

Chapter 5

Knowledge Management in Support of Enterprise Risk Management

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ABSTRACT

Risk management and knowledge management have so far been studied almost independently. The evolution of risk management to the holistic view of Enterprise Risk Management requires the destruction of barriers between organizational silos and the exchange and application of knowledge from different risk management areas. However, knowledge management has received little or no attention in risk management. This paper examines possible relationships between knowledge management constructs related to knowledge sharing, and two risk management concepts: perceived quality of risk control and perceived value of enterprise risk management. From a literature review, relationships with eight knowledge management variables covering people, process and technology aspects were hypothesised. A survey was administered to risk management employees in financial institutions. The results showed that the perceived quality of risk control is significantly associated with four knowledge management variables: perceived quality of risk knowledge sharing, perceived quality of communication among people, web channel functionality, and risk management information system functionality. However, the relationships of the knowledge management variables to the perceived value of enterprise risk management are not significant. We conclude that better knowledge management is associated with better risk control, but that more effort needs to be made to break down organizational silos in order to support true Enterprise Risk Management.

INTRODUCTION

The separation between Knowledge Management (KM) and Risk Management (RM) is part of current organizational reality. The aim of this

research is to study how KM concepts may help improve RM, and help to turn it into true Enterprise Risk Management (ERM). It builds on previous work on knowledge-related constructs within RM (Rodriguez & Edwards, 2010). In this

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article, we consider the relationships between KM variables related to knowledge sharing, and two RM variables: perceived quality of risk control (representing the operational level of RM) and perceived value of the ERM implementation (representing the strategic level). Crouhy, Galai, and Mark (2001) indicate the need for risk systems to control risk at individual and enterprise level.

This article begins with the identification of events that have affected the financial services industry and that indicate the need for better management of risk management knowledge. The succeeding sections introduce relevant concepts of risk management and knowledge management, present the research model that comprises eight hypotheses, and describe the analysis of the results of two regression models that were used to test them. The final sections discuss the findings and seek to interpret their meaning.

The Context of Financial Services

The financial crisis of recent years has raised many questions about the performance of financial institutions in response to adverse events. There are doubts about their capacity to execute the three knowledge components of the management of risk: use of models, use of technology and leveraging on people (Beasley, Bronson, & Hancock, 2009; Champion, 2009; Taleb, Goldstein, & Spitznagel, 2009).

Financial institutions are information and knowledge organizations (Fourie & Shilawa, 2004). Risk is one of the principal business issues a financial institution must deal with. To manage risk "is frequently not a problem of a lack of information, but rather a lack of knowledge with which to interpret its meaning" (Marshall, Prusak, & Shpilberg, 1996, p. 82). Knowledge reduces uncertainty (Nonaka, 1991) and therefore, knowledge reduces risk (Dickinson, 2001). However, it is not clear how knowledge is organized in, and provides support to, financial institutions in order to deal with uncertainty and risk.

The performance of financial institutions is affected by the management of wider risk exposure represented by an offer that includes more products and services than in the past. Financial institutions thus need to evolve from a risk management process based on silos of risk analysis towards Enterprise Risk Management (ERM) which is a dynamic risk management process across the company (Dickinson, 2001). To transform RM into ERM is a strategic step in managing risk, but is essentially good risk management practice (Lam, 2003) with an holistic view.

As KM also needs to take an holistic view of the organization (Edwards, 2009), it therefore seems reasonable to suppose that these two disciplines, when working together and complementing one another, can better handle the risks affecting financial organizations.

THEORETICAL BACKGROUND

This section presents concepts relating to managing risk (risk management processes, the differences between RM and ERM, and a description of the risk management system) and managing knowledge (knowledge management processes and knowledge management systems). It goes on to consider the small amount of existing work combining KM and RM.

Risk Management in Financial Institutions

For financial institutions, RM is "the overall process that a financial institution follows to define a business strategy, to identify the risks to which it is exposed, to quantify those risks and to understand and control the nature of the risks it faces" (Cumming & Hirtle, 2001, p. 2) and a "collection of processes, people and systems aligned for the purpose of measuring, managing, monitoring, and controlling risk exposure." (Levine, 2004, p. 31).

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