2011 saw China begin to implement its 12th Five-year Plan. The Plan seeks to refine China’s economic development by pushing forward the development of emerging strategic industries, expanding independent innovation, and pursuing sustainable economic development alongside social harmony and stability. 2011 also marked the 10th anniversary of China’s accession to the WTO. Following hard-fought negotiations, China joined the World Trade Organization, beginning the process of bringing its economy into line with the international economic system. Back then, China was still a new player in the international trade system, and needed to transform itself in order to adapt to the new rules of the game. Since then, China has become a leader in international trade; its total trade volume is now the world’s second-largest, as is its total GDP.

However, 2011 was not all smooth sailing for China. Domestically, China faced pressures from inflation, real estate bubbles, and loss of control over local governments’ financing platforms; externally, China continued to feel the impact of the global financial crisis, falling under the shadow of the European sovereign debt crisis and the U.S. economy’s weak recovery. During this critical year of transition, China’s economic performance was barely satisfactory. Domestically, China needs to curb inflation, maintain moderate growth, and avoid an economic hard landing; externally, it needs to actively cope with the decline in export demand caused by deterioration in the market environment. China needs to keep this enormous wheel—the world’s second largest economy—rolling forward along the right track, and at a steady speed.

Looking ahead at 2012, continued implementation of the development strategy defined in the 12th Five-year Plan is the path forward for the Chinese economy. At the Plan’s core lies: the question of how to maintain momentum towards rapid economic development built up during the past 30 years of “Reform and Opening Up”; how to greatly enhance the competency of Chinese enterprises, transforming them from followers into leaders on the global stage, and drivers of global growth; and how to...
adjust the economic model to cope with those social, economic, technical and environmental factors that hamper development. If these goals are to be achieved, China must do more than simply coast forward on the inertia of the past 30 years. There have been great changes in the economic and business environment. Many new factors and driving forces influencing economic development have emerged. New trends are forming. We must have new ideas, new strategies and new initiatives to meet these new challenges.

The global financial crisis of 2008 is a clear signal that the old model will be hard to sustain. The country should rethink its economic growth model, while enterprises should rethink their business models. If, caught unawares, enterprises fail to make adequate preparations, and continue down their previous path, it is unlikely that they will be able to take advantage of business trends. They will miss out on opportunities to develop, and may find themselves facing additional difficulties.

We think that there are four important factors will have important impact on China’s economic and business environment. These factors may change enterprises’ operational environment. They may also change enterprises’ business or operational models; some factors may prove beneficial, while other may cause temporary operational difficulties; some factors are global, while some are particular in China.

(1) How will China develop its economy in the next 5-10 years is an important strategic issue, and hence the first factor we need to discuss. In the final analysis, this is an issue of balancing, or rebalancing, different economic models. This is an urgent issue facing both the Chinese government and business executives. If they do not face it directly, or if they fail to respond or cannot find ways to solve this problem, they will forfeit the opportunity to shape the future of business.

(2) While China is undergoing rapid urbanisation domestically, the Chinese economy is also rapidly becoming integrated into the global economic system. Chinese enterprises have found themselves being pushed by enormous forces. Willing or not, they are now face-to-face with the rest of the world. China is the main representative of the newly emerging markets driving the formation of a multi-polar world; likewise, the formation of a multi-polar world has driven the rise of multinational companies in emerging markets. The globalisation of Chinese enterprises is a by-product of the new situation. Globalisation is particularly significant for developing Chinese enterprises. The impact of the global financial crisis has spurred decision-makers both within enterprises and throughout the Chinese economy to rethink their models of economic growth. They realize that they have to break out of their set patterns, and transform their business and operational models. The need for transformation will push Chinese enterprises to go global. One might say that globalisation is the natural choice for Chinese enterprises given present trends.

(3) Like enterprises elsewhere, Chinese enterprises are confronting issues of environmental protection and sustainable development. In some senses, sustainable development is of very real, very practical significance for Chinese enterprises, not only because China is one of the world’s largest energy consumers and carbon emitters, or because China faces serious pollution and environmental degradation problems, but also because the Chinese economy is still growing rapidly, putting additional pressure on the environment. At the same time, China ranks among the top countries in the world in clean energies, including the manufacturing and use of wind turbines and solar panels.
the road, China will develop strong competencies in clean coal, nuclear technology and new energy vehicles. Because of the seriousness of China’s environmental issues, only by improving the environment can the well-being of China’s people realistically be improved. Only in this way can we create breathing room for further improvement, and create opportunities that will help enterprises develop. Sustainable development holds an additional meaning for Chinese enterprises, separate from issues of resources and environmental sustainability. It is only by planting the seeds of institution building, corporate culture and citizenship, and social responsibility that enterprises will grow, flourish, and endure.

(4) Chinese enterprises are a new force in the global economy. Their innate deficiencies lie in their thinking, in their human resources, their management, and their processes; even more so in innovation and technology. At China’s current initial stage of economic development, imitation and copying are inevitable. Low-cost manufacturing is also unavoidable. However, once enterprises have developed to a certain scale and degree, they should no longer depend on imitation or low-end manufacturing. Instead they should produce their own innovation, their own original technologies. Breakthrough development and deployment of many new technologies level the playing field for enterprises everywhere, and have created opportunities for Chinese enterprises that once lagged behind to catch up, or even to surpass, their competitors. For example, technologies such as the mobile internet, Web 2.0, cloud computing, new energy, and electric cars have almost unlimited promise. In order to seize these opportunities, and keep pace with traditional technological leaders, Chinese enterprises need to devote more time and energy to R&D. They need to create a domestic ecosystem that supports innovation, and increase productivity through innovation in both products and processes.

Walking a correct, steady path towards development requires properly balancing economic growth models. By doing this, Chinese enterprises can use globalisation to increase their competitiveness. They can stick to the path of sustainable development to increase citizens’ well-being, and leverage new technologies to catch up with leading players. For Chinese enterprises, this will be the direction of their development, and where their opportunities for growth and expansion lie over the next five years, 10 years, and longer. It is also their historical mission, and their responsibility to all of humanity. When considering the next step of its development strategy, any enterprise should take into account the aforementioned four factors (explored in greater detail below). Enterprises should consider which factors they should prioritise, which factors can be leveraged, and which trends will influence which factors, so that these trends can also be anticipated and leveraged. Factors that influence economic development and shape the overall business environment might be seen by business executives as greatly removed from their day-to-day concerns. They might think that, as the management of a single enterprise, their influence is insignificant. They may believe they lack the ability to alter the course of events. But, as the Chinese saying goes, “those who do not plan for their future will find trouble at their doorstep”. If enterprises do not assess and respond to these forces, they may lose the initiative. They may find themselves unable to keep up with the pace of economic development, putting them at a disadvantage, and at risk of suffering unnecessary losses.
I. China needs to balance its economic growth model

Following the global financial crisis, the concept of “re-balancing”, predicated on the notion that there had been a “loss of balance”, began to appear with regularity in a variety of different settings. It is now the subject of scrutiny by ever-greater numbers of individuals in economics, management, government and corporate circles. Indeed, the phenomenon of unbalanced economic development is not new. The financial crisis has made it a prominent problem, and one which has drawn attention from people in all walks of life.

This imbalance takes two forms: worldwide, it takes the form of uneven development between nations, regions and different economies; in China, it has assumed the form of an unbalanced economic development model.

The imbalance in global economic development has two aspects:

Firstly are the high savings rate, low consumption and high exports in emerging countries like China, in which a low-cost manufacturing advantage supports an export-oriented economy. On the other hand, traditional western developed markets and countries like the U.S. have a low savings rate, high consumption and high imports; they consume products exported from emerging countries through deficit spending. Export-oriented emerging countries have accumulated massive foreign exchange earnings, while developed countries whose imports exceed exports have accumulated trade deficits. As a result, spendthrift rich countries borrow money from the penny-pinching poor countries by issuing bonds, causing excess market liquidity in developed countries. In the presence of excess liquidity, individuals no longer treat credit seriously. Everyone seeks to profit from asset transactions, recklessly disregarding whether the transaction carries risk. So long as one is able to pass the buck to the next person, there is no incentive to care about the eventual disastrous result. This improper functioning of the credit system caused the current financial crisis, from whose impact the world has yet to fully recover. This imbalance is an imbalance in consumption, in savings, in investment, in monetary flows, and in the credit system.

Secondly: For many years, we lived in a unipolar world where economic power was concentrated in developed economies. These economies dominated and controlled the rules of business, innovation, technology, capital and branding. They were the centres of the global economy. Multinational corporations from these economies expanded all over the world, expanding their reach to every corner of the globe. In the meantime, the economies of non-developed markets remained in a marginal state, passively accepting the constraints imposed by pre-existing rules, and dominated by outside forces. This imbalance was an imbalance in the distribution of economic strength.

At the micro level, the imbalance in China’s economic growth model takes the form of long-term reliance on limited added value, low labour cost, low value-added manufacturing, and a lack of homegrown brands, technology and innovation. At the macro level, China is over-dependent on investment and exports to stimulate economic growth, while domestic consumption is inadequate. The imbalance is also structural: China’s south-eastern coast is still stronger economically than the inland regions in the centre and the west of the country. State-owned companies still control the majority of resources. Due to the constraints imposed both by resources and the system itself, private enterprises are barred from numerous industries. Though the Chinese economy is large in size, careful inspection reveals it to be an asymmetrical giant.
Imbalances in the global and Chinese economic growth models have attracted their share of attention. Rebalancing on a large scale is already underway. On the world economic stage, the balance of power has shifted. The centre of economic growth has begun to shift from developed countries to developing countries, and new forces shaping the business environment are coming into focus. The world has evolved from unipolar to multipolar, from a single centre to multiple centres, from one-way dependency to mutual dependency. Innovation, capital, resources and talent now flow many ways instead of just one. Emerging markets are beginning to “decouple” themselves from the old system. The relationship and impact of dependence, and the dividing line between independent variable and variable are no longer so clear. For example, in 2009, China replaced the U.S. as Brazil's largest trading partner. China’s direct investment in Brazil was only 92 million U.S. dollars in 2009. The Brazilian authorities predict that it will increase to 10 billion U.S. dollars in 2010. The weight of these two large developing countries, located at two opposite sides of the earth, is increasingly balancing the unbalanced scale of the global economy.

As pointed out by Chinese president Hu Jintao, the international financial crisis has called attention to the issue of transforming China’s economic development model. Superficially speaking, the Chinese economy felt the impact of the financial crisis in the form of reduced growth rates. In actuality, the crisis’s main impact was on China’s economic development model. A comprehensive evaluation of both the international and the domestic economic situation yields the conclusion that a transformation of the model of economic development is urgently needed. The process of transforming China’s economic development model is, in reality, a process of economic rebalancing. Rebalancing means a shift from reliance on advantages in labour costs to a focus on independent innovation, R&D and design, high-end technology, and precision manufacturing; it means a shift from low-end OEM to creating one’s own brand, setting up one’s own market channels, winning recognition from consumers and clients, expanding to the high-end of the value chain; it means a shift from relying on investment and export to paying equal attention to investment, export and domestic consumption; it means a transformation from a land-intensive, energy-intensive, high-emission growth model to an environmentally friendly, energy efficient, low emissions model.

Be it the rebalancing of the world economic order, or the rebalancing of China’s economic development model, both will catalyse the formation of a new business environment. Both will produce a need for new business models. Both will generate new forces that shape the future. It is highly possible that the next 10 years will prove a turning point, where a new, balanced global economy becomes a reality. At the end of the day, the enterprises that respond to these changes and new forces, those that make the best of the circumstances and seize emergent opportunities, will find themselves in a favorable competitive position. Conversely, those that think the rebalancing of economic development is only a concern for economists and politicians, only a topic for political criticism by scholars in their academies and ivory towers, will face risk.

II. Transformation and the accumulation of strength both require globalisation
Ever since the strategic transformation of “Reform and Opening Up” in the late 1970s, the Chinese economy has grown rapidly. From 1978 to 2010, average annual GDP growth rates were 9.8%, the highest in the world during the period. After more than 30 years of development, in what could rightly be called a modern economic miracle, China has transformed from a planned economy of material shortage teetering on the verge of collapse into one of the largest and most dynamic economies in the
world. The history of more than 30 years of economic development is the history of evolution: from isolation from the global economic system, to integration with it. To a large extent, the present strength of the Chinese economy is as a result of the opportunities for development created by economic globalisation. It is also the result of China’s pursuit of a market economy, respect for market rules, and active participation in the global economic division of labour. One could say that the history of China’s reform and opening-up is the history of constant globalisation, both of China’s economic development and of the operation of Chinese enterprises. Since the beginning of Reform and Opening Up, China’s bond with globalisation has been indissoluble.

After more than 30 years of effort, China has become an economic giant. The total volume of both its GDP and its trade has leapt to second in the world. The rapid growth of its economic strength has required China to take a wider view, to seek greater space for development, to take on more responsibilities in global economic affairs, and to redefine its position in the global economic system. China will not find the answers to the problems it faces in its next steps only looking inward. Looking outside, taking steps to “go out” is the natural way to spur the continued growth of China’s economic strength. There is no other choice. Globalisation requires the support of both soft and hard power, and is a comprehensive test of an economy’s overall strength. In the midst of developed countries’ crisis-induced difficulties, the continued, stable development of the Chinese economy is the foundation for the globalisation of the Chinese economy. In the wake of the financial crisis, the balance of international commercial power has shifted, opening up further globalisation opportunities for China. The current situation is highly favourable to speeding up the pace of globalisation.

With the global economy still not yet fully recovered, Chinese enterprises need to review their plans for development, and think about fundamental problems from two perspectives: firstly, does the financial crisis mean that the process of globalisation will slow? Do the problems exposed by developed economies and their enterprises during the financial crisis mean the end of western management thought? Can the experience of developed markets and enterprises no longer serve as reference for Chinese enterprises? Secondly, do existing business and operational models need to be changed? Do enterprises need to reshape themselves, and ascend to a new, higher level of strategic thinking?

The answer to the first question should be obvious. The outbreak of the financial crisis reflects serious defects in developed economies and their companies; however, this does not mean that the modern management concepts originated in the western world no longer hold any instructive significance. In many ways, the management ideas and experience of the western enterprises are still leading edge. Even the problems exposed by the crisis can serve as lessons for Chinese enterprises that seek to avoid committing the same errors.

The answer to the second question is also in the affirmative. Post-financial crisis, the global economic situation and operational environment have changed. It is not only nations who need to adjust their models of macroeconomic development; enterprises also need to reconsider their growth models. Old, familiar business models are no longer necessarily be effective in globalised market competition. The search for new models is imperative. Only through change can we adapt to the new era.
What is globalisation? For enterprises, globalisation is first and foremost a regional concept. Simply put, it means that the markets for an enterprise’s products and services, the sources of its raw materials and technology, as well as its business and operations, are all international to some extent. Globalisation is also a process for enterprises. The process of moving from operating domestically to operating globally is an evolutionary process. Enterprises move from initial to advanced stages, each phase marking a different form of globalisation.

Chinese enterprises formulation of globalisation strategies is directly impacted by the enterprise’s goals in globalising, its capabilities, and the degree of competition within its industry. Enterprises in different industries may adopt differing globalisation strategies, in accordance with their particular needs and strengths. Chinese enterprises seeking to globalise in the face of crushing domestic competitive pressures are putting their strategic focus on building sales networks overseas, on investing in factories overseas to their expand their international markets, or how to utilise their local low-cost advantage to integrate global resources. Those enterprises wishing to augment their space for overseas development would do well to focus the development of their globalisation strategy on whether M&A or organic growth is the best way to seize market share and win new business overseas. For those enterprises whose main goals are to optimise their operations and extend their value chain overseas, the selection of a globalised strategy manifests itself mainly in the question of how to best achieve that extension. Many Chinese enterprises that are abundant in strength and experience now regard the creation of a globalised enterprise as their main development goal. Their strategy for the creation of a globalised enterprise rests on pillars such as the creation of globally renowned brands, the localisation and digitalisation of global operations, and an approach to expansion which integrates both organic growth and M&A.

A strategy that is developed on the basis of an enterprise’s own comparative and competitive advantages can clarify the enterprise’s present position and future direction. Even more important than the strategy, though, is its implementation. An important question to be clarified at the implementation level is what kind of operational model the enterprise should adopt during the process of globalisation. The global operational model we have proposed addresses deep questions of how enterprises can operate global businesses efficiently, given the particular characteristics of each enterprise’s industry, the enterprise’s own capabilities, and each enterprise’s unique path towards globalisation. The model includes five elements: leadership abilities, quality of personnel, organisational structure, processes and technology, and criteria for measuring excellent performance. A successful global operational model requires the five elements to function in a harmonious balance. The model should suit the enterprise’s globalisation strategy and the local market environment. More importantly, the enterprise must have the ability to transform itself in response to changes in the market and adjustments in its competitive strategy. When the enterprise needs to be restructured or when significant changes happen, it should be able to refashion its global operational model in a timely and effective fashion. Many Chinese enterprises have undertaken ambitious M&A projects overseas; but they usually find that integration is not easy. Some fail to achieve their goals. One important reason is that Chinese management teams are accustomed to managing domestic business, and do not yet have the ability to navigate the treacherous transition from familiar domestic business to unfamiliar and complicated global operations. Investing a great deal of time and effort into building a global operations model is a prerequisite for the success of a business’s efforts to globalise.
State-owned enterprises have played a prominent role in the larger trend towards globalisation. They have been out ahead blazing the trail for other Chinese enterprises, expanding the space for development. The globalisation of private enterprises is now in the ascendant. Private enterprises' surge forward is one of the great recent developments in the Chinese economy, and one worth paying attention to. But what lies behind this surge?

Firstly, for private enterprises, “going global” can help to enhance their international competitiveness. Since the beginning of Reform and Opening Up, and after more than 30 years of high-speed growth, private enterprises have made notable contributions in job creation and expansion of exports, among other areas. However, after an initial phase of rapid development, many private enterprises have encountered bottlenecks in technology, talent, markets, branding, and capital. These bottlenecks have seriously restricted these enterprises’ continued growth. This has spurred them to begin considering how to enhance their core competencies, transform their growth models, and seek new paths for development. “Going global” has become one of the important elements in private enterprises’ development strategies. For the majority of these enterprises, the purpose of globalisation is not to acquire resources, but optimise their value chain. Through globalisation, they can rapidly acquire capabilities in R&D, design, high-end manufacturing, overseas sales channels, and branding. These capabilities are critically important to enhancing their ability to innovate, move to the high end of the value chain, and transform their economic growth model. All of these are beneficial to the development of the Chinese economy, and important to releasing the full potential of the Chinese economy.

Secondly, private enterprises' "Go Global" strategy facilitates the development of a market economy, contributing to image of China’s economy as one that operates by market rules. Due to their clear property rights, private enterprises tend to make decisions based on market factors, as opposed to non-market factors. Given their strongly market-oriented rationale, private enterprises operating overseas can easily gain approval from local regulators and win recognition from local business circles. Therefore, in their efforts to go global, private enterprises not only strengthen their own business, but also expedite the globalisation of Chinese enterprises in a broader sense.

Thirdly, private enterprises are capable of reaching decisions rapidly and flexibly. They are very capable of making adjustments according to the trends in the investment environment and the demands of operating on a global scale. For an economy to grow and flourish, it needs to be flexible and efficient. By rolling out a “Go Global” strategy, private enterprises can blossom further, play bigger roles, and become another significant engine driving the fast, steady, long-run growth of China’s economy. At the same time, the globalisation of private enterprises is creating new room for the development of China’s economy.

Our world becomes smaller and flatter by the day. As the old saying goes, “pull one hair and the whole body twitches”. Global patterns are shifting from unipolar to multipolar, from unilateral to multilateral. Economies of every shape and size rely on one other, with complicated and interest-driven relationships. Under these circumstances, few nations or organisations can stay aloof. Few can remain successful by focusing only on their own interests. Economic globalisation is irreversible in this respect. If enterprises lack a global mindset, and limit themselves
to a specific country or place when formulating their development strategy and operational model, they are likely to prepare inadequately, and to misunderstand business dynamics. As a result, they will miss opportunities to develop, or may even find themselves facing even greater difficulties down the line.

Globalisation is of even greater significance to developing Chinese enterprises. China’s economy is confronting the historic task of transforming its pattern of growth; Chinese enterprises have to cast aside old ways of doing things, and transform both their business and their operational models. Transformation calls for creativity, for innovation, for brand building and customer-centric attitudes, for integrating resources and melding cultures. Growth and transformation will aid these enterprises in their quest to go global.

III. Companies must implement sustainable development strategies

Issues such as carbon emissions, global warming, environmental pollution, carbon reduction strategies, new energy, clean energy, alternative energies, environmental protection, and sustainable development have long been the subjects of discussion among members of political, academic, and industrial circles in countries around the world. Since the signing of the Kyoto Protocol in December 1997, and since the COP15 United Nations Climate Change Conference in Copenhagen in December of 2009, the COP16 United Nations Climate Change Conference in Cancun in 2010, and the latest COP17 United Nations Climate Change Conference in Durban in 2011, more people have begun to pay their attention to the quality of the environment around them. Understanding that environmental issues directly impact their well-being, more and more people are seeking solutions.

Human beings’ productive activities and pursuit of economic development causes harm to the environment. Economic development, while it does improve human being’s living conditions, also harms the environment. The more development, the more human beings suffer, and the less sustainable development is. However, we cannot discard economic development solely to protect the environment. We cannot give up our struggle at the first appearance of obstacles. The question before us is how to promote both economic development and environmental protection. Sustainable development appears to offer the only route out of this seeming Catch-22.

Sacrificing the environment as the price of development is unsustainable for two reasons: Firstly, environmental deterioration directly and significantly impacts human life in the form of food that cannot be eaten, air that cannot be breathed, water that cannot be drunk. Secondly, excessive exploitation means humans are facing the possible exhaustion of natural resources; oil, coal, mineral resources, water, land, forests, grasslands, and biodiversity are rapidly diminishing, or even disappearing. Once exhausted, non-renewable resources cannot be replaced; as a result, development cannot be sustained.

China, currently the owner of the world’s second-largest economy and its largest population, is developing rapidly. This creates unprecedented needs for resources, and places unprecedented pressure on the environmental. The resource consumption, environment pollution, and carbon emissions caused by China’s economic development are second to none in terms of total volume and scale. Therefore, where sustainable development is concerned, China’s private enterprises have significant responsibilities to shoulder.
If we broaden our perspective somewhat, we will see that, for Chinese enterprises, sustainable development goes beyond being “green”, beyond environment protection, low carbon, or new energy. More than just resources or the environment, sustainable development means addressing questions of corporate institutions and culture, moulding enterprises’ civic consciousness and sense of social responsibility, and building networks in support of corporate social responsibility. In a word, sustainable development is tied with “being green”, but goes beyond being green. Sustainable development is a multi-hued concept, one that is harmony with most Chinese enterprises’ desire to build businesses that will endure over the long run.

There are four aspects of sustainable development that are worth noting.

Firstly, China is one of the world’s largest environmental polluters, and one of the largest consumers of resources; however, it is also a major manufacturer of various new energy products. For instance, the country leads the world in production and use of wind turbines, and it is expected that it will eventually top the world in the production and application of clean coal, nuclear energy, and electrical vehicles. It is an apparent paradox: The largest consumer of resources and producer of pollution is also the largest producer of clean energy. How to find balance in the dynamic relationship between these two conflicting realities, and how to use that balance to realise sustainable development, are topics that call for further exploration. For example, at the moment the majority of enterprises developing new energy products do not work together with enterprises that consume resources and cause pollution. Each move in their own separate spheres. However, if new or clean energy technology could emerge from industries traditionally known as polluters and energy consumers, it could help to transform these industries, or to improve their traditional production models. Another approach is to bring together the new energy industry with traditional industries, seeking new, green sources of growth. This approach could reduce energy consumption and environment pollution while simultaneously developing new and clean energy technologies.

Secondly, we found that Chinese enterprises place excessive reliance on their manufacturing capacity to address environmental and resource-related crises. Examples of this include the wind and solar power industries, as well as the vehicle battery industry. Many have yet to master the core technologies underlying basic manufacturing processes. They lag behind in non-manufacturing fields such as bio-fuel, waste-fuel, and synthetic biology (a discipline that uses engineering principles to design new bio-system and organic substances. One application is the transformation of sugar from sugarcane into diesel). In addition, research and development targeted at producing innovative mobile or networked products such as the iPad, iPhone, and e-books, products which have high added value, consume relatively little in the way of materials, and result in relatively little pollution, is given short shrift. Efforts to protect the environment protection need to involve not only the energy industry, but also non-energy-related industries as well.

Thirdly, sustainable development requires a change of mindset on the part of governments, societies and enterprises. They must re-evaluate their priorities. They must determine which goals are primary, which are secondary, and which are merely general in nature. Most important of all, the mode of thinking whereby “development” is seen purely as growth in GDP must be changed completely—the quality of growth and improvement in living standards must be included in any conception of development. The central government should change its system of incentives for
local governments to ensure the latter seek sustainable development, rather than pursuing development at all costs, like a farmer killing the goose that lays the golden eggs. The whole of society must reject luxury and advocate frugality. Everybody must understand that the harmony between human beings and nature is a prerequisite for harmonious relationships between people. There are limits to development, and to the demands that man can place on nature. Maintaining the ecological balance is a goal that should be prioritised above unbridled development.

Fourthly, for enterprises, sustainable development means more than adjusting their concept of development. It means more than pursuing balanced growth models, saving resources, being environmentally friendly, and focusing on new forms of green technology. Sustainable development means enterprises have to focus their attention on the creation of a healthy corporate ecology. Enterprises should start internally, by establishing a stable corporate governance structure, putting in place measures for employee development and leadership transfers, all while giving emphasis to corporate citizen-building and corporate social responsibility. Externally, enterprises should develop extensive social networks, seeking coordinated development with stakeholders. Only in this way can an enterprise create a sustainable, durable business (or what is called, in Chinese, a “hundred-year shop”).

A philosophy of sustainable development must be put into practice. Otherwise human beings will be wiped out by their own behaviour. We believe that human beings are rational. We will find the road to salvation. However, humanity’s collective rationality by no means ensures that individuals will behave rationally. Individual attempts to maximise personal interests complicate and obscure the implementation of sustainable development. Add in the number of interested stakeholders, the broad scope of the issues, and the inherent technological complexity, and the direction of future development becomes very difficult to predict. Uncertainties abound, as do developmental models. Frames for development are as numerous as are its results. It is difficult to know which model will prevail, which context appear most frequently, which results will emerge. Given the excess of uncertainty, enterprises must incorporate a variety of models, frames, and results into their planning. They should plan as far ahead as possible, and find an approach to sustainable development that fits their particular circumstances, be it leading or following in new technologies; investing in new forms of energy or developing new products and materials; be it establishing alliances, or striking out on their own. Only in this way can an enterprise avoid the vulnerability that comes from insufficient preparation.

IV. Enterprises must be at the forefront of new technology
Technology develops at a breakneck pace. Every day seems to bring a new breakthrough. New technologies pour forth, overturning old ways of doing things, changing the ways in which we live and work. As individuals and customers, we cannot be fully, clearly aware of all the changes that take place around us each day. Almost imperceptibly, an enormous, irreversible revolution has occurred. Looking back, we find that things are indeed different. We live in a world that is dramatically changed.

Like individuals, enterprises more often than not fail to take advantage of new technologies. It is impossible for enterprises to fully comprehend the incremental change that comes with the incubation and development of new technologies. The enormous changes brought about by breakthrough technologies can subvert the existing order overnight. In moments like these, everything becomes clear: the path that development will take, the extent of the changes, the gap between the old and
the new. Consumers will always be at the leading edge when it comes to perceiving
the appeal of new technologies. By the time that enterprises have the same
realisation, they very well may be too late.

Just as a man skilled at observation and sensitive to new technologies may suss out
the next "cool" technology from among a sea of information, enterprise can also
analyse their industry and technological trends to identify potentially disruptive
technologies, and adjust their strategy to cope with the coming changes. We have
seen any number of enterprises that have met with difficulties, and found themselves
marginalised or pushed out of the market entirely due a failure to respond to new
technologies in a timely, appropriate fashion.

As a new force in the global economy, Chinese enterprises are still playing
technological catch-up. For these enterprises, the direction of future technological
development is of utmost importance. Starting as they are in a disadvantageous
position, they can only get their start by mimicking or purchasing others’ technology,
and combining it with low-cost manufacturing. However, once enterprises have
attained a certain level of sophistication, and grown to a certain size, mimicry and
low-end manufacturing no longer work. To move forward, they need to innovate, to
create their own technology. The development and spread of new technologies
levels the playing field for all enterprises everywhere, giving Chinese enterprises the
chance to catch up to and surpass their competitors. To seize the opportunity to
catch up to traditional technological leaders, Chinese enterprises need to put their
backs into research and development. They need to establish their own innovation
ecosystems, and raise their productivity through innovation in products and
processes. We have been pleased to note that some China enterprises have already
made a good start of things. Advances in areas such as high-speed trains, wind
turbines, solar panels, clean coal, nuclear energy, and fuel cells are of particular
note.

There are three categories of technology which will be of particular significance in the
future:

The first category is the development of information technology (IT), which is adding
greater functionality to an already-useful internet. In the Web 2.0 era, mobile internet
has made networks ubiquitous. Expanded network coverage means that individuals
can hop online whenever they wish, increasing the time that they spend online.
Social networks such as Facebook, Youtube, inter-business collaboration networks,
blogs, and micro-blogs allow individuals to communicate and collaborate in
unprecedented new ways. These networks also enable more convenient approaches
to production and dissemination. With network-based cloud-computing services,
enterprises are freed from the need to purchase, update, and maintain hardware and
software. These cloud services are charged for on a volume basis, which lowers
costs and raises the efficiency of IT services. This alters the way that enterprises go
about operations, customer relationships, sales, and marketing, both in form and in
content. For example, the American company Eli Lilly created a networked virtual
medical platform called Innoventive, the first of its kind anywhere. The company uses
the platform to collect creative ideas from researchers all over the world. More than
50% of the collected solutions come from China, India and Russia. Some companies
use blogs and video to train their employees. Others use social networks such as
Facebook to conduct training and consumer market research. Some use sharing
networks such as Youtube to promote planning and circulate videos. Staff members
are encouraged to build blogs as soft advertisements aimed at customers, and to
build online communities for communicating with and assisting customers.
With the widespread use of information technology, many business activities that were once performed face-to-face are now done via the internet, the “Internet of Things”, servers, and mobile devices. Each time we perform an internet search, in the blink of an eye, data is exchanged countless times across innumerable servers. When we order a book, buy a plane ticket, or send a parcel through express delivery, digital information moves through a world of ones and zeros, connecting us across thousands of kilometres at the speed of light. We no longer need to go to a travel agency to pick up several copies of a paper flight ticket written in red and blue on carbon paper just board a plane. Just as, when we see a person carrying something, we only see his body, his arms, or his legs, but cannot see the brain commanding and coordinating the different parts, we can see a factory, a machine, or a machine operator, but we cannot see the information technology that connects them and allows them to operate efficiently together. Digital technology has created an economic nervous system, driving geometric increases in the efficiency of business activities.

IT development has hastened the emergence of six new forces shaping the market: (1) Synergistic production between enterprises, customers and supplies has blurred the boundaries of the traditional division of labour within enterprises’ value chain. (2) New types of enterprises are using IT to build communication channels between manufacturers and customers. (3) Changes in the capabilities, scope, and cost of information technology will enable the emergence of new forms of B2B. (4) Information technology allows content to spread more widely among consumers with coinciding interests who gather on open global forums to share information on products and services, for the purposes of knowledge-sharing and economic self-interest (rather than for commercial profits). (5) Information technology allows customers to participate in markets where customers face each other directly, enabling them to collaboratively produce products and services. (6) People can collaborate electronically, allowing them to make consumer decisions cooperatively. Enterprises should understand how these new forces shaping the market will affect their business model, so that they can turn these forces to their advantage, rather than being at their mercy.

Secondly, enterprises are creating new products and services. This not only creates enormous new demand, but also reduces the use of resources, and generates tremendous value. Examples include Apple’s iPod, iPhone, and iPad, Amazon’s Kindle, Cisco’s TelePresence, biopharmaceuticals, General Electronics’s portable electrocardiogram and ultrasonoscope (which were developed in India and China), and Taobao.com’s Alipay, among others. Innovations in products, services, and processes can greatly increase labour productivity. As China moves out of low-cost manufacturing, and its pool of working-age labourers shrinks, rising productivity will be necessary to keep the economy growing apace. Innovation in products and services is essential in this respect. Innovating in products and services requires the capacity to create, rather than following or imitating. Enterprises must therefore place emphasis on collaboration and innovation.

Thirdly, environmental protection and new energy technologies are of enormous import for people everywhere. Chinese enterprise should give these fields their due emphasis. The development of these new technologies is ripe with potential. The examples run from wind, solar, nuclear, tidal, and geothermal energies, to bio-fuel and fuel cells, to smart power grids, carbon sequestration and storage, energy saving through frequency-switching, and de-sulphurisation technologies, among many others. In this field lie the most opportunities, the most potential breakthroughs, the
greatest untapped potential. Enterprises need to examine the technological trends and characteristics of their own fields, and make their decisions accordingly. Chinese enterprises have already begun work in a number of industries. Within these enterprises lies the potential for further breakthroughs. They have the potential to become leaders in their fields.

In the face of relentless technological change, there are two things Chinese enterprises must do: Firstly, they must be ahead of the technological curve, rather than behind it. They must be prepared for new technology’s assault on established business and operational models, and take timely measures to combat it. Secondly, they must join in the development of new technology, rather than standing idly by. Only by utilising their strengths and technical competencies to unearth technical breakthroughs of their own can they find their place in the onrushing tide of technological development, and create value for other enterprises, and for society as a whole.