

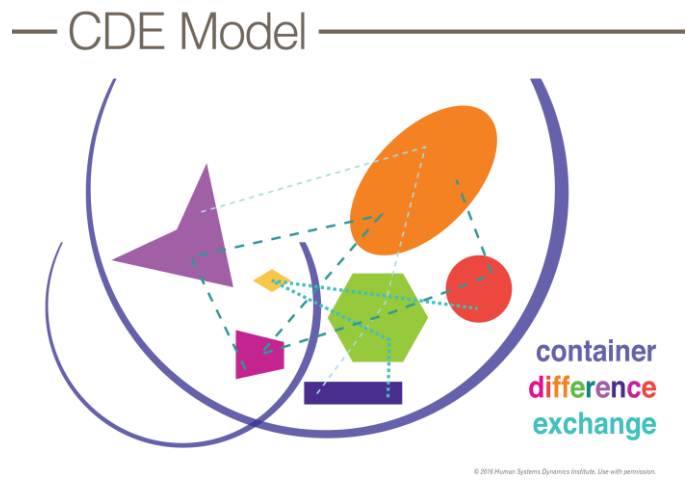


HUMAN SYSTEMS  
DYNAMICS INSTITUTE

## CDE Model

### Description of CD

The CDE Model explains the three system conditions that influence the speed, path, and direction of self-organizing systems. The conditions shape the patterns that make up the reality of your world.



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### What?

Using the CDE Model you can look deep into the dynamics of patterns around you. When you use the CDE Model to explore the patterns in your life and work, you identify conditions that give rise to those patterns, and can speculate on how changing conditions can shift the patterns.

### So What?

The patterns that shape our lives—the success, the joys, the challenges, the opportunities, and just the patterns of everyday life and work—emerge as we move through the complex human systems where we live, work and play. These patterns are shaped by the interdependent influences of three conditions in those systems. The emergence of patterns is governed by the interplay among the conditions:

- ▶ **Container:** Similarities that contain the system while patterns emerge (C);

Nothing is intractable.

- ▶ **Differences:** The significant distinctions that hold tension and have greatest influence on decision and action (D); and
- ▶ **Exchanges:** Connections in the system that ensure the movement of information, energy, and other resources (E).

When you can explain the dynamics of your human systems at this level, you increase the options to take wise action to influence those patterns toward greater coherence and resilience.

## Now What?

Use the CDE Model in your next sticky issue to:

- ▶ Understand the dynamics of the patterns that shape the problem.
- ▶ Identify options for action to influence those patterns.
- ▶ Take action to change the conditions and bring about change, and then see what's next.

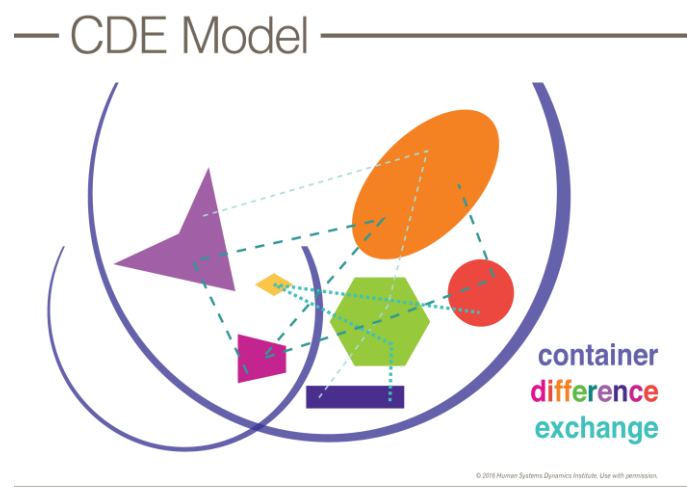


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## CDE Model

### What is the Purpose of the CDE Model?

The Eoyang CDE describes the three **conditions** that determine speed, direction, and path of a system as it self-organizes. These conditions shape and express options and interactions of agents as they self-organize. The conditions bind them together such that they will connect across the differences in the system and generate patterns of behavior and thought. Glenda Eoyang discovered these conditions in her research about and with organizations. The three conditions, elegantly simple, are brief and powerful.\*



### So What Can You Learn from the CDE Model?

If you use the CDE to explore the dynamics of your system, you can see how patterns emerge. That level of understanding offers you multiple options for taking action to influence those patterns toward greater resilience and sustainability.

- ▶ **Containers** hold the system while patterns form. Containers may emerge from physical boundaries, such as a room or a building. A container may be a psychological or emotional connection that gives rise to patterns. A strong, charismatic leader, organizational silos, the love of a child, fear of the future—all of these are containers that can shape patterns of interaction and decision making. A container may be as simple as the agenda for a meeting, creating the length, time, content, and discussion. Or a container may be as complex as the history, social agreements, shared experiences, and language of a cultural

\* For more information, see [www.hsdinstitute.org](http://www.hsdinstitute.org).

Nothing is intractable.

community.

As you look at the tension points in your system, notice how those patterns are held together. Is there too much constraint in the container? Do you need more time for the meeting? More space for the party? Broader acceptance of new ideas? All of those point to the need to expand the container. At the same time, you may notice that there is not enough constraint. Change is not happening fast enough. People get sluggish or irritable in a meeting because they are bored or have time to talk about things that don't really matter. This points to the need to tighten the container by focusing purpose, scheduling less time, or inviting fewer people.

- ▶ **Differences** refer to the significant “differences that make a difference” in the system. Difference in the system provides the potential for change and the emergence of patterns as the agents negotiate and accommodate the diversities that separate them. While a highly diverse system usually has too many differences to count, the important shifts will happen around those differences that are most critical to the system’s overall functioning.

Differences you pay attention to are generally differences in degree or differences in kind. Difference in degree is indicated quantitatively and qualitatively—better or worse, more or less, faster or slower, bigger or smaller. For instance, there may be ten people in a training room; each one a unique and special human being. Differences such as the degree of skill, amount of understanding, and influence of role will establish patterns of interaction that could dominate the learning session. On the other hand, difference may be represented by the kind of diversity that’s present: leadership skills vs accounting skills.

Increasing, decreasing, or introducing new differences will shift the conditions and change the emergent patterns in a system. Consider a party where everyone is talking all at the same time, in many languages, about a number of topics. That system can’t settle into a single, strong pattern. It’s chaotic and unconstrained. On the other hand, at a party like that, imagine that someone walked over to the piano and began to play a popular tune. That difference might invite some attendees to step toward the piano and begin singing along. Others may begin to dance or move along with the music. Still others may discontinue their conversations, turning toward the music to listen and enjoy. The shift in that one difference—music or not—invited people to change their disparate behaviors and shift the pattern.

- ▶ **Exchange** is any flow that generates change in the system. For example, exchanges can inform the system about its own. Feedback, dialogue, entertainment, conversation are all examples that come to mind first because you live and work in verbal communities. Other examples of exchange include

multiple ways the system or the agents in the system share information, energy, and other resources. Rules inform the agents in the system of what is acceptable or allowed activity. Experiences help agents form opinions and build knowledge. Games and sports, competition and collaboration, giving and receiving are all ways the system engages in exchanges that shape patterns. Measurement and regular reporting are all exchanges that influence business. Planning and budgeting are important exchanges, too.

Consider the party that was calmed by the piano player. Too many exchanges made the party chaotic and “messy.” The piano music had the impact of constraining the number and kinds of exchanges, so that multiple and disparate patterns could settle into a few dominant patterns: listening, singing, and dancing.

## **Now What Can the CDE Model Do to Influence Patterns in Your System?**

Because the three conditions are massively entangled with each other, it is only necessary to shift one condition to bring about change in the other two. For example, when you make a container smaller, generally the differences become more significant, and the exchanges happen faster. It is critical to remember, however, that, while you can anticipate the change you might trigger, you can neither predict nor control just what the consequences of that change will be. HSD practitioners and professionals who use the CDE Model to help them understand and influence the dynamics of their systems use Adaptive Action\* to step into ongoing cycles of decision making and action taking.

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\* For more information, see [hsdinstitute.org](http://hsdinstitute.org).