A Systems Thinking Framework for Knowledge Management

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Abstract: To handle information Myriad frameworks have been created. Nevertheless, the field was slow in formulating a widely accepted, systematic knowledge management system. This paper reviews the existing framework for knowledge management and gives suggestions as to what a general framework should include. The distinctive characteristic of this work is that it emphasizes putting information management in a broader sense of system thought in order to better identify and appreciate the driving influences on its success or failure.Managing knowledge is a young discipline for unestablished, commonly known, codified structure. Despite this, knowledge management approaches have implemented in a wide range of organizations. on the other hand, such methods do not sufficiently meet the needs of organizational Knowledge Management. This written product will have more lasting strength as a discipline if theories and concepts unifying across the discipline are aligned with the information management methods, methodologies, tools and techniques. Knowledge management is an evolving field that command concentration and hold up from the engineering community. A lot of companies are now engaging in knowledge technology to leverage resources to its stakeholders and clients both within and outside their companies. Managing understanding involves an organization's meaning creation of the intangible assets.

Keywords: Framework, Knowledge management and Systems thinking.

INTRODUCTION

Knowledge management (KM) is the technique of exchange, generate, using and maintaining an organization's information and information. It relates to a multidisciplinary approach to attaining organizational objectives through making the best use of knowledge. KM covers classes in corporate management, information processing, accounting, library, and computer sciences. Other fields, including media and information, computer science, public health, and public policy, can add to KM investigation. Quite a few universities offer dedicated master's in information management. A good number multinational corporations, public agencies as well as non-profit organizations, frequently as part of their departments for business planning, Technology, or human reserve management, have staff dedicated to inside KM behavior[1].

Many consulting organization facilitates these startups with advice on KM. Information management activities usually take care of organizational objectives such as enhanced competence, competitive benefit, imagination, lessons learned sharing, alignment as well as organizational quality improvement. Such activities overlap with organizational knowledge, and would be differentiated from that by concentrating further on knowledge management as a planned tool and promote information allocation. KM is an organizational learning launch pad. It has been also introduced the word "professional knowledge management" to promote knowledge management, which relates to knowledge management at the individual level[2].

Managing knowledge is an emerging area that commanded industrial community attention and support. Already, other organizations engage in information management to exploit expertise both within and beyond their organizations outside to its owners and clients. Managing awareness includes the development of value of intangible assets of an organization. The experts indicate that a number of organizations are developing information systems specifically designed to facilitate knowledge sharing and integration.Through this approach emerge two main issues for information management. Firstly, knowledge management requires far more than tools to promote the exchange of information. Practitioners are now starting to understand that the people and the workplace traditions are the driving forces which identify the success or failure of information management programs. Additionally, technology process forces a narrow view which may be inhibiting knowledge's growth and staying power administration[3].

Managing information is a young discipline for a widely recognized, codified structure not established. Despite this fact, there have been a number of strategies for knowledge management implement across a wide spectrum of organizations. Such methods, though, do not sufficiently fulfill the organizational Knowledge Management needs. The concern is that the management information will just be a passing fad close to the re-engineering business cycle and the widely accepted notion it failed. It is observed that knowledge management needs to be

implemented into the organization's strategic goals in order to fully realize its organizational enhancement capacity powerful results[4].

This written product the management of information will have more lasting strength as a discipline if theories and concepts unifying throughout the discipline should be aligned with the methods, methodologies, tools in addition to techniques of information management. This paper examines the information management strategies that have developed and provides guidance for way to evolve a supervisory system. This paper in Section 2 identifies and reviews the frameworks for information management which have been literature published within the broader sense of thinking about structures.Essential observations In Section 3 analysis of the current state of the art will help identify yourself. In Section 4, instead, recommendations for potential directions for generalizing the system are given for information management[5].

FRAME WORK REVIEW

➢ Systems thinking:

The logical basis for machine analysis is problem solving that takes into account problems as a whole. Problem solving requires identifying patterns to improve comprehension of the problem in addition to its response to it. The outcome of system thinking rely a great deal on how a system is described, since system explores the relations among the different part of system. Limits have to be set to differentiate which parts of the universe and what's inside the machine components shall be known as machine setting. The system's setting can affect problem resolving as it affects the system, but it is not part of the system[6].

A broad array of processes, tools and concepts includes system thought, all with a shared aim of understanding system relationships. Systems theory is championed on the assumption that when systems are decoupled into smaller pieces, there are developing properties of system. One instance may be a dynamic problem wherever a driver hits red lights in every few blocks. If the driver notice only red lights, then it only try speed-up to make the next light before it turns red.If, however, he considers his vehicle, the lane, changes in speed, and the distance between lights, he may find that if he speeds up to make a light, it changes into red. That is to say, a pace trips the lights, causing him to drive slower. He will raising his speed if he sees this trend, and drive through all green lights[7].

This instance is predominantly important for demonstrating the strength of information administration while put in a meaning for the systems thought. Systems analysis can boost information management by making nuanced, realistic depictions procedure, and therefore improve considerate and understanding capability of information management programs to meet organization's requirements. An information management approach to systems also answers the issues posed by experts about the lack of a supervisory structure to provide a general sense of direction for information management activities within organizations.Several theoretical perspectives on problem-solving systems that incorporate reasoning in the literature, was presented. Some examples include spiral dynamics of soft systems analysis, analysis of system manipulation and theory of value systems. Assessment of life cycles is a basic method for systems thought issue-solving popular in the literature.These tests analyze whole cycles enabled in systems. This is critical for learning management, since intellectual capital and learning are created and leveraged through synergies all various sections of the information management process that only become apparent when the process is in progress considered altogether[8].

The definition of planned structures, formalized by experts refer to all program systems where there is a certain aim and the program is bound and developed to achieve that goal or goals, hence the intent of the system.In addition, the concepts of adaptive and sensitive systems are introduced, respectively, which are important and appropriate for general system thought, and for a knowledge management context, as will become evident elsewhere in this paper.In response to changes in the system, adaptive systems adjust to help accomplish the system's goal or purpose. Responsive systems are learning from past performance of the system to improve functionality and efficiency. It provides a supervisory structure to help ensure the same general approach knowledge management programs across organizations and with various methodologies and resources tackle requirements[9].

➢ Knowledge management frameworks:

As mentioned earlier, a number of people are and organizations have put in place structure for managing information. Possible systems marked as prescriptive, descriptive and/or a two mixed. Statutory frameworks provide instructions on the types of information management procedures without providing precise details on the protocols be enforced. Essentially, they recommend various ways of getting involved in information management, i.e., propose a methodology of knowledge management Conversely, Characterize or define different structures managing information[10]. Many frameworks discussed so far in the literature are prescriptive frameworks. And the structures seem to be career-oriented. This was a natural direction to move in for initial knowledge management efforts, as the processes involved in the actual implementation of knowledge management are tasks or knowledge manipulation activities.There are also other significant reasons for the effective management of knowledge; this is a major finding of thispaper and is consistent with previous study[11].

ANALYSIS OF KNOWLEDGE MANAGEMENT FRAMEWORKS

Many primary points, grouped in a further two general findings, emerge from a review of existing frameworks for information management, the structures don't suit systems as conclude:

1 The marks are of a prescriptive kind and thus emphasis on information management responsibilities;

2 The structures are not about the notion of training in a double-loop, cohesiveness over structures is lacking;

3 There is no universal concept of what constitutes a system for managing knowledge;

4 Multiple definitions are common to multiple frameworks but frameworks differ in order or structure.

The first set of conclusions relates to the idea of knowledge management not being consistent thinking with structures. This is because a lot of information management system focuses primarily on knowledge management the method or activities of the information cycle-the transfer of knowledge through the organization and tasks required to promote the movement. Another one: important information management elements such as integration of the application of information with the organization's strategic objectives are neglected, the people concerned for knowledge activities either the cultural circumstance inside where knowledge management is evolved.

Based on the system thinking definition given, for knowledge management to be compatible with system thinking, it must consider the whole cycle of knowledge management: purpose of strategic organization goals, information, technology, learning, and counterculture. Therefore these pieces can be further divided into various information forms, information flows, knowledge activities, learning, and the media and counterculture subgroups within the organization.The first finding-the structures are mainly prescriptive means the systems tend to be task-based and ignore other facets of the managing information. And they don't have total, holistic approach to knowledge management as determined by thinking about processes[12].

The structures in these examples include a collection of information management activities; Where Knowledge Cycle is the priority. That is, they discuss how information spreads and is exploited in an organization without taking into account factors influencing the knowledge process. Some examples of tasks include knowledge acquisition.These results however only state that the majority applications shall be prescriptive. All descriptive and hybrid frameworks consider non-task-oriented aspects of information management, including cultural aspects factors, the connection between knowledge management and strategic business priorities and the need for feedback loops to address changes in the knowledge management climate.Such feedback loops fix problems adaptability and sensitivity to improved information management activities results. Experts demonstrate the notion of strategic business priorities by their focus. Coordination, planning and leadership. While other structures for scholars discuss some of the main aspects required for a knowledge management approach to processes, it provides the most detailed structure in current literature and is closely consistent with the recommendations in this paper. Nonetheless, none of the descriptive or hybrid structures meet all of the defined criteria[13].

The second result deals with learning inside systems of information management. The concept of learning is related to loops of feedback as discussed in finding. Monsanto has no structured knowledge management system but the company is one of the few that understands the principle of knowledge management learning through the use of knowledge management maps of knowledge. The Mutual Group 43 proposes frameworks which specifically include a learning component. With the exception of a single feedback loop, the methods remain relatively linear.This conclusion is consistent with experts' finding that dual-loop learning is far less prevalent than single-loop learning in organizations, and is often missing. This differentiates between double- and single-loop learning where one-loop learning training is what companies do for solution and incremental shifts in functions. Double-loop learning is generative; that is, learning with a double-loop requires learning at a more fundamental level where simple premises are modified.This is consistent with system theory as it includes the idea of evolving properties of processes where information is learned or unlearned, i.e. when relationships are assessed and understood in the system, emerges from system. Feedback serves as a facilitator to synthesize emerging assets as a simple system thought tenant[14].

In this paper some of the frameworks reviewed appear to know any degree of learning but neveranswer it correctly. For example, the Institute of Knowledge Research and all of them have an activity of knowledge creation; include knowledge production. It can be argued that these activities contribute to learning, but they do not fully encompass it because they are characterized as activities that result in learning from a single loop. The systems take a step forward on thinking. The scholars identify a series of activities which precipitate learning, such as knowledge formation, synthesis, and adaptation.Training is usually defined as the result of information management practices. This argues that one- and two-loop learning should be used in a full learning mode. This finding asserts that double-loop learning is the form that is missing from current frameworks for knowledge management. Again, learning is necessary to promote a knowledge management approach that is adaptive and sensitive to the changing organizational climate and culture within which knowledge management takes place[15].

The results contribute to the notion of having a lack of coherence in knowledge management initiatives, and they support Beckman's assertion that the field of information management is missing sustainable structure.

The two points also reinforce the claim of this paper that suggestions are imperative for how the field as a whole might begin to define its premises and theories. The third result stems from the focus on and the components of the systems discussed here differ.In essence, there is no fixed, generally accepted notion of the required elements of a system for Handling Information. From the beginning of the system appears to be prescriptive in nature, the absence of cohesiveness across systems includes prescribing the different tasks needed for information management. Some examples include Buckley and Carter who incorporate governance and efficiency, Ernst & Young who do not include seeking information and who include information securing[16]. Consensus only for the concise structures, which is a misunderstanding of what is to be found in an information management system. For example, in their framework, the National Technical Institute of Greece, Andersen Consulting and the Delphi Group include cultural factors but not learning or connecting with strategic business goals. It integrates learning and organizational culture into their structure, and Arthur Andersen covers all the main aspects outlined in this paper: cultural considerations, ties to strategic goals, and learning feedback loops. Buckley emphasize the business process by taking a different approach.More subtle differences between the frameworks illustrated by the duties of knowledge. American Management Systems and Price Water House Coopers are beginning to gather information. Knowledge associates employ a similar function, except that they call information-acquiring practice. The subtle difference is that possessing the information means that it was already discovered, and is now actually obtained. Ernst &Young and National University of Technology are using another somewhat different definition. The first step in information management in those examples is to instill intelligence[17].

In this case, instead of merely finding or obtaining preexisting information, the information is actually generated. Wider definition of information generation is agreed than the others that include the acquisition of knowledge. Its analogous development of knowledge in phase. A brief analysis highlights the distinctions that occur between the various frameworks while a number of commonalities between frameworks continue to exist.The article before us leads to the fourth finding, which refers to the conceptual and organizational variations between the sets. This conclusion is related to prescriptive frameworks, and helped by looking at multiple frameworks flow. Any of the frameworks for the application do not recommend a particular flow. Those such as the distribution of knowledge and the integration of information components. In that order, and in reverse order, all of those elements are used in his system[18].

In fact, the Frameworks include a component to information development. Contains this much later than the others in his frame work though. In reality, in the system, O'Dell has information development as its last requirement. It was first suggesting the acquisition of knowledge and then the creation of knowledge; the Institute for Knowledge Research lists these steps in reverse order. It includes both the finding of knowledge and the acquisition of knowledge in its framework, but there is an additional, up-front requirement to transform information into knowledge.At this point it should also be noted in some cases distinguish different types of knowledge e.g. here, distinction applies to classifying knowledge as either explicit or implicit. Explicit information is the formal language that has been codified and conveyed. This can be viewed, stored, exchanged and implemented effectively. Tacit knowledge is knowledge that is difficult to communicate, to represent and to express[19].

RECOMMENDED DIRECTIONS

Several advice for a whole discipline what emerges from this review of the existing framework system for the management of information? These recommendations highlight strengths and limitations of existing frameworks in an engage in creating a common, unifying structure. The system thinking concept is a commonality across borders. By integrating information management into program thought, the defects in the existing structures and a general structure may be mitigatedoutlines appear. The definition of systems thinking suggests a hybrid paradigm that includes elements that are both prescriptive and descriptive[10]. Although the order in which knowledge management tasks are carried out may remain variable, a system approach fosters an atmosphere in which, generally, the same factors influence knowledge management initiatives such that outcomes are increasingly relevant. Recommendation for feedback and double-loop learning addressed later in this section also indicates that it may not be possible to coordinate activities[20].

To build on the previous claims, systems thinking is key to a knowledge management system as it enables the alignment of knowledge management programs with the organization's strategic priorities and objectives. It is accomplished by the holistic perspective of the enterprise that arises when a program strategy is implemented, helping to create a consistent picture of what is being done and why it is being done.Such a relation practically defines the initiatives to Control Information. To do this, knowledge management must provide extensive preparation before performing knowledge management activities to identify the problematic of an organization[21].

In addition, a system for the information management recognize that information management requires knowledge management so more than just the activities of information management or the knowledge process. Therefore the management of intelligence cannot be viewed in the same way as general information systems. It

is necessary to develop holistic methodologies and processes that emphasize knowledge management's organizational and cultural aspects. Bob Buckman, CEO of Buckman Labs, said 90 per cent of his organization's information management effort is cultural. In the same vein, consulting companies are citing their activities as a strategic 80 per cent.This explores the topic of knowledge activities vs. culture by classifying information management methods as either codification or rationalization strategies. Codification strategies seek to record and store information in databases, and professionalization strategies strive to build people's networks for transmitting ideas. Provide knowledge they possess. This must be people-driven to incorporate cultural elements of an organization. Technologies, techniques, and tools used for different Knowledge Management aspects the existing organization should be built around culture. For example, the Mutual Investment marketing groups operate collaboratively, and coordination takes place through functional units. In contrast, fund managers tend to work individually within the investment fund group. Information is made accessible to all so individual fund managers determine how to use it and how to do so.Naturally, once information is transmitted and exchanged, tools must be used to store and disseminate the information to others[12].

Furthermore, knowledge management is an ongoing incremental change and evolution cycle not a one-time effort. This argument, combined with the fact that there are similar elements in a number of systems that are organized differently, implies that a collection of distinct linear tasks may not be suitable for information management. Instead, multiple feedback loops need to be built into the control of information and allowing for multiple simultaneous events to be carried out during the product. This leads to the notion of learning in the knowledge of double-loop learning. Single-loop learning is already discussed through an amount of Investigators. The suggestion here is to integrate both single-loop and double-loop learning into the system for information management so that there can be differing degrees of learning. Fresh in dual-loop learning existing knowledge is synthesized by combining it in new and innovative ways.The learning will change or evolve the Information Management Program is part of carried out inside the system. Updated feedback loops in and between Information measures management processes are important elements to achieve a double-loop learning and learn organizing. With this suggestion a hybrid system is especially important as prescribed tasks can lay the groundwork for dual-loop learning, but all facilitators of dual-loop learning are feedback, interaction between individuals in the organization, and evolving strategic objectives[22].

The importance of information and its value are both important for comprehensive information management systems, processes, and performance. Spinning feedback loops such maintenance and upgrading play an important role of both the method of information management and of physical health. Beyond feedback loops the system for information management will include a prescription to relieve double-loop conceptions learning and maintaining which includes things like new knowledge creation, the combination of knowledge and sharing know-how[23].

The preceding debate provides the basis for recommended Knowledge Management Framework. The two primary recommendations are

1. both prescriptive and descriptive frameworks should facilitate the second recommendation and
2. Knowledge management activities should be consistent with system thinking. Then, the second recommendation contains a series of recommendations that follow:
3. It is important to connect organizational strategies and objectives with knowledge management,
4. Planning will take place beforeawareness management tasks shall be carried out, an organization must have cultural dimensions
5. Recognized knowledge and the application of informationin a way which is consistent with the society ofarrangement, and
6. The management of information is an evolutionary, iterative mechanism driven by feedback loops and learning.

The suggestions tabled by the authors based on some of the popular themes others applied to information management literature: activities related to information management must be essential and should include activities such as location, verification, storage, organization, sharing and use knowledge should be differentiated between explicit and implicit knowledge and each needs to be treated properly and the system should include 3 single-loop learning and double-loop learning[24].

There are various mechanisms for differentiating between various 'forms of' information.Subsequent work indicated that a distinction between tacit knowledge and explicit knowledge reflected an oversimplification and a self-contradictory notion of explicit knowledge. In particular, intelligence must be converted into information in order to be made clear.A second proposed framework for categorizing knowledge dimensions distinguishes embedded knowledge of a system outside a human being from embodied knowledge representing an acquired capacity of the nervous and endocrine systems of a human body.A third suggested paradigm distinguishes between "new knowledge" (i.e., innovation) exploratory development and "existing knowledge" transfer or exploitation within a group, organization or society. Collaborative contexts such as working communities or using social media resources may be used for both knowledge formation and transmission[24].

CONCLUSION

Research results and guidelines have one unifying theme: systems thought. The key inference is that existing systems do so usually do not employ a system approach. This paper's principal suggestion is that systems inside the systems should be built protection. In addition, criteria for assessing frameworks for knowledge management within the context of systems analysis were set out in the paper. These structures have been implemented as a bench, mark in order to determine the main recommendation. According to the present study, a perspective and descriptive framework needed for management of the knowledge at any particular palace or an organization with an approach of the system re thinking.

The ideas to counter results findings can also be mitigated. That is, bringing in information management systems thinking should create a supervising framework by defining what systems thinking is that dictates a more coherent concept of system for Handling Information. Know-howof management remains young, field-developing and existing systems contain some but not all key attributes set out in this paper. This research is under way hopefully provides a basis on which to build the future research is going to build.Early case studies collections recognized the importance of the strategic, process and measurement dimensions of knowledge management. Key lessons learned include public and cultural for their action as the most significant tools for the effective development, allocation and implementation of information; cognitive, social and organizational learning processes are necessary for the achievement of a knowledge management approach; and assessment and rewards are necessary to speed up the learning process.

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