



Major Risks in Complex Innovative Projects: From Interdependence to Logistics

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Abstract

Complex innovative projects, as for instance, defence projects demand enormous investments of public funds and are under public scrutiny in what concerns their performance. Such projects are characterised by being impacted by eight major risk categories: novelty, uncertainty, complexity, interdependence, resource limitations, logistics, creative destruction and innovation and political constraints. Understanding and managing these risk categories and their interrelation with supply chains are critical in order to ensure an adequate project performance. Based on relevant literature research this paper intends to propose a framework for risk analysis in the context of complex innovative projects. The methods used will encompass analysis and cause-and-effect logics in order to contribute to improved risk management in the context of defence projects, and preventing the impacts of such risk. The objectives of this research are twofold: (1) establish a framework for risk assessment in the context of defence projects (which can be extrapolated to other complex innovative projects), and (2) design an approach/process to optimally manage such risks. In attaining such objectives a major positive contribution may result for improving the performance of complex innovative projects.

Keywords: Complex Innovative Projects, Innovation, Project Management, Risk Management, Uncertainty

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