A Simulation-Based Approach to Understanding Alternative Supply Chain Configurations

Project Statement
This is a three-year Australian Research Council (ARC Linkage) project to develop a simulated learning approach that will link the choice of supply chain strategy to theoretical criterion regarding implementation feasibility.

In tackling this issue we place much needed emphasis on what is appropriate for the organisation in terms of supply chain strategy given the circumstances facing the company.

This research co-funded by the ARC, The University of Wollongong, The Australian Graduate School of Management and BlueScope Steel.

Objectives
The specific objectives of this project are to:

1. Better understand why alternative supply chain configurations are chosen that can appear to be inefficient;
2. Identify the process capabilities required to support different supply chain configurations;
3. Employ discrete event and continuous simulation to model a feasible set of supply chain configurations;
4. Develop a "what if" decision support system that provides sharper and more detailed feedback to the wider business community regarding what is appropriate given the circumstances in which they may find themselves.

Project Outcomes