



THE BIG PICTURE

Facing Up to a Changing World

By ADRIAN A. DONE

The year 1876 was not a good one for the Samurai. After centuries of dominating Japanese politics and society, several events conspired to bring their powers to an abrupt and unseemly end. A whole way of life that had emerged during the 7th century and dominated the region for centuries disappeared in the blink of an eye.

The same could be said of countless other civilizations throughout history. From the Romans to the Aztecs to the Rapa Nui, they have all met their fate.

One lesson is that, at certain points in history, humans seem incapable of foreseeing inescapable trends or acting in a timely and appropriate manner to deal with them – a fact that

should give us serious pause for thought as we confront an array of 21st century challenges.

To raise awareness of these challenges, I put together a course at IESE Business School titled “The Big Picture.” My first question to MBA students and business executives alike is, “How much time do you dedicate to thinking about the big issues that are likely to affect your personal and professional life in the next 20 years?” The overwhelming response from current and future captains of industry is, “Frankly, not much. Certainly not enough.”

What would your answer be?

In this article, I will try to redress this. I highlight a dozen global trends that are likely to impact our political, economic and business



Facing Up to a Changing World

landscapes within the foreseeable future. Some may be obvious – even to the extent that you may well be bored of hearing about them.

But these global trends are already changing our world, and not being fully aware of the underlying forces, and failing to take appropriate and timely action, could potentially turn your life and/or business upside down.

This article, based on research I conducted for my book, *Global Trends: Facing Up to a Changing World*, is primarily meant as a guide for navigating the turbulent waters of the years to come. Whether you are a business leader or merely a concerned citizen, my belief is that we should all become more aware of these trends, and be prepared to take appropriate action before the next occurrence of disruptive “black swan” events.

Although clear threats emerge from each of these megatrends, so, too, do new possibilities. I also present tools for not only identifying and mitigating the major threats, but also maximizing the significant opportunities that are likely to come your way.

Mitigating Threats in a High-Risk World

We are now living in a world of growing economic uncertainty, where millions have to accept the prospect of worsening business opportunities and living conditions. The unpleasant truth is that the current economic turmoil stems from our collective failure to foresee the foreseeable and act on the actionable.

■ EXECUTIVE SUMMARY

How much time do you dedicate to thinking about the big issues that are likely to affect your personal and professional life in the next 20 years? If you're like many busy executives, not much. Yet with a global outlook arguably bleaker today than during the lowest point of the credit crunch, burying your head in the sand is no answer. Surely, it is better to face up to the big global trends looming on the horizon and figure out the best courses of

action to take, based on sound evaluation of the underlying facts and in-depth consideration of possible outcomes. In this article, the author identifies 12 global trends that he feels will present considerable hurdles in the coming years. Then, he presents practical tools for plotting the major threats and maximizing the significant opportunities that are likely to have a direct bearing on your – and your company's – future wellbeing and prosperity.

Worse still, the economic picture today is arguably bleaker than during the lowest point of the credit crunch in 2008–09. Not only are our leaders still frantically trying to contain the fallout from *that* crisis, we also now face a myriad of other crises.

Business leaders face a stark choice: distinguishing between those global trends that present a real and present danger to their company's operations, and those that are less pressing or more remote.

In my research, I identified a dozen global trends that will present considerable hurdles in the coming years. Many of them already feature prominently among the core threats identified by the Office of the Director of National Intelligence and the National Intelligence Council – the most senior advisers to the President of the United States on issues of national security – as well as among the global risks as seen by the World Economic Forum. Here I provide a brief summary of each.

1. ONGOING REPERCUSSIONS FROM THE CRISIS.

After throwing huge sums of public money at the problems in the banking sector, much excessive debt has moved off banks' balance sheets and onto national ledgers. As with many historical boom-and-bust cycles, a different world will emerge from this, the worst financial crisis since the Great Depression of the 1930s. New economic, financial, political, legal and social structures and regulations will be laid down. The 21st century will be shaped by how the global economy survives profound uncertainties and whether it is able to overcome excessive debt accumulation.

2. GEOPOLITICAL POWER SHIFTS. The BRIC economies are moving fast. In the lead is China, whose GDP is predicted to catch up with the United States' by 2035. India is expected to overtake most European economies by 2020. Russia will be in a similar situation by 2035, while Brazil is on track for 2040. Meanwhile, a host of other Emerging and Growth-Leading Economies are expanding rapidly, as Alicia García-Herrero reported in her article, “The Next Emerging Giants Take Flight,” published in Issue 10 of *IESE Insight*. With economic success comes political power, and it is inevitable that these countries will have a greater say in the new world order. Be warned: If your

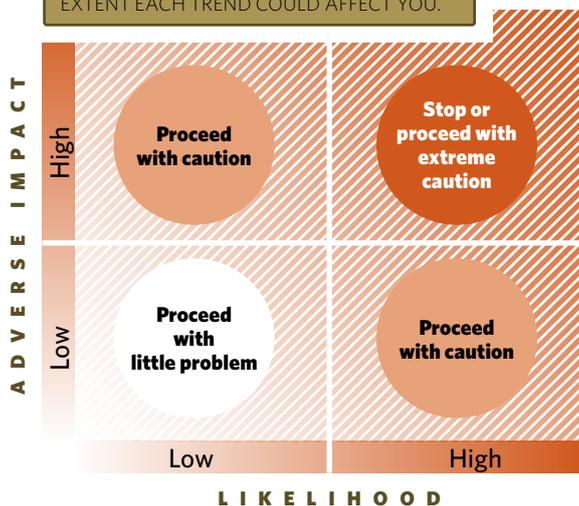


Facing Up to a Changing World

Clarifying the Big Picture

EXHIBIT 1

CONSIDER THE PROBABILITY AND TO WHAT
 EXTENT EACH TREND COULD AFFECT YOU.



company is not in these markets, it will soon find itself in a shrinking pond.

3. TECHNOLOGY. Be prepared for the “creative destruction” of developing technology. Ask yourself how sci-fi breakthroughs such as wireless energy transfer, avatar-style robotics or anti-aging drugs would impact your company. Here’s a sobering statistic: Only 1 in 5 of the top companies in the 1960s managed to survive unscathed into the new millennium. Many others simply failed to see or adapt to abrupt technological changes.

4. CLIMATE CHANGE. Scientific evidence that the world’s climate is changing remains unequivocal. The problem has gone beyond mitigation and will undoubtedly require the development of adaptation strategies. Expect some global areas to bake, others to flood and others to be blasted by ever more extreme weather events. Clearly, we need to look for ways to reduce our greenhouse gas emissions for the benefit of future generations. In the meantime, choose where and how to live and do business with care. Just as the polar bears will have to adapt their habits, so will you and your company.

5. WATER & FOOD. Drinkable water will be the next oil. Barring radical changes in its management, water resources are only going to

get scarcer. Those economies whose groundwater supplies are fast depleting will have to look elsewhere for water or else come up with innovative solutions. To make matters worse, 70 percent of global water use is in agriculture – less water, less food. Although undernourishment may have gone down during the 20th century, the rise in food prices means that it is on the rise again. Ironically, while the world’s poor continue to starve, rich nations are dealing with health problems related to overconsumption, such as obesity, heart disease and diabetes, which are proving to be expensive socioeconomic problems.

6. EDUCATION. Despite overall improvements, Asia, Latin America and Africa remain education black spots. In most countries, girls have problems accessing education; boys have problems staying there. Such issues largely extend into adulthood. More than 775 million adults worldwide – one in five – cannot read health advice, manage a bank account, read an advertisement or write a letter. And this is not just a problem of the developing world. For example, an estimated 1.5 million adults in the Netherlands are functionally illiterate, and in France, three million have literacy problems. If people can’t read or write, how can they possibly solve 21st century problems?

7. DEMOGRAPHIC CHANGES. The world’s population is projected to rise from the current seven billion people to reach nine billion by 2050, putting a strain on resources before eventually leveling off. Indeed, within the next several years, half of humanity will only be having enough children to replace itself. “Population pyramids” will be replaced by “population coffins” as the populations, primarily of developed nations, become older and need to be sustained by a shrinking working population. Retiring on a full pension at 65 could become a thing of the past. To keep economies afloat, immigration of younger, able bodies will be encouraged and could even become a source of competition between nations.

8. WAR, TERRORISM & SOCIAL UNREST. Humans have a history of violence and antisocial behavior. The 20th century was particularly bloody, with as many as 200 million people killed in major wars. Sadly, the 21st century has started



Facing Up to a Changing World

in a similar vein, with war, terrorism, social unrest, piracy, organized crime, illicit trade, corruption, governance failures, fragile states and proliferation of weapons all on the rise. Perhaps most worryingly, the chances of a high-impact geopolitical conflict taking place within the coming decade are extremely high. Could the 21st century be even more unstable than the last?

9. ENERGY. Demand for energy is insatiable. Having grown by 50 percent since 1980, it is likely to grow exponentially over the next 30 years. This puts added pressure on fossil fuels, which represent the majority of global energy consumption. By contrast, renewable energies currently account for just a tiny fraction of power generation, and urgently require further development. Some predict that nuclear *fusion* – significantly safer than nuclear *fission* – could become our most sustainable energy option. We may expect to see more energy-efficiency initiatives to manage the demand side, not to mention more dammed valleys, wind farms and solar-paneled buildings.

10. ECOSYSTEMS & BIODIVERSITY. By 2050, we will be using up the equivalent of two Earths to support our increasingly unsustainable lifestyles. Countless creatures are disappearing from the planet. For example, we remain dependent on bees for pollination, yet their populations are fast collapsing, and our fish stocks

are already terribly depleted or contaminated. Ecosystem and biodiversity concerns are no longer the preserve of a few tree-hugging eco-warriors, but are shared by all for our mutual wellbeing.

11. HEALTH. In many poorer nations, a third of the people die before they reach the age of 14, and even greater numbers die between the ages of 15 and 69, many from easily treatable conditions. Without profound change, the United Nations' declaration of health and wellbeing as a fundamental human right will remain a pipe dream for half the world's population. Simply being rich is no guarantee of health. A Tajikistani can expect equal health and longevity as an American, despite paying 25 times less on health care. In the face of spiraling costs, aging populations, rising pandemics, drug-resistant superbugs and new child illnesses, public and private health systems may be stretched to breaking point.

12. NATURAL DISASTERS. Some 200 million people are affected by disasters each year, compared with just 50 million in 1970. Crowded cities, unsafe constructions, lack of urban planning, the destruction of natural buffers and climate change have all combined to leave more and more people exposed. For example, the 2010 earthquake in Haiti affected 40 percent of the population when 70 percent of the buildings collapsed, resulting in an economic impact of 124 percent of GDP. Those who can implement projects to protect themselves do so, while poor, populous cities are disasters waiting to happen.

■ ABOUT THE AUTHOR

Adrian A. Done is an associate professor in the Production, Technology and Operations Management Department at IESE Business School. He also serves as a research associate with the Advanced Institute of Management (AIM) in the U.K. He earned his Ph.D. from the London Business School and his MBA from IESE. He began his professional career with Ford Motor Company, working in the global automotive industry during two decades. His research on the leveraging of knowledge

across manufacturing and service supply chains has received awards from institutions including the European Foundation for Management Development, the Decision Sciences Institute and London Business School. He is an active member of international research networks, including the International Manufacturing Strategy Survey, and is regularly invited to present at international conferences. He lives in Barcelona with his wife and two sons.

Time to Get Our Heads Out of the Sand

When faced with the specter of such myriad threats, the overwhelming response of most human beings is one of utter incomprehension and/or denial – a semiconscious burying of heads in the sand. “As long as it doesn't affect me directly, let's just carry on” has become the mantra of our age.

Surely, though, it is better to face up to these changes and figure out the best courses of action to take, based on sound evaluation of the underlying facts and in-depth consideration of possible outcomes.

Specifically, business leaders should be



**Formulating
an Action Plan**

EXHIBIT 2

PLOT YOUR THREATS, OPPORTUNITIES AND ACTIONS.

GLOBAL TRENDS	THREATS		ACTIONS						Who?
	OPPORTUNITIES		A	B	C	D	E	F	
The Crisis	1								
	2								
Geopolitics	3								
	4								
Technology	5								
	6								
Climate	7								
	8								
Water & Food	9								
	10								
Education	11								
	12								
Demographics	13								
	14								
War & Unrest	15								
	16								
Energy	17								
	18								
Ecosystems	19								
	20								
Health	21								
	22								
Disasters	23								
	24								
		When?							

asking themselves how these trends could impact their own operations. In Issue 8 of *IESE Insight*, MIT's David Simchi-Levi wrote about how companies could mitigate their risks by optimizing control over their supply chains and making sure they had a fallback position should a problem arise with one of their main suppliers. Common sense, right? But, as

Simchi-Levi revealed in "Seven Myths to Beat Before They Beat You," many corporations simply don't do this. Instead, their priority is to keep costs down, rather than building a strong, responsive supply chain.

Seeing the Big Picture

Any one of the 12 global trends, by itself, has the



Facing Up to a Changing World

We need more than the tools and skills acquired through functional, silo-oriented education. To make good decisions, we also need to be able to make sense of the bigger picture.

power to impact us on a personal, organizational, societal, national and international level. As such, each trend represents an important area of serious analysis.

Yet each trend is also closely tied to the others, so any meaningful analysis cannot be done in isolation. Energy scarcity, for example, will affect the supply and price levels of many other resources, including food and water – something we are already witnessing. And as we saw in the 1930s, severe economic crises can lead to the rise of extremism, which, in turn, may intensify geopolitical tensions across regions. Leading experts have warned that we are living through a similarly tense era. For this reason, we need to look at the big picture.

Some leaders might say it's impossible to plan for the unplannable. This argument serves to shirk responsibility for these crises. The truth is, you can plan for many of these trends, since we already know a great deal about them. Indeed, when faced with the very real possibility of a high-impact event heading your way, the only rational response is to carry out some form of scenario and action planning.

The problem is, most business people are too pressed for time and overloaded with information to devote themselves to activities that, however profound they may be, present no immediate payoff or repercussions. As a result, big mistakes are made: Nuclear plants are located in areas of high seismic activity; carmakers dig themselves into deeper holes due to their failure to anticipate technological development and changing social needs; and investors gamble on things they don't understand, can't afford and ultimately regret.

In short, we need more than the tools and skills acquired through functional, silo-oriented education and professional experience. To make good decisions, we also need to be able to make sense of the bigger picture, which

requires a firm grasp of the major issues out there in the real world.

Coming Soon to a Business Near You

The most worrying thing about these global trends is the sheer scale of the threat they represent, not to mention the high likelihood of them actually happening within the next decade. This is not scaremongering; it is a rational evaluation of the evidence available to us.

Drawing on the insights and perspectives of around 500 of the world's top minds, the World Economic Forum's annual Global Risks Report reveals that many unpleasant scenarios related to the global trends I have identified are either "likely" or "very likely" to occur within the next decade. In addition, their projected economic impact is well in excess of \$100 billion, not to mention the many other forms of suffering they could cause.

Many of the individual threats posed by the 12 global trends fall into the high impact/high likelihood quadrant of the two-by-two matrix shown in **Exhibit 1**. Only through pragmatic scenario and action planning will our companies be able to mitigate these threats, as well as seize potentially significant opportunities. The good news is that there are a number of business tools and frameworks that managers can use to implement appropriate actions to reduce risks and costs, and increase benefits and profits.

Doing More With Less

In my experience, companies can build sustainable value and address inadvertent costs and complex challenges simply by doing more with less. This usually takes the form of managing operations to provide better quality product-and-service outputs with reduced inputs, but the same can be applied to the management of threats and opportunities. Some of the most successful approaches are

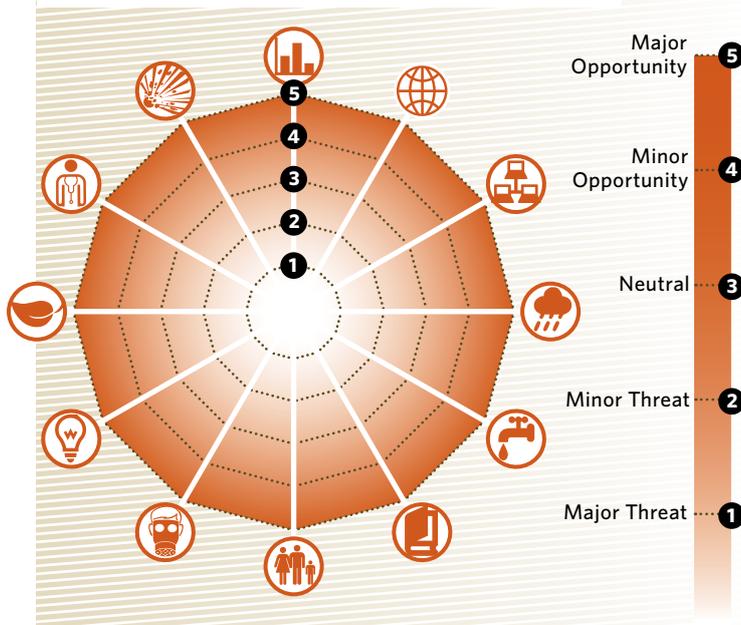


Facing Up to a Changing World

Global Trends Clock

EXHIBIT 3

RANK EACH TREND BY PUTTING A DOT ON THE SPIDER DIAGRAM. JOINING THE DOTS GIVES A VISUAL IMPRESSION OF WHERE THE MAIN OPPORTUNITIES AND THREATS LIE.



simple ones that can be easily understood and communicated.

One such common-sense approach is known as Pareto Analysis, or the 80/20 principle. In other words, roughly 80 percent of the effects come from 20 percent of the causes. As such, a business leader should be able to mitigate around 80 percent of the threats his or her company faces by intelligently and systematically working on 20 percent of the underlying problems. Likewise, 80 percent of the opportunities can be exploited by focusing on 20 percent of the priority actions that will reap the most dividends.

In any management situation, it makes sense to concentrate on those actions that will lead to the most benefit with the least possible use of time, energy and resources. Since we are aiming to be more fruitful with less effort, we can think of it as picking fruit off a tree: Why waste 80 percent of your time and effort on the 20 percent of the fruit that is simply out of your reach, when you can relatively easily pick 80 percent of the low-hanging fruit with 20 percent of the effort? Only once the easier-to-get fruit has been picked,

and there are still enough resources and motivation to continue toward higher goals, is it opportune to move on to the harder-to-reach stuff. Even then, the same rule applies: Concentrate on the fruit that is most within your reach.

While by no means a magic formula, this approach does work. As it is successfully implemented across all manner of organizational and business scenarios, it makes sense to apply the same principle when setting out to tackle the complexities associated with the 12 global trends.

Managing Threats and Opportunities

To manage the threats and opportunities your company faces, you first need to identify those that will have the greatest impact on your business. In reviewing the list of 12 global trends, several may jump out at you.

The next step is to brainstorm, ideally in a team, a more detailed list of threats and opportunities within those selected areas that are most likely to affect you in the coming years. Reduce that list down to the top 20 percent of the most severe threats and most promising opportunities, and enter these into a table similar to that in **Exhibit 2**.

Next, identify actions to address each of these threats and opportunities. Again, reduce the list of actions down to the top 20 percent and enter them into the table (“Actions: A, B, C, D...”). Then, work through the table indicating, with a dot, the threats and opportunities that are addressed by each action.

Here, the complex interrelatedness of the global trends actually helps, since you will invariably find that any particular action will work toward addressing several threats and opportunities simultaneously.

Joining the Dots

As the “Global Trends Clock” suggests (**Exhibit 3**), there are strong cause/effect relationships going not only around the clock, but also between opposite points of the clock. The crisis will be interconnected with demographic changes; geopolitical shifts are inextricably linked with war, terrorism and social unrest; technological challenges affect energy supplies; climate change is connected to ecosystems and biodiversity; water and food are



Facing Up to a Changing World

These interconnections may appear complex, but there are likely to be actions that work across several global trends, making them significantly more manageable.

related to health; and the quality of education will determine a country's response to natural disasters.

These interconnections may appear complex but, as analysis of the threats, opportunities and actions chart will reveal, there are likely to be actions that work across several global trends, making them significantly more manageable.

Consider cost-saving energy-efficiency efforts: These will produce beneficial impacts across several global trends. Other actions – such as investing in new technology, creating new markets in emerging nations, collaborating with educational initiatives and encouraging health improvement programs – will have positive and profound impacts across many areas. Implementing leaner approaches that use fewer resources and generate less waste is an obvious way to mitigate several threats and exploit numerous opportunities at the same time.

Now, using the indicators you have marked on **Exhibit 2** and **Exhibit 3**, take the analysis a step further by simply connecting the findings. What do you see?

First, you will have a new perspective on the big picture. Second, you now have a way of killing several birds with one stone, as each action encompasses several trends.

Granted, these simple diagrams are only a start. As you delve deeper into each action, you will need to employ more complex tools and methods. But at the very least, this represents an effective and efficient way of getting the process of mitigating threats and maximizing opportunities under way.

Adaptability: The Key to Survival

In doing all this, it is worth recalling the words attributed to Charles Darwin: “It is not the strongest of the species that survives, nor the most intelligent; it is the one most adaptable to change.”

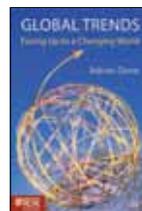
Change is a fundamental component of do-

ing business in the 21st century. In sectors such as technology and pharma, where rapid change is a given, only the most flexible and adaptable companies stay the course. Even in sectors that were fairly slow to change, such as the media, only the most nimble actors are able to benefit from the shifting landscape.

Once the initial urge of denial is overcome, you can stop worrying about the future and start preparing for it instead. By looking ahead and arming yourself with increased awareness, you should be able to regain control over how you manage and navigate the global challenges of our times, with a greater sense of courage and confidence. You will be able to take better decisions and actions in the years to come.

While the end may not be nigh, the times are certainly a-changin'. The success with which we confront these global trends will have a direct bearing on our – and our companies' – future wellbeing and prosperity. □

■ TO KNOW MORE



- Done, A. *Global Trends: Facing Up to a Changing World*. Basingstoke, U.K.: Palgrave Macmillan, 2011.

■ See www.facinguptoachangingworld.com