

Chapter 1

Measuring Knowledge Management Outcomes at the Individual Level: Towards a Tool for Research on Organizational Culture

Shahnawaz Muhammed

The American University of Middle East, Kuwait

William J. Doll

The University of Toledo, USA

Xiaodong Deng

Oakland University, USA

ABSTRACT

Extant literature has mostly focused on defining knowledge management success at an organizational or project level. The literature lacks a framework for measuring knowledge management success at the individual level. From a cultural perspective of knowledge management, individual knowledge, innovation and performance make organizations more productive. This research proposes a model of the interrelationships among individual level knowledge management success measures (outcomes) including conceptual, contextual and operational knowledge, innovation, and performance. The model is tested using a sample of 252 individuals engaged in managerial and professional knowledge work. The results suggest that conceptual knowledge enhances operational and contextual knowledge. Contextual knowledge also improves operational knowledge. Contextual knowledge is the key predictor of innovations that, along with operational knowledge, enhance work performance. The results provide a model (tool) for defining and measuring knowledge management success at the individual level. The implications of this success measurement tool for future empirical studies of organizational culture are discussed.

DOI: 10.4018/978-1-60960-555-1.ch001

INTRODUCTION

Knowledge management (KM) can be viewed from many different perspectives. From an organizational implementation point of view, these perspectives fall into one of the three categories identified by Alavi and Leidner (1999). This includes an information-based perspective, a technology-based perspective, or a culture-based perspective. From an information-based perspective, the focus of knowledge management is on the various characteristics of the information within the organization such as making information easily accessible and relevant. From an information-based perspective, competitive advantage is attained by managing information. From a technology-based perspective, the emphasis is on gaining competitiveness by providing technology infrastructure and support to connect various elements within the organization. In their survey, Alavi and Leidner (1999) found that managers who held a culture-based perspective associated KM with factors that shaped or were shaped by the organizational culture such as learning, communication and the development of intellectual property. Nayir and Uzuncarsili (2008) show the profound impact organizational culture can have on knowledge management through a case study in an emerging market, highlighting its importance in globally diverse environments.

In this chapter we adopt the cultural perspective that is widely used in the KM literature (Alavi & Leidner, 2001; Jennex, Smolnik, & Croasdell, 2007). We propose and develop some direct outcomes of knowledge management at an individual level. We also examine the interrelations between those outcome measures. We hope these direct outcomes will serve as an important measure in evaluating the success of KM, first at the individual level and subsequently at an organizational level.

From a cultural perspective, individual level learning and outcomes form an important force

that shapes the organizational culture. This organizational culture determines the firm's success in the marketplace. Success of organizational level KM initiatives depends on the knowledge of individuals in these organizations and how these individuals use and share their knowledge (Grant, 1996; Grover & Davenport, 2001). Individuals' knowledge related to specific tasks is a critical component of their effectiveness and eventually leads to a favorable outcome for the organization. This task knowledge reflects the individuals' learning that takes place within the organizational context (Kim, 1993; Nonaka & Takeuchi, 1995).

Understanding how individuals' task related knowledge is impacted and how it can be quantified is generally lacking in the literature and can potentially hamper the overall research efforts in the KM field (Guo & Sheffield, 2006). Alavi and Leidner (1999) acknowledge that "...development of meaningful metrics for measuring the value, quality and quantity of knowledge is a key factor for long-term success and growth of KMS" (p.22). This research contends that enhanced task knowledge is the primary outcome of individual knowledge management. Further, we explore its relationship with other relevant individual outcomes such as individual innovation and performance.

With a cultural perspective of KM in mind, this research focuses on developing measures of individual level task knowledge including conceptual knowledge, contextual knowledge, and operational knowledge. We then explore the relationships among the three types of knowledge, and relate them to innovation and performance outcomes. The intent is to provide reliable and valid knowledge management success measures at the level of individual knowledge workers. These success measures can help validate whether cultural dimensions, organizational factors, or specific knowledge management practices enhance the success of individual knowledge workers.

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/measuring-knowledge-management-outcomes-individual/54078

Related Content

A Model of Knowledge Management Success

Murray E. Jennex and Lorne Olfman (2008). *Current Issues in Knowledge Management* (pp. 34-51).

www.irma-international.org/chapter/model-knowledge-management-success/7364

Knowledge Management Systems in Business Management Using Knowledge Graphs and Semantic Technologies

Yara Mohammad, Mirna Nachouki and Elfadil A. Mohamed (2025). *International Journal of Knowledge Management* (pp. 1-29).

www.irma-international.org/article/knowledge-management-systems-in-business-management-using-knowledge-graphs-and-semantic-technologies/369121

Construction of Digitalization-Based Sharing Platform for Decorated Archway Cultural Educational Resources in Southern Hunan

Li Zhou and Chanting Wang (2025). *International Journal of Knowledge Management* (pp. 1-26).

www.irma-international.org/article/construction-of-digitalization-based-sharing-platform-for-decorated-archway-cultural-educational-resources-in-southern-hunan/390385

Mode of Socialisation: Comparing Effects of Informal and Formal Socialisation on Organisational Performance

Meliha Handzic (2007). *Socio-Technical Knowledge Management: Studies and Initiatives* (pp. 208-220).

www.irma-international.org/chapter/mode-socialisation-comparing-effects-informal/29347

Supporting the Complexity of Inquiring Organizations: An Agent Approach

Dianne J. Halland Yi Guo (2005). *Inquiring Organizations: Moving from Knowledge Management to Wisdom* (pp. 109-132).

www.irma-international.org/chapter/supporting-complexity-inquiring-organizations/23868