



Jack Welch

Western Exposure

In India's Outsourcing Boom, GE Played a Starring Role

Early Investments Helped Fuel
Tech and Service Sectors;
A Cheap Source of Talent
Jack Welch Hears a Sales Pitch

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NEW DELHI -- In September 1989, Jack Welch, then **General Electric Co.**'s chairman, flew to India for a sales call. He hoped to sell products like airplane engines and plastics to the Indian government.

But during a breakfast meeting with top government advisers, it was Mr. Welch who got pitched. "We want to sell you software," Sam Pitroda, chief technology adviser to the late Indian Premier Rajiv Gandhi, told a surprised Mr. Welch. Mr. Pitroda explained that India needed business for its emerging high-tech sector.

"If I kiss your cheek, what do I get in return?" the GE chairman replied, according to two men who were present.

Fifteen years later, the answer is clear: the global outsourcing revolution.

India today earns more than \$17 billion from corporations world-wide seeking low-cost overseas talent to do everything from write software to collect debts to design semiconductors. GE in large measure stoked the phenomenon, playing an unheralded role as the Johnny Appleseed of India Inc. and reaping billions in savings for itself along the way.

GE's technology partnership with India came amid the country's economic opening, which began in 1991 when New Delhi began systematically dismantling tariff and export controls. Indian executives say early investments by GE in India gave their technology and business service sectors crucial credibility and cash when other companies still viewed the country as a risky backwater. Moreover, exposure to Mr. Welch's culture of cost-cutting and efficiency taught them business skills they are now using to compete globally, often against U.S. firms.

"What we learned out of [the relationship with GE] is phenomenal," says S. Ramadorai, chief executive of India's largest software company, Tata

Consultancy Services Ltd. Business from GE helped TCS boost its annual revenue to nearly \$1.6 billion in the year ended March 2004 from just around \$37 million in the early 1990s, says Mr. Ramadorai. Today, GE still accounts for 15% of TCS's overseas revenue and the Bombay company has used the GE relationship to spread into new markets such as China and Eastern Europe.

Publicly, GE has been reluctant to take credit for its singular role. Shipping white-collar jobs overseas has proved controversial in the U.S. Demoralized American workers have had to train their foreign replacements. During the 2004 presidential campaign, Democrats threatened to impose tax penalties on companies that move jobs overseas.

But the strategy has been pivotal for GE. In 2000, it inaugurated a Jack F. Welch Technology Centre in Bangalore that employs thousands of researchers working on everything from new refrigerators to jet engines. This year, the conglomerate plans to spend about \$600 million on computer-software development from Indian companies, according to a recent company report. The company estimates that similar products would cost it as much as \$1.2 billion in the U.S.

GE also recently unleashed a big new player in Indian outsourcing. In November, it sold a controlling interest in GE Capital International Services, or Gecis, a company with about 17,000 employees that GE started in 1997 to answer mail from its credit-card customers. With the \$500 million sale of the Indian unit to private investors, it will start going after business from other corporations looking to save money.

Helped by the outsourcing boom, India's economy is on track to grow 7% for the fiscal year ending this month. Services now make up roughly half of India's total economic growth, and the revenues from India's technology sector are expected to exceed \$28 billion during the current fiscal year, according to Nasscom, a trade organization representing India's high-tech sector.

Indian businessmen and politicians widely credit Mr. Welch and GE for seeding their country's economic boom. "The breakfast meeting was the turning point" for India's information-technology industry, says Jairam Ramesh, a senior economic adviser to India's ruling Congress party who was present at the 1989 meeting.

The first teams of GE executives Mr. Welch dispatched to India set foot in a country where cows meandered freely in the streets and temperatures often rose above 100 degrees Fahrenheit. "I was tasked to make sure nobody got sick," says Sunand Sharma, a former executive with GE's India operations who helped coordinate the conglomerate's initial software partnerships.

GE Medical System's former Asia chief, Chuck Pieper, was among the first to arrive in 1989, seeking an Indian partner to help develop a low-cost ultrasound



**Azim Hasham
Premji**

machine. Because India was still a closed economy protected by steep tariffs and red tape, GE needed a domestic partner to sell its instruments there.

Among Mr. Pieper's first contacts were with **Wipro** Ltd., a Bangalore software-services company which until the late 1970s largely profited from selling vegetable oil. He says he quickly became enthralled with Wipro's chief executive, Azim Premji -- today India's richest man -- who picked him up at the Bangalore airport in a hulking Ambassador sedan, a 1950s design famed for its rugged endurance but lack of air conditioning or power steering.

Mr. Pieper felt confident that he could get a "good night's sleep" with Mr. Premji as GE's partner. Within a year, the two companies had formed a joint venture to manufacture and distribute an ultrasound machine.

GE's industrial-equipment sales into India didn't take off as anticipated. But executives realized they'd found a cheap source of talented programmers and engineers. GE's Mr. Pieper quickly set aside \$5 million annually to hire Wipro to write more software code for GE ultrasound machines and computer tomography, or CT, scanners.

GE's taste for cost-cutting came as a shock to Wipro executives such as 48-year-old Ramesh Emani, who helped manage the software partnership. He says GE soon began playing one Indian software firm against another to drive down costs, demanding constant productivity gains. "GE was very brutal," says Mr. Emani, who now heads a Wipro unit developing software for automobiles and cellphones.

By the mid-1990s, top GE managers began encouraging other units to follow the medical division's lead in India. In some cases, Mr. Welch gave the order directly, says Mr. Pieper, now vice chairman of Credit Suisse First Boston's alternative capital division in New York. "For the same amount of engineering dollars, we were getting 50% more people thinking about stuff world-wide," he says.

A software programmer in India with two to four years' experience makes about \$10,000 a year, compared with \$62,000 in the U.S., according to Hewitt Associates LLC, a Lincolnshire, Ill., consulting firm.

GE contracts helped underwrite the growth of India's technology sector, Indian executives say. At one point during the 1990s, Wipro's software unit, Wipro Systems Ltd., received 50% of its revenue from GE. At TCS and another leading technology company, **Infosys Technologies** Ltd., the figures were between 20% and 30%, the companies say. Combined these three firms now account for a third of India's total software exports.

Fruitful Partnership

A look at General Electric's history in India:

- **1989:** Then Chairman and CEO Jack Welch meets with Indian government.
- **1990:** GE forms a joint venture to develop and market medical equipment in India with Wipro Ltd.
- **1995:** GE starts contracting significant pieces of its software developing and maintenance to Indian companies.
- **1997:** GE forms GE Capital International Services, now known as Gecis, to handle backroom work and market analytics.
- **1999:** Gecis establishes the first international call center in India.
- **2000:** GE opens a research center in Bangalore to tap Indian engineers.
- **2004:** GE sells 60% of Gecis for \$500 million, cashing in on its giant outsourcing operation and freeing it to compete against IBM, Accenture and Indian firms.

Source: WSJ research

For the fiscal year ended March 31, 2004, Wipro's information-technology businesses generated more than \$1 billion in revenue, up from just \$15 million in 1989. Its headquarters in Bangalore is an oasis of blue fountains and manicured lawns amidst dirt roads and parched fields. In a December interview there, Wipro's chief executive, Mr. Premji, said GE "helped us understand global companies."

By the late 1990s, GE began turning its attention from simply buying software from India to using the country as a base for data entry, processing credit-card applications and other clerical tasks.

Other companies such as **American Express Co.** and **British Airways PLC** had already moved some back-office operations to India. But with Mr. Welch's enthusiastic support, GE

eventually went much further, shifting thousands of jobs and untold dollars in operational expenses to India. Savings on backroom operations alone amount to about \$300 million a year.

Nigel Andrews, a former top GE Capital executive who oversaw India, says the "light went on" for GE in 1997 as the financial unit was about to create an Indian office to process credit applications for a credit-card joint venture with a local bank.

Mr. Andrews says he realized that India's 100 million English speakers offered an almost limitless pool of inexpensive, educated labor for such tasks. "We started to think, we can do this for the rest of the world," says Pramod Bhasin, 53, a former GE Capital executive who helped create Gecis and serves as its chief executive.

Their first move was to hire away the Indian executive then managing American Express's Indian outsourcing unit, Raman Roy. The new Gecis operation quickly took on a number of assignments for GE's U.S. businesses, such as pulling together mortgage applications. By late 1998, Mr. Roy began patching together a prototype for the company's first international call center in New Delhi.

That effort met with skepticism from U.S. executives, who thought India's telephone and electricity infrastructure was too unreliable. Mr. Roy's team worked with Indian regulators to install reliable phone lines and bought generators to guard against frequent power cuts. They strung bed sheets between cubicles to meet U.S. requirements for privacy of financial data.

"The phone company initially told me there wouldn't be outages for much longer than six minutes," Mr. Roy says. "I told them I couldn't survive an outage of even six seconds."

The venture offered clear economic advantages. An Indian call-center worker earns around \$3,000 annually, compared with more than \$27,000 in U.S., according to Hewitt, which says its comparison is based on secondary sources. Mr. Bhasin says 8,500 people responded to a newspaper ad for the first 20 positions.

After the call center's first trial in early 1999, GE allocated more than \$10 million to expand the operation, as well as other processes. Mr. Roy says former GE Capital Chief Gary Wendt told him: "You don't know the revolution you just created." Mr. Wendt didn't return phone calls seeking comment.

In the U.S., GE's outsourcing push continued to meet resistance. Executives worried about replacing American workers with overseas labor. Mr. Andrews says that managers at GE Capital's credit-card operations feared U.S. clients might take offense at being called by foreigners.

As the cost savings, efficiencies and quality became apparent, GE increasingly came to view outsourcing as a weapon to drive its profits. Mr. Welch challenged his top managers to meet with Indian staff. At GE's annual gathering of top management in Boca Raton, Fla., he gave the stage to Messrs. Andrews and Bhasin, who pitched their operation. "You weren't a fully fledged player if you weren't doing something in India," says Mr. Andrews, who today serves on several corporate boards and as a governor of the London Business School.

GE's Gecis unit eventually employed 12,000 people at two expansive office buildings outside Delhi and a glittering new tower in Bangalore, and several thousand more in other countries. It also started providing more sophisticated services like accounting and analyzing new markets for GE businesses. In 2004, Gecis estimates, it did about \$400 million of work, mostly for its parent company.

In November, GE sold 60% of Gecis to U.S.-based investment firms General Atlantic Partners LLC and Oak Hill Capital Partners LLC. The sale has allowed Gecis to begin working for companies other than GE, including Japan's **Nissan Motor** Co., which recently signed on as a customer.

GE leaders have discovered limits to overseas operations. India's nuclear standoff with neighboring Pakistan in 2002 caused executives to worry the company had become too "concentrated" in the subcontinent and led to a pause in investment, says Scott Bayman, head of GE's India subsidiaries.

Some other GE units have also withdrawn business from India. Last year, GE's health-care business stopped using India to handle customer-service calls, after a GE health-care survey showed that hospitals and physicians "prefer to work with local, U.S.-based customer services." The calls are now being routed to call centers in Wisconsin and Florida. GE's health-care unit still does some work with Gecis.

Alumni of GE's India operations say they aren't worried about a backlash against outsourcing. Indian entrepreneurs are churning out dozens of new technology and outsourcing companies, many based on business models learned from the American conglomerate.

Mr. Roy, the former Gecis executive, founded Spectramind which was acquired by Wipro. Now with 15,000 workers under him at Wipro, Mr. Roy says he's looking forward to competing with his former employers. "Technology companies and outsourcing firms in India need to recognize that if it wasn't for GE, they wouldn't be here today," he says.

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