**Project Title:** Supply Chain Risk Management In Practice: A Behavioral Study of What Is, And What It Is Thought To Be

**Project Number** IMURA0436

**Monash Main Supervisor**
(Monash Main Supervisor (Name, Email Id, Phone))
Mohan Krishnamoorthy
mohan.krishnamoorthy@monash.edu

**Monash Co-supervisor(s)**
(Monash Co-supervisor(s) (Name, Email Id, Phone))

**Monash Head of Dept.**
(Monash Head of Dept. (Name, Email))
Chris Davies
chris.davies@monash.edu

**Monash Department:**
Mechanical and Aerospace Eng

**Monash ADRT**
(Monash ADRT (Name, Email))
Emanuele Viterbo
Emanuele.Viterbo@monash.edu

**IITB Main Supervisor**
(IITB Main Supervisor (Name, Email Id, Phone))
T T Niranjan
ttniranjan@iitb.ac.in

**IITB Co-supervisor(s)**
(IITB Co-supervisor(s) (Name, Email Id, Phone))

**IITB Head of Dept**
(IITB Head of Dept (Name, Email, Phone))
G. K. Adil
adil@iitb.ac.in

**IITB Department:**
SOM

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**Research Academy Themes:**

**Highlight which of the Academy’s Theme(s) this project will address?**
(Feel free to nominate more than one. For more information, see www.iitbmonash.org)

1. Advanced computational engineering, simulation and manufacture
2. Infrastructure Engineering
3. Clean Energy
4. Water
5. Nanotechnology
6. Biotechnology and Stem Cell Research

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**The research problem**

**Define the problem**
Successful implementation of strategies like lean management, outsourcing and offshoring have reduced inventories and improved efficiencies on the one hand, but on the other hand, due to the resultant low inventory and increased geographic footprint, has increased firms’ exposure to risk considerably in recent years. Accordingly, supply chain risk management (SCRM) is a pressing problem for most large
corporations today.

Although SCRM is now a fairly well developed area of research and practice, one problem that is overlooked by both practitioners and academics is, what gets managed is not “supply chain risk” but managers’ perception of that risk.

Perceptions of risk are affected by emotions and cognitive biases and can be quite far from reality. For example, research has shown that people judge death by accidents to be more than 300 times more likely than death by diabetes, but the true ratio is 1:4. It follows that managers could also suffer from cognitive biases, which affect the way they make decisions at their workplace. It is a moot question whether the supply chain risk that companies are spending millions of dollars managing, is anywhere close to actual risks that the firms face. Clearly, this is a problem that consultants and the higher echelons of large companies need to be concerned about.

Project aims

**Define the aims of the project**

The study aims to identify systematic deviations of managers’ perception of supply chain risk from the real world. The research will be empirical, and will draw upon academic literature on risk perception and decision biases, apart from supply chain management and organizational theories.

Expected outcomes

**Highlight the expected outcomes of the project**

- A description of how supply chain risk management problems are framed and implemented in large professionally managed corporations.
- An understanding of cognitive biases, affect and emotions and social factors that lead decision makers astray from effective SCRM.
- A toolkit to guard managers against such pitfalls

How will the project address the Goals of the above Themes?

**Describe how the project will address the goals of one or more of the 6 Themes listed above.**

While the research has immediate application in supply chain management domain, the insights and contributions of the proposed study are also sufficiently basic to be of interest to a large community of practitioners and academics outside supply chain management. In other words, this also contributes to basic research, and is there for relevant to the theme.

Capabilities and Degrees Required

**List the ideal set of capabilities that a student should have for this project. Feel free to be as specific or as general as you like. These capabilities will be input into the online application form and students who opt for this project will be required to show that they can demonstrate these capabilities.**

- Strong undergrad degree in engineering from a premier institute, with exposure to courses/internships in Operations Management
- OR Masters degree with specialization in Operations Management/Marketing/Supply Chain Management, from a premier institute
- Desirable:
  - A few years of work experience in managerial or consulting roles
  - Awareness of supply chain risk management
  - Awareness of topics in behavioural analysis
  - Awareness of or demonstrated experience in qualitative research and empirical research

Potential Collaborators

Please visit the IITB website [www.iitb.ac.in](http://www.iitb.ac.in) OR Monash Website [www.monash.edu](http://www.monash.edu) to highlight some potential collaborators that would be best suited for the area of research you are intending to float.