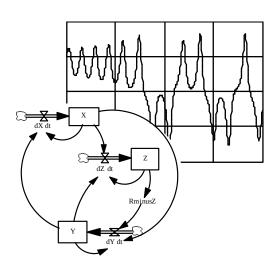
# What is System Dynamics?

System dynamics is a computer-aided approach to policy analysis and design. With origins in servomechanisms engineering and management, the methodology uses a perspective based on information feedback and mutual or recursive causality to understand and manage the dynamics of complex physical, biological, and social systems.

# **The Field of System Dynamics**

The field developed initially from the work of Jav W. Forrester. His Industrial Dynamics (1961) is still a significant statement of philosophy and methodology in the field. Since its publication, the span of applications has grown extensively and encompasses work in

- corporate planning and policy design
- public management and policy
- biological and medical modeling
- energy and the environment
- theory development in the natural and social sciences
- dynamic decision making
- complex nonlinear dynamics



### **Activities of the Society**

### The System Dynamics Review

The Society's journal is published quarterly by John Wiley & Sons, under the editorship of Brian Dangerfield of the University of Salford and an international editorial board. The Review publishes high quality, peer-reviewed advances in system dynamics and systems thinking and their applications to societal, technical, managerial, and environmental problems. The journal is abstracted in the relevant major bibliographic information services.

### **International Conferences**

The Society's annual conference is held alternately in North America and Europe, with occasional appearances in Asia and the Pacific Rim. These conferences, and the meetings of local chapters and interest groups, introduce newcomers to the field, keep practitioners aware of current developments, and provide unparalleled networking opportunities.

### **Membership**

Members receive an annual subscription to the System Dynamics Review and access to the *Review* online through Wiley InterScience; discounted conference rates; and regular information about activity in the field. Chapters are organized in:

- Australasia Italy
- Switzerland

- Brazil
- Japan
- UK

- China
- Korea Latin America
- Economic

**Dynamics** 

- Egypt Hellenic
- Russia
- Student

In addition, a growing number of special interest groups are active, including:

Business

- Health Policy
- Environmental Dynamics
  Security
- Higher Education

#### Resources

### The Production-Distribution (Beer) Game

Complete game kits for this deeply insightful introduction to the power of a dynamic systems perspective are available directly from the Society. The purpose of the game is to illustrate the key principle that *structure produces* behavior. For more information, contact the Society or see www.systemdynamics.org

#### The Forrester Seminar Series

The Society is proud to present this series of videotaped discussions with the founder of the field, Jay W. Forrester. The eleven three-hour sessions address a variety of topics which should be of interest and benefit to any student or practitioner in the field. An accompanying CD contains suggested readings for each session. May be ordered singly or as a set.

#### The Literature Collection

The MIT System Dynamics Group Literature Collection was selected by Jay W. Forrester. The collection spans nearly fifty years of work in system dynamics, and reveals a rich historical point of view. Included are over 3500 D-memos, along with theses, publications, the Guided Study Program, the Road Map series and miscellaneous selected papers. Available on DVD.

### The System Dynamics Bibliography

The Society maintains an active database of publications in the field, which is available online on a shareware basis (free to members) at www.systemdynamics.org or on disk from the Society.

#### **Previous Publications**

Most past editions of conference proceedings (1986 - 2004) and the System Dynamics Review (1985 - 2004) are available from the Society.

## **Contact the Society**

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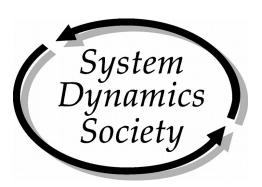
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Promoting the rigorous study of systems and their behavior using computer simulation and a feedback perspective for policy analysis and design

The *System Dynamics Society* is an international non-profit organization devoted to encouraging the development and use of system dynamics and systems thinking around the world.

With members in over sixty countries, the Society provides a forum in which

- researchers
- educators
- consultants
- practitioners in corporate and public sectors

interact to introduce newcomers to the field, keep abreast of current developments, and build on each other's work.