

China's Emerging Technology Talent Pool

Executive Summary

As China's economic growth continues, dramatic shifts are underway in the Chinese economy. One of these shifts is the emergence of a massive pool of talented university graduates, whose labor has the potential to contribute significantly to both domestic and global enterprises. Along with this talent pool comes an intensive government focus on developing domestic expertise in science and technology. Western companies are presented with new opportunities to make use of this talent pool, and to help develop it further. The savviest companies have already taken action. But the race has just begun. Companies that act quickly and decisively now have much to gain in the near, medium and long term.

Explosion of College Graduates

For centuries, higher education in China was almost exclusively for one purpose: to train people for government service. This began to change at the end of the 19th Century, with the advent of more Western-style universities. Still, student numbers remained small relative to China's population.

Then came 1998, when Premier Zhu Rongji took bold action to expand the number of college graduates. In the ten years that followed, the number of college students increased over 600%, from 3.4 million to 21.5 million.[1]

This has not been entirely a good thing for the students themselves. The Chinese economy expanded rapidly during the same period, but not fast enough to absorb the explosion of college graduates. As a result, there is a large pool of unemployed and underemployed college graduates in China. Many of these graduates have training in fields where their talents will be needed — including technology — but for which demand has not yet matured. Western companies with technology needs are a perfect complement to the current oversupply of Chinese talent, and stand to gain by providing opportunities for these graduates.

Government Commitment to Technology Talent

The Chinese government's higher education expansion is just one part of a comprehensive set of policies to ensure that China has an abundant supply of talent proficient in the world of technology and technology services. Looking to the future, China's leaders saw that their heavily export-dependent economy, with its focus on cheap labor and materials, had a

limited shelf life. Eager to ensure China's continued development and vibrancy, China's central government began devising and implementing policies to create a service-centered economy — one based on knowledge and talent.

In 2006 the central government, quite publicly, launched a policy called the "Medium- to Long-Term Plan for the Development of Science and Technology 2006–2020" (MLP). The MLP covers a vast range of areas related to science and technology. Talent is one such area: a new policy of "strengthening the nation through talent" (réncái qiángguó 人才强国) is advocated as a supplement to the 1990s policy of "a thriving nation through technology education" (kējào xīngguó 科教兴国). The Chinese government is now intensively focused on developing China's science and technology talent.

This takes several forms:

- 1. Education.** Not only has the government massively expanded domestic secondary education, but has invested in sending students and researchers overseas for advanced education. Whereas in the past, these students and researchers might have been tempted to remain abroad, more and more are now returning to China as "returned overseas Chinese," or *hǎiguī* (海归), intent on applying their newfound knowledge and skills to developing China's science and technology workforce.
- 2. Massive expansion of investment in R&D.** As fast as China's economy has been developing, R&D spending has been growing about twice as fast. Increasingly, large multinational corporations (MNCs) have been establishing their own R&D centers in China. Already over 1,200 such centers exist. MNCs are more willing and eager than ever to outsource technology-related portions of their enterprises to China.[2]
- 3. Financial incentives to companies.** China's government officials at the central, provincial, and local levels, are overwhelmingly judged on their ability to increase GDP, and on their ability to do so in ways that are in line with central government priorities. Therefore, officials are always on the lookout for organizations that can help them increase GDP while also providing employment and training for China's technology workforce.



新世基科技服务
ORCHESTRALL

When they find such organizations, officials are often eager to attract them by providing financial incentives. Often this takes the form of significant discounts on office space rentals. In cases of companies willing to invest significant capital in infrastructure, entire buildings might be constructed at cost, yielding tremendous savings and offering such companies a significant competitive advantage.

Another common form of incentive is large government subsidies for training, which has the effect of reducing training costs for companies, further increasing competitive advantage.

The overall picture is of an historically unique confluence of circumstances: a rapidly expanding pool of technology-proficient talent; a shift from a manufacturing economy to a service economy that is poised to provide ongoing demand for this talent; and an incentive structure that is highly favorable to organizations that can make use of this talent. This puts forward-looking Western companies in position to make unprecedented gains. As experts Denis Fred Simon and Cong Cao put it:

The changing complexion of China's S&T [science and technology] relations and cooperative linkages reflects the deepening of the country's talent pool and strengthening S&T capabilities. To ignore or underestimate the potential of these developments in China is to miss one of the most important strategic transformations and structural changes in the global economy of the 21st century.[3]

Finding The Right Partner

As with any opportunity, it is not immediately obvious how to take advantage. Western companies face numerous challenges in accessing China's talent pool:

- 1. Licensing.** Unless a company already has a well-established China operation, it can take significant time and money to get up and running. Even after an operation is established, a separate entity must often be set up in each location. It helps to have a partner with extensive local knowledge and connections, in order to facilitate efficient start-up.
- 2. Regulatory challenges.** China's labor law is famously complex and restrictive. And while many strides have been taken toward greater openness and fluidity, significant expertise is still required to navigate China's labor regulations.
- 3. Access.** How can companies find, hire and retain the right employees? The labor market is still largely immature. Job fairs are more and more common, and information is more freely available than ever, but finding just the right person for the job — not a simple matter anywhere in the world — is still more challenging in China than it is elsewhere.

Companies wishing to access China's talent pool are thus faced with a classic choice: go it alone or find a partner. Such companies will need to consider carefully the costs, benefits and risks associated with each of these paths.

Don't Miss Out

A recent study by experts in China's technology industry summarized the landscape as follows: "[O]nce considered one of the more backward developing countries, China today stands as one of the world's most robust and dynamic economic and technology forces." [4] China's talent is at center stage in this unfolding story. Despite the challenges and risks, tremendous opportunity awaits the company that sees the entire picture and takes decisive action.

Contact Orchestrall if you think you may be ready to have China's talent make a difference for your business. We will help assess your readiness and see if China is right for you.



[1] China's Ministry of Education

[2] "China's Future: Have Talent, Will Thrive," by Denis Fred Simon and Cong Cao. Issues in Science and Technology Online, <http://www.issues.org/26.1/simon.html#>

[3] "China's Future: Have Talent, Will Thrive," by Denis Fred Simon and Cong Cao. Issues in Science and Technology Online, <http://www.issues.org/26.1/simon.html#>

[4] "China's Innovation Challenge," by Ceng Cao, Denis Fred Simon, and Richard P. Suttmeier. Innovation: Management, Policy & Practice (2009), p. 255.



新世基科技服务
ORCHESTRALL



Global Headquarters:
新世基(集团)科技服务有限公司
香港铜锣湾告士打道255-257号
信和广场8楼5B
電話: +852-2549-5196
傳真: +852-2549-9115

Orchestrall Group, Ltd.
Suite 5B, 8th Floor
Sino Plaza
255-257 Gloucester Rd.
Hong Kong
Phone: +852-2549-5196
Fax: +852-2549-9115

Orchestrall (Beijing) Ltd.
新世基(北京)科技服务有限公司
100193
中国北京市海淀区
东北旺西路8号
中关村软件园9号楼 (国际软件大厦) 三区E座

Orchestrall (Suzhou) Ltd.
新世基(苏州)科技服务有限公司
215400
中国江苏省太仓市北京东路88号

Orchestrall, Inc.
One Liberty Place
1650 Market Street, 36th Floor
Philadelphia, PA
USA

European Branch Offices:
Stockholm, Sweden
Barcelona, Spain
Warsaw, Poland

www.Orchestrallinc.com
+1-888-658-9816
info@orchestrallinc.com

Contact Orchestrall today

Or visit www.orchestrallinc.com if you think you may be ready to have China's talent make a difference for your business.



新世基科技服务
ORCHESTRALL

