

Four Pillars of the New Reality and Their Implications for Leadership



A Perspective from

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“We are now faced with the fact, my friends, that tomorrow is today. We are confronted with the fierce urgency of now. In this unfolding conundrum of life and history, there is such a thing as being too late.”

Dr. Martin Luther King, Jr.

What will the world look like in 2025? What kind of leaders will we need?

These may sound interesting questions to ponder over a glass of wine but they are more urgent than that. We believe that the world is in the midst of one of its periodic fundamental shifts that resets basic assumptions, reshapes organizations, and can potentially reorder world power. It is also a shift that can inspire imaginations, spur innovation, and challenge humankind to expand its horizons.

We are not futurists. One of the things we know is that any speculation we might make about thought-activated communication devices or solar-powered jet packs would be wrong. The only question about such forecasting would be if we would be off by 5% or 95% – and time would be the only way of telling.

Instead, as we considered 2025, we decided to look for what we could know for sure that could be a useful lens for looking a decade or two ahead. What we discovered is that there is a new emerging reality. Many things that we have taken for granted in terms of work, play, health, and other aspects of our lives are changing. These changes could be the biggest we have seen since the Industrial Revolution. Driving those changes are what we call Pillar Trends – trends that can alter the fundamental assumptions about how a society works. We have identified four that we feel are most relevant for imagining what the world will be like in 2025 and what it will take to lead in that world:

- the urbanization of the planet
- global climate change
- the aging of the population in the developed world
- an exponential increase of knowledge.

These Pillar Trends, detailed below, define the new reality because they are global; no global organization will be able to escape their impact and no action by any single individual, organization, or sector can change their basic course over the foreseeable future. Adaptation, not avoidance, is the only course. How to adapt, of course, is the question and we hope that, by using these four trends as a framing device, we will help leaders more accurately divine their particular course.

This paper is addressed to leaders. Because of the necessity for action, and both the scale and scope of the Pillar Trends, we believe that leadership is what is required both to seize the opportunities and rise to the challenges they present. This is not the usual bromide of “we need more leadership” that is heard whenever a significant issue is raised. Rather it is a belief based on our definition of leadership as

engaging people to believe and act on behalf of something larger than themselves and their narrowly defined self-interests. Uniting people and institutions, getting them to embrace an enlarged view of their interests that finds common cause with others, and moving those entities forward is the work of leaders.

The Pillar Trends will also challenge many traditional views of leaders and leadership, particularly organizational leadership based so much on the leader as a formal authority figure. The characteristics, training and skill sets that have made for successful CEOs and Managing Directors over the past 50 years must all be subject to fresh examination and analysis because the Pillar Trends can revise the basic contexts in which leaders operate. As we will detail below, there are significant implications for leaders and leadership that are already coming into focus.

The Pillar Trends, generally individually rather than in combination, have become factors in strategies for firm competitiveness, investment, and risk analysis. However, rarely are their implications for leadership itself examined. We do that here.

These Pillar Trends are also significant because they are deeply interconnected – not necessarily in terms of causation, but in the ways that they will co-evolve. For example:

- Global warming is causing rises in sea levels just as people concentrate in ever greater numbers in super-cities – most of which are located on or near the world’s oceans and rivers, making them particularly vulnerable to such rising sea levels;
- The aging population will be more susceptible to lung disease that can come with the increased concentration of pollutants that come with greater urbanization;
- An emerging specialty in urban planning is “environmental gerontology” – designing cities to be more hospitable for their “silver citizens”. (Spinney, 2010);
- Along with the rising incomes of the emerging urban middle class in the developing world is coming an increase in the consumption of meat – the food source that is most energy-intensive in its production and thus further contributing to climate change.

None of the Pillar Trends is surprising in and of themselves; they are relatively well known. However, what has been considered in less depth is the cumulative impact and the changes that will catalyze in how people around the world live, produce, play, worship, organize, and consume – and what that means for those who will lead our social institutions. The Pillar Trends will be the framework within which market trends and other more short-term phenomena will unfold.

There are specialists on each of these trends with far greater expertise than we have. The ability that we bring to this endeavor is to be able to stand back as generalists and students of leadership to provide a more holistic perspective. Our role here is to draw on the collective work of these experts, synthesize where we see connections, and recognize patterns where they can help us better understand the cumulative impact of the Pillar Trends and the challenges they represent for leadership.

The co-evolution of the Pillar Trends points toward a swing of the pendulum from a period of hyper-specialization to a more holistic approach to both opportunities and problems. The big challenges the world has faced since the dawn of the Industrial Revolution were best solved through the application of specialized knowledge in engineering, medicine, product development, manufacturing, and other domains. Putting a man on the moon or eradicating polio, to take two well-known examples, were driven by the focused efforts of individuals with deep knowledge of a specific area; the few solved for the many and the average person had little role in either effort (although many benefited from the efforts of the few). In the new reality, a much broader range of individuals and organizations will be involved in understanding what to do about global warming and the other Pillar Trends outlined below. Specialized knowledge will not go away; in fact, it will remain critical, but we are entering a time when the many will solve for the many as these Pillar Trends transform so many facets of our global lives. The issues we face are too large, too complex, and too interconnected to be solved solely by small groups of specialists working independently.

The U.S. Presidential campaign of Barack Obama in 2008 was an excellent example of this new dynamic. Policies and politics aside, a significant factor in Obama's victory was the campaign's ability to activate millions of people to raise money, engage their communities, and get out the vote. They tapped into the ideas and energy of a veritable army of people and had them calling, blogging, organizing events, and knocking on doors. The campaign provided tools and general guidance but also let the collective brainpower of the movement's members figure out how to beat their opponents. The team at the center was listening and learning as much as talking and directing. They were catalysts more than commanders.

This is not a model that will come naturally to many in what are called "leadership positions", particularly corporate heads who have been trained to focus on short-term financial measures and rewarded handsomely when they do it well – and quickly shown the door when they do not. Politicians also find it difficult to look beyond the next election cycle and an electorate that wants to know "what have you done for me lately?"

Yet it is not impossible. Companies such as GE and Unilever have grown their profits, in part by embracing sustainability as an innovation and brand engine that delivers both short and long-term benefits. Phillips and Siemens have both made the aging of the population a fundamental part of their corporate strategies.

Whether looking at solving the issues we face as "meeting a challenge" or "adapting to a new reality", there will be massive changes in production, distribution, and consumption. In 2025, collaboration will be a necessity, not a luxury. Think open source vs. the Manhattan Project.

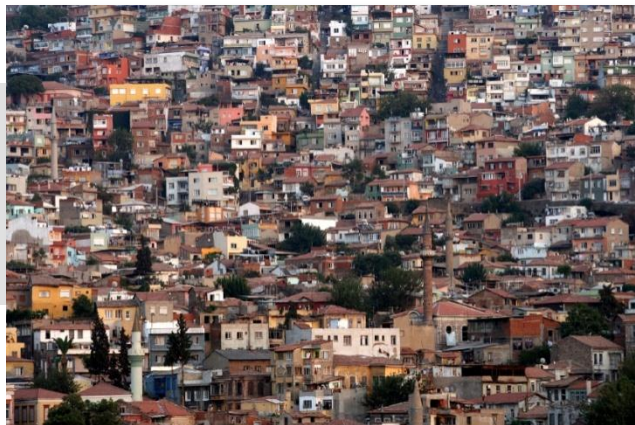
The potential to engage a broad swath of the population in our efforts to find solutions is one reason that we remain optimistic despite the enormity of the issues represented in the Pillar Trends.

The Pillars

1. The Urbanization of Society

“Vast, intensely urban hubs will radically redefine the world’s future macroeconomic and cultural landscape.”

Richard Saul Wurman, founder,
The [19.20.21 Project](#)



Increasingly, we all live in cities. Ten percent of the world’s population lived in cities in 1900. That percentage reached 50% in 2008 and it is projected to reach

75% by 2050 (Soja, 2006). That means that, in 2025, the planet will be well on its way to becoming Urban Earth and humankind an urban species. This urbanization represents several important transitions:

- The number of urban dwellers in Asia and Africa will double by 2030. This means that the urban populations of those two continents will grow more in 30 years than from the beginning of history to today. Darfur, a place that Westerners tend to think of as a desert, is 65% urban and has three major cities. In 1900, the world’s largest metropolitan areas were London, New York, Paris, Berlin, and Chicago. The largest of them, London, had 6.5 million people. In 2006, the largest metro areas were Tokyo, Mexico City, Mumbai, New York, Sao Paulo, Delhi, Calcutta, Buenos Aires, Jakarta, and Shanghai. The largest of these, Tokyo, has 35.5 million people. Projected population growth patterns indicate that we will see an even greater concentration of the largest metro areas in what is now known as the developing world. In 1950, 40% of urban dwellers were in developing countries; in 2030, it is projected to be 78% (Soja, 2006).
 - o This takes place as the world’s population continues to surge: it took 10,000 generations for human population to reach two billion (Gore, 2006, p. 216) but, by 2025, we will have crossed the threshold of seven billion. That is almost a four-fold increase over just one human lifetime.
 - o By 2030, sub-Saharan Africa is projected to have a greater share of the world’s urban population than Europe.
- The definition of “city” is evolving. First, Richard Florida, one of the world’s leading public intellectuals on economic competitiveness, demographic trends, and cultural and technological innovation, is among those advocating that mega-cities or mega-regions are the most meaningful ways to look at the world as economic activity is increasingly centered in them. According to Florida, the largest mega-regions are Tokyo followed by Boston-New York-

Washington (Bos-Wash) in the U.S. Florida argues that, although New York, Boston, and Washington are separate cities and are distinct in terms of governments, sports teams, etc., they are essentially a single competitive cluster (there are 450 city regions with 1MM+ people and 20 mega cities of 10MM+ as of 2008). The Urban Age Project defines these as “global city regions” – a “new metropolitan form characterized by sprawling polycentric networks of urban centres clustered around one or more ‘historic’ urban cores” (Soja, 2006, p. 58). Further, a Brookings Institution report cited by Florida finds that these global mega-cities have greater links to each other than to second or third tier cities that are more geographically proximate. For example, Bos-Wash is linked more closely to London and Shanghai than to Cleveland or Pittsburg (Florida, 2008). Many of these second tier cities will actually shrink as the pull of opportunities in the mega-cities grows. Another alternative definition comes from the *Shell Global Scenarios to 2025* that predicts the evolution of nation states into market states with “a redefinition of the states’ fundamental promises, toward maximization of opportunities for companies, investors, civil society and citizens rather than the Nation’s welfare” (Bressand, 2005).

Second, areas with populations that would normally make the threshold of “urban” have developed without any of the infrastructure we typically associate with cities. These are refugee camps and other semi-permanent settlements. According to the U.N., there are 10-14 million refugees worldwide and about 3.7 million of those are living in camps (Lewis, 2008). While these camps are always referred to officially as “temporary,” Palestinian settlements in the West Bank and Gaza are celebrating their 60th anniversary and there are camps in Afghanistan that have been in continuous existence since the 70s and in Africa since the 90s. By 2004, a refugee could expect to live in a camp for 17 years. “The result is a kind of spontaneous urbanization” (Lewis, 2008). Related to these camps are the other marginal urban areas – 80,000 people who live in a dump in Manila and as many as a million people who sleep in the cemeteries of Cairo each night (Lewis, 2008).

This has led me to create definitions of four types of cities:

- *Legacities* (New York, London, etc.) where there are issues of revitalization and refurbishment, especially with regard to infrastructure.
- *Technotopias* (Dubai, Dongtan, etc.) that are built as “talent highlands” hoping to attract the world’s best and brightest by offering state-of-the-art technology and infrastructure;
- *Cities of Desire* (the favelas of Rio, Dharavi in Mumbai – which has 700,000 people living on just 551 acres (Hanna, 2010), etc.) – or Squatter Cites as they have been called, where there seems to be little formal organization or infrastructure, and low income and education levels. Stewart Brand has spoken extensively about squatter cities.
- And finally, *McCities* that are new urban developments, such as those sprouting in China, yet that use largely last-generation technology and infrastructure. Fifty-percent of the new floor space in the world is being built in China, yet much of it is being built at

environmental standards that are two-to-three times below what is common in the developed world (McKibben, 2010).

- Wealth remains concentrated in established cities and Moscow now has more billionaires than any other city according to Forbes Magazine (New York is 2nd and London is 3rd) (Kroll, 2008). Measured by GDP in U.S. dollars (2005), the richest cities were Tokyo, New York, Los Angeles, and Chicago/Paris (tie). The result is a growing population/wealth divide where you have greater and greater concentrations of people in relatively poor areas. Emerging research from Harvard suggests that societies with wide disparities in health, wealth, and education are worse for all members of society based on life expectation statistics (Gudrais, 2008). This work looks at country-specific data and has not examined either city or regional statistics.

2. The Changing Climate of the Planet

"...even the richest, technologically advanced societies today face growing environmental and economic problems that should not be underestimated."

Jared Diamond, Collapse



Whether one believes global warming is human-caused or a natural phenomenon, the evidence that significant climate change is underway is overwhelming. The concentration of CO₂ in the atmosphere increased by approximately 1/3 between 1958 and 2005, with the growth projected to continue to 2025 and beyond. The same is true of other greenhouse gases. By 2025, the “Snows of Kilimanjaro” – Africa’s highest peak – will be gone, as will all of the glaciers in the U.S.’s Glacier National Park (Diamond, 2005). The Arctic may have its first ice-free summer as soon as 2040 (Global Warming Fast Facts, 2007). In July 2009, the world’s oceans reached their highest average temperature in the 130 years that they have been tracked (“World ocean temperatures,” 2009). The story is the same across the planet.

The world-changing impact of global warming is not predicted to be felt by 2025, although respected environmentalist Bill McKibben bases his latest book, *Eaarth: Making a Life on a Tough New World*, on the premise that the changes are substantial enough that the world with which we are familiar is already gone (McKibben, 2010). The average global temperature is predicted to rise by 0.5° C by 2030 after rising approximately 1.4° from 1880 to 2000 (Global Warming Fast Facts, July). The next several years will be critical in shaping the world’s response in preparation for the changes to come. One can foresee increasing action by governments, corporations, third sector organizations, and private citizens as the changes become more dramatic. “The rate of warming is increasing. The 20th century's last two decades were the hottest in 400 years and possibly the

warmest for several millennia, according to a number of climate studies. The United Nations' Intergovernmental Panel on Climate Change (IPCC) reports that 11 of the past 12 years are among the dozen warmest since 1850" (Global Warming Fast Facts, 2007).

Should the major ice masses such as the Greenland ice fields break up, the sea could rise as much as 14 to 20 feet. It is projected that 20 million people would need to be evacuated from Beijing and 40 million from Shanghai. In Calcutta and Bangladesh, 60 million people would be displaced. The maps of the world will have to be redrawn, according to Sir David King, chief scientific advisor to the UK government: "...humanity had better be prepared for a complete realignment of the coastal zones, where most of the world's major cities are sited," he said in 2004 (Lean, 2004). Three years later, the editor in chief of *The Times Comprehensive Atlas of the World* remarked that the latest edition showed that, "We can literally see environmental disasters unfolding before our eyes" (Writers, 2007).

3. The Aging of the Population in the Developed World

*"All developed countries, regardless of their current fertility level, have one thing in common: substantial future aging. Without a very dramatic increase in fertility—and a rapid one—unprecedented aging is now assured."*¹

Carl Haub, senior demographer and Conrad Taeuber Chair of Population Information at the Population Reference Bureau.



Fertility rates in the developed world dropped significantly from 1960 to 2000. That means that between now and 2025, "80% of the native-born workforce growth in North America – and even more in much of Western Europe – will come from those over 50" (Dychtwald, Erickson, & Morison, 2006). The U.S. and Canada will see a steady growth in the working-age (20–64) population (15% and 16% respectively) through 2025, the UK will see just a 7% rise, France a meager 2% and Germany, Italy, and Japan will all see declines. China will see growth of 20%.

However looking beyond 2025, the U.S. is projected to continue its growth rate while Canada drops to just 2%. The others all show declines: U.K. (-7%), France (-9%), Germany (-21%), Italy (-27%), Japan (-28%), and China (-13%) (Dychtwald, Erickson, & Morison, 2006).

Globally, population growth is projected to be largely in developing nations, with the population of the developed world remaining flat. In 2025, the developed world will comprise approximately 1.2 billion people, about where it is now, while the developing world will grow from 5.4 billion to 6.5

¹ Population Research Bureau, "Global Aging and the Demographic Divide", originally published in *Public Policy & Aging Report 17, no. 4 (2007)*.

billion people. Currently, about 60 babies are born in the U.S. every six minutes. In that same time, 244 babies will be born in China and 351 will be born in India.

Birthrates remain higher than the global average in Africa and the Middle East – areas with challenges in public health, education, economic development, and political stability. In developing countries, the demographic transition seen in the developing world (from high mortality, short lives, and large families to longer life expectancy and far fewer children) “is certainly underway, though these countries vary widely at their places along the spectrum” (Bureau, 2007).

According to *The Economist*, (Economist, 2010) U.N. statistics say that the percentage of the population over 60 will increase from about 11% today to 22% in 2050. That will make one in three people in the developed world a retiree and one in ten will be over 80. More than 10,000 people will become eligible for Medicare and Social Security in the U.S. each day between 2010 and 2030. The Congressional Budget Office estimates the percentage of GDP allocated to entitlement programs will grow from 9% in 2010 to 20% in 2025.

New York City is just one major urban area that is making modifications to its cityscape to accommodate an aging population. The city is encouraging owners of private buildings to make their bathroom facilities available to “silver” citizens, lengthening the time for crosswalk crossing at certain intersections, and installing fold-down seating along the sidewalk. It is creating two “aging-improvement” districts (Hartocolis, 2010). All of these are designed to make the city more viable for elder citizens. The sub-specialty of “environmental gerontology” has been called “a revolution in urban planning” (Spinney L., 2010).

4. An Exponential Increase in Knowledge

"I have 18 people gathering key data tracking 50 technical disciplines. In most, tech progress is doubling every 12 to 15 months – faster even than the advancing power of computer chips. Most people don't appreciate what such exponential growth means. That's why they don't realize how dramatic the next few decades will be."

Raymond Kurzweil, inventor,
entrepreneur, futurist



The rate of the growth of knowledge has been increasing for hundreds of years but it is entering a turbo-charged period. There are five times as many words in the English language now as there were in Shakespeare’s time. A week’s worth of today’s *New York Times* contains more knowledge than an average person encountered in a lifetime

in the 18th century. More new information will be created this year than over the past 5,000 years. The amount of new technical information is doubling every two years today; by 2010, it is predicted to double every 72 hours. By 2025, it may be doubling every day. That means that a large amount of what you learn at the beginning of a technical course may be outdated by the time you finish. Continuous education and lifelong learning will be necessities, not luxuries.

A greater understanding of the human brain will affect how we choose leaders, how leaders in turn act toward their followers, and how firms interact with customers. Critical to that research is massive computing power and other technology that enables ever-closer examination of this remarkable organ.

It is fortunate that computing power will also continue to increase dramatically. While one cannot accurately predict the specific technologies that will develop, one can feel confident that chips will become more powerful, communication devices will become ubiquitous, and technology will be ever-more central to our lives. Next-generation fiber optics currently being tested are carrying 10 trillion bits of data per second on a single fiber. That load is expected to triple every six months through 2025. By 2025, it is predicted that a \$1,000 laptop will have computing capacity that exceeds that of the human brain.

Implications for Leadership

1. Meet the System-centric CEO.

A central tenet of the post-WWII era has been the rational actor theory, which holds that each participant in the economic equation acts in his, her, or its own self-interest and that the greatest good for the whole results as the sum of these narrowly focused micro-economic decisions. It has been reinforced in everything from MBA education to quarterly analyst calls, which emphasize short-term performance of a tightly defined unit.



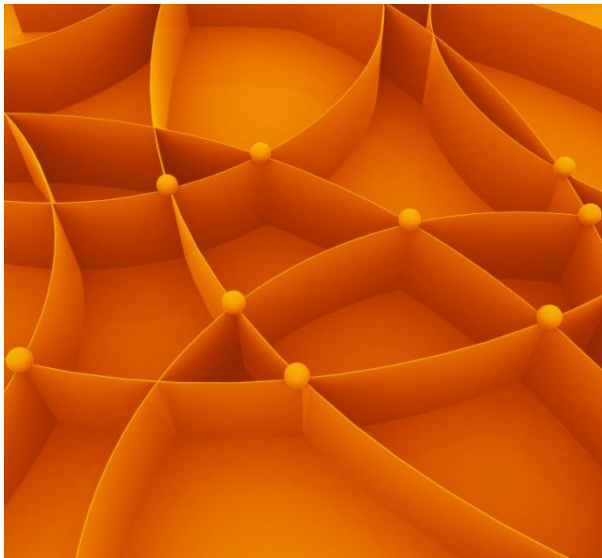
In a world redefined by the Pillar Trends, the concept of “self-interest” will expand to include some responsibility for the broader system in which the individual or firm operates. Externalities such as social and environmental impact will increasingly be factors in measuring firm and executive performance (Meyer & Kirby, 2010). Performance of each “node” (see #2 below) will more and more be seen a result of the success of the system – a leadership challenge and approach fundamentally different than those which face most CEOs today. This will be a continued evolution and refinement of the “triple bottom line” much discussed but only in the early stages of adoption such that it factors heavily into top executive recruitment, retention, and reward.

The 2010 Deepwater Horizon oil spill provides a dramatic example of what is to come: in initial Congressional hearings, government pointed the finger at industry and the individual firms before the committee – BP, Transocean, and Halliburton – all pointed fingers at each other. The failure, however, is one of a system in which regulators and firms alike placed their individual priorities at the fore and conspired to create a system in which responsibility was narrowly defined. One of the fallouts from the spill is a dramatic redefinition of the standard to which society will hold both private and public sector leaders for the output and impact of their entities on larger systems, such as eco-systems and regional economies.

Systems thinking requires use of the affiliative networks in the brain whereas traditional leaders have more often used the fear and incentive-based neural networks (think budget targets and the penalties for missing them as “fear”; bonuses and stock options as “incentive”). The latter are excellent for simple threats with simple solutions, but they are much less effective when the challenges are complex and coordinated, collaborative action is required. The effectiveness of

the incentive system is particularly short-lived: the “high” one gets from a raise or a new car wears off in a few days or weeks. The affiliative system delivers long-lasting pleasure: it is where we feel love and family connections, for example. Jonathan F.P. Rose (2010) has called the affiliative system the brain’s “we map” versus its “me map.” Starbucks’ CEO Howard Schultz shows evidence of engaging the affiliative system well with both colleagues and customers (Rose, 2010).

2. Evolving the Meaning of the Firm.



In a world where system rather than component-based thinking and action will be an increasing requirement of competitive success, the firm as a base unit of organizational coherence and value generation will shift. If success is measured through participation in and the output of a system, the firm becomes a node in a network rather than simply a self-contained entity. The “network effect” is not new (Katz & Shapiro, 1994) but most performance evaluation systems – those of the financial markets as well as firm-specific talent management tools – embrace a

traditional view of the firm. Does it matter, however, if one produces the world’s finest automotive lithium battery if it does not integrate properly with the other components and, as a result, the automobile power is unreliable?

The firm as a node will be dependent upon, and need to be proficient at, collaboration, co-opetition (Brandenberger & Nalebuff, 1996), and other forms of cooperation. These activities may extend beyond what have been thought of as the provenance of the firm to include a more extensive involvement in education to ensure a steady flow of qualified talent – education systems in both the developed and developing worlds are not producing enough baccalaureate-level graduates, particularly in technical and scientific fields, to meet the demands of business – through end-of-life disposition or reclamation of the firm’s products.

Information, now firmly ensconced along with goods and funds as the triumvirate of forces that drive the global economy, is increasingly democratized. If along with this you accept that the challenges embodied in the Pillar Trends will require open-source rather than closed-source solutions, much of the information treasured as proprietary is sub-optimized. Its power is best

leveraged and cultivated by a network in which it is freely exchanged rather than hoarded in individual fiefdoms in which value is perceived to be increased by the difficulty of access.

The CEO of such a firm will need to be an alliance builder able to create connectivity between seemingly disparate players as much or more than fulfilling the traditional role of head of a hierarchical entity.

3. Negotiating New Models of Governance.

The meltdowns of 2001-2003 and 2008-2010 both showed that current boards and models of governance are inadequate to ensure the proper stewardship of stakeholder interests in the face of executives bent on circumventing their oversight. The list of notorious failures is long – Enron, WorldCom, AIG, Fannie Mae, Freddie Mac and many others have become the best known case studies in poor



governance. Many other lesser known companies were unprepared to survive the turbulence of economic bubbles. While numerous CEOs have taken a tumble, the basic structure and composition of corporate boards has largely escaped questioning – at least outside of shareholder activist circles.

Without making any claim to know the specifics of what will emerge, we do feel that we are on the cusp of significant shifts in governance structures. Should a management oligarchy replace the “CEO monarchy”? Should the non-executive and management boards be more aligned and less distant? Should activist board members be welcomed rather than shunned? How do you evolve succession planning and other processes to better adapt them to this evolving reality? These are the kinds of questions that will be asked by companies that want to be ahead of this curve.

4. Navigating an Unpredictable World.

People will experience an increased frequency of “unpredictable” events similar to 9/11, 7/7, the Szechuan and Haiti earthquakes, Hurricane Katrina, the Virginia Tech shootings and the

H1N1 pandemic. Climate change is altering weather patterns, resulting in more violent storms in some areas and significant decreases in precipitation in others. Social and political tensions are likely to result in ongoing terrorism and other acts of seemingly random violence. Public health officials agree that we are overdue for a deadly flu pandemic and seismologists feel that the likelihood of “the big earthquake” hitting the San Andreas Fault will approach 100% over the next 20–30 years. In short, life is going to seem riskier and less certain, particularly in developed nations that have been used to relative stability.

Look for redefinitions or reinterpretations of terms like trust, hope, integrity and authenticity in the popular lexicon as people’s relationships with organizations – public, private, and third sector – evolve to reflect this new reality. Reputational risk will be an increasingly important consideration.

The implications for leadership of this shift are profound because most leaders today were trained to operate in world of relative stability and predictability. Novel situations require great emotional intelligence and self-awareness as well as agility in diagnosing fast-changing situations. Leaders emerge in such situations not because they have the most power or cache of resources but rather because they are able to craft a way forward that resonates with all those that he or she needs to follow. In such situations, leaders must be effective with the hierarchy under their direct control and with a wide range of other stakeholders over whom they have little or no authority.

5. Leading and Managing Short Supply.

The middle class in the developing world is forecast to grow dramatically. Moving from the country to the city has almost always meant an increase in the standard of living for the people involved and this offers many opportunities for firms. “The World Bank estimates that the global middle class is likely to grow from 430 million in 2000 to 1.15 billion in 2030. The bank defines the middle class as earners making between \$10 and \$20 a day – adjusted for local prices – which is roughly the range of average incomes between Brazil (\$10) and Italy (\$20)” (The new global middle



class: Potentially profitable – but also unpredictable, 2008). More important, 93% of the global middle class is projected to live in the developing world with China and India accounting for 2/3 of the growth (The new global middle class: Potentially profitable – but also unpredictable, 2008). The Brookings Institute estimates that by 2025, the middle class will represent 52% of the global population, up from 30% today.

However, U.S.-style consumerism long held up as the middle class ideal is not sustainable globally. Consumption had already passed the point where the Earth's rate of renewal can keep up in 1999. By 2025, if current growth trends continue, it will take approximately 1.5 Earths to sustain consumption of renewable resources (Loh & al, 2002). This will have an increasing impact on people's consumption patterns: increasing numbers will want to consume more, some will choose to consume less, many will consume differently, and many more will look for companies to deliver products and services in an efficient, minimal impact way.

Until recently, the questions of resources had largely been ones of "From where?" and "At what price?" rather than "If?". Price is certainly a constant issue and demands from the growing economies of China, India, and others are likely to push the cost of basic materials upward. More significant, however, are changes such as the retrenchment of the ice caps at the North and South Poles as well as glaciers at the "third pole" in the Himalayas and other mountainous regions around the world portend dramatic shifts in the availability of fresh water for drinking and irrigation in the world's populated regions. Military experts in many nations regard water and food-related conflicts as a major global risk: one study from the University of California/Berkeley suggested that a 1^o Celsius rise in temperatures in Africa would increase the likelihood of conflict by 55%, which would result in more than 390,000 combat deaths (Chivers, 2009).

There will be constriction in the supply and increases in the cost of basic goods and raw materials. This will be particularly acute in those items where supply cannot be increased quickly: oil/fossil fuels, foodstuffs, and clean water.

In 2008, Americans are shocked by gasoline that has passed \$4.00 per gallon but it is commonly believed that growth in emerging economies will keep prices high (and push them higher) through 2025. There will be periodic backsliding in prices but the overall trend line will rise. With growth concentrated in the developing world, economic growth will be tied to energy consumption and rising population, and increasing living standards will likely lead to a substantial rise in energy demand (Loringer & Garret, 2009). New, more efficient technologies can help mitigate the strains of this demand, but they will be hard-pressed to keep up with rising demand – especially in poor areas without the capital to invest in technology. Even in the best cases, major infrastructure transformations such as energy systems can take several decades and up to a century.

China is undergoing “the largest scale of urbanization and rural-to-urban transition in human history” (Soja, 2006). They will have gone from 20% urban in 1970 to more than 50% by 2025 – a transformation that took the rest of the world several hundred years. That pace of expansion will continue to consume enormous amounts of oil, coal, steel, wood, and other raw materials.

Continued population growth globally and the growing middle class will keep demand for food high. “The new consumers of the emerging global middle class are driving up food prices everywhere. The food-price index compiled by *The Economist* since 1845 is now at an all-time high; it increased 30 percent in 2007 alone. Milk prices were up more than 29 percent last year, while wheat and soybeans increased by almost 80 and 90 percent, respectively. Many other grains, like rice and maize, reached record highs. Prices are soaring not because there is less food (in 2007, the world produced more grains than ever before), but because some grains are now being used as fuel and because more people can afford to eat more. The average consumption of meat in China, for example, has more than doubled since the mid-1980s” (Naim, 2008).

Coupled with this will be an increased demand for water. Under a business-as-usual scenario, total domestic consumption will increase 75% from 1995 to 2025, of which 90% will be in developing countries according to a World Economic Forum report. Today, more than one billion people live without potable drinking water. Dirty water and poor sanitation are the second largest contributors to global infant mortality (Samans & Waughray, 2009).

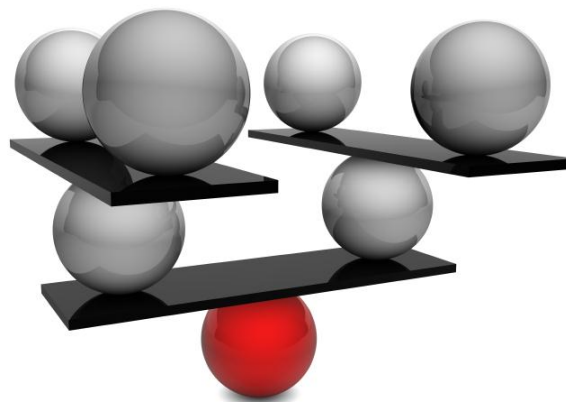
This will ensure that consumers stay focused on low prices. In the developed world, consumers will be looking to hold onto what they have long taken for granted – easy access to a vast array of products, the ability to make convenience a top priority, and the freedom to treat everything from shoes to computers to refrigerators as “fashion items” that can be replaced simply because they are out of style. Developing nations will aspire to what they have watched consumers in developed nations enjoy. It is not hard to see the potential for conflict.

Leaders will need to focus their firms on supply chain efficiencies. Rising wages in traditionally low labor cost countries will make it more difficult to control costs by shifting production geographically. There is a large opportunity, however, to help consumers consume more efficiently. From packaging to the retail setting/environment to getting goods to the point of use to the waste stream, the consumption chain has received much less attention than the corporate supply chain. The growth in the developing world provides the opportunity to rethink much of this without the constraints of existing infrastructures.

6. Balancing new tensions.

There will be several tension points that will require active management and skillful leadership. Among them are:

- a. Low Price vs. Low Impact. Consumers, and increasingly b2b customers as well, expect to pay less but also demand high safety standards, clean production, green supply chains, and transparency in your operations.
- b. Security vs. Convenience. As computing power grows, so too will both the proliferation of devices and processes to make paying for things easier as well the ability of criminals to hijack your funds and/or your identity. Balancing ease of use with security will remain a seesaw in motion.
- c. Extraction vs. Cultivation. Extraction was the goal of shareholder value-based capitalism – focus on delivering as much value to shareholders as possible now (and let us note that it also led to massive grants of stock to CEOs, making them major shareholders and in theory aligned with other shareholders in the pursuit of quarterly profits). It was believed that market forces would send the appropriate signals to mitigate legal, environmental, and other risks. Cultivation takes a longer view: it also strives to return value to shareholders but in ways and at rates that are sustainable over decades, not merely quarters. The extractive leader points to firm performance during his or her tenure; the cultivating leader looks to how he or she built on what was inherited and how well-positioned the firm is to prosper after his or her time at the helm in addition to the results delivered while heading the firm.
- d. Urban Haves vs. Have Nots. “Urbanization will stimulate innovation, creativity, and economic growth, while at the same time intensifying social and economic inequalities and conflict-filled political polarization” (Samans & Waughray, 2009). For CEOs of multinational firms, this has “best of times, worst of times” implications as more and more people will bring their products into their lives thanks to their growing affluence, while others will react more violently against iconic global brands as symbols of oppression. The 2010 unrest in France and the U.K. were the product of “haves” feeling that they were sliding, indeed being pushed, toward the “have nots.”



7. Leading a More Fragmented Workforce.

Today, we think of work/life balance as a two-dimensional equation where we juggle time at the office vs. time at home. This is soon to become a lifelong game of three-dimensional chess. Greater longevity along with a lack of younger workers will drive a move to retire retirement and replace it with a career continuum in which one's later years will be spent working in a second or third career. Companies will need the people and the people will need the money.

Rather than a progression from school to office to retirement community, there will likely be an interwoven blend of periods of education, work, and sabbatical throughout one's adult life. With the speed at which knowledge is evolving, four or six years at university/graduate school may simply be too long to spend simply learning while what one learns in four-to-six years will no longer last a lifetime. With the end of retirement, periodic sabbaticals may become more common. Workers will lead more varied careers.



These changes will dramatically affect the way companies acquire, develop, and retain talent. A leader accustomed to cultivating “high potentials” who will move for the firm and progress up through a series of company-planned assignments will be in for a rude awakening. The successful CEO will be a skillful talent broker and foster the creation of a “talent highland” that is carefully calibrated to respond to the needs of the best and brightest essential to firm performance.

For the corporation that wants to lead to 2025, there are several steps that can be taken now:

1. **Question orthodoxies.** Virtually everything you do now will be done differently in 2025. While many firms have practiced creative destruction with their products and the lower levels of their organizations, few have brought such rigor to how they choose and challenge their most senior executives and boards. Start asking questions, experimenting, and innovating now.
2. **Simplify, simplify, simplify.** And then help your customers and suppliers simplify too. With the exponential growth in complexity, the only way to survive is to simplify in ways that make the complexity manageable. Do this at the firm level to eliminate the need for the yearly reorganization; help your customer do it to increase the value you deliver.
3. **But don't ignore complexity.** There are many tools for simplifying our view of the world but they do not make the underlying complexity go away. Leaders must have a nuanced perspective on

the different forms complexity can take and the implications of each for their strategy and organization.

4. **Rebalance your leadership pipeline.** Be sure that you have proven collaborators with subject matter expertise in critical global challenges such as the Pillar Trends. Look for diversity – and get beyond lip service. Diverse perspectives are now a necessity for effectively employing, marketing to, and serving global constituencies.
5. **Focus on resilience.** You cannot predict everything that is going to go wrong but you can prepare to bounce back quickly. Resilience and agility will be the hallmarks of leading organizations and their leaders in 2025.
6. **Leverage data.** The emergence of predictive analytics as a powerful driver of understanding and decision making across sectors is helping determine the next generations of winners and losers. Leaders must learn to make their calls based on guts-plus-evidence.

Take advantage of today's big knowledge advances.

There are so many dramatic advances in knowledge that it can be difficult to take the time to assess each for its power to potentially transform your business. Look, for example, at the mapping of the human genome. It started with great fanfare several years ago but more recent progress has not attracted nearly as much attention. Yet people are now hosting “spit parties”, the result of which is detailed information that can lead to individualized nutrition advice and medical treatment based on an individual’s genetic code. What might that depth of individualized information mean for your relationship to your customers, suppliers, or workers? What opportunities or threats might it represent?

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About the RoseMont Institute for Transformational Leadership

The world faces a leadership crisis. Confidence in leaders has declined significantly in recent years resulting in what many leadership experts are now saying are significant threats to our economic and social systems. What we believe is needed is fresh thinking about the challenges leaders and organizations face as well as about the leadership that must be demonstrated in order to meet them.

The RoseMont Institute for Transformational Leadership provides a platform for a variety of compelling voices to engage in dialog and debate topics related to transformational leadership. We believe that the thinking is there – much of it with front line leaders – and the Institute endeavors to surface it, aggregate it, and catalyze conversations. Our outlook that is global, challenging, real-world based, and forward-looking.

We currently have fellows in Boston, Geneva, New York, and San Francisco and continually seek new voices from around the world. If you are interested in becoming an Associate, Fellow, or Corporate member of the Institute, please contact us at inquiries@rosemontinstitute.com.

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