Knowledge is increasingly being recognized as the new strategic imperative of organizations.There is another form of information retrieval called "push" technology. In this case information retrieval is initiated by the system rather than by a user. In this form of information retrieval, the users subscribe to areas of interest. They then receive updates via e- mail delivery, personalized web pages and personalized corporate portals or home pages consuming the cataloging effort will be. Let us take, for example, the case of cataloging a book describing how to build a particular machine. There are several questions that we need to ask. Shall we consider the entire book as one unit and catalogue it as such. Or, shall we consider as one unit one chapter of the book, or one section or one paragraph of the book? The larger the unit the more difficult it is to find the exact information one is looking for. In some cases, the manner of dividing into units presents itself as obvious. After the information is divided into smaller units, the units must then be categorized by content type. To do this, it is necessary to create a list of all the content types for the organization. This list may include classifications such as proposals, invoices, white papers, and correspondence. Each entry is then tagged with content attributes, including metadata such document title, author, client, and approval status. These predefined categories and attributes constitute the site vocabulary. Microsoft Site Server has facilities for managing content type and attributes. e) Information retrieval Once the repository of information is created and populated, the next step will be to provide various emails. These documents normally contain valuable information, but they are not easily searched and found. For a knowledge management system to be effective, it must provide for search engines that can deal with such unstructured information. In most cases, however, some form of information structuring is necessary to facilitate subsequent information retrieval and use. Some information may require more than a storage format. For instance, Online Analytical Processing (OLAP) systems convert data from Online Transaction Processing (OLTP) into a format more suitable for aggregation and analysis. OLAP operates against this secondary data store rather than the production system. d) Information organization To facilitate retrieval, a two-step process must be implemented: first, the information should be divided into manageable units; and second, each unit should be categorized. Before the information is divided into smaller units, there is need to determine the size, or granularity, of each meaningful unit. The finer the subdivision or granularity of each unit the more tedious and time For this reason, communities of practice can provide that underlying layer of stability to many organizations. c) Information Storage and Retrieval The third element of knowledge management is information storage and retrieval. The organization should ensure that acquired or shared knowledge is readily accessible to others. This can be done by storing information in a centralized location with sufficient provisions for easy retrieval. For example, reports, statistical data on economic, social, and environmental areas can be stored in databases while official documents, once approved, should be categorized and stored electronically in suitable file systems. The documents and information in databases could then be retrieved through the Internet or the organization's intranet websites. There are four main options for storing the information that are captured or shared. These namely are file system storage (local and network directories and folders), databases, e-mail, and websites (intranet and external). In most organizations, the bulk of information is likely to be in relatively unstructured formats. These can be in the form of typical business or office documents such as reports, memos, spreadsheets, or Although

communities of practice generally grow spontaneously around personal relationships, it is important that organizations create a condition conducive for such growth to occur. Many progressive organizations rely on communities of practice to maintain the professional excellence of project teams regardless of where the members of the team may be geographically located. Because communities of practice facilitate knowledge sharing, they are critical to overcoming the challenges involved in the creation, sharing, dissemination and use of knowledge. In many organizations, communities of practice are informal groupings that are separate from but are not in conflict with the formal organizational structure or hierarchy. They act as parallel structures but do not interfere with the regular responsibilities and accountabilities of staff members. They are groups in which various areas of knowledge connect people. In all organizations, the management structure and hierarchy may change, and projects start and will eventually end. Communities of practice however can continue indefinitely if there are groups of people that are interested in sharing knowledge. Knowledge is the continuous element that binds the members of the community of practice together. The competitive advantage of many organizations is generally determined by the magnitude of knowledge sharing that takes place within the organization. But knowledge sharing does not automatically take place. It must be encouraged and nurtured. In general, it is necessary to facilitate communication and nurture the right culture within the organization for proper sharing of knowledge to take place. Knowledge sharing can be enhanced through the implementation of appropriate technologies, operations and systems that stimulate collaboration, facilitate the process of sharing, and reward those individuals that share the most knowledge as well as the individuals that utilize knowledge that have been shared. Organizations are generally able to make decisions with impact when knowledge is efficiently shared. They can make and execute decisions rapidly when individuals throughout the organization can gain access to important strategic ideas. When an organization starts to manage its knowledge to attain competitive advantage, one key initiative would be to foster the formation of communities of practice around the core knowledge of the organization. Seminars and workshops also provide excellent venues for creating and capturing tacit knowledge that may come from the speakers or the participants. b)Knowledge Sharing and Enrichment The second element of knowledge management is knowledge sharing and enrichment. This element is probably the most crucial among the four. It is during the process of sharing that knowledge is usually refined and enriched. Knowledge can be shared by the organization with its employees (e.g., through memos and instructions) and sharing of knowledge can occur between employees of the organization (e.g., through group discussions and internal meetings) as well as with people outside of the organization (e.g., through attending seminars and workshops). Furthermore, as the knowledge on cleaner production technologies is distributed by the organization to its staff, various sector committees and thematic networks can provide a forum where new ideas can be exchanged, debated, and made more relevant. Through this process of dissemination, debate and discussion, the organization's knowledge on cleaner production technologies is enriched. Additionally, when staff members attend outside seminars, workshops and meetings on cleaner production technologies, further knowledge sharing, and enrichment take place. knowledge is created, it will be necessary to capture it so that it can be utilized. Knowledge capture and/or creation Assess Knowledge sharing and dissemination Contextualize Update Knowledge

acquisition and application Knowledge can be captured in various ways. Knowledge from outside the organization can be captured by accessing different sources such as publications, websites, emails, and the Internet. Explicit knowledge from within and outside of the organization can be captured in various forms such as printed reports, record of meetings, copies of memos and the like. These documented outputs are generally generated at various stages of operation of the organization. On the other hand, tacit knowledge can be created and captured during discussions and meetings with office colleagues, stakeholders, institutional partners, consultants, and experts. or organization since the very interaction among people generates knowledge. One of the primaries aims of knowledge management is to capture the knowledge that is produced during such interactions. Because of the highly competitive nature of today's markets, there is increasing need within corporations and organizations to create new knowledge, generate novel ideas and concepts, and to capture these knowledge, ideas and concepts. The creation of new knowledge will not be possible without creativity and innovation. These are the two most important traits or skills needed to make the organization more productive and competitive. For this reason, creativity and innovation require proper management. If managed effectively, these skills can be harnessed to discover alternative approaches to doing things, faster way of completing tasks, cheaper methods of producing outputs, and easier paths to accomplishing desired results (See figure 3.3). The process of creating new knowledge is the most difficult to manage. Often creativity and innovation flourish when there is a minimum of intervention from management. Nevertheless, for many organizations there is no option but to find ways and means to manage this process since for some their survival as a viable organization depends on how well they can manage this process. Once new Total Quality Management (TQM) and business process re-engineering initiatives. As a result, knowledge management projects became big business and source of revenue for major international consulting firms such as Ernst & Young, Arthur Andersen, and Booz-Allen & Hamilton. In addition, several professional organizations interested in such related areas as benchmarking, best practices, risk management, and change management began exploring the relationship between knowledge management and their areas of special expertise. These included reputable organizations like the American Productivity and Quality Council and the American Society for Information Science. A complete knowledge management system must contain four elements. These are: a) knowledge creation and capture, b) knowledge sharing and enrichment, c) information storage and retrieval, and d) knowledge dissemination. a) Knowledge Creation and Capture The first element of knowledge management is knowledge creation and capture. Knowledge is continually being created in any group, corporation, The agenda of many conferences also started to include knowledge management as a main item for discussion. But the introduction of knowledge management did not come until 1991 when Tom Stewart published the article "Brainpower" in Fortune magazine.This is what is known as the "people and culture" enabler in knowledge management.The work of Peter Senge, on the other hand, focused on the "learning organization" and emphasized the cultural dimension of managing knowledge.Other management experts and practitioners like Chris Argyris, Christoper Bartlett and Dorothy Leonard-Barton of Harvard Business School contributed significantly to the development of the theory of knowledge management and the growth of its practice by examining in their various work and

publications the many facets of managing knowledge.Results– Oriented definition o To have the right knowledge at the right place, at the right time in the right format Process– Oriented definition o The systematic management of process by which knowledge is identified, created, gathered, shared and applied Technology –Oriented definition o Business intelligence + collaboration + search engines + intelligent agents Knowledge management definitions could be as follows: In any organization, certain areas of knowledge are more important than others.As a conscious discipline.Knowledge Creation To Tacit Knowledge To Explicit Knowledge From Tacit Knowledge Socialization Externalization From Explicit Knowledge Internalization Combination Socialization is a process of creating common tacit knowledge through shared experiences.Participation in external networks, establishing partnerships with other organizations, and creation of knowledge centers are also effective means to disseminate knowledge.Since users have different levels of technical expertise and have different purposes for .accessing information, multiple access methods will have to be provided