

# **Group Modeling-Building: The Environment, Culture and Work Conditions Impact on the Process**

**Sadia Rina**

Department of Industrial and Management Engineering  
Shenkar College of Engineering and Design  
Ramat-Gan, Israel  
rinasadia@gmail.com

## **Abstract**

Systems thinking is a conceptual language that encourages professionals into using "feedback loop" thinking rather than mere linear thinking. In order to analyze a problem, a process of building a model of the interrelationship between the various variables of the system took place in an Israeli factory, in a country of mixture cultures and social backgrounds. The process of building a model involved many participants of different positions in the factory, composing a diverse group with varied inputs. Since the participants in the model building process were chosen from various levels within the company, they were also from diverse backgrounds in terms of their cultural background, socio-economic status and their work position. These impact their way of thinking and their opinions on the problem. It is therefore vital for research management teams to acknowledge these differences between group members in order to understand the contradictory information that may come up from different parts of the group. This variety in problem conceptualization may also arise in knowledge elicitation by using both the group model building process and personal conversations. Revealing this kind of cultural mixture allows a continuous improvement process of knowledge elicitation through this model building process.

## **Keywords**

Feedback loops, group modeling process, knowledge elicitation, culture

## **Biography**

**Rina Sadia** is currently a fulltime lecturer in Shenkar College of Engineering and Design in Israel. She was also a lecture at Ariel University in Israel. She earned her B.Sc. in Industrial and Management Engineering from Ben-Gurion University in Israel and her M.Sc. and PhD from Virginia Polytechnic Institute and State University. Her areas of interest include system dynamics, applied statistics, and statistical processes control.