Realizing the benefits of knowledge base in an organization

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Abstract: A knowledge base (KB) is a technology used to store complex structured and unstructured information used by a computer system. Most organizations use KB to capture various types of knowledge to derive new knowledge. In this paper, we are going to consider knowledge base systems to consist of three components. These components are a platform for submitting knowledge assets (KA), evaluating them, and finally capturing the benefits of those knowledges. we will discuss how these components can help the organizations in grasping the knowledge benefits in terms of revenue, cost-saving, cost avoidance, health, safety, security, and the environment. Organizations planning to invest in KB systems can benefit from this paper to help them in understanding how KB can benefit the organization. They will also know how and what to be considered while implementing and rolling-out a KB system for enterprise users.

Keywords: Knowledge, Knowledge Base, Knowledge Asset, Knowledge Management, Knowledge Officer, Knowledge Sharing, Knowledge Evaluation, Knowledge Benefit.

I. INTRODUCTION

In the current age of digital transformation, knowledge base (KB) solutions become important aspect that enterprises become keen to invest in. Nevertheless, there are challenges to overcome to take advantages of a well-designed KB system. The KB systems can be viewed as an easy-to-implement solution. Nevertheless, the ability to collect, evaluate and capture the benefits of knowledge on the fly is a huge challenge. With the best KB system deployed there still the challenge of the culture. In other words, employees may tend to think what-is-in-it for them if they share a piece of knowledge with others. We will discuss how these challenges are remediated by putting well defined processes that will help enterprises realize the benefits of their successful KB solution.

II. DETAILED DESCRIPTION

The development of KB system is being considered to be a process involving three steps. These steps are a system for submitting knowledge assets, knowledge evaluation, and finally capturing and realizing the benefits of those knowledges. We will discuss each step as following:

• KB system

The KB system will mainly be focusing on automating the process of capturing the knowledge. A knowledge submitting process should be an easy to carryout task by the employees in enterprises. This process requires employees to supply various details of the knowledge. Enterprises should pre-populate the solution with all possible disciplines, knowledge types and the owner organization details to allow employees to select those details while submitting the knowledge. This ensures the knowledge is categorized properly and provides a strong means to search existing knowledge and allow reusability. The solution should also mandate employees to provide contact details of all employees involved in the knowledge preparation.

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There must be a mechanism for employees to add all beneficiary organization details with the knowledge submission. This is a very critical step. Employees — who create knowledge — know better about which organization could benefit from that knowledge.

• Knowledge Evaluation

The knowledge evaluation process is very crucial to any KB solution because a good solution should contain good, reliable and reusable knowledge. This process involves special employees we call Knowledge Officers (KOs). These are potential employees who are subject matter experts in their fields, and might be assigned by top management of an enterprise to play a major role in evaluating the knowledge submitted under their organization. There could be primary and backup KOs in every organization in an enterprise.

All knowledge submitted goes through well-defined approval process including the submitter's management and at last by KOs. We believe that this step is important to ensure the KB solution provides reliable and trustable knowledge, which leads to reuse.

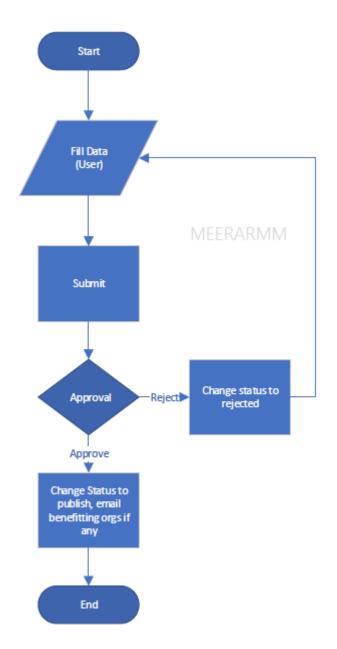
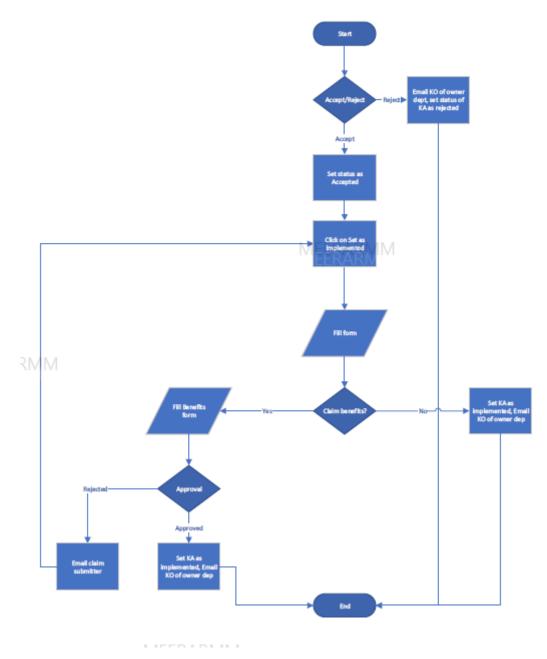


Fig. 1: Knowledge Submission Process

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• Knowledge benefits

Capturing the benefits process out of knowledge is the last process that gives a return-on-investment in any KB solution. The KOs of any organization should be able to pick up knowledge from the KB, considering that this knowledge is helpful to their organizational business and adds value. As part of the knowledge submission process, the knowledge is recommended to potential organizations that could benefit from the knowledge. The KOs of these organization should have the means to view knowledge recommended to them, and be able to accept and implement it in their business.





When the knowledge is accepted, the solution monitors its implementation and asks the KOs to submit knowledge benefits. These should target some of the key benefit criteria, including: financial benefits in terms of revenue, cost-saving, cost avoidance; and nonfinancial benefits in terms of health, safety, security, and environment benefits. All benefits claimed by the KOs are approved by their management. This is an important step to ensure the benefits and values entered can be trusted.

III. CONCLUSION

The return on investment on a KB solution solely relies on how organizations are able to capture the trusted benefits of the knowledge submitted into the solution. Management of any enterprise should be provided with dashboards to look into the benefits achieved from each organization by reusing existing knowledge. Management should recognize the organizations which brings higher value of benefits and reward employees who contributed the knowledge that brought benefits. As the system gains momentum, knowledge reporting benefits, in terms of revenue, cost-saving, cost avoidance, health, safety, security, and the environment, will become an easier task.

REFERENCES

- [1] Knowledge base. (2021, March 17). Retrieved April 09, 2021, from https://en.wikipedia.org/wiki/Knowledge_base
- [2] 5 Ways to Ensure Critical Knowledge Transfer " Chief Learning Dorothy Leonard, 1 Jan. 1970.Web. 5 Apr. 2021.