

Scanning the Future Environment:

The Systems Thinking Approach®

by Barbara A. Collins, S.M.P. and Henry Kwok



There will come a time when our descendants will be amazed
that we did not know things that are so plain to them.
– Seneca, c. first century

WHY THINK ABOUT THE FUTURE?

A major bank laid off a large number of employees during the Asian financial crisis. As the economy turned around, they had to compete against other banks to recruit qualified employees for those same positions. This was a well-intended decision gone wrong because they failed to think far enough ahead. Analytic solutions to systems problems attempt to fix symptoms without addressing root causes. The result is that sometimes today's solutions become tomorrow's unintended problems.

Change is no longer an option, and change compels us to respond. Doing nothing leaves us in mediocrity. Deciding on the future we want to create – even when we may not see that future ourselves – gives us a sense of purpose. As individuals we need to decide what we want in life. As global citizens we need to decide on the type of community and environment we want future generations to inherit. As corporate officers we need to decide on ways to secure both profitability and sustainability for the future of our organizations.

Lao Tzu, a Chinese sage, said (probably with an ironic smile), *If you do not change direction, you may end up where you are heading.*

The past few decades have seen some very pervasive forces of change that spared no one. The Internet revolutionized the way we communicate, live, shop, work and network in

© 2015 Haines Centre for Strategic Management LLC. All rights reserved.

about 20 years. Cheap air travel has reduced distances. The world has been flattened and it is now at our doorstep. These forces of change have been destabilizing – we are pushed forward, pulled backwards and even propelled into the unknown. At different times, they reinforced and amplified one another, and sometimes they have clashed.

Peter Drucker added another revolutionary factor: *In a few hundred years when history of our time will be written from a long term perspective, it is likely that the most important event historians will see is not technology, not the Internet, not e-commerce. It is an unprecedented change in the human condition. For the first time – literally – substantial and rapid growing numbers of people have choices. For the first time, they will have to manage themselves. And society is totally unprepared for it.*

We have been responding to these changes in a somewhat random and even chaotic manner. The postmodern Global-Information-Ecology-Technology paradigm shift is generating many conflicting interpretations of the future. This infuses more confusion in a time when we need understanding to drive towards creating our future.

The future will be more frustrating if we do not adjust the way we think and act, for the changes over the next century are expected to be faster, more complex and even more unpredictable. We are moving into an unparalleled time in which whatever we have seen in the past will pale in comparison to what we create in the future. We are sailing into uncharted waters through winds of chaotic and complex change. So how are we to get ready for the future?

RESPONDING TO THE FUTURE

Global competition, market convergence and divergence, highly volatile financial and commodities markets, climate change, new technology, regulatory change, demographics and new consumer values are a few of the ever increasing number of change drivers reshaping our lives and our businesses.

The future may be uncertain but we can shape our own destiny by the decisions we make today. To make reasoned decisions, we must identify emerging trends – the tipping points and early signals of how the likely future will unfold. Tomorrow will pose more threats but offer greater opportunities with greater prospects for collaboration and disruption.

Several strategies must be considered when deciding the future we want to create.

First, **we must expand our thinking** – to base our decisions and actions not just on the probability of certain future events but on our assumptions about where those events may take us, or, even better, on the possibilities we foresee in leading and directing those

© 2015 Haines Centre for Strategic Management LLC. All rights reserved.

changes. A roadblock may prevent us from taking the route we had planned, but if we take the detour with the intention of exploring previously unknown territory rather than as an inconvenience, our trip may become the experience of a lifetime.

Second, **we must manage uncertainty**. We must plan with the end (our vision of a desired future) in mind. We also must develop the ability to modify the plan and to respond effectively to contingencies. It is impossible to predict all the things that might occur. Thus we must learn to respond effectively to low probability but high impact events. A golfer is challenged by other players in the field and by the course conditions. It is futile to predict what he would encounter but he can become consistently good by developing the capability to respond to whatever may confront him. The critical difference between a crisis and an opportunity is in the state of preparedness. If prepared, we can take advantage of opportunities and take threats in stride.

Third, **we may or may not have control over changes**. The future may be beyond our influence. In these situations, we may be able to control *the effects*. We cull infected birds to remove the cause of an avian flu epidemic and immunize people against the effects of the flu. We may not be able to prevent an earthquake but we can build houses that withstand the shocks.

In short, the future may be uncertain and uncontrollable but we shape a better tomorrow by making the changes we can make, by influencing and collaborating with others to make the changes beyond our control, and by mitigating the effects of such imposing changes.

METHODS OF FUTURE STUDIES

The goal of futuring is not to predict the future but to make it better. *Futuring* (or *futurism* or *futures studies*) emerges as a discipline to provide foresight on future trends, and to afford us the opportunity to decide what is desirable and what to change in order to cope with the complex and uncertain forces of change ahead. It transforms foresight from an intuitive skill into a coherent body of techniques and knowledge.

- **The possible future** can be explored by researching what experts, futurists, opinion polls, etc., are saying. The key is to keep an eye out for weak but potentially significant signals – just like an AWAC system that captures whatever appears on the radar screen.
- **The information we collect** must then be examined for potential relevance to our business and industry. Here, we must be imaginative to avoid rejecting trends on their

face that later cross industries and become widespread, as e-commerce and Web-based learning have. We must examine our underlying assumptions critically and objectively, asking, *How might this trend impact us?* and rejecting no possibility without serious consideration. Once the possibilities have been sorted by relevance, we may rank them by level of impact we believe they may have on our business.

The Haines Centre for Strategic Management uses the SCEPTIC Template as a systemic framework to scan the future environment. Some examples of trends and drivers of change or discontinuity are listed but they are by no means exhaustive.

The SCEPTIC Model for Future Scanning

SOCIO-DEMOGRAPHICS – E.g., Post-baby boomer bubble. Shift towards high concentration living and high population mobility.

COMPETITORS - E.g., Artificial intelligence re-defining humanity. Micro-competition.

ECONOMICS & ECOLOGY – E.g., Growing knowledge-based economy. Greater emphasis on environment issues – climate change/leaching of the earth/shortage of potable water/severe biodiversity reductions. Unknown viruses and resistant bacteria.

POLITICAL/REGULATORY - E.g., Limits to traditional democracy. Clash of civilization. Rise of terrorism. Disappearing national boundaries.

TECHNOLOGY - E.g., Nanotechnology, biotech, info tech and cognitive science converging.

INDUSTRY - This refers to trends unique to your own industry.

CUSTOMERS/STAKEHOLDERS – E.g., The rise of Cultural Creatives. Emergence of spirituality and search for the meaning of life.

- **We may develop scenarios**, both positive and challenging, that describe the world, our markets, our products and services as they may become, given the changes we foresee.
- **Potential opportunities and risks** can then be identified within the trends, and form the basis for developing a meaningful strategic vision – what we will become, in light of our information and assumptions about the future.

This will bring us to the present in which we have to plan on bridging the gap between where we are now and the preferred future we want to create.

UNDERSTANDING THE FUTURE THROUGH THE PERSPECTIVE OF SYSTEMS THINKING

A new set of skills is needed to journey into the frontier of the wildly unpredictable future. We need cognitive skills to envision the future. We need systems thinking skills to understand the dynamic interplay of the factors that will shape the future, to critically examine our assumptions, and to strategically select long-term solutions.

Systems thinking provides an excellent framework to perceive and understand the future and subsequently to manage its uncertainty, complexity and chaos. The basic ideas are:

- A system is a group of interacting, interrelated and interdependent components that form a unified and complex whole;
- A system is situated within and interacts with an environment;
- There is energy-material-information exchange via semi-permeable boundaries among the different elements within the system, and with other systems in the larger environment; and
- Systems seek equilibrium in their behavior.

Everything is part of a system or systems. The universe is the mega-system that contains an infinite number of systems and subsystems in complex interactions.

Relationships form among elements (e.g., individuals, groups, functions, activities in organizations), creating culture. Changes in these relationships can alter the system. A small action in one component of a system can trigger a ripple effect of actions and reactions throughout the system. Changes also occur in the external environment and impact the system and its component parts in both obvious and subtle ways.

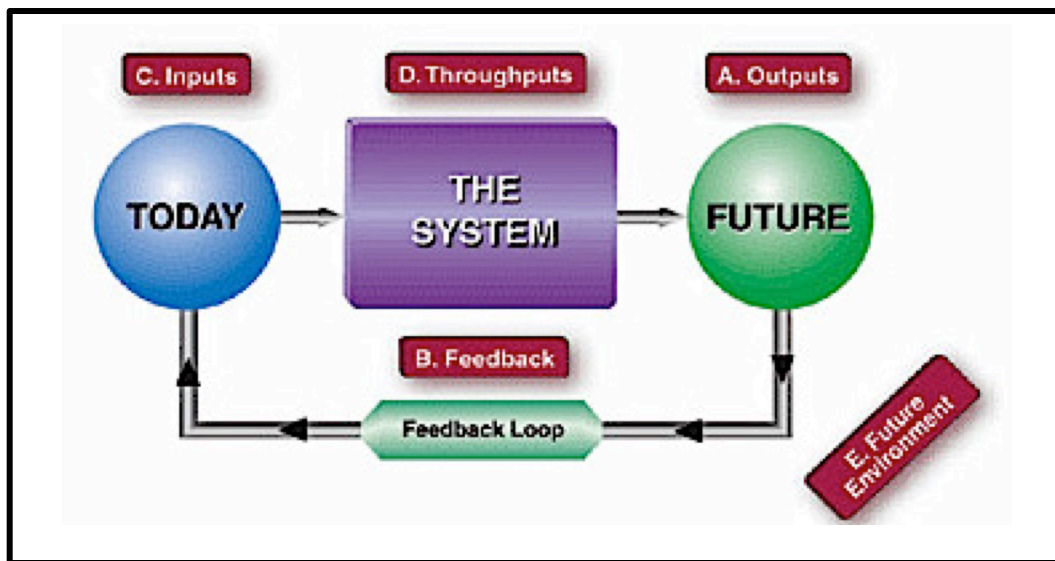
PUTTING IT ALL TOGETHER: THE SYSTEMS THINKING APPROACH® TO STRATEGIC MANAGEMENT

Managing the future means being able to envision it based on what we know and our assumptions about that knowledge. Futuring focuses on foresight – picking up early trends to generate thoughtful dialogue, connecting disparate ideas to reveal possible futures. Futuring continuously pings everywhere in the environment for weak signals to track changes in their early growth, and to evaluate their likely impact. This work

© 2015 Haines Centre for Strategic Management LLC. All rights reserved.

provides the context within which we decide what we want to create – strategically – over a significant time span.

Strategic management focuses on the next one to three years. Given the long-term strategic vision we've developed, what do we need to do TODAY to begin closing the gap between where we are and where we're going?



The scope, drive and objectives for futuring and strategic management may be different. But good futuring skills and long-range foresight can provide the basis for good strategic decisions. Good foresight provides the ability to think further into the future, making possible astute judgments on what will work best over time.

As we've discussed in this paper, with the discipline of futuring, changes may be predicted and prepared for. In addition, a culture of attention to future trends and flexibility of response can make an organization more resilient to unexpected change.

SO WHAT CAN WE LEARN?

What changes may occur and how will they affect us? The future is not good or bad, but neutral. Frequent scanning for possible changes reduces the risk of missing or misreading important trends. We can identify the major trends and drivers of change and discontinuity, using the SCEPTIC template.

What does this mean? These change drivers can paint different scenarios for our plans and policies for the future. Our first strategy may be identifying metrics we can track, with “red flag” markers that signal the need for a change in our strategy or our direction.

What will we do about it? When weak signals begin to strengthen, its time to act. Futuring and environmental scanning are not exercises. They stretch from identifying trends to possibilities to challenges to actualizing business opportunities. In a time of exponential change and increasing volatility, the challenge is to ‘remake’ ourselves or die. We must adapt and reconstruct our organization in response to actual and anticipated changes in the environment. We can use these changes as leverage to open opportunities.

Organizations must respond to the accelerating and pervasive changes by developing capabilities in:

- Engaging in collaborative futuring networks
- Intelligent environmental scanning and strategic thinking
- Dynamic strategic management

References:

1. House of Commons Public Administration Select Committee, **Governing the Future, Second Report of Session 2006–07. HC 123-I**. Published on 6 March 2007 by authority of the House of Commons, London: The Stationery Office Limited
2. The “Eltville Model” of Future Management Group.

<http://english.futuremanagementgroup.com/en/eltvillemodel/index.php>



Haines Centre for Strategic Management provides:

- ☐ Training
- ☐ Facilitation & Consulting
- ☐ Executive Coaching
- ☐ Articles, books, models, templates for strategic planning and management to help you achieve leadership excellence and outstanding performance.

Visit us at www.hainescentre.com

Call us at 619.663.3631