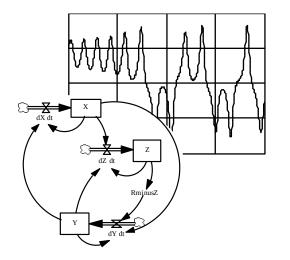
What is System Dynamics?

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 Jay 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 Wiley-Blackwell, 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:

•

.

•

•

Korea

Pakistan

Switzerland

Economics

Russia

Student

UK

Latin America

- Australasia
- Brazil
- China
- Egypt
- Germany
- Hellenic
- Italv
- Japan

In addition, a growing number of Special Interest Groups are active, including:

- Business
 Inter- and
 - Intranational Conflict
 - Model AnalysisPsychology
- Health Policy

Education

Environment

Energy

• Information Science and • Security Information Systems

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 Literature Collection on DVD

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.

The Forrester Seminar Series on DVD

The Society is proud to present this series of 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.

The System Dynamics Bibliography

The Society maintains an active database of publications in the field, which is available online at www.systemdynamics.org.

The Electronic Oracle

A new reprint of the original 1985 book by Donella H. Meadows and Jennifer M. Robinson. New forewords by Dennis Meadows and John Sterman are included.

Fireside Chat with Jay W. Forrester

George Richardson's wide-ranging and often humorous interview with Jay W. Forrester, now on DVD. Recorded at the Atlanta 2001 International Conference of the System Dynamics Society.

Conference Proceedings

Printed conference proceedings and full papers, as provided, are available for sale in hard copy and are also available as open source on our website, www.systemdynamics.org.

Contact the Society

Erling Moxnes, President Professor University of Bergen Bergen, Norway erling.moxnes@ifi.uib.no

Roberta L. Spencer, Executive Director

System Dynamics Society Milne 300 – University at Albany Albany, NY 12222 USA Phone +1 (518) 442-3865 Fax +1 (518) 442-3398 office@systemdynamics.org www.systemdynamics.org



Society Sponsors

Amber Blocks Ltd. New York, New York, USA Atrivé Houten, The Netherlands Bolide Pty. Ltd. Frenchs Forest, NSW, Australia Booz Allen Hamilton McLean, Virginia, USA **BP** Global locations **Center for Sustainable Ecosystem** Nanotechnologies Albany, New York, USA Centre for OR and Applied Statistics, Salford Business School, University of Salford UK Complexio Paris, France Decision Dynamics, Inc. Bethesda, Maryland, USA Delft University of Technology Delft, Netherlands e-integrate Brussels, Belgium Evans & Peck Pty. Ltd. East Roseville, Australia Forrester Consulting, LLC Boca Grande, Florida, USA Jay W. Forrester Cambridge, Massachusetts, USA Grupos Proyectos Querétaro, México Health Market Science King of Prussia, Pennsylvania, USA Homer Consulting Voorhees, New Jersey, USA isee systems Lebanon, New Hampshire, USA The Manufacturing Game Humble, Texas, USA **Mohaseboon Financial and Business Consultants** Cairo, Egypt Murphy Hall & Company, CPA's Burlington, Massachusetts, USA PA Consulting Cambridge, Massachusetts, USA PAR-Group, Nijmegen School of Management, Radboud University Nijmegen, Nijmegen, Netherlands Patterson America, Inc. Toronto, Canada Pegasus Communications, Inc. Waltham, Massachusetts, USA Powersim Solutions, Inc. Herndon, Virginia, USA Proverbs Corporation Prague Czech, Republic **Rockefeller College of Public Affairs and Policy**, University at Albany Albany, New York, USA System Dynamics Group, MIT Cambridge, Massachusetts, USA System Dynamics Group, University of Bergen Bergen, Norway transentis management consulting GmbH & Co. KG Wiesbaden, Germany Union Graduate College Schenectady, New York, USA Ventana Systems, Inc. Harvard, Massachusetts, USA Ventana Systems UK Salisbury, Wiltshire, UK Whole Systems Partnership North Yorkshire, UK Worcester Polytechnic Institute (WPI) Worcester, Massachusetts, USA

XJ Technologies St. Petersburg, Russia

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.

Dy With members in over seventy 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.

Promoting th systems an using compute feedbac for policy ar