# Systems Thinking: It's more than you think. SM

## Continuous Improvement Associates

## Organizational Evolution

Concerned about problems that come with growth? Already sensing limits?

Check out what's holding you back

#### Why is this important?

Organizational growth proceeds in phases as a function of age and size. At each transition

between phases, an organization must overcome a revolutionary crisis. Because revolutions can be painful and costly, it's helpful to be prepared to take action to make them less so.

In facing each revolution, it's important to keep in mind:

• Change is difficult at the end of an evolutionary period because much of the system's structure is oriented around preserving the status quo.

• Earlier or later stages solutions won't work ... the solution must be appropriate for the stage.

• The solution is the cause of the next problem.

 A shared understanding of the system structure for this sequence is necessary for coordinated action.

#### The models

Figure 1 shows the traditional model of organizational birth, maturity and decline. The problem with this model is that it's too simple. In a classic HBR paper\* Larry Greiner describes five phases of growth. Death is possible at each.

#### Growth

Figure 2 shows the basic reinforcing feedback that generates growth. Our paper, The Engines of Growth, describes many of the possible engines. This simple structure allows continuing growth, but in reality nothing

#### What is systems thinking?

Seeking to understand system behavior by examining "the whole" ... instead of by analyzing the

The Traditional Organizational Life Cycle growth Fig. 1

Size of growth (RO Growth undamental Fig. 2 An engine drives growth.

grows forever.

Greiner describes the limiting forces that arise as an organization grows. His model

> (Figure 3) shows a series of evolutionary stages punctuated by revolutions that must successfully resolve a series of crises.

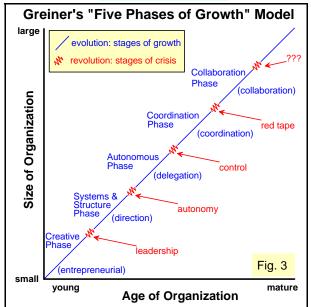
#### The structure of limiting crises

Growth begins, according to Greiner, in a Creative Phase. Even-The "traditional" life cycle shows a profile of birth to death. tually informal communication, lack of procedures, and process ineffi-

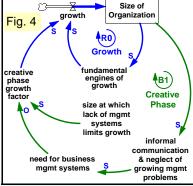
> ciency limit growth. Essentially, the organization becomes too big to manage informally ... creativity begins to look more like chaos.

Figure 4 shows that, as the organization grows, eventually the "informal communication" and

> "need for business mamt systems" begins to limit the "creative phase growth factor." The "size at which lack of mgmt systems limits growth" is the "thermostat" of balancing loop, B1, the level at which growth in the phase begins to slow.



If revolution isn't successful at each stage, it dies or regresses to an earlier stage. Earlier or later stage solution won't work.



Growth in the Creative Phase is limited by a lack of formal systems (B1).

Those who have lived through this transition know it's difficult. It's precisely the informality that many have liked ... and they rebel against "process and systems" that appear "bureaucratic."

#### **Crisis of leadership**

This is an apparent threat because the strength of the organization has been its creativity and ability to adapt quickly. To the contrary, rather than being a threat, organizational growth cannot continue without more formal systems. Indeed, it can die.

Figure 5 shows (in red) the influences that allow growth to continue. When the "need for business mgmt systems" becomes

sufficiently great, it prompts management to provide "direction & formal systems." If it does, this again reinforces growth (R1) ... entering the Systems & Structure Phase that in turn is limited by B2.

Size of Organization: Sales or Insta systems & RO) structure phase growth factor operation of creative phase amental engine **♦**B1 growth factor Creative Phase size at which & formal (R1 lack of mamt Phase 1 systems Leadership limits growth informal . Revolution communication need for business & neglect of rowing mgmt problems mgmt systems size at which need for autonomy limits arowth **♠**B2) mgmt losing touch w/market need for Systems & autonomy & eng/mfg processes Structure Phase Fig. 5

Providing direction & formal systems (R1) allows growth by overcoming the limits (B1) of the Creative Phase. Balancing loop, B2, limits eventually growth in the Systems & Structure Phase.

"The task of top management is to be aware of the stages; otherwise, it may not recognize when the time for change has come, or it may act to impose the wrong solution."

Larry Greiner, HBR

case, going back to informality.
Only this brings failure.

We must keep process & systems while granting autonomy to larger units. As Ken Wilber says, "Evolution is a process of transcend and include, transcend and include."

#### The five phases

There's not room to show it, but the structure of each subsequent phase (Table 1) is exactly like that added in Figure 5.

#### Conclusion

Revolutions are required, not only to meet the challenges of a changing environment, but also to meet the challenges created by success in an unchanging en-

vironment. Though Greiner's model is based on his empirical observations, the language of system dynamics allows us to see the structure that supports his theory and the logic of its validity.

#### Crisis of autonomy

Growth continues until the organization gets so large that management loses touch with the market and processes. Then, different groups within the organization need more autonomy.

It's tempting at this point for organizations to try the solution of the past ... in this

ı	Table 1 Greiner's Five Phases of Growth					
	P h a s e	The Evolutionary Stages	Manage- ment Focus	Some characterizations of the evolutionary stage (i.e., solutions that end the previous stage's crisis)	Problems that arise from the solutions of this stage	Crises that must be overcome by revolutions to get to the next stage
	1	Creative	Make & sell	Ad hoc systems and processes, technical orientation.	Confusion and a crisis of leadership.	Leadership: solutions to managerial problems.
	2	Systems & Structure (direction)	Efficiency of operations	Process efficiency, more formal communication systems, accounting systems & procedures.	Cumbersome hierarchy that has difficulty controlling a more complex organization.	Autonomy: to remove restrictions on lower-level employees.
	3	Autonomous (delegation or decentralization)		Greater responsibility is given to plant managers and market territories.	The top loses control over highly diversified operations, parochial attitudes.	Control: to regain control over the organization as a whole.
;	4	Coordination	tional con-	Merging decentralized units into product groups, formal planning, company wide control & review of line managers, centralized capital expenditure allocation.	Headquarters unfamiliar with local conditions. Conflict between line & staff, between headquarters & the field.	Red tape: that needs to be overcome.
	5	Collaboration		Less formal control with more facilitation for decision-making, matrix structure used to assemble cross-functional teams, economic rewards geared more to team, than to individual, performance.	Lack of internal solutions (e.g., new products) for stimulating growth, a need to look outside for partnering.	"???"

#### Feedback is Power - Tap It

The nature of a stable system is to resist change. A system maintains stability by having many more balancing than reinforcing loops. Balancing loops counteract change and appear as resistance, opposing movement from equilibrium. In the field of system dynamics, this is called policy resistance: we observe social systems react more weakly than we expect, and even perversely, to policy shifts.

#### **Workshop Benefits**

The greater the success, the more dependent the system is on the current way of doing things — the greater the forces that arise to oppose change. It's as true for organizations as for people that our greatest strength is our greatest weakness. It's painful, even frightening, to give up ways of being that have brought success. To change we need a language and a way of thinking that allows us to communicate and reinforce the need for change. A systems thinking workshop is an opportunity to acquire them.

#### **Revolution Takes Us to New Levels**

"This generates a great deal of disruption and chaos, so to speak, and the system, if it doesn't simply collapse, escapes this chaos by evolving to a more highly organized pattern. These new and higher patterns solve or defuse the earlier problems, but then introduce their own recalcitrant problems and inherent limitations that cannot be solved on their own level — the same process of evolution we see in other domains as well."

Ken Wilber, A Brief History of Everything, 1996.

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