



Learning from Dragons who are Learning from Us:

Developmental Lessons from China's Global Companies

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Let her sleep. When the dragon awakes, the world will tremble...

When Napoleon Bonaparte made this statement he may well have been envisioning the global economy in the 21st century. Since China opened its doors to the West thirty years ago, there has been a dramatic change in China's economic fortune. The evolution of Chinese businesses from closed door isolation to internationalization, and even global integration for some, has been dramatic and swift. As these firms matured, there have been major shifts in corporate strategy, technology management, and human resource and talent management practices, especially among globally competitive, leading edge Chinese firms.

Americans and Europeans are beginning to notice, and even fear, Chinese multinationals. They have come to our attention primarily through high visibility media coverage of Haier's bid to acquire Maytag, CNOOC's bid to acquire Unocal, and Lenovo's successful acquisition of IBM's computer business. This visibility is the tip of the iceberg regarding aggressive Chinese acquisitions of foreign companies, 62 percent of which are in Asia.

Chinese energy companies have bought controlling stakes in oil fields from Indonesia to Sudan; China's largest steel-maker, Baoshan Iron and Steel, has bought into iron ore mines in Brazil to ensure reliable supply, and is part of a consortium seeking control of Canada's largest mining firm, Noranda. Acquisitions are one of many paths taken by Chinese multinationals' as they grow toward global dominance in their industries. There is no doubt: the dragon has awakened.

Conventional wisdom suggests that there are three principal reasons for Chinese companies to expand abroad.

- Secure natural resources to meet high home demand for raw materials and fuel

- Identify and secure foreign technology and know-how
- Escape home market saturation and ruthless price wars

In this article, we examine the second and third drivers as we seek to understand key success factors for Chinese manufacturers serving global markets.

Twenty years ago, scholars and practitioners alike were forecasting that despite a strong desire to do so, Chinese companies would not join the ranks of the industrial mighty by this millennium. They were too pessimistic. Today there are credible examples of Chinese multinationals among the industrial mighty in industries as diverse as information technology, consumer electronics, telecommunications, white goods, steel, oil and gas, and banking.

While these companies might not be household names, we are surrounded by their computers, refrigerators, and televisions. They carry unfamiliar names like Haier, Lenovo, Huawei, TCL, UTStarcom, Galanz, Pearl River Piano, Chonghong, Ningbo Bird, Kelon, Baosteel, CNOOC and Sinopec. They also have proven to be formidable competitors in their industries.

We focus our discussion on four Chinese manufacturers that have successfully globalized. Specifically, we describe the business evolution and drivers of changes in the management practices of Haier, Huawei, Lenovo and TCL. These vanguard companies, profiled below, followed a common evolutionary path to success.¹ We are intrigued with the future challenges these companies will face and what must be done to address them. Our conclusions focus on the solutions and key success factors that other globalizing companies can emulate.

¹ Full versions of these research case studies are available from the authors. We have synthesized key case facts for this manuscript.

EXHIBIT 1—LENOVO: MAKING OF A LEGEND

Lenovo was founded as Legend Holdings in 1984 by Liu Chuanzhi, an engineer at the Chinese Academy of Sciences, and ten fellow engineers. They began by distributing computer products and then assembling personal computers for AST. Legend introduced its first proprietary product, a Chinese character system for personal computers, in 1985. In 1988, they designed and manufactured motherboards and added systems integration services to their offerings. Since their founding, they have emphasized the personal development of all employees and made considerable investments in growing their talent base.

Until 1990, when China opened the door for companies such as IBM, Compaq and Dell, Lenovo had enjoyed relatively uncontested Chinese market position. In response to this opening, Legend began making and distributing its proprietary brand of personal computers through an extensive network of sales outlets that provided personalized service. By 1996, Legend had tied with IBM for personal computer market share in China. In 1997, Legend became China's top brand. In 2004, Legend changed its name to Lenovo, a name seen as more favorable for global expansion.

Lenovo has become a "miracle" in the Chinese information technology (IT) industry today because of its unique managerial strategy and people-first mechanism. Lenovo Group takes "creating space to develop employees, upgrading their value, and improving their working and living quality" as its mission; consequently employees subordinate their individual pursuit to Lenovo's long-term development.

Today, Lenovo is China's largest and the world's fourth-largest personal computer manufacturer, after Hewlett-Packard Co. and Dell of the U.S. and Acer of Taiwan. Lenovo has focused its scope, and currently produces desktop and notebook personal computers, workstations, servers, storage drives, IT services and IT management software.

Lenovo's current strategic focus is on emerging markets, growth in consumer markets, and expanding its notebook business, along with continued development of peripherals and services. By 2007, Lenovo had restructured its global supply chain and achieved its goal of outpacing industry growth worldwide. Business was so good that the company stopped using the IBM brand, to which it still held the rights, and began offering only Lenovo machines.

EXHIBIT 2—HAEIR GROUP: REACHING HIGHER AND HIGHER

Chairman and CEO Zhang Ruimin took the reins of the government-controlled Qingdao Refrigerator Plant in 1984. He took over a company with 100 employees and poor quality products. To make matters worse, they were on the verge of bankruptcy. In his dramatic first act as CEO he smashed 76 poor-quality refrigerators with a hammer to drive home his intention to improve product quality. Ever pragmatic, Zhang Ruimin believes that Haier has to think about talent management and performance management. They must focus on how they can change the mindset of the employees to get the needed results.

The foundation of Haier's human resource management strategy is rigorous performance management. They rank employees daily on results. Managers are evaluated monthly on performance and quarterly on potential. The system is fully transparent, and performance management is tightly linked to employee rewards and development. This system is highly differentiated from human resource practices used in other Chinese companies.

Today Haier Group is the fourth-largest white goods manufacturer in the world and is a very well known brand in China. As it grew, Haier acquired 18 companies that it identified as running at a loss. Haier acquired these companies because of their market potential, vitality and expected contributions once Haier's manufacturing processes and culture were adopted. Once acquired, Haier then restructured processes and procedures and converted idle tangible assets into productive assets at a minimum cost and in a short period of time.

Haier has established an extensive sales network around the globe primarily through strategic alliances with key partners in prospective global markets. Haier learned about the U.S. market by supplying small refrigerators to Wal-Mart Stores as Haier built their internationalization competencies.

Haier uses a three-pronged approach to internationalization that includes a localization strategy combining design, production and marketing network as the core of its global branding strategy. By the end of 2006, Haier owned 240 corporate subsidiaries and 18,000 sales outlets throughout the world. It has 5 research centers,

8 design centers, 6 design branches, 10 information stations, 30 manufacturing centers, 22 trading companies and almost 59,000 sales network outlets in more than 160 countries.

Haier has their eye on the high-tech future. Zhang believes that people must be connected to the world during the information era. He hopes that through this set of solutions, Haier can enable everybody, especially the Chinese, to enter the information era.

EXHIBIT 3—TCL GROUP: FROM HUMBLE ROOTS

TCL joined Haier and Lenovo as recipients of *Fortune China's* Most Admired Chinese Companies of 2007. TCL was founded in 1981 to produce cassette tapes and is owned primarily by the city of Huizhou, China. TCL's other investors include Philips Electronics N.V. and Toshiba. From these humble roots they have grown to be one of the largest Chinese electronic industrial groups, managing a global-scale business in consumer electronics. The company has three primary subsidiaries, including the TCL Group, TCL Multimedia Technology, and TCL Communication Technology. TCL stands for The Creative Life, which means originality inspires life. TCL credits a dedicated and innovative spirit as the driver of their success and rapid development. In 1999, TCL began exploration of international business. It promoted its own brand in emerging markets, purchased mature brands in the European and American markets and joined the vanguard of Chinese national companies in the internationalization process.

TCL does most of its business in China, where they are one of the leading manufacturers of cell phones and televisions. In addition, they produce other household appliances, personal computers, standard wire-line telephones, and electrical components such as light switches and cabling. TCL has technology partnerships with Microsoft Corp. and Intel Corp. They sell products in more than 40 countries under brands such as Thomson, RCA, and Alcatel. TCL aspires to compete on par with global consumer electronics giants like Sony Corp. and Samsung Electronics Co. TCL has evolved through several stages on the way to internationalization from technical commercialization, the accumulation of core technologies to innovation in their worldwide design centers. TCL's innovative designs have won many international awards.

Currently TCL aims to develop its high-end industry value chain. They are also developing a new brand strategy, "Originality Inspires Life" to position the company to become the most creative brand of China in the next decade. To this end the TCL Group has set up research and development centers and dozens of R&D branches overseas and nearly 20 assembly bases in China, Poland, Mexico, Thailand, and Vietnam. That gave impetus to the merger in 2004 of China's largest television maker, TCL Group, and the French manufacturer, Thomson. As part of the deal, TCL gained control of the RCA brand in the United States as well as factory operations in Poland and Mexico.

EXHIBIT 4—HUAWEI, THE ROAD LESS TRAVELED

China is a big source of growth in the world's telecommunications market, and Huawei Technologies is its rising star. Huawei was founded in 1988 by Ren Zhengfei, a former People's Liberation Army officer, as a distributor of imported PBX products. Shortly thereafter, Huawei began development of proprietary PBX equipment. From those beginnings, they have grown to be China's largest manufacturer of telecommunications equipment and networking systems hardware and software. Through the development of a broad range of telecommunications commodities Huawei is becoming a real rival to networking giants such as Cisco Systems Inc. and Nortel Networks Corp.

By 2004, its overseas sales had surpassed that of its domestic market. Having long been a major player in the Asia/Pacific region, Huawei has grown into a major global player. Its customer base includes more than 40 countries. Huawei serves 70 percent of the world's top 50 telecommunications carriers. Vodafone awarded Huawei a 2007 Global Supplier Award for Outstanding Performance in June 2007.

Huawei is consistent in building links to partners and markets in the West. Recently Huawei formed joint ventures with Siemens and 3Com. They maintain partnerships with such companies as Hewlett-Packard Co., Microsoft Corp., and Oracle Corp. The use of joint ventures and partnerships has been a key driver of Huawei's growth and learning. In addition, they have R&D operations in India, Russia, Sweden, and U.S. laboratories.

Huawei focuses heavily on R&D. Each year Huawei invests more than 10 percent of its sales revenue into R&D. This investment pays off; in 2007, Huawei became the fourth-largest patent applicant in the world,

with 1,365 applications. Its 2007 sales make Huawei the fifth-largest telecommunication company in the world.

Huawei is headquartered in Shenzhen, just across the border from Hong Kong. Their ultramodern campus includes a training center with multiple floors of training rooms, art from around the world, and numerous signs of cultural sensitivity such as a prayer room for Muslim clients.

Huawei employs 22,000, including 3,000 foreigners. Huawei has been working with leading consults such as IBM, the Hay Group, PwC and FhG to carry out management transformation in order to keep abreast of international industrial benchmarks. They believe that they have a good balance between their company's size, business profitability, and expertise today. Huawei Technologies was included in the World's Most Respected 200 Companies list compiled by *Forbes* magazine in May 2007.

MAPPING CHINESE MULTINATIONAL EVOLUTION

In studying these Chinese multinationals, we found four evolutionary phases: (1) the learning phase, (2) the build-up phase, (3) the internationalization phase, and (4) the globalization phase. These phases frame our discussion, and within each we examine four sets of practices or issues:

- Corporate strategy and strategic intent
- Technology management practices
- Human resource management practices
- Anticipated future challenges

We found that challenges and solutions in each phase were different from prior or subsequent phases. For example, manufacturing skill sets were a challenge in the learning phase and cross-cultural skill sets were a challenge in the internationalization phase. While

these companies faced skill set challenges in both phases, the nature of the challenge changed.

We also found that the Chinese context influenced management practices at different phases in the companies' evolution. For example, knowledge acquisition was a central focus in the learning phase and profitability was central in the internationalization phase. In [Table 1](#) we summarize our findings about corporate strategy, technology management and human resource management within each phase, and conclude by identifying the driver or drivers of transition to the subsequent phase.

THE LEARNING PHASE

It does not matter if the cat is black or white so long as it catches mice.

Unlike many of their Western counterparts that start with a burst of creativity, these Chinese multinationals began life in a *learning phase* that focused on the attrac-

TABLE 1 EVOLUTIONARY PATTERN AND PRACTICES

	STRATEGIC INTENT	TECHNOLOGY MANAGEMENT PRACTICES	HUMAN RESOURCE MANAGEMENT PRACTICES
Learning Phase	Build a platform to grow the business	Knowledge absorption Localization of products and services	Build vision and values Establish corporate culture Build manufacturing skill sets
Build-Up Phase	Expand value chain Regional expansion Outward investment to build global platform	Build technology capability with a focus on quality and efficiency	Build professional management skill sets Formalize human resource management practices
Internationalization Phase	Expand business to serve higher margin markets	Innovation of products and services with a focus on "good enough" for local, regional and other emerging markets	Harness local talent Build expatriate management Build high performing work systems Build cross-cultural capabilities
Globalization Phase	Product and geographic diversification Build global brand Grow	Innovation of products and services: "world class" for all markets Integration of acquired technology	Build mindshare Build localization abilities with global integration
Global Dominance Phase	Industry keystone positioning Global dominance Create new industries	Innovation: discontinuous change Drive convergence	Build global mindset Build global social controls

tion and absorption of existing technology and know-how. Commonly, this learning was accomplished through collaboration, joint ventures or licensing agreements with foreign companies. While the bias for learning through others began in this phase, it persisted throughout the life span of the companies we studied.

In the learning phase, Lenovo began by importing and distributing personal computers, and then moved into equipment repair and training, incrementally building necessary skill sets and capabilities, and acquiring knowledge and know-how. Haier learned through licensing agreements and alliances with respected global competitors like Leibherr Group, Merloni and others from multiple countries. Huawei followed a path similar to Lenovo by importing and selling PBX equipment and followed this with collaboration with Texas Instruments Inc. and joint equipment development with Motorola Inc. TCL began with joint ventures and co-investment to manufacture cassettes.

These multinationals began in a context that was challenging, if not daunting, for business startups. There was a dearth of information about industrial technologies and world-class manufacturing know-how. This challenge was made worse by an inadequate supply of well-trained, skilled employees with experience in world-class manufacturing operations. The absence of soft skills had a negative impact on the Chinese multinationals' ability to effectively absorb the technologies they were seeking. In addition, institutions of higher education were not prepared to provide state-of-the-art technical or managerial knowledge. They had been closed off from outside influence for several decades, and teaching practices focused on the memorization of facts as opposed to the practical application focus in many Western countries.

The core of the technology management focus in this phase was a decidedly strong bias towards industrial technology and know-how absorption. To support this, human resource management practices were locally focused, with an emerging appreciation of the importance of this function to support the companies' growth intentions. The local focus emphasized building skills needed to produce world-class products, accompanied by an emphasis on building manufacturing-supportive mindsets that emphasized performance, accountability and meritocracy.

Haier, for example, started an in-house corporate training center to teach skill sets such as total quality management to line workers, diffuse the Haier culture of personal responsibility and accountability, and provide for the long-term development of managers. The investments in building their human resource capabilities yielded positive contributions to effectiveness in future phases. Other human resource practices in this phase included building vision and values for the

company and developing a corporate culture that broke from that of state-owned enterprises.

In this phase, attracting industrial technology know-how, building assembly and basic manufacturing capability to support manufacturing, usually for others – in other words learning to be able to grow the business – was the companies' dominant strategic choice. This focus on learning “from the outside” has its roots in China's isolation, when limited relations with technology-sophisticated and savvy countries hampered the flow of knowledge.

Entrepreneurial ambition, either that of a small group of technical entrepreneurs, as seen in the Lenovo case, or a strong leader, as seen in the Haier, Huawei and TCL cases, was the driver of the transition to the next phase—pushing the companies studied to undertake an aggressive build-up of capabilities.

THE BUILD-UP PHASE

The loftiest towers rise from the ground.

Building and reinforcing a foundation to support internationalization was the essence of the *build-up phase*. Mastering the application and localization of knowledge acquired in the learning phase to build scale and competitiveness were the primary activities of the *dragons*. The emphasis was on developing and reinforcing operational effectiveness in the choice and development of capabilities that enable growth and value-chain expansion.

The capabilities developed served as a platform that enabled these companies to engage in original equipment manufacturing (OEM) for large customers and exportation to nearby markets. Lenovo, for example, designed and manufactured motherboards in addition to their trade and service activities. Haier developed quality assurance capabilities by incorporating the 6-S quality concept. Huawei focused on “self-development” to build local market share. TCL focused on improving cycle times.

Technology management had a two-pronged focus. On one hand, there was a significant emphasis on manufacturing process improvement to solidify quality and efficiency capabilities, and on the other there was significant imitation of existing technologies with the introduction of improvements or adjustments for localization.

In the West we view technology imitation negatively. There is another way of looking at imitation. The processes and procedures a firm must develop to have the ability to imitate a technology in effect build a technology or knowledge platform, enabling it to produce at a higher level than before the imitation was undertaken. If we examine the rise of Japanese and Korean multinationals, we find that they too began with imitation and evolved to innovation. In the West we conflate imitation with intellectual property

violations, a discussion of which is beyond the scope of this manuscript. While these violations do occur, a technology imitation approach can also be implemented through licensing agreements or technology transfer within an alliance or other form of collaboration. Lenovo, Haier and TCL licensed technology from American and European giants like IBM, RCA and Merloni. Convergence of the two technology management paths of process innovation and product imitation and localization resulted in the development of knowledge platforms and supporting capabilities that would serve as the basis for innovation ability in the build-up phase.

The evolution of the human resource management system paralleled capability building on the technology front. Here, the human resource management orientation included the selective adaptation of foreign best practices, often provided by consultancies and geared toward building professional management skill sets. This resulted in a heavy emphasis on corporate culture development, and vision and values communication as part of the formalization of human resource management systems. All four Chinese multinationals developed well articulated visions that emphasized domestic and international business growth and values that reinforced a customer focus, personal accountability, technological excellence, and quality.

Frustration with “excess capabilities” – these companies could produce more at higher quality levels than the home market demanded, and do it significantly better than the local competition – was the force that drove them to the next stage. They also experienced pressure for growth and expansion from evolving government policies (especially the move toward privatization of state-owned and collective enterprises), growing employee expectations and management aspirations. In addition, local markets provided thin margins at best, and company growth or survival in the increasingly demanding context depended on serving higher margin markets.

THE INTERNATIONALIZATION PHASE

The journey of a thousand li [miles] begins with the first step.

Desires to seek higher margin markets and utilize increasingly world-class capabilities were the roots of the *internationalization phase*. Internationalization began with regional expansion to similar, nearby, markets and then moved to more developed markets.

Company strategy during this phase focused on building brand, localization of products and services for new markets, and differentiation of products to support higher margins. To support this internationalization objective, Haier and TCL established design centers in major centers around the world. Huawei established a global network of research collaboration

partnerships. Lenovo changed its name from Legend to Lenovo in anticipation of global expansion.

Technology management continued to focus on building the companies' knowledge platform with the objective of internalizing innovation capabilities to migrate up the value chain to higher value-added products and services. The goal of technology management during internationalization was to produce “good enough” products and services for local, regional and other emerging markets. In addition to this organic growth, these firms began engaging in inorganic growth through alliances and acquisitions to speed up the time it takes to build scale and scope needed for efficiency.

As strategic ambition continued to evolve and these firms built experience, human resource management practices shifted focus to a strong emphasis on sophisticated performance management systems and an appreciation of the strategic importance of development and retention of knowledge talent, including managerial talent. Firms also struggled to develop the cross-cultural competencies needed in international markets. International success, coupled with ever growing capabilities, was one the drivers of the shift to the globalization phase.

Another driver was the competitive threat of both foreign firms entering China, given China's WTO membership, and the growing competitiveness of local companies. Dell Computer Corp. entered the China market and presented a credible challenge to Lenovo, for example. Also, the successful rise of local competitors such as ZTE began to challenge Huawei. The Chinese multinationals we studied found that there is no resting place in a global economy!

THE GLOBALIZATION PHASE

You can't catch a cub without going into the tiger's den.

In the *globalization phase*, corporate strategies increasingly focused on serving sophisticated domestic and global markets, and on achieving a dominant position in their industry. The strategic focus was on product and geographic diversification, building global brands and, above all, growth. Technology management focused on innovation with an emphasis on localization of “world class” products and services that served all markets.

For example, half of Huawei's workforce is engaged in research and development (R&D) activities; since 2005 more than half of their sales are outside of China. Haier continues the “roll the ball up the slope” philosophy, moving from the low end to the high end of the value chain, and one third of their sales are outside China. Lenovo acquired IBM's personal computer business to quickly grow their global footprint, thus becoming the world's third-largest

personal computer manufacturer. They also were a major sponsor of the Olympics, an undertaking to build global brand recognition and reputation in a highly respected and highly visibility global venue. These firms needed to simultaneously build localization abilities and globally integrate their globally dispersed activities.

Human resource management practices shifted focus to an intense need to master talent management with an emphasis on the early identification and careful growth of high potential employees, coupled with increasing use of global sourcing for talent. A major challenge was the lack of global mindset among employees, so they invested to build this. As they grew and expanded globally they found that social controls that worked at home did not serve them well abroad; so they had to master the development of global social controls. These efforts were complicated by post-merger integration and human resource system integration challenges. Building a common global mindset among all employees is perhaps the biggest challenge in the globalization phase.

As these firms continued to execute their visions, they pushed for global dominance in their respective industries. Again, there was no shortage of entrepreneurial ambition for global dominance in their industries. This ambition for global dominance was the driver that propelled these firms to the next phase—global dominance.

While none of the firms we studied have yet achieved this ambitious objective, they all face and identify a set of challenges that stand between their global integration capabilities and their global dominance objectives.

FUTURE CHALLENGES

When your horse is on the brink of a precipice it is too late to pull in the reins...

There is no turning back. As these vanguard companies position to execute on company strategies to achieve global dominance in their respective industries, they face a new set of challenges. They have grown large and complex; their operations and customers are located in increasingly more countries with increasingly sophisticated expectations. Consequently, the ability to *control* their global operations is emerging as a much bigger challenge than it was in the past.

Behavioral or social controls that were effective in a Chinese industrial setting are likely to prove less effective or even ineffective and counter-productive in global settings. Indeed, they are often proving ineffective in China's home market—as the labor pool becomes younger; savvy, with more employment options, and no fear of mobility like older generations.

In addition, these vanguard companies are focusing on differentiation and localization in the market, a

practice that, carried to the extreme, can erode *efficiency* as they produce in much higher cost locations. They must be more aggressive in capturing the efficiency benefits of globalization, especially since these efficiencies are the source of surplus revenue generation that can pay for innovation, expansion or even dividends for stockholders.

The implications are that the vanguard might have to consider using capital investment to substitute for labor in a country where labor is abundant, or even consider offshoring work from China to lower labor cost countries, although this might seem farfetched at first glance.

To dominate in their industries they will have to be at the forefront of *innovation*—driving change as opposed to reacting to change. The focus of technology management practice will have to shift to a combination of sophisticated imitation and innovation to serve a variety of levels of markets and diverse customer expectation. However, patents alone are no longer sufficient, since these primarily represent incremental innovation. These companies must become drivers of discontinuous change if they are to dominate. Global dominance will likely derive from breakthrough or discontinuous innovations.

To quickly achieve global dominance, the vanguard will need to master the use of inorganic growth options, including mergers and acquisitions, to secure market access, new technologies, natural and human resources. Mergers and acquisitions will become a powerful tool to build market share and mindshare. Significant knowledge clusters in a variety of industries, including those in high technology, are emerging in China. This provides the opportunity for forward or backward integration, another growth path. However, this also introduces the threat of growing domestic competition on one hand, and an opportunity for industry ecosystem development and Chinese firm dominance in these ecosystems on the other.

The more successful and visible these companies become, the more they will be expected to take *socially responsible* leadership positions in the communities they serve. They will need to meet the competing demands of an increased number and variety of stakeholders, often through corporate responsibility programs. Thus, the development of capabilities in corporate responsibility effectiveness will become more important. An important spill-over benefit for companies with a reputation for practicing social responsibility will be attracting and retaining superior talent.

Finally, these vanguard companies must all continue to build their leadership pipelines, embrace succession planning, and master talent management in multiple labor markets, not just at home. It is estimated that within a decade China will need about 75,000 executive level managers competent in both

Chinese and global settings. As of now, they have less than one percent of that. English-skills and the ability to work with foreign clients are in such short supply that there is now a trend to import talent from India and the Philippines. Human resource management practices must be responsive to hyper-turbulent labor markets with a relative shortage of knowledge workers in technology intensive industries and an even worse shortage for those with executive skills in global companies—two areas where talent management is essential for these firms to achieve global dominance.

Despite the large Chinese labor market, the real talent market is global, and mastery of “fishing in this bigger pond” will be challenging. This implies the need to master the use of a global supply chains for human resources. In addition to enhanced cross-cultural communications and negotiations skills needed in earlier phases, these vanguard Chinese multinationals will have to develop global mindsets among employees, especially those charged with customer facing activities, or innovation.

KEY SUCCESS FACTORS

The key success factors embraced by these *dragons* offer a winning combination providing sustainable competitive advantage for other companies aspiring to globalize. These *dragons* embraced a common set of behaviors and practices.

- *An exceptionally strong entrepreneurial orientation*
- *Leaders with driving ambition and a worldview transcending personal ambition*
 - *Strong bias for learning from others—many others*
 - *Ability and agility to adapt and internalize knowledge and know-how leading to quicker growth*
 - *Highly responsive acumen for opportunity recognition capabilities*
 - *Clear pattern of “learn-apply-internalize-grow” loop*
 - *Virtuous cycle of evolutionary development repeated at each phase*
 - *Early embrace of internal development of capabilities and talent*

As these Chinese multinationals confront the challenges we identified, it is the behaviors embedded in these key success factors that will equip them to achieve global dominance in their industries. Indeed, this is equally valid for companies in general.

DISCUSSION AND CONCLUSIONS

A number of globally integrated vanguard Chinese firms have begun the journey toward integration into the global economy, and some have achieved the status of successful, full-fledged global competitor. They share entrepreneurial ambitions focused on achieving global dominance in their respective industries. The journey we have described illustrates a pattern of successful migration from isolation to global integration among a number of firms in a variety of industries.

We believe that there are some important and generalizable lessons that can be learned by studying the evolution of these Chinese multinationals.

- Early identification of performance gaps
- Patience in building of layers of capabilities to close these gaps
- Position for the long term
- Willingness to continuously learn
- A bit of luck and a lot of risk-taking

Companies considering emulating the vanguard are well advised to adopt what Ruimin Zhang, CEO of Haier calls “*principle of the mean*”—a moderate, evolutionary, incremental approach to development and growth. Not all companies, or even all Chinese companies, aspiring to globalization must pursue the same evolutionary pattern followed by these vanguard companies. But the pattern works.

Finally, the two most important lessons that these *dragons* offer are the lesson that persistence pays, and the lesson that there is no hiding place in the global economy.



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