# **SYSTEMS THINKING: THE WINNING FORMULA**

### "Best Practices Research - The DNA of Successful Organizations"

"Systems Thinking: The Natural Way the World Works"

By Stephen Haines, Founder and CEO of the Haines Centre for Strategic Management®

Our Centre utilizes the Science of Systems Thinking as embodied by General Systems Theory and the Society of General Systems Research (now ISSS). The Systems Thinking Approach<sup>®</sup> is our foundation, our core technology, and a new orientation to life. It is the best, most holistic organizing framework and language available in the world to guide all our consulting, training, and keynoting with clients. Why?

Systems Thinking is a heavily researched and rigorous macroscientific theory with its roots in the Universal Laws of Living Systems on Earth and in ecology and biology. It is analogous to DNA in humans; it defines our life-giving characteristics. An Austrian, Ludwig von Bertalanffy is the father of what he called General Systems Theory when he formed the Society of General Systems Research in 1954 with Margaret Meade and three superstar Nobel Prize winners from economics (Kenneth Boulding), physiology (Ralph Gerard), physics/math (Anatol Rapoport). It has been a more recent focus of Dr. Russell Ackoff (renaissance professor emeritus at University of Pennsylvania) and Dr. Jay Forrester at MIT in Systems Dynamics, among others. In fact, we have identified over 30 other scientific disciplines such as electronics, architecture, complexity and chaos theory, project management, etc. whose leading thinkers and writers are moving in this direction. This is the long-term result of the five superstars above whose goal was finding a **unity** of science for all complex living things on earth. Von Bertalanffy was nominated for a Nobel Prize himself by Buckminster Fuller, another renowned Systems Thinker. However, von Bertalanffy died before he could be awarded the prize which is given to only living persons.

In short, Systems Thinking is an old/new *orientation to life*. It is "the natural way the world works" and thus, a better, more natural, simpler, and holistic view of living systems, such as individuals, teams and organizations, as they try to survive and thrive in today's dynamic complex global environment. This holistic and more purposeful *outcome-oriented* approach distinguishes Systems Thinking and our Centre from other consultants who have a primary focus on separate challenges, issues, and organizational functions (a more narrow, piecemeal, and fragmented approach to life and work).

While von Bertalanffy is relatively unknown to most people, his impact through his disciples is enormous. We all know who **Peter Drucker** is—the most revered management thinker, father of management thought, and number one management consultant in the world in the 20th Century. Well, he also was from Vienna, Austria where Systems Thinking was (and is still being) taught and where he was influenced by von Bertalanffy and his Society of General Systems Research.

### The Winning Formula

Systems Thinking is based on 50 years of scientific research on the unity of Science for Living Systems and is the best, most holistic, organizing framework and language available in the world to guide all our thinking, planning and actions in life.

Others he influenced include **Aldus Huxley**, **Karl Menninger**, **Arthur Koestler**, **Norbert Weiner**, Russell Ackoff, **Abraham Maslow**, **Ervin Laszlo**, **Erik Erikson**, and **Jean Piaget** to name only a few.

While we do not know of von Bertalanffy, we all know **Edward Deming**, the father of quality and his TQM approach. The "T" in TQM means "total" or "entire system" and was his approach as another renowned Systems Thinker. Unfortunately his thinking was not initially accepted in western management and society. So he had to go to Japan and became so revered that their top quality award is the "Deming Prize". We later established ours as the "Baldrige Award for Quality", a much less prestigious name.

The question we are often asked is; who were some of Deming's prime clients in Japan and what were their results? Toyota was one. They now have the famous "Toyota Management System", resulting in Toyota becoming the world's largest and most profitable automobile firm in 2007. They have now surpassed General Motors (GM). GM, despite learning about Toyota's management system through their joint venture in Fremont, California, called NUMMI (New United Motors Manufacturing Incorporated), never could implement this management system. GM's culture has rejected this "management system" concept.

In fact, it takes a higher, more integrated "Helicopter View" intellect and level of human maturity (Erickson's "*Interdependence Level*") to utilize this different and more effective worldview. Some people see and understand it naturally. Others never get it. As Martin Luther King said, "*many attend but few understand*" (about church and religion).

#### WHAT IS SYSTEMS THINKING?

A system is defined as **"a set of elements or components that work together in relationships for the overall objectives/vision of the whole"**. The focus of all systems' elements in an organization should be the attainment of an organization-wide shared vision of customer satisfaction within today's complex and changing environment.

How we think...is how we plan...is how we act..., and that determines the results we get in work and life. Systems Thinking is a

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higher order thinking about the whole system first rather than its parts.

#### CONCEPTS AND RESEARCH

This 50 plus years of rigorous scientific and biological research on Systems Thinking has been translated, interpreted, and updated by us at the Centre. Our Systems Thinking Approach<sup>®</sup> uses three interrelated main concepts from the research to clarify and simplify how we view our complex world. They help us improve as individuals, teams, and whole organizations. These concepts give us a broader and better framework, or mental map, to see, to think, to understand, to diagnose, and to act more effectively. The most powerful way to improve our effectiveness is to improve the way we think!

Thus, these three interrelated Systems Thinking concepts below create a more elegant simplicity for ease of use (the KISS method) out of our complex and chaotic world and include:

**#1. The Seven Levels of Living Systems** are in natural hierarchical relationships with each other, starting with (7) **Earth** as the largest living system and progressing downward to (6) **societies/communities**, to (5) **organizations**, to (4) **teams/fam**-

CONCEPT #2 12 Natural Laws of Living Systems on Earth			
	Best Practices vs.	Trac	ditional Human Dynamics
I. THE WHOLE SYSTEM: "The whole is greater than the sum of its parts."			
1.	Wholism–Overall broader perspectives, Ends/Purpose-Focused, Synergy	1.	Parts Focused–Suboptimal Results, Narrower Views, Means
2.	Open Systems–To the Environment, Regular Scanning, "Outside-In", Implications Clear	2.	Closed Systems–Low Environmental Scanning or Concern, Parts-Focused
3.	Boundaries–Clarity of System, Integrated, Fit, Collaborative, Complementary	3.	Fragmented/Inflexible–Turf Battles, Voids, Overlaps, Duplication
4.	Input/Output-How Natural Systems Operate, "Backwards Thinking"	4.	Sequential–Linear, Mechanistic, Piecemeal/Analytic, Forecasts
5.	Feedback–On Effectiveness, Results, "Feedback is a gift", Encourage It.	5.	Low Feedback–Financial Only Fear, Defensiveness, Lack of Measures
6.	Multiple Outcomes–Goal seeking at all levels (WIIFM)-"What's In It For Me?"	6.	Conflict–Artificial "Either/Or" Thinking "Yes, but", One Result Only
II. THE INNER WORKINGS: Synergy, Relationships and Interdependence			
7.	Equifinality–Flexible and Adaptive, Empower the Means, More than One Way To Do It	7.	Direct Cause-Effect-1 Best Way, Quick Fix Fails, Activity-Focused
8.	Entropy–Follow-up/Inputs of Energy, Renewal, "Booster Shots" needed	8.	Natural Decline–Obsolescence, Rigidity and Death
9.	Hierarchies–Flatter Organization/Self Organizing, Productive Order Emerges	9.	Bureaucracy–Command and Control, Policy Paramount, Centralize Decisions
10.	Relationships-Related Parts–Patterns, Webs, Interdependence and Leverage, Fit	10.	Separate Parts-Components, Silos, Individualism, Parts are Primary
11.	Dynamic Equilibrium–Maintain Stability and Balance/Culture, Self-Regulating, (disequilibrium on the edge)	11.	Resistance to Change–Myopic View Ruts, Habits, Root Causes delayed in Time and Space
12.	Internal Elaboration–Details and Sophistication, Clarity and Simplicity	12.	Complexity-and Confusion/Chaos

# **ilies/departments**, to (3) **individuals**, and finally to (2) **organs**, and to (1) **cells**.

We have adapted this to look at the three key levels of living systems that affect organizations (individuals—teams—organization-wide) and their three levels of collisions/collaboration (1=1, team-team, organization-environment). This leads to Six Natural Levels of Leadership Competencies and focus for planning, people, leadership, and change. These Six Natural Levels of Leadership Competencies are *found nowhere else but at the Centre*. They are the Number One corporate-wide core competency of all successful organizations. **James Grier Miller** was the Systems Scientist who popularized these seven levels in his landmark book, Living Systems originally published in 1978 and revised in 1995. If Systems Thinking seems close to the field of Behavioral Science, it is. Miller is the person who named the field "Behavioral Science."

**#2. Standard and predictable System/Organizational Dynam**ics are based on 12 Characteristics (or DNA Codes) of open/living systems in Systems Thinking from the research of the Society of General Systems Research. The original research was first published in the 1972 Yearbook of the Society for General Sys-

tems Research through the Academy of Management Journal, December 1972. This research listed the 12 Codes or DNA of Successful Living Systems of all types, organized along two similar DNA Strands (our internal and external Strands of Life). This allows us to work in and compare one organization versus another in different industries, as well as one human being to another. We humans are all quite similar with these 12 predictable human dynamics/DNA Codes split along our internal and external Strands of Life. Further, the Centre recently researched these 12 Codes and Characteristics extensively versus many of the other 30 scientific disciplines and found these 12 original characteristics still to be THE complete set of Characteristics of the "natural way the world works". For reference, see Volume IX of the Haines Strategy Library for the complete comparisons of the different disciplines. It is located at www.SystemsThinkingPress.com

**#3.** Within today's dynamic and ever-changing environment, **the Standard Functioning of every Living System** includes a circular "input—throughput—output—feedback loop". We copyrighted this as **The Five Phases (A-B-C-D-E) of the Systems Thinking Framework** based on six of the 12 characteristics of Living Systems in the 1972 Yearbook. We then applied them as a very simple, yet comprehensive set of ABC's as **the** organizing framework and language to an integrated ever-growing suite of over 20 seamless daily applications and language.

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Note: Please see these four concepts in our color Job Aids/Models, fourpage Executive Summary Articles, and Survey Instruments that describe Systems Thinking and their universal applications in more detail. There are over 100 of these applications and growing. Our website www.SystemsThinkingPress.com has all these specific Systems Thinking products and their many, many universal applications. Call us for details or assistance.

#4. In addition, we use The Rollercoaster of Change<sup>®</sup> as a fourth Systems Thinking Concept and Framework. It is the natural and historical "cycles of change" that are also based on the 12 characteristics of Life on Earth. It is all you need to know from

over 20 so-called "different" change theories to assist senior management and all employees in being proactive, innovative, and more successful with any kind of personal, team, and/or organizational change. This is the organizing framework for the most complex strategic and systematic, transformational change processes worldwide. This change cycle is "natural, normal, and highly predictable". We copyrighted this fourth Systems Thinking Concept as The Rollercoaster of Change<sup>TM</sup>. It has proven to have universal application on how all Seven Levels of Living Systems undergo change naturally with Six Basic Phases of any Change processes (including the one usually ignored, a Smart Start).



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