Measuring Knowledge Management/Knowledge Sharing (KM/KS) Efficiency and Effectiveness in Enterprise Networks

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ABSTRACT

Knowledge Management (KM) is critical in ensuring process efficiency, outcome effectiveness and improved organizational memory for the modern day business enterprises. Knowledge Sharing (KS) is fast becoming a rapidly growing area of interest in the domain of knowledge management. The purpose of this paper is to enlist a set of generalized metrics that can be used to evaluate the efficiency and the effectiveness of knowledge sharing in an enterprise network. The metrics proposed in this research are those that can be readily measured by various types of enterprise knowledge sharing systems, and link usage information to organizational outputs. The paper uses an illustrative case example of how an enterprise might make use of the metrics in measuring the efficiency and effectiveness of its knowledge sharing system.

Keywords: Cognitive Enterprises, Enterprise Networks, Knowledge Management (KM), Knowledge Sharing (KS), Learning Enterprises, Measurement, Metrics, Organizational Networks

INTRODUCTION

In the present day business environment marked by intense competition and rapid globalization, where the only certainty is uncertainty itself (Ahmed et al., 1999; Nonaka, 1998), one of the greatest assets that any enterprise can have is its intellectual capital. With the very foundation of businesses and industries shifting from natural resources to intellectual capital (Hansen et al. 1999), the competitive success of an organization have started resting on effective and faster use of its intangible assets (Bontis et al., 1999), the chief component of which is knowledge. As a result, the emergence of knowledge-based economy has made knowledge management...
an integral part of an enterprise’s business and strategic planning process and often reflects the competitive strategies of an enterprise (Hansen et al., 1999; Majid & Wey, 2009). Harnessing and managing knowledge forms an integral part of achieving organizational objectives such as improved performance, innovation and competitive advantage and in the process serves as a strategic enabler of managerial and organizational cognition (Carayannis, 1999). So profound has been the growth of knowledge management that more and more organizations have started creating specific positions such as knowledge managers and knowledge teams (Ahmed et al., 1999) in order to address their knowledge management practices and strategies. Knowledge Management facilitates the development and cultivation of the channels through which knowledge, information and signal flow within and among enterprises, thereby greatly aiding it to achieve its desired competitive success in the industry. As a result, KM has managed to attain the status of one of the hottest management topics among both academicians and practitioners alike.

One of the key ingredients of a successful knowledge management process is Knowledge Sharing (KS). Knowledge Sharing (KS) occupies a pivotal position in the domain of knowledge management of an enterprise and should be created and nurtured within the enterprise itself (Lee & Al-Hawamdeh, 2002). The importance of knowledge sharing and transfer is being widely acknowledged by all types of organizations and managers and researchers alike have sought new ways to address the challenges associated with sharing knowledge in modern business environments (Lichtenstein & Hunter, 2006). Transfer and sharing of knowledge, apart from developing individual working skills, also facilitates to develop effective team dynamics and knowledge base (Wang et al., 2006) - two key elements for organizational success. Furthermore, effective knowledge sharing leads to the growth of the overall knowledge base of an organization, and consequently leads to a faster deployment of knowledge across organizations (Syed-Ikhsan & Rowland, 2004). However, in spite of its vast importance in the context of organizational dynamics, there is still a dearth of academic and technical publications on the tools and techniques of measuring and evaluating KS. As a result, it was thought worthwhile to develop a generalized set of metrics that might be used to evaluate KS in an organization in order to aid in developing a more robust knowledge management strategy.

The purpose of this paper is to develop a set of metrics that would allow enterprises to measure the efficiency and effectiveness of their knowledge sharing processes. This is particularly useful for enterprises that have formalized KS platforms (such as content management systems, practice networks, web 2.0 collaboration systems etc.) Having a well-defined set of quantifiable KS metrics will enable a knowledge-centric enterprise to formulate a better knowledge management strategy, which might in turn lead to a more streamlined corporate strategic planning process.

Beginning with a theoretical background of the concepts, the paper subsequently goes on to develop a set of well-defined and quantifiable metrics that might aid an enterprise to evaluate its knowledge sharing capability. Key concepts from the available literature on KM and KS were studied in order to lay the foundation for the set of metrics. An illustrative case study is used to show how organizations can utilize the metrics. The paper concludes with discussing the limitations of the research and outlining potential areas of future research activities.

THEORETICAL BACKGROUND

A proper understanding of the theoretical foundation of the concepts is always essential for a sound research process. Therefore, a review of the literatures on the concepts of knowledge management and knowledge sharing was vital in illustrating the importance and contribution of the study. This section of the paper consists of a brief summary of selected literatures that were thought to be essential to establish the rigor of this research. The section is divided
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