

Modeling Cooperation Games in Network Organizations

Part 1: steps 1

1. Choose a network organization (NO) to simulate. An example is a small project team of n people (e.g., 3-10 people) working on a common set of goal. For a motivating simple example, consider the NO is assembling a toy with n sequential parts and each person has only one part. Person i must wait for person $i-1$ before adding part i to the toy. This example has time sequence involved. In other examples, members of a team must act simultaneously or predictably to complete a task. These intimate cooperation protocols go beyond coordination in game theory. Start with Levesque and Cohen's model of teamwork and consider modifying it to allow for cooperation. Adding shared plans is one option. Adding mutual plans is another option.

Part 2: Step 2

1. Implement an NO that performances effectiveness of cooperation game model from step 1.