A New Framework for Anticipating the Future

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Introduction

This paper was originally developed as background for group meetings involving strategic planning; its content and approach is focused on United States audiences. Its objective is to briefly list the key driving forces of change and to highlight that we are living in a period that is a undergoing a transition to a new fundamentally different era. Once a group recognizes the need to change, discussion can focus on how to deal with the possible futures. Dealing with these possible futures is the theme of this paper.

Attached is a one page discussion of a new framework and new mindset needed to work our way through this transition period. Also attached is a one page summary of six major driving forces of change. This update of the paper takes account of the economic changes that became highly visible in fall 2008. The long term (at least several years) effects of the current economic situation make it much more difficult to address the other changes that are taking place at the same time. The solutions not only require a new "mindset" but require new ways of working together and focusing on realistic choices rather than holding onto long established personal or organizational viewpoints. Achieving success through this highly complex process will be difficult.

Whether you are optimistic or pessimistic about the future, you need to understand four observations:

- Current trends are not sustainable in the long term. We are in a period of tremendous change, with several significant "problems" emerging at the same time. These times are unique and not simply one more example of ups and downs of historical events. Therefore the old rules and priorities for commerce, society, and governance may not apply and new ones will have to be developed. When we "recover" from the current economic crisis it will not be business as usual.
- We have new tools in our toolbox but we need more than tools. Solutions primarily involve dealing with individual attitudes and developing collective solutions. Whether we have the national and state political capacity to make the necessary changes is unclear. The solutions are immensely more difficult than simply applying technological fixes.
- Different people and organizations have different views about what is happening and what to do about it. Some views are so strongly held that they are essentially non-negotiable. Changing long-held beliefs and practices is not simple even when there are significant impacts that get people's attention that change is needed.
- It is more difficult than in the past to identify and plan for preferred futures as there are more possible futures. This results in more uncertainty and requires more institutional flexibility. It is good to have a Plan B.

Further Reading

Listed below are 1) selected websites related to driving forces of change, and 2) books related to foresight and possible futures.

Reading Related to Driving Forces of Change

- Arizona State University, Morrison Institute for Public Policy. 2007. Arizona Policy Choices Sustainability for Arizona: The Issue of Our Age. http://morrisoninstitute.org/
- Centron, Marvin and Owen Davies. 2008. 55 Trends Now Shaping the Future. http://carlisle.army.mil/proteus/docs/55-future.pdf
- National Intelligence Council. 2008. Global Trends 2025. http://www.dni.gov/nic/NIC 2025 project.html
- Regional Plan Association. 2006. America 2050: A Prospectus. http://america2050.org/
- U.S. Government Accountability Office. 2008. Long-Term Fiscal Outlook: Action is Needed to Avoid the Possibility of a Serious Economic Disruption in the Future. , GAO-08-411T (January 2008). http://gao.gov/new.items/d08411t.pdf
- World Federation of United Nations Associations. 2008. Millennium Project: Global Futures Studies and Research. http://www.millennium-project.org/

Reading Related to Foresight and Possible Futures

- Diamond, Jared. 2005. Collapse: How Societies Choose to Fail or Succeed.
- Barker, Joel. 1992. Paradigms: The Business of Discovering the Future.
- Hiemstra, Glen. 2006. Turning the Future into Revenue: What Businesses and Individuals Need to Know to Shape Their Futures.
- Hines, Andy and Peter Bishop (editors). 2007. Thinking About the Future, Guidelines for Strategic Foresight.
- Johanson, Bob. 2007. Get There Early: Sensing the Future to Compete in the Present.
- Lempert, Robert, et al. 2003. Shaping the Next One Hundred Years: New Methods for Quantitative, Long-Term Policy Analysis.
- Naisbitt, John. 2006. Mindset. Part I is a description of various "Mindsets" and Part II focuses on "Pictures of the Future".
- Senge, Peter, et al. 2008. The Necessary Revolution: How Individuals and Organizations are Working Together to Create a Sustainable World.
- Wiener, Edie and Arnold Brown. 2006. Future Think: How to Think Clearly in a Time of Change.

A New Mindset for Leaders and a New Framework for Making Today's Decisions

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The major institutional decisions we make today will have significant future implications. To make better decisions today we need to better understand the significant changes that are underway in our world. **This requires a new mindset.**

Traditionally, choices about the future have been based largely on past experiences as modified by known or pending changes, and by accounting for the cyclical nature of past trends. These approaches generally worked well under past conditions. But there are two significant events occurring that make choices on long term issues more difficult:

- The cumulative and significant impacts of several large-scale changes are all coming at about the same time.
- A transition from mid-20th century policies and structures to the new conditions of the 21st century is upon us.

A continuation of the traditional way of preparing for, and making, the many major choices facing us is **not sustainable in this new environment**. Adapting to this new world will be uncomfortable for many, but those that recognize the need to adapt early will have a competitive advantage and benefit accordingly. While many things are uncertain, many fall in the "near-certainty" category, and we especially need to plan for those changes. The attached page lists six driving forces describing some of the changes we are facing - organized by familiar topics: Globalization, Resources, Demographics, Technology, Economic and Social, and Governance and Infrastructure. What is uncertain are the specific events that will occur and the specific approach we will end up taking, not whether we need to take actions. Some of these actions will be very unpopular and most will require significant changes in our existing ways. Individuals or institutions cannot do this alone, even when working through partnerships or other groups. Addressing these changes involves organizations working together, toward the new goals, and new roles for governments (national and beyond) to help society address the new realities – and we need to do this soon.

Changes will be significant, will occur in several major areas at once, and are unprecedented in their scale and potential impacts. The primary condition we need to understand is to think with a system-wide perspective. We are past the time when incremental changes are sufficient to address future near-certainties — we need transformational changes and these will not come easily. These changes are not necessarily to be feared; simply sharing information about why we need to adapt to a new world, and why we need to take aggressive actions on a continuing basis, can accomplish much in educated populations. But we also need to think in terms of alternative futures and understand a range of long-term implications of today's choices.

A few changes we should especially be aware of include:

- Knowledge of the long-term historical context will become more important when trying to understand the future.
- Current assumptions may be inappropriate or appropriate, depending on the topic and timeframe.
- Uncertainty will be greater and simply following historic trends or cycles may lead to misleading conclusions.
- Everyone and every institution will be affected in some way the scale of this change is very large.

We need to be careful not to predict specific times or events. While we need to develop a mindset for dealing with change and uncertainty, we must do it in a manageable way. We can continue to advance and manage the change process by developing a conceptual understanding of a basically new world, by making appropriate adjustments to live within that world, by using new ways of evaluating and managing our institutions, and by institutionalizing foresight processes.

We need a new mindset for living in a changed world. The most important consideration is to fundamentally understand that we are in a new world. There will be lots of uncertainties, acceptable solutions will be less clear, and there will be more dilemmas to work through. However, things are changing on a continual basis, exposing vulnerabilities and improvements alike. We are not in a series of cyclic events where things will return to normal. There has been a shift to a new paradigm. This means the basic "rules of life" and our priorities have changed and that requires us to adopt a new mindset in our approach to everything. One effective approach would be to develop several scenarios or ask "what if..." questions to learn more about the possible futures. What will not work is traditional planning and decision making processes that are grounded in continuing our past experiences.

A new framework for operationalizing the new mindset. Two acronyms help us move head. The VUCA world was first identified by the U.S. Army, and subsequently accepted by several business and consulting firms. It represents one type of framework for thinking about the future. The FAIR method is a way for institutions to respond to the VUCA world. Just understanding these two acronyms could go a long way in helping people recognize the change upon us and that we can do something about it.

- VUCA is volatile, uncertain, complex, and ambiguous.
- FAIR is to be flexible, agile, innovative, and responsive.

Driving Forces of Change – A Guide for New Thinking About the Future

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There is a broad recognition that some historical trends are not sustainable over the long term. This requires us to begin thinking differently about the near term (3-5 years) as well as the long-term (5-20 years). This will be a traumatic process as the inertia of existing ways is significant and viewpoints on specific changes and appropriate solutions vary, some dramatically so.

1. Globalization

The world operates as a global economy and there are broad and interdependent activities among many countries. Communication capabilities have further increased the realization that countries cannot function in an isolated manner. While the U.S. retains significant military capacity and is among the large economic powers, it will need to share world leadership with other countries (particularly those designated as RDE, or Rapidly Developing Economies) that are rising in influence. The U.S. will also be impacted by a global competitive environment for the research and development sector that has long existed for the manufacturing sector, as well as increased competition for commodities due to increasing growth and consumption rates in the developing world. These global changes ripple through all the driving force topics.

2. Resources

The key resources where supplies and uses are of concern are: water, energy, and food (other commodities are also facing increased demand, from cement to copper to exotic chemicals). Climate change, dramatically increasing world per capita consumption, limits of traditional sources and production methods, and uncertainties of future choices suggest increased costs of these key resources This is significant because all three key resources are essential to all societies.

3. Demographics

Many populations are living longer and in the developed countries the proportion of older people is increasing. The U.S. is somewhat unique among developed countries because its population of young is increasing at the same time the baby boom fraction moves to older ages, resulting in smaller number of working age people to support increased numbers of both young and old. This "dependency ratio" applies to some other countries as well, although many developing countries have a majority of young. In addition, migrations within countries (to urban or economic centers) and immigration from other cultures is altering the social and physical structure of the urban centers of many countries.

4. Technology

Three key technologies that continue to evolve are: bio, information, and materials. There are tremendous possibilities for these technologies to improve productivity, to more efficiently use resources, and to change established areas such as health, education, communication, and infrastructure. These technologies can augment the human capabilities in some expected and unexpected ways as well as address issues related to resources and infrastructure. As the proportion of digital natives (those who are fundamentally comfortable with digital technologies and believe that is the norm) substantially increases and as technologies continue to evolve, we should expect many different ways of doing basic societal functions – such as learning, work, leisure, and communication.

5. Economic and Social

Traditional economic issues such as the trade balance, foreign investment, and debt (federal, commercial, personal), continue to be important. Long recognized issues such as health care and increased demands by an aging population for Social Security and Medicare are now upon us. Increased diversity (ethnic, cultural, economic, political) in the U.S. makes it more difficult to agree upon the details of basic services that allow our society to function. Diasporas (the dispersed populations that share a common experience, specific interests, values, political viewpoints, religious or ethnic roots, and corporate or NGO affiliations) are becoming more powerful in either aiding or impeding progress. They will play an increasingly important role in shaping the future. The world economy turned down in Fall 2008. This experience raised new issues such as the lack of oversight for new investment instruments and the ways of minimizing worldwide economic disruption .

6. Governance and Infrastructure

Much of the U.S. infrastructure is aging, especially in urban areas (basic organization and function, and public services). Increased demands have been placed on older infrastructures as well as newer ones by population increases. Key areas include environment (pollution, waste, protection), transportation (goods and people, communications, energy), and methods of doing business or providing education. Government rules and processes designed and fine tuned for a different world (smaller, slower, less complex) are largely inadequate for the types of decisions we face. Government's required role in structuring incentives (for new directions), disincentives (for old directions), regulation and standards setting and foresight studies is lagging. The international "governance" system (e.g., United Nations and its multiple agencies, non-governmental organizations, and multinational corporations) is changing as the global influence of the developing nations increases.

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