

System Dynamics NEWSLETTER

Volume 17 – Number 2

June 2004

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From the President

Bob Eberlein

It is a pleasure for me to be able to write to you with the news that we have reached agreement with John Wiley & Sons for the continued publication of the *System Dynamics Review* as a Wiley Journal. The new agreement recognizes the current structure of the Society and provides for a working relationship that should enhance our ability to serve the membership and promote the publication of the best work in the field.

Financially, the agreement provides a substantial increase in the revenue that we retain from our membership dues. While we will need to continue to pay close attention to Society finances, we are finally in a position where a sensible plan for future activities can be made which has reasonable cash flow implications. For quite some time the Society budget has resulted in a shortfall, and has required some innovative entrepreneurial activities at the central office to maintain a healthy cash balance. Hopefully, we now have a foundation that will allow

us a more reasoned approach to improving and growing the Society.

The biggest change for the membership resulting from the new arrangement will be that all membership renewals and billings will go through the Society office. Sometime in September we will be sending out the membership renewal forms for 2005. These will probably be sent with an updated newsletter. We are hoping to have an online renewal process available for those who would like to pay by credit card. If you prefer to pay by check, that can be mailed directly to the Society office. You will continue to receive the *System Dynamics Review*, and have access to it electronically as you now do. Any inquiries about membership status will need to be directed to the central office.

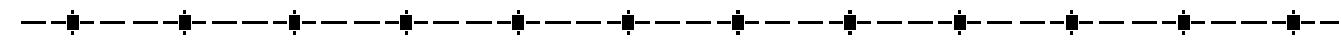
On a different note most of you are probably aware of the System Dynamics Mailing List that I moderate (system-dynamics@world.std.com). This list has now been active for almost a decade (the first posts were in December of 1994) and has been a great place to ask questions, share information and generally keep in touch. Recently, Tony Kennedy took all of the

historic posts and put them into an online discussion format that makes them searchable and makes the threads easy to follow. These are available at <http://www.systemdynamics.org> - see also <http://www.vensim.com/sdmail> for more information on the mailing list.

With the conference fast approaching the central office is extremely busy managing reservations, putting together the printed proceedings and doing everything else it takes to make our conferences a success (including already working on the 2005 conference). One change this year is that the CD proceedings will not be distributed at the conference, but will be sent out after the conference. This is to

allow authors to update their papers up to the last minute before the conference, and even after the conference based on feedback received there. There is more about the conference elsewhere in the newsletter.

I spoke in the last newsletter about volunteer opportunities and one such concrete opportunity would be the conversion of older issues of the *System Dynamics Review* to an electronic format. These could either be included at the Wiley InterScience site, or perhaps made available to members on a CD. If you have any interest in helping with this activity please let me know.



From the Executive Director

Dear Members:

We have just passed through the graduation time of the year, and this June I comment on our student members. In 1995 the System Dynamics Society had 43 student members and for the calendar year 2003 we had 203. Student membership now accounts for about 20% of our overall yearly membership and grows consistently every year. At our research conference student turnout consistently reflects the percentage of student members. Students mention to me that they are pleased to be members since it gives them a place to belong and to be among people from all over the world who are doing system dynamics.

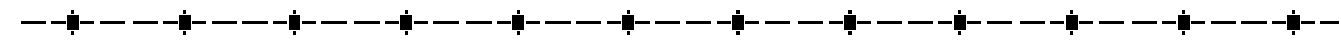
In addition, students are helping to cultivate a nurturing community by enthusiastically encouraging communication and outreach to others. Events such as the PhD Colloquium, the formation of the Student Chapter in 2002, and the boundless volunteer work they perform for the Society and the conference are ample confirmation. Notably, the fourth annual PhD Colloquium will be held in Oxford next month! To recognize the excellent work students do in the field of system dynamics, in 2001 the Society established the Dana Meadows Student Prize (good luck if your paper is being considered). Our outstanding students define the future of the field of system dynamics, and the future looks bright.

Every year at graduation time, I am very proud of all the students I have come to know through the Society. Receiving a degree is a huge accomplishment. I am always excited to learn where their first job will be, how system dynamics will be applied in their job, and to what corner of the world they will relocate. Armed with vision, they will be moving on. Fortunately, almost all of the student members stay in touch, by continuing their membership and by remaining involved in the Society. Many times student volunteers continue to volunteer for the Society even after they start a career. Then, once a year at our conferences we get to meet again.

This spring and always, I say a hearty “well done” to all the graduates everywhere. However, this year I am reacting differently to all this “moving on.” My son Dan will also be wearing the mortarboard and gown as he graduates from Brown University with an undergraduate degree. And, on a very important occasion, I find myself at a loss for words, with a smile on my face, and a lump in my throat.

I am extremely proud of all our past, present and future graduates. Please do stay in touch as you move on.

Warm congratulations! *Roberta*



2004 Governance

Officers

Robert L. Eberlein
President

Jay W. Forrester
Founding President

Deborah Lines Andersen
VP Publications

James M. Lyneis
VP Meetings

Graham W. Winch
President Elect

David Packer
Secretary

Ginny Wiley
VP Members & Chapter Activities

Brian C. Dangerfield
Ed., System Dynamics Review

Pål I. Davidsen
Past President

David Andersen
VP Finance

Robert Y. Cavana
VP at Large

Policy Council

Andreas Groessler
Taehoon Moon
Kevin O'Neill
Qingrui Xu
(2002-2004)

Deborah Campbell
David Lane
Scott Rockart
Etiënne A.J.A. Rouwette
(2003 - 2005)

Allen L. Boorstein
David Exelby
Tim Haslett
Gianliborio G. Marrone
(2004-2006)

Chapter Representatives

Rohita Singh
Australasia

Pierre J. Ehrlich
Brazil

Qifan Wang
China

Walid Badr
Egypt

George Papaioannou
Hellenic

Habib Sedehi
Italy

Akira Uchino
Japan

Nam Sung Ahn
Korea

Isaac Dyner
Latin America

Silvia Ulli-Beer & Birgit
Kopainsky
Switzerland

Brian C. Dangerfield
United Kingdom

Oleg Pavlov
Economic Dynamics

Özge Pala
Student

Special Interest Group Representatives

Carol Frances and Michael Kennedy
Education

Anastássios Perdicoulis
Environmental Dynamics

Jack Homer and Geoff McDonnell
Health Policy

Jose Gonzalez and Klaus Breuer
Security

MIT System Dynamics Group Literature Collection

Bob Eberlein

I have fond memories of browsing through the filing cabinets at MIT looking for the nuggets of wisdom accumulated over the years by Jay Forrester and his students. After more than a year of hard work by Jay, Nan Lux and a number of others, the content of those filing cabinets will be available on DVD.

More details will be sent to you by e-mail in the near future, or check the Society website periodically. In addition to D-Memos, most of the PhD, Masters and Bachelors theses done at MIT in system dynamics are also included. This is truly a treasure trove of interesting stuff.

Request for News

Our plan to publish four issues of the *System Dynamics Newsletter* this year is coming to pass with this, our second issue. Please send us your letters, news, photographs, and ideas to be included in one of the newsletters! Additionally, if you would like to contribute an article of interest to our community, please send your suggestion to the Society office.

All past newsletters, back to 1998, are available on the Society website under "Publications."

Member News and Notes

Publications

Geoff Coyle, *Practical Strategy: Structured Tools and Techniques*, Prentice Hall, 2003.

<http://vig.prenhall.com/catalog/academic/product/0,1144,0273682202,00.html>

Lars Finskud, *Competing for Choice: Developing Winning Brand Strategies*. Vola Press Limited, (London, UK): 2003.

<http://www.competing4choice.com/>

Juan Martín García, *Teoria y ejercicios practicas de Dinamica de Sistemas*, 2003.

<http://www.catunesco.upc.es/cursos/sistemas.htm>

Jose J. Gonzalez, *From Modeling to Managing Security: A System Dynamics Approach*, Norwegian Academic Press. (Kristiansand, Norway): 2003.

<http://www.hoyskoleforlaget.no/hia035>

Alexander Ryzhenkov, *Models of Cyclical Growth*, Russian Academy of Sciences (IEIE), (Novosibirsk, Russia): 2003.

New PhD's

It is our pleasure to announce that many of the Society's student members have recently received their PhD's.

Valerie Gacogne's PhD dissertation, approved in June 2003 at the French National Engineering School, ENPC (Ecole Nationale des Ponts et Chaussees), will be published by INRETS (the French National Institute for Transport and Safety Research). The title is "Impact of Freight Transport Costs on Logistical Systems with System Dynamics Modelling."

Etienne Rouwette's dissertation is titled "Group Model Building as Mutual Persuasion." David Lane of the London School of Economics attended the defense at Nijmegen University.

From the Massachusetts Institute of Technology:

Ph.D. graduate **Mila Getmansky** has accepted a position on the faculty at the University of Massachusetts, Amherst.

J. Bradley Morrison, who received his Ph.D. in February 2003, has been a lecturer and post-doc this year. He is currently selecting among several exciting academic offers. His dissertation is titled “Co-Evolution of Process and Content in Organizational Change: Explaining the Dynamics of Start and Fizzle.”

From the University at Albany, State University of New York:

In December 2003, **Vedat Diker** graduated from the School of Information Science and Policy. His dissertation title is “Toward a Dynamic Feedback Theory of Open Online Collaboration Communities.” Vedat has been teaching at the University of Maryland, College of Information Sciences, College Park, Maryland USA, since September 2003.



Luis Luna Reyes, from the School of Information Science and Policy, also received his PhD this May. His dissertation is titled “Collaboration, Trust and Knowledge Sharing in Information Technology Intensive Projects in the Public Sector.” Luis and his family are returning to his hometown of Cholula, Mexico, where he will be an Assistant Professor in the Business School at Universidad de las Américas.

Aldo Zagonel received his PhD this May from Rockefeller College’s Department of Public Administration and Policy. His dissertation title is “Reflecting on Group Model Building Used to Support Welfare Reform in New York State.” Aldo is headed to Albuquerque, New Mexico where he’ll join Sandia National Lab’s System Dynamics Group in modeling critical infrastructures surety.

Luis Luna Reyes, David Andersen and Aldo Zagonel, at the University at Albany, New York USA, Commencement, May, 2004.

A hearty “congratulations” to all!

Latin American Conference Announcement

The Latin American Chapter of the Society decided last November to hold the “Second Latin-American System Dynamics Conference”(November 18-19, 2004) in Chile! It will be a great opportunity for people to share experiences. Since the goal of the Latin-American Chapter is to promote system dynamics while avoiding the language barrier, the working language is Spanish. One area of interest of the conference and the Chapter is to foster the incorporation of system dynamics in university curricula. For now, the first task could be to help people studying to become teachers by making K-12 material (like the Creative Learning Exchange newsletters and others) available in Spanish.

Quite a number of proposed papers have already been received. The program chair is Isaac Dyner (Colombia); Martin F. G. Schaffernicht is in charge of the Organizing Committee, together with Gloria Perez (Mexico).

If there are Spanish-speaking scholars or students out there who are not subscribed to the Spanish discussion list but are interested in attending the conference, please contact Dr. Martin Schaffernicht (martin@utalca.cl) in order to receive a call for papers.

For more information visit the conference website at <http://dinamicasistemas.utalca.cl/> or contact Dr. Martin Schaffernicht, (martin@utalca.cl) Universidad de Talca. Also, please visit the chapter’s website: <http://dinamicasistemas.mty.itesm.mx/>

2004 Oxford, England Conference

The 22nd International Conference of the System Dynamics Society will be held July 25 - 29, 2004, at Keble College in the University of Oxford, England.



Conference Host: HVR Consulting Services Ltd.
Conference Partner: Powersim Software AS, The Business Simulation Company

For updated details, please visit the Society website at:
<http://www.systemdynamics.org>

Deadlines and Key Dates

June 18, 2004 - Conference registration deadline.
July 23, 2004 - Final deadline for late registrations accepted on a space-available basis (no on-site registration).
July 25, 2004 - PhD Colloquium, Policy Council Meeting.
July 26, 2004 - Oxford Conference Opening!
August 27, 2004 - Deadline for final paper versions for CD-ROM Proceedings.
September 2004 - CD-ROM Proceedings mailed to conference registrants.

PhD Colloquium at Oxford

Dear students, faculty and all other practitioners,

This year the fourth System Dynamics PhD Colloquium will be organized at the main conference in Oxford on Sunday July 25. Learning from and elaborating on past experiences, we feel a separate colloquium will have benefits over a “standard” parallel paper presentation because common problems related to PhD research in system dynamics can be identified and discussed in more depth, providing a unique opportunity for learning among all attendants.

This colloquium will bring together PhD students working on foundations, techniques, tools, and applications to system dynamics and give them the opportunity to present and discuss their research. Participation from experienced faculty and others in the wider system dynamics community is a vital element for the colloquium to fulfill its objective and provide a constructive and diverse atmosphere to the students.

Information will be updated on the PhD Colloquium website: http://www.angelfire.com/sd2/sd_colloquium, accessible through the official System Dynamics Society 2004 conference website.

We hope you can attend!

PhD Colloquium Organization,
Burak Guneralp
PhD Candidate/Graduate Research Assistant
guneralp@uiuc.edu

Dept of Natural Resources and Environmental Sciences
University of Illinois at Urbana-Champaign
1102 S. Goodwin Ave. Turner Hall W-515
Urbana IL 61801 USA

Thursday Workshops

Following is a list of tentative workshop titles (and presenters) to be offered at this year’s conference. For further workshop information and updates, please go to the [conference website](#).

Title: Using Kalman Filtering to Compare Data and Model Behavior,
Presenter: Bob Eberlein

Title: ExTrain[®]: Management Training Platform for Simulation-based Learning and Knowledge Management,
Presenters: Imrana Umar and Senthil Natchimuthu



The Dining Hall at Keble College, Oxford

Title: Reaching Out to Others - Helping “Dynamic Virgins” Understand With Models and Microworlds, **Presenter:** Kim Warren

Title: Wielding the “Choice Pipeline” for Stakeholder Development in Strategy Dynamics Projects, **Presenter:** Kim Warren

Title: Integrated Systems Methodology for the Mapping, Measurement, and Modeling of Knowledge Based Processes, **Presenters:** Peter Vanderminde and Markus Schwaninger

Title: Planning Health and Social Care Services for Older People in North West London Using System Dynamics, **Presenters:** Douglas McKelvie and Steve Arnold

Title: Making Creativity Deliberate, **Presenter:** Dennis Sherwood

Title: Recognising Cybernetic Principles Manifested in Self-Organising Systems, **Presenters:** Alfredo Moscardini, Steve Brewis, and Leonie Solomons

Title: Technology Adoption Strategies in Energy Production, **Presenter:** David P. Kreutzer

Title: Methods to Make Your Simulation Run on the World Wide Web, **Presenter:** Michael Bean

Title: Using Semantica as a Scaffold to Systems Thinking, **Presenter:** Richard Langheim

Title: Riding the Seven Waves: Mastering Supply Network Dynamics, **Presenters:** Henk Akkermans, Wiebe Cnossen, and Paul Bogerd

Title: Starting a System Dynamics Program in Your School For Students Grades K Through 12, **Presenter:** Diana Fisher

Title: MacroLab: Model Facilitated Learning of Macroeconomics, **Presenter:** David Wheat

Title: Fast-track Strategic Modeling, **Presenter:** Dennis Sherwood

Modelling Assistance Workshop

In recent years, there has been a modelling assistance workshop at the International System Dynamics Society conferences (many thanks to Jack Homer for establishing this and Paul Newton). The forthcoming conference will also include such a workshop.

The objective of the workshop is to enable anyone to discuss any aspect of system dynamics modelling they may be undertaking with experienced modelling coaches. Topics could include assessing the applicability of system dynamics, conceptualisation, detailed formulation, analysis and communication.

We will be following the successful approach of assigning coaches to modellers needing assistance. It is intended that these will be one-on-one sessions and we will match the most appropriate coaches to the modellers' needs.

In the first instance I would like to invite any one who would like to get access to experienced coaches to contact me so we can assess demand. This is a great opportunity for you to solve any issues you may have.

In addition, we need coaches to come forward and offer their services. This will commit you for only a few hours. This is a rewarding way to support the system dynamics community and feedback from previous workshops has shown just how much people appreciate their time with the coaches. We anticipate that the workshop will run at some point during the core conference period (Monday – Wednesday).

Please contact Dave Exelby (dave.exelby@hvr-csl.co.uk) for more details or to register your interest.

Announcing the System Dynamics Society 23rd International Conference **BOSTON 2005** **July 17 - 21, 2005**



Conference Venue

The Seaport Hotel in historic Boston offers the finest meeting destination facility on the city's vibrant harbor. It is in the heart of Boston's Seaport District overlooking the breathtaking panoramic view of Boston Harbor and the city skyline. It is located within minutes of the airport, financial district and the downtown area, filled with restaurants, shops, museums and attractions. Public spaces at the Seaport have wireless Wi-Fi access and each guest room is equipped with complimentary Internet/VPN access at T-1 speed. For detailed information about the Seaport Hotel please visit: <http://www.seaportboston.com>

Program

The conference will bring together diverse perspectives on the application of system dynamics to broaden perspectives and foster dialogue and debate.

The conference program will consist of plenary, parallel, poster and workshop sessions demonstrating the state of the art in the theory and application of system dynamics. In addition, panel discussions, special interest group sessions, student colloquia, events of historic interest, vendor displays, exhibits, demonstrations, Society business meetings and other related gatherings will be scheduled. The conference schedule will provide time for relaxed social and professional interaction.

Submissions

Papers may be submitted from January 2, 2005 to March 18, 2005. Submissions must be in English and should be 5 - 30 pages in length. Abstracts will be accepted and considered for poster presentations only. Submission of models and other supporting materials is encouraged in all cases.

Contacts

Program Co-chairs:

John D. Sterman and Nelson P. Repenning
 MIT, Sloan School of Management
 Cambridge, Massachusetts USA
 E-mail: isdc05@mit.edu

Workshop Chair:

Jack B. Homer, Homer Consulting
 Voorhees, New Jersey USA
 E-mail: jhomer@comcast.net

Conference Manager:

Roberta L. Spencer, Executive Director
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Deadlines and Key Dates (tentative)

July 26, 2004	Conference Announcement and Call for Papers and Sessions.	June 1, 2005	Tentative program schedule.
January 2, 2005	Opening date for presentation submissions and workshop proposals.	June 17, 2005	Early conference registration deadline and hotel room registration deadline.
March 18, 2005	Paper submission deadline and Workshop proposals due.	July 17, 2005	PhD Colloquium and Policy Council Meeting.
May 2, 2005	Notification of acceptance.	July 18, 2005	Boston Conference Opening!
May 4, 2005	Session proposals due.	August 19, 2005	Final papers for CD-ROM Proceedings.
May 9, 2005	Final abstracts due for Proceedings.	September 2005	CD-ROM Proceedings mailed out.

For updated details, please visit the Society website at: <http://www.systemdynamics.org>

Sponsor News

Atrivé

Atrivé is proud to join the ranks of System Dynamics Society sponsors. We are strategy consultants and work mainly for housing corporations, municipalities, schools and institutes for care for the elderly. Atrivé is the legal successor of Marco Polis Advies, the client of Prof. Vennix in the housing associations east and west cases.

We provide our services in an ever more integrated fashion, with more system dynamics and scenario planning so that our clients can face the complex challenges of 21st century society. Our core businesses are strategy and organizational development, housing market and urban transformation, finance, human resources, construction and real estate management. We also offer top-market interim managers.

We recently carried out a successful group model-building project in the region of The Hague. We hope to report on it at the 2004 conference in Oxford. The central theme of the project was to balance green field housing construction, transformation of run-down housing estates and the impact of these two processes on the social housing market. An interesting aspect is the setting with two client organizations: the federation of housing corporations, SVH, and the regional authorities, SGH. The project helped them to settle the discussion on appropriate policy interventions. The model is being used in many discussions now and is in the words of SVH president Crista Begeman "highly addictive."

Once more, we're proud to be a sponsor and looking forward to seeing you in Oxford!

Bolide

Bolide is a small, specialist consultancy located in Sydney, Australia. We work with a limited number of CEO's, typically assisting them when they take up new roles and seek to transform their organizations.

The foundation for our work is a universal, enterprise framework that supports a systematic organization review, leading to an integrated change program and targeted gains in profitability. The best results are obtained where the client resources the exercise and Bolide provides the guidance and support through an

investigation phase on to the startup of the transformation program.

We also use in-house profiling software to determine the underlying performance dynamics of any business. This helps to underwrite a business transformation by providing a fact base which augments the understanding derived through interviews and the rationale for targeted gains in profitability.

We have committed significant research and development resource to the development of the profiling software and our future is focused on the commercialization of the software.

Booz Allen Hamilton

Booz Allen Hamilton has a deep expertise in applying modeling and simulation for both public and private sector clients. System dynamics is a vital aspect of the firm's extensive modeling and simulation toolkit. The firm utilizes an integrated approach to help tackle complex problems in the areas of public health, international trade, energy, and budget and performance integration.

Recently, Booz Allen worked with the Global Business Coalition to Fight HIV/AIDS to develop a simulation of HIV/AIDS in India. Working with leading scientists from Emory School of Public Health and Brown University Medical Center, Booz Allen developed a simulation of the AIDS epidemic in India that accurately projected prevalence and mortality rates over 30 years. The simulation allowed decision makers to explore the public health and economic impacts of government and private sector prevention and treatment options. The simulation was used to drive a 2-day war game, which brought together over 200 senior leaders from government, international health organizations, and the business community. The end result was over 100 new initiatives and 53 proposed partnerships to fight HIV/AIDS.

Similar simulation efforts have been conducted to understand the impact of external shocks on the travel and tourism industry in Jordan, develop energy risk management strategies for the US Army, and to understand how resources affect performance for the Department of Labor. Booz Allen is committed to

helping clients understand and shape their complex environments through an interdisciplinary approach that brings system dynamics simulation together with statistical, econometric, and agent based tools.

Brand Management Group

Brand Management Group is a management consulting company specializing in marketing strategy and innovation. Our clients are leaders or challengers in their own defined sector: banking, insurance, communication services, travel, telecom services and IT services. Their common goal is to build brand equity. They all work with Brand Management Group because we enable executives to reach their target goals better and faster than any other management bystanders.

System dynamics is an important and fundamental part of our practice. We are by no means experts in system dynamics, but we use causal loop diagrams in the early phases of a strategy processes. It represents a “language” that makes it possible for executives to “dive” from everyday events - to understand the underlying system that drives their key performance variables. That is, in our world, the variables that drive customer loyalty, customer profitability, income and most importantly, brand equity. We apply the basic tools presented in Peter Senge’s *The Fifth Discipline*.

One of the major challenges in developing leading brands is the ability to innovate their contents and value propositions. Brand Management Group has therefore launched “iLab” (The Innovation Laboratory), which is a toolbox that delivers a structure that enables the organization to develop, receive and qualify ideas from employees or interest groups. The largest bank in Norway, DnB NOR, and The Norwegian Post are two examples of clients that have introduced this toolbox.

We would like to challenge members of the System Dynamics Society to create an arena for sharing information and experience concerning marketing dynamics. As far as we know, there is no such arena – but there should be!

For further information, please contact our Managing Partner, Henning Tunslie (henning@brandmanagement.no) or visit our website: <http://www.brandmanagement.no>

Centre for OR & Applied Statistics, University of Salford

In June 2003 the State Planning Unit (SPU) of the government of the state of Sarawak (E. Malaysia) and CORAS entered into a research contract of two years’ duration to construct a system dynamics model which would be used to assist the SPU and senior ministers in formulating policies for the economic and social development of the state to 2020. This research project also involves our Centre for Economics Research.

Following a first full visit to Sarawak in September 2003, the focus of the model was agreed to be a consideration of how best to manage the state’s transition from a resource-based economy (p-economy) to that of a knowledge-based one (k-economy).

Subsequently a second visit was made in February 2004 at which the education sector in the prototype model was presented. This live demonstration achieved much in generating enthusiasm for the project within a group of civil servants who knew little about system dynamics. The first of two training sessions for a selected group of them had been held at Salford in January 2004.

The model will be considerably enhanced over the next several months, working from the template provided by an agreed high-level map of the overall system.

Forio Business Simulations

Forio Business Simulation’s web simulation software, Forio Broadcast, has been upgraded.

Forio Broadcast provides everything you need to get a simulation running on the web. You can use Broadcast to develop your model, create an HTML or Flash interface to your model, and host your simulation--all without being a web expert.

Forio Broadcast 2.0 provides enhancements that make it simpler for developers to build sophisticated and user-friendly simulations. In addition, users of Broadcast Professional and Broadcast Enterprise will find a variety of new and enhanced features that make it easy to protect, redistribute, and license simulations to other users and institutions.

Broadcast 2.0 contains several enhancements to simulation operation.

- Simulation users can complete a single simulation run over multiple days or weeks instead of being limited to a single block of time.
- Simulation facilitators can create special scenarios for users in a class or workshop and then review runs after they are completed.
- Multiplayer simulations allow multiple teams of users to interact within a single simulation run, for example in a competitive strategy simulation.
- Developers can set up time-limited trials, allowing potential customers to try a simulation before purchasing.
- Developers can create special simulation reports that are opened automatically in Microsoft Excel or Word.

Learn more about Forio Broadcast at: <http://broadcast.forio.com>

General Motors

Led by Nick Pudar and Dan Roesch, GM Strategic Initiatives (GMSI) is a staff of General Motors Corporation responsible for analyzing major strategic initiatives for the company. GMSI often develops detailed quantitative models of the automotive industry or specific aspects of it, in order to more accurately assess the likely impact of potential new strategies. Many of these are system dynamics models developed with the help of consultants Mark Paich, Lyle Wallis and Norm Torre of Decisio LLP. Recent topics range from internal cost driver studies to projections about the Hydrogen Economy and the transition to fuel cell vehicles. Phil Keenan (phil.keenan@gm.com) has submitted a paper to the upcoming Oxford System Dynamics Society Conference on the Enterprise Model, developed a of couple years ago to take a broad look at the corporation and its marketplace, combining internal activities such as engineering, manufacturing and marketing with external factors such as competition in the new and used vehicle marketplaces. Last year's Vehicle Development System model, looking at the design of new vehicles and the constraints inherent in managing a portfolio of expensive, long lead-time projects, came to fruition with the adoption by senior management of a key policy recommendation derived from the model. In addition, GMSI is now experimenting with a hybrid of system dynamics and

agent-based modeling, which allows the creation of more realistic simulation models and eases the task of explaining to the computer how the real world works. We are currently applying this agent-based simulation approach in a Human Resources model of the workforce, as well as in an analysis of consumer decision making behavior using click stream data from automotive websites.

Global Strategy Dynamics

Strategy Dynamics announces a one-day workshop in central London, 30th July 2004, the day after the Oxford conference.

Conventional strategy tools don't link business decisions to business results in a measurable, transparent way. Strategy Dynamics does.

This one-day course will introduce the key concepts of Strategy Dynamics to resolve strategic business challenges.

Included:

- All material/handouts and your own mobile white board
- Delivery by Professor Kim Warren and the Strategy Dynamics Solutions team
- Permanent license for MyStrategytm software and introductory session
- Microworld license for 30 days – an interactive learning game – you make the vital decisions!
- A copy of either "The Critical Path" by Kim Warren, "Competing for Choice" by Lars Finskud or "People Power" by Jeremy Kourdi and Kim Warren
- Refreshments and lunch
- A networking session between 5.30 – 7pm

As a member of the System Dynamics Society you will receive a 20% discount off the normal rate of £500. The course will be held in central London on the 30th July 2004.

For further information please contact Jules Wright at jules@strategydynamics.com or +44 (0) 207 886 8186.

High Performance Systems, Inc. (HPS)

On March 4, 2004, High Performance Systems, Inc. (HPS) of Lebanon, New Hampshire, announced a name change to isee systems. "Our new name and logo better reflect the visual nature of our products.

We help people to see the systems in their life, in their work, and in their studies. Our software enables you to see interconnections,” says President Jessica Richmond.

Barry Richmond, while an Engineering Professor at Dartmouth College, founded HPS in 1984. His mission was to make the world a better place by increasing people’s capacity for thinking, learning, communicating, and acting systemically. Since its inception, HPS has become the world leader and innovator in systems thinking-based software products and training.

“Our software gives people a powerful tool to generate insights, such as unintended consequences of an action or policy, and then to be able to try out different scenarios on a simulated practice field. Making mistakes on practice fields is a lot less painful, costly, and embarrassing than making them in real life,” Ms. Richmond explains.

Today, isee systems is a thriving, privately held company with substantial global reach in the spheres of business, education, and government. isee systems will continue to pursue its mission by focusing on creating new versions of the software for its core customer base of business consultants and managers (ithink software users), and university professors, high school teachers, students, and researchers (STELLA software users). isee systems will also remain focused on providing systems thinking training workshops throughout the year.

isee systems will continue to operate from its headquarters in Lebanon, New Hampshire, USA. For more information, visit <http://www.iseesystems.com> or call +1 603 643 9636.

HVR Consulting Services Limited

HVR expands its successful Operating and Support Cost Analysis Model - OSCAM suite of tools for the US Department of Defense with the release of OSCAM Air v2.0.

OSCAM is a joint US and UK program providing rapid assessments of the operating and support costs of high value capital assets and their component systems. Using system dynamics, OSCAM represents the business processes that drive costs and their relationship to management policies in order to assess the impact of alternative maintenance strategies and

operating policies on the cost and availability of these assets. More information can be found at <http://www.oscamtools.com>

HVR is one of the UK’s leading suppliers of system dynamics modelling and consultancy for businesses and governments worldwide.

isee systems

New May 2004! Strategy Training from the makers of ithink

Managing from Clarity: Improving Business Performance with ithink

This innovative, hands-on approach to applying systems thinking to strategy was created and is taught by Dr. James Ritchie-Dunham, President of the Strategic Clarity Institute and visiting scholar at MIT.

Read what David P. Norton, President, Balanced Scorecard Collaborative, co-author of the best-selling *The Balanced Scorecard* and *The Strategy-Focused Organization* has to say: “Most organizations can’t execute strategy. Complexity is their enemy. A shared model (vision) of the strategy is the best way to cut through complexity. Unfortunately, developing clear and compelling visions to guide organizations is an art mastered by very few leaders. Are we condemned to wander aimlessly until a great leader develops a vision? System dynamics can make a science of visioning. Managing from Clarity provides a roadmap for introducing systems thinking to your organization. Read it; it’s a snapshot of how strategy will be managed in the 21st Century.” Training dates in Boston: September 20-22 or November 8-10.

For more information, or to register, go to: <http://www.iseesystems.com> or e-mail jrichmond@iseesystems.com or call +1 603 643 9636.

ITP Consultores

ITP Consultores is a young consulting firm with ten years in the Latin American market. It offers services to public entities and private corporations in strategy, regulation and organization. ITP Consultores has developed projects for corporations including renowned multinationals and multilaterals. So far, project assistance has referred to projects regarding billions of dollars.

ITP Consultores is positioned as the only firm with such capabilities in Venezuela and some other Latin American countries. ITP has developed a successful work helping top executives to manage top corporations and institutions through assistance, training and coaching. It has developed numerous Flight Simulators and Management Environments to help executives making decisions on businesses and complex issues.

ITP Consultores has developed a consulting approach that differentiates it from other consulting firms, through the due ownership by its clients of all its contributions and added value. It includes assistance and training to build up clients' capabilities to solve problems supported by system dynamics and develop a learning environment to continuously create value. This approach and its highly skilled team have let the firm develop long-term relationships with clients.

ITP Consultores is capable of supporting big projects for corporations in the region and has partnered successfully with firms to convey excellence services.

We are pleased to announce that ITP Consultores has partnered with Powersim Software AS for Latin America, including a role as Reseller. Our alliance with Powersim from Norway guarantees the highest level of assistance and service to our clients and to the system dynamics community in our region.

London Business School

The System Dynamics Group at the London Business School (LBS) is proud to be a conference sponsor this year. Specifically, LBS will sponsor the Special Plenary Session: Working Ideas, Insights for Systems Modelling - The Broader Community of Systems Thinkers. In 2001/02, a series of research meetings funded by EPSRC and organised by Lancaster University explored in-depth the relationship between hard and soft approaches to systems modelling. This plenary session will replay selected insights from the meetings of particular relevance to the system dynamics community. Talks by Peter Checkland, Mike Pidd and John Morecroft will be followed by discussion led by Kim Warren. Please join us in July at Keble College in Oxford for this much anticipated session. We look forward to seeing you there!

MIT System Dynamics Group

System dynamics at MIT continues to thrive. There have been a number of new developments over the past year.

1. Introductory system dynamics course now available on MIT's Open CourseWare website

The syllabus, lecture schedule, and assignments for the introductory course in system dynamics here at MIT are now available through MIT's Open CourseWare project, at

[http://ocw.mit.edu/OcwWeb/Sloan-School-of-Management/15-](http://ocw.mit.edu/OcwWeb/Sloan-School-of-Management/15-874Fall2003/CourseHome/index.htm)

[874Fall2003/CourseHome/index.htm](http://ocw.mit.edu/OcwWeb/Sloan-School-of-Management/15-874Fall2003/CourseHome/index.htm). Anyone, from instructors to those interested in self-study, can use the materials for free in any noncommercial setting. (The terms of use are described at:

<http://ocw.mit.edu/OcwWeb/Global/terms-of-use.htm>.)

The text for the course is Business Dynamics (see <http://www.mhhe.com/sterman>); the specific readings to accompany the course and assignments are described on the OCW site. We include the syllabus and assignments, but not assignment solutions. We want to encourage people to learn system dynamics, but we also want to preserve the utility of the material for faculty who may wish to use the materials in their courses. Making lecture notes and solutions available undercuts the effectiveness of the material for both instructors and students.

If you are an instructor or considering offering a course in system dynamics, we can arrange for you to receive the *Business Dynamics Instructor's Manual* and access to the Instructor's section of the Business Dynamics website. Send an e-mail describing the course you teach (or will be teaching), including the university/dept/program, information about the course, approximate number of students, and so on, to jsterman@mit.edu. Please note: for the same reasons we don't post solutions to the assignments online, access to the *Instructor's Manual* is restricted to instructors.

2. System dynamics now part of core curriculum for Sloan Fellows program

Last year the Sloan School redesigned its flagship executive education program. Known formally as the MIT Sloan Fellows Program in Innovation and

Global Leadership, the program has been completely redesigned to integrate the existing Sloan Fellows program with MIT's Management of Technology program to create an exciting full year degree program for high-potential individuals who will create and lead the innovative organizations of the 21st century (see <http://mitsloan.mit.edu/execed/fellows/index.php>). The introductory system dynamics course is now a key part of the required curriculum.

3. Ph.D. program

We welcomed Dan McCarthy, a faculty member at the US Military Academy, West Point, and Tim Quinn, a Stanford alum with experience in health care, to our Ph.D. program.

OLM Consulting

OLM Consulting is continuing to undertake a wide range of system dynamics consulting in health and social care in the UK. The main theme is to assist health purchasers in commissioning health and social care from providers. We are doing this in four London boroughs and two counties. Typical issues are a) community services to manage chronic disease and avoid the need for hospitalisation, b) using intermediate care to divert from hospital, c) minimising use of tertiary services and out-of-area placements and d) how to configure post-acute services to maximise independence.

A second theme is in using system dynamics models round alternative configurations for mental health services. We are doing this at a national level and also for two local health communities. Typical issues are the relationship between different levels of service and models of prevention versus treatment, crisis services and voluntary versus compulsory admission to hospital.

Other strands of work include:

- Computer simulation round workforce planning.
- System dynamics to underpin research projects. We are hoping to set up a project of this kind with a focus on public health and the impact of environment (community cohesion, housing, etc) on mental health and crime.
- System dynamics to underpin future strategies - for instance, regeneration projects, growth areas for housing/jobs in southern England.

- This would typically involve modeling alternative forms of care to find what is most sustainable.
- System dynamics as part of the management toolset for anyone dealing with complex operational situations. We would like to embed these sorts of techniques in the NHS and social care.

Pegasus Communications, Inc.

Join us at the 14th Annual Pegasus Conference, "Building Collaborations to Change Our Organizations and the World: Systems Thinking in Action," December 1-3, in Cambridge, Massachusetts.

The challenges of transforming our organizations--and the world--are too complex and our interests too interdependent for any one individual, organization, or nation to provide a solution. By applying a systemic lens to the collaborative process, we can increase effectiveness in reaching broad and lasting solutions to our problems and achieve the results we really care about. Keynote speakers include: Peter Senge; Caterpillar Vice President Chris Schena; a team from the Greyston Foundation Bakery; Deborah Meier, educator and author of *In Schools We Trust*; and quantum physicist and author Danah Zohar.

Powersim Solutions, Inc.

Last year Powersim introduced the second of its two – ExTrain[®] and ExPlan[®] – system dynamics based simulation platforms to the market. ExTrain[®], which was introduced two years earlier, is Powersim's web-based Executive Training and Strategy Communication application platform. It is designed to help organizations improve the collective capacity of their managers to execute strategy and create value for their stakeholders through management training. ExTrain[®] has helped our clients to foster dialogue, collaborative team learning and the creation of a shared vision among their managers. Among the most frequent users of the ExTrain[®] platform are Discover Business Services (the merchant side of Discover Financial Services), The American Red Cross, and Novellus Systems.

ExPlan[®] is Powersim's application platform for managing the corporate strategy and scenario planning process. It creates a risk-free simulation environment that allows managers to set corporate

goals, factor in perceived external pressures to properly anticipate scenarios, and experiment with alternative strategies by allocating resources. ExPlan® creates an integrated web environment that allows corporate managers and policy makers to engage in collaborative planning for risk mitigation and revenue assurance, and to explore current and future options and opportunities. It also includes a full implementation of a dynamic Balanced Scorecard.

ExTrain® and ExPlan® have made it possible for many who may never build system dynamic models to be able to use models built by experts in the field in ways that have profoundly affected their understanding, influenced their decision making processes and in some cases helped them to change some of their management practices.

Powersim Solutions is currently seeking partners who are interested in licensing either or both applications platforms for delivering their simulation models for management training, decision support or strategy and scenario planning. For more information about partnering and licensing ExTrain® and ExPlan®, please contact:

Powersim Solutions
585 Grove Street,
Herndon, VA 20170
Phone: +1 703 467 0910
E-mail: solutions@powersimsolutions.com or
sales@powersimsolutions.com

Project Performance Corporation

Project Performance Corporation (PPC) specializes in applications for the public sector. PPC develops custom decision support tools for complex projects and programs in the areas of policy analysis, environmental analysis, program management, and national security. In the past year, PPC has responded to defense initiatives in the areas of homeland security and program management. For example, PPC developed a baggage-screening model that simulates baggage flow in all US airports. Other activities include a prototype of an acquisition strategy model for innovative projects and programs.

PPC was founded in 1991 and has grown steadily to more than 125 employees located across the USA. The company is located in Northern Virginia, just

outside Washington, DC. For information, please visit our website at <http://www.ppc.com> or contact:

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E-mail: glove@ppc.com

Toshiro Shimada, Japanese System Dynamics Chapter

The Japanese Chapter now has two Research Subcommittees as follows:

1. Business Process Dynamics Research Subcommittee:
Chairman: Prof. Michiya Morita (Gakushuin University) (13 members)
Contents: Analytical Research for Supply Chain in Various Industries
2. Japanese Economy Research Subcommittee
Chairman: Prof. Hidenori Kobayashi (Chuo University) (6 members)
Contents: Formulation of Japanese Economy Model and Analysis of Japanese Current Economy

University of Bergen

Asc. Prof. Katherine Goodnow has joined the System Dynamics Research Group at the University of Bergen. Her academic background is in Media Sciences with a specialization in documentaries, TV production, screenwriting and new media. She will strengthen the group's emphasis on knowledge dissemination by way of system dynamics based interactive learning environments.

Late 2003, the University of Bergen signed a collaborative agreement with the Millennium Institute.

This agreement is expected to help the System Dynamics Group build capacity in system dynamics based national planning, such as in the use of Millennium Institute's T21 for that purpose. It will allow the System Dynamics Group in Bergen to benefit from Millennium Institute's vast network of international institutions, CEO's and governments across the world. As part of this collaboration, M.

Phil. Matteo Pedercini of the Millennium Institute offered an intensive 14-day introduction to T21 as part of our education this spring. This successful event will form the basis for a full course on national modeling offered next year.



Present at the event, hosted by the Royal Norwegian Embassy in Washington D.C., were the Norwegian Minister of Education and Research, **Kristin Clemet**, **Dr. Gerald Barney**, Millennium Institute, **Rector Kirsti Koch Christensen** and University Director **Kåre Rommetveit** from the University of Bergen.

Dr. Gerald Barney will spend six weeks as Research Fellow at the University of Bergen this year.

Twenty Master Students and one PhD candidate are expected to graduate from the System Dynamics Group in Bergen this year.

Ventana Systems, Inc.

Ventana Systems, Inc. is pleased to announce the availability of version 5.3a of Vensim. We have added in the ability to navigate to other models, other applications and even websites from within a sketch. We have also enhanced the ability to replicate elements of model structure with controllable naming modifications and the ability to replace substrings in selected variables. The new reference mode capabilities in Vensim mean that you can put your reference modes down directly on top of model structure. Not only does this allow you to compare model behavior with your reference modes, but you can actually use reference modes to drive inputs. This provides an excellent platform for experimentation with mental integration.

Ventana continues to make Vensim PLE available for educational use without charge and has a family of products to meet all modeling needs. A number of enhancements have recently been made to Vensim PLE, including support for multiple views and the

ability to handle data and we will be making a number of additional changes to PLE to increase usability without adding undue complexity. The revolutionary SyntheSim capability in all Vensim configurations brings structure and behavior together allowing you to instantly see the results of changes to model assumptions. SyntheSim will work with any model, automatically providing you with sliders and showing you how model behavior changes as you move them. You can also effortlessly cut feedback loops by overriding the behavior of different model variables to localize the sources of dynamics.

More details on Vensim are available from our product website, <http://www.vensim.com> Ventana also provides consulting services and has deep experience in a number of areas including corporate strategy, supply chain control, project management and production control. For more information visit our corporate website, <http://www.ventanasystemsinc.com/>

Ventana Systems UK

Ventana Systems UK undertake consultancy and provide various levels of training and support in system dynamics and Vensim. We support the sale and maintenance of Vensim in the UK and have developed the complementary Sable interface application.

In the past year, we have completed work in the Pharmaceutical, Petrochemical, Government, Manufacturing and Transport sectors and continue to provide consultancy services around the world.

Our Vensim courses have been redesigned, with the advanced course now a one-day add-on to the introductory course, while we continue to provide ad-hoc training support specifically designed to meet client requirements.

We have created a Vensim, Sable and System Dynamics Forum on our website <http://www.ventanasystems.co.uk/forum> designed to help Vensim users and anyone interested in system dynamics to interact more closely with us, and with each other. Recently, the forum has incorporated the System Dynamics Mailing List Archive, providing a quick and easy means to search over seven years of system dynamics conversations.

To discuss consultancy or training support or for further inform please contact:

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Wiley InterScience is the dynamic online content service from John Wiley & Sons delivering the full text of over 360 leading professional, scientific, technical and medical journals plus major reference works.

Members of the System Dynamics Society already have access to the online edition of the *System Dynamics Review*, giving access to all existing years of data – over eight years' worth of content!

Now, in addition, users can have instant, full-text access to an extensive collection of journal articles, book chapters, and most reference work articles available on Wiley InterScience with ArticleSelect™ and Pay-Per-View.

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Whether you are an industry-specific practitioner or a member of a consulting firm, creating powerful, flexible simulation models is essential to your success. That's the thinking behind AnyLogic, the total productivity solution from XJ Technologies.

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As you'd expect, each of our solutions comes with an unwavering commitment to customer service and your ongoing satisfaction and includes comprehensive documentation and ongoing support.

For more information about our company and our services contact us at <http://www.xjtek.com>

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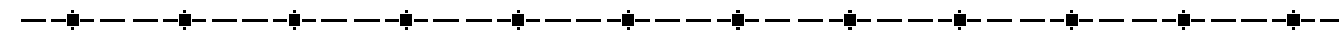
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