



# Applied Systems Thinking

*Use the Power of Structure to Create Lasting Change*

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## Building the Foundation for Change By David Peter Stroh

Systems Thinking can be a powerful approach for enabling organizations to achieve lasting solutions to chronic, complex problems. However, change always comes at a price. When applying systems thinking, the promise of sustainable change comes at the price of asking key stakeholders to take responsibility for having contributed to the very problem they want to solve. **Leading people to understand how they have contributed, albeit unintentionally, to the problem requires building a strong foundation for change.**

**Building a strong foundation for change entails five steps:**

1. Defining the problem you want to solve or goal you want to accomplish
2. Identifying key stakeholders, those who influence or are affected by the current situation and stand to gain or lose by altering it
3. Clarifying the motivations of each of these stakeholders for change
4. Assessing pre-conditions for change in the system
5. Beginning to engage key stakeholders individually and collectively

### Define the Problem

Systems Thinking is most applicable when you want to solve a chronic, complex problem or achieve a significant goal that affects multiple stakeholders. **It is helpful to define the issue in terms of a focusing question such as:**

- Why does this problem keep happening?
- Why, despite our best efforts, have we not been able to achieve this goal?

For example, a community seeking to end local homelessness asked, “Why, despite our best efforts, have we not been able to reduce the number of

homeless people in our community?” A computer peripherals company asked, “Why are we not able to achieve our time-to-market and product reliability goals simultaneously?” The senior management team of an international human rights organization wanted to know, “Why, despite our best efforts, is their continuing tension between management and staff in our organization?”

### Identify Key Stakeholders

One simple way to identify key stakeholders is to first **list those individuals or groups who affect or are affected by the problem you want to solve**. For example, the Ten-Year Planning Committee to end homelessness in a county of 100,000 people identified the following stakeholders:

- Public officials
- Business leaders
- Community leaders
- Social service providers
  - Non-profit organizations
  - Government agencies
- Service providers dedicated to serving homeless people
- Homeless people
- Local foundations

Next, consider each stakeholder’s current level of support for change and the desired level of support you seek from them. Rate the levels of support between -3, indicating a strong resistance to change, and +3 signifying active sponsorship of the change. For example, public officials were considered to be a 1 on the scale (concerned but not taking a leadership role), and the Ten-Year Planning Committee wanted them to take a strong leadership role (3 on the scale). Business leaders in this community were considered neutral about the change at first (0 on this scale), and the committee wanted them to be very supportive (2 on the scale). Interestingly, one of the temporary shelters dedicated to serving homeless people was rated as -1 because it was concerned about having to give up its evangelical mission, and the other committee members wanted this shelter to be at least supportive of the project (1).

You can capture this information in the first three columns of Figure 1 below.

**Figure 1: Analyzing Key Stakeholders**

Name	Current Support (-3 to +3)	Desired Support (-3 to +3)	Their Motivation	What You Can Do

### Clarify Their Motivations for Change

The next step is to **identify each stakeholder's motivation for change**. Motivation might come from one or both of the following sources:

- People envision clear **benefits** to changing the status quo
- People are concerned about the **costs** of *not* changing

In the first case you are clarifying people's goals for change, their aspirations or ideal for the future. In the second case you identify their fears of a current situation continuing as it is or getting worse if nothing is done to change it. For example, public officials in the community cited above were only minimally supportive of the change because the homeless shelters had already been located outside the downtown area where the problem would have been more costly to local businesses. At the same time, they acknowledged that taking care of all people in the community was the right thing to do, and they were concerned that deteriorating economic conditions could make the problem worse if it were not addressed more aggressively.

You can capture this information in column four of Figure 1.

### Assess Pre-Conditions for Change

There are three **pre-conditions for change which must be satisfied in order for the problem to be solved** in a sustainable way:

1. Senior management is aligned around a shared vision of what they want to achieve

2. Key stakeholders have the ability to manage tradeoffs between the short- and long-term consequences of their decisions
3. Stakeholders are willing to invest time and/or other resources for learning - especially about their own responsibility for the current situation

Effective change is predicated on senior management in an organization or key leaders in a community being aligned around a vision of what they want to accomplish. Without an agreed-upon direction, no solution can be effective. If this condition does not exist at the outset, you should consider engaging the leadership in identifying their common values, developing a shared vision, or - in highly conflicted situations - developing scenarios of what might happen in the future without any intervention on their part and preparing them to be successful under a range of possible futures.

Systems Thinking asks people to consider what they can do in the short-term that supports their long-term success, and the answer to that question is not always obvious. It challenges conventional wisdom that anything one does to improve a situation in the short-term will also improve conditions in the long-term. In fact, most quick fixes create unintended consequences that neutralize initial gains or actually make matters worse in the long run.

Therefore, decision-makers who are able to consciously manage tradeoffs between the short- and long-term consequences of their actions are best positioned to take advantage of the insights that Systems Thinking offers. If you cannot engage decision-makers directly at first, it helps to still consider their views on the current situation and motivations for change from the beginning. The better you understand the world from their perspective and incorporate their views into your analysis, the more likely they will pay attention to your work over time.

The third pre-condition is that stakeholders be willing to invest their own time and/or other resources to not only learn what is happening and but also to dig more deeply into *why* it is happening. The reason is that many chronic problems remain unsolved because people make incorrect assumptions about why the problem exists - and hence what should be done to solve it. Most significantly, they fail to see their own role in contributing to the problem they are trying to solve.

Instead of being willing to uncover their responsibility for the problem, they either “just want the answer” or blame others for the problem and assume that the solution lies in changing how others behave. The key is to provide both a carrot and stick for engaging stakeholders in the change process and for encouraging them to discover their responsibility for the current situation. One carrot involves expressing compassion for people’s inability to solve the problem until now despite their best efforts to do so. Another is pointing out

that the benefit of taking responsibility is gaining power, i.e. people have much more control over their own thinking and actions than they do over how others think and behave. The stick entails confronting people with their own ineffectiveness by asking them, “If you are so clear about the solution, why haven’t you been able to implement it?” This challenge often humbles people into considering that they might not be as knowledgeable as they think they are.

### Begin to Engage Stakeholders

The fourth step in building a foundation for change is to begin to **engage stakeholders individually and collectively in the problem-solving process**. Gaining stakeholders’ individual support for the change means showing them how being involved will bring them the benefits of change or avoid the costs of not changing that concern them. For example, public officials in the community were encouraged by nationwide figures showing that preventing homelessness was much less costly - as well as more humane - than returning people to permanent housing. Business leaders were engaged by discovering that many homeless people held jobs while others had valuable skills in construction and other vocations. You can document your ideas about how to engage stakeholders individually in column five of Figure 1.

Since a systems analysis helps stakeholders see how they are connected with each other in often non-obvious ways, it also helps to plan early on how to engage them collectively as well as individually. There are three strategies to consider:

- Gather data from all stakeholders individually and feed the results back to them in the form of a causal loop diagram that shows how their behaviors are inter-connected
- Support one stakeholder group in developing its own diagram to highlight the unintended consequences of its own actions
- Work with a cross-functional group of stakeholders to develop a comprehensive view of the problem that members can then share with their constituents

Gathering data from all stakeholders individually and then feeding back the results was the approach used in the community seeking to end homelessness. We interviewed 50 people who represented the various community groups to understand their views on why homelessness persisted in the community and developed a comprehensive systems map based on their input to answer this question.

Supporting one stakeholder group to develop a diagram illuminating the unintended consequences of its own actions has been an approach we have used both with senior management teams and functional leadership teams. For example, in one company the senior management team wanted to understand

the obstacles that would prevent it from developing and implementing a new strategic direction. The systems map clarified their own tendencies for firefighting instead of strategic management and for excluding certain functions that would have to be more actively involved if system-wide change were to succeed. In another company the corporate leadership team of the company's telecommunications function sponsored an investigation into why it had difficulties in working with the company's field organizations.

Developing a cross-functional team from the beginning requires strong senior level sponsorship. The benefit is that all the functions contributing to and affected by the problem are involved early on and can think together about a complex problem that touches all of them. This approach was used by a company that was re-engineering seven different business processes simultaneously and wanted to develop a cross-functional view on how planned improvements in one process would be supported or undermined by changes contemplated in other areas. Another company used cross-functional teams to understand why it was having such difficulty achieving its time-to-market and time-to-volume goals.

### Putting It All Together

**In summary, building the foundation for change begins with asking several questions:**

1. What is the problem you want to solve or goal you want to achieve?
2. Who are the key stakeholders? How supportive are they now, and how supportive do you need them to be?
3. What are their motivations for change?
4. What pre-conditions for change are already in place, and what can we do to develop the remaining conditions?
5. How can you begin to engage stakeholders individually and collectively?

With a strong foundation in place, you are likely to be much more effective in motivating people to make the individual and collective changes required to solve a complex problem or achieve a significant goal in sustainable ways.

### **About the Author:**

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