Knowledge Sharing Portal Evaluation: An Extended Analysis of Knowledge Seekers’ and Experts’ Feedback

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ABSTRACT

A knowledge management (KM) system plays a crucial role in every industry as well as in higher learning institutions. The purpose of this case study is to better understand the relationships between the knowledge seekers and expert’s feedback when evaluating, knowledge portals. One of the primary goals of this case study is to analyze the data collected from the database technology professionals (knowledge seekers), who access a series of database technology articles in the knowledge sharing portal to enhance their skills. This study also analyzes the data from the database technology experts, for validation, and performs the correlation between the evaluation results of knowledge providers and seekers. In addition, this paper tries to identify the correlation between the feedback data collected from knowledge seekers and providers. This study also describes an evaluation methodology involving both knowledge seekers and providers, with an emphasis on the key evaluation factors and supporting factors, as an effective approach to evaluate the knowledge sharing portal.

Keywords: Availability, Correlation, Experts Feedback, Knowledge Management System (KMS), Knowledge Sharing Portal, Ranking, Relevance, Usability, Users Feedback, Weighted Arithmetic mean Method (WAM)

INTRODUCTION

Knowledge is defined that all that has been perceived or grasped by the mind; learning; enlightenment and also body of the facts and principles accumulated by mankind. Tacit knowledge is believed to be the expertise a professional possesses and utilizes it whenever needed he or she orally explain it and if necessary, write down or post it in the knowledge sharing portals. Knowledge Management provides an innovative methodology for knowledge creation, storage, dissemination and sharing. Knowledge Management System (KMS) is a term that is used to describe the creation of knowledge repositories, improvement of knowledge ac-

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cess and sharing as well as communication through collaboration, enhancing the knowledge environment and managing knowledge as an asset for an organization. Though today’s organizations build infrastructure, context and learning cycles in the form of knowledge sharing portals, there are no proven measurement processes in place, to assess the effectiveness of the knowledge sharing portal, either to enhance the portal itself or the knowledge assets in the portal, or to archive the unused or irrelevant knowledge assets. The required metrics can be collected through an evaluation methodology, such as Goal Question Metrics, Balanced Score Card, and/or Hybrid methodology suggested by Subramanian and Geetha (2011). In this study, we focus on examining the use of a Knowledge Sharing portal for providing technical knowledge to the database administrators, with respect to its usage and the effectiveness. Each topic in the knowledge sharing portal provides the related information in the database administration field which will be useful for the day to day operations of the Database Administrators. In addition, because the topics were developed for providing additional tips or best practices which are beyond the textbook, we are interested in the impact of the additional knowledge on other aspects of the traditional class, and training including lectures.

Based on the literature survey and benchmarking with few companies, three primary factors were identified namely Usability, Availability and Relevance related to how the knowledge seekers and providers use the knowledge sharing portal. We shall first describe the KM System Technology Framework, Components of KMS and quality factors which are critical for conducting an evaluation exercise for measuring the strengths and weakness of the existing KM system and its components. Secondly, we shall describe the process of building a metric database using the multi-dimensional metric model, for capturing the measures and metrics for the three prime factors, which are collected through evaluation methods. All the knowledge seekers and experts were given a web based evaluation sheet to feed in their scores, using the balanced score card method (Kaplan & Norton, 1996). The relationship between the feedback from both users and experts and other supporting factors were studied in detail using the correlation. The weights are assigned to each evaluation category first and then rated using the WAM method.

**KM SYSTEM TECHNOLOGY FRAMEWORK**

Knowledge management (KM) system is a collective term that is used to describe the creation of knowledge repositories, respective interface components, improvement of knowledge access and sharing as well as communication through collaboration, enhancing the knowledge environment and managing knowledge as an asset for an organization. A KM system could be Document based, Ontology/Taxonomy based, AI technologies based or based on network maps or based on more organic approach using social computing tools. A KMS is an integrated multifunctional system that can support all major knowledge management and processing activities such as, Capturing, Organizing, Classifying, Understanding, Debugging, Editing, Finding, Retrieving, Disseminating, Transferring and Sharing knowledge. Considering the fundamental capabilities of KMS described by Jennex (2011) and typical KMS infrastructure topology, Subramanian and Geetha (2011) found a suitable KMS framework, which is mentioned in the Figure 1. This framework represents all the components which make up the KMS for industries as well as higher learning institutions and in particular focused on the needed quality factors to develop a measurement model based which are helpful for measuring the effectiveness of KMS. Some of the commonly used components which make up the KMS are described in the below sections.

**Knowledge Sharing Portal**

It is a place where users will interact with the system as a first point of entry. From here, user will do everything they want in order to
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