

10 Useful Ideas on Systems Thinking

At the heart of systems thinking is the holistic principle of interconnectedness. I compiled the following list to make this core idea translatable to daily life. The ideas presented here are not meant to be the final word on the subject of systems thinking.

1. Everything is connected to everything else.

Real life is lived in a complex world system where all the subsystems overlap and affect each other. The common mistake is to deal with one subsystem in isolation, as if it didn't connect with anything else. This almost always backfires as other subsystems respond in unanticipated ways.

2. You can never do just one thing.

This follows from the preceding idea. In addition to the immediate effect of an action, there will always be other consequences of it that ripple through the system. Every action has unintended consequences.

3. Different people in the same structure will produce similar results.

Charlotte Roberts asks, "Who has the most influence on the performance of an ocean liner when it is out at sea in route to its destination?" Answer: The designer of the ship. A logical extension of this notion is: Don't try to control the players, just change the rules. If the system tries to make choices for people, the people will try to outwit the system. It is much more effective to change the rules of the game so that it is to most people's advantage to make choices that are good for the whole system.

4. A collection of things is a system if any one element can affect the performance of the whole.

There is no inherent end to the system. The boundaries of a system are arbitrary, defined by the observer. Systems analysis is finding connection in patterns. A threshold question in systems analysis is, "What level of the whole do you seek to know?" For example, it has been observed that business is part of a larger system constructively understood as such. For example, business decisions affect the economy, environment, community, and industry, as well as the mental health and well-being of employees and their families, and the wealth of investors.

5. From "either/or" to "both/and".

We often err when we think in mutually exclusive opposites. We consider our next steps as being either along the path of solution x or solution y. Breakthroughs come when we consider the possibilities of blending both x and y. Considering both the whole and its parts, bridging in some lively way

what appear to be opposites, forces us to consider situations from multiple perspectives.

6. There is no "away" to throw things to.

Dennis Meadows of the University of New Hampshire said, "When you see whole systems, you start noticing where things come from and where they go. You begin to see that there is no 'away' to throw things to."

7. The easiest way out is the fastest way back in.

A common blunder is to grab for a solution prematurely without appreciating the underlying root causes driving a situation. A systems thinking sequence to reach a deeper understanding is to first consider the event, then to peel back a layer to see if it is part of an underlying pattern. In other words, has this happened before? Peel another layer by asking why this pattern is occurring. Continue asking "And, why is that?" until the root cause emerges. [This is the practice of the asking the "5 whys".]

8. Profound changes can take place in ways we cannot foretell.

A small force or event can have a disproportionate effect.

9. The map is not the territory.

Useful as they are, no model, theory, or tool can capture the full complexity of the subject it addresses. Roger Harrison writes, "I never can resist the urge to create theories and models. But, I hold all maps and theories lightly, consciously making room for mystery and for doubt."(3)

10. An answer is a question's way of asking a new question.

And, there are no final answers.