

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 but do start with coordination or a nonzero sum game model 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.