Knowledge Management and Role of ICT for Development

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Abstract: Knowledge Management has become the key factor for the success of all organization. KM is all about making available the right knowledge to the right people. It is about making sure that an organization can learn, and that it will be able to retrieve and use its knowledge assets in current applications as they are needed. Most often, generating value from such assets involves sharing them among employees, departments and even with other companies or institutes in an effort to devise best practices. Knowledge management is the practice of identifying, creating, communicating, socializing, measuring and improving knowledge to support strategic objectives. (Anna Mar, Simplicable). Thus, Knowledge sharing is facilitate through information and communication technologies including computers, telephones, databases, e-mail, data mining system, video conferencing equipment, search engine and many more. This paper focus on identify the significant role of information and communication technology in knowledge management.

Keywords:-Knowledge management,types,ICT role,

1. Introduction

Knowledge management deals with the organizational optimization of knowledge through the use of various technologies, tools, and processes to achieve set goals. [1]

We all need knowledge in one or the other form to do our job or to achieve our goal. Perhaps we need to understand how our customer database is designed, so that we can extract a particular report. For example, we need to know the best way to get senior managers to approve a business case. This requires specific knowledge to come up with the solution for the same. For this knowledge management plays an important role. [2]

Knowledge Management, (KM) is a concept and a term that arose, roughly in 1990.It is simply can be explained as organizing an organization's information and knowledge holistically. Davenport (1994) offered the still widely defined it as "Knowledge management is the process of capturing, distributing, and effectively using knowledge."[3] The basic thrust of KM is to capture and make available, so it can be used by others in the organization, the information and knowledge that is in people's heads as it were, and that has never been explicitly set down.

2. Types of Knowledge Management

Table: 1 Types of Knowledge Management [4]

Explicit	Tacit
Explicit knowledge is formal and systematic.	Tacit knowledge is not so easily expressed.
It can be easily communicated and shared. Typically, it has been documented.	It is highly personal, hard to formalize and difficult to communicate to others. It may also be impossible to capture.
Articulated knowledge, expressed and recorded as words, numbers, codes, mathematical and scientific formulae, and musical notations. 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. Opposite of tacit knowledge	The challenge is to identify which elements of tacit knowledge can be captured and made explicit—while accepting that some tacit knowledge just cannot be captured. For tacit knowledge that cannot be captured, the goal is to connect the possessors of tacit knowledge with the seekers of that knowledge.

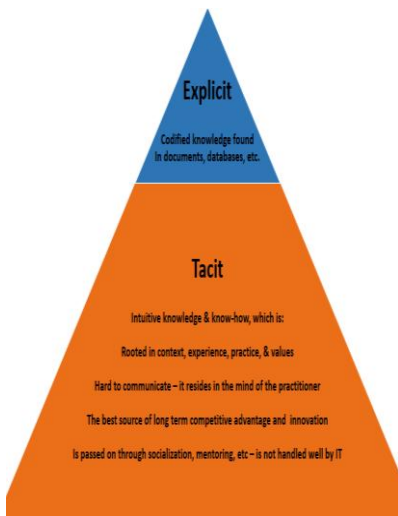The above table can be summarized as mentioned in below figure

Figure: 1 Types of Knowledge management [4]

3. WHY MANAGE KNOWLEDGE?

According to David Derbyshire, "Scientists have worked out exactly how much data is sent to a typical person in the course of a year – the equivalent of every person in the world reading 174 newspapers every single day" (Derbyshire, 2011, p. 1).

Three key reasons why actively managing knowledge is important to a company's/Organizations' successes are:

1. Facilitates decision-making capabilities
2. builds learning organizations by making learning routine
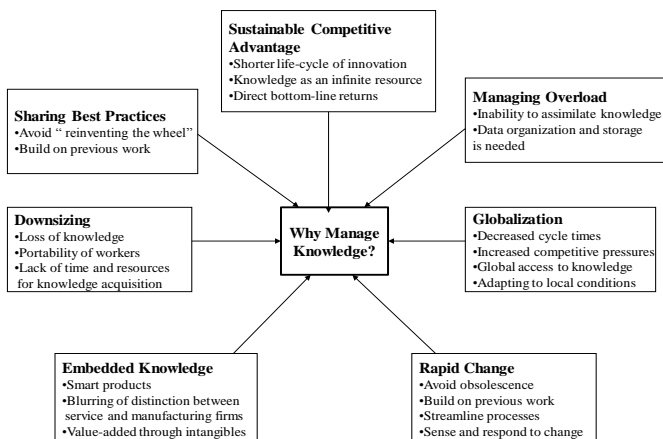3. Stimulates cultural change and innovation.

Figure: 2 Why Knowledge management [6]

Knowledge management is a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise's information assets. These assets may include databases, documents, policies, procedures, and previously un-captured expertise and experience in individual workers. [1]
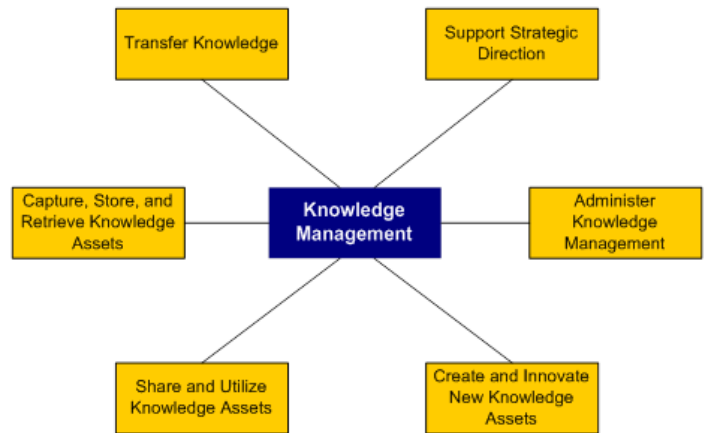

Figure: 3 Why Knowledge management [7]

"Knowledge management is the process of capturing, distributing, and effectively using knowledge. [3] Knowledge management is the practice of identifying, creating, communicating, socializing, measuring and improving knowledge to support strategic objectives. [1]

4. Role of ICT in Knowledge Management

The influence of globalization and impact of Information communication technology has given birth to today's *"Knowledge Economic Era". Knowledge management is considered as a key factor for success of any organization in today's era.* Explored the role and contribution of new Information and Communication Technologies (ICT) in the emerging field of Knowledge Management[8].ICT is often used in Knowledge Management programmes to inform clients of latest innovations and developments in the business sector as well as to share knowledge among employees. Also, ICT facilitates accumulating organizational knowledge, providing access to retrievable knowledge and enhancing collaboration for knowledge sharing and creation.

ICT's are technologies which facilitates the management to share knowledge and Information. Therefore ICTs has a bigger role in knowledge management initiatives. ICT has raised the need for organizations to come out with new methods, policies, tools and techniques to develop frameworks, processes and technologies so as to promote effective management of knowledge. [9]

ICT provides tools for creating, sharing, managing, storing and retaining knowledge. These tools allow for the exchange of information via websites, social networks, etc. ICT enables and provides the entire infrastructure and tools to support KM processes within an enterprise[10]. To succeed in KM, it is

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important that assessment and defining of ICT capabilities are done properly as it supports and facilitates KM processes such as knowledge capture, storage, retrieval, sharing and collaboration, dissemination, and updates in organizations in higher education. Some of the KM enabling ICT tools and networks includes Knowledge Portals, Electronic Document Management Systems, Academic Publishing, Academic Contents and Exchanges, Database Management Systems (DBMS), Data Warehouse, Data Mining, Groupware, Communities of Practices (CoP), Social Communities of Interests, and Individual Communities of Interests.

Table: 2 Role of ICT [11]

ICT Tools/Networks	Description of Roles	Examples
Knowledge Portals	Search and access to web-based knowledge	Google, Yahoo,
E-Document Management Systems	Knowledge repositories created by individual academic institutions	Digital Library
Academic Publishing	Proprietary digital libraries for electronic access to academic publishing	Emerald, Elsevier
Academic Contents and Exchanges	Electronic collections of course materials and learning objects	JSTOR, MIT Open Courseware
Database Management Systems (DBMS)	Set of computer programs that control the creation,maintenance, and the use of a database.	Student records
Data Warehouse	A repository that facilitates reporting and analysis of data	budgeting data, Financing data
Data Mining	The process of extracting patterns from data	Academic profiling
Groupware	Is designed to help people involved in a common task achieve their goals	Knowledge Forum, Synergeia, Wikis
Communities of Practices (CoP)	Groups of practitioners networking in a particular fields of endeavor to define a practice and knowledge domain	Consortia, Educational Research Services
Social Communities of Interests	Social networks drawn together to share knowledge and build relationships	Facebook, MySpace, Flickr
Individual Communities of Interests	Tools for individuals to manage personal knowledge and networks	Blogs, Twitter

5. Conclusion

Organizations are now facing many challenges because of explosion of information availability and to cope up with the external pressures to achieve success for their organization. This makes the improvement of a comprehensive, strategic and adoption of knowledge management (KM) a necessary step to improve human capital. Knowledge management has an important function inside any organization/Institution and companies so that it developed quickly. KM has great impact on organization success. ICT on one side has given birth to "Knowledge economic era" and on the other hand ICT provides tools for creating, sharing, managing, storing and retaining knowledge. These tools allow for the exchange of information via websites, social networks, etc.

There is much evidence that there is a big struggle among organizations and forms of rapid change in business environments. Therefore; organizations start thinking of developing and enhancing methods to develop their human capital. As a result having knowledge has become the main factor for success or fail in any organization

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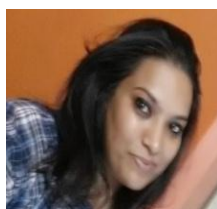
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