

## Chapter 5.3

# Explaining Experts' Perceptions of Knowledge Management Effectiveness

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### ABSTRACT

In this article, we propose and empirically test major KM effectiveness determinants from the perspective of experts' perceptions. Specifically, we examine the complex interrelationships between infrastructural and process capabilities, uncovering their mediated and moderating effects on KM effectiveness. The results show that KM process capabilities constitute the primary direct determinant of KM effectiveness. As stipulated in the IT assimilation theory, the effect of IT is not direct, but rather fully mediated through KM process capabilities. Contrary to previous findings, culture acts as an oblique factor, moderating the effect of KM process capabilities on KM effectiveness. Using a formative model of KM

process capabilities, we also identify the relative importance of KM processes, which should be of significant appeal to practitioners. [Article copies are available for purchase from InfoSci-on-Demand.com]

### INTRODUCTION

Despite the vastly growing importance of knowledge management (KM), scholars and practitioners still know very little about how KM effectiveness can be achieved. One such framework, among the very few, is provided by Gold, Malhotra, and Segars (2001), in which organizational effectiveness is used as a surrogate for KM effectiveness and is modeled as an outcome

of two independent drivers: KM infrastructural and process capabilities. While Gold et al. (2001) made an important contribution by identifying the direct effects of these capabilities, further theoretical development is required to examine the interrelationships among these capabilities. Indeed, several contingencies (i.e., mediators or moderators of the effects of KM infrastructural and process capabilities) may exist, casting doubts on the interpretation of the significance and relative importance of the direct effects of these capabilities.

We therefore develop and empirically validate a conceptual model explaining the roles of different KM infrastructural and process capabilities that affect KM effectiveness. Our model does not study the KM capabilities in isolation, but rather in relation to each other. As the perceptions of organizational decision makers are often the main basis of important KM decisions, we operationalize the research model from the perspective of these experts' perceptions. We also use a formative measurement model to develop a more comprehensive categorization of important KM process capabilities and examine their significance and relative importance in achieving KM effectiveness. An empirical survey study conducted with over 190 current KM practitioners provided strong support for the model.

In the remainder of this article, we first present the conceptual background and theoretical development of the research model. Then we describe the research methodology, followed by a discussion of the empirical results. We conclude the article by suggesting implications for future research and practice.

## **CONCEPTUAL BACKGROUND AND HYPOTHESES DEVELOPMENT**

### **The Importance of Experts' Perceptions of KM Effectiveness**

KM effectiveness is defined by the extent to which KM objectives are achieved. These objectives

should stem from and align with business objectives. KM effectiveness is therefore closely associated with aspects of organizational effectiveness (Davenport & Prusak, 1998; Nonaka & Takeuchi, 1995). The contributions of KM capabilities to organizational performance are, however, elusive. Most of them are intangible and take time to manifest themselves. Furthermore, the assessment of KM effectiveness is often confounded by many uncontrollable business, economic, and environmental variables, such as return on investment (Gold et al., 2001). As some strategic objectives of KM (e.g., enhanced agility and better profitability) are difficult to capture, it is more useful to measure operational objectives (e.g., enhanced innovation rates, shorter cycle times, and improved quality of products and services) to evaluate KM effectiveness. Although operational contributions of KM are difficult to relate to financial ratios, they provide a foundation for assessing the relative contribution of KM capabilities to organizational effectiveness (Gold et al., 2001). The assessment of KM operational capabilities is, however, not easy, as such capabilities are difficult to anticipate (vary across organizations) and may not be readily measurable (few organizations develop appropriate metrics). Alternatively, companies may use a more subjective assessment based on the perceptions of key decision makers, such as the chief knowledge officer (CKO) or other leaders of the KM program in an organization who hold expertise in KM implementation. As different KM objectives may carry different weights, an overall evaluation by the KM experts would embed the relative importance of these objectives. Furthermore, subjective evaluations of KM effectiveness are often the main basis of important KM decisions. In this article, we examine factors affecting KM effectiveness from the perspective of KM experts (i.e., key decision makers in a KM program).

### **KM Effectiveness and Organizational Capabilities**

Successful KM programs require the existence of relevant preconditions (Davenport, DeLon, &

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