

Futuring: A Complex Adaptive Systems Approach to Strategic Planning

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Strategic planning continues to be one of the most frequently requested nonprofit consulting services. Client's constructs of what strategic planning is, however, range from a one-day board and staff retreat to a six-month or longer process involving extensive research of trends, opportunities, and challenges. Most express the hope that the process will help them develop the "right" plan that will provide a map to the future or at least position their organization to survive for the next three to five years. Those who want to conduct extensive research often express the belief that if they can gather the right amount of quality information they can avoid predictable pitfalls and bring about desired outcomes.

To judge from the number of requests and the language people use to describe what they want, we are still in what Richard Pascale (1999) calls the "strategic era:"

The decade following World War II gave birth to the "strategic era." While the tenets of military strategy had been evolving for centuries, the link to commercial enterprise was tenuous. Before the late 1940s, most companies adhered to the tenet "make a little, sell a little, make a little more." After the war, faculty at the Harvard Business School (soon joined by swelling ranks of consultants) began to take the discipline of strategy seriously. By the late 1970s, the array of strategic concepts (SWOT analysis, the five forces framework, experience curves, strategic portfolios, the concept of competitive advantage) had become standard ordnance in the management arsenal. (83)

However, as Pascale argues in his article about Complex Adaptive Systems, there are new approaches to planning. This article describes the current state of traditional approaches to strategic planning in nonprofits, some emerging approaches, and the potential for further rethinking offered by Complex Adaptive Systems Theory.

Traditional Approaches

Since its prominence in the 1970s and 1980s, strategic planning has become a method for examining the appropriateness of an organization's mission and for positioning an organization to deal with potential challenges in the future. If one were to include many of the refinements that have occurred over the past twenty some years, the method as they applied in nonprofit settings usually involves:

A set of underlying principles:

- There is a need for a clear, well-understood mission and vision
- The organizational culture must support trust, honesty, and accountability
- The participants need to have strategic/systems thinking and skills

- Well-informed cross-functional, cross group networks are important for gaining the best insights and sharing the process and decisions throughout the organization
- Good communication must be maintained at all times
- The coordinating team needs to define what they consider a successful planning process and articulate that definition clearly to those involved

The process usually includes:

- A Coordinating Committee and/or Planning Committee
- Task Forces to develop sections of the plan
- A planning retreat for internal stakeholders or their representatives and some external stakeholders
- A planning document developed by tasks forces and the planning committee with assistance from a consultant

The steps in the process, not necessarily in this order, can be:

- Review the organization's purpose, mission, vision and values
- Conduct an external environmental and internal organizational SWOT (What are our Strengths, Weaknesses, Opportunities, and Threats) scan
- Analyze the information from the scan
- Create a discussion document or a way to involve stakeholders in the information that was gathered during the environmental and organizational scan
- Revise the mission statement if necessary
- Revise or create organizational values (if not clarified)
- Create a vision of the future
- Develop strategies to implement the vision
- Identify specific long range goals/objectives
- Design a first year, detailed implementation plan
- Design an evaluation process for the plan

The strategic planning consultant and the coordinating/planning committee usually share responsibility for accomplishing each of those steps. In earlier approaches to strategic planning, the planning committee or an executive team usually developed the plan with some input from other staff and external stakeholders through surveys, interviews or focus groups. Currently, most agencies attempt to include as many internal and external stakeholders either through the information gathering and/or through a series of large/small group planning meetings to help formulate components of the plan.

Emerging Approaches to Planning

A number of approaches to planning have emerged over the past twenty years. They include: Whole-Scale (Dannemiller, 2000), Search/Future Search Conferences (Emery, 1996) (Weisbord and Janoff, 1992), the Conference Model (Axelrod, 2000), and FutureScape (Sanders, 1998). All of these approaches tend to use variations of the traditional process with the following differences:

- They emphasize large and small group ways to involve as many stakeholders in the system (both internal and external) in the planning process,
- They tend to do the environmental and organizational scan in “real time” at a large group meeting (with some scanning done before to shape the questions and process),
- They emphasize looking at the whole system and not parts; that is why they want to have as many representatives of the organization a part of the process,
- They favor visual and metaphoric approaches in addition to rational processes; and
- While developing the usual long-term goals, they tend also to look for short-term immediate changes that can help increase commitment to the overall plan.

Some use Appreciative Inquiry (Cooperrider, 1999) processes and emphasize how to nurture the effectiveness of those aspects of the organization that are valued by the internal stakeholders and produce value for the external stakeholders. Clarifying what the external stakeholders find valuable becomes the focus of the environmental scan. This scan can be done through interviews or focus groups (more traditional approach) or forums and large group meetings.

As practitioners incorporate the emerging approaches and attempt to connect them to clients’ requests for more traditional strategic planning, they have developed some interesting hybrid variations. All of the following approaches assume the starting point is revisiting the organization’s purpose and mission. In most cases there is a large group environmental scan, or a forum with external representatives, or the more traditional environmental scanning and report writing:

- Develop a three to five year Vision with long term strategies such as we will emphasize collaborative projects with other service providers, we will expand our capacity by emphasizing staff development. Specific goals and objectives are created on a yearly basis in an operational planning process.
- Develop a three to five year vision, affirm that the major strategy will be entrepreneurial development of opportunities, and identify criteria for how to decide among the many opportunities.
- Examine how people currently spend their time and energy and identify the emerging strategies and practices that are and could continue to move the organization forward. Choose how to support or further develop those strategies and design goals and objectives to accomplish that. The emerging strategies may lead to a re-examination of the mission.
- Instead of developing a plan, identify key strategic questions that become the topic of regular board and staff meetings. Such questions include: Who are our customers and how are they changing? How do we deal we an economic downturn? What are emerging service needs? As a product of the discussions the board and staff formulate long range strategies that inform operational decisions.

Complex Adaptive Systems Theory's influence on Strategic Planning

Most of the practitioners of the new approaches to planning say they draw upon Theoretical Biology, Quantum Physics, and Chaos Theory, particularly theories of self-organization, nonequilibrium, complementarity, and the “butterfly effect”—minute fluctuations can produce large scale changes. Another influence on management theory and strategic planning is Complex Adaptive Systems Theory that attempts to understand how physical, biological and social systems operate. When people describe Complex Adaptive Systems they commonly include many of the following characteristics:

- ***Agents with schemata.*** The agents interact with each other constructing and reconstructing schemata (assumptions, expectations, values, habits) that organize their relations at the local level. They are continually coming together to understand the world and each other, form judgments, fashion the future, and to sustain their relations. Their act of responding to and interpret what they experience involves constructing, reconstructing, and modifying their schemata.
- ***Global patterns of relationship emerge.*** As the agents interact locally, adapt to each other, and generate variety and complexity in their schemata they construct coherent and global patterns of interacting: rituals, structured relationships, communication systems, commonly held criteria for making decisions (operating values), a shared purpose, and organizations. This emergence of self-organization comes from a range of valuable innovations to unfortunate accidents. Misunderstandings and miscues offer variable ways of interacting and opportunities to reshape the assumptions and expectations that have become global patterns. Each contributes to the continual change going on in the organization. Each time the members solve problems individually and together they self-organize and release variety into the system. The system will wind down unless replenished with energy generated by internal and external relations and the subsequent innovations and mistakes.
- ***Coevolution at the edge of chaos.*** Complex Adaptive Systems exist at the boundary regions near the edge of chaos where the frozen components of order begin to melt and the agents in the system coevolve in order to survive and optimize themselves in the changing environment. The agents often have conflicting goals that require them to adapt to each other's behavior. Complex Adaptive Systems are constantly creating variety and are at risk of death when they move toward equilibrium. One cannot predict which variation will have the greatest influence. Often, small variations can have huge effects and massive efforts may have little effect. Simple patterns can combine to generate great complexity and variety, and emerging complexity can create many possibilities and many possible futures. There are many small changes and infrequent, irregular massive changes.
- ***System evolution based upon recombination.*** In every interaction the agents enact historic patterns—the previously formed schemata—with slight or major variations. The agents are able to recognize the patterns, experience the difference, and choose to reconstruct them or construct new patterns. Thus there is consistency yet difference. The

system generates novelty without abandoning the best elements of its past. The system is also resilient: flexible and open to learning in order to evolve while being durable and consistent with its schemata—purpose, values, rituals, and relations.

- ***No one point of control.*** For a Complex Adaptive System to survive it must cultivate variety, but it is an illusion to think that one can direct the variations. One can only disturb the system and be mindful of what is happening. At the same time one cannot be separate from the system—stand outside and influence its direction. One can only influence the rules, the relationships, the choices made as a participant in interactions while being influenced by others. (Anderson, 1999; Kauffman, 1995; Pascale, 1999; Rouse, 2000; Stacey, 2001)

Attempts to apply earlier versions of Complex Adaptive Systems theory to organizations often rejected or de-emphasized strategic planning in favor of organizational learning processes for challenging existing mental models of behavior in organizations in order to learn how to rapidly adapt to a changing environment (Phelan, 1995). If small variations can have huge effects and massive efforts may have little effect it is difficult to identify historic and emerging patterns that can be projected into the future in a planning process. Thereby, it is argued that the organization needs to develop learning processes that will enable it to adapt to the many unexpected changes. The emphasis on learning organizations has contributed to efforts to foster self-organization and co-evolution in organizations through such techniques as learning circles, peer learning groups, communities of practice, and systems thinking. There may not be a predictable future but there is still a need to engage in futuring—continually constructing a future. We need ways to answer are we engaged in the most appropriate activities and relating in the most appropriate way to our stakeholders that contribute to our resilience and optimization in this particular patchwork of current and emerging relationships.

When we combine the emphasis on learning organizations and with the need to construct a future we have such planning concerns as:

- How can we be clear about our purpose and values and use them to structure modes of communication that support interconnectedness among the various stakeholders?
- How can we optimize and construct relationships in the organizations so to foster complexity, self-organization, and futuring?
- How can we encourage resiliency in the organization—the flexibility, durability, openness to learning, and decision making and problem solving skills to make complex, reliable decisions in the presence of massive and often, conflicting input as we coevolve between order and chaos?
- How can we find the unique, alternative outcomes already contained in the current situation and its history, as different from creating an unknown future?
- How can we disturb/get the attention of the organizational system?

Techniques

If strategic planning is a way of asking are we engaged in the most appropriate activities and relating in the most appropriate way to our stakeholders that contributes to our fit and optimization in this particular patchwork of current and emerging relationships, there are some aspects of the traditional methods that are helpful and many that need to be modified. Instead of a rational, step by step planning process that produces the “right” goals that will allows us to exercise some control over the future, we need to develop mindfulness as we move between chaos and order. Some of the possible ways this can be done are:

Shaping the context for planning

As with traditional strategic planning the process can benefit from a well-informed, cross-functional, and representative coordinating group and an organizational system that supports trust, honesty, and accountability. The group needs to decide:

- How ready is the organization for developing a strategic plan? Are there far too many changes/crises happening or is the staff highly resistant to changing their patterns of work? If there are too many changes, the group may consider ways to foster relationships in the organization that encourage mutual learning and construction of adaptive techniques to the rapid changes (organizational learning approaches). Or they could use this time as an opportunity to revisit the mission and values and develop strategies that will help the immediate situation and provide some guidance for at least the next 2 years. If there is a high level of resistance, the group may want to look at ways to modify the relationships among the staff in order to develop possibilities that have been ignored. Are there some groups that could be cross-functional or work on joint projects?
- Is there sufficient trust and a sufficient functioning level in the relationships that would support honest feedback and discussion, and is there a willingness to learn and create together? If there is not, how can the process itself contribute to creating this atmosphere of trust and learning?
- Will the organization commit the needed time and money to the process?
- How can the coordinating group members be aware of the dynamics in their group in order to be more mindful of what is contributing to or hindering communication among the staff?
- What will be their criteria for deeming the planning process a success?
- Who will be involved and how?
- What will be the steps in the process?

Clarify, review, and affirm the core purpose, mission, values, desired outcomes, and criteria for making decisions that influence the stakeholders.

In Complex Adaptive Systems the agents are interconnected through commonly held criteria for making decisions (operating values) and a shared purpose that also informs the way they relate to each other and the stakeholders. As with the traditional and emerging processes described above, the coordinating group needs to involve the whole system in clarifying and reaffirming what difference (outcome) the agency is trying to achieve with its stakeholders, how they will know if they have achieved that difference, and what are the values/criteria that will influence what practices, methods, and resources they will use to achieve those outcomes.

Fostering relationships and systems and modes of communication

A Complex Adaptive System approach to Strategic planning is an opportunity to reconstruct relationships and construct possibilities through dialogue and networking among both internal and external groups. This means a shift in emphasis. As in traditional and emerging strategic planning approaches, meetings among stakeholders still have a role in generating information for decision-making, but they have a larger role in nurturing the relationships that contribute to constructing possibilities and encouraging self-organization. Instead of a traditional organizational and environmental SWOT analysis, the agency may use Appreciative Inquiry and other ways to look for the changes already happening or about to happen. There may be a series of large (whole system) and small group meetings of both internal staff and external stakeholders in order to create the opportunity for new relationships and better communication. The agency may try to understand the various relationships it has with its stakeholders and other community entities and how they and the stakeholders influence those relationships. The staff may want to explore their assumptions about the past, present and future and how those assumptions are affecting how the staff relates to each other and to the stakeholders.

The following are two examples of ways I have assisted nonprofit agencies with this aspect of the planning process:

Past, present, and future assumptions

1. If the following is done with up to 25 people the first step begins with a full group brainstorming session. If the activity is conducted with a much larger group, then small groups of up to 10 people could be formed. A question is posed and the small group generates their responses on flip chart paper. At the end of a set period of time (10 – 15 minutes) each group hangs up its flip chart paper on one section of the wall. Then the facilitator moves on to the next question.
 - What from the past do we assume is influencing the present?
 - What do we appreciate and value about the present situation?
 - What do we want to continue and develop from the present into the immediate future?
 - What are our hopes and fears for five to ten years from now?
2. Form small groups for each of the sheets of flip chart paper (past, present, immediate and distant future) or, if larger group, have groups form around the clusters of flip chart paper for each time topic

3. Assignment for groups:
As we look at what we generated on the flip chart paper:
 - What do we see and experience?
 - What are our assumptions about why the items on the flip chart paper are important?
 - How have those assumptions been affecting how we relate to each other? To our stakeholders? To our mission?
 - What do we want to let go of?
 - What do we want to affirm?
4. The small groups report back. After all the reports have been heard, either in the full group (for up to 25 participants) or in another set of small groups:
 - What are some commonalities we heard about:
 - The past
 - The present
 - The future
 - What we want to let go of
 - What we want to affirm
 - What from this exercise is important for us to carry into our discussion of strategies?

Through this exercise, the management and staff of a social service agency realized that they were not as controlled by past events as they thought. The organization had moved through a transition from a twenty-year tenure founder through two short tenure executive directors to the current director who was about to reach her second year anniversary. Most of the staff had worked for the agency for at least six years. They were able to name how they had romanticized and demonized the past. As a consequence, they were able to let go of projects and structures that no longer furthered the mission, and claim what was important to carry forward. When they looked at the present and future they were able to reaffirm how primary the mission continued to be. While they were worrying about the impact of the past they had not fully appreciated the sense of team and mutual respect that had been developing and was going to be more important as they attempted to deal with emanate financial challenges. As an immediate action while they continued the planning process, they decided to develop a uniform communication system and more opportunities for cross functional groups to gather in order to work on problems and consult on pending agency wide decisions.

Mapping influences

1. The facilitator poses the following question to the group: What differences do we want to make?
2. The group creates an image that symbolizes that outcome(s) and the facilitator places it in the center of a sheet of flip chart paper.
3. The group identifies the other people and/or entities in the agency and the community who influence how this outcome(s) can be accomplished. The facilitator places them on the chart

within a series of circles—the circle immediately around the outcome are those that have considerable influence; the next circle are those with some influence; and the last circle are those with little influence but require attention.

4. The group then maps how the outcome(s) will impact the people/entities on the chart. At the prompting of the group the facilitator draws lines connecting the various people/entities to the outcome using thick solid lines for high impact; broken lines for medium impact; and dotted lines for minimum impact. Some people may have high influence over the outcome(s) but are not (or only in a limited way) impacted by the outcome.
5. The facilitator then invites the group to place the following symbols next to each of the influence relationships on the map to indicate what is the nature of the influence:
 - M This relationship is directly related to our achieving our mission
 - \$ This relationship is a source of money/funding for the agency
 - I This relationship provides important information for achieving the outcome
 - A This relationship helps the agency gain access to money, information, clients, etc.
 - S This relationship is important for the agency's survival
 - U The agency has enough power now or could develop the power needed to effect a change in this relationship
6. In small groups the participants look at the chart and identify:
 - What do we need to pay attention to?
 - What relationships do we need more information about in order to understand their importance to us? Where are we spending most of our time?
 - What do we need to support and foster more?
 - What might we need to change?

They then discuss:

- What have you learned as a result of doing this mapping exercise?
- In order to make a difference in how well you achieve your outcome(s) what relationships would you want to modify? How?

As a result of this exercise groups are able to gain a larger perspective on the many relationships that influence their work. They are able to see possibilities for different ways for their agency to be a significant contributor to the welfare of their community. They are able to identify how they have been spending far too much time dealing with relationships that have little to do with their outcomes or their survival while they had been neglecting relationships that are directly mission related or are sources of needed funding. They are also able to concretize change. They see that there are certain relationships that need to be maintained, nurtured in different ways, or ended.

Choosing strategies that increase resiliency and the ability to perform complex and reliable decision making

Beinhocker (1999) recommends that instead of choosing singularly focused strategies, organizations need to cultivate multiple strategies, many of which will operate in parallel in

order to encourage co-evolution. The multiple strategies that can increase the resiliency of an organization are 1) those that deepen and extend current practices, 2) those that create new practices, and 3) those that plant the seeds for future developments. While emphasizing the first, organizations that continue to optimize in their particular fitness environment commit varying degrees of resources to the other two.

In forming strategies, the coordinating group (and the whole system through group meetings) can be mindful of the continual changes happening in the organization and decide how to foster those that fit the mission, values, and criteria. They can discuss what are the changes they want:

- To acknowledge—because they are already happening and they deepen and extend current practices
- To influence—because they need some support and direction to occur and they have the potential to further improve current practices and/or create new practices
- To make happen—because they are new possibilities: new practices or the seeds for future development

In order to contribute to continuing resiliency, planning strategies could include ways to foster the organizational learning processes mentioned earlier. These could include instituting and supporting opportunities for cross-functional and staff in the same program to come together for peer learning groups, case conferences, and mutual problem solving sessions.

A Complex Adaptive System approach to strategic planning builds upon organizational learning methods while it emphasizes mindfulness, mission and values based decisions, fostering relationships and systems of communication, and continuing to construct possibilities that contribute to an organization's self-organizing and resiliency in its immediate and distant environment. A vision of a near or distant future and the strategic plan itself are not blueprints for a future state but ways to prepare an organization to be more mindful of the constant changes and possibilities happening in the present.

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