

Knowledge Management- A Global Perspective

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Dr. Monika Sharma is working as an Assistant Professor at Hindu College, Amritsar, Punjab since October, 2007. She has total teaching experience of 18 years in various educational institutions of higher education. She has done her Doctorate degree and Masters in Business Administration (with specialisation in Marketing as a Major subject and Finance as a Minor subject) from Guru Nanak Dev University, Amritsar, Punjab. She has co-authored five books published by reputed national publishers. She has also presented a number of papers at various National and International seminars and conferences. The author has to her credit a number of publications in the various refereed national and international journals. Apart from this, she has also attended various workshops and orientation courses.

ABSTRACT

Knowledge Management is an important tool that emphasizes the development of a system which helps to preserve and disseminate the information as and when required. Enterprises may possess important information, but that is of no use unless and until a proper environment and culture is created that is conducive to learning and sharing of that information and knowledge. It must also be ensured that information and knowledge must be accessible. Knowledge Management has a major role in sharing and distributing the data, information and knowledge in the business organizations. Knowledge Management adds to the productivity of the businesses and this is the reason that managers advocate the use and implementation of the Knowledge Management System and the creation of such a work culture where an integrated approach of identification, evaluation, retrieval, and sharing all of an enterprise's information assets like databases, procedures, documents, policies and previously un-captured expertise and experience in individual workers is used Keeping in mind this growing

significance of Knowledge Management, an attempt has been made through this study to understand the importance and role that

Knowledge Management plays in raising the level of customer satisfaction of a business. The examples of organizations that successfully applied the concept of Knowledge Management have also been discussed.

Key words: Global prospective, Knowledge management, Organisational management , Tacit Knowledge, Explicit Knowledge

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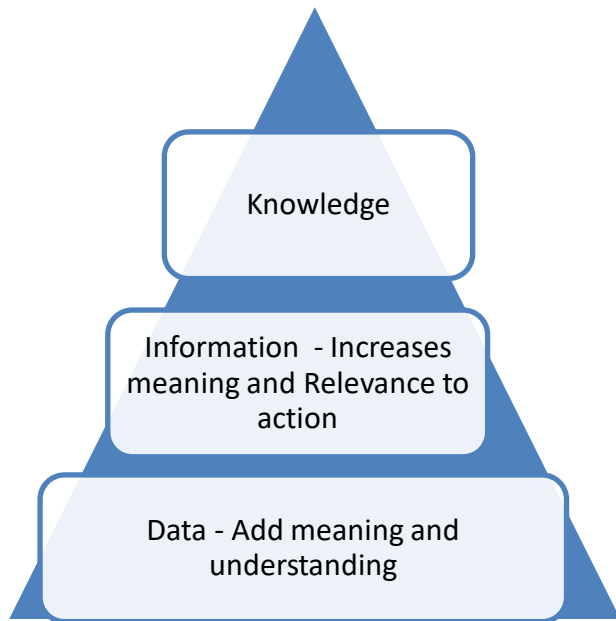
INTRODUCTION

A widely accepted definition of knowledge management applied in worldwide organizations enumerates the concept as the aggregate of methods devised to create, share, manage and use information and knowledge available within an organization. The purpose here is to make the best possible use of knowledge in a manner that helps in the achievement of objectives. It concentrates on all those organizational processes that aim to improve the data and information processing capacity of the information technologies unit on the one hand and innovative skills of human resources on the other. In other words , Knowledge Management aims to save knowledge in an easily accessible form so as to make the most efficient and optimum use of the knowledge that is available to an organization and thereby improving the overall efficiency of the business. The ultimate objective here is attainment of effective performance.

Personal Knowledge Management— PKM concentrates on how the information, thoughts and beliefs of a business must be arranged. In this approach, the person who shares and connects the insights and information is also responsible for creating the knowledge.

Enterprise knowledge management— EKM takes care of the acquisition and storage aspect of the core distinctions and also how these distinctions and insights should be shared and secured. EKM also deals with the processes and strategies to be adopted for the above functions. While managing the knowledge at this stage, the organization does not afford to ignore the aspects like competitive advantage, upheavals, transformations, innovations and dexterity. This aids in distinguishing the knowledge from information and data. .Information is a sort of message that is sent by one person i.e. sender to another person known as receiver and is capable of being stored into a computer. Data ,on the other hand, is the information that has not been interpreted, although it is organized and structured. The information that is useful or has some purpose is known as knowledge. In nutshell, knowledge is there in the mind and head whereas information can be saved in a system. When some purpose is attached to information, then it is transformed into knowledge. Knowledge Management seeks to provide guidance to the organization in relation to the creation of new knowledge as well as efficient utilization of the already available information.

Fig. 1.1 Data- Information- Knowledge Hierarchy



Knowledge Management concentrates on three aspects:

- Accumulation of Knowledge
- Storage of Accumulated Knowledge
- Knowledge Sharing

The concept of Knowledge Management encompasses two types of knowledge:

- **TACIT KNOWLEDGE** is the knowledge that is difficult to store and share with others as it is more intuitive and gained over a period of time through experience, practices and values. It may be communicated through socializing, mentoring etc. ‘Know-how’ and ‘intuitive thinking’ are examples of this category of knowledge. Information Technology acts as a support.
- **EXPLICIT KNOWLEDGE** is the knowledge that can be conveniently and easily taught to others as it can be codified in documents, databases etc. For instance, how to run software or how to operate machinery are examples of this type of knowledge. Information Technology is essential for its transfer and storage.

The aim of KM is to create an environment and culture conducive to learning and sharing of knowledge by increasing the level of accessibility of information and knowledge. The concept also ensures that the organization does not lose the important information possessed by an employee if that employee leaves the organization. Thus, KM emphasizes on development of a system which helps to preserve the information that can be of any use to the organization.

ORGANISATIONAL KNOWLEDGE

Knowledge has become one of the key concerns for organizations in 21st century. Thus, it would not be justified to discuss the term Knowledge Management without having an understanding of the concept of Organisational Knowledge. It is one of the key areas that appear to be involved in Knowledge Management

in today's emerging knowledge based society. Many noted scholars like Peter Drucker, Daniell Bell, Laurence Prusak, Peter Senge, Dorothy Leonard Barton, Michael Polanyi et al laid stress on the ever increasing significance of organisational knowledge.

The word knowledge has been derived from the Greek word *episteme*. The great philosopher Plato gave the first philosophical definition of knowledge who described this concept as

“justified true belief”. Collins English Dictionary (2000) defines knowledge as “the facts, feelings or experiences known by a person or group of people”. Table 1.1 gives an overview of the concept and definitions of Knowledge Management as given by noted authors.

Table 1.1 Organisational Knowledge Defined

AUTHORS	DEFINITION
Bourdreau and Couillard (1999)	A driving force for action and a sphere of influence for professionals
Buckley and Carter (2000)	“Structured information”, which does not characterize the simpler “information”
Davenport and Prusak (1998)	A fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information
Galup et al. (2002)	Inseparable information in context
Kanter (1999)	Power for decision making and execution
Leonard and Sensiper (1998)	Information that is pertinent, actionable and based on some experience
Lin and Wu (2005)	Information that becomes knowledge when it is interpreted by individuals, given a context, and anchored into the beliefs and commitments of individuals
Mahlitta (1996)	Information for action
Nonaka and Takeuchi (1995)	A dynamic human process of justifying personal belief toward the “truth”
Plato (1992)	Justified true belief
Polanyi (1962, 1966)	An activity which is better described as a process of knowing
Tiwana (2002)	In the business context, nothing but actionable information
Tsoukas and Vladimirou (2001)	The set of collective understandings embedded in a firm, which enable it to put its resources to particular uses
Vail (1999)	A value-adding tool for organizations

HISTORY OF KNOWLEDGE MANAGEMENT

The development of the concept of Knowledge Management and its significance over a period of time can be better understood with the help of the table given below:

Table 1.2 History Of Knowledge Management

1970s	Management theorists and practitioners like Peter Drucker and Paul Strassman published papers that laid stress on the use of information and knowledge and also their relevance for the organizations.
Late 1970s	Everett Rogers at Stanford and Thomas Allen at MIT, undertook studies on information and technology transfer that helped in developing understanding of new facts related to Knowledge Management and the use of computer technology to manage knowledge.
1978	Doug Engelbert introduced a Knowledge Management system “Augment” that was a hypertext/ groupware application system having an interface with other applications.
1995	Leonard- Burton contributed to the theory of KM through a case study, “Effectiveness of the Chaparral Steel Company’s Knowledge Management Strategy” which was being practiced since 1970s.
1995	A book titled, “The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation” by Nonaka and Hirotaka Takeuchi threw more light on the significance of the concept of Knowledge Management.

KNOWLEDGE MANAGEMENT LIFE CYCLE

The KM life cycle emphasizes that in order to have a competitive edge the organizations must try to optimize its KM system. A knowledge database must be created that can be accessed by all. This will help to transfer the gathered information to the people who need it. But, this can be achieved only when the employees are motivated enough to share the information. The various stages of the KM life cycle are depicted below:

Stage 1: Identification of Essential Knowledge

Stage 2: Creation of New Knowledge

Stage 3: Transfer of Knowledge to others

Stage 4: Storage of Information to make it accessible

Stage 5: Transfer of knowledge back to organization so that it can be reused

Stage 6: Unlearning the obsolete knowledge

GENERATIONS OF KNOWLEDGE MANAGEMENT

By the early nineties, the researchers claimed that there were two branches of Knowledge Management. But later on the concept of Third Generation KM was also evolved.

FIRST GENERATION KNOWLEDGE MANAGEMENT

First generation Knowledge Management emphasizes that information and experience in an organization must be handled in a manner so as to increase its accessibility in a manner that is readily available in a corporate environment, as and when required. This generation is also known by the name “Knowledge Capture”. It means that when the knowledge capture is managed, then the system is transformed into a powerful information asset.

The use of technology is the very basis of this first generation. Thus, it can be said that Knowledge Management here is no more than an issue of information storage and retrieval. The ideas that are used here are derived from system analysis and management theory. This approach of first generation knowledge management gave a boost to consultancies and the concept of so-called Knowledge technologies came into existence. Very sophisticated and refined data analysis and retrieval systems were created and developed through the first generation knowledge management, but the fact that how the information contained in such systems would be created and ultimately used was totally ignored. As a result of all this the organizations end up investing in the technological fixes that barely or never took care of the ways in which knowledge must be used.

The solutions provided by first generation sometimes prove to be feckless. The reason for the same being that in order to disseminate, distribute and share the information, the organizations need to install a sophisticated internet and the use of intranet has to be encouraged. This may cause acrimony amongst the employees and they may lose confidence in the organization. Here, the principles and standards of Econometrics are applied and the theory of management is treated as a branch of Economics. As Econometrics is all about commodities and cash, thus it became necessary to treat knowledge also as a commodity. This was something difficult to accept and implement as knowledge is not a commodity, but a process. In such a situation, the only alternative was to treat tacit knowledge as explicit. Because of the above mentioned aspects, this first generation failed to manage knowledge creation.

SECOND GENERATION KNOWLEDGE MANAGEMENT

As the first generation failed both theoretically and practically, in accomplishing its main task of knowledge creation and sharing, the researchers began to identify and devise the ways in which the above task can be efficiently done. The analogy of the organizations also underwent changes as it was now realized by the theorists that organizations are also capable of learning and also, learning theory and management are linked to each other. The business enterprises started to prefer the organic models of organizational structure

instead of hierarchical model. As per these models, the organizations are structurally more adaptable and responsive to changes in their environment. The organizations were earlier treated as integrated systems, but with the development of complexity theory and chaos theory, it was realized that organizations are complex interdependent units that respond actively to changes in the environment.

In this generation of Knowledge Management, the manner in which the knowledge is constructed and used by the people is the most significant aspect. The growth of the knowledge is described with the help of organic metaphors. It has a very close association with organizational learning. It recognizes that organizational success is related more to learning and doing rather than dissemination and imitation.

When a business becomes aware of and develops an understanding of the facts, information and truths gained by it over a period of time in the form of experience, then it can be said that that the entity has acquired knowledge. Knowledge, in simple words, is the acquisition of or possession of interconnected details which are of lesser value when considered in isolation.. Knowledge is a very vast term with varied meanings where each meaning differs with the context in which the word is being used. But, generally the term is closely associated and related to such concepts as information, instruction, communication, representation, learning and mental stimulus etc.

Although knowledge and information, both talk of true statements, but a line of demarcation can be drawn between the two. When the information is directed towards the achievement of some purpose or is meant for a particular use, then it becomes knowledge. This is often referred to as information linked to or associated with intentionality by the philosophers. This study of knowledge is known as epistemology.

THIRD GENERATION KNOWLEDGE MANAGEMENT

This generation of Knowledge Management is future oriented where products and services are designed by taking into consideration the future scenario. Thus the ability and capability of the organization to change and adjust with time plays a key role. All the activities and innovations are directed towards future requirements which in some cases need to be found and realized by the organizations without any indication from the present environment.

WHY SHOULD ORGANIZATIONS MANAGE THEIR KNOWLEDGE?

An old proverb says, " Knowledge is Power". This is true in the context of both our professional and personal lives. Another well known truth is that knowledge is one of the assets that multiply by sharing. This fact has now been realized by the businesses; hence the concept of Knowledge Management is widely being accepted and implemented by the organizations. To be more specific, the practice of managing knowledge has gained importance in the business houses because of the following reasons:

a. Enhancement of the level of Customer Satisfaction:

A good KM system accelerates the process of finding solutions to the problems of customers. The efficient system of knowledge sharing enables the organizations to improve their product or services in a comparatively short span of time.

b. Better Access to Knowledge and Information:

A well organized KM system helps in speeding up the process of searching the information an employee/customer needs. It is also an aid to simplify the procedure of connecting with the persons who hold important information. This adds to the overall productivity of the organization.

c. Efficient Decision Making Process:

The employees can act proactively as far as decision making is concerned. This becomes possible as the businesses having well developed KM system ensure the availability of the information to the persons who require the same.

d. Encourage Innovation:

An efficient KM system enables and motivates the employees to share their viewpoints, experiences, ideas and provide them the access to latest information. This enhances innovative thinking so as to enable the organization to meet the new challenges and also to compete in a better way.

e. Avoid Wasteful Efforts:

Knowledge Management helps to avoid duplication of efforts, thereby, increasing productivity and saving time. The reason for the same being, that knowledge and information acquired by one employee/department is exchanged and shared with others. The time and efforts, this, saved at the employees' end can be utilized for doing something novel.

f. Improved and Quick Decisions:

The organizations that share knowledge and collaborate internally will always be, in relation to their competitors, able to provide new, better and quick services to their customers.

g. Lower Employee Turnover:

Healthy KM practices in an organization often leads to reduction in employee turnover, as this system leads enhancement of the level of employees' satisfaction and creation of more skilled employees. Lower turnover implies that fewer workers are needed to be trained and recruited every year. This leads to reduction in the expenses that businesses have to incur in finding and training the workers. An efficient KM system has a high negative correlation with the attrition.

h. Enhancement of Efficiency:

KM system assists in creation of such a work environment where knowledge is embedded within the system instead of being available with one or few individuals. The ease and convenience with which

information can be extracted results in enhancement of employees' efficiency. The financial consequences of this improvement in efficiency are quite visible and can be easily measured.

i. Improved Business Transparency

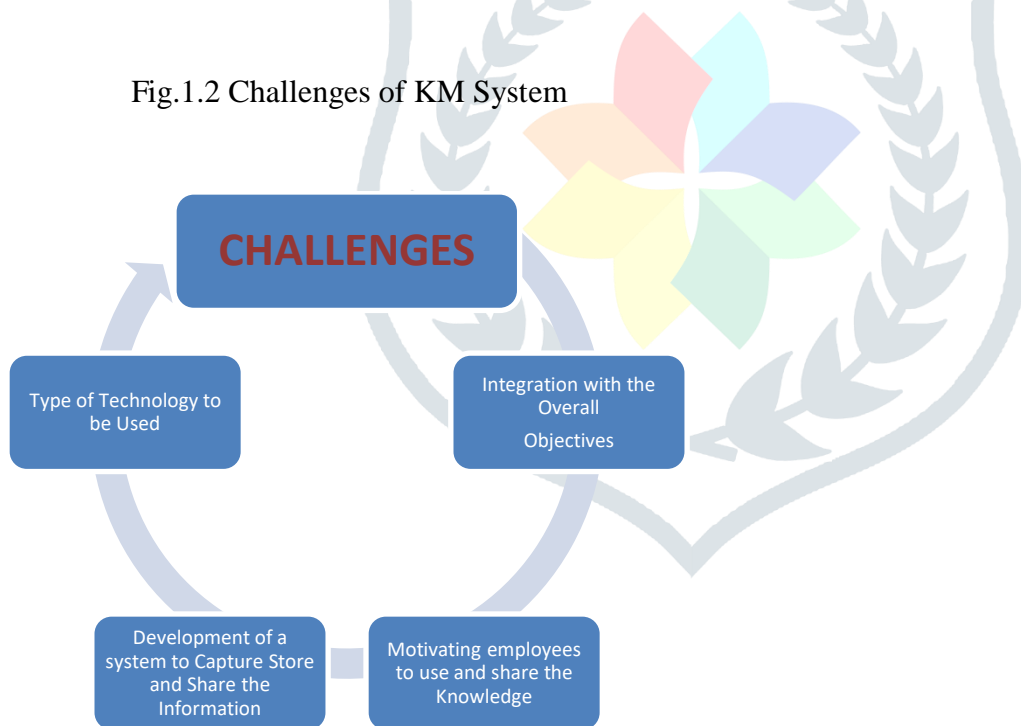
A well developed KM system requires that the processes and procedures must be well documented. This, in return, makes the business activities more transparent. The amendments and changes can also be easily administered, if and when required.

IMPLEMENTATION OF KM SYSTEM: A Challenge for the Organizations

The Knowledge Management System, if properly implemented, provides a competitive advantage to the businesses. But, the organization must be cautious while using it as it must address the following issues for successful implementation of this system:

- a. Integration of KM system with the overall objectives of the organization
- b. Convincing and motivating the employees to use and share the knowledge
- c. Development of a system to capture, store and share the knowledge and information so that it becomes easier to find the information and resources
- d. Taking decision regarding the type of technology to be used for implementing KM system

Fig.1.2 Challenges of KM System



In order to meet the above mentioned challenges, the organizations should take the following measures:

- a. Setting clear goals and objectives consistent with the KM System
- b. Creating a corporate culture and environment where employees are ready to share the knowledge
- c. Adopting strategies for managing change
- d. Understanding the pros and cons of the technologies available for implementing KM System

Fig. 1.3 Ways to Overcome Challenges



WHY ARE ORGANIZATIONS HESITANT TO INVEST IN KNOWLEDGE MANAGEMENT?

Knowledge Management, although has become a common practice being followed by the organizations for the past few years, yet the companies hesitate as far as the investment in Knowledge Management system is concerned. This is because of the difficulty of measurement of returns on this investment. Also, it takes a comparatively longer time to recover the initial investment made in KM in comparison to other cost cutting tools being used by the businesses. The managers, although, understand the fact that KM adds to the productivity of the organizations and advocate the use and implementation of the Knowledge Management System and the creation of such a work culture where an integrated approach of identification, evaluation, retrieval, and sharing all of an enterprise's information assets like databases, procedures, documents, policies and previously un-captured expertise and experience in individual workers is used, yet they are unable to quantify the benefit and returns derived by the organization by implementing Knowledge Management system.

INFORMATION MANAGEMENT VS KNOWLEDGE MANAGEMENT

	Information Management	Knowledge Management
1.	Focus is on facts, figures and hard data i.e. explicit characteristics of the information.	Encompasses all aspects of enterprise viz communication, management framework, organization culture etc.
2.	It is measured quantitatively.	Qualitative measurement is done i.e. behavioral changes over a period of time are

		studied.
3.	Can be replicated.	Difficult to replicate as it involves innovations unique to an organization.
4.	It is technology based.	It is people based.

DERIVING KNOWLEDGE/ KNOWLEDGE ACQUISITION

Knowledge acquisition means the knowledge that a business attempts to obtain from external sources. The various sources of acquiring knowledge include :

- a. **Suppliers:** Here the knowledge may flow from business to suppliers and vice-versa. The organizations may act as a source of knowledge related to production needs, forecasts, inventories, customers, markets etc. for the suppliers. Similarly, the businesses may try to get an insight into the fact that how suppliers can fulfill the firm's requirements.
- b. **Customers:** Here the businesses seek to improve their products and services by understanding their customers in a better way by identifying their preferences, motivations, requirements, expectations etc.
- c. **Competitors:** As far as applicability of Knowledge Management to the concept of competition in relation to a business is concerned, it simply involves the organization of the data possessed by a business in a manner that it facilitates the process of retrieval and analysis of the information.
- d. **Partners/Alliances:** Alliances that aim to add to the knowledge may act as an indispensable resource only if they are properly managed. For this, transfer of knowledge must be promoted through sharing of technology, regular interactions, common projects etc.
- e. **Other Expertise:** Apart from the above mentioned particular sources, knowledge may also be acquired from some other external sources like consultants and experts. Here, the basic aim is to make it sure that the right type of information which meets the strategic and tactical needs of the business is collected.

The simplest sources of acquisition and verification of knowledge include traditions and generally recognized authorities. Apart from this, observation and experimentation may also be used for knowledge derivation. Traditional, experimental or authoritative sources also assist in deriving the knowledge.

DISTINGUISHING KNOWING THAT FROM KNOWING HOW

If one wants to understand the difference between "Knowing" and "Knowing How", then he need to have a clear understanding of the concepts of Procedural Knowledge and Propositional Knowledge. Propositional knowledge or Theoretical Knowledge is something that has been acquired by an individual simply through reading books, encyclopedias etc. It means the person possessing such knowledge does not have any

practical experience. But, on the other hand when knowledge is acquired by performing a particular task, it is Procedural Knowledge. Propositional Knowledge is difficult to demonstrate.

INFERENCEAL VS FACTUAL KNOWLEDGE

Knowledge may be categorized as factual or inferential. Factual knowledge which is based on direct observation may suffer from uncertainty as there is greater probability of the occurrence of errors of observation and interpretation. Inferential knowledge is more objective than factual as it is based on reasoning from facts and theories. Observation or testing may or may not assist the verification of such knowledge.

KNOWLEDGE MANAGEMENT: It's Adoption by the Businesses and Organizations

- ***Spartan Race's Customer Centric Self Service:*** Spartan Race, which is a global leader in obstacle races adopt a customer – centric self service strategy. For successfully implementing knowledge management concept, the company presents knowledge aligned with a customer's unique needs. It has established almost 40 help centers customized by country. Thus, it tries to ensure that users can easily find right content for their specific needs. By the implementation of successful KM system, Spartan Race has managed to decrease chat volume by 95% and extended its support team's live chat by 3 hours every day.
- ***Vend's Knowledge Centered Service:*** Vend, a retail management software company adopts a user-centered design approach to implement effectively the system of knowledge management whereby the most searched for content is displayed at the top. Since the implementation of knowledge centered service, Vend has experienced 65% increase in help center articles, 29% increase in customer satisfaction and 40% increase in one- touch solves.
- ***Khan Academy's Community:*** The academy that is a non- profit works to make free education available for everyone and anywhere. Its biggest success factor is its customer interactions with its website (especially during the period when schools moved online due to COVID-19). The most significant aspect that helped it to become a great knowledge management guru is the its peer-to-peer knowledge sharing platform.
- ***Canva:*** It is a graphic design company that endeavors to make video and graphic design amazingly simple for everyone. Canva is an excellent example if we talk of the importance of plating and presenting the knowledge clearly and beautifully. The company adopts easy to implement Knowledge Management process and help center design strategies. The help center has been created in a manner that makes it easy for the customer to find answers to these queries. The website has a customer friendly design as it has a thorough sidebar of information with simple category titles and well designed organization methods. A clear "Contact Us" section ensures that customers have an access to support if and when they need the same.
- ***Tesco:*** Tesco, a grocery giant whose technology alone handles over 40,000 tickets per week, has a powerful internal Knowledge Management base that allows taking the pressure off its help center

managers by deflecting quick and repetitive questions. Its strong knowledge management network unites the various service desk offerings into a single knowledge repository that provides a one-stop-shop for information for its 4,60,000 employees located across 9 countries. For implementing its knowledge management strategy effectively, the company encourages its help center managers to edit and contribute content so as to ensure that the needs of the internal customers are always met and the articles are up to date.

WORLD LEADERS OF KNOWLEDGE MANAGEMENT SYSTEMS

Table 1.3 World Leaders of Knowledge Management Systems

S. No.	Company	Description
1.	Zendesk	The main features of the knowledge base platform Zendesk are that it is open, adaptable and expandable. It assists in the development of self-help customer service and the software supports more than 30 languages.
2.	ProProfs Knowledge	It helps in improving the customer support and internal team cooperation through the provision of creating self service knowledge base for customers and internal knowledge base for employees. It is helpful especially to startups, small businesses and corporations.
3.	Click Up	It is an all in one knowledge management system that helps in Project Management, Process Management, Task Management and Time Management. Its special features and possibilities like collaboration and reporting provides the facility to the teams to submit comments and collaborate in real time.
4.	Knowmax	It is an AI powered system which provides the customers access to the right information at the right time. It allows consistent flow of internal and external information by integration of the contrasting data sets. It also has the provision to construct decision trees, articles, FAQs etc.
5.	Document 360	The software contains a simple user friendly Markdown editor that helps the company in

		frequently making additions to and also revising the knowledge base articles , comparing the changes, identifying by whom the changes have been made and assessing the articles that are most seen and interacted with. All this helps in deciding which articles require regular revision.
6.	LiveAgent	The software has a WYSIWYG editor that helps in writing and customizing articles, forums, feedback, suggestions and FAQs. It is of great help to all teams and companies.
7.	Monday.com	It provides a platform to the companies that help them in developing tools that allow them to meet their specific needs. All work can be managed from a single workspace with the help of work operating system. It can provide assistance practically in every situation.
8.	Zoho Desk	It is also known by the name ‘Context Aware Support Desk’. All customer support activities can be managed with the help of this. It is a fully loaded CRM that is best suitable for the customer centric businesses that handle a large number of customer queries.
9.	Confluence	It is a content collaboration programme through which knowledge can be published, organized and accessed from a single location. The process of creating document, providing feedback and iteration to change the content can very conveniently be managed through this.

CONCLUSION

Knowledge Management enhances the accessibility of the expertise and knowledge held by the organization, thereby creating a more efficient workforce that is capable of taking quick and promising decisions. It also enhances the growth of innovation within an organization that gives a competitive edge to the business. All this adds to lower employee turnover. Effective Knowledge Management system also results in enhancement of customer loyalty. In a nutshell, it can be concluded that Knowledge Management offers value driven tangible benefits to the business, irrespective of the reasons of implementing the same. It surely has a positive influence on organizational performance.

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