

Systems Thinking Simplicity

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"The problems that we create with our current level of thinking can't be solved by that same level of thinking"

Albert Einstein

What is Systems Thinking?

Systems thinking is a holistic approach that views the whole as being primary and the parts as secondary. It focuses on the relationships between the parts rather than the individual parts themselves. Systems thinking is based on *general systems theory*, a field of study pioneered by Ludwig von Bertalanffy in the 1950s. By using systems thinking you will see the interdependencies, connections and cycles in any problem. In linear thinking these relationships are ignored and focus is only on the solution with no consideration of possible consequences.

A system is a set of pieces that work together for the benefit of the whole. Our bodies are a system. As individuals we are a living system and part of larger systems such as communities, countries and planet earth.

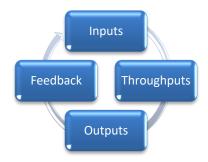
Each system is made up of interrelated pieces that will have an effect on the functioning of the whole. Each of the pieces will affect other pieces in the system. The whole system will have characteristics that none of the individual pieces possess.

Lead by example

Your organization is a system. It is a collection of individual units or tasks that function to benefit the organization as a whole. We know from experience that if something goes wrong in one part of the organization, it will have an effect in other parts. It is for this reason that systems thinking is the very best foundation for planning, execution and on-going operations.

We like to use the visual of the helicopter. Getting up above of the ground level and day to day issues to see what is really going on. What does the whole system/operation look like? How are different pieces affecting each other? What is really going on in the organization beyond each individual division's problems? Leaders at all levels in the organization need to lead by example and show they are focussed on the entire operation. Boards and senior management teams should use systems thinking in building their strategic and execution plans.

A simple illustration of a system model:



Any living system has inputs, outputs, throughputs, feedback on how things are working, and it operates in an environment. All of the pieces are vital to the healthy functioning of the system. If anything is missing, we have system failure.

Look at any manufacturing process. We have the output of a product which we plan to sell. We have inputs including parts, a factory, machinery and staff. Throughputs include the actual manufacturing steps that result in a finished product. Feedback tells us how we are doing and can be measured in units/hour, defects, profit/unit and anything else deemed important. We also exist in an environment which includes our marketplace, economy, country, global competition, supplier network and customer base. This is a very complex mix of factors that can mean success or failure of our business.

We can bring the beauty of simplicity to this complex mix by going back to the model. While some of the technology, measures and marketing efforts may be very complex, why we are doing them and where they fit is not. By constantly going back to the systems model we can maintain focus on what is important.

Stephen Covey, in his great book The Seven Habits of Highly Successful People talks about *beginning* with the end in mind. This is systems thinking. He is referring to the focus on outputs/outcomes and the need to start there. Our feedback measures will be matched to the results we wish to achieve. Inputs will be adjusted as necessary to support those outcomes. Throughputs will take those inputs and give us the outputs we desire. At all times we must be aware of the environment we operate in and what is changing.

You can see the linkages. If we start with the wrong desired outputs/outcomes it is impossible to put the right measures, inputs and throughputs in place to be successful. If we do have the right outputs/outcomes but do not measure the right things, we will not know how we are doing. If we have the right outputs/outcomes and measures in place and our inputs do not support those, we will fail. The system is a cycle where all pieces must support each other. One weak link destroys the system.

In other articles, we help you work through each piece of the systems thinking model to improve your chances of success in your organization and personal life.

In strategic planning and management, we have taken the systems thinking model and developed Strategic Thinking Simplicity. This simple approach to planning and execution provides your organization with the clarity needed undertake the right actions to give you the desired results you are looking for.

Use systems thinking as the foundation in your daily activities for better, more consistent results. Create a culture of systems thinking in your organization and reap the rewards of achieving all of your desired outcomes.

Check out our other articles for best practices, tips and tools to help your organization become an industry leader at strategic management

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Simplicity – Clarity – Action - Results

