

1. INTRODUCTION

Knowledge is the ability to take effective action it is the Know-how, born of experience that allows correct decisions to be made, and effective processes to be developed and applied. Knowledge is increasingly being recognized as the new strategic imperative of organizations. The most established paradigm is that knowledge is power. Therefore, one has to hoard it, keep it to oneself to maintain an advantage. Enterprises are required to make maximum use of the knowledge and it is their corporate knowledge asset. These knowledge assets are distributed right across the enterprise such as: databases, knowledge bases, filing cabinets and peoples. Enterprises need to know corporate knowledge assets and how to manage and make use of these assets to get maximum return. Most traditional company policies and controls focus on the tangible assets of the company and leave unmanaged their important knowledge assets.

2. LITERATURE REVIEW

We have historically categorized the knowledge management journey into three generations; the period 1990-1995 can be called as the first generation of knowledge management. The initial work started with defining knowledge management, investigating the potential benefits of knowledge management for businesses, and designing specific knowledge management projects (senge, 1990; nonaka, 1994; quinn, 1992; and wigg, 1993). (newman, 1997) conclude that a leader's responsibility is to be continually aware of the state of knowledge leadership within the organization and continually evaluating the organizations inventory of knowledge with the potential to deliver market leadership, readiness to exploit it, timing for release and potential lead time before a competitor reverse engineers the product or process. Knowledge management practical application to organizations started around 1996, which can be stated as the second generation of knowledge management. (hansen et al., 1999) mentioned that only strong leadership could provide the necessary direction, where an organization will need to implement and effectively deploy a knowledge management program. (rossett, 1999) pointed out five ways that knowledge management perspectives can influence training: (1) joining ongoing efforts and collaborating with other organizational people involved in knowledge management initiatives (2) repurpose existing knowledge bases and training materials (3) use many strategies to support people at work (4) head a pilot effort aimed at seeking opportunities to use knowledge management perspectives and systems and (5) increase the "learning fullness" of the knowledge management system. (bennett & gabriel, 1999) says that a problem with the im-

plementation of knowledge management is the fact that staff needs to be trained in writing, editing and formatting skills in order to input items to a knowledge repository, as information has to be presented in a prescribed standardized fashion. Third generation emerged around 2002 where focus seems to be on result part such as the link between knowing and action (paraponaris, 2003). All knowledge is inherently social, cultural and organizational knowledge can only be realized through change in organizational activity and practice. (szarka, et al., 2004) reports that training is the most widely used method of knowledge transfer used by employees to share knowledge. (karunakar, 2005) has studied knowledge management in it industry. (joseph m. Firestone and mark w. Mcelroy, 2005) suggested that knowledge management as a field has been characterized by a great deal of confusion about its conceptual foundations and scope. As a result, practitioners have tended to view knowledge management interventions as those that have been given that name by themselves or others who claim to be practitioners, continuing that practice is destructive to knowledge management as a discipline, because it prevents coherent evaluations of knowledge management's track record. Moreover we have (a) offered a framework and set of criteria based on it for deciding whether claimed interventions are bonafide instances of knowledge management, and (b) illustrated the use of that framework in critical evaluation of typical "knowledge management" interventions, including extensive discussion of an unambiguous case where knowledge management has been done. (tracy a. Hurley, carolyn w. Green, texas a&m university-kingsville, san antonio, 2005) this paper offers ngos many suggestions for more effectively managing their knowledge. It suggests that the industry – as a whole – could benefit from a coordinated "between" knowledge management effort such as a virtual cop and a "best practices" database. These would effectively serve all industry stakeholders. The uniqueness of the nonprofit industry has led to a slow adoption of these types of knowledge management programs. However, they are needed in order to advance both the ngos and their industry in times of financial difficulties. (hutchinson and quintas, 2008) have tried to see knowledge management from large scale, small and medium size organizations perspective.

3. DEFINITIONS OF KNOWLEDGE

Knowledge is the human ability resulting from interpreted information understanding that germinates from combination of data information, experience, and individual interpretation. Knowledge is defined as, "things that are held to be true in a given context and that drive us to action if there

were no impediments" (andre boudreau). "capacity to act" (karl sweiby). "justified true belief that increases an entity's capacity or effective action" (nonaka and takeuchi). "perception of the agreement disagreement of two ideas" (john locke). In an organizational context, knowledge is the sum of what is known and resides in the intelligence and the competence of people.

3.1 TYPES OF KNOWLEDGE

Knowledge is divided in to two types such as explicit and tacit knowledge.

A. EXPLICIT KNOWLEDGE

Explicit knowledge is codified. It is stored in documents, databases, websites, emails .these include knowledge assets such as reports, memos, and business plans, drawings, patents, trademarks, customer lists, methodologies recorded and can be accessible. It can either be structured or unstructured. Explicit knowledge is easy to communicate, store, and distribute and is the knowledge found in books, on the web, and other visual and oral means. Some of the examples are internet, intranet, best practices, emails, newsletters etc.

B. TACIT KNOWLEDGE

Tacit knowledge is context-specific. The knowledge that resides in an individual's mind, unwritten, unspoken, and hidden vast storehouse of knowledge held by practically every normal human being, based on his or her emotions, experiences, insights, intuition, observations and internalized information. The sharing of tacit knowledge is a great challenge to many organizations to identifying the tacit knowledge that is useful to the organization. Some of the examples are formal, informal face-to-face or telephonic conversations, video conferences and presentations, individual knowledge and expertise, mentoring and coaching.

4. KNOWLEDGE MANAGEMENT

Following are the few well known definitions of knowledge management. Knowledge management is result-oriented, process oriented, technology oriented. It is the introduction of some new tools, new methods, new processes and new strategies that enabled us to think for the first time, very differently about knowledge, and how to make some substantial improvements in the way we manage knowledge, as individuals, teams, organizations, and between organizations. Knowledge management is the discipline of enabling individuals, teams and entire organisations to collectively and systematically create, share and apply knowledge, to better achieve their objectives by ron young, ceo/cko knowledge associates international. Knowledge management will deliver outstanding collaboration and partnership working. It will ensure the region maximizes the value of its information and knowledge assets and it will help its citizens to use their creativity and skills better, leading to improved effectiveness and greater innovation. - west midlands regional observatory, uk knowledge management is the broad process of locating, organizing, transferring, and using the information and expertise within an organization. The overall knowledge management process is supported by four key enablers: leadership, culture, technology, and measurement. – american productivity and quality centre. Knowledge management is having four pillars. These pillars are management, organization, infrastructure, content management systems, people and culture. Knowledge management is the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusion, use and exploitation. It requires turning personal knowledge into corporate knowledge that can be widely shared throughout an organization and appropriately applied.the knowledge cycle is as given below.

- Knowledge
- Create
- Capture
- Organize
- Use
- Access

1. Knowledge is created. This happens in the heads of people.
2. Knowledge is captured. It is put on paper in a report, entered into a computer system of some kind, or simply remembered.
3. Knowledge is organized, where it is classified and modified. The classification can be the addition of keywords which could be indexed. Modification can add context, background or other things that make it easier to reuse later. The test of this step's success is to determine how easily people in the organization will be able to access and use the knowledge when they need it.
4. Knowledge is shared and used. When knowledge is shared and used, it's modified by the resources that use it. This takes us back to knowledge creation.

5. WHY KNOWLEDGE MANAGEMENT

Knowledge management enables the organization to become more efficient in translating contextual information into the value adding business logic of the company." the ultimate end-goal of knowledge management should be to formalize knowledge by capturing it as a set of business rules governing the execution of business processes. Knowledge management is not just about it systems capturing and distributing knowledge, it is about creating a culture of collaboration and sharing. Enterprise architecture and business process management technology will become a key enabler of knowledge management because it allows a business to capture and change essential business logic. The end result of knowledge management is implementing a business rule from which business value can be leveraged. Following are the benefits of knowledge management through which recently it is apply by business.

5.1 Increase competition – now day's competition is in a high stage many organizations rely on knowledge to create their strategic advantage. With available knowledge widely dispersed and fragmented, organizations often waste valuable time and resources in 'reinventing the wheel' or failing to access the highest quality knowledge and expertise that is available.

5.2 Reformation and downsizing - without effective mechanisms in place to capture knowledge of experienced employees, organizations make costly mistakes or have to pay again for knowledge they once had on tap.

5.3 Involvement of best practices - companies save millions a year by taking the knowledge from their best performers and applying it in similar situations elsewhere.

5.4 Successful modernization - companies applying knowledge management methods have found that through knowledge networking they can create new products and services faster and better.

These and other benefits, such as improved customer service, faster problem solving and more rapid adaptation to market changes, have resulted from an explicit focus on corporate knowledge as a strategic resource.

6. MOTIVATIONS OF KNOWLEDGE MANAGEMENT

There are a number of motivations, leading to organizations undertaking a knowledge management program. Following are the motivations of knowledge management.

- 6.1 Making available increased knowledge content in the development of products and services
- 6.2 Product development cycle should be short.
- 6.3 Facilitating and managing organizational improvement
- 6.4 Control the expertise of people across the organization
- 6.5 Take benefit of 'network effects' through which the number of productive connections between employees in the

organization increases and the quality of information shared increases

6.6 Managing the production of data and information in complex business environments and allowing employees to rapidly access useful and relevant knowledge resources and best practice guidelines

6.7 Facilitate organizational learning

6.8 Managing intellectual capital and intellectual assets in the workforce such as the expertise and know-how possessed by key individuals as individuals retire and new workers are hired

6.9 A convincing sales pitch from one of the many consulting firms pushing knowledge management as a solution to virtually any business problem, such as loss of market share, declining profits, or employee inefficiency.

7. KNOWLEDGE MANAGEMENT ROLES AND RESPONSIBILITIES

To efficiently and effectively implement a knowledge management strategy and to perform the new knowledge management processes, new roles and responsibilities are required. This is depending on the scope, size and duration of the knowledge management initiative. For successfully implementation of knowledge management in organization following responsibilities are important.

- Proper education of the technology to the employee is essential.
- Senior management engagement and commitment in throughout working is important.
- Identification of the critical knowledge areas and concentrate on them
- A shared knowledge management vision and strategy is defined and it is linked to the business objectives.
- A knowledge sharing culture in every section is required.
- Strong knowledge management-enabled processes that produce and control the knowledge
- Natural and successful knowledge-led communities
- Enabling knowledge technologies to achieve desired goal.
- Aligned rewards and recognition
- If critical knowledge is required for processing then appropriate training to the worker for acquiring skills is important
- Defined and effectively managed knowledge worker competence level
- Define measures to test the business and knowledge management benefits achieved.

THE KEY ROLES AND RESPONSIBILITIES OF ORGANIZATION EMPLOYEE

7.1 CHIEF KNOWLEDGE OFFICER RESPONSIBILITIES

7.1.1 To place knowledge management within a theoretical and historical context ·

7.1.2 To critically appraise knowledge management solutions

7.1.3 To manage organizational knowledge effectively, as a strategic asset, to further the organizations objectives.

7.1.4 To manage organizational knowledge effectively.

7.2 KNOWLEDGE BASE OWNER RESPONSIBILITIES

7.2.1 responsible for conducting the best knowledge process.

7.2.2 Reviews new knowledge expert.

7.3 KNOWLEDGE MANAGER RESPONSIBILITIES

7.3.1 To aware for the central importance and strategic benefits of knowledge management ·

7.3.2 Understands the underlying principles, processes, enabling tools and technologies ·

7.3.3 To aware of the critical success factors, organizational and individual ·

7.3.4 Able to better manages knowledge effectively at an organizational and team level.

7.3.5 Responsible for harvesting knowledge, ideas generated.

7.3.6 Responsible for submitting to the knowledge base owner ·

7.3.7 To identify and critically assess the value of knowledge in the organization.

7.3.8 To aware of how the new interactions, teamwork and information technologies successfully support the knowledge management processes, within and between organizations.

7.4 KNOWLEDGE WORKER RESPONSIBILITIES

7.4.1 Able to manage knowledge effectively at an individual and team level ·

7.4.2 Manage information, time, tasks, processes and goals ·

7.4.3 To better access, filter, analyze, synthesize, accumulate, store, communicate and apply knowledge ·

7.4.4 To better collaborate in a dynamic, virtual team environment ·

7.4.5 To use communication, collaboration and information management technologies effectively to navigate the information and knowledge environment.

7.5 KNOWLEDGE MANAGEMENT CONSULTANT RESPONSIBILITIES

7.5.1 To conduct change readiness and knowledge sharing risk assessments ·

7.5.2 To audit existing knowledge management processes and intellectual capital ·

7.5.3 To develop knowledge management objectives and strategy to support inter-organizational and international organization knowledge management processes ·

7.5.4 To educate and coach management and facilitate the change to a knowledge based organization ·

7.5.5 To understand the creativity and innovation process in terms of team collaboration and organizational knowledge management.

8. KNOWLEDGE MANAGEMENT TOOLS

There are a great variety of knowledge management tools available in the market .some of the typical tools are as follows.

8.1 Document management system:-there are several document management products on the market, all providing basically the same functionalities (e.g., ms sharepoint, oracle ifs, lotus domino, etc) which is used to construct folder structure. Indexations of all common files, workflow, version control, advanced search.

8.2 Enterprise portal: portals can be defined as single points of access that provide easy and timely access to knowledge. Portals are important tools for knowledge management since they make it easier to share knowledge in an organization. The complete cycle of knowledge includes a series of episodes. A knowledge worker seeks and retrieves knowledge from the portal and then organizes and analyses it so that it may be used to make decisions or take action. Finally, the outcome is shared and disseminated as lessons learned. This knowledge is then stored in a place that can be accessed by other colleagues. The concept of an enterprise portal en-

compasses the various tools, technologies and practices that make knowledge available to all the staff of the organization and other authorized outside users.

8.3 Information database and lessons learned system: in an organization where people are the most important assets, managing their skills, capabilities, interests and experience is critical. A skills management system is a web-based tool that supports this in a distributed way, spreading the workload over the whole organization. All employees can update their own skills (adding new skills or changing skill levels) and interests, and use the tool to locate people with particular skills.

8.4 Collaboration tool:-groupware and workflow management are also collaborative functionalities groupware brings together virtually all employees involved in a certain task or project. Workflows describe interactions among employees by defining paths, time and individuals involved in certain procedures. Once described, the system can automatically manage the procedures, improving the quality of collaboration. E-mail messaging is a basic but highly efficient way to collaborate.

8.5 Communities of practice. An excellent means to share knowledge among people who have common interest. Here they will be described again briefly from the perspective of being used as a tool in the implementation of a knowledge management system within an organization. The fact that communities of practice can be viewed as an important enabler for the sharing and enrichment of knowledge as well as a useful tool for the implementation of a knowledge management system.

9. KNOWLEDGE MANAGEMENT PROGRAMMES ACTIVITIES

9.1 creations of knowledge teams collect people from all disciplines to develop the methods and skills.

9.2 Appointment of a knowledge leader to promote the agenda, develop a framework

9.3 Development of knowledge bases such as best practices, expertise directories, market intelligence capital.

10. KNOWLEDGE MANAGEMENT PROCESS

Knowledge infrastructure consist of technology, structure, and culture along with knowledge process architecture of acquisition, conversion, application, and protection are essential capabilities for effective knowledge management. Alavi et al. (2001) developed a systematic framework that is used to further analyze and discuss the potential role of information technologies in organizational knowledge management. This framework is grounded in the sociology of knowledge and is based on the view of organizations as social collectives and "knowledge systems." according to this framework, organizations as knowledge systems consist of four sets of socially enacted "knowledge processes": (1) creation, (2) storage/retrieval, (3) transfer, and (4) application. This view of organizations as knowledge systems represents the cognitive and social nature of organizational knowledge and its embodiment in the individual's cognition and practices, as well as the organizational practices and culture.

11. KNOWLEDGE MANAGEMENT STRATEGY

Main strategy of knowledge management is getting the right knowledge to the right people at the right time, and helping people to share and put the information in to action to improve organizational performance and functioning of organization. Knowledge management is the strategies and methods of identifying, capturing and leveraging knowledge to help a firm compete. knowledge management will help to ensure that individual learning is the organizational learning and to concentrate on how organization identifies, creates, captures, shares and leverages the knowledge. It will manage information combined with experience, context, interpretation and reflection. Knowledge management is achieving organizational goals through the strategy driven motivation

and facilitation of knowledge workers to develop, enhance and use their capability to interpret data and information (by using available sources of information, experience, skills, culture, character, personality, feelings, etc.) Through a process of giving meaning to these data and information. (beijerse (1999)) knowledge management concerns the formalization of and access to experience, knowledge, and expertise that create new capabilities, enable superior performance, encourage innovation, and enhance customer value (be knowledge management an (1999).

12. WHY KNOWLEDGE MANAGEMENT DIFFICULT

There are many problems associated with finding out these knowledge assets and being able to use them in an efficient and cost-effective manner. The most difficult part in implementing knowledge management is not the technology it is to understand where knowledge resides within the organization. Implementation of knowledge management varies from company to company, country to country. It has to be localized to suit one's requirement. Enterprises need to have an enterprise-wide vocabulary to ensure that the knowledge is correctly understood. It is able to identify, model and explicitly represent their knowledge, share and re-use their knowledge among differing applications for various types of users. Suppose any organization want to implement the knowledge management above are the some difficulties can be arises in implementing knowledge management such as lack of knowledge-sharing culture, user lacking appropriate technological skills. Sometimes experts of the system are too busy, making knowledge management a daily priority for employees, complexity of implementation.

13. IMPLEMENTATION OF KNOWLEDGE MANAGEMENT IN INDUSTRY

Industry need to recognize that knowledge is an important asset. Knowledge is gathering over time and will assist the organization be successful. A survey by reuters found that 90 per cent of companies that deploy a knowledge management (knowledge management) solution benefit from better decision-making, while 81 per cent say they notice increased productivity. Industry is resource-oriented and it becomes quite important to ensure that knowledge in the minds of resources is safeguarded. It is found that, while 26 per cent of knowledge in the average organization is stored on paper and 20 per cent digitally, an astonishing 42 per cent is stored in employees' heads. There have been many instances where the learning and knowledge is lost when resources move to newer roles, or leave the organization knowledge is invisible and is tied up in customer relationships. It is linked to the ratio of experienced to junior employees. Knowledge management assists in getting the right knowledge to the right person as fast as possible and assists in retaining customers. Planning is important and the organization must be willing to take the risk. Knowledge management practitioners should have management support and not over-promise. They should take things at a small scale and monitor the progress of the knowledge management initiative. If any problems arise during this stage, they are easier to solve. Once it is stabilized, we should be able to move to the next stage, where knowledge management can be implemented organization wide. However, the plan will need to be revised continuously. Most importantly, knowledge management requires determination and perseverance. Knowledge management practitioners should not expect immediate returns on knowledge management investment. It may take several iterations of real input and measurable output and subsequent updates before a good knowledge management system is in place. Here are just a few examples of organizations that have achieved significant benefits through knowledge management.

➤ **Wipro infotech** - wipro infotech, explaining the importance of knowledge management at all levels. It take technical training is based on the centrally controlled competency model rather than division requirement. Recently wipro infotech introduced, an e-learning approach with the online portal, providing the learning resources, and this is reducing the training cost and increasing flexibility. It will conduct

knowledge need identification workshop for business units, in which groups of people performed an exercise and identified the critical knowledge needs of their businesses. Using the existing IT infrastructure and network, a web based knowledge management repository was introduced to store knowledge and enable people to have quick access. Wipro infotech has accepted the challenge on knowledge management, and is driving hard to become a knowledge intensive organization. They have seen initial success in our approach and have derived benefits by deploying channels and technologies at a synchronized speed with people involvement at the grass root level.

➤ **Hindustan liver limited** - a structured approach to knowledge management (knowledge management) is essential to focus on knowledge creation, validation and sharing. It will increase organizational capability for growth. HLL is therefore committed to creating systematic ways to manage organizational knowledge. A key element of such an approach is stress on knowledge sharing which can convert individual expertise, skills, experience and insights into organizational knowledge. HLL is aware about knowledge management is essentially a process to increase the capacity for energetic and focused action, by connecting people to people and people to knowledge.

➤ **Bp** - bp is one of the world's leading international oil and gas companies, providing its customers with fuel for transportation, energy for heat and light, retail services and petrochemicals products for everyday items by introducing virtual team working using videoconferencing have speeded up the solution of critical operation problems.

➤ **Microsoft**- microsoft using knowledge management as a single transaction system with consistent business policies and processes. Integrated platform for sharing knowledge and collaboration.

➤ **Hoffman la roche** – it will reduce the cost and time to achieve regulatory approvals for new drugs.

➤ **Dow chemical** - by focusing on the active management of its patent portfolio have generated over \$125 million in revenues from licensing and other ways of exploiting their intangible assets.

➤ **Texas instruments** - by sharing best practice between its semiconductor fabrication plants saved the equivalent of investing in a new plant.

➤ **Hewlett packard** - by sharing expertise already in the company, but not known to their development teams, now bring new products to market much faster than before.

➤ **Nasa sel**- knowledge management reduced company software development defects; productions cost and developed software with increase use and higher quality.

➤ **Telenor telecom software** - the company indicates that estimation accuracy has improved because of only knowledge management, and focus on risk management.

➤ **Australian telecom company**- good acceptance of product among user

➤ **Icl finland** - saved time, because it is easier to find documents. Easier to learn new project members about project work.

➤ **Mahindra and mahindra (m&m)** - tractor and utility automobile manufacturer mahindra and mahindra realized that to compete effectively it would have to be able to create a stream of new products on a continuing basis. Given its limited resources and global ambitions.

It identified good project management skills as a key ingredient and initiated an organisation-wide process, guided by external consultants, to create a robust project management capability.

➤ **Tvs motor company**- tvs motor company realized that a strong product development capability was essential for its survival and growth. However, they saw the essential requirements as being able to match user needs to product concepts and to be able to seamlessly transfer designs into manufacturer.

From above examples it is clear that if organization implements a knowledge management strategy with knowledge-sharing culture, user acquire appropriate technological skills. Experts of the system are involved continuously throughout the implementation then definitely it is helpful for the development of product and services of the business. Information technologies play an important role in business today's, now a days, and also in how successful knowledge workers are in acquiring and applying knowledge content that is made available to them by the organization. A well developed system is needed for the organization to build up a content management system. Since robertson (2003) predicts that content management systems (cms) will become a "commodity" in the future. Many content management system project fail owing to a lack of good implementation standards and a lack of an understanding of usability issues, technology approaches will continue to generate unsuccessful projects. Cms should be handled in a strategic way. The system which involves knowledge management strategies and tools should be developed in the near future.

14. CONCLUSION

Implementing knowledge management, as we argued, can be the first step towards a new innovative culture and a new approach to change management and strategy development. Knowledge management does not belong to one area; people from different disciplines are working on it. Information management is a subset of Knowledge Management and technology should be seen as an enabler and part of infrastructure. For the majority of those interested in Knowledge Management, the key drivers are organizational efficiency, maximizing organization's potential, competitive advantage, building a learning organization and managing intellectual capital. However, implementing Knowledge Management is also not that easy. The organization should have sufficient management skills and the ability to adapt new behaviors and processes to successfully manage an external part of their business. These skills should include Knowledge Management abilities and a willingness to apply them to a new and more challenging situation.

REFERENCE

alavi m. and leidner, d. e. "review: knowledge management systems: conceptual foundations and research issues," *mis quarterly* (25:1), 2001, pp. 107-136. | david j. skyrme, "knowledge management: making sense of an oxymoron first published 1997, and revised 2003." | joseph m firestone, "doing knowledge management", *the learning organization journal*, vol. 12. no. 2. | karunakar p. (2005), "knowledge management a challenge in it industry", *electronics information and planning*, vol. 33 | mohammad nazir ,ahmad sharif, nor hidayati zakaria, nazmona mat ali and mohd zaidi abd rozan, *university technology malaysia*, "knowledge management practices in the small medium software companies applying corporate knowledge management practices in higher education", *journal of knowledge management practice*, august 2005. | newman v. (1997), "redefining knowledge management to deliver competitive advantages", *journal of knowledge management*, 1(2), pp. 123-128. | prof. s. l. gupta and dr. v.k. kohli , "knowledge management is the need of corporate for excellence" | suliman al-hawamdeh, "knowledge management: re-thinking information management and facing the challenge of managing tacit knowledge", *information research*, vol. 8 no. 1, october 2002. | torgeir dingsoyr and reidar conradi, "a survey of case studies of the use of knowledge management in software engineering". | apurva anand, m.d.singh, "understanding knowledge management: a literature review", *international journal of engineering science and technology (ijest)* | www.google.com | www.whereisdoc.com |