



## **Adaptive Action: Setting Conditions for System Change**

*by Royce Holladay*

Did you ever, when you were a child, have one of those “fortune telling crystal balls”? The one I had was heavy plastic about the size of a grapefruit. The ball itself was opaque plastic with a window where you could see into the murky depths of the unknown. When you asked a question and turned the ball over, a small shape would miraculously appear with words inscribed that held the key to your future. Then you would wait breathlessly for whatever words of wisdom might appear. “It is highly likely.” “Chances seem bleak.” “Promising.” are some of the phrases, as I recall them. But there was one phrase that seemed more powerful and promising to me: “Conditions seem favorable.” Now at seven or eight years old, I had no idea what “conditions” were, but the fact that they seemed favorable was always a good sign.

**What?** As an HSD professional, the concept of conditions is still powerful for me, but much less mysterious in many ways. Glenda Eoyang, founder of the field of HSD, has brought a laser-sharp focus to the concept of “conditions” in complex adaptive systems. Agents in a complex adaptive system respond to their environment by self-organizing to form new patterns of interaction and decision making. In human systems, we see this when individuals and groups come together and experience the tension that emerges across the differences that define them. As those individuals and groups shift their connections and interactions to relieve those tensions, patterns of behavior and decision making emerge. Those patterns, in turn, influence future behaviors and decision making of groups and individuals in the system.

*I worked with a team of middle managers once who were, in their own ways, each skilled and committed individuals. They led the people in their departments and progressed well in their work. I came to know them when they were being asked to re-organize to eliminate the silos of their work and provide customer-focused services in seamless and coordinated ways. Over time they had developed ways of working that just did not contribute to the new expectations for collaborative service.*

*They were in constant conflict, with no real focus of their disputes. They contradicted each other and showed varying levels of disrespect for each other in their team meetings. They had engaged in team building activities to establish norms and meeting processes and agreements. However, in the longer term, they did not follow those norms and continued to engage in competitive and dysfunctional behavior.*

In her research, Eoyang identified three conditions that exist in all complex adaptive systems to shape the speed, path, and direction of self-organization. She describes those as:

- Container (C) - Containers hold the system together in such a way that agents can begin to connect and generate patterns. A container can be anything that will draw the agents in the system together: a shared idea, bounded geographical space, common experiences and affinities, a strong charismatic leader. Any physical,

emotional, socio-political, or conceptual feature can bound a system so it will begin to self-organize.

- Difference (D) - Differences allow patterns to emerge. The differences can be of any sort, but they have to be significant to the players in the system. They might be a difference in kind or type, such as the difference between skill in math and skill in dancing. Or they might be difference in degree, such as more or less skill in math.
- Exchange (E) – Exchanges are the ways the parts of the complex adaptive system connect to each other to generate patterns, Exchanges between and among agents in a system enable them to share resources such as time, energy, information, money, or ideas.

*When we work with a group we do a CDE analysis where we identify the containers, differences and exchanges at work in the system. We do this by asking them to describe their challenges and interactions and chart the conditions we hear them discuss in their stories. The following table reflects an early analysis of this group of middle managers.*

<i>Container</i>	<i>Differences</i>	<i>Exchanges</i>
<i>Team of leaders</i>	<i>years of service</i>	<i>weekly meeting</i>
	<i>areas of work</i>	<i>monthly project reports</i>
	<i>background and focus of work</i>	<i>email</i>
<i>Definition of service</i>	<i>support and nurture</i>	<i>regulations and policies</i>
	<i>regulation and monitoring</i>	<i>records</i>
	<i>medical model vs assets based</i>	<i>electronic management system for records and ifno</i>
<i>Approach to supervision</i>	<i>closely monitoring and micromanaging</i>	<i>360 reviews from their employees and each other</i>
	<i>loosely connected and empowering</i>	<i>HR records</i>
	<i>years of experience as a supervisor</i>	<i>Feedback and conversation among staff they supervise</i>

**So what does this tell us?** Container, difference, and exchange (CDE) are conditions that influence a self-organizing process and shape how quickly the process moves forward, how messy the path is, and how clear the resulting pattern is. Each condition can shift the pattern, based on its characteristics.

- **Containers** can be large or small, and the smaller, more tightly contained a system is, the faster the patterns will emerge.
- **Differences** can be many or few; and they can be large or small. Too much difference or too many differences will prevent the system from settling down into a pattern. Too little difference will prevent any pattern from emerging.
- **Exchanges** that are tightly coupled—fast, frequent, information-rich—generate stronger patterns than exchanges that are too loosely coupled.

*From our analysis of the team of middle managers, we know the basis of a few of their conflicts. There are unresolved differences that continue to cause tension in the team. Those differences could be addressed in a number of ways and we can plan those interventions based on what we see in the CDE analysis.*

**Now what can we do?** These explanations of how the conditions can influence pattern formation in the self-organizing process help us to see and understand the dynamics of our

systems. It is in using CDE as a method that we can inform action to make take wise action. Once those conditions are clarified and named, it becomes so much easier to identify one or two actions that will have the greatest potential to address the issue and shift the patterns.

*Given what we see in the CDE analysis, we knew we could intervene by developing and supporting a common definition of client service, by addressing the differences in supervision style, or by finding a common focus and agreement about their collaborative focus and measurable outcomes.*

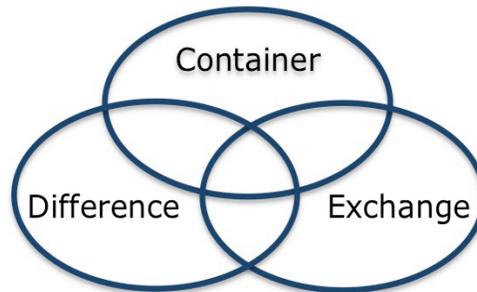
*What we chose to do was to first work with them to identify how their different perspectives about service shaded their interactions. We helped them articulate those differences without pointing fingers. We were able to facilitate their understanding of each others' perspectives and come up with agreements about their interactions. We taught them how to question without blame, state their positions without defensiveness, and communicate in clear and unambiguous messages. Then we followed up with short-term observation and coaching until they believed they were ready to move to the next challenge.*

*At that point we went back to the analysis to see if they were still in the same place with their other challenges and disagreements.*

So, with the Eoyang CDE, you no longer really need a crystal ball. You can use the CDE to see the pattern as it emerges and to understand how conditions shape that emergent pattern. The Eoyang CDE can help you recognize and name conditions of systems. Then you can take intentional action to influence those conditions to shape change in complex adaptive systems through Adaptive Action.

For more on Eoyang CDE or Adaptive Action, visit the HSD Institute wiki at [wiki.hsdinstitute.org](http://wiki.hsdinstitute.org).

**Eoyang CDE**  
*Model and Method*  
to  
*See, Understand, Influence Complex Systems*



**Container**

Large

Small

**Difference**

Many,  
Large

Few,  
Small

**Exchange**

Loosely  
Coupled

Tightly  
Coupled

From the examination of the C, D, E, you

1. Identify where each condition maps on the continuum to find out where you are.
2. Identify where you want to be on the continuum.
3. Choose which condition you can shift most easily.
4. Take action to create that shift.
5. Evaluate the impact of your action and decide what steps to take next.