

EDITORIAL PREFACE

Cascading Levels of Contingency Management: Global, Country, Organization and Practitioner

Kenneth David Strang, State University of New York, Albany, NY, USA

INTRODUCTION

The theme of this issue is to cascade – descend – the different levels of analysis in contingency management, from the world wide (global), to the national (country), to the project team (organization), and finally the individual (practitioner). In this issue, contingency management is discussed across several industries by describing or quantifying the uncertainties into risks and then recommending strategies for action or mitigation.

The first manuscript addressed the global level of analysis, from the perspective of international terrorist attack risks using a literature review and a large sample of empirical data. The national level of analysis was addressed in a manuscript that investigated the relationship between gas scarcity and socio-economic factors in a country known for high production of this commodity. The organizational level of analysis was discussed within projects or case studies from different disciplines. First a lean

operations approach was presented and then applied to an engineering case study. Second a financial risk management scenario model was developed using software and then applied to a road infrastructure project. Finally a book review was included to illustrate the practitioner (individual) level of analysis as a best-practice recommendation for the contingency management of risks.

LITERATURE REVIEW

What and Where Are the Risks of International Terrorist Attacks: A Descriptive Study of the Evidence?

Strang and Alamieyeseigha (2015) reviewed the literature, collected a large sample (N=125,087), and then analyzed the international terrorism data from 1970 to present in order to describe the patterns of world wide terrorist attacks. They identified interesting facts at the global level of analysis, such as which peaceful nations

unexpectedly experienced terrorism. They also identified the countries that would most likely be targets of international terrorism (Iraq, Pakistan and India were the top three). They identified the most lethal terrorist organizations according to deaths, injuries and property damage inflicted. They summarized terrorist attack types according to fatalities, injuries and property damage. The article included a current literature review along with ideas for how to extend the research on global terrorism.

Analyzing Petrol Scarcity Risk in Nigeria: Strategic Management Survey and SWOT

Akpan and Nnamseh (2015) used the survey method (N=351) along with correlation analysis to identify the factors perceived to be related to the shortage of gas in Nigeria (country level of analysis). The survey was integrated with a unique SWOT analysis of the macro environment factors that impacted petrol availability. They presented descriptive statistics and significant correlations. The interesting aspect of their study was showing the link between gas shortage and negative socio-economic impact to the citizens in that country. The top factors associated with the shortage of gas were: Socio economic unrest, transport fare increases, depressed consumer spending with price increases, fire and road accidents, gross domestic product decrease, along with increased poverty. It would be interested replicate this study in other countries.

Comprehensive Risk Abatement Methodology as a Lean Operations Strategy

McLaughlin (2015) reviews a unique methodology for reducing risk which is considered a strategic tool within the lean operations domain. The comprehensive risk abatement approach includes a six-step process of developing risk a matrix by identifying risks, ordering them by importance, listing the mitigation options, selecting the solutions, controlling the processes and then synthesizing new ideas to avoid the risks

occurring again. The risk ranks are compared using Eigen analysis to identify correlations. Lack of correlation could mean that risk solutions were not successful. He then applies the methodology on a case study (organization level of analysis). This is an interesting and unique approach, grounded in the electro-chemical engineering discipline, and thus it differs from the qualitative approaches often seen in project management or lean operations.

Risk Analysis Using Simulation Software Applied On A Road Infrastructure Project

Desai (2015) uses a literature review with the case study method to explain how risk management is addressed within infrastructure projects (organization level of analysis). Infrastructure construction projects are often million or billion dollar investments, with the most common being state/national roads, railways, ports, airports, electricity plants, telecommunication lines, oil gas pipelines and irrigation systems. She explains how to use Excel to develop a model for analyzing risks. Her model incorporates pertinent financial techniques such as internal return rate (IRR) and discounted payback periods. She then applies the methodology to a case study of a six lane road infrastructure project in India. The unit of analysis was the impact of cost of construction cost, loan interest rates for loans, methods of depreciation, revenue sharing on various financial indices: IRR, MIRR, DSCR and payback period. In addition to risk analysis, she illustrates how to perform sensitivity analysis and scenario analysis. The paper makes a solid contribution to the practitioner body of knowledge for the risk analysis and the project management disciplines.

Review of Project Risk Management: Essential Methods for Teams and Decision Makers

Udumalagala (2015) reviewed a lean methods book that was focused on improving risk management and decision making for mega-projects. The level of analysis here, as with most book

reviews, would be practitioners (individual), or the industry level of analysis (if considering this a best-practice). She pointed out the book author was careful to identify the drawbacks of using only deterministic methods for risk management (e.g., without probabilities). Instead she explained how the book author recommended and explained how to use probabilistic techniques for risk analysis and management. This was a comprehensive book review with several quotes from the author which allows prospective readers and project managers to gain a realistic perspective about the topical coverage prior to purchasing it for their own use.

CONCLUSION

The goal of this issue was to draw attention to how risk analysis and contingency management are studied from various levels of analysis, and across disciplines. It may not be obvious that two studies may seem comparable with identical units of analysis, but they would be

distinctly different if they used different levels of analysis. The levels of analysis are usually linked to where the results will be generalized to, such as a project, an organization, a particular industry, a country, or world wide. In a way, using multiple levels of analysis is a strategy for a journal to achieve cross-study data and method triangulation, as attempted in this issue.

In closing, I am excited to announce that I have taken on several new projects, including developing the *Academy of Decision Sciences*, the *Open Journal of Emergency and Rescue* plus some readers may be aware that I recently completed a research design handbook: *Palgrave handbook of research design in business and management*. I want to thank everyone who has help me to achieve these accomplishments and please feel to drop in to see me online at (<http://ken.multiplications.org/>) for more research ideas!

Kenneth David Strang
Editor-in-Chief
IJRCM