

## Chapter 13

# The Management of Knowledge Risks: What Do We Really Know?

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### ABSTRACT

*The purpose of this paper is to review extant research on knowledge risk management (KRM) to establish our body of knowledge and to identify gaps justifying further research activities. The study is based on a systematic review of peer reviewed empirical and conceptual articles on the management of knowledge risks. This proceeding proves evidence that there are a small number of papers addressing knowledge risks and its management. The recommendations derived from the findings can assist researchers, managers and consultants to better understand the critical importance of integrating KRM in the firms' enterprise risk management. This increased understanding can particularly be useful for managers as better decisions will be possible.*

### INTRODUCTION

Shorter product life cycles, greater demands of consumers, increased demand for knowledge-intensive products and services, and the necessity of constant market observation make the business environment a rather complex one (Wiig, 1997), one that is characterized not only by a number of opportunities but also by a number of different risks (Kumar, 2002). Regarding the latter companies are required to have a proper and comprehensive risk management approach in order to cope with these risks. This approach should be able to handle both traditional risks (such as currency risk, customer default risk) as well as

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knowledge risks, i.e. those risks that are related to knowledge practices or that are the results of them. Given the increased importance knowledge has gained over the years, one would argue that the management of knowledge risks should have received great attention. Based on the underlying assumption of enterprise risk management, which assumes the integration and coordination of all types of risks across the entire organization (Razali & Tahir, 2011); the management of knowledge risks, i.e. Knowledge Risk Management (KRM), should take a fundamental role sure. In fact, calls for broader and more integrative approaches have been made and increased over the years (Kallenberg, 2009). KRM is a systematic process of applying tools and techniques to identify, analyze and respond to risks associated with the creation, application and retention of organizational knowledge. In this context for entrepreneurs and owner-managers it is fundamental that they understand the business in which they operate in order to identify and manage risks (Jafari, Rezaeenour, Mazdeh, & Hooshmandi, 2011), as otherwise they can hardly cope with the organization's overall risk exposure.

While the study of risk management can be considered an established one (Alhawari, Karadsheh, Talet, & Mansoura, 2012), this is surprisingly not the case with KRM (Trkman & Desouza, 2012; Lee, Suh, & Lee, 2014). Given the new emphasis of the ISO 9001:2015 on knowledge and risk management, KRM however could gain in importance very soon.

Against this background the purpose of the paper is to gain an understanding of how extant literature has addressed the management of knowledge risks so far. Based on the results of the review, promising areas for the study of KRM in private organizations are derived.

The paper is structured as follows: The next section briefly presents the background of the paper, before the methodology of the literature review is outlined. Then the findings are presented. The paper terminates with the conclusion.

## **Theoretical Background**

Risk is "the volatility or standard deviation (the square root of the variance) of net cash flows of the firm" (Heffernan, 2005, p. 103) and can be divided into financial and non-financial / intangible related / knowledge risks. By considering both risks related to tangibles as well as to intangibles organizations will get a more balanced and holistic picture of their operations (Durst, 2013), which in turn can improve decision-making.

The management of risks can be summarized as comprising the following four steps: identification of risks; quantification and thus evaluation of risks; management and control of risks; and continued reporting on the development of risks (Vaughan & Vaughan, 2001). According to Smallman (1996), organizations should take a holistic approach to risk management, one that is characterized by a continuous monitoring of all sources of risk, a combination of qualitative and quantitative techniques on risk assessment, risk monitoring, and organizational learning, i.e. one learns from past errors and disasters. Risk management is considered essential for reducing the impacts from emerging risks and thus supports organizations in reaching their goals (Nielsen, 2006).

Even though the relevance of knowledge is generally acknowledged, extant literature suggests that there is a paucity of research concerning the management of the risks related to knowledge (Trkman & Desouza, 2012). In light of the mass of theoretical and empirical work that has been conducted in the field of knowledge management (e.g. Kogut & Zander, 1992; Nonaka, 1994; Majchrzak, Cooper, & Neece, 2004; Tzortzaki & Mihiotis, 2014), this is somewhat surprising. Knowledge however is not

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