

## Chapter 2

# Integrating Sustainability into Project Risk Management

**Gilbert Silvius**

*LOI University of Applied Sciences, The Netherlands & University of Johannesburg, South Africa*

### ABSTRACT

*One of the developments that changed today's business environment is the increased concern about the sustainability, or unsustainability, of our society. Silvius and Schipper (2014) identify a growing number of publications that study the impact of sustainability on project management. One of the 'impact areas' they identify is the identification and management of risk in the project. This chapter discusses the main concepts of sustainability and their implications for project risk management. The main findings are that the integration of the concepts of sustainability imply (1) A broader identification and considering of risks, expanding the orientation on risks to include also environmental and social perspectives and to consider the full life-cycle of the project's deliverable, impact and resources. (2) Inclusion of (potential) stakeholders in a transparent process of project risk management. And (3) Adopting a social, communicative, approach to risk management, as opposed to the calculating, rational approach.*

### INTRODUCTION

One of the developments that changed today's business environment is the increased concern about the sustainability, or unsustainability, of our society. Many studies and authors show that we are 'eating up our planet' (Assadourian & Prugh, 2013) and the pressure on companies to broaden reporting and accountability from economic performance for shareholders, to the much broader concept of sustainability performance for all stakeholders, has increased substantially (Visser, 2002). The 2012 BSR/Globe Scan study concludes that "The most important leadership challenge facing business today is the integration of sustainability into core business functions." (BSR/GlobeScan, 2012). One of these business functions that sustainability needs to be integrated in, is project management (Silvius et al., 2012).

Silvius and Schipper (2014) identify a growing number of publications that study the impact of sustainability on project management. One of the 'impact areas' they identify is the identification and management of risk in the project (Silvius & Schipper, 2014). This result may not be surprising, as risk

DOI: 10.4018/978-1-5225-0335-4.ch002

management is a familiar concept in both project management (for example: Hillson, 2014) and sustainable development (for example: Kytte & Ruggie, 2005; Bebbington et al., 2008). And given the concepts that are associated with sustainability thinking, such as the ‘triple bottom line’ (Elkington, 1997), life-cycle assessment (Labuschagne & Brent, 2005) and stakeholder theory (Freeman, 1984), it should be expected that integrating sustainability in risk management provides new insights (Silvius et al., 2012). In this context, Winnall (2013) concludes that ‘With the inclusion of the concept of sustainability in project management, the assessment of potential risks will need to evolve.’.

However, a quick scan of the titles of publications on sustainability and project management, that were published by in the literature reviews of Silvius and Schipper (2014) and Marcelino-Sádaba et al. (2015), learns that only one publication explicitly mentions ‘risk’ in the title of the publication. However, as the title of an article is only a very brief indication of its content, a more in-depth analysis is required. It is with this goal that this chapter was developed. In this chapter we will discuss the concepts of sustainability and analyze the implications of considering sustainability in project risk management. Questions that will be covered are:

- *What is the relationship between sustainability and risk?*
- *What are the implications of considering sustainability in the steps and activities of the project risk management process?*
- *What are the implications of considering sustainability in the way the project risk management process is executed?*

The remainder of this chapter is structured as follows. First we will explore the theoretical backgrounds of the concepts of sustainability, risk management and their relationships, based on the literature on these concepts. The findings from the literature review will summarize into a conceptual model that we will use in our conceptual mapping of the integration of the concepts of sustainability into project management. The methodology used in this conceptual mapping will be explained in the third paragraph of this chapter, followed by the discussion of our findings. In these findings we will derive a definition for ‘sustainable project risk management’. The chapter will be concluded with some concluding remarks, recommendations and opportunities for further research.

## **BACKGROUND**

This paragraph explores how the main concepts of our study are defined and conceptualized in literature. First we will explore the relationship between sustainability and risk, thereby identifying the main concepts of sustainability and the questions on risk management that can be derived from these concepts. Following this, we will describe the concept of risk and the processes of risk management, as they are found in project management literature. The final section of the paragraph confronts the processes of project risk management with the concepts of sustainability, in order to develop a conceptual framework for the analysis of the impact of sustainability on project risk management.

20 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/integrating-sustainability-into-project-risk-management/154318](http://www.igi-global.com/chapter/integrating-sustainability-into-project-risk-management/154318)

## Related Content

---

### Organizational Citizenship Behavior Among Employees of Public Higher Learning Institutions: The Role of Internal Corporate Social Responsibility

Faustina Mangor Narh, Rita Appiah and Louis Gyekye Appiah (2022). *International Journal of Applied Management Theory and Research* (pp. 1-22).

[www.irma-international.org/article/organizational-citizenship-behavior-among-employees-of-public-higher-learning-institutions/305112](http://www.irma-international.org/article/organizational-citizenship-behavior-among-employees-of-public-higher-learning-institutions/305112)

### The Efficacy of Spiritual Transcendence Scales Among Muslim Students in Malaysia

AbdulGafar Olawale Fahmand Kazeem Kayode Bakare (2019). *Science and Spirituality for a Sustainable World: Emerging Research and Opportunities* (pp. 175-191).

[www.irma-international.org/chapter/the-efficacy-of-spiritual-transcendence-scales-among-muslim-students-in-malaysia/232780](http://www.irma-international.org/chapter/the-efficacy-of-spiritual-transcendence-scales-among-muslim-students-in-malaysia/232780)

### Cultural Indoctrination and Management Education Curriculum

Bryan Christiansen (2019). *International Journal of Applied Management Theory and Research* (pp. 1-15).

[www.irma-international.org/article/cultural-indoctrination-and-management-education-curriculum/227053](http://www.irma-international.org/article/cultural-indoctrination-and-management-education-curriculum/227053)

### Optimization Model for IT Change Management

Yixin Diao, Daniela Rosuand Leila Zia (2015). *Maximizing Management Performance and Quality with Service Analytics* (pp. 233-258).

[www.irma-international.org/chapter/optimization-model-for-it-change-management/135370](http://www.irma-international.org/chapter/optimization-model-for-it-change-management/135370)

### Organizational Citizenship Behavior Among Employees of Public Higher Learning Institutions: The Role of Internal Corporate Social Responsibility

Faustina Mangor Narh, Rita Appiah and Louis Gyekye Appiah (2022). *International Journal of Applied Management Theory and Research* (pp. 1-22).

[www.irma-international.org/article/organizational-citizenship-behavior-among-employees-of-public-higher-learning-institutions/305112](http://www.irma-international.org/article/organizational-citizenship-behavior-among-employees-of-public-higher-learning-institutions/305112)