Which people and connections will be most powerful and influential in shaping the future? A globally interconnected meritocracy based on individual freedom and the American dream? Or many networks reflecting the persisting power of culture and history?
Shell International builds a set of global scenarios every three years to explore the overarching challenges arising from changes in the business environment that need to be faced by its businesses. These scenarios provide a useful context for testing our strategies and plans and help us to anticipate significant changes in the world around us. This booklet contains a summary of our most recent scenarios, which look out to 2020. We hope that these stories of the future help stimulate other journeys of exploration.
People and Connections

Global Scenarios to 2020

Public Summary

Global Business Environment
Shell International 2002
We welcome your questions and views

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Introduction

Scenarios are a tool for helping managers plan for the future—or rather for different possible futures. They help us focus on critical uncertainties: the things we don't know about that might transform our business, and the things we do know about that might involve unexpected discontinuities. They help us understand the limitations of our 'mental maps' of the world—and to think the unthinkable, anticipate the unknowable, and utilise both to make better strategic decisions.

Scenarios are alternative stories of how the world may develop. They are not predictions, but credible, relevant, and challenging alternative stories that help us explore ‘what if’ and ‘how’. Their purpose is not to pinpoint future events, but to consider the forces that may push the future along different paths. They help managers understand the dynamics of the business environment, recognise new possibilities, assess strategic options, and take long-term decisions.

Shell companies pioneered the use of scenarios for strategic planning in the 1970s and since then, have applied them to a wide range of decision-making situations. Shell planners have also been involved in developing scenarios with such bodies as the World Business Council for Sustainable Development and the Intergovernmental Panel on Climate Change, as well as in using scenarios to help build a shared vision of the future in divided societies, such as South Africa in the early 1990s.

There is no limit to the stories we could tell about the future. Some scenario exercises create a wide range of alternative scenarios. But Shell experience is that for developing our strategic thinking, it is more productive to focus on just two thought-provoking scenarios—such as the two we present in People and Connections.

Using Scenarios

In broad terms, managers can use scenarios:

- To identify emerging challenges in the global business environment and to prepare accordingly.
- To test and develop strategy.
- To develop focused challenges.
- To establish a common platform for scanning, learning, and communicating.

Identifying Emerging Challenges

Scenarios offer an opportunity to see different possible developments, and consequently new risks and opportunities that a business might face. Identification of underlying future risks, as seen from the vantage point of possible futures, is likely to be more valuable than just a restatement of the risks seen through the lens of conventional wisdom.

Testing and Developing Strategy

Much of our evaluation of projects, policies, and strategies is based on forecasts extrapolating from the past and present, combined with some sensitivity analysis. However, many major projects have long lead times and are born into environments that are, in many respects, radically different from those in which they were conceived. Scenarios provide detailed descriptions of the contexts in which projects may come to fruition, and so enable us to take a more comprehensive review of possible risks before the decision to proceed is taken. Scenarios also embody factors that are not easily quantified. Therefore, we are able to see a broader range of risks more clearly. For example, the scenarios may highlight new political risks, changing customer preferences, and new critical success factors.
Developing Focused Challenges
Scenarios need to embody relevant, challenging contexts for managers. Some of these challenges will be broad, sweeping changes, and these are typically covered in global scenarios. However, managers also need to take account of forces of a more specific nature—for example, those relating to a particular business or region. Global scenarios can provide a foundation for this detailed work, leading to more directly focussed challenges for managers.

Establishing a Common Platform for Scanning, Learning, and Communicating
Scenarios can be used as a common base for discussion and as a starting point for identifying new business risks and finding new options for growth. By challenging the mental maps of managers, they also contribute to ongoing learning, not only about the business environment and potential emerging challenges, but also about the implications of those challenges for a particular business. In a world of information ‘overload’, scenarios can also help managers prioritise information needs and to absorb and use information more effectively. When scenario summaries are shared with external stakeholders, they often provide a useful platform for mutually beneficial discussions about the coming business environment and the role of our company within it.

The Global Scenarios of the 1990s

The scenarios of the 1980s were strongly coloured by the high oil prices and recession of the early part of the decade, the subsequent oil price collapse, speculations about the longevity of the USSR, and concerns over climate change and sustainable development. All these issues were explored from within the mental framework of a Cold War World.

But by the end of the 1980s, it was clear we had entered a new era. The 1990s explored the new shape of a more integrated world that was subject to powerful global forces.

1992
In 1992, the forces of globalisation and liberalisation were being felt around the world. With the fall of the Berlin Wall, the century-long struggle among the three ideologies of fascism, communism, and capitalism seemed to have been won by capitalism. But the triumph of capitalism posed new threats to governments and societies who had much to lose. The key question of the 1992 scenarios was: will the forces of economic and political liberalisation be embraced (New Frontiers)? Or will they be resisted (Barricades)? New Frontiers was driven by rapid growth in developing nations and mutually beneficial relationships between rich and poor. This recognition of interdependence was accompanied by the beginning of virtuous circles in which, for example, liberalisation led to higher output and income, which led to better health and education, which, in turn, led to additional income rises, and so on. The need for adaptation to rapid change was a theme that was later emphasised in the 1995 scenarios and again in 1998. Barricades introduced an ‘energy is bad’ theme that basically pitted rich nations against poor ones. The poor were marginalised, and the opportunities for growth in rich and poor countries alike were missed, affecting world GDP in the long term. The ‘politics of identity’—with its emphasis on national interests—weakened international institutions and left many global problems without effective solutions.
1995

By 1995, it seemed clear that the forces of globalisation, liberalisation, and technology were irresistible—‘TINA’ (’There Is No Alternative’). To some extent, the 1995 scenarios were built on New Frontiers with the question being not “Will the world embrace or resist TINA?” but rather, “What form of embrace will be most successful?” At the time, there seemed to be two contenders for the prize: a US-style capitalism versus a more communitarian approach. Just Do It! was a fast-moving world of technology innovation, hypercompetition, ‘bubbles of value,’ customisation, individuality, and ad hoc networking. It was a self-organising world in which governments were neither quick enough nor competent enough to match the dynamic power of corporations and in which the stretching of the social fabric dictated by TINA was even more pronounced. Da Wo (‘Big Me’) emphasised the long-term health that can come to societies and businesses that organise with a view to the future and a vision of the whole. The actors in this scenario saw their own destinies as being bound up with that of the larger whole and were willing to sacrifice the ‘little me’ for the ‘big me’ of the corporation, country, or family. Where Just Do It! stressed individualism and libertarianism, Da Wo emphasised cohesion and the idea that ‘governments matter’.

1998

Just as the 1995 scenarios were, in part, built upon New Frontiers, the 1998 scenarios were built on Just Do It! as the only successful kind of response to TINA. In effect, the 1998 scenarios were an exploration of two aspects of TINA: ‘TINA above’ (The New Game) and ‘TINA below’ (People Power). The New Game stressed the challenge of global problems and the development of new international institutions and the formalisation of rules for the health of the global economy. Increased global competition meant that companies not only had to learn and implement best practice but also had to master strategic design in order ensure sustained profitability. People Power explored the effects of growing numbers of people who became wealthier and better educated than ever before. The flowering of diversity and increased volatility contributed to the rapid obsolescence of institutions.

The scenarios of the 1990s explored the economic and political implications for the future of three significant global forces—globalisation, liberalisation, and technology. The scenarios of the new century add a third dimension to the economic and the political—the exploration of the social consequences of these forces, and their effect, in turn, on the global business environment.
Latecomers to the new global economic game are faced with threats and opportunities over which they have very little control. Many poor people, entirely unequipped to compete in the global marketplace in which they find themselves, scramble to make a living for their families. Those in the developed world, who’ve been in the game longer, are better off economically—but they often feel they’re not much better off when it comes to controlling their own destinies. Governments and ethnic, religious, and cultural groups clutch at their autonomy, threatened on all sides. And those members of the global class who look beyond the stresses of the moment worry about one of the biggest threats of all—that soon there won’t be a global environment capable of sustaining the world that the global economic game is creating.

The forces of globalisation, liberalisation, and technology, while continuing to determine the future, must be considered separately, and in detail. Globalisation of communications will certainly continue; governments are not likely to give up markets as the determining factor in setting prices; and technology alone has less power to determine the future than how people actually use the technology. In each area, people will determine what aspects of these global forces will persist.

People have always used technology to enlarge their capacity to act. But now more than ever, the combination of powerful new technologies and our increased interconnectedness work together to amplify the often unpredictable behaviour of human beings. The growth of telecommunications technology, our increased travel, our capacity to know more about each other than we’ve ever known, the interconnected global economy, and the integration of our markets, our politics, and even our daily lives—all amplify our actions. We are all interconnected—one human being in a small country can wreak havoc on global communication infrastructures overnight; one terrorist group can bring a major city to a standstill, with ripple effects on the worldwide economy. But the forces of globalisation, liberalisation, and technology also function as the sources of possible transformation. Human beings can launch a

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**TINA and ‘The Three Rs’**

Increasing globalisation, the relentless onrush of new technology, and the liberalisation of markets continue to be primary shapers of the future. We may think “There Is No Alternative” to these trends—TINA. But at the beginning of the 21st century, we have to look more closely at these forces and school ourselves in ‘the three Rs’ that people may use to resist TINA—Regulations, Restraints, and Rules.

People want the efficiencies that market liberalisation brings—but they also want appropriate government regulation to assure, for example, continuity of electricity supply at a reasonable price. Technology, too, has a powerful forward momentum—but the applications of biotechnology and nanotechnology, just to name two, raise enormous ethical dilemmas and the possibility of restraints on implementation. And while technology is pushing out the boundaries of what it means to be human, globalisation is pushing in the boundaries of culture and family under pressure from an irrush of unfamiliar ideas, products, and services from multinational companies, and images from movies, television, global brands, and the Internet. Globalisation, like liberalisation, will continue—but there will be new rules of engagement over time.

Is TINA, then ‘overturned’? No. But we need to explore the regulations, restraints, and rules that will modify these impersonal global forces because under these forces are real human beings—people who often do not act in the rational, self-interested way they are ‘supposed to’ in economic theory. Some of the most powerful forces in human history (Christianity, for example, or Islam, or Buddhism) do not have their deepest roots in the economic soil. And even when they do (arguably, for example, in the American Revolution), the by-products of these forces can have powerful and unexpected consequences. People have a way of upsetting the status quo, especially when they act together under the force of deeply held values galvanised by a new ideal or by new circumstances—or when they feel threatened.
European stargazers look up at the night sky and see Orion and Ursa Major and Cassiopeia and all the other constellations that culture has inherited. But even though the stars are the same, other cultures look up and see entirely different constellations. In the same way, we can look at the globe and see multiple geographies—from *geo*, earth + *graphein*, to write—we ‘write’ the patterns we see that make sense of our earth.

No matter what the future holds, it will arise out of the interplay of four interconnected geographies: global circles of connection; the globe of nations; the numerous geographies of heartland and edges; and the earth, which is a geography of mountains and rivers and land and life itself.
Circles

Innumerable circles of influence and interconnectedness shape human activity in the world. Some of these circles are global—international non-governmental organisations (NGOs), for example—and some are local—the gardening club, for example, or the bowling league. All contribute to the complex identities of contemporary individuals.

While networks of people sharing the same values have existed throughout human history, what’s different now is the varied scope and scale of interconnectedness, and the fact that these associations are less and less bounded by time and space. The circles of connection can be both global and minute—the international association of butterfly collectors, for example. But whatever the scale, the individuals who form these circles find both meaning and identity in the shifting spheres of relationships to which they belong.

The geography of Circles raises important questions for the future:

• To which circles of connection do you belong, and which of these will most influence your future?
• How will the new constellations of interconnectedness shape the world?
• Which circles of connection will prove to be the most powerful?
Nations

For most of modern history, the geography of nations has been one of the most powerful shapers of the world. With the rise of global capitalism, some have argued that nation states are becoming less important and that many of their traditional functions are increasingly difficult to perform in the new global economy. But whatever the scope of these constraints, it is not ‘the end of history’ for nations.

Key questions for the future:
• What expectations do you have of your own nation?
• How will national boundaries and the sense of identity that comes with them shape the world to come?
• Which will prove to be more powerful: the connections among people from different nations or the interconnections among nations?
Heartland and Edges

Within many regions, an internal geography of heartland—with its more traditional values and rooted activity and culture—is encircled by outward-oriented cities populated by people who often have very different values and lifestyles.

There have always been ways of characterising national constituencies as ‘conservative and liberal’ or ‘rural and urban’. What intensifies these splits, however, is the increasing connectedness of the edges of one nation with the edges of other nations—in many cases the edges ‘touch’ each other more closely than they do the heartland.

Heartland and Edges is a geography not just of nations but also of companies and individual human beings, who may experience their own conflicts between their traditional identities and the imperatives of a world that offers rewards for leaving those identities behind.

This dual geography raises questions:
• What place do you call ‘home’, and to what extent will globalisation change it?
• Will the sense of identity associated with the heartland prove to be more powerful than the homogenising forces of globalisation?
• Is there a ‘heartland’ path for nations to follow in their development, different in profound ways from conforming to the global cutting edges?
The Earth

In this century, for the first time in human history, we realise how interdependent we all are—we must take account of the geography of the ‘whole’ earth, with all its interconnected systems.

No matter what story we tell about the future, we must ask:
• How will our human activities affect the earth?
• Will the geographies of connection evolve to protect and nurture the earth’s natural systems?
How the questions raised by the multiple geographies are resolved will have a profound influence on the options available to business. In particular, depending on their outcomes, businesses will be facing different ‘rules of the game’, social orders, political agendas, and people’s preferences. The regulations, rules, and restraints that modify the large, impersonal forces of globalisation can develop in a number of ways.

Of all the possible stories that could be told about the future, two seem to offer the most insight into the important issues we face. The first scenario, Business Class, explores what happens when the connected freedom of the globally interconnected elite and the only remaining superpower, the US, lead the world towards greater economic integration and a dream of economic prosperity for all. In this scenario, cities and other rising sources of power diminish the influence of national governments in a kind of ‘new medievalism’, while businesses pursue cutting-edge strategies to meet the volatile conditions of the time. Gas is ‘the great game’ in energy because consumers want it for health and environmental reasons, businesses want it as a source of new wealth, and the growth of fuel cells relies on it.

The second scenario—Prism—questions the monochromatic world of global integration and explores, instead, the persisting power of culture and history—the connections that matter—and the pursuit of multiple modernities as they emerge in a new regionalism. In these diverse environments, the heart of business is the ability to gain access and trust. Oil remains the dominant global fuel for another two decades, supporting a long oil game and allowing successful energy companies to build a platform for transition to a post-oil world.

By rehearsing these futures, we hope to improve our capacity to see and respond not only to problems or products or processes, but to people—the real sources of power and the real drivers of change.
Connected Freedom

The world of Business Class is not run by business; but it is run like a business with a focus on efficiency and individual freedom of choice. In this world, globalisation has brought tangible benefits to both rich and poor societies. Growing inequality can be tolerated as long as people see opportunities to improve their lives and have the liberty to pursue their own dreams.

Connected Global Elites
Highly interconnected global elites form the cutting edges of almost every area of the world. Their power is disproportionate to their numbers, in part because of their wealth, and in part because the principles with which they agree constitute the operating framework of global institutions such as the World Bank, the IMF, and the WTO.

One reason global elites fly high in Business Class is that the pilot of the system, the US, remains the only global superpower for the twenty-year period. What this means, in effect, is that the global elites in all countries that aspire to growth go along with the way the US shapes economic policy—the so-called ‘Washington Consensus’.

These elites can be living in any nation in the world—but wherever they are, they are most likely to be urban dwellers. Business Class is a world of large and powerful interconnected megacities. Within this world, there is a great deal of mobility, with elites moving to the points of greatest synergy and opportunity, and poorer people eager to move towards opportunity whenever they can.

In general, national governments in Business Class function to facilitate the technological and commercial aspirations of individual companies and citizens. The ‘social contract’, in most cases, is a form of minimal

A Better World?

Since 1980:
- Life expectancy has increased from 61 to 68 years.
- In developing countries, life expectancy has increased from 58 to 65 years.
- Adult literacy has risen from 63% to 75%.
- Primary school enrolment has increased from 81% to 90%.
- Secondary school enrolment has increased from 60% to 68%.
- In the poorest countries, secondary school enrolment has grown from 49% to 59%.
- The percentage of women of childbearing age in the poorest countries who had access to contraception has increased almost tenfold—from 4% to 35%.
- Cereal production per hectare has increased 20%.
- Infant mortality has fallen from 8% to 5.4%—and in the poorest countries, from 9.7% to 6.8%.

Income inequality is rising, but the gap in human development is falling.

Source: World Development Indicators 2000

Which Gap Matters Most?

![Graph showing comparison between development gap and income gap](source:worlddevelopmentindicators2000)
safety net that individuals may choose to strengthen for themselves by purchasing their own tailored insurance plans from among the many offered by global service companies.

Connections and Contagions
To increase connections also increases 'contagions'—terrorism, drugs, ethnic violence, illegal migration, environmental degradation, arms trafficking, and the global spread of diseases by both animals and humans. Another contagion is financial vulnerability. The more closely integrated economies become, the more likely it is that movements in the economies or currencies in one country create a fall-out effect in others. But 'contagion' has a positive side, too. As global elites and others become more aware of problems around the world and how these problems might affect them personally, they begin to turn their attention to solving a number of them.

The increasingly integrated global economy and the effects of globalisation in culture, language, and ways of doing business are knitting the world together far more effectively than any global government could have hoped to do. The ideology of freedom within an emerging set of rules of the game, large rewards for large risks, a global meritocracy, and creative responses to customer needs is attractive to many different kinds of groups, not just to the connected global elites.
larger circle of interconnected global elites. Key to movement within all these circles is individual freedom of choice. This emphasis on freedom and choice means that boundaries of all sorts become more porous—new family configurations replace the nuclear family model, for example, and migration across national boundaries raises new issues in global politics.

In Business Class, the US is an exemplar not just because of its economic might, but also because of the ideals, including equality of opportunity and individual liberty, on which it was founded. “We’re in the midst of a great experiment,” one observer says. “Will the American Dream become a dream within reach of all humanity? Or will it simply create a world where the rich get richer and the poor stay poor, with no hope of a better life for their children?”

(The sentiment in the Declaration of Independence) gave liberty not alone to the people of this country, but hope to all the world, for all future time. It was that which gave promise that in due time the weights would be lifted from the shoulders of all men, and that all should have an equal chance. —Abraham Lincoln, US President, 1861-65

In Business Class, power continues to be diffused beyond states to many other institutions, including non-government organisations, markets, business, and the media. This splintering process gives increasing room for manoeuvre among established authorities, and leads many people to the uneasy conclusion that no one is really in charge. The levers of power are difficult to identify even when the world as a whole is becoming more transparent.

The Politics of Protest

As pressure on governments increases—in part because of the demands of ageing societies—and their capacity to act diminishes, citizens become more cynical about both mass politics and governance. Many people feel compelled to seek alternative modes of political expression—through participating in demonstrations staged as media events, for example, or in various forms of direct pressure by NGOs and other interest groups. Corporations are also active in the policy-making arena, pushing their own agendas. The public sees multinationals, especially, as having a large impact on global policy, and these companies are often targeted as a prime cause of global problems.

‘The New Medievalism’

In a world where no one is in charge and where governments have no monopoly on power, a kind of ‘new medievalism’ arises. Rather than neat, self-contained national markets and nation-states, with political authority unambiguously asserted within defined geographic boundaries, a mesh of multiple authorities and competing loyalties arises, based on networked relationships.
As political decentralisation continues, cities and even some smaller, local communities set their own global agendas alongside states and companies. A foreign company has to satisfy not only the laws of the host government, but also the demands of local and provincial authorities, its own home government interests, the rules set by inter-governmental organisations, and the concerns of the non-government organisations.

In this world of competing powers, the US, although reluctant to lead, is a powerful influence. Like an emperor of medieval times, the US often has to accommodate the moral authority of over-arching but less powerful institutions like the UN with its 'pope’, the Secretary General. While the US does serve its own interests, these interests coincide with rising global prosperity, so the world as a whole benefits, even though developing countries sometimes find it difficult to adapt to US policies. One reason for this consistency of interests is that the glue holding the world together is the dynamic of the economy and the aspirations of people in nations all over the world.

The Economics of Business Class
The relatively unbridled global capitalism of Business Class leads to highly volatile economies. There are many short-term crises, and in weaker economies, these have long-lasting effects. But for agile young economies, high risks can bring high rewards as well.

The global economy, piloted by the US, keeps flying—but some people have more room to manoeuvre than others. Even though developing countries are doing better than ever, and more people are being lifted out of poverty than ever before, rising expectations lead some in the ‘economy class’ areas of the world to perceive themselves as struggling to make it; others in very poor nations don't have the means to take off from ground level at all. A great deal of resentment is directed towards the cutting edges from the heartland, but at the same time, the shift in most parts of the world from the rural and traditional to the urban and the modern continues and even intensifies.
In general, the global economy continues on its path of liberalisation and integration in spite of the increased inequality and volatility that results from economic integration. This is a world of economic peaks and valleys, prone to speculation and 'bubbles'. The logic of global capitalism leads to a relentless pursuit of efficiency, which, in turn, leads to high polarisation and volatility because capital and high quality labour move quickly to where the profits are made—the rich get richer because they’re better placed to take advantage of opportunities. There are frequent, herd-like capital flows—one year, capital pours into local start-ups, the next everyone invests in China.

Transparency also increases, largely as a result of the deepening interconnectedness enabled by communications technology, but also through the enforcement of global rules of the game. Some countries, such as China and India, travel so fast on the wheels of partial reform that their economies overheat and derail, ripping the frayed social fabric. The financial markets are unnerved and punish the vulnerable, innocent and guilty alike. This turmoil leads to a significant economic shock in 2006 and a gradual recovery up to 2010. In the second decade, there is a restructuring of economies and an increased adherence to the Washington Consensus—an adherence that is the ticket to fly in the world of Business Class.
The tension between heartland and cutting edges in *Business Class* is mirrored in the world of business as well, where a key to success is the relationship between what is ‘core’ to the business and central for value creation—what distinguishes it from others—and what can be outsourced or treated as of less strategic importance.

**The ‘Core-poration’**

In *Business Class*, multinational corporations are organised along global business lines and are adept at spreading risks with wide portfolios and at launching new offerings on a global scale. Globalisation has increased the necessity for corporations to be the best exemplars of the global business model, establishing ‘best practice’ in quality, service, and other measured results. Increasing transparency creates a demand for clear reference points and criteria by which progress can be measured. Ranking and other transparent comparisons allow anyone to see which company is the best performer in any of a number of areas. A company that finds it is not the best in an area then outsources that function to a company that is better—thus increasing the performance measurements of the ‘core’. Strategy, distribution, accounting, HR, pensions, IT, and corporate culture, for example, can all be outsourced.

**The ‘Scarcity Shift’**

The nature of global competition, with its commoditisation, universal benchmarking, and lack of tolerance for the mediocre, means that rents are driven down in many areas. Corporations are under enormous pressure to sustain any sort of competitive advantage in this environment of ‘Scarcity Shift’—the shift of rents to the few resources that remain scarce. These scarce resources are usually a unique asset position, a powerful brand, or the best employees. The competitive pressure from the global cutting edges is so intense that unique asset positions are always threatened; and having a powerful brand is effective only if a company can continually renew its product and services suite; but attracting and retaining the best people is the greatest challenge of all.
The High Flyers of Business Class

With their portable pensions and benefits and their emphasis on individual mobility and success, the best employees are ‘free agents’. People look for the leverage that comes from improving their own personal portfolios—and thus their value as free agents on the open market. What Business Class employees look for in a job, in other words, is exactly what will give them the opportunity to move on to the next, better job—or to launch a business of their own.

Government Referees and Consumer Kings

Regulation in Business Class is focused on market efficiency. Governments attempt to regulate the playing field through anti-trust legislation, but for the most part, the effects of competition are left to fall as they will. Only those entities that are ‘too big to fail’ are rescued, simply in order to avoid breakdowns of the system as a whole. But the global scale of these firms implies that such rescue efforts are beyond the capacity of almost all states except the US or US-led multilateral interventions—thus handing over another advantage to US firms and their investors on the global playing field. This advantage becomes especially important as China opens up, joining the WTO and encouraging foreign investment.

Consumers are smarter than ever before; some would even say ‘cynical’. They are well informed—or their various purchasing agents are, for Internet purchasing services offer comparative information on almost every aspect of commercial life. In this world where everything is measured, there are ‘points’ awarded for social conscience and ‘corporate virtue’, and many NGOs specialise in advertising brand ratings along a scale of social responsibility indicators. Multinational corporations may look as if they hold the reins of power, but, as with many other aspects of this world, it is the individual rather than the institution or business entity that is empowered.

Purchasing agents are only one of the many global service industries in Business Class. As opportunities increase, and people are faced with more choices, they begin to look for ways to increase efficiency in order to save

Employee Mobility

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<td>1994-96</td>
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Source: McKinsey. * Shell estimate

Work and Life

- A survey of workers in thirteen industrialised countries found that a desire for a decent balance between work and life was rated more highly than a good salary everywhere but in Russia.
  Gemini Consulting
- "CEOs are increasingly suffering from stress, sleep deprivation, heart disease, loneliness, failed marriages, and depression, among other problems. And those woes are taking toll on the bottom-line."
  Davos World Economic Forum, 1999
- The largest private employer in the US is Milwaukee’s Manpower, Inc., a temp agency.
- The main causes of international assignment failures are ‘domestic reasons’ (at 76%), followed by ‘dual career issues’ (59%), ‘location’ (41%), ‘career risk’ (34%), and ‘package offered’ (28%).
  PricewaterhouseCoopers, 2000
time. This emphasis on efficiency, enabled by labour-saving technology, means that more and more aspects of individual life are run as though they were businesses with out-sourcing—taking care of children, running a government, gathering support for an NGO. Service industries do very well; and commodities do best when they are packaged as services, catering to individual choice.

In addition to individually designed services, a new category of ‘beyond-product’ offerings built around ‘experience’ and ‘meaning’ become increasingly successful. These personally tailored offerings go beyond the old customer segmentation categories into a world of new challenges, such as the challenge to ‘know’ the customer ‘personally’, even in relation to his or her situational consumption—the tendency to buy on impulse or switch brands depending on mood, setting, social environment, etc. Customers must be wooed on a purchase-by-purchase basis rather than bound by an ongoing loyalty.

The Illusion of Choice

Business Class is a world of unlimited choice—but, in reality, a world of micro-variations. In many areas, because of razor-thin profit margins, best practice, finely tuned customer research, and psychologically astute advertising campaigns, a kind of global standard emerges for most products. Variety occurs not at the core of the product, but on the edges.

Corporate image is such an important part of Business Class that corporate executives benchmark themselves in relation to their ratings in approval polls of the sort that used to be reserved for politicians and, before that, for entertainment celebrities. This trend is exacerbated by the decline in brand loyalty, which is accompanied by increasing demands for ‘responsiveness’ of branded products. One indication of the growing demands placed on high-profile corporate brands is the rise of equally high-profile—and effective—consumer boycotts. For many people in Business Class, boycotts seem more relevant than voting because corporations seem to have more power than governments.

The Great Game of Gas

Like the boom in the railway infrastructure of the nineteenth century that transformed the world of manufacturing, the growth of gas infrastructure in the early years of the twenty-first century transforms the energy landscape. Gas is ‘the great game’ in energy because consumers want it for health and environmental reasons, businesses want it as a source of new wealth, and the growth of fuel cells relies on it.

Deregulation was not the main reason for breakdown in supplies in California, but [it was] because production was divorced from demand as a result of constraints on the various players.

Jean Syrotta, French electricity regulator, 2001

A Consumer-Driven World

In Business Class consumers drive energy markets. Busy people demand more convenient and flexible energy services that address their growing health concerns—and they have more choices than ever before. Liberalisation and increased competition in energy markets provide a platform for global innovation in energy services and new, disruptive energy technologies.

Liberalisation is increasingly successful because both consumers and governments learn from the experience of California and Brazil and from other poorly co-ordinated deregulation policies. The benefits of liberalisation are clear—lower prices and the unleashing of innovation. Under increased liberalisation, for example, European power consumers enjoy lower prices as well as a wide range of new energy and consumer services.

Many liberalised markets go though difficult periods as the new rules are established. It takes a few price shocks before people realise that market prices can be volatile and that governments are not going to bail them out if problems arise. Traders soon provide a range of risk-management products to energy consumers wanting greater energy security. Eventually, governments remain directly involved in markets only for over-arching functions such as setting minimum environmental standards and ensuring the availability of spare capacity.
People and Oil Politics

Regimes in the Middle East come under increasing strain, with demonstrators often filling the streets, apparently to voice their opposition to Israel and the US, but in reality, also to protest the political status quo. There is little Arab unity in response to this increasing unrest. Client states cling to the US for protection, but are often criticized by their own people for doing so. The US tries to remain in the background and to keep the oil flowing.

By 2014, low investment over the previous years has left little excess capacity in the oil supply chain. A production cutback produces a price hike much greater than intended, and oil markets sit in a precarious position. Non-OPEC conventional production has peaked and is declining. The lack of economic diversification and the prospect of declining oil demand in the not-too-distant future through growing fuel-cell vehicle sales encourages some Gulf States to use their 55% market share to generate very high prices. But high prices threaten to damage the economies of core growth markets like China. The US also reacts, and under intense pressure, OPEC oil producers concede with a supply increase that pulls prices back to the $30-$40 range.

‘The Great Game of Gas’

In contrast to oil, with its declining attractiveness, gas—seen as a clean, low-cost source of power—is clearly the fuel of the new century. An important aspect of the growth of gas demand is the success of industrial CO₂ trading systems. This spurs governments in wealthy countries to auction emission rights, a development that ultimately leads to the establishment of international agreements on CO₂ management. Growing demand encourages gas exploration—and on the supply side, the optimists turn out to be right. By 2020 ultimately recoverable world gas resources are much larger than estimated at the turn of the century, rising to 3300 billion barrels of oil equivalent.
With sales growing globally at just under 4% a year, gas provides the backbone for the distributed and individual energy services and technologies that consumers demand. Many people are willing to pay for high quality power; others are simply seeking lower prices or more choice and better service. These consumer demands and the increasing availability of low-cost combined heat and power services spur the rapid growth of distributed fuel cell power. Although the proportion of power derived from fuel cells and other distributed power sources is still relatively small, this is the area where innovation and structural changes are focused.

In spite of the growing popularity of gas, selling energy units is not the largest game. The big prizes go to:
- Companies that acquire strategic resources or that place large bets and create the enabling gas infrastructure, particularly large cross-border pipelines and strategically placed LNG terminals.
- Companies that manage the customer’s complete energy services.
- Companies that place the right strategic bets on ‘disruptive technologies’.

Large opportunities exist in all markets. In the world of Business Class, successful developers make big bets, but skilfully lay off much of this risk to future users and capital markets. The US government acts as a broker for large pipeline projects to China, India, and Turkey.

Within five years I’ll be able to go down to Wal-Mart and pick a microgenerator off the shelf to power my house. I will connect it to the gas pipe and generate power as well as heating my house and producing hot water. And it will be much cheaper than the grid.

Kurt Yeager, President and CEO, EPRI, 2000

If gas is to be the backbone of the future energy system, two major strategic bets face gas suppliers:
- Developing major cross-border pipelines to connect remote gas fields to customers, for example in Asia.
- Securing low cost or strategically placed gas resources.

For most major markets (Europe, China, India, North America, Brazil) abundant low-cost sources of future gas supply lie within a radius of four thousand kilometres. Pipeline development on this scale is feasible, but costly and politically complex. Nonetheless, the delivered cost of this gas should be competitive with alternatives such as coal, particularly as environmental costs are increasingly included in final costs.
A key issue for energy suppliers and distributors is whether to enter the business of commercialising ‘disruptive’ technology, and if so, where to place strategic bets. And how much is needed to stay in the game, let alone influence its outcome? In the transport business, fuel manufacturers, automakers, and emerging competitors face a bewildering array of technology choices. Is it possible to identify the critical future technologies?
Even for successful companies, ‘The Great Game of Gas’ is not easy. Progress on gas infrastructure is volatile and uneven. Companies have to mediate or accommodate the interests both of host countries and of the US. In 2006 the economic crises in China and India slow the development of gas markets and make some of the early infrastructure investors look foolish. But those who persist control some of the most valuable assets in the new century, not only in terms of return, but also as supports for a ‘clean’, earth-friendly image.

Beyond 2020, gas continues to establish energy dominance, while oil starts to decline. Fuel cells are improving transport efficiency and opening the market to new fuels, reversing a fifty-year trend of increasing oil use in transport. Oil grows only in low-cost heating markets and petrochemicals. The only energy game in town is gas—and the cutting edge for the future lies in developing and using new technologies based on gas for products and services that consumers want.

Shortly after 2020, gas overtakes oil as the dominant primary energy source as fuel cells diffuse widely in stationary and transport applications.
### Overview of Selected Country Scenarios

To support the Global Scenarios, a number of country scenarios were built to explore how Business Class would play out on a national and regional level. This table highlights key areas of a selected few of those scenarios.

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<tr>
<td>US</td>
<td>Impressive recovery from antitrust laws, technological and economic example, on technology dividend comes through. Leaders in shaping global values and expectations.</td>
<td>Successful, self-made individuals, linked through common goals and values, exert influence at home and abroad and cluster in megacities.</td>
<td>US leads global networks, attempting to set up local playing fields, which, however, subverting the US ‘halo-maker’ US is selective global ‘SHEEP’.</td>
<td>Pragmatic heads off strong local cancer and is rooted in a distrust of government and big business. NGOs exert influence through ‘clan action’. Courts becomes more activist, awarding huge damages to same causes.</td>
<td>Effective but undemanding governance with other (not always friendly) small states to follow. Culture living list of non-interventions. Emphasis on deregulation, High growth, small volatility, hyperconsumerism.</td>
</tr>
<tr>
<td>EU</td>
<td>Rapid expansion to over 24 member states. Loosely integrated, but becoming one of world’s most influential and effective organizations. In an increasingly unstable neighborhood.</td>
<td>Increasingly internationalized youth, benchmark money allures.</td>
<td>Europeanization results in State veling power to regions and cities. A post European entity network emerges. US remains close and important ally. Instable Russia poses an increasing security threat. SDG’s foreign policy actions remain limited.</td>
<td>Cities, regions, networks, and the EU compete with each other. Increasing urban-rural divide. Individual quality of life is key concern.</td>
<td>Diversity of economic models and cultural and value patterns. Failure to agree on integration policy to provide labor for aging EU populations. Fairly high growth, unevenly spread.</td>
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<tr>
<td>Summary</td>
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What shapes the future is not what we have in common but the interplay of our differences. Just as a prism breaks up the single light that strikes it into many different bands of coloured light, so, too, human experience breaks up our one species into many different nationalities, ethnic groups, religions, language groups, aspirations, values, physical geographies, and all the other distinctions that characterise us. We look at the world through our differences rather than our similarities—through the particular lens or colouring of our culture.

So when it comes to human affairs, a monochromatic globalisation is not inevitable. There is an alternative—many alternatives, in fact, because people see and value in very different ways. *Prism* is the story of how these alternatives play out over the next twenty years.

**The Connections that Matter**

While *Prism* has its interconnected circles of global elites, the circles of connection that matter in this world are those that overlap and that last through time. Pressures of modernisation continue in *Prism*—but what makes the future different from the immediate past is that people look to their roots, their heritage, and their families as the source of values around which to organise their lives. So strong, over time, are these connections based on values and roots that in two decades, the world assumes a very different aspect from what prophets of globalisation had predicted at the turn of the century. *Prism* is a world that has gone beyond the modernist emphasis on efficiency, functionality, and global homogeneity toward the realisation of ‘multiple modernities’ that incorporate diverse cultural values and practices.

*Source: Daedalus, Winter 2000*
The Heart of the Heartland

In *Prism* people are interested in economic well-being and growth. But they are also interested in the health of their own communities, in religious imperatives, and in national pride. The globally interconnected elites may occupy a disproportionate space in economic conferences, international institutions, and global news stories—but they form a relatively thin film over a much bigger world. And even the global elites have long-term associations and roots in their local cultures.

This growing connection to the heartland is encouraged by communications technology, which stimulates a very different pattern of development from the rural-urban-suburban pattern of industrialisation. New businesses take firm root in both rural and semi-urbanised regions, and some countries, such as China, encourage the growth of ‘secondary cities’ in order to draw people away from the crowded coastal areas further into the heartland.

‘Our Way’

Those who saw no alternative to the onrush of globalisation consistently under-rated the power of two coupled human aspirations: identity and belonging. When basic economic needs are satisfied, people often use their newfound freedom and prosperity to express their own identities. If there were a theme song for the world of *Prism*, it would be ‘My Way’—not the ‘my way’ of unfettered individualism, but the ‘our way’ of all the circles of family, roots, country, language, culture, and land.

Corporations, too, have to pay attention to community identity in this world because collective values increasingly shape individual lifestyles. In *Prism*, the environments for business vary from one community to another. Some communities exhibit resistance to ideas that upset established religious or social norms—and since many issues are handled at the local level, a wide variety of behaviours can be found.
Prism isn’t all sweetness and light. The shadow side of diversity is the increased likelihood of boundary disputes, from the level of gang against gang to the subtler boundary disputes of European versus American patent law. And the dark side of an ‘our way’ emphasis on identity is prejudice against those of a different value system or background. Demagogues use diversity and identity as ways to arouse passion and attract followers. But in a world of great diversity, there is room even for intolerant or repressive regimes.

Circles of Community
Now that the Internet has matured, people find ingenious and very fulfilling ways to organise virtual, long-term communities, forging meaning and identity through new interests and networked associations. In time, some of these communities emerge into the ‘physical’ realm. Whether old or new, the communities of Prism identify and attempt to address many important problems—including the issue of ageing populations in all the developed countries.

The emergence of these new communities rejuvenates rather than replaces the old circles of power and influence. Rumours that ‘the nation-state is dead’ turn out to be greatly exaggerated. Governments are significant actors in this world, charged with supporting the economic health of their citizens—but also with nurturing the kind of social cohesion that helps make societies function and prosper. This means more than a safety net to catch the ones who fall; it means a floor to raise as many people as possible.
In *Prism*, this shaping hand of government operates very differently from one country to another because notions of progress vary from place to place. While regional circles of influence and power develop around the world, very few global agreements are negotiated. But this lack of global co-operation does not stop progress in key areas of sustainable development, for example. In the absence of global institutions and global policemen, regional agreements offer much more powerful instruments for reform than any global agreement could. Sometimes, long-term partnerships between groups lead to the development of new paradigms for co-operation and problem solving. Whether the issue is sustainable development or military defence, the overlapping circles of community lead to powerful alignment on new approaches.

“If Islam is sound for all times and places, then we must act as if the Prophet just informed us of this Book [the Koran].”

Muhammad Sharur
The New Regionalism

Prism is the story of the values of the heartland—how the powerful aspirations of different groups create many new worlds.

Globalisation—a World Wide and an Inch Deep

By 2001, the success of the one dominant ideology remaining after the fall of communism has sparked off a reaction against it. People no longer trust that economic liberalisation and a rising tide of opening markets will lift all boats. They harbour real anxieties over growing inequalities and a relentless globalisation that seemingly destroys choice and places power in unaccountable hands.

Adding force to the anti-globalisation reaction is the disappointing economic performance of the US. Soon after the turn of the century, the US economy slumps, creating a ripple effect in Europe and deepening the malaise in Japan. Politicians in a number of countries call for a reduction in dependence on the US economy and begin to question the principles laid out in the Washington Consensus.

Meanwhile, the US slump spreads to Europe and Japan, prickling any delusions about the ability of these regions to go for economic growth separately. They also recognise that one source of strength and resilience of the American economy is its large size and diversified structure—so there may well be an advantage in greater regional integration that goes well beyond trade. In particular, countries seek closer and multifaceted ties to their neighbours for both political and economic security, and to increase their bargaining power in international markets.

Transcending the Washington Consensus

The fundamental sources of dissatisfaction with the so-called ‘Washington Consensus’ have less to do with individual policy prescriptions—which may indeed be appropriate under particular circumstances—than with the universality ascribed to them, with what they omit, with the limitations of the logic on which they are based, with what many perceive as the ham-fisted way the prescriptions are forced on reluctant governments, and, of course, on their failures in practice. In particular, the Washington Consensus is in disrepute because it is seen to:

- Ignore the vital importance of basic services (for example, health and education) for growth.
- Reject certain measures, such as government subsidies and other kinds of more direct intervention, which have been crucial in development success stories (for example, East Asia and China).
- Disregard the brutal experiences of transition economies, the failure to stimulate growth in Latin America and Africa, and the role of naive liberalisation in inducing the Asian crisis.

<table>
<thead>
<tr>
<th>Washington Consensus</th>
<th>Alternative or Augmented Views</th>
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<tr>
<td>Fiscal discipline</td>
<td>Exaggerated fiscal discipline, especially that which ignores cyclical aspects and sustainability issues, is unsound economics.</td>
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<tr>
<td>Redirection of public expenditure</td>
<td>Simplistic approaches ignore legitimate trade-offs confronting governments, e.g., education funding.</td>
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<tr>
<td>Tax reform</td>
<td>The devil is in the details—superficial ‘reform’ can be harmful.</td>
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<tr>
<td>Market-determined positive real interest rates</td>
<td>Some regulations in the banking system (e.g., deposit rate controls and entry restrictions) can reduce moral hazard.</td>
</tr>
<tr>
<td>Competitive exchange rates</td>
<td>Capital account liberalisation must be approached very cautiously. There is an emerging consensus against ‘pegged rates’.</td>
</tr>
<tr>
<td>Trade liberalisation</td>
<td>The fragmentation of markets by poor infrastructure or local middlemen can have long-term adverse impacts.</td>
</tr>
<tr>
<td>Openness to foreign direct investment</td>
<td>Benefits can be captured only if there are effective and transparent regulatory frameworks as well as adequate absorptive capacity.</td>
</tr>
<tr>
<td>Privatisation of state enterprises</td>
<td>Private monopoly can be even worse. Many states (e.g., Russia) can have major long-term effects.</td>
</tr>
<tr>
<td>Deregulation</td>
<td>A balanced approach is needed to define the appropriate role of the state. There is also a need for proper planning and sequencing.</td>
</tr>
<tr>
<td>Legal security for property rights</td>
<td>Property systems are not self-enforcing and depend upon legal procedures, social trust, and civic norms.</td>
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‘Our-Way’ Economics

Each country or region finds its own development path based on its individual economic, political, and social circumstances. And while markets are wide open, many regions inhibit the flow of short-term capital, having learned from the Asian financial crisis not to pursue austerity policies in the face of financial crisis, but to support credit lines and maintain production.

Countries, like China, for example, can outstrip those that have liberalised quickly, like Russia. Supporters of the Washington Consensus point out that Russia’s liberalisation, like California’s liberalisation of energy markets, was imperfect at best, and no reflection on liberalisation in itself. But in Prism, people’s perceptions have more influence than elitist analysis, and they prefer to face the future ‘our way’.

Politics of the Heartland

In Prism, national politics addresses local aspirations and culture to build a domestic consensus on how to engage with globalisation. In each country a rich and wide political discourse wells up from the heartland about what to protect, what to accept, and where to open up. And in addressing its culture and history, each country has to define its own community, the essence of what it means to belong.

The heartland is neither unified nor silent. The Internet and other technologies of connection have enabled groups with more focused views to assume a real political voice. Where deep values are concerned, ‘fringe movements’ leap up out of the middle class. But it’s not just fringe groups that go onto the streets–middle-class protestors, like the UK fuel protestors of the early part of the century, find sympathetic support in the heartland. And because in Prism there are overlapping circles of connection, people can band together to work for a cause rather than being able to unite only by what they are against.

In the aftermath of 90’s excesses, the industrialised world experiences slow growth. In contrast, developing countries achieve moderately high and stable growth by following customized development strategies rather than a simplistic orthodoxy.

We will not do anything that harms our economy because first things first are the people who live in America.

George Bush, US President, March 2001
‘The New Regionalism’

During the early twenty-first century, regional groupings begin to emerge, each with its own ‘consensus’ about the recipe for economic success, and each highly focused on trading within its own region. This ‘New Regionalism’ is not a recycled version of trade protectionism and regional economic blocs. Rather, these regions represent concentrations of political and economic power, based on a regional ‘heartland’ type identity, yet outward-oriented and open to external market forces.

The new regions negotiate with each other, and shifting networks of interconnections among them bind the groupings to each other. These networks prove to be more flexible and effective than global institutions in overcoming political frictions. Provided agreements can be reached among members, regions ‘lock in’ positions on environmental control or trade before seeking agreement at the global level. ‘The New Regionalism’ is therefore a halfway house to multilateral cooperation on a global scale, and is indeed more effective at achieving a global consensus.

In a world of international rather than global initiatives, national identities assume increasing importance, and not just for governments, who insist on preserving autonomy of action. The framework of a market economy depends on legitimacy of governments, and that legitimacy, in turn, depends on governments delivering what their citizens think is important. Countries must manage the difficult task of balancing welfare concerns with efficiency and the promotion of their own national interests in the global marketplace. This attention to a greater integration of social goods with economic imperatives leads to lower inequalities within countries. Social concerns take the form of local civic action—while people are linked globally, they are primarily active locally.

Economic versus Social Policy

The assumed dichotomy between economic and social policy is false, in part because economic measures are usually instrumental in achieving social ends—and vice versa, as, for example, in the way education helps achieve economic ends. In addition, economic systems are embedded in social systems, and any market must be defined with respect to rights and obligations of the participants. These rights, in turn, are the outcome of explicit or implicit social bargains achieved through overt or unconscious political processes. All markets are based on some rules of the game, which govern who can or cannot participate (for example, children, foreigners in property markets), what can be exchanged (for example, labour services of children), specific rights and obligations (for example, building codes) and the process of exchange itself (for example, information disclosure). These regulations have evolved as technologies, economic structures, and the balance of power among interest groups have changed over time. Thus, the debate between economic and social policy proponents can usually be boiled down to one between those who prefer the status quo in terms of present rights and obligations versus those who prefer change.
Obligations and Aspirations

In Prism the powerful aspirations of many different national and regional communities create a new world of brightly flourishing diversity. But resistance against globalisation has its own shadow. Political entrepreneurs arise to feed on nationalist sentiment, seeking popular support outside of the mainstream consensus. The technology of globalisation also makes surveillance by the state, especially over people, much easier and more pervasive. In particular, many countries begin to impose tighter controls over the movement of their people, and ‘two-tier’ domestic societies arise, incorporating rigid divisions between citizens and non-citizens.

In spite of occasional government interference in their lives, people in Prism actively support governments that are responsive to their concerns. Most protests, therefore, are mounted against governments rather than corporations, on the assumption that governments can do something about problems. This expectation of governments is especially clear in relation to the ageing populations of the OECD, who are becoming less willing to tolerate the erosion of social safety nets and loss of control that seem to accompany uncontrolled globalisation and liberalisation. In Prism, an increasingly wealthy and educated world is also increasing its awareness of social obligations—to the ageing, the young, the poor, the disadvantaged.

Gradually, as the threat of a monochromatic global world culture fades away, the differences between communities, nations, and regions become matters of pride rather than prejudice—the celebration of a rainbow of human communities offering many different ways to look at the future.
Heartland Business Opportunities

In a world in which the local and the national are increasing in importance, multinationals turn their attention to their local businesses, exploring new opportunities and often employing and training local staff as a source of competitive advantage. Becoming part of the community is a big investment, requiring a focus on relationships, not on steps in the value chain. Successful companies know how to lever their reputation and relationships to provide a wide range of services.

Heartland opportunities require the right fit of:
- Local knowledge—especially important in a service-oriented world.
- Best global practices—but adapted to local needs.
- Cutting-edge technologies.
- Individually tailored customer offerings that take into account the local context.
- Individually tailored employee packages—with a greater emphasis on the relation of work to family and community.
- Service support.
- Close management of corporate identity.

Putting these pieces together is like finding the solution to a complex puzzle. You have to have a vision that can work across many different cultures and yet be tailored for the local environment. You can’t be everywhere. And yet you and your reputation will be seen everywhere.
Access and Partnerships

Access to markets is a challenge in *Prism*, mainly because governments and customers prefer the products and services of local firms. In order to be successful, multinationals have to operate beyond mere short-term advantage—they have to earn the right of access and the license to grow by being long-term partners in the development of positive, socio-culturally tailored goods and services for nations and communities. These emerging partnerships are not just with other companies or even with country regions, but with the people themselves in those regions.

In addition to skills in finding partners and in developing relationships, companies must also be flexible enough to translate the system of trust in legal instruments, such as contracts, into trust in relationships. It’s often the company with the relationship rather than the company with the initial contact and contract that wins in the end.

While there are challenges in this world, there are advantages, too. The greater willingness of governments to become active partners in promoting social and economic health means that many kinds of ventures are supported with a ‘safety net for risk’—limited liability, for example, or bankruptcy laws, which, although they may promote ‘moral hazard’, also encourage entrepreneurship.

Can You Buy Your Way In?

Struck by the difficulties of building a business from scratch in foreign climes, ambitious global companies may try to buy their way in. But striking acquisition deals may not be so easy, either. Even in one of the world’s most advanced economies, Japan, the hurdles can be tremendous. It is not that Japan is backward—it’s just different from the US model.

Unlike US companies, for example, Japanese companies do not exist primarily for the benefit of shareholders; in fact, shareholders are quite low in the pecking order, a position that is deeply embedded not only in corporate custom, but also in the finer points of law and the application of governmental guidance.

• Japanese shareholders are usually long-term investors, including customers, suppliers, and banks.

• Japan’s accounting practices are less transparent than those of the US, and do not follow US practice. Even after the reforms enacted in 2000, it is often difficult for an outsider to penetrate highly aggregated accounts.

• Japanese boards are not ‘one-man bands’ but share responsibility in a complex way, often involving other institutions, regulators, and former chairmen.

• Japanese executives have non-portable perks. They often lack severance arrangements, because being laid off was never part of the original plan. So when it comes to an acquisition or a merger, they have everything to lose and nothing to gain.

And once you have mastered all that, why not try China?
**The Problem of Corruption**

In *Prism* the ‘connections that matter’ can be abused. Because groups of people tend to be connected with each other rather than with other groups, they are highly reliant on the lynchpins, the people who can control access between one group and another. A second pathway to corruption is the flexibility of rules. Often rules are ignored as unsuitable for local needs or the current situation. The emphasis on local tailoring of rules means that in some cases, real accountability is elusive. And where accountability fails, corruption of one kind or another is hovering nearby.

**Work-Life Integration**

Employees in *Prism* increasingly insist that their jobs contribute to their personal lives and that work be interconnected with community life and values. They are attracted to companies that have a strong sense of identity and purpose—not just brand identity and a drive to make money, but a sense of ‘who we are’ as a corporation and a purpose that is connected to the larger world and lives as something more than a slogan.

**Holding the Parts Together**

Corporations in *Prism* must be able to put together complex arrangements that endure—and to deal with complex and difficult political situations when they arise. To have both the necessary flexibility and the depth, multinationals find they must manage heartland and edges in their own workforce in relation to the country they are in. For example, employees in a company’s operating units in different country heartlands may share their corporation’s values, but not have much else in common. The edges formed by the expatriate staff in those companies may have more in common with other expatriates working in different branches and in different locations than with their immediate colleagues in the local operating unit. In *Prism*, just as individuals must balance their work and their individual lives, so, too, companies must manage the delicate balancing act of being a global cutting-edge organisation in a world of heartland identities.

Although pervasive corruption affects all, it affects the poor disproportionately, and remains a challenge of many societies.
The Long Oil Game

A Security-Driven World
In Prism, concerns over energy security and the environment, and a sense that liberalised energy markets will not deliver the 'right' solutions set the scene for more active government intervention. People support this intervention because in the early years of Prism, they are first battered by an economic downturn; then lulled into a false sense of security when oil prices drop; and then shocked awake to a sense of their own vulnerability by a sharp rise in prices. Following further ‘failures’ in key gas and power markets, they are convinced of the need of government intervention on behalf of the common good.

The Response to Oil Price Volatility
From the low in 2003, oil prices rise for the next few years, peaking in 2006 at $40/bbl. Outrage over these high prices is voiced everywhere. Some people vent their anger at energy suppliers. Others lobby governments for new regulatory policies, arguing that effective intervention is needed:
• To minimise the adverse national security implications of rising dependence on energy imports;  
• To minimise the impact of volatile and potentially very high oil or gas prices;  
• To ensure affordable energy supplies for all members of society; and  
• To promote more efficient energy technologies and alternative energy sources in order to reduce the impact of energy on the environment.

‘Our Way’ to Energy Security
Most governments respond by establishing national energy policies designed to provide secure, stable, and clean energy. These policies stay in place even when oil prices start to come down (as they do in 2010) because they are tailored to local conditions, differing from country to country.

Lessons from Power Sector Reforms in Developing Countries
Based on experience in developing countries over the past decade, a number of lessons have emerged on power sector liberalisation and privatisation:
• The legal and regulatory framework and utility restructuring should precede privatisation to avoid problems with stranded assets.  
• State ownership should be divested before the next election.  
• Following reforms and until a good regulatory record has been established, protection against major uncertainty in tariffs and licensing is needed in order to attract investors.

Deregulation is one of the worst and least thought-out grand public experiments in this century. There has virtually been no debate on the merits for core consumers.
Tyson Slocum, Public Citizen, 2001

In countries with little record of sound regulations, governments have to carry an unduly high proportion of investment risks through performance and payment guarantees.
• Unbundling is possible while ensuring proper supply co-ordination and security.  
• A competitive power pool based on spot pricing is too complex for all but the most advanced developing countries.
• Where cash collections are inadequate, first priority should be distribution and supply improvement.


Deregulation is one of the worst and least thought-out grand public experiments in this century. There has virtually been no debate on the merits for core consumers.
Tyson Slocum, Public Citizen, 2001

The Long Oil Game

A Security-Driven World
In Prism, concerns over energy security and the environment, and a sense that liberalised energy markets will not deliver the 'right' solutions set the scene for more active government intervention. People support this intervention because in the early years of Prism, they are first battered by an economic downturn; then lulled into a false sense of security when oil prices drop; and then shocked awake to a sense of their own vulnerability by a sharp rise in prices. Following further ‘failures’ in key gas and power markets, they are convinced of the need of government intervention on behalf of the common good.

The Response to Oil Price Volatility
From the low in 2003, oil prices rise for the next few years, peaking in 2006 at $40/bbl. Outrage over these high prices is voiced everywhere. Some people vent their anger at energy suppliers. Others lobby governments for new regulatory policies, arguing that effective intervention is needed:
• To minimise the adverse national security implications of rising dependence on energy imports;  
• To minimise the impact of volatile and potentially very high oil or gas prices;  
• To ensure affordable energy supplies for all members of society; and  
• To promote more efficient energy technologies and alternative energy sources in order to reduce the impact of energy on the environment.

‘Our Way’ to Energy Security
Most governments respond by establishing national energy policies designed to provide secure, stable, and clean energy. These policies stay in place even when oil prices start to come down (as they do in 2010) because they are tailored to local conditions, differing from country to country.
Security of supply drives countries to concentrate on making best use of their own indigenous resources—some, for example, support a strong push towards renewables; others develop more efficient, clean coal technologies; and advances in CO₂ sequestration aid the development of unconventional oil and coal resources. Renewables also play an important role in meeting energy security needs.

**Security and the Environment**

Fears about energy security are accompanied by concerns about the environment, especially about those aspects of the environment that are locally pressing, such as air pollution. Governments respond with a wide range of policies, but most focus on taxation and regulation. Taxes and standards vary by location and level of consumption, both within and between regions. In many places they are maintained at high levels to discourage energy consumption and carbon emissions, while new energy technologies, such as renewables, are supported, particularly in their early stages of development. Despite experiments with various trading systems, use of market-based instruments, such as tradable carbon permits, is limited—they are seen as too blunt and uncontrollable. People believe that only governments can ensure progress in sustainable development.

**Regulation and the Public Good**

In *Prism*, governments and the public do not believe that markets will be able to deliver a clean environment, energy security, and energy services to the poor. Decisions on the nature of the required regulation remain firmly in the political realm because governments are in the best position to mediate between competing demands. People also believe that it is not desirable to unbundle these different public goods. For example, improving local air quality could exacerbate CO₂ emissions or energy security. A balance needs to be struck—and only governments can achieve this balance.

“**Energy deregulation and reliance on consumer preferences can only go so far, because they do not take into account critical “public goods” of energy security and environment protection.**”

*Strategic Energy Policy: Challenges for the 21st Century,* Baker Institute, April 2001
While governments support competitive markets, they use a range of instruments to achieve their objectives. Many use taxes and enforce standards. Some establish comprehensive rules requiring all suppliers to provide minimum levels of spare capacity and to use energy technologies with lower environmental impact. In some markets these obligations are tradable, but this is the exception. In any event, the specific policies and regulations are less of an issue than the fact that it is governments and regulators who decide on what services and standards will be provided.

Another area of government activity is involvement in the development of major new energy infrastructure, such as gas pipelines. But governments promote cross-border gas pipelines only when they are satisfied that rising dependency on imported energy will not adversely impact supply security.

By 2006, the combination of oil price volatility, concern over the environment, the fear of another economic downturn, and the use of ‘energy security’ as a political issue has resulted in a critical mass of public opinion forming around the goal of energy efficiency in many countries. Governments exploit the synergies between these concerns to drive new levels of energy efficiency.

Access and Partnerships

In the second decade of **Prism**, oil prices and oil demand growth are both low, and the few growth opportunities remaining are unevenly spread across the world. The key to sustainable growth is access to the fast-growing markets—but access is possible only when companies have a credible local face. The great challenge is to gain and hold one of the few profitable positions offered.

In the world of **Prism**, being selective about locations and partnerships really matters because companies cannot usually bear the high entry and infrastructure development costs expected in all markets. Opportunities lie closer to the customer—but only if companies can handle the new government regulations and the specific demands of individual markets.
The Long Oil Game
Towards 2020, deeper problems of the industry become clear, and analysts are beginning to talk about the end-game of oil and gas. Competition from advanced coal, renewables, and nuclear has slowed growth in oil demand, and growth in gas demand is only modest. In this environment, few of the companies have the capacity to migrate to greener pastures.

But there is an unexpected opportunity for companies in the ‘long oil end-game’. With low demand, and prices in the 10-12 $/bbl range, the end-game of oil is potentially longer than might have been predicted. Oil remains the dominant global fuel for another two decades. Those energy companies that survive have an extended life, and their large cash flows, generated in successful key markets, provide a platform for transition.

Sustainable Titans—2020 and Beyond
In *Prism*, those few companies that have succeeded in establishing access and partnerships at the local level have an opportunity to build energy infrastructures in the developing world. Partnerships between private enterprise and governments create novel business opportunities for the 21st-century. ‘Our way’ energy and economic policies make it difficult for companies to adopt a ‘one-size-fits-all’ global strategy. But energy titans with access and partnerships have a wide set of options. They also have an additional advantage in that they attract the most highly sought-after employees—people whose idea of an ‘employee value proposition’ is strongly focused on ‘values’ and the opportunity to make a difference to the world in which they live.

Economic slumps and disagreements within OPEC, which take time to resolve, lead to price volatility to 2010. Eventually, led by the Gulf states, OPEC pursues a volume strategy that keeps prices low.
Overview of Selected Country Scenarios

To support the Global Scenarios, a number of country scenarios were built to explore how Prism would play out on a national and regional level. This table highlights key areas of a selected few of those scenarios.

<table>
<thead>
<tr>
<th>Country</th>
<th>Summary</th>
<th>Heartland Values</th>
<th>Overlapping Circles of Connection</th>
<th>Self-sufficiency</th>
<th>Importance of Local Knowledge</th>
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<tbody>
<tr>
<td>US</td>
<td>Global technology lead creates. Unilateral economic superpower. Exploits client state role to concentrate on western hemisphere.</td>
<td>Recession and war against terrorism encourage a significant increase in the role of government.</td>
<td>Emphasis on forging strong inter-regional associations, especially with Latin America, rather than shipping global institutions. Trade-related friction with EU and Asia.</td>
<td>Energy security concerns push regional self-sufficiency and result in a diversity of energy mix in different member states, including expansion of renewables and nuclear.</td>
<td>Empirs on unitary European heritage, culture, and identity creates a 'half' advantage in providing services and products within EU market.</td>
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<td>EU</td>
<td>Deeply colonised EU, centralised in part by strong, centrally ruled Russia. Expansion is paid and limited. Slower growth in early years, followed by sustained recovery. Housekeeping, obsessive actor in world affairs.</td>
<td>Newest members catalyse new vision of European culture, liberty, and democracy, leading to a stronger sense of European regional identity. Social protection redefined as prudicences, justifying social safety nets.</td>
<td>Stability and security through balancing Chinese values and western modernisation. Communist Party modernisation.</td>
<td>China, but is at peace with itself.</td>
<td>China, but is at peace with itself.</td>
</tr>
<tr>
<td>Japan</td>
<td>As government-mediated reforms start to play, pressure returns for a more thorough approach to problems. Renewed sense of Japanese pride with record highs. Japan loses regional influence to China, but is at peace with itself.</td>
<td>Strong emphasis on environmental concerns as part of the return to tradition, including respect for traditional local practices. Japan emerges as an innovative exemplar of green technology move.</td>
<td>Stability and security through balancing Chinese values and western modernisation. Communist Party modernisation.</td>
<td>China, but is at peace with itself.</td>
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<tr>
<td>China</td>
<td>Fourth-generation leadership emergent. Gradual, controlled economic and legal reforms. Democrats come market with Taiwan. China at no role of world effort.</td>
<td>Conservative white-collar fears centrists. Businesspeople, intellectuals, and cities bought within the ruling establishment. Gradual liberalisation and movement towards multiparty political system after 2003.</td>
<td>Involving groups in cities, towns, and villages, and relatively forgiving amongst these groups. Middle classes mobilised to participate in politics. Indian regions strengthen cultural ties with neighbours.</td>
<td>China, but is at peace with itself.</td>
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</tr>
<tr>
<td>India</td>
<td>Because of stalled efforts on a variety of fronts, the global economic slump, and the loss of a key state actor, political leaders define new spaces for social and structural transformation. Focus on inclusive, broad-based development based on stronger social cohesion.</td>
<td>Middle class economics caught Alienation/inequity/inequality/inequity and stagnated growth. Inefficient prioritisation of state-led economic growth. Energy demand growth leads to security concerns. Focus on public spending efficiency.</td>
<td>Long-term gas import decline. Economy less affected by global market swings, leading to less volatile, more sustained growth. New member states catalyse a new vision of European culture, liberty, and democracy.</td>
<td>China, but is at peace with itself.</td>
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The Terrorist Attacks in the US and the Global Scenarios

The terrorist attacks on the World Trade Center and the Pentagon appear as a defining moment, marking a new phase in the impact of globalisation around the world. These attacks were targeted against a highly fragile set of networks and relationships that make up our globalised world, and appear to have changed this world irrevocably. The nature of the US response will further test those networks. How might our global scenarios help us understand the implications of these events?

Business Class

In Business Class, the US pulls together a global coalition against terrorism, allying itself with the interconnected global elites from other societies, who share its beliefs and empathise with its concerns. In a number of developing countries, however, this successful coalition-building widens the gap between the connected edges, instinctively drawn towards supporting the US, and their heartlands, whose people have other, more immediate concerns, or else even relish the sight of an overweening US hegemon being 'taken down a peg or two'. These rifts prove particularly turbulent in the Middle East, where the concerns of the heartlands are, at least for some people, openly hostile and where many in the connected edges are at best equivocal; for in the Middle East, the internationalised elite is fragmented, with elements pitted against each other and with concerns far removed from many of its fellow regional citizens.

The US continues as the only global superpower. Indeed, as has happened before in US history, crisis serves to strengthen American society and to involve it more constructively abroad. Despite moves to tighten security, the American commitment to an open society and to individual liberties is too deeply ingrained to be substantially changed even by a crisis of this magnitude. The need for international cooperation to fight global terrorism leads the US towards a policy of cooperative engagement designed to strengthen international institutions and global regimes. But...
even with a significant increase of cooperative engagement, the international system continues to be shaped by US concerns and initiatives.

Issues such as terrorism are really beyond the competence of individual nation-states to handle; and over the long term, the US recognises that it is in its own interests to respect the sensitivities of other states, and to pursue its anti-terrorism agenda through effective global institutions and regimes, which it seeks to reform. Under US leadership, international law begins to play a greater role in:

- Regulating the international system.
- Reforming and strengthening the UN system and its associated functional specialised agencies.
- Encouraging the de facto emergence of an international human rights regime (encroaching on the domestic conduct of states).

**Prism**

*Prism* is a story of modernisation in which people look beyond efficiency and global homogeneity to their roots, their values, and their families. As the conventional view of globalisation, including the growth of a universal cosmopolitan market, is shattered, old forces of religion, ethnicity, and territoriality revive. As *Prism* makes clear, these forces can act to strengthen modernisation by grounding it within a world of ‘multiple modernities’, characterised by diverse cultural values and practices.

But there is equally a dark side, in which diversity feeds prejudice against ‘the other’, giving rise to a nationalist backlash. In the terrorist attacks on the US, we see this dark side in which an unbridgeable cultural cleavage results in an emotional mix of cultural resentment, a sense of injustice, and an uncompromising rejection of western modernity. The western response might well mirror those sentiments should it take the form of increased social controls and possibly also a nationalist backlash. Nevertheless, it should be noted that while the US has chosen to depict its struggle against terrorism as a defence of civilised values, if these are taken to be values of toleration and pluralism, they are neither exclusively western nor exclusively modern. *Prism* is not a world in which we see a clash of civilisations.

The war against terrorism leads western governments to introduce new security measures and even tighter controls over the movement of people. These measures and controls, including surveillance by the state, are made easier and more pervasive by the technology of globalisation. One possible reaction to the puncturing of US pre-eminence could be a more critical evaluation by others of the version of modernity that the US promulgates, and a search for alternatives to conventional liberal capitalism. In a world of ‘multiple modernities’, different countries will modernise successfully in different ways. In retrospect, the events of September 2001 will be seen to have triggered off a huge impetus leading to a more diverse pattern of governance around the world (which fits what has historically been the norm). The twentieth-century’s obsession with US success is replaced by a twenty-first century awareness that many different forms of modernity are possible, and these can co-exist. The sense of diversity brought about by an awareness of different ways of being modern spreads to the global institutions, which no longer press international economic integration for its own sake. The new understanding—a real mind-set change within the international organisations—is that all countries should prosper within their own governing structures and institutions. Over time, this understanding gives rise to newly powerful regional institutions and agreements, each exhibiting a distinctive set of governance arrangements.
Some Questions to Consider

• If you felt certain that Business Class was an accurate projection of world developments, what would you or your organisation do differently in the coming year?
• If you felt certain that Prism was an accurate projection of world developments, what would you or your organisation do differently in the coming year?
• You recognise the inherent uncertainty about future developments. Having answered the question of what your organisation would do in each of the two scenarios, now determine what you actually will do differently.
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