



Applied Systems Thinking

Use the Power of Structure to Create Lasting Change

**From the AST Library
Practice Article 5**

“Identifying and Breaking Vicious Cycles”

by David Peter Stroh

This article explains how to surface the most easily understood dynamic in Systems Thinking and transform it into an engine for success.

We welcome your questions and comments at
practice@appliedsystemsthinking.com



IDENTIFYING AND BREAKING VICIOUS CYCLES

BY DAVID PETER STROH

Perhaps the most prevalent and accessible form of systems thinking for people new to the concept is the vicious cycle. Examples:

- An epidemic accelerates in proportion to the number of people exposed, which in turn increases the likelihood that the epidemic will spread even further.
- Downsizing is likely to reduce an executive's ability to generate revenue (not just costs), which in turn decreases profits and increases pressure to downsize yet again.
- Acts of violence perpetrated by one party in a war stimulate acts of revenge by the other party, which in turn lead to violent retaliation by the first party and an ongoing escalation by both sides.

Although people are easily caught in vicious cycles, they often do not see these cycles as endless spirals and do not know how to escape the dynamic.

This article:

- Describes an easy way to *identify vicious cycles* that people are caught in;
- Explains a four-step process to *transform this dynamic* into an engine of success instead of failure;
- Will *expand your thinking* beyond simple vicious cycles to enrich your

TEAM TIP

Look in magazines, newspapers, and current events websites for examples of vicious cycles. Keep your eyes open for phrases such as "It just keeps getting worse," "downward spiral," and "self-fulfilling prophesy" (from the "Systems Clues in Everyday Language" pocket guide by Linda Booth Sweeney).

understanding of common problems and identify specific interventions for complex systems.

Doom Looping

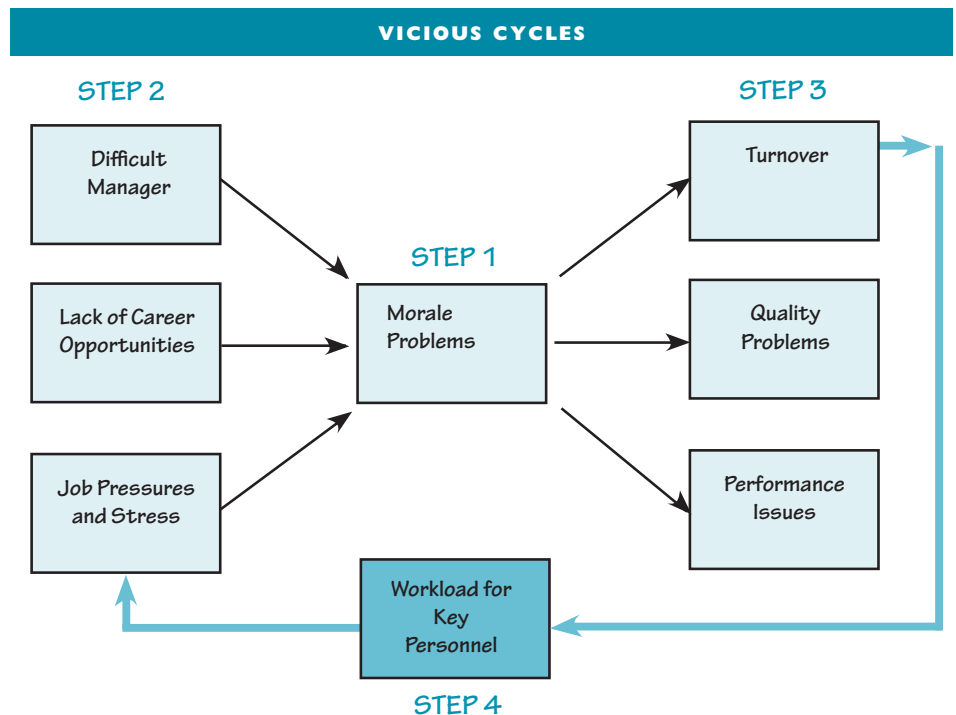
One easy way to identify vicious cycles we are caught in is called "doom looping," originally developed by Jennifer Kemeny. Doom looping has four steps:

1. **Identify a problem symptom** that concerns you because it seems to get worse and worse over time. For example, your symptom might be *morale problems*.
2. **Identify three immediate and independent causes** of the problem symptom. For example, three immediate causes of morale problems might be

a difficult manager, lack of career opportunities, and job pressures and stress.

3. **Clarify three immediate and independent consequences** of the growing problem symptom. For example, three immediate consequences of morale problems are *turnover, quality problems, and performance issues.*

4. **Finally, show how at least one of the consequences exacerbates at least one of the causes.** The connection might be direct or indirect. For example, the consequence of *turnover* is that it increases *workload for key personnel*, which in turn increases *job pressures and stress*, thereby increasing morale problems and *turnover* even further (see "Vicious Cycles"). This dynamic is a



One easy way to identify vicious cycles we are caught in is called "Doom Looping."

vicious cycle or, in systems thinking parlance, a reinforcing feedback loop.

Transforming Vicious Cycles

Once you have identified a vicious cycle, you can look for where to *break the cycle* and ideally transform it into a positive engine of growth. This involves four steps:

1. Identify at least one link in the vicious cycle that is governed by people's beliefs or assumptions

instead of hard-wired into the system. This is a link that can be broken. To clarify this link, ask, "Is this cause-effect link inevitable, or can it be influenced by changing how people think and behave?"

Example: "Do morale problems necessarily have to lead to high turnover?" Here the answer is "No," because the existence of morale problems could just as well stimulate the active engagement of your best people—the ones most likely to leave first when things get bad—in turning around the organization. By contrast, once turnover occurs (especially of good people), the workload of key personnel is likely to increase and, as a result, so will job pressures and stress, and then morale problems. These links are more hard-wired into the vicious cycle.

2. Redirect the causal factor in the weak link by creating a new goal. Ask, "What do we want to accomplish when this causal factor appears?"

Example: "We want to establish a highly effective organization led by our best people at all levels."

3. Clarify the corrective actions required to bridge the gap between where you are and the new goal.

Example: "In order to increase morale and achieve the goal of an effective organization led by our best people at all levels, we will ask these people to reassess the organization's strengths, weaknesses, and opportunities and lead task forces to capitalize on the most critical areas."

4. Implement reinforcing actions that sustain the new momentum.

Because managers tend to be pulled by multiple demands, they often take their attention off of a new initiative once it appears to be moving forward. In order to ensure that the change in direction is sustained, it is important to implement actions that reinforce this direction over time.

Example: The task force leaders can benefit from individual coaching and team learning meetings that enable them to overcome organizational resistance, deal with surprises, and increase each others' effectiveness. This process should be followed by timely implementation of their recommendations and adjustments in the organizational infrastructure to support new ways of working.

Addressing More Complex Dynamics

Because vicious cycles are relatively easy to identify when things go wrong, we are tempted to see them everywhere we look. However, focusing on many vicious cycles tends to confuse people and limit their ability to identify effective interventions. There are two ways to make sense of multiple vicious cycles and key in on high-leverage interventions:

- The first is to *simplify multiple vicious cycles* by identifying the four to seven variables that people believe are most critical to the problem. Next, depict how these variables interact with each other by drawing no more than two or three loops. Once you have simplified the number of loops, use the above method for breaking and transforming vicious cycles to develop an intervention strategy.
- The second approach is to *recognize that vicious cycles tend to disguise and dominate more complex dynamics*. These dynamics can often be depicted initially as systems archetypes. Archetypes provide a rich, comprehensive explanation of what is happening while still being easy to understand. In addition to providing clarity that is both sophisticated and accessible, systems archetypes enable people to target more specific

high-leverage interventions.

Example: If a vicious cycle is created when people use a quick fix to reduce a problem symptom, draw the "Fixes That Backfire" (also known as the "Fixes That Fail") archetype, and apply interventions for producing a sustainable solution (see, for example, *Systems Archetypes Basics: From Story to Structure* by Daniel H. Kim and Virginia Anderson, Pegasus Communications, 1998). If one or more vicious cycles increase dependence on a quick fix and undermine your ability to implement a more fundamental long-term solution, show the "Shifting the Burden" archetype and use interventions designed to support this solution.

Other dynamics where vicious cycles tend to dominate include:

- **Success to the Successful**—one part of the system performs better and better over time at the expense of decreasing success of another part;
- **Accidental Adversaries**—the unintended consequences of actions taken by two potential collaborators undermine each other's effectiveness;
- **Competing Goals**—efforts to achieve too many goals for too many different parties reduce their ability to accomplish any goal satisfactorily;
- **Escalation**—two parties continuously amplify their activities to defeat the other without ever achieving a sustainable advantage.

In sum: Identifying vicious cycles is often a great place to start applying systems thinking to chronic, complex problems. At the same time, people can often gain richer insight and even greater leverage by testing for and depicting the systems archetypes that produce these cycles. ■

David Peter Stroh is a principal of Applied Systems Thinking and founder and principal of www.bridgewaypartners.com. David is an expert in applying systems thinking to organizational and social change. You can contact him at dstroh@appliedsystemsthinking.com.

This article is adapted with permission from the Applied Systems Thinking Library.
© Applied Systems Thinking 2006