

## A Very Brief Introduction to Systems Thinking Concepts and Tools

### SYSTEMS CONCEPTS

**Mental Models** : Our beliefs, assumptions, and ideas about how things work. Mental models are often hidden, even from ourselves.

**Change Over Time** : There are patterns in the world that we ignore especially slow changes that go unnoticed but are very dangerous. These patterns are usually generated by interconnectedness and once seen can help avoid mistakes.

**Feedback** : How can I see the real world operating in "circular causality", not just cause and effect.

**Leverage** : How can I solve problems with least efforts?

**Behavior Over Time Graphs** : Used to visualize how variables change over time.

**Causal Loop Diagrams** : Used to visualize causal relationships.

**Iceberg** : Helps us to see events, patterns, structures and mental models.

**Ladder of Inference** : Gives awareness of how we add our own meaning to what we hear.

**Archetypes** : A set of templates that a practitioner of Systems Thinking usually uses to understand and explain a real life situation.

### SYSTEMS TOOLS

Rajinder and Zareer have been teaching Systems Thinking for the last 10 years. They have had interactions with Peter Senge, have undergone training by Steve Kipps from USA and Sheila Damodaran from Singapore. They are currently serving as faculty at the department of Systems Thinking at SCMLD.

## Annual Calendar for Systems Thinking workshops

2013	April		
	May	ST 1 17th and 18th	
	June	DM 1 14th and 15th	
2013	July		
	August	ST 1 9th and 10th	DM 1 23rd and 24th
	September	ST 2 7th and 8th	DM 2 21st and 22nd
2013	October		
	November	ST 1 8th and 9th	DM 1 22nd and 23rd
	December		
2014	January	ST 2 7th and 8th	DM 2 21st and 22nd
	February	ST 1 7th and 8th	DM 1 21st and 22nd
	March		
		ST 1 = Systems Thinking level 1	DM 1 = Dynamic modeling level 1

### Venue

**Sadhana Centre For Management & Leadership Development**  
A wing, Shop No 306, Shopper's Orbit, Vishrantwadi, Pune 411015.

**Phone** : +9120-2567 2026 / 7  
**Contact** : Zareer Aga 9890922936  
**Email** : zareer.aga@gmail.com  
**Website** : www.connector.org.in

**Faculty** : Rajinder Raina  
Zareer Aga

**Dates** : As per calendar

**Timings** : 9.00 am to 5.00 pm

**Investment** : Rs 6,000.00 for Level 1  
Rs 10,000.00 for Level 2

(including Lunch, tea, snacks and reading material for 2 days)



## LET US EXPLORE HOW TO LOOK AT THE WORLD WITH A FRESH LENS

Department of Systems Thinking

Offers For the First Time in Pune  
Year round Two-Day Workshops

Co-facilitated by:

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**Sadhana** Centre for Management &  
Leadership Development (SCMLD)

## What exactly is a system?

System. We hear and use the word all the time. "There's no sense in trying to buck the system," we might say. Or, "This job's getting out of control; I've got to establish a system." Whether you are aware



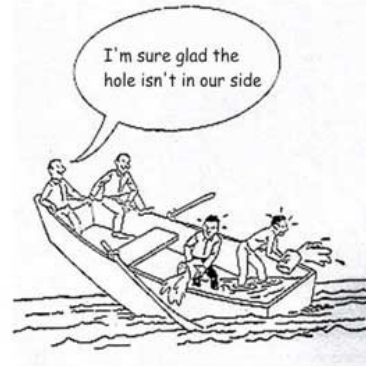
of it or not, you are a member of many systems - a family, a community, a church, a company. You yourself are a complex biological system comprising many smaller systems. And every day, you probably interact with dozens of systems, such as automobiles, ATM machines, retail stores, the organization you work for, etc. How would we know one if we saw one, and why is it important to understand systems?

Most important, how can we manage our organizations more effectively by understanding systems?

The workshop explores these questions and introduces the principles and practice of a quietly growing field: **systems thinking**.

## What is Systems Thinking?

Systems thinking is one of the key management competencies for the 21st century. As our world becomes ever more tightly interwoven globally and



as the pace of change continues to increase, we will all need to become increasingly "system-wise."

This workshop gives you the language and tools you need

to start applying systems thinking principles and practices in your own organization.

## Who Should Attend?

This course is designed for knowledge workers and decision-makers in industry, government and not-for-profit sectors including CEOs, managerial and policy staff.

Educationists from teachers to Institutional managers from Pre primary to post graduate Institutes.

Individuals involved in strategic and policy decisions will find the workshop of particular interest.

No previous experience with Systems Thinking or computers will be required.

## Why Systems Thinking

People who learn Systems Thinking report that it sharpens and clarifies their entire world view: Confusing, disconnected "snapshots" of life start to make more sense when understood as patterns of change over time.

The effects of undesirable patterns may be lessened and the influence of beneficial patterns may be increased by deeper understanding of "what is going on here". The sudden surprises, hidden resistance, and underlying harmony generated by feedback relationships become less mysterious.

Many of us have some sense that "everything is connected to everything else".

Systems Thinking provides tools to better understand, see and communicate these connections.

## Course Connect

- Understanding what is a System
- Understanding Characteristics of Systems
- Learning Habits of a Systems Thinker, how to think systemically?
- Application of Systems Thinking in real life
- Systems thinking language - Story telling
- Paradoxes and paradigms - creating the essential paradigm shift
- Cause - effect and feedback. The Causal loop view
- Mental models - Our view of the world and how to expand it.
- Using The tools - Iceberg, Causal loops, Ladder of inference, BOTG, Archetypes