# SYDIC:

# SYstem Dynamics - Italian Chapter

## ABSTRACT (\*)

In spite of its potential strengths and different attempts made in the passed to apply it to business research, management education and practice, still today System Dynamics is far from being sufficiently exploited both in academic and in industrial context in Italy.

SYstem Dynamics - Italian Chapter born offers the opportunity to:

- ✓ Investigate the present S.D. scenario in Italy;
  - ☆ University and research centers where S.D. courses are present
  - ☆ Companies where there have been or are having experiences with S.D. methodology
  - ☆ Practical applications by consultants in both educational and company model construction
- ✓ Underline problems met proposing S.D. approach
- ✓ Express practical results obtained
- ✓ Evaluate potential "levers" for S.D. diffusion
- (\*)This work has been done in collaboration with members of SYDIC

## SYDIC:

## SYstem Dynamics - Italian Chapter

- ◆Habib Sedehi
- ◆1996 International System Dynamics Conference
- ◆Cambridge Mass (USA)
- ♦July 21-25, 1996

## Chapter Objectives

- ◆ Diffusion of System Dynamics methodology
- ◆Promotion in developing learning and research for interaction between S.D. and related fields
- ◆ Establishing operative links with other S.D. communities/groups/chapters
- ◆ Development of educational programs through S.D. methodology
- ◆ Sponsoring S.D. events (seminars, workshops,...)

#### Italian S.D. Scenario

- ◆ Questionnaire
  - ✓ Who works with S.D.
  - ✓ Which type of organization
  - ✓ When started
  - ✓ Work area using S.D.
  - ✓ How came to know
  - ✓ Why S.D. approach
  - ✓ Which tools use
  - ✓ Problems met

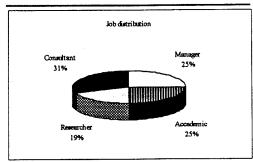
## **Summary:**

- ♦ Chapter Objectives
- ♦ Present Activities
- ◆ Italian S.D. scenario
- ◆ Inquiry Results

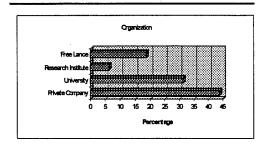
### **Present Activities**

- ◆ Regular Plenary meetings
  - ✓ Activity reports
  - ✓ S.D. & related field practitioner interaction
- ♦ Work groups
  - ✓ S.D. & B.P.R.
  - ✓ S.D. & Management Strategy Control in SME
  - ✓ S.D. Tools Benchmarking
- ◆ Chapter promotion
  - ✓ News letter & Publications
  - ✓ Internet WWW
  - ✓ Workshops & Seminars organizations

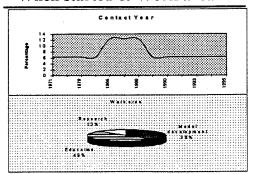
#### Who works with S.D.



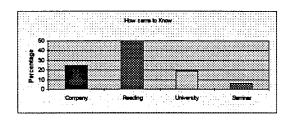
## Which type of organization



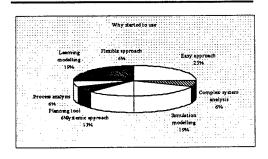
## When started & Work area



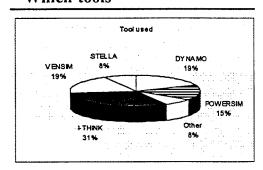
How came to know



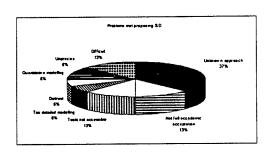
Why S.D.



Which tools



## Problems met



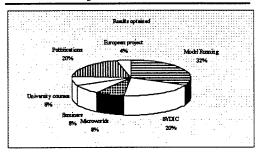
#### Results obtained

- ◆ Realization of models running in different contexts
- ◆ Constitution of SYDIC
- ◆ Teaching S.D. in University courses
- Promoting thesis in S.D, involvement in European projects
- ◆ Realization of a Dynamic Model as an educational game
- ♦ Books on S.D.
- ◆ Presentation of papers in International conferences

#### Results obtained

- ◆ Realization of Microworlds & Business games for Management education
- ◆ Realization of Dynamic Models in logistic & productive process
- ♦ Use of methodology and examples in seminars
- ◆ Realization of functional models
- ◆ Use of methodology and examples in University courses
- ◆ Sell of S.D. tools in different contexts

#### Results optained



## S.D. diffusion "levers"

- ◆ Formal University & Business School courses
- ♦ More thesis in S.D.
- ◆ Massive seminars for managers
- ◆ Continuos workshops & seminars in S.D.
- ◆ SD Italian review or news letter
- ◆ Creation of SD models data base
- ◆ Integration with other simulation approaches
- ◆Education tools based on S.D.

#### S.D. diffusion "levers"

- ◆ Use of Internet (www) in S.D. knowledge diffusion
- Firm & Univ. interaction (thesis)
- ◆ Development of general models to be personalized
- ◆ Seminars for specific users
- ◆ Models classification (strategic & operative).
- ◆ Seminars for SME managers
- ◆ Less costs of S.D. tools & model development
- ◆ European Projects

#### S.D. diffusion "levers"

- ◆ Papers to be published, in not only S.D. reviews
- ◆ Realization of tools (languages) easy to use for end user
- ♦ Tools to help integration with other approaches
- ◆ Interaction with national & international research centers
- ◆ Academic involvement in related fields
- ◆ More documentation distribution