

What is Systems Thinking?

One of the major breakthroughs in understanding the complex world of organizations is the field of systems theory. The field studies systems from the perspective of the whole system, its various subsystems and the recurring patterns in the relationships between the subsystems. Systems theory has greatly influenced how we understand and change organizations.

The application of this theory is called systems analysis. One of the major tools of systems analysis is systems thinking. Basically, systems thinking is a way of helping a person to view systems from a broad perspective that includes seeing overall structures, patterns and cycles in systems, rather than seeing only specific events in the system. This broad view can help you to quickly identify the real causes of issues in organizations and know just where to work to address them. Systems thinking has produced a variety of principles and tools for analyzing and changing systems.



See “Benefits of Open Systems View” on page 141 to understand the many benefits of having a systems view.

By focusing on the entire system, consultants can attempt to identify solutions that address as many problems as possible in the system. The positive effect of those solutions leverages improvement throughout the system. Thus, they are called “leverage points” in the system. This priority on the entire system and its leverage points is called whole systems thinking.

Remember information about the open systems model? That model puts priority on recognizing the interaction between a system and its external environment. The model, in conjunction with whole systems thinking, is a powerful means to analyzing and changing systems.

Systems theory has evolved to another level called chaos theory. In this context, chaos does not mean total confusion. Chaos refers to the dynamics of a system that apparently has no, or little, order, but in which there really is an underlying order. In these systems, small changes can cause complex changes in the overall system. (In technical terms, chaos theory applies to complex non-linear dynamics systems.) Chaos theory has introduced new perspectives and tools to study complex systems, such as biological, human, groups, weather, population growth and the solar system.



See the resources in “Systems Thinking, Chaos Theory and Tools” on page 488 in Appendix D to learn more about systems thinking, chaos and tools.

Note that systems theory and systems thinking are not the same as being systematic. In the context of a consulting project, systematic is about setting goals, collecting and analyzing feedback about status of achievement of goals, and then adjusting activities to achieve the goals more effectively.

The tools and principles in this section of the Field Guide were selected because they are easy-to-understand and quick-to-apply when working with organizations.