

# OVERVIEW ON KNOWLEDGE MANAGEMENT TECHNIQUES

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**Abstract—Knowledge management systems are therefore part of the organizational learning process, although they focus more on strategic management of knowledge as a shareable business asset. The core goal of knowledge management is to connect people looking for knowledge within an organization to those who have it, with the ultimate aim of increasing the overall knowledge level of the team and organization.**

Keywords: Organization, Production, Validation.

## I. INTRODUCTION

In software life cycle, maintenance plays a big role. Once the software is developed and made available in live environment then the software is considered to be in the maintenance phase. While the software development takes a short life span (1 – 3 years), the maintenance phase continues until its life time (5 to 20 years or even more). Typically the software requires updates regularly to keep it up to date with the customer

needs. When the software is a product then many new features need to be added now and then to keep its competition at high.

A big healthcare IT organization faced challenges in maintaining their one of the major revenue generating IT system. The system frequently faced issues related to system maintenance. Its enhancements took longer for release and the projects of the system's failure rates were higher.

The organization has decided to investigate the root cause of the problems with the system and to take appropriate steps to resolve those. They decided to take a look at the failed projects, current issues and the overall system's problems thoroughly as it is their major revenue generating products. During the investigation they have identified that the product is missing proper knowledgeable resources and issues around its knowledge repository.

Generally risks appear due to the uncertainty conditions. Uncertainty is

created due to the lack of knowledge and its sharing. It is important to make decision in this context which leads to the source of risks. Normally risks need to be given proper mitigation plan. If no mitigation plan is available then the risk becomes a threat at a later stage. Providing information in to the processes leads to the construction of improved solutions. In addition, as a result of the sovereignty influenced by the project, they have the drawback of getting unchained from the rest of the projects which separates knowledge front. (Koskinen, 2010).

The knowledge of the project lies with the elucidation of information and data that can change the complete consequence. The assumptions, clarifications and knowledge have to be moved from the project stakeholders such as sponsors, managers, and project teams to the risk register and appropriate documents.

## II. Literature Review

Knowledge Management is a basically a new era since it came into existence from 1990s. Although it was not used in the industry's first, it became an important aspect once it was started practiced in the organizations.

Knowledge management has become a significant business for management companies in late 1990s. To improve learning for individual as well as the organization and its culture to attain competitive advantage (Pun and Nathai- Balkissoon 2011). So the Knowledge Management base is moved from individual to the commonality during the 1990s.

Knowledge management has turned as important tool for improving the organizational structure and result oriented development so different companies adopted similar practice. Knowledge management based approach plays a major role in organizations, which manage and support knowledge and to work for maximizing the added value of knowledge for organization. Knowledge management increases the value of the business by achieving the goals and provides new heights in the business (Tiwana, 2001).

Knowledge management is effectively incorporated, in government information and health care sectors and it has become one of the precarious assets to influence the enterprise competitive benefits. Knowledge management is becoming an important tool in providing dynamic and efficient

service to the user community. More knowledge and information is created as technology improvement and the whole world has become knowledge – oriented hub.

### III. Organizational Knowledge Structure

One of the essentials of second-generation knowledge management is the thought of knowledge structures – codified languages of collective information. For eras, human civilizations have been embedding information in myths, ceremonies, dance, and other traditional artifacts. In turn, these constructions, along with our civilizations' institutions, disclose much about our traditional values, principles, and procedures, and the ways in which they have progressed over period.

The codification of collective information facilitates knowledge transmission from one generation to the next without individuals' having to trust on the fragilities of human remembrance. Cultural artefacts can thus be seen as a record of structural knowledge.

How does the idea of knowledge constructions apply to the commercial world? It is easy as the

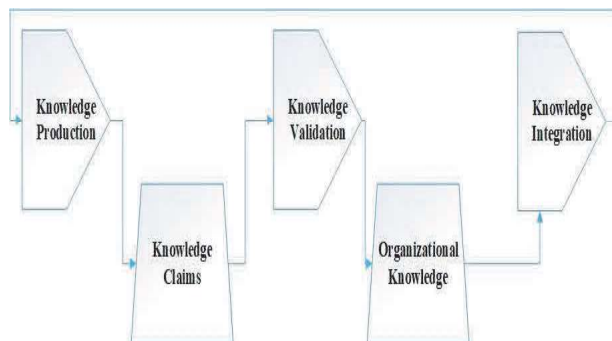
business procedures are nothing but the codified form of technical (know-how). Business approaches, such as whether to be in the loan business in the first place, are codified languages of declarative knowledge (know-what).

Although many contemporary knowledge constructions take the form of information systems, videos, documentation and other recorded demonstrations, they are just as frequently found in corporate stories, repeated patterns of behavior, and management styles. Nonetheless of where information is held, the difference between practical and declarative knowledge is significant for two reasons. To do the double-loop study, the organization must know what is available and its own language. Accepting that knowledge is expressed in the form of instructions that are enclosed in culture, processes, business strategies and structural schemes makes it stress-free for practitioners to discover and communicative what their organizations.

Second, understanding that, declarative knowledge energies practical knowledge can melodramatically increase an organization's rate of education and

innovation. For example, IBM's declarative knowledge of what the market for e-commerce involves will define its approach for how to participate customers and opponents in the marketplace. Eventually, every process that workers follow in training can be traced to cooperatively held archetypes about the e-commerce market. The slenderest error in any fundamental declarative assumptions can condense whole functioning divisions outdated or entire valuechains inappropriate in the blink of an eye. Therefore, it is significant to know that the influence for making lasting, across-the-board change is in changing declarative knowledge rather than in mending with procedural knowledge.

It is important to distinguish the knowledge from data, or information or even wisdom. Based on the



**Fig.1 Knowledge Life Cycle**

descriptions of practical and declarative knowledge given above, all examples of data, knowledge, information, and wisdom can be characterized as either knowledge of fact (declarative rules) or knowledge of exercise (practical rules).

Even the most hygienic summary of statistics observed from a laboratory experiment express someone's knowledge of what occurred, which is declarative knowledge.

Rather than distinguish among data, knowledge, information, and wisdom, it is more productive to emphasis on gradations in the assessment of knowledge. Computing the value of a given set of practical and/or declarative guidelines boils down to calculating how well they are helping the organization in achieving its goals. Using this principle, what is deliberated low-grade "data" one day could simply become high grade "wisdom" the next deprived of any change in the authentic content.

Consuming established second-generation knowledge management's view of the form that knowledge takes and the containers in which it is stored, the next idea of ultimate importance is

the procedure by which new instructions come into animation.

### *Techniques of Knowledge Management*

#### *Knowledge Management Processes*

To ensure that information in your company is accurately fashioned, stored, and recycled, it is dominant to implement the internal procedures the accurate way. Company policy and processes administrate the way employees intermingle with each other and the organization itself, so if you are considering to adopt knowledge management both meritoriously and professionally, here are some possibilities you should know:

#### *a. General Company Policy towards Knowledge Management*

The significance of knowledge management and knowledge distribution should be communicated to your workers. Implement knowledge management practices and make them compulsory in the day-to-day procedures of your company. For example, giving workers some time off work every week so that

they may deliberate of, what they had learned freshly and commit it to script is a good procedure you may wish to contrivance.

#### *b. Knowledge Creation Guidelines.*

Make sure that any substantial that enters your familiarity base does so in a systematized fashion. Generate strategies for knowledge formation, interconnect them to your workers, and make sure that they are followed. Preferably, every worker should have admittance to the knowledge management tools and be encouraged to contribute.

#### *c. SME Role*

In the preceding article, we straight that, it is necessary to give your employees access to the leading specialists within your organization. Launching rules that tells how and when the experts may be consulted will, on the other hand, give your workers admission to greater expertise, and on the other, make sure that the specialists can accomplish their main responsibilities without continuous interruption. Best run-through in this regard is to have every accomplishment choose a day of the

week and set approximate time aside for accessing at that day at a specific time (make sure to interconnect this information to your workers). Also, it is suggested for those looking for advice to evidently formulate their questions in advance to save time.

#### *Preserving Expertise Related To Solved Issues:*

Organization, like individuals, must learn from their mistakes and avoid downsides they've encountered previously. To that conclusion, it is important to preserve the knowledge about the incident, as well as the steps taken to correct it.

#### *Conserving the expertise of Workers leaving the Organization:*

Worker revenue is a fact of lifetime, and even key personnel may consent for greener meadows. However, this doesn't malicious that you can't or shouldn't attempt and minimize the impairment this will cause. Expertise is valuable, and you should struggle to reserve every ounce of it, once somebody gives you their warning. While anterior learning will come in accessible, you should attempt and have the leaving individual's

knowledge committed to script as well as transferred verbally.

#### *Knowledge Management Tools and Techniques*

##### *Knowledge Bases:*

The "old trustworthy" preference, knowledge management acceptance in a company often begins with creating a knowledge source (to be fair, it often doesn't development any further than that). It usually grosses the form of an intranet gateway or a wiki-based mini-site comprising answers to the most commonly asked questions in the organization, explanations of technical processes, detailed use circumstances and examinations of issues come across in the past. A knowledge base can comprehend text, multimedia materials, video seminars, links to significant third party resources, and more.

##### *Communities of Practice:*

These are specialized communities where associates are amalgamated by a common sphere of action, a shared project, or a mutual goal. If you can make it so that your workers start conversation shop with

each other, partaking tips and experience, acknowledge yourself on getting over a key knowledge management obstacle, as creating and encouragement such communities is one of the key knowledge management goalmouths. You can use diverse technical means, such as environments or groups belonging to the organization's core social network, to aid your workers share their proficiency. It would also be a big plus if the selected solution structures, the ability to rate or up vote predominantly useful topics or insightful assistances.

#### *Knowledge Map:*

A knowledge map marks it easy for your workers to associate to an expert in a particular area of knowledge. It stands for a purpose, before you can ask for guidance, you must first catch someone who can give a knowledgeable answer, and this is where a knowledge map comes in accessible way. It lists the specialists within the association, shows their corresponding areas of expertise, and affords the means of communicating them.

#### *Bank of Ideas:*

Bank of ideas accumulates and stocks the ideas and best carry out generated in your organization. Enterprises known for their groundbreaking revolution don't simply get their vivid ideas out of tinny air - they energetically solicit ideas from their workers and directors, and they eavesdrop. However, not every indication can be instantaneously considered for implementation, so in the intervening time you need to accumulation them somewhere. You also need to top score, who came up with what, so that when the corporation decides to act upon a specific suggestion, its author can be referred and rewarded. As always, having the aptitude to rate other people's thoughts and mention upon them is a massive plus.

#### CONCLUSION

The aim of the paper is accomplished in associations with the investigation of the extent to which the tools and methods of knowledge management can be applied to the procedures and processes of risk management used in the early stages of assignments. This has been confirmed and the extent has been shown to be very high with the inspection and recommendations to



effectively implement them for improving recent risk management practices. The similarities are analyzed and documented for better understanding of knowledge aspects. This helps to improve the project teams to understand and identify the aspects and update the knowledge as needed.

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