

An Indian-Australian research partnership

Project Title:	THE EFFECTIVE FUNCTIONING OF SERVICE TRIADS IN REGULATED ENVIRONMENTS	
Project Number	IMURA0658 (8)	
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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
7. Humanities and Social Sciences

The research problem

Define the problem

Organizations (*clients*) often outsource their *customer-facing* services to third party services *providers*, forming what are known as 'service triads'. Service triads involve high levels of information asymmetry and conflicts of interest between the entities. This project focuses on service triads in regulatory environments, where these issues are perhaps more complex and less understood than the typical service triad. Regulators often have a public health and safety and a risk perspective, impose legal

obligations, prohibit specific activities and monitor triads using various regulatory instruments such as audit, inspections, financial controls, performance indicators and annual reports. The impact of these actions on accountability of the constituents of the triad, and service performance is unclear. Also, with too many regulators or too much interference, the provider might be subjected to conflicting pressures from multiple principals, and that can negatively affect the quality of service. The relationship between regulation and service performance may also be mediated by the expertise of the regulators.

This leads to the important question of how does regulatory environment impact the relational dynamics of service triads.

Project aims

Define the aims of the project

The project aims to:

- Identify the risks that regulators face,
- Develop a methodology to quantify these risks,
- Identify certification processes or protocols to manage these risks, and
- Develop an understanding of the circumstances when different service triad constituents are to be held accountable

Expected outcomes

Highlight the expected outcomes of the project

Enhanced understanding of the the dynamics of regulated triadic relationships, the influence of the regulator on performance, risks involved and how these might be quantified and managed. Theoretical insights will be derived from a simulation model of how regulated triads function.

Contribution to practice by developing a decision-framework that can improve the effectiveness of regulated service triads.

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.

The project will contribute to the advanced computational engineering/simulation theme and will assist in understanding how regulated triads operate, the key challenges and risks involved and devising an effective decision framework/model.

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.

The project requires sound analytical/quantitative skills as well as excellent oral and written communication skills in order to effectively carry out fieldwork, interact with practitioners, and successfully disseminate the findings through scholarly and practitioner outlets. An ideal candidate for this project would have a strong first degree in Engineering or an MBA from a premier institute.

Potential Collaborators

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

Sourav Sengupta (as a co-supervisor, depending on where he secures a Post-Doctoral position)

Please provide a few key words relating to this project to make it easier for the students to apply.

Service triad, service supply chains, service supply chain, outsourcing, simulation, regulatory agencies
Operations Research, Simulation, Modelling, Risks