Editorial Preface

From Philosophy to Physics:
Why Are Risks Increasing and What Can We Do?

Kenneth David Strang, State University of New York, Queensbury, NY, USA & APPC Research Australia, Cammeray, Australia

Welcome to 2017 and where did 2016 go? A lot has happened around the world in these past 12 months that we could study from the perspective or risk and/or contingency analysis. A few editorials ago I suggested prospective authors could take leading headlines from the Google News aggregator and turn them into research questions to perform an interesting study that would be relevant to IJRCM. If you look at all the events that occurred in the last 12 months you will see many such opportunities. Many of those opportunities have grants and funds available from public or private institutions. We also have several conference initiatives sponsored by IJRCM so as to provide our readers and authors with network and knowledge sharing avenues.

Quality, uniqueness and practitioner topic relevance are our goals at IJRCM. In our current issue we have collected a group of very interesting papers that are theoretically linked in as far as they start and end with philosophy, while they include physics, policy and power (electrical that is) as focus topics sandwiched in between the ideological perspectives. This may sound like prosaic alliteration but I can assure you it is methodical and purposeful. Read on and you be the judge.

In our first paper Korstanje critically reviews the risk ideology of Argentina. His paper was an interesting socio-economic contrast with my American culture and as compared to my experience living in Australia. He explained that Argentina is an agro-export country with power concentrated in a few large landowners which pitted agri-businesses against industrial development, slowing development. He narrates an interesting case story of a couple who encountered enough wealth to own a large farm and an expensive new car. Ironically, they were forced to sell their car because they could not afford the insurance against third parties, accident, fire, and theft. According to Korstanje, the couple in his case study purchased more insurance than they could afford because they were concerned that vandals or terrorists would somehow target them since they had a new car. Being from USA I cannot imagine this being an issue with car insurance here as I feel it is more likely for an American to skip buying insurance if it becomes unaffordable - but sometimes I have seen people will keep driving an uninsured car (e.g., this is the uninsured motorist coverage that we often add to policies). On the other hand, an American would be more likely to trade in an expensive car to get a cheaper one that would require only cheap insurance. This is a stark contrast to what Korstanje claims from his practitioner experience. Socio-cultural risk avoidance seems to be the root factor of Korstanje's article. This is a topic that ought to be studied more in IJRCM; that is, we encourage researchers to investigate the impact of cultural differences, especially uncertainty avoidance, on decision making and on other economic production activities or outcomes.

The focus changes from philosophy to practical application with Todinov's paper. He creates and examines a model to reduce the risk of ships colliding at night in a busy port. He calls his concept 'risk inversion'. I'm not engineer so the improved physics of freight-ship construction went past my comprehension but I did understand the concept of shortest route as a comparative measure of efficiency in the linear programming/transportation analysis (a topic that I teach and research). Additionally, Todinov revealed that he recommends a process called 'Failure Modes and Effects Analysis' (FMEA) which is family of lean operations risk reduction approaches. The first technique is a quality planning approach called Process Failure Modes Effects Analysis (PFMEA). In PFMEA operations specialists brain storm what might go wrong during the manufacturing process, and then they quantify the consequences. The second is Design Failure Mode Effects Analysis (DFMEA) which is done by engineers during the design phase (before production) to brain storm ways that a product design might fail in real-world use (usually the outcome is an Affinity or Fishbone diagram). Each risk is calculated using a relative probability such that an overall expected design risk can be estimated. Thus, DFMEA estimates risks of manufacturing a product whereas PFMEA examines the risks of it failing after purchase (in the marketplace). Both techniques are used to reduce risks as well as to improve the design and manufacturing reliability of a product. These two techniques would be suitable for IJRCM so we encourage researchers and practitioners to consider studying them and submitting the paper to our journal.

The third article changes the direction from the freighter transportation industry towards managing risks in the higher education sector. Nurhadi and Chang examine the literature and develop a risk management framework for higher educational institutions using Australia as a reference point. While they retrace what has already been accomplished in this industry (e.g., everyone especially senior management must accept and practice risk prevention), they do advance an idea that the human resource mechanisms must establish accountability and reward effective risk management behavior. They emphasize following the ISO 31000 risk treatment processes. Perhaps this is a body of knowledge that should be explored across other industries? We encourage higher education researchers to publish their experiences and case studies with us.

The manuscript by Nersesian and Strang is a just-in-time (JIT) clean energy case study to show that alternative energy creation combinations may overcome risks associated with climate change and greenhouse gas reduction policies. JIT in this sense is asserted due to the publicity that global climate reality has received during the last 12 months. Their model summarizes several types of electricity generation plant designs. What is unique about their paper is they suggest something which is expense and nearly impossible to do with conventional batteries: Store a large amount of electricity for later use (i.e., capable of generating over 5MegaWatts through kinetic energy with very little loss). Batteries that large are not yet feasible to manufacture. Their approach is to use a pumped-hydro facility called a 'reservoir battery' which uses off-peak MWatts from nuclear, gas, fossil fuel as well as solar, wind or hydro, to move water into a storage area for later release to create hydro electricity from kinetic energy (gravity). Pumped hydro storage is not a new patentable idea but developing a sustainable model is novel and useful for practitioners. Sensitivity analysis was applied to show effective combinations of several pumped hydro reservoirs that could save a utility company or municipality millions of dollars in costs every year. They pointed out that their idea would be most valuable when only clean energy methods like solar or wind farms were being used because those energy creation methods are more susceptible to unpredictable reliability problems (i.e., fog, clouds, too little or too much wind). I would go further and point out that much more experimentation needs to be done with climate analysis and clean energy production. For example, years ago USA were dependent on importing oil and mining it was often infeasible because a costly cocktail of chemicals had to be pumped into the pipelines to force out gas and oil. However, several experiments in Texas proved that cheap natural pollution-free water could pumped into wells (or fractures) instead of deadly chemicals to force out oil or gas. This new methodology was cheaper, cleaner, and resulted in better production. It also allowed USA to become more self-sufficient in producing a much-needed resource, thus creating a multiplier effect

on the economy, increasing GDP and increasing oil-gas processing knowledge. What we are missing are the models to better analyze the risks and contingencies of oil-gas production.

Our final article is an insightful and provocative review into the globalization of uncertainty which is called the 'American fear culture'. Korstanje, an IJRCM board member, does an outstanding job at explaining how post-Marxian studies have impacted global terrorism, and in particular how this 'culture of fear' has become the accepted norm in western societies to the extent that civilian rights have drastically diminished. The reason I chose to share this review, beyond the fact that Korstanje is good at ferreting out provocative risk-related issues, is to stimulate researchers to consider surveying the perceptions of citizens on risk avoidance tolerances as well as their perceptions of current democracy. A colleague outside the USA asked me recently, "Are you really in the land of the brave and the free anymore?" President Obama has rhetorically asked why we have so much more domestic terrorism as compared to the rest of the democratic world – that's a good point and one worthy of future studies.

In closing we thank all reviewers and the IGI-Global publishing team for helping us stay on time to remain a well-respected international journal. We have many interesting new keywords and several conferences to allow our stakeholders to share knowledge. We hope to bring insightful and diverse manuscripts in to IJRCM to serve the interests of you our readers. Please continue to follow and respond to our multi-year call-for papers (http://ijrcm.multinations.org/).

Kenneth David Strang
Editor-in-Chief
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