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Practice Article 7

"Going Deeper: Moving from Understanding to Action”

by Richard Karash & Michael R. Goodman

This article explores in more depth one of the six steps involved in thinking systemically about business issues.

We welcome your questions and comments at practice@appliedsystemsthinking.com
The March 1995 Toolbox column outlined a six-step process for applying systems thinking to a specific issue (“Six Steps to Thinking Systemically.” V6N2). One of the steps was listed as “Going Deeper” into the Issues.” In this follow-up article, Richard Karash and Michael Goodman explore the Going Deeper approach in more depth, explaining each of the steps of this process and illustrating how it can provide a more focused insight into analyzing a systemic problem.

Once a group has created a systems diagram that reasonably explains the problematic behavior they have been experiencing, they often ask, “Now what do I do?” To move things forward at this point, it is usually necessary to bring in the other learning disciplines—mental models, team learning, personal mastery, and shared vision—to augment the systems thinking approach. The generative questions provided by applying the other disciplines to a problem can help a team move from understanding to action. After all, the aim of any systems thinking analysis is not just to gain better understanding, but to improve the situation as well.

The Going Deeper™ process is a 4-step model for taking a deeper look at underlying issues in order to create an intervention strategy (see “Going Deeper™ Questions”). Below, we explain each step, revisiting the Bijou Bottling case that was introduced in the March article.

**Preliminary Work**

Before beginning the Going Deeper process, you should have developed a causal loop diagram that reasonably explains a problem or issue you are trying to understand. For example, at Bijou Bottling, the team was struggling with chronic late shipments. When they mapped out the problem, they discovered a “Shifting the Burden” archetype at work: the company’s commitment to superior customer service resulted in heroic, 11th-hour interventions to move shipments out. Over time, however, the company became addicted to crisis management. Not only did this take attention away from more fundamental system-wide improvements, but it also contributed to more crises and reinforced the perceived need for crisis management (see “Bijou’s Crisis Management Dilemma”).

Once you have captured the relevant causal feedback loop structures, as Bijou did in identifying an archetype, you can then begin the Going Deeper process listed below. It is likely, however, that you will cycle back to do more diagramming, since this is an iterative process.

### 1. Explore the Purpose

Having a clear purpose in mind is essential for any systems thinking effort to be successful. Many of us have experienced the power of someone asking the question, “What are we really trying to do here?” The Going Deeper process helps to remind us of the larger vision by asking two questions: (1) in the broadest context, what results do we really want from this system? and (2) compared to that goal, what results are we getting now? Answering these questions clarifies the tension between vision and current reality.

In the Bijou case, the team said, “What we really want is for all this to run smoothly—for us to be a real team together, and to be delighting our customers. We also want our work to be more fun and not so hard on the people here. Right now, we’re consumed in fire-fighting, crisis management, and internal conflict.”

### 2. Examine Mental Models

Mental models are important elements of the structure that may be producing the undesirable results. One way to surface underlying mental models is to ask, “Assuming that everyone in the system is acting reasonably and responsibly from their point of view, what is the thinking (beliefs, assumptions, rationale) that leads to the choices being made?”

![Bijou's Crisis Management Dilemma](image)

The Bijou team discovered a “Shifting the Burden” dynamic at work: customer problems were solved with heroic “11th-hour” efforts (B1), rather than with improvements in the production/distribution system (B2). Over time, people at Bijou “learned” that heroism is rewarded, which reduced their willingness and ability to address system-wide problems, and also increased the company’s dependence on heroic efforts (R3).
You can then map these mental models on your causal loop diagram by adding “thought bubbles” to the links that represent those choices (for more on this process, see “Mental Models & Systems Thinking: Going Deeper into Systemic Issues,” February 1995).

At Bijou, there were widely held mental models around issues of commitment, “hustle,” and doing “whatever it takes” to make things right for the customer. People would stop at nothing when goods were needed for a special promotion. Along with this focus came a more subtle message, however, which might be expressed as, “Don’t bother me unless it’s important—unless it’s a crisis!” This unspoken assumption made it hard to get people to focus on long-term improvements in operating processes and systems.

3. Acknowledge Personal Responsibility

It’s so much easier to see how other people are creating problems than it is to see our own role in them. Therefore, we always need to explore our personal responsibility for the problems we are seeing. What are we doing that might be perpetuating the current problem?

At Bijou, people began to see that they were contributing to the “Shifting the Burden” structure by devoting all their energy to problem-solving, rather than dealing with the underlying operational issues. They all assumed that “someone else” would take care of the deeper problems. By seeing the problem as coming from other departments, they had been blocking the very cross-functional teamwork that was necessary to improve the situation. They had come to believe in their powerlessness to affect the “system,” when in fact their own involvement was the only route to improving it. Moving away from powerlessness toward a creative orientation is a fundamental requirement for making change.

4. Expand the View

Before designing and implementing an action plan, it is important to examine the situation in terms of the larger system. First, it is helpful to see the problem in a historical context, by looking forward and backward in time. Too often, a problem situation is viewed as a snap-shot—a unique moment in time, disconnected from the past or future. To get a sense for the historical context, try drawing graphs of the important behaviors. Ask yourself, “Have we been here before?” Then project into the future the type of behavior you expect to see if your intervention is successful. What will be some clear signals that your efforts are working?

Another way to see the larger system is to reexamine the causal connections in the original diagram and see if additional elements can be added to the loops. Look especially for potential unintended consequences that might result from the proposed solutions. At Bijou, looking at the larger system helped them realize that customers had learned how to work the system—they quickly learned that in order to get attention, they needed a crisis, so they became adept at building “fires” (loop B4 in “Customer-Driven Crises”). Managers at Bijou also realized that all of the expensive fire-fighting was creating cost problems, which diverted resources away from system improvement and created even more internal friction.

Redesigning the System for Improvement

The purpose of the Going Deeper questions is to move toward action, seeking a change in the system that will produce better results. People also generally want an improvement that will be self-sustaining and will change the pattern of behavior over time—not just a one-time blip that fades away.

At Bijou it was clear that in order to solve their delivery problems they needed to weaken the crisis loop (B1) and strengthen the improvement loop (B2). Accomplishing this would require a change in attitude—a shift away from fire-fighting toward really working on the system. It would also require a sense of personal responsibility and involvement on everyone’s part—no more hiding behind the belief that change is “someone else’s job.” And it would take real understanding of how the system works, which could be gained by mapping the relevant processes through additional loop diagrams.

Systems thinking is not just a technical discipline or a “silver bullet” that can make a problem simply disappear. Used in conjunction with the other learning disciplines, it is a powerful tool for individual, team, and organizational change. The Going Deeper questions seek to bring together aspects of all the learning disciplines in order to move a team from understanding to action.

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Purpose
• In the broadest context, what results do we really want?

Notice the differences

• Compared to this, what results are we getting now?

My Personal Responsibility
• How am I responsible for the system functioning the way it is?
• In what ways am I perpetuating this structure?

Mental Models
• Assuming that everyone in the system is acting reasonably and responsibly from their point of view ...
  
  What is the thinking that leads to the choices being made? What beliefs? Assumptions? Rationale?

• What thinking lets the system persist as it is?

Expanding Our View
• Have we been here before? What does the past suggest about today’s situation?

• Add additional elements to your diagram—extend the cause and effect chains. Try moving both forward and back. What might be other unintended consequences? Are there any additional loops?

• Now, simplify your diagram—the aim is rich, concise communication of the important dynamics.