

Chapter 14

Knowledge Management in Support of Enterprise Risk Management

Eduardo Rodriguez

University of Wisconsin – Stevens Point, USA

John S. Edwards

Aston University, UK

ABSTRACT

This chapter 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 hypothesized. 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. The authors 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). ERM implementation has evolved and studies show that organizations have expectations of improving the ERM process to perform better. Callahan and Soileau (2017) identified that organizations with ERM process in higher maturity levels have

DOI: 10.4018/978-1-5225-5427-1.ch014

a better operational performance than their peers in the market. Fraser and Simkins in 2007 presented the misconceptions of ERM that reduced the implementation of the ERM process, in Fraser & Simkins (2016) presented solutions to the challenges and misconceptions. These solutions are based on the ERM best practices study. These solutions are associated with knowledge management practices where knowledge transfer in policy and integration of ERM in strategic planning, committees conversations, performance evaluation and development of common language around ERM terms.

Bromiley et al. (2015) indicated the importance of studying several aspects of ERM from the management perspective mainly on ERM adoption and capacity to implement ERM in organizations. In this 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). The development of financial services organizations is not only going in the direction of knowledge-based service quality but also in the development of metrics for sustainable appropriate performance. On the one hand, Paul et al. (2015) pointed out the importance of products knowledge in the quality of services in banking. On the other hand, O'Brien and Szerszeń (2017) shows that the review of risk metrics (VAR) is part of the activities to develop by banks in order to improve and use the knowledge of the banks performance and financial positions in the markets.

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 wide 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.

22 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/knowledge-management-in-support-of-enterprise-risk-management/208332

Related Content

Risk Analysis Using Earned Value: An Engineering Project Management Study

Scheljert Denas (2015). *International Journal of Risk and Contingency Management* (pp. 22-33).

www.irma-international.org/article/risk-analysis-using-earned-value/133545

Future Trends in Generative AI for Cyber Defense: Preparing for the Next Wave of Threats

Azeem Khan, Noor Zaman Jhanjhi, Haji Abdul Hafidz B. Haji Omar, Dayang H. T. B. A. Haji Hamid and Ghassan A. A. Abdulhabeab (2025). *Vulnerabilities Assessment and Risk Management in Cyber Security* (pp. 135-168).

www.irma-international.org/chapter/future-trends-in-generative-ai-for-cyber-defense/374395

A Business-Driven Process Model for Knowledge Security Risk Management: Tackling Knowledge Risks While Realizing Business Benefits

Ilona Ilvonen, Jari Jussila and Hannu Kärkkäinen (2019). *Effective Knowledge Management Systems in Modern Society* (pp. 308-325).

www.irma-international.org/chapter/a-business-driven-process-model-for-knowledge-security-risk-management/208333

Exploring the Roles of Police Leaders in Countries in Transition

Gerald Dapaah Gyamfi (2020). *International Journal of Risk and Contingency Management* (pp. 1-17).

www.irma-international.org/article/exploring-the-roles-of-police-leaders-in-countries-in-transition/261205

The Role of Mutual Benefit in Informal Risk Management

Mohammed Al Balushi and Jake Ansell (2022). *International Journal of Risk and Contingency Management* (pp. 1-18).

www.irma-international.org/article/the-role-of-mutual-benefit-in-informal-risk-management/303105