
Knowledge Management and Knowledge Management Systems: Conceptual Foundations

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Abstract: Information is a common and abstract notion defined epistemological conversation in western philosophy since the Greek Classical era. However, there has been mounting attention in the treatment of in sequence as an important organizational tool in recent years. According to the interest in organizational information and knowledge management (KM), there searchers have begun to promote a class of information systems, referred to as Knowledge management system (KMS). KMS is to support knowledge creation, transfer and submission in organizations. Management of information and consciousness is a dynamic subject with several facets. So efficient development and implementation for KMS a foundation is needed in several rich read more Literatures.KMS Research and Development to be reliable should maintain and build on substantial writing which exists in different but related fields. This paper analyses and interprets the literature on knowledge management in a variety of fields with an eye to identifying key study areas. Comprehensive method vision of information management in the association focusing on the possible Knowledge arrangement in that phase, knowledge is outlined in this paper. Building on the reviewing literature and evaluating knowledge management methods, discussion is done on a variety of relevant research issues related to the processes of knowledge management and the role of IT in support in those processes.

Keywords: Knowledge management, knowledge management systems, knowledge management review, organizational knowledge management and research issues in knowledge management

INTRODUCTION

The knowledge-based perspective premises this services rendered using measurable resources depends on the combination and operation of these, which in turn is a function of the company's know-how (knowledge, that is) This awareness is integrated into the and brought by a variety of institutions including community and personality of the company, practices, procedures, processes and records, as well as workers. because knowledge-based resources are normally tough to repeat and communally nuanced, the firm's knowledge based view argues that these knowledge assets can provide a sustainable competitive advantage over the long term[1]. Nevertheless, the information that exists at any given time per se is less than the capacity of the company to apply the current knowledge effectively awareness creating new information and taking accomplishment that pave the way for gaining a advantage in knowledge based possessions. At this point that IT will engage in recreation an important role in bringing in the firm's knowledge based view. Superior information technologies can be used to systematize, enhance and accelerate intra and intercompany knowledge management on a broad scale. (fig. 1) Benchmarking, knowledge audits, transferring best practices, and the development of employee's points to realization of organization's knowledge and importance on the entire intangible assets. In view of the significance of organizational information, our aim is to manufacture the pertinent and information based work for numerous disciplines that experts believe to be contribute and form the way experts think control of information and implementation of knowledge structures in organizations[2].

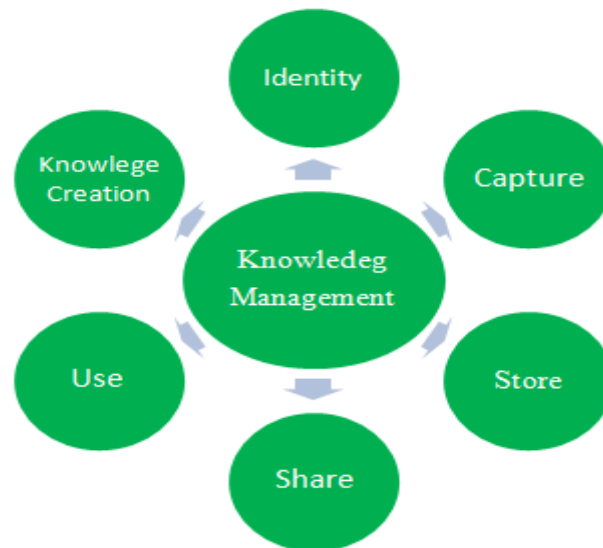


Fig.1: Different Aspect of the Knowledge Management

The paper is organized according to the following: section presents managerial review information and business literature. This segment provides an exhaustive description of the alternatives taxonomy of information and awareness and their Knowledge Management Implications. The following sections take a view of the process management of information, and present this view in detail with a look to define potential the role of IT within the various stages of management of knowledge. A broader corporate perspective on knowledge management analysis is then given by the discussion of relevant research topics arising from the literature review. The final section summarizes the four general conclusions of our work, and presents the discussion[3].

The question of knowledge definition has taken up since the Classical Greek era the minds of philosophers have led to many epistemological debates. For the purposes of this paper it is unnecessary to engage in a debate to examine, challenge or reframe the term information or to discover the "universal truth," from the perspective of philosophy of antiquity or modernity. It is because this comprehension of expertise was not a deciding factor in developing the firm's information-based philosophy, nor in stimulating the interest of researchers and practitioners in the management of organizational expertise. A widely held view with sundry minor variants is that data is raw numbers and statistics, data is processed and information is authenticated as knowledge. Yet the assumption of a hierarchy from data to information to expertise with each varying along certain dimensions, such as meaning, utility, or interpretability, rarely survives scrupulous evaluation. What is key to differentiating information and knowledge effectively is not found in the material, structure, quality or usefulness of the information or expertise supposedly received. Instead, knowledge is information that is in the minds of individuals: it is personalized information concerning facts, procedures, concepts, interpretations, ideas, judgments and observations[2].

It makes the disagreement that the often assumed sequence for data and information is in fact the opposite: information must be knowledge before formulation and evaluated for authenticity. Real data does not survive without effecting with basic information that are needed to validate the data framing in the information. This argues there is information which exists when it is coherent, verbalized and organized information which becomes data upon assignment of a fixed representation and standard interpretation. The very fact that this argument is critical is information does not survive beyond an manager: it is formed permanently by an individual needs and by basics of knowledge. Accordingly, intelligence is the product of rational learning caused by novel stimuli. It is necessary to transform the information into knowledge whenever it comes in an individual's mind, after knowledge needs to be expressed as the information and displayed in the form of images, phrases, text or any other medium as required[4].

Another significant consequence of this knowledge concept is that processes designed to foster information in organizations could not appear drastically different from those of many types of information systems must also be based on allowing users to assign meaning for learning and to collect details and/or data on some of their expertise. Awareness is described as a rational belief in the increases the ability of an organization to take successful steps. From many viewpoints, knowledge can be seen (1) a condition of mind, (2) an entity, (3) a mechanism, (4) a circumstance of right of entry to information, or (5) a ability[3].

Knowledge was explained as a fact or even a state of meaningful to be a situation of knowing understanding or learns gained understanding; the sum or range of what was apparent, exposed or learned." The viewpoint on knowledge as that a state of mind is centered on allows persons to increase their individual knowledge in addition to implement in requirement of the organization. A second view defines information, like an item. This

viewpoint posits that information cannot be view as something to be processed and interchangeable, information can be interpret as a method of learning and adopting simultaneously[5].

The perspective of the process centers on the expertise applied. Fourth place consideration of information is that of the access state with regard to knowledge. Organizational information has to be structured according to this view to enable right of entry to and fetching of content. This scene can be seen as an addition of the scenario of knowledge to be an object, like a particular one focus on the convenience of information. Lastly, intelligence understands as ability with the power to affect prospect action. It builds on the perception of capacity by suggestive of that knowledge is a capacity for precise actions but a capability to employ information[6]. The main consequence of these a variety of knowledge interpretations is that every viewpoint implies a dissimilar approach for information management and a dissimilar viewpoint of the role of structures in justification of knowledge management[7].

DISCUSSION

Taxonomies of Knowledge:

Grounded in reality, involvement and experience is a precise sense, dimension of knowledge has cognitive as well as technological components. The cognitive dimension refers to the mental models of a person composed of, values, paradigms, mental maps and view point. The technical portion consists of practical know-how, crafts and skills which are relevant to a specific context. An example of tacit knowledge is knowledge of the best way to treat a particular customer-use flattery, use a difficult one sell, and follow a no-nonsense approach. The unambiguous knowledge dimension is codified, articulated as well as communicated in a representative and/or even in natural form. Speaking the phrase. An example is a manual for a proprietor accompanying an electronic purchase service. The handbook includes material on the reasonable Product activity[8].

One may also find information as existing in the person or community. Individual knowledge is generated and is available in the person while social knowledge is generated by and inherent in a group's collective behavior. Both Nonaka and others rely a great deal on the unambiguous, implicit, individual combined distinction of knowledge but not able to provide a detailed description of the interrelationships between the various types of knowledge. One potentially troublesome feature of this categorization is its definition and the supposition that hidden knowledge is additionally valuable than clear knowledge is the equation between the incapability to expressive knowledge and its value. None would argue that explicit information is more important than implicit knowledge, a point of view that, if adopted, might support a method of information management as technology used to help clarify, store, and disseminate knowledge[9].

Whether knowledge is tacit or explicit, the more that point may indeed miss valuable. Both are not dichotomous knowledge states, but mutually dependent and reinforcing knowledge qualities: tacit knowledge forms the context required for the creation and understanding of explicit information by the framework. The inextricable relation between tacit and explicit knowledge indicates that only people with a certain degree of mutual knowledge can really exchange information: if there is tacit knowledge essential for the interpretation of specific knowledge, then, in order for Individual B to understand the knowledge of Individual A, its underlying knowledge bases must have some overlap. Nevertheless, it is precisely in the application of technology that IT holds promise to increase poor links in organizations, and thus increase the scope of information sharing. However, in the absence of a common space for information, the actual effect of IT on information sharing is doubtful. This is a problem that IT researchers have often ignored, and that managerial researchers have implement to challenge the use of IT to handle information. The very real meaning of the task of information management needs to amalgamate information in all groups for what IT will act a decisive role[10].

It can be argued that the greater the common room for intelligence, the less the sense for persons share information within the community, and thus the superior the specific information and the higher the IT worth added to knowledge. The smaller the already shared room for information greater the need for contextual information in a group, the less explicit knowledge will be relevant, and therefore IT will be less applicable to knowledge. Tacit knowledge have gotten more attention and interest concentration and yet the previous is not the only one to deliver both benefits and benefits organizational Problems. Explicit information by virtue of being reported may present a specific challenge related to a presumption of legitimacy. As it can be seen as legitimated, and thus reasonable. In addition, explaining knowledge, given the transient nature of certain facts, might result in rigidity and rigidity that would hinder efficiency, besides improve it[11].

The tacit-explicit division of information is commonly applied cited, though there are sundry other classifications of knowledge which escape the recondite subtleties of a tacit-explicit aspect. Others refer to information as declarative, formal, causal, and relational. A systematic approach to classifying information simply seeks to define forms of knowledge that are valuable to organizations. Examples involve awareness about consumers, goods, procedures, and rivals, which might take in finest practices, know-how as well as heuristic laws, trends, technology, and business processes [12].

Knowledge Management in Organizations:

The growing increase in information about organization has prompted the question of information management to the benefit of the company. Know-how management refers to the identification and use of the collective organizational know-how to help compete with the organization. Management of information is intended to augment inventiveness and receptiveness. A recent study of European businesses establish that nearly few of the companies report having problematic a important setback due to the loosening of main personnel, with 43 per cent experiencing impaired customer or supplier relationships and 13 per cent facing income losses due to the departure of a single employee[13]. In another sample, most organizations were of the opinion that there was a lot of the information that they wanted inside the company, but it remained difficult to recognize that it existed, locate it and exploit it. Such a thing create problems with the preservation, place and implementation of knowledge have contributed to systemic attempts at information management. Building an information infrastructure not just a technological network, but a web of interaction and collaboration between people provided space , time, resources and encouragement[14].

Knowledge management is commonly considered a process which involves different activities. Slight variations in the process delineation exist in the literature, mainly about the number and marking of processes rather than the underlying principles. At the very least one finds the basic creation, storage / retrieval processes, transfer, and the application of information. Of example, these major procedure can be subdivided into the growth of interior knowledge, the attainment of outside knowledge, the accumulation of knowledge in credentials versus routine store, as well as the keep the information updated and shared with all surrounding system [14].

Knowledge Management Systems:

Knowledge Management Systems (KMS) used by managing awareness of the organization. That is, they are IT-based supporting structures built and improve knowledge creation, storage / retrieval, transfer and application processes within the organization. While not all KM initiatives include IT introduction and warnings against IT focus at the financial and social cost. It is not unusual for many KM initiatives to rely on IT as an important enabler for cultural aspects of KM. [15]. Another growing usage of the information system is the development of organizational directories, also known as the mapping of internal know-how. Since much information remains unmodified within an association, map the internal know-how is a substantial useful method for knowledge management. One survey indicates that 77 percent of participant assumed that the best information of their company was unavailable, and 72 percent felt that errors had been repeated many times. Such a thing belief that current information is not being implemented is an opportunity to map internal expertise[16].

Development of information networks is a third important application of knowledge management systems. It brings folks jointly virtually in order to swap over and combine their combined knowledge in each of the specialized areas. The campaign based less on mapping skills or benchmarking than getting the experts together, to share essential information and expanded. The provision of online communication and discussion fora may shape networks of information. Buckman Laboratories has been used an interactive online discussion where observations from users are thread in a informal sequence and indexed by author, topic, and date[17].

This has been reportedly helped to adapt to the altering basis of opposition that has merely developed from advertising products to address chemical conduct issues for customers. In another case, Ford found that the development time for cars was reduced from just sharing knowledge 36 to 24 months, and the exchange of information as well as delivery period for the dealers was reduced from 50 to 15 days[16].

Information systems designed to promote and improve knowledge awareness within the company must balance and strengthen awareness person and group management practices. To accomplish this, the plan of information systems be supposed to be grounded in an sympathetic of the complexity and type of managerial knowledge and driven by that. Similar angles on knowledge and the different taxonomies of knowledge earlier were mentioned. Those discussions emphasize the importance of assessing and recognizing the information role of an organization and its intellectual capabilities still exist[18].

It takes some understanding to formulate a concept strategy for Management and the role of information technology in facilitating the management of knowledge. In the field of information technology (IS), it was general to design such systems having prime focus on codification of knowledge. Management monitoring systems and executive support systems have focused on this form of information gathering and dissemination. Knowledge management systems may deliver an opportunity to broaden the breadth of the IT-based information provision to include the different forms and types of knowledge set out. No suggestion that IT should be applied to the KM the activities of the organization in question shall provide means of capturing all the kinds of knowledge mentioned; the different types of knowledge that form the substance of the IT will depend on the nature of the organization.. Although the preponderance of knowledge management theory derives from research into strategy and organizational philosophy, most knowledge management programs include information technology, at least in part, if not to a large degree. Yet little IT work exists to help knowledge management in the design, use, or performance of the systems [19].

Organizational Knowledge Management Processes: A Framework For Analysis Of The Role Of An Information System:

Under this structure, organizations as information structures consist of four sets of "information" that are socially implemented procedure: (1) construction (also known as building), (2) storage / retrieval, (3) transition, and (4) function; such view for the accumulated information help to organizational knowledge in order to be recognized for the society and boost the practices for the knowledge sharing [18].

Knowledge Creation:

Creation of managerial information includes the production of new content or the replacement of existing content through implicit and explicit awareness of the organization. Knowledge is a practice of the sharing to amplified and expanded in order to justify for the organization. This model is used to implement to create the tacit as well as explicit knowledge for the use of the organization and help to pass this information in to a wide circle of the volunteers.[20].

The socialization procedure indicates to implicit exchange knowledge of new tacit knowledge through social sciences interactions and common interactions with members of the organization. The grouping mode refers to generating new open knowledge by fusing, categorize, and explicit knowledge. The two modes are interaction as well as conversion to transform the tacit into explicit knowledge. Externalization refers to the transformation of tacit knowledge into explicit new knowledge. Internalization refers to the development of new implicit knowledge based on explicit knowledge [20].

The different modes of knowledge formation are not as pure, but even very mutually dependent and interconnected. Every mode is based on, contribution and profit from additional modes. For instance, when person gets a new insight trigger by contact with one more, the social inclined mode may lead to the development of new information. In the other hand, the style of socialization could be taking the transition of current tacit information one participant to another, by debating thoughts. Fresh awareness of organization, per se, not to be produced but only new knowledge received. In most cases the grouping mode involves an interim step-that of a person illustration insight from explicit sources and the code of the new information in a specific form (outsourcing). Lastly, internalization might comprise of the simple exchange of obtainable explicit information into the tacit knowledge of an individual as well as the creation of fresh understanding of organization as the clear source causes fresh insight[21].

Knowledge Storage/Retrieval:

Experiential studies have exposed that organizations build information and be taught, but they often fail to remember (i.e., they do not understand or misplace track of the information they acquire). The storage space, organizing and fetching of organizational information, also known as managerial memory, constitutes an essential part of effective management of organizational information. Organizational memory involves information reside in different types of materials, counting on paper documents, organized data saved in electronic devise, recorded organizational procedures and processes, and implicit knowledge gained by individuals in addition to internal networks[22].

As with the process of knowledge creation a distinction mentioned in the following section throughout the literature, memory was rendered between people and organizational. Personal memory is created based on thoughts, perceptions, and behavior of an individual. Organizational memory stretches beyond the memory of the individual to include other components such as organizational culture, transitions (processes of development and job processes), structure (formal organizational roles), ecology and archives up information. Semantic memory denote to general, descriptive, and expressed information, while episodic reminiscence refers to context-specific and located information (e.g., particular organizational decision circumstances and their outcomes, place, and time). Experience might have positive as well as negative possible effects on action and results. On the optimistic view, basing and comparing organizational amend in prior knowledge promotes the introduction of change. Experience also helps to store up and re-apply practical strategies in the shape of policies and measures, which in effect avoids the loss of organizational possessions in replicating preceding work[22].

On the other hand, memory has a possible negative impact on an individual as well as organizational aspects powerful presentation. On a single level, reminiscence can be consequence in biased executive. At the managerial level, recollection may contribute to maintain the same condition by improving the knowledge of a lone loop (distinct as a cycle of error detection and correction). This in effect could lead to peace, coherent organization, resistant to change cultures[23].

Knowledge Transfer:

Having discussed the creation and storage / retrieval of knowledge, and considering the important issue of knowledge transfer. The process of applying knowledge and representing learning, or new knowledge creation, that occurs when individuals apply knowledge and observe results. It is the transfer of explicit knowledge of an individual to group semant memory (which can occur, for example, when individuals place reports that they have prepared on a group database viewable to others). It is reflect the potential transfer of episodic memory from individual tacit information to community. Individuals can also learn a semantic and episodic memory from the party. Knowledge transfer might be took place in a number of the way as between the individual, among groups, between nations ,etc.

Much of the literature centers on the third function that of transfer channels of information. Channels for the transfer of knowledge can be personal / impersonal or informal / formal, formal mechanisms including unplanned meeting, a casual seminar or intermittent break talks, may be successful in promoting socialization with wide ranging preclusion disclosure. These processes in small companies can also be more successful[22].

CONCLUSION

The literature review highlighted the complexity of and multifaceted organizational character managing information and awareness. Different views and taxonomies of information have been studied and debated. For instance, implicit or explicit form of knowledge; it may apply to an entity, or ability cognitive state; it might exist in persons, classes, records, and systems, policies, or data repositories. The management of knowledge involves a distinct but interdependent knowledge creation and recovery processes, knowledge storage, and request of knowledge. An association and it's at point of time, members may engage in multiple procedure chains of knowledge management. As such, the management of information is not a monumental but has a dynamic nature for organization phenomenon. In addition, the complexity, and underlying knowledge management tools and resource requirements approaches vary according to the category, capacity, and individuality of knowledge management process.

KMS, by explains on a variety of IT instruments and skills, will engage in recreation different roles in supporting systems of corporate information management. Clear examples of IT support for the four processes of information management described in the paper obtainable in portion of the System. It is significant that KMS can lead to a mixture of types of KM support by drawing on diverse and versatile IT capabilities. Beyond traditional coded knowledge retrieval and storage. Research questions were raised regarding the processes of organizational knowledge management and the role of IT in those processes. The basis for future research might be these questions.

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