

Global Scenarios 1998 - 2020

Contents

About Scenarios	1
TINA Above and Below	5
The New Game	11
The Framework for Institution Building	12
Energy, the Environment, and the Value Chessboard	14
The New Corporation: Learning and the Power of Strategic Design	17
People Power	19
Millennium Bangs and Innovations	20
Energy, the Environment, and Consumer's Choice	22
The New Corporation: Core Purpose and the Power of People	23



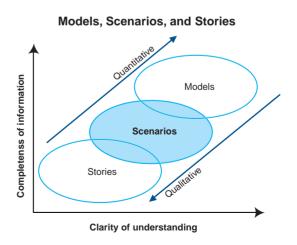
About Scenarios

Scenarios are plausible and challenging stories, not forecasts. They do not extrapolate from the past to predict what will happen in the future, but instead offer two very different stories of how the future might look. They help to prepare for discontinuities and sudden change; they help to create a common culture or language through which the future can be imagined and discussed; and they challenge the mental maps we all hold.

Scenarios assist in the understanding of complex situations, providing a useful tool for organisational learning. Some systems – the operation of refineries, for example – are well understood and can be represented by models. But others, especially those involving people, contain so many variables and so little hard

data that they can be appreciated only through intuition and are best communicated through images and stories. Scenarios can be viewed as a linking tool, which integrate intuition and quantitative modelling to enhance our understanding of how a system works.

Previous global scenarios have concentrated on issues such as the oil







price, the environment, political and financial trends, and the post-Cold War world order. This set of scenarios extends the outlook to business issues, especially the external developments that have a direct bearing on strategic questions currently facing multinational corporations like Shell. Under each scenario, the section entitled *The New Corporation* raises fundamental issues – the function of corporations, the importance of strategic control points, the forces of atomisation and commoditisation, the nature of reputation, organisational learning, leadership, and core purpose. In the competitive worlds of these two scenarios, corporations have to confront difficult issues head on. For example:

- What does it mean to be a global company?
- What strategic control points can enable businesses to gain sustainable advantage?
- Does unbundling businesses within a corporation improve performance?
- What risks are important, and how can they best be managed?
- Where are the profit zones* areas where customers are willing to pay more than the cost of capital?
- What do companies need to learn in order to perform better? How can they learn more effectively?
- How much authority should be delegated to front-line managers, and what processes and organisations are needed for such empowerment?
- Technology has enabled companies to organise in networks. Are such organisations advantageous, and, if so, where and how?
- Where should businesses provide tailored solutions for different situations and

^{*} Source: The Profit Zone, Adrian J. Slywotzky and David J. Morrison.

different customers, and where should they offer an optimised single solution?

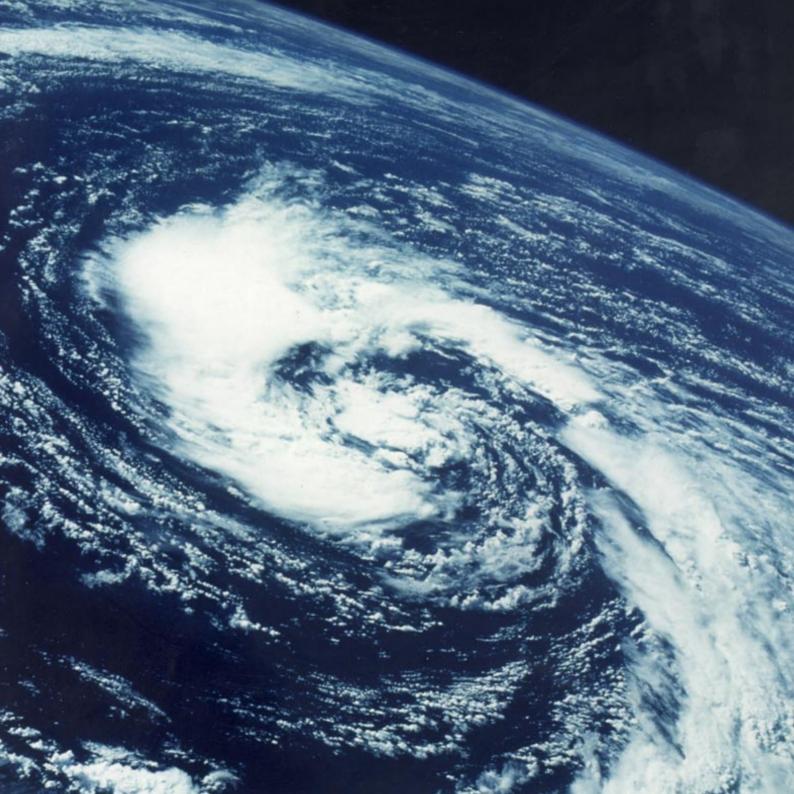
- How can a high-level value proposition be translated into practical business strategies?
- What is the best approach to technology development and commercialisation?

The Shell Group, like other major corporations, has been grappling with these and other issues specific to our own businesses. A number of possible stories could be written about the future of these issues. We have chosen to write two that offer the most challenging and plausible futures. This booklet offers a brief "public" overview of those scenarios, in the hope of stimulating provocative and useful conversation

Global scenarios are only the start for customised strategy development in an organisation. Central to using scenarios is the facilitated workshop, where open discussion around the implications of the scenarios helps provide a basis for a strategy development that is "owned" by the participants. Elements typically include:

- reconsideration of vision and objectives.
- clarification of business ideas that will lead to success.
- identification of strategic priorities.
- identification of "gaps" between where the organisation is now and where it would like to be in the future.
- identification of relevant actions to move the organisation forward.





TINA Above and Below



TINA - 'There Is No Alternative'

In the early 1990s, the forces of globalisation, liberalisation, and technology were sweeping the world, creating enormous challenges as well as new opportunities. The 1992 scenarios described two responses to these forces: in *New Frontiers*, the opportunities and challenges were embraced, while in *Barricades*, they were resisted. Three years later, we saw that *Barricades* was a story appropriate for only a very small part of the world – the forces of what came to be known as 'TINA' were simply too strong to resist.

The 1995 scenarios emerged from *New Frontiers* in response to the question: what political, social, business, and economic systems are best able to exploit the forces of TINA? In *Just Do It!*, success came to those who took advantage of quickmoving opportunities in a world of hypercompetition, customisation, and rapid technological innovation. In *Da Wo* ('Big Me'), countries and companies discovered that success called for a committed investment in relationships, where trust and the enabling role of government provided the long-term strategic advantage.



In 1998, we see that TINA is more powerful than ever, and that the effects of TINA operate on two levels: at the level of markets, financial systems, governments, and other wide-reaching institutions ('TINA Above'); and also at the level of individual people, who, in many parts of the world, rich and poor, are becoming wealthier, better educated, and freer to choose ('TINA Below').

TINA Above: Globalisation, Liberalisation, Technology – and their Interactions

Globalisation is obvious to anyone who watches American movies in Kenya, or buys Chinese-made clothes in France, or drives Japanese cars in South America, or listens to British CDs in Papua New Guinea.

Liberalisation is also familiar to the millions of consumers who are faced with competing sellers of telephone, gas, power, and entertainment services. For many products, only a small share of value is locked into geography – which means that the 'footloose' parts of the manufacturing process can be moved anywhere. In competing for these footloose enterprises, cities, regions, and governments find they are subject to the discipline of global financial markets – TINA at work.

Technology innovation – a truly revolutionary force – not only improves efficiency and enables new products and services, it also creates effects whose impacts take many years to understand. Information technology, in particular, intensifies TINA in three ways:

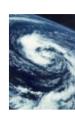
 IT informs customers and suppliers, allowing customers to find the best value from an increasing array of competitors, and allowing suppliers to tailor their offerings to individual customers.

- IT disintermediates, allowing customers to communicate directly with the sources of goods and services, and allowing companies to unbundle their manufacturing processes and re-distribute them more efficiently. Disintermediation is a particularly subversive part of information technology, threatening many established oligarchies, such as banking and other financial service companies.
- IT *enables*, particularly in the areas of communications, automation, tracking, and speed. IT expands choice and increases transparency; it is ubiquitous, serving as a powerful force in the globalisation of ideas; and it is mundane, because its primary applications are in meeting basic customer needs and in improving basic business processes, although often in innovative and revolutionary ways.

Many people see the recent crisis in emerging markets as a resistance to TINA and a threat to globalisation and liberalisation. But the structural failures behind the Asian and Russian crises are not those of TINA but of the many weak domestic institutions in those countries. The resulting pressure is to reform those weak institutions, not to return to barricades.

TINA Below: People with Education, Wealth, Choice

Although wide variations exist, most people across the world are increasing in wealth and education and have more choices. As people move up the familiar Maslow hierarchy of human needs, they begin to exercise choice based on their values and desires rather than on hunger and fear. For example, in developed





economies, wealthier people express a greater willingness to pay for goods and services that are 'green' or that are the products of socially responsible companies. What will be the effects of more people becoming wealthy enough to make such choices?

In developing countries, emerging middle classes wish to exercise more choice about the way their countries are run. The increase in the number of these choices, as well as the growth in education and wealth, will create new pressures on government institutions, businesses, and even individuals themselves.

Two Scenarios for Business

The squeeze on institutions and societies will intensify in response to pressures from above – open and transparent markets, globalisation, commoditisation – and pressures from below created by informed customers, smart employees, demanding citizens, and other stakeholders. Will we learn to cope with *TINA Above* by coming together to design global rules of the evolving game that allow it to be played fairly and efficiently? Will we strengthen global institutions, continually reinvent our businesses, and learn to play *The New Game?*

Or will TINA Below, with its spontaneous, unstructured, and less predictable forces of wealth, choice, and education, dominate? Will consumer choice, rising personal expectations, and grassroots pressure groups overwhelm attempts to impose rules and overshadow old institutions? Will People Power emerge, producing new kinds of economic activity that we have never seen before, and

Ciobalisation TINA Above Technology Organisations and Institutions Governments NGOs Companies Football Cottons TINA Below

TINA Above and Below

challenging businesses with the need for creativity and resilience?

In either scenario, businesses will be transformed. 'There Is No Alternative' to such transformation. The question is: how will it occur? Which of these forces – *TINA Above* or *TINA Below* – will be more powerful in shaping the future?





The New Game

In *The New Game*, existing institutions and organisations successfully adapt to the new and evolving complexities of *TINA Above*. At all levels, from the local to the international, people come together to solve problems, and, in the process, new institutions emerge, and old institutions are reconstructed to deal with TINA's global revolution. Of course people have always come together to solve problems. But TINA means that now, there's only one global game to play in – or, as is the case in some regions, to aspire to join.

On the level of individual businesses, the over-arching framework of *The New Game* brings with it rules of play and models of best practice. Information technology and high transparency allow these rules and models to be seen and analysed. Those who learn these rules and can play well in such transparent and efficient global markets can earn rich rewards. As always, those who can design winning strategies do well, and success breeds success – but because of the global scope of *The New Game*, sustained success comes to relatively fewer players on the field. The good players reap extremely large rewards, while those who play poorly struggle simply to survive.

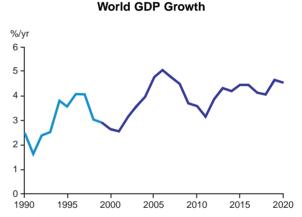
Meanwhile, the faster spread of experience, the ability to tap that experience, the increasing feedback loops in every sector of activity, and the growth of transparency make learning itself a necessity. Evidence of increased capacity to learn may be found when we look at the wide variety of predictions that haven't





come true: the much-trumpeted limits to growth have been circumvented by market responses and technological progress; oil price changes have had progressively smaller impacts on the world's economy; nuclear war has so far been avoided; China has not collapsed; Mexico has survived the peso crisis; Kyoto has not been abandoned. All of these are 'dogs that didn't bark'. So businesses and institutions do best in *The New Game* when they are designed as learning systems, continually reinventing themselves. And transparency serves to

encourage a larger number of players to enter the game, while at the same time, it does nothing to decrease the complexity of the game itself or the difficulty of designing winning strategies. The game is increasingly complex, with a bigger board, new pieces, new rules, and the emergence of new institutions.



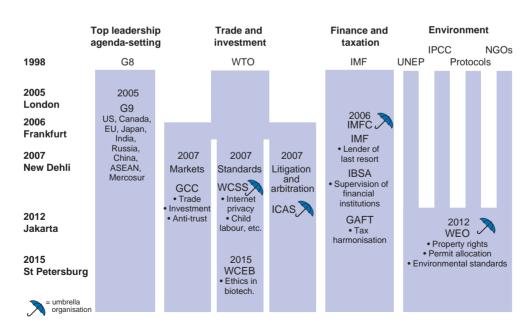
The Framework for Institution Building

The world of *The New Game* has learned that TINA does not tolerate structural financial weaknesses for very long. The Asian and Russian crises of 1997–98 and the resulting investor responses, as well as the application of IMF corrective measures, lead banking systems around the world to adopt a more conservative approach. The currency crises of the late twentieth century drive home the point

that in this global economy, we are all vulnerable to weaknesses in any part of the system. A functioning macrostructure gradually emerges, and global public opinion forms to support the notion that this stability should be institutionalised through establishing a global lender-of-last-resort system. The International Monetary and Financial Council (IMFC) evolves from the IMF and begins to serve this function very effectively. Such a system can work only when there are clearer rules to govern the financial system – for example, in regulating, auditing, accounting, and bankruptcy. To participate in and benefit from *The New Game*, players have no choice but to live by these international rules.



Development of International Institutions





One of the effects of the increase in effective global problem-solving and the emergence of functioning global institutions is that national governments become only one of a number of partners in problem-solving. High tax levels have been lowered, hidden subsidies removed, and minimal social security safety nets are available, but only for those in real need. Like businesses, market states are in a relentless search for best practice. In addition, the function of the state is beginning to shift. The social contract of the old nation-state model was based on the welfare of its citizens. Now the nation state holds itself responsible for something else: ensuring minimal safety nets while maintaining a fair economic playing field for its citizens. The new model seems highly effective. Many problems that had seemed intractable in the twentieth century are being solved, usually at the level most suited to address them - global, national, or local. Entrenched positions, including those of unions and special-interest lobbies, are eroded in this new world. As a result, a whole new set of international institutions evolves, setting standards on a wide range of issues, from internet access to the environment.

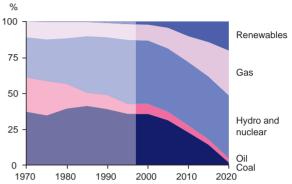
By 2020, this new global system is in place, encouraging global competition within defined frameworks. The rules-driven and competitive world of *The New Game* prospers, with world GDP growing just under 4% per year during the scenario period.

Energy, the Environment, and the Value Chessboard

In The New Game, Kyoto works. Consensus about the importance of the

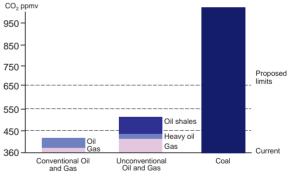
environment leads to the formation of the World Environment Organisation (WEO), which emerges from working groups of NGOs, government officials, and business representatives, with input from other international organisations, such as UNEP. The WEO becomes increasingly skilled in encouraging and overseeing market mechanisms to reach environmental objectives. For example, Kyoto is achieved through the trading of carbon emission permits. These market mechanisms reinforce TINA, which is driving out subsidies, and the increasing reliance on rules-based systems reduces fear about energy security. The effect is to drive coal out of the energy mix in OECD countries, in part because coal use is the main risk factor for global climate change.

OECD Electricity Mix



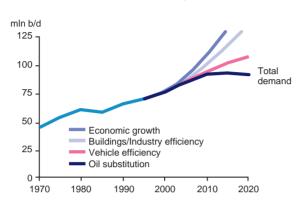


Atmospheric CO₂ Concentration if all Resources are Used



Note: Proven plus undiscovered resources at the 50% probability level Source: based on IPCC 1995 Second Assessment Report and Masters, 1994

Oil Demand Decomposition



As one result of technology development, the US Partnership for a New Generation of Vehicles (PNGV) program and its competitors succeed in commercialising a new generation of highly sought-after vehicles with three times the fuel efficiency of late 1990 models.

Middle East oil producers see the writing on the wall. In order to maximise the value of their resource, they keep the oil price low by design and increase their share of the limited market.

In *The New Game*, competitors must continuously strive for innovation and efficiency while at the same time avoiding the pressures of regulators and competitors to erode advantage. With competition emerging at all stages of the energy value chains, and with the boundaries between different energy forms disappearing, a value chain is better seen as a kind of value chessboard. Firms struggle to find and hold strategic positions in different parts of the value chain in order to create competitive barriers and to move resources from one part of the chain to another when profit opportunities shift. And profit opportunities in the value chain do shift – constantly – making it difficult to find and hold onto zones of unusual profitability.

The New Corporation: Learning and the Power of Strategic Design

The New Game is a tough world for business. Increasing transparency and competition drive goods and services towards the zone of commoditisation and, eventually, into the 'empty core,' where profit is very low. Companies attempt to achieve competitive advantage by seizing strategic control points in a given market and then by continually reinventing themselves in order to stay ahead of

the competition and of the very effective regulators, who vigorously root out potential monopolies. In *The New Game*, strategic cost leadership is absolutely vital – but it isn't enough. Success depends on identifying the constantly shifting profit zone, the area of the value chain where customers are prepared to pay in excess of



the cost of capital. Fast, cheap, and effective learning is a core competence in this world, and organisations create structures to encourage this learning. *The New Game* is a world designed to prevent many traditional ways of taking advantage of customers. The challenge for management in such a world is to do better in allocating capital than the atomised, impersonal, and highly efficient market – in short, to add value.





People Power

In *People Power*, *TINA Below* brings significant increases in wealth, choice, and education, and, for the first time in history, large numbers of people across the globe are free to express their own values and often do so in unpredictable, unstructured, and spontaneous ways. This flowering of diversity undercuts authoritarianism and conformity, and appears to weaken many long-standing social institutions – marriage, obedience to authority, and norms of sexual expression and public behaviour, for example. It is a volatile and exciting world, one of great creativity and accelerating change, where 'news of the new' is rapidly disseminated.

It may seem as if values are changing, too. But a closer look reveals that people have always held differing views, but have been too poor to have time to express them, or too constricted by authority to be able to do what they wanted, or too ignorant to know they had other choices. What is different about *People Power*, then, is not that people change their values, but that people are enabled, through liberalisation, education, technology, and relative wealth, to behave openly and effectively in expressing a wide range of diverse values and desires. It is as if the tight cords of authority and poverty that have held people together, like so many

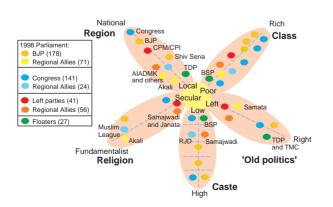


flowers in a bouquet, have been cut, leaving the individual flowers to blossom in many directions. And, in a world of hundreds of multimedia outlets, always looking for the new, these divergent blooms receive a great deal of attention. No matter how strange and chaotic the world is, it appears even stranger as packaged for news and entertainment.

Millennium Bangs and Experiments

This unleashing of diversity in *People Power* allows weeds to flourish as well as flowers. It is a volatile and unpredictable world with fragmented political parties and such a divergence of views that institutions find it difficult to build consensus. Institutions are further challenged by the speed of change – they just never seem able to catch up or to reform themselves or their spheres of activity in time to address the current problems. They do learn and reinvent themselves – but the

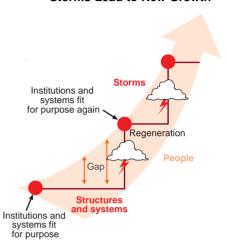
Indian Politics - Dimensions of Belonging



lag between the changes in people and the necessary changes in the institutions that serve them seems to be growing. Only a crisis can lead to a large-scale change in this world. For example, the asset bubble of the last years of the 1990s cannot be let down gently without damaging the delicate state of the world financial system. It continues to grow, like the famous Dutch tulip bubble, until it crashes in the new millennium.

The crash, accompanied by financial crises in Japan and China, reverberates around the world in a series of 'Millennium Bangs', creating the biggest recession since the 1930s. Meanwhile, other problems, such as pensions and the effects of aging populations, remain unresolved. Solutions are proposed, but are put off. Existing institutions simply cannot cope with the scale and complexities of the problem. In the end, people have to resort to their own

Storms Lead to New Growth



solutions, for example, by creating private pensions and by continuing to work, sometimes into their seventies. This combination of self reliance and experimentation proves to be fruitful. Although people complain and feel insecure, the increased innovation and personal initiative lead to a dynamic world.

Between 2015 and 2020, average GDP grows by 5% per year, although growth is uneven. Many relatively well off and educated citizens, who have an increasing array of choices, join other like-minded people in expressing their values through a variety of global associations. Environmental activists, for example, are far more likely to support their international cause, whether rain forests or whales, than support their particular government policy, which may have been crafted to encourage particular national companies. At the same time, people engage in intense activity at the local level, where they can see the direct results of their



political influence. But others, frustrated by apparent inactivity, take direct individual action. At the extreme, this leads to acts of violence against those who are seen to be persistent polluters.

Energy, the Environment, and Consumer's Choice

In *People Power*, energy markets, like other markets, are driven by an increasingly diverse array of end-user needs. This is a world full of entirely new ways of doing things, with large numbers of experiments. Also, because of intense media attention, including tailored internet news dissemination, the new catches on rapidly. Entire industries can change almost over-night. The players in the electricity industry, for example, are rapidly transformed beyond all recognition as they come to terms with distributed power generation. Oil prices are volatile as the market responds to events such as the inrush of oil from Russia and the Caspian Region and the effects of sanctions and boycotts against Nigeria and other victims of 'the curse of oil'.

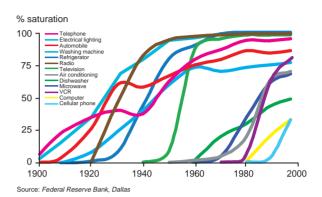
Energy marketers in *People Power* aggressively exploit new information and communication technologies to differentiate services according to time and occasion-of-use, location, demography, and even attitude, creating an explosion of new bundled-energy services. For many customers, however, energy marketers become an irrelevant impediment between themselves and the supplier.

After recovering from the Millennium Recession, energy demand explodes in developing countries. But in industrialised countries, on-going efficiency improvements, continued economic shifts to services, and saturation of major



energy needs keep demand growth relatively stagnant. Not only do people prefer to spend increases in disposable income on entertainment, health, and personal services, but also new appliances tend to be small, mobile, information-rich, and minimal in their energy requirements.

US Saturation of Household Energy Uses



In People Power, although the EU

ratifies the Kyoto agreement, the US does not. Angry about local pollution, congestion, and health issues, protesters target oil, coal, and car companies through increasingly effective NGOs and individual action. Outrage spills over into boycotts and other actions against polluters, including the drivers of gas-guzzling cars. Corporations, under intense media scrutiny, are held to higher standards of social accountability – *People Power* in action.



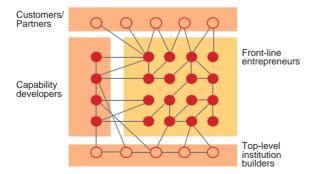
In this world of media spotlighting and consumer expression of values, reputation and brand really matter. But brand may require subtle variations across borders or other customer segments, assuming more importance in less developed nations, for example, than in OECD countries. In fact, 'tailorism' – the tailoring of solutions to fit individual customers – is a feature throughout the world of *People Power*, extending to governments, education, services, and almost



every facet of life. Companies succeed only if they can provide tailored services not simply for their own customers, but for their customers' customers.

Diversity in a world of 'tailorism' is not just about income, gender, race, and nationality, but also about skills, feelings, and values. Employees, for example, are willing to give a lot where they find a fit between their personal values and those of the corporation, but are highly intolerant of companies that do not fit them. In turn, companies find they need to tailor employment roles and opportunities to fit many different kinds of people. Companies need diversity because they need to understand the contradictory trends and currents of their markets. But increasing diversity means they can no longer afford to have single competence profiles and one-size-fits-all employee development models. In the old world of 'Taylorism', people were commodities – moving parts, which had to be made more efficient or replaced. In the new world of 'tailorism', people are irreplaceable individuals whose unique talents create opportunities for business growth and profit. The creative entrepreneurs so necessary in *People Power* have many opportunities to

A New Organisational Model



Source: Ghoshal & Bartlett, The Individualised Corporation

succeed on their own, so companies must work very hard to attract them.

People are key to success in this world, for only people are creative and resilient enough to respond intelligently and quickly to the unpredictable – and customers are often unpredictable. Successful companies are those that have highly empowered and entrepreneurial individuals close to the customer. In the absence of a hierarchical management structure, corporate leaders in *People Power* function as coaches for the front-line managers, who are empowered to make major decisions. What guides all these empowered front-line entrepreneurs is clarity of purpose and a strong sense of values, with leaders working to establish and strengthen these. In *People Power*, core purpose is not just a slogan – it is the way of aligning the company for competitive advantage.



