EFFECTIVE USE OF KNOWLEDGE MANAGEMENT

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Introduction

Knowledge and Knowledge Management plays a pivotal role at all levels of hierarchy in an organisation to help it grow and develop. Various efforts have been made towards the achievement of KM, in terms of technology, use of IT, Data support systems or HRIS. But these channels provide more of information, as compared to knowledge. Knowledge is a much more organised data and proves to be more convenient and reliable, when it needs to be applied. It is obtained from intellectual resources in the organisation. Knowledge Management is all about the process of capturing, developing and efficiently using the knowledge available. It has to be channelised in a proper direction, to gain maximum benefit and satisfaction. Therefore, information storing, retrieval and sharing have become convenient. Knowledge Management is an activity practised by enterprises all over the world.

What is Knowledge Management?

"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."
Knowledge Management is the systematic management of an organisation's knowledge assets for the purpose of creating value and meeting tactical and strategic requirements; it consists of the initiatives, processes, strategies and systems that sustain and enhance the storage, assessment, sharing, refinement and creation of knowledge. Knowledge Management (KM) therefore implies a strong tie to organisational goals and strategy and it involves the management of knowledge that is useful for some purposes and which creates value for the organisation.
KM must create/provide the right tools, people, knowledge, structures (teams), culture, etc. so as to enhance learning; it must understand the value and applications of the new knowledge created; it must store this knowledge and make it readily available, for the right people, at the right time; and, it must continuously assess, apply, refine and remove organisational knowledge in conjunction with concrete long and short term factors.
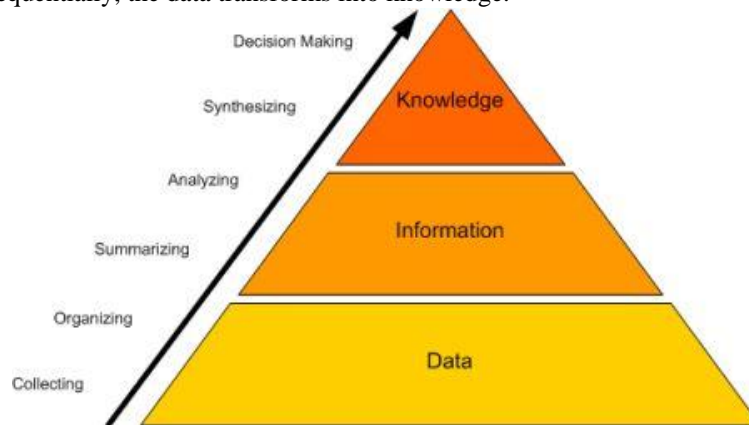
Types of Knowledge Management

There are specifically three broad areas, in which the knowledge is divided – explicit, implicit and tacit
Explicit knowledge: It is knowledge that is tangible. This can include published papers, documents. This can easily passed to other people, through books or hardcopies.
Implicit knowledge: It is knowledge that can be converted into the tangible.
Tacit knowledge: This is intangible form of knowledge. This isknowledge gained through our experience. As we work in an organization, over a period of time, we understand the working conditions well and understand, who are the most reliable people and what efficiency can be expected from an individual.

The Knowledge Management Process

In the process of Knowledge Management, these enterprises comprehensively gather information, using many methods and tools. Then, the gathered information and organised, stored and analysed, using defined techniques. The analysis of such information will be based on resources, documents, people and their skills. Properly analysed information will then be stored as 'knowledge' of the enterprise. This knowledge is later used for activities such as organisational decision making and training new staff members.
There have been many approaches to Knowledge Management, from the early days. Most of the early approaches have been manual storing and analysis of information. With the introduction of computers, most organisational knowledge and management processes have been automated.
Therefore, information storing, retrieval and sharing have become convenient. Nowadays, most enterprises have their own Knowledge Management framework in place.
The framework defines the knowledge gathering points, gathering techniques, tools used, data storing tools and techniques and analysing mechanism.

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The process of Knowledge Management is universal, for any enterprise. Sometimes, the resources used, such as tools and techniques, can be unique to the organisational environment.

The Knowledge Management process has six basic steps assisted by different tools and techniques. When these steps are followed sequentially, the data transforms into knowledge.

Step 1: Collecting

This is the most important step of the Knowledge Management process. If you collect incorrect or irrelevant data, the resulting knowledge may not be the most accurate. Therefore, the decisions made, based on such knowledge, could be inaccurate as well.

There are many methods and tools used for data collection. The data collection should be a procedure in Knowledge Management process. These procedures should be properly documented and followed by people, involved in the data collection process.

The data collection procedure defines certain data collection points. Some points may be the summary of certain routine reports. With data collection points, the data extraction techniques and tools are also defined.

In addition to data collecting points and extraction mechanism, data storage is also defined in this step. Most of the organisations now use a software database application, for this purpose.

Step 2: Organising

The data collected needs to be organised. This organisation usually happens, based on certain rules. These rules are defined by the organisation.

If there is much data in the database, techniques such as 'normalisation' can be used for organising and reducing duplication.

This way, the data is logically arranged and related to one another, for easy retrieval. When the data passes step 2, it becomes information.

Step 3: Summarising

In this step, the information is summarized and the lengthy information is presented in a tabular or graphical format and stored appropriately.

For summarising, there are many tools that can be used, such as software packages, charts (Pareto, cause-and-effect) and different techniques.

Step 4: Analysing

At this stage, the information is analysed in order to find the relationships, redundancies and patterns. An expert or an expert team should be assigned for this purpose, as the experience of the person/team plays a vital role.

Step 5: Synthesising

At this point, information becomes knowledge. The results of analysis (usually the reports) are combined together, to derive various concepts and artefacts.

A pattern or behaviour of one entity can be applied to explain another, and collectively, the organisation will have a set of knowledge elements that can be used across the organisation. This knowledge is then stored in the organisational knowledge base, for further use.

Basically, the knowledge base is a software implementation that can be accessed from anywhere, through the Internet.

Step 6: Decision Making
At this stage, the knowledge is used for decision making. As an example, when estimating a specific type of a project or a task, the knowledge related to previous estimates can be used. This accelerates the estimation process and adds high accuracy. This is how the organizational Knowledge Management adds value and saves money in the long run.

8 Steps to Implementation
Implementing a Knowledge Management programme is not an easy task. You will encounter many challenges along the way, including many of the following:

- Inability to recognise or articulate knowledge; turning tacit knowledge into explicit knowledge.
- Geographical distance and/or language barriers, in an international company.
- Limitations of information and communication technologies.
- Loosely defined areas of expertise.
- Internal conflicts (e.g. professional territoriality).
- Lack of incentives or performance management goals.
- Poor training or mentoring programmes.
- Cultural barriers (e.g. "this is how we've always done it" mentality).

Need for Knowledge Management
The overload of data is making knowledge management increasingly more important.

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

1) It facilitates decision-making capabilities;
2) It builds learning organisations by making a learning routine, and,
3) It stimulates cultural change and innovation.

Facilitates Decision-Making Capabilities:
Data can offer managers a wealth of information, but processing overwhelming amounts can get in the way of achieving high-quality decisions. GE's Corporate Executive Council (CEC) is an example of how one company put a Knowledge Management system in place, to help executives cut through the noise, share information and improve their decision-making. The CEC comprises heads of GE's fourteen major businesses and the two-day sessions are forums for sharing best practices, accelerating progress and discussing successes, failures and experiences. While information overload or needing knowledge from people, in other parts of the company, for decision-making, can handicap managers, putting in place Knowledge Management systems can facilitate better, more informed decisions.

Builds Learning Organisations by Making a Learning Routine:
"Learning in Action: A Guide to Putting the Learning Organisation to Work" by author David Garvin stated "To move ahead, one must often first look behind". The U.S. Army's After Action Reviews (AARs) are an example of a Knowledge Management system that has helped build the Army into a learning organisation by making a learning routine. This has created a culture, where everyone continuously assesses themselves, their units and their organisation, looking for ways to improve. After every important activity or event, Army teams review assignments, identify successes and failures and seek ways to perform better the next time. This approach to capturing learning from experience builds knowledge that can then be used to streamline operations and improve processes.

Stimulates Cultural Change and Innovation:

Actively managing organisational knowledge can also stimulate cultural change and innovation by encouraging a free flow of ideas. For example, GE's Change Acceleration Process (CAP) programme includes management development, business-unit leadership and focussed workshops. CAP was created to not only "convey the latest knowledge to up-and-coming managers" but also "open up dialogue, instill corporate values, and stimulate cultural change". In this complex, global business environment, these types of knowledge management programmes can help managers embrace change and encourage ideas and insight, which often lead to innovation, even for local mom and pop business owners.

Benefits of Knowledge Management

1. Enabling better and faster decision making:
By delivering relevant information at the time of need through structure, search, subscription, syndication and support, a Knowledge Management environment can provide the basis for making good decisions. Collaboration brings the power of large numbers, diverse opinions and varied experience to bear, when decisions need to be made. The reuse of knowledge in repositories allows decisions based on actual experience, large sample sizes and practical lessons learned.

2.Making it easy to find relevant information and resources:
When faced with a need to respond to a customer, solve a problem, analyse trends, assess markets, benchmark against peers, understand competition, create new offerings, plan strategy and to think critically, you typically look for information and resources to support these activities. If it is easy and fast to find what you need, when you need it, you can perform all of these tasks efficiently.

3.Reusing ideas, documents and expertise:
Once you have developed an effective process, you want to ensure that others use the process each time a similar requirement arises. If someone has written a document or created a presentation which addresses a recurring need, it should be used in all future similar situations. When members of your organisation have figured out how to solve a common problem, know how to deliver a recurring service or have invented a new product, you want that same solution, service and product to be replicated, as much as possible. Just as the recycling of materials is good for the environment, reuse is good for organisations because it minimises rework, prevents problems, saves time and accelerates progress.

4.Avoiding redundant effort:
No one likes to spend time doing something over and over. But they do so all the time for a variety of reasons. Avoiding duplication of effort saves time and money, keeps employee morale up and streamlines work. By not spending time reinventing the wheel, you can have more time to invent something new.

5.Avoiding making the same mistakes twice:
George Santayana said, "Those who ignore history are doomed to repeat it." If we don't learn from our mistakes, we will experience them, over and over again. Knowledge Management allows us to share lessons learned, not only about successes, but also about failures. In order to do so, we must have a culture of trust, openness and reward for willingness to talk about what we have done wrong. The potential benefits are enormous. If NASA learns why a space shuttle exploded, it can prevent recurrences and save lives. If FEMA learns what went wrong in responding to Hurricane Katrina, it can reduce the losses that may be caused by future disasters. If engineers learn why highways and buildingscollapsed, during a previous earthquake, they can design new ones, to better withstand future earthquakes. If you learn that your last bid or estimate was underestimated by 50%, you can make the next one more accurate and thus earn a healthy profit, instead of incurring a large loss.

6.Taking advantage of existing expertise and experience:
Teams benefit from the individual skills and knowledge of each member. The more complementary the expertise of the team members, the greater the power of the team. In large organisations, there are people with widely-varying capabilities and backgrounds and there should be a benefit from this. But as the number of people increases, it becomes more difficult for each individual, to know about everyone else. So, even though there are people with knowledge, who could help other people, they don't know about each other. The late Lew

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Platt, former CEO of HP, is widely quoted as saying "If only HP knew what HP knows, we would be three times more productive." Knowing what others know can be very helpful in a time of need, since you learn from their experience and apply it to your current requirements.

7. <u>Communicating important information widely and quickly:</u>

Almost everyone today is an information worker, either completely or partially. We all need information, to do our jobs effectively, but we also suffer from information overload, from an increasing variety of sources. How can we get information that is targetted, useful and timely, without drowning in a sea of email, having to visit hundreds of web sites or reading through tons of printed material? Knowledge Management helps address this problem, through personalised portals, targeted subscriptions, RSS feeds, tagging and specialised search engines.

8.<u>Promoting standard, repeatable processes and procedures:</u>

If standard processes and procedures have been defined, they should always be followed. This allows employees to learn how things are done, leads to predictable and high-quality results and enables large organisations to be consistent in how work is performed. By providing a process for creating, storing, communicating and using standard processes and procedures, employees will be able to use them routinely.

9.<u>Providing methods, tools, templates, techniques and examples:</u>

Methods, tools, templates, techniques and examples are the building blocks, supporting repeatable processes and procedures. Using these consistently streamlines work, improves quality and ensures compatibility across the organisation.

10.<u>Making scarce expertise widely available:</u>

If there is a resource, who is in great demand, due to having a skill, which is in short supply, Knowledge Management can help make that resource available to the entire organisation. Ways of doing so, include community discussion forums, training events, ask the expert systems, recorded presentations, white papers, podcasts and blogs.

11.<u>Showing customers how knowledge is used for their benefit:</u>

In competitive situations, it is important to be able to differentiate yourself from other firms. Demonstrating to potential and current customers that you have widespread expertise and have ways of bringing it to bear on their benefit can help convince them to start or continue doing business with you. Conversely, failure to do so could leave you vulnerable to competitors, who can demonstrate their Knowledge Management capabilities and benefits.

12.<u>Accelerating delivery to customers:</u>

Speed of execution is another important differentiator, among competitors. All other things being equal, the company, which can deliver sooner, will win. Knowledge sharing, reuse and innovation can significantly reduce time to deliver a proposal, product, or service to a customer. And that translates into increased win rates, add-on business and new customers.

13.<u>Enabling the organisation to leverage its size:</u>

As an organisation grows, the increasing size is only a benefit, if it can use the knowledge of all of its employees. Through the use of tools, such as communities, expertise locators and repositories, the full power of a large enterprise can be exploited.

14.<u>Making the organisation's best problem-solving experiences reusable:</u>

Consistently applying proven practices, also known as best practices or good practices, can significantly improve the results of any firm. For example, if a manufacturing plant in one part of the world has figured out how to prevent the need for product rework and all other plants around the world adopt this practice, savings

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will flow directly to the bottom line. By establishing a process for defining, communicating and replicating proven practices, an enterprise takes advantage of what it learns, about solving problems.

15.Stimulating innovation and growth:
Most businesses want to increase their revenues, but it becomes increasingly difficult, as industries mature and competition increases. Creating new knowledge, through effective knowledge sharing, collaboration and information delivery, can stimulate innovation. If you achieve this and many of the other 14 benefits enabled by Knowledge Management, you should be able to achieve growth.

Challenges Faced by KM
1. Security: Providing the right level of security, for Knowledge Management is the key. Sensitive information should be shielded from most users, while allowing easy access to those, with the proper credentials.
2. Getting people motivated: Overcoming organisational culture challenges and developing a culture that embraces learning, sharing, changing, improving can't be done with technology. There is no use in launching a tool, if there is no drive to share the knowledge.
3. Keeping up with technology: Determining how knowledge should be dispensed and transferring it quickly and effectively is a huge challenge. Constantly changing structures mean learning how to be smart, quick, agile and responsive – all things a KM tool must be able to accomplish.
4. Measuring knowledge: Knowledge is not something that can be easily quantified and is far more complex, because it is derived out of human relationships and experience. The focus should be on shared purpose, rather than results or efforts.
5. Overcoming shared leadership: KM tools allow others to emerge, as voices of power within an organisation. Workers are given a "voice", which can sometimes cause internal conflict.
6. Keeping data accurate: Valuable data generated by a group, within an organisation may need to be validated, before being harvested and distributed. Keeping information current, by eliminating wrong or old ideas is a constant battle.
7. Interpreting data effectively: Information derived by one group may need to be mapped or standardised in order to be meaningful to someone else in the organisation.
8. Making sure information is relevant: Data must support and truly answer questions being asked by the user and requires the appropriate meta-data, to be able to find and reference. Data relevance means avoiding overloading users with unnecessary data.
9. Determining where in the organisation KM should reside: Does KM fall under HR, IT, communication? This decision will determine what drives your knowledge sharing initiative and who will be responsible for maintaining the community.
10. Rewarding active users: Recognising the users, who actively participate and contribute to a knowledge database, will not only encourage them to continue contributing, but will also encourage other users to join.

Knowledge, learning and sharing come from people and their relationships with one another, not necessarily from the tools, databases and technological aids used. However, with the proper technology in place, you can facilitate better communication and overcome these challenges to have an up-to-date, secure and organised knowledge base.

Different types of Knowledge Management Initiatives
Knowledge Management initiatives are taken by organisations and practitioners' worldwide, which reveal how these companies create value from their intangible assets. The initiatives are in the external structure, the internal structure and the competence of the people.

Examples of these initiatives are as follows :

1. External Structure initiatives: Gain Information and Knowledge from Customers, Example: Netscape, USA, Close links via the Net to opinion leaders among customers, who are encouraged to report Problem which enables it to create new generations of software at a fast pace.

2. Internal Structure Initiatives: Build a Knowledge Sharing Culture, Example: 3M, USA. With 60,000 products of their own innovation process, this company has an organisation that balances between creativity and conservatism. 3M's values encourage learning and risk taking, but managers are required to link continuous learning to revenues.

3. Competence Initiatives: Create Careers based on Knowledge Management – Examples: IBM USA and most large Japanese companies. In most dual careers, Employees are encouraged to switch between professional and managerial jobs, in order to gain more holistic knowledge about the company.

Companies from diverse fields have made effective use of KM. Varied areas, which include, among others, an NGO like TERI (The Energy and Resource Institute), Banking and Finance sectors like ICICI Knowlegde Park and Corporate Business like TCS, Infosys, ONGC etc.
And while it would be easy for sceptics to say that it is simple for large companies to adopt it, the paper would briefly discuss the NGO TERI case, to illustrate the effectiveness of Knowledge Management.
The Energy and Resource Institute has developed a comprehensive Knowledge Management system to organize its research outcomes centrally and provide a single window access to research outcomes centrally and provide a single window access to researchers as a gateway at their desktops that provide facility to browse and search various forms of digital resources.

Conclusion:
Knowledge Management is an essential practice for enterprise organisations. Organisational knowledge adds long-term benefits to the organization, in terms of finances, culture and people.
Therefore, all mature organisations should take the necessary steps, for knowledge management, in order to enhance the business operations and the organisation's overall capability.

References:
[1].   Partha Bhattacharya and Pravin Kumar Chaudhury, Knowledge Management and its Utilisation
[2].   www.kmworld.com/Articles/Editorial/What-Is-.../What-is-KM-Knowledge-Management-Explained-82405.aspx
[3].   www.knowledge-management-tools.net/knowledge-management-definition.html
[4].   www.dzone.com/articles/10-challenges-knowledge
[5].   Jhaveri A.P.2001. Knowledge Management (KM) - Wealth from Information, *Computers Today*, 16-31
[6].   Aug 2001.70-73