

EDITORIAL PREFACE

How to Research Risk and a Few Contemporary Quantitative Studies

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INTRODUCTION

Earlier this year the journal team completed a successful partnership with the City of New Orleans and IMAGO at the International Disaster Conference (IDCE), January 8-10, 2013. IDCE 2014 is already in the planning stages so researchers are invited to contribute again. In particular interpretative, qualitative-oriented risk research is requested, such as humanistic perspectives of natural or man-made disasters.

Key insights arose at IDCE 2013 concerning the gaps in risk management research, which influenced our topic coverage in this issue. There was a polarization of industry practitioners: most had great ideas but do not attempt to document them in journals versus only a few scholars publish their findings. According to risk management practitioners and doctoral students across several disciplines, a major impediment to publishing research was the lack of documentation to guide the design and analysis; in most cases, practitioners felt the existing research methods literature was confusing and overwhelming.

Therefore, the first article in this issue presents a framework of ideologies, analysis strategies, methods, and techniques for designing quantitative and qualitative research papers. The remaining articles demonstrate the

post-positivistic ideology, by applying quantitative methods with descriptive and inferential statistical techniques. We hope future studies will illustrate a social-constructivist philosophy.

The second article is an interesting survey of project managers, which is followed by a case study of measuring uncertainty in the petrochemical industry. The fourth and fifth manuscripts are rigorous empirical studies of a supply risk model created from structural equation modeling, and an agricultural investment risk model developed from ordinary least squares regression, respectively.

LITERATURE REVIEW

Risk Management Research Design Framework

Research method thought leaders Mike Crotty, John Creswell, Egon Guba, Yvonna Lincoln, Lawrence Neuman, Robert Yin, John Glaser and others were cited by Strang as influencing his post-positivist-social-constructivist research design framework. He interviewed 33 practitioners to understand how research guidelines could be improved to help emerging scholars and they reviewed the resulting model to strengthen

it. He created a simple research design typology grouped into four layers: research ideology, unit of analysis strategy, formal research method, and analysis techniques. He explained how ideology and strategy are integrated with formal methods such as experiments, surveys, case studies, ethnography, grounded theory, content analysis, hermeneutics, discourse analysis, anthropology, ethnography, phenomenology, general analytics and others. He described how methods are linked with techniques including sampling, descriptive statistics, validity, reliability, inferential statistics and so on.

Risk Management Instruments, Strategies and Their Impact on Project Success

Anantatmula and Fan demonstrate the survey method by collecting responses from project managers (PM) about their perceptions of risk management tools (N=87). Their questionnaire items focused on risk mitigation approaches that are commonly employed along with their dependency with the type of organization. They found that organizations are more likely to depend on a contingency reserve rather apply formalized risk analysis. Interestingly, there was no relationship between a PMs individual propensity towards risk versus the organizational culture. They concluded that organizations do not pay enough attention to formal project risk management; instead, they rely on allocating contingency buffers.

RISK ASSESSMENT USING AHP IN A PETROCHEMICAL CASE STUDY

Manabi, Salahshour, and Dezfouli demonstrate the Analytical Hierarchy Procedure in a case study of risk assessment at a petrochemical company. They developed a petrochemical risk construct from a literature review which resulted in four categories of oil and gas project risks, namely: technical, financial, human and

environmental. They used the interview method to collect uncertainty ratings from 30 engineer subject matter experts. Not surprisingly, return on investment was the most important financial risk. Failure to comply with safety standards was the most significant technical risk (and this was the highest overall). The highest environmental risk was corrosion. Interestingly, although we commonly hear about worker injuries at oil refineries, the most likely human risk was sabotage.

Structural Equation Model of Supplier Trust and Information Sharing

Mandal and Bhattacharya demonstrate structural equation modeling, which is a complex statistical technique. They surveyed supply chain managers (N=164), using an instrument to assess beliefs about supplier concentration, supplier dependence, sourcing strategies and trust towards customers. The principles they relied on were: Resource Based View of the firm, Transaction cost economies, and Relational Capital Theory. They found that supplier concentration, supplier dependence, sourcing strategies and trust towards a customer increases supply side risk. Interestingly, they also determined that trust towards suppliers and high level of information sharing among the supply chain partners reduces uncertainty. Therefore, these last two factors should be advocated by supply chain managers.

Agricultural Investment Risk and National Domestic Production

Oman Khanlen designed a single explanatory case study which utilized the hypothesis testing and general analytics research methods to quantify uncertainty in order to develop a model to improve national agriculture production. He extensively reviewed the literature to identify the agriculture related factors which impacted gross domestic production. He used

the hypothesis testing method, which included ANOVA and Ordinary Least Squares regression techniques, to measure the cause-effect on national agriculture production. The agricultural investment independent factors included commercial bank credit granting, government funding, and a unique agriculture credit guarantee scheme. His application of the scientific method serves as a guide for other practitioners with a positivistic ideology.

FUTURE RESEARCH

IJRCM seeks manuscripts exploring uncertainty and risk topics using interpretative formal methods such as cases studies, ethnography, phenomenology, grounded theory and reflective action research. Since most of IJRCM content in 2012 has been written from the post-positivist ideology, we are calling for more research applying

the other philosophies namely pragmatism or social-constructivism. A good example would be case studies or action research of natural or man-made disasters, such as hurricanes, flooding, earth quakes, manufacturing accidents, mass homicides, and medical diseases. There are suitable topics for IJRCM from all disciplines and industries.

Finally, strategic scholars should start their research for IDCE 2014. We will again support the IDCE conference for 2014 as a media partner. IJRCM will review papers submitted for IDCE based on these keywords: disaster stories, emergency/crisis management, homeland security, business continuity, economic stability, disaster preparation, response, recovery, and mitigation.

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Kenneth David Strang has a Doctorate in Project Management (business research), an MBA (honors), a BS (honors), as well as a Business Technology diploma (honors). He is a certified Project Management Professional® from Project Management Institute, and is a Fellow of the Life Management Institute (distinction, specialized in actuary statistics and pension systems), from the Life Office Management Association. His research interests include: leadership, multicultural e-learning, marketing new product development, knowledge management, and risk/e-business project management. He teaches subjects in business, in class as well as online, plus he supervises doctorate students. He has authored numerous manuscripts and books since 1981. Finally he is an Editor and Associate Editor at several journals.