Huawei Technologies

China's first multinational?

by Simon Cartledge

To a striking degree, Huawei Technologies is China writ small. The Shenzhen-based maker of telecoms network equipment emerged from nowhere over the last decade to become a global economic force. Its success stems from China's low costs, which it now seeks to transcend. Its impact is changing how businesses operate around the world. It has aspirations to become a high-tech power, which are more noteworthy for their potential rather than their reality but which certainly should not be written off. And even as China has embraced market forces while maintaining a huge government role in economic sectors the Communist Party deems strategic, so Huawei, nominally a private company, has received massive state support both at home and abroad. Finally, there is opacity to both its leadership and operations which leaves observers harboring suspicions about its long-term goals and the means it will use to reach them.

Operators, get me 600%

Huawei's revenues and net income, 2000-07

	Revenues US$ bn	Net income US$ m	Margin %
2000	1.9	345	18.2
2001	2.3	258	11.2
2002	2.1	108	5.1
2003	2.7	384	14.2
2004	3.8	624	16.4
2005	6.0	681	11.4
2006	8.5	512	6.0
2007	12.6	674	5.3

Source: Huawei

Figuring out what is going on at the company is a tricky task. A few things are clear: rapid growth for one. Revenues doubled between 2000 and 2004, and then more than tripled from 2004 to 2007. Net income, however, has been more or less flat in the past four years and margins have fallen. The company's line – that its overseas expansion has proved expensive – has not been questioned by analysts. Most of this growth has come from overseas sales, especially in developing countries in Asia, Africa and Latin America (see "Tapping new markets").

Tapping new markets

Revenues by region, US$ bn

	2006	2007
Asia/Africa/Latin America	4.8	6.7
China	2.8	3.8
Europe	0.8	2.0
North America	0.1	0.1

Source: Huawei, author estimates

The recent growth spurt propelled Huawei into the top league of global telecoms equipment manufacturers. In 2007, it displaced Canada's Nortel in the number five spot (see "At the bottom of the top"). The company predicts a 38% increase in contract value this year, implying revenues of US$15-16 bn and a closing of the gap with fourth-place Nokia Siemens Networks.

Further revenue growth is assured for the next few years

Continued rapid growth over the next two or three years is virtually assured. The number of global competitors is shrinking (thanks to the mergers of Alcatel and Lucent and of the network arms of Nokia and Siemens). Operators like to involve at least two vendors in any major infrastructure purchase to keep the bigger one in check. The lower number of competitors thus automatically creates opportunities for Huawei. At home, the government will finally hand out 3G licenses, leading to a massive infrastructure roll-out. And once the current restructuring of China's telecoms operators is completed later this year, these companies look likely to spend up to US$40 bn on international acquisitions. This activity may also create new business for Huawei.

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With a little help from friends

Huawei's general strategy is straightforward: offer equipment cheaper than anyone else's, throw in useful extras like transmission infrastructure or hand-sets, and, when necessary, put up the money to pay for it all. In 2005, it arranged a US$10 bn credit line with China Development Bank (CDB) to help fund its international expansion. Huawei denies this money is used to help purchasers pay for goods, but the opening of the credit line was quickly followed by a US$200m contract to supply wireless equipment to Nigeria, with the entire payment funded by the bank. In May 2008 India's second largest mobile operator, Reliance Communications, took out a US$750m loan from CDB, of which at least US$500m was earmarked for buying equipment from Huawei. Huawei's claim that it receives no subsidies from the Chinese government may be technically true, but with support like this handouts are unnecessary.

At the bottom of the top

2007 revenues, US$ bn

Cisco Systems	34.9
Ericsson	31.3
Alcatel-Lucent	27.9
Nokia Siemens Networks	21.0
Huawei	**12.6**
Nortel	11.0

Source: Lightreading.com

There is, however, more to Huawei's success than cheap prices. While the company overplays its R&D claims (see "People, not dollars"), it does make steady incremental improvements to its equipment, usually in a way which allows purchasers to lower their operating costs (e.g. by reducing power usage). It has also actively pursued joint ventures and partnerships with leading technology firms. A US$100m joint venture with Siemens, established in 2004, develops 3G mobile technologies. A 2007 venture with anti-virus software firm Symantec creates data and network security applications. It also has joint labs with (among others) Intel, Texas Instruments, Qualcomm and Infineon.

Questions – and answers

Transparently opaque

Yet despite all that is known, Huawei remains a bit mysterious. A major brand-building campaign (including a logo redesign by Interbrand and full-page ads in magazines such as *The Economist* and *BusinessWeek*) aims to present the company as just another big telecoms equipment vendor. But below the surface Huawei still looks rather different from its global competitors.

A distinctively Chinese attitude inflects many of its operations. A visitor to its sprawling Shenzhen campus will get an elaborate welcome and almost no information. Much is shown but nothing is explained, and the visitor departs as bemused as before. The glossy annual report, available on the corporate website, contains a few selected financial statistics and many pages of management platitudes. No senior staff are named, let alone the compensation they receive. Its "Message from the Company" is signed by the "Executive Management Team, Huawei Technologies Co., Ltd."

IBM meets Confucius

"They have IBM processes overlaid on Confucian reporting structures," says a US consultant who has worked with the company. "Do I see a highly evolved, employee-centric organization from the millions of dollars they sunk with [human resources consultants] Mercer? No, they still have a very state-owned enterprise mentality – all leaving their desks together at noon for their lunch breaks." The mattresses researchers have beside their work stations have more to do with a culture of napping at lunchtime than devotion to their work, he adds.

Phones and oil

A private arm of the Chinese state?

It is frequently asked whether Huawei acts purely from commercial motivations, or if it is an agent of broader state policies. It is impossible to know for sure, given the refusal of senior management to talk. But there are hints. Its work spaces are filled with posters that mix Western corporate motivational slogans with ones backing China's development agenda. The team is not just Huawei, it is also the nation. It may not be entirely coincidental that many of Huawei's overseas contracts are in nations wooed by China as energy suppliers –including Nigeria, Venezuela, Saudi Arabia, the United Arab Emirates and Sudan.

At home, too, Huawei's relationships with Party and government are hard to parse. In late 2007, the company announced it was seeking resignations from 7,000 staff who had been with the company since its early years. The news created a media stir, with commentators – including domestic ones – speculating that the company's action was an attempt to circumvent the Labor Contract Law due to come into effect on 1 January 2008, which would make it far harder to dismiss long-term staff. Reports about the resignations then dried up overnight – suggesting that Party propaganda officials put out a gag order. It is unknown whether the resignations actually occurred.

No more talk of an international listing

The actual motivation behind the resignation request may have been to clean up Huawei's notoriously murky ownership structure. Huawei claims to be largely owned by its employees, though suspicions abound that many of its domestic customers also have direct or indirect equity stakes. Through 2004 speculation was widespread that the company planned a stock-market listing. All such talk has since disappeared, and outside analysts often theorize that the complexity of ownership scuttled the listing.

Instead, the company now hopes to realize its global ambitions with help from private equity. It teamed with Bain Capital in a failed effort to take

People, not dollars

Huawei makes much of its commitment to spending 10% of revenues on research and development (R&D). This implies a jump from US$600m in 2005 to US$1.25 bn in 2007. The latter figure is respectable but still on the low side – most of its major competitors spend about 15-20% of revenues on R&D. But a focus on dollar values may fail to count the benefit of armies of cheap technical labor.

Thanks to the vast number of people it has working on development, Huawei can customize both hardware and software very quickly – even to the point of having dedicated research teams for specific clients. As 3G and 4G networks are rolled out, this strength can only grow: both systems will be increasingly sold on the basis of their applications rather than their hardware. This means ever more customization to meet the needs of ever more diverse groups of users.

The majority of Huawei's R&D staff are young and relatively inexperienced (not to mention cheap), and this makes them more suited to labor-intensive customization work than are the high-end research engineers employed in developed countries.

In search of American friends

over struggling US network equipment firm 3Com, with which Huawei has had a joint venture since 2003. This summer it announced plans to sell half of its mobile handset division to one of five American private equity firms. The two moves appear related. The 3Com purchase was scuppered because of US government security concerns. If an American financial company has a stake in a major (but non-strategic) part of its business, this could smooth Huawei's path next time it looks to make a US acquisition.

Multinational, or Chinese?

Huawei embodies many of the shifts and contradictions in China's development strategy. The original goal of the economic reforms launched in the late 1970s was to acquire various desirable elements from overseas – most notably technology – while otherwise keeping China's doors as closed as possible. Exposure to foreign investment and the global economy through the 1980s and 1990s brought enormous benefits, which the country's leadership recognized. But recent rebuffs to China's outward investments – such as Huawei's attempt to buy 3Com and the failed 2005 effort by China National Offshore Oil Corp (CNOOC) to purchase Unocal – have left many in China wondering just how level the playing field will be as more Chinese companies go international.

Accompanying this shift in point of view has been a revival of support for key state-owned enterprises. Economic policy makers remain well aware of the value of market forces, but the last few years have also seen increased support for a smaller group of some 40-50 of the country's biggest state firms. Huawei, ostensibly private, does not formally belong to this group, but seems to enjoy similar benefits.

The blue-collar firm for the future of telecoms

The management question for Huawei is whether it should try to behave more like a multinational (which would require more transparency and more true high-end R&D), or should it focus on strengthening its distinctively Chinese characteristics? The answer is not obvious. Huawei has tried to establish itself as one of the world's leading telecoms equipment vendors, and has achieved this by forcing the industry to restructure in its likeness rather than the other way around.

The future may continue to favor that approach. Telecoms equipment firms like to talk about increasing the services component of their work. But the reality of the roll-out of 3G and 4G networks will involve "a new form of blue-collar labor," in the words of Ross O'Brien, head of the information and communications technology practice at Hong Kong consultancy Intercedent Asia. In other words: labor-intensive, repetitive tasks, with some degree of customization, but requiring a large number of relatively low-cost technicians rather than a small number of highly skilled engineers.

Most likely, Huawei will continue to make life uncomfortable for the incumbent giants through its mastery of these blue-collar skills. It will also try to emulate some of the incumbents' skills, especially in the development of new technologies. But a move to the technological frontier is unlikely to be a core source of success in the next few years.

Reality will remain elusive

In short, Huawei will probably persist in its schizophrenia – highlighting its high-tech aspirations, while actually gaining market share through lower prices. And as China will continue to be a country where reality and its depictions maintain an ambiguous relationship with each other, so Huawei will remain a company whose opacity is matched by a continued ability to supply competitive products at a price that others find hard to match.