

Chapter 30

External Knowledge Integration

Jeroen Kraaijenbrink

University of Twente, The Netherlands

Fons Wijnhoven

University of Twente, The Netherlands

Category: Processes of Knowledge Management

INTRODUCTION

The field of knowledge management has concentrated on the creation, storage, retrieval, transfer and application of knowledge within organizations while underexposing external knowledge (Alavi & Leidner, 2001). Although the importance of external knowledge is well-recognized (Cohen & Levinthal, 1990), there remains a need for a better understanding of the organizational processes through which external knowledge is integrated (Grant, 1996; Ranft & Lord, 2002). This article addresses this lacuna by proposing a process

model of knowledge integration consisting of three stages—identification, acquisition, and utilization of external knowledge. We propose a model of modular subprocesses that parsimoniously reflect the variety of knowledge integration concepts in the literature and integrates them in a coherent way. Such understanding serves as a bedrock for solving knowledge integration problems and for designing knowledge integration solutions (Markus, Majchrzak, & Gasser, 2002).

BACKGROUND

In the current literature, the term knowledge integration is used for the integration of knowledge from individuals or departments within an organization (Becerra-Fernandez & Sabherwal,

DOI: 10.4018/978-1-59904-931-1.ch029

External Knowledge Integration

2001; De Boer, Van den Bosch, & Volberda, 1999; Grant, 1996; Leonard-Barton, 1995; Okhuysen & Eisenhardt, 2002; Patnayakuni, Rai, & Tiwana, 2007; Szulanski, 1996). Based on the meaning of the word ‘integration’ (‘to incorporate into a larger unit’, Merriam Webster Online) we extend the term knowledge integration with three stages that model the incorporation of external knowledge. We call the processes associated with the term knowledge integration in the current literature *utilization*. Because external knowledge needs to be acquired before it can be utilized, we include a stage of *acquisition* in the model. Correspondingly, to acquire external knowledge it needs to be identified first. Acquisition is therefore preceded in our model by a stage of *identification* (see also Kraaijenbrink, 2007; Kraaijenbrink, Groen, & Wijnhoven, 2005; Kraaijenbrink, Wijnhoven, & Groen, 2007).

Although there is excellent research done on each of the stages, we found no contribution that covers them all. Typically, scholars concentrate on one or two knowledge integration stages and leave out either identification (e.g. Almeida, 1996; Crossan, Lane, & White, 1999; Tsang, 2002), acquisition (e.g. Galunic & Rodan, 1998; Rosenkopf & Nerkar, 2001), or utilization (e.g. Leifer & Huber, 1977; McEvily, Das, & McCabe, 2000; Shenkar & Li, 1999). Other scholars regard knowledge integration as a black box or elaborate on explanatory models of successful knowledge integration (e.g. De Boer, Van den Bosch, & Volberda, 1999; Hamel, 1991; Hansen, 2002; Lane &

Lubatkin, 1998; Mitchell, 2006; Mowery, Oxley, & Silverman, 1996; Szulanski, 1996; Zander & Kogut, 1995). As such, they provide an understanding of the outcome of knowledge integration but less so of the process.

Though they do not provide a holistic model, these scholars give us the ingredients for a holistic knowledge integration model. In this article, we try to put the pieces of the knowledge integration puzzle together. We follow a pragmatic approach in which we borrow relevant concepts from literature and position them in the knowledge integration model: an approach similar to what Glaser called ‘transcending’ – taking relevant variables from theories while trying to raise their conceptual level (Glaser, 1978: 14-15).

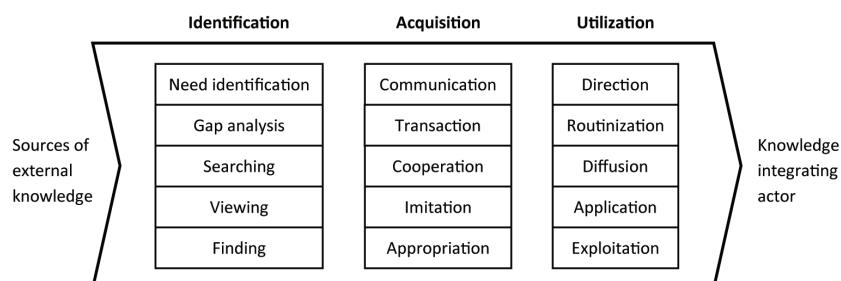
MAIN FOCUS: STAGE MODEL

Although there is no consensus on what constructs form the essential basis of a process model (Curtis, Kellner, & Over, 1992), we define a process as a configuration of connected subprocesses, performed by certain actors. Within this article, we suggest an ordered set of knowledge integration subprocesses (see Figure 1) and four views on actors that perform them.

Identification

All subprocesses between initiating a knowledge integration process and locating specific external

Figure 1. Stages and subprocesses for external knowledge integration



10 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/external-knowledge-integration/48981

Related Content

Exploring the Extent and Impediments of Knowledge Sharing in Chinese Business Enterprise

Wen Bing Su, Xin Liand Chee W. Chow (2012). *Conceptual Models and Outcomes of Advancing Knowledge Management: New Technologies* (pp. 266-290).

www.irma-international.org/chapter/exploring-extent-impediments-knowledge-sharing/62427

A Performance Analysis of Semantic Caching for XML Query Processing

Boris Novikov, Alice Piguland Anna Yarygina (2013). *International Journal of Knowledge-Based Organizations* (pp. 40-60).

www.irma-international.org/article/a-performance-analysis-of-semantic-caching-for-xml-query-processing/101193

Knowledge Sharing between Enterprises of the Same Group

Nuno Carvalhoand Isabel Gomes (2017). *International Journal of Knowledge Management* (pp. 34-52).

www.irma-international.org/article/knowledge-sharing-between-enterprises-of-the-same-group/181289

Knowledge Management in Research Joint Ventures

Elena Revilla (2008). *Strategic Knowledge Management in Multinational Organizations* (pp. 207-226).

www.irma-international.org/chapter/knowledge-management-research-joint-ventures/29787

Teacher Evaluation of Institutional Performance: Managing Cultural Knowledge Infrastructure in Knowledge Organisations

Garima Mathurand Abhijeet Singh Chauhan (2021). *International Journal of Knowledge Management* (pp. 1-16).

www.irma-international.org/article/teacher-evaluation-of-institutional-performance/288323