

Systems Thinking: A New Paradigm

Systems thinking offers an ensemble of ideas and practices based on the belief that the parts that form a system cannot be understood in and of themselves; they can be understood only in context, in the relationships they have with each other and with other systems. Standing in contrast to the Cartesian and Newtonian reductionistic and deterministic worldviews, systems thinking proposes an encompassing and holistic approach.

There has been a slow but steady shift away from mechanistic and materialistic thinking in physics. “The universe begins to look more like a great thought than like a great machine,” states Fritjof Capra.⁴ Physicists in quantum mechanics are moving away from looking at forces emanating from particles to focusing on the evolving relationships between these particles and how they continuously affect each other. The whole and the part require equal attention. This is a both/and approach rather than either/or. Systems thinking is a new science that applies to the natural, scientific, and social worlds and to business as well.

Whereas Cartesian/Newtonian logic rests on linear relationships between cause and effect, systems thinking focuses on cyclical relationships. A problem can be understood as an imbalance of certain parts in relation to the whole, in an evolving set of relationships. Seeing the economy through such a lens means creating business models that promote not only a corporation’s health but also the health of all other systems that interact with it. This is not done in the name of idealism; rather, it is done because of sheer

necessity. Individual health (that of the business) truly depends on the health of the whole (that of all internal stakeholders, external stakeholders, the environment, and the culture).

With the adoption of systems thinking, what seems obvious from a theoretical viewpoint has been proven from the perspective of economic business choices. Now that the globe has proved to be finite, practice confirms that there is no trade-off between economy and the environment. Because we are coming to the limits of growth, many now realize that profit and respect for the natural and social environments are tightly interwoven and interdependent. They all increase or suffer together. It is for these reasons that, according to studies, 70 percent of attempts at redesigning businesses failed in the 1990s.⁵ And multinational corporations now have an average life expectancy of only forty years.⁶

In organizations, systems consist of people, structures, and processes that work together to make the whole healthy or unhealthy. Parameters to consider are single events, trends, deeper systemic structures or forces, and mental models or assumptions that shape the structures and forces.

- Events: Tangible events are the simplest data to be harvested from the system.
- Patterns/trends: These are determined by looking at what is happening over time. At this stage, stakeholders need to share information to create a more complete picture of reality. A key to seeing holistically is seeing patterns, rather than simply finding causes, merits, or faults in individual factors or players. Patterns are like fractals that reappear at every level of a community or organization.
- Systemic structures or forces: We find these by asking ourselves what the deeper forces are behind the patterns, their origin, and the modality of their formation.

- Mental models: These result from our core beliefs. Examples are nationalism, utopian thinking, and political or religious convictions. Although we may all hold any of these mental models, we are rarely conscious about how they affect our actions. We need to be aware of our assumptions in order to see beyond our blind spots; from an unconscious place, we may be perpetuating the problems we want to resolve.

Comprehensive economic thinking focuses on processes and qualities. It pays attention to patterns, direction, and internal rhythms. It sets the conditions for clear intent, for agreements on how people work together, and for agreements on how they can become better observers, learners, and colleagues. For this comprehensive purpose the widest participation is the most effective organizational strategy—that is, one that includes all internal and external stakeholders. Commitments do not become real until everyone participates in their creation. And the broad premises of systems thinking set the stage for major changes in the way information and communication spread inside the organization.

Information and Communication

Organizational intelligence resides in as many voices as possible, not just in experts or managers. Margaret Wheatley compares the flow of information to a salmon going up the stream.⁷ The organization ensures the stream is clear so that many more salmon can get to the source and so that the group can harvest new ideas and projects. This is a view of information as common nourishment, rather than information as power. It is the leadership role to nourish others with truthful and meaningful information. In this way capacity for

solutions comes from whatever energy, skill, influence, and wisdom are available—in other words, from any place within the system.

This circulation of information keeps the system able to constantly adapt to new conditions. A free flow of information is necessary for a new orderliness to arise, so that command and control become a thing of the past. This means developing new habits and moving away from looking at negative feedback (deviations from expected outcomes) to focusing on positive feedback that highlights the new and amplifies it. This is an important shift of attention from problems to new resources. Stable systems do not suppress local disturbances; rather, they support them and thus increase the stability of the system. The organization thus prizes natural order over control, and the more freedom there is, the more order will emerge.

Along with information and communication, a special role is played by the promotion of the universal corporate core values of the triple bottom line (people, planet, profit), to which we could add the importance of social processes. Values are the most powerful force of attraction in an organization. And the most important value, by far, is meaning: the idea that you are meant to be there and that your contribution counts. However, new values do not necessarily generate new behaviors. There must be room for self-awareness and reflection and the ability to help each other notice when we tend to return to old behaviors—hence the need for caring feedback. And the extent to which core values reach every place in the community depends on the rise of a new kind of leadership.

The New Leadership

Leadership can be seen as a behavior, not a role, and the need for it can thus be satisfied by different people at different times. The leader is the one who most of all embodies the values of the organization and who is most open to learning the new. The leader is also the one who helps the organization look at itself.

In *Servant Leadership*, Robert Greenleaf advanced the idea that leadership rests on a state of being, not of doing. Joseph Jaworski moves a step further. The leader is the one who decides to make choices that serve life and who can listen to what is wanted in the larger environment.⁸ This kind of leadership, usually associated only with individuals such as Gandhi or Martin Luther King, is now available to us all. We need to shift from the idea of exceptional individuals with innate leadership qualities to the practice of bringing forth exceptional leadership qualities in everyone. This is because we are facing the need to create collectively and to collectively shape our destiny. Through this lens, leadership is the ability to shape the future; or as Otto Scharmer would say, it is about sensing what future wants to emerge. By understanding reality differently, we can allow new futures to emerge.

Leadership is about the release of human capacities. Listening is a key element in the ability to inspire others; one could argue it is one of the most important capacities of a leader. “In dialogue you’re not building anything, you’re allowing the whole that exists to become manifest. It’s a deep shift of consciousness away from the notion that parts are primary,” states Joseph Jaworski.⁹ Coming to the place of true dialogue in a recurring way is a necessity for the life of organizations. It must accompany all the successive phases of their development.