

**HOW A SUPERCORP RIDES TO THE RESCUE AFTER A DISASTER:
IBM AND TSUNAMI RELIEF**

EXCERPT FROM NEW BOOK
SUPERCORP: HOW VANGUARD COMPANIES CREATE INNOVATION, PROFITS,
GROWTH, AND SOCIAL GOOD

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PUBLISHED BY CROWN (NEW YORK) AND PROFILE BOOKS (LONDON)

run roughshod over human feelings. A half century ago, the military-industrial complex and organization-man conformity were named and scorned. Today, greed is attributed to Big Oil profits and derivatives-peddling banks that caused a massive global financial crisis. Critics can always find reasons for the unease that the public often feels about big companies. Even revered entrepreneurial Google is vulnerable to being dubbed an evil empire after growing big enough to dominate the online search field and Internet advertising.

But another model is on the rise, and it is already changing the image of what business is and can be. I call that new model the vanguard company.

Vanguard companies are ahead of the pack and potentially the wave of the future. The best of this breed aspire to be big but human, efficient but innovative, global but concerned about local communities. The best have business prowess and clout with partners and governments but try to use their power and influence to develop solutions to problems the public cares about. They sometimes serve as an alternative to inefficient or oppressive states or religions by standing for high universal standards of openness, inclusion, and transparency. The leaders of a vanguard company espouse positive values and encourage their employees to embrace and act on them.

Vanguard companies have the power to contribute to the world in positive ways, and they want to do so. This new business model has been arising in recent years but is still a work in progress. It is no longer a sideline activity or an afterthought, such as check writing to give away a few leftover crumbs, but a mainstream imperative that infuses every aspect of the business. It is becoming the wave of the future because the public demands it and employees want it, especially the highly educated new generation that wants to work for companies in sync with their idealism. Furthermore, the capabilities of vanguard companies enable them sometimes to take action more quickly than governments. Or they work with governments to add great value to solving problems that matter to the general public, such as education, health, or the environment.

A vanguard company might even fly to the rescue when disaster strikes. That is what IBM did in India and Asia following one of the

deadliest natural disasters in history, the December 2004 tsunami, just as the company had done after earthquakes, terrorist attacks, and other major emergencies. This story shows what the new model looks like in action. It is not just "do-goodism" but a whole new way of working, a new model for strategy, innovation, employee empowerment, and leadership that is good for business and, ideally, good for the world.

tsunami

ON THE DAY of the tsunami, Shanker Annaswamy was close to the beach in his hometown of Chennai with his family. Annaswamy was an engineer who had joined IBM as chief executive for India six months earlier. It was raining too hard on that late December day to walk the beach, so he took his family to a temple a few kilometers from the ocean. Driving back to his relatives' house, he saw chaos in the road and people leaving their homes. He thought this was perhaps a film shooting, which always attracted crowds. At the house, he switched on the television and learned that there had been a tsunami. The full impact was not yet clear. When he returned to Bangalore that night, he was shocked to hear about the extent of the damage.

The next day in his office, Annaswamy received a visit from one of his managers, Sunil Raghavan, a long-time IBM'er with responsibilities for protecting data security. Raghavan declared that IBM could and should do something to help. "I said, 'How can you help?'" Annaswamy recalled. "He said, 'Shanker, I have done this in the Bhuj earthquake before. IBM has capabilities.' The only thing I said was, 'What can I do for you?' He said, 'You being the head of the company, you know some of the governor's people. Can you talk with the IT [information technology] secretary of Tamil Nadu?' So I called this gentleman, Vivek Harinarain. When I reached him, although he could not connect IBM and tsunami, he said, 'Okay, why don't you send them. I have no time to think how they can help. But send them.'" At the same time, a team in New York led by Robin Willner at Corporate Citizenship and Corporate Affairs had prepared a memo requesting approvals by IBM senior leadership to deploy significant technology and talent to coordinate relief and recovery efforts on the ground.

In a precursor of IBM's Smarter Planet initiative, an IBM system was quickly developed to track material flow at each entry point to the disaster area—roads, train stations, the airport. But phone lines and cell towers were down, so how could the data be transmitted? The determined and imaginative IBM team put a laptop in a car and drove it from place to place to move the data across the stations. Though time-consuming, this was a better tracking mechanism than anything else around to guide decision making by government and other relief agencies. "I think they were very happy, because afterward they were able to trace what went where. They were able to retrieve some material from place A and send it to place B. Given the level of chaos, there was just no other way they could have done that," Raghavan said.

Tracking and handling medical supplies is vital after an emergency involving thousands of people. Because the government hospital in Bhuj collapsed in the earthquake, the area was bulldozed clear so a tented hospital could be set up. Big containerloads of medicines had come in from all over the world, but ground personnel could not read the foreign-language labels, so they did not know what they had. Moreover, the containers were in the sun, blistering afternoon temperatures of 40 degrees Celsius (104 degrees Fahrenheit) could cause deterioration quickly. IBM established a system that documented the generic names of medicine in many languages. Medical inventory management system code, written in the United States, was adapted quickly in India and connected to the Internet. IBM volunteers sat down with three or four pharmacists brought in from other locations to go through the medicines container by container. They took inventory and put the data into the system. Users could then key in information from the label, which would tell them what the medicine was. And inventory numbers indicated a surplus of some medicines that could be sent to other places where they were needed.

Later, after the team left, the IBMers knew that their inventory management system lived on. Local users continued to download code updates as they rebuilt the district hospital and the surrounding small health centers.

One big disaster behind them, IBMers gained confidence in their ability to use their core technology to make a difference, and that became important after the tsunami. Indeed, the whole country gained

confidence. After the Gujarat earthquake, the government of India made disaster readiness a priority. By the time of the tsunami a few years later, the government felt confident enough to refuse U.S. help.

THE TSUNAMI RESPONSE

Sunil Raghavan saw the tsunami as even more devastating than the earthquake. Once again, IBM sites were not affected. But when the magnitude of the tsunami disaster was clear, he was confident that IBM would want to help. First, he placed another early-hours call to his boss, Armitabh Ray, requesting a team for the next three days. Ray recalled, "This team spontaneously said we would like to participate in the relief work. Nobody from corporate told them that they had to do this." In the morning, Raghavan walked into Shanker Annaswamy's office and got his support, as well as a go-ahead from the government IT official for the state of Tamil Nadu.

Despite the danger of a repeat tsunami, Sunil Raghavan and his team packed water and emergency supplies in their cars and headed for Nagapattinam in Tamil Nadu, the southern state that bore the brunt of the impact. They went in an exploratory mode. Rather than pulling solutions off the shelf, they had to learn what would add value—the same ears-to-the-ground listening mode used by a vanguard company to trigger innovation. As they toured the area, they immediately saw differences between this disaster and the earthquake. While the earthquake had wiped out large areas and destroyed infrastructure, the tsunami devastation was concentrated in the first few hundred yards from the shore. Farther out, conditions appeared normal; even streets of shops were still standing. The IBM team attended a meeting with about two dozen NGOs about what these various relief groups were doing and how they were coordinating their efforts, to see how IBM might add value. That evening, the state IT secretary invited Raghavan and colleagues to dinner at his home; all the hotels and restaurants had closed down.

One challenge was straightforward administration, to manage the volume of relief supplies. In one day, the enormous inflow of material filled up all the space government officials had for outdoor storage, and supplies were diverted to Madras. IBM provided a temporary material receipting system. Soon it was clear that there were problems

coordinating data coming in from other places along the coast, so IBM set up a website to post data and updates, borrowing bandwidth from an IBM customer, a local Internet service provider. About a half-dozen small projects like these were done, using standard technology. IBM made it clear up front that it wanted no publicity and was not looking for money. If business leads might follow, IBMers were not coming in to chase them. "That makes it far easier to engage, because people then are comfortable that you're not coming in with ulterior motives. So it has translated into goodwill for sure. It has translated into what we think of ourselves as IBMers, that we're pretty serious about playing our role as citizens," a team member said.

After leaving good systems in Tamil Nadu, in January 2005 IBM India leaders shifted to challenging problems in the Andamans and Nicobar Islands, remote places with great strategic significance to India (and none to IBM). This next phase provided opportunity for significant innovation—the chance to develop something new intensifies the motivation of vanguard company employees. Much of Nicobar had gone underwater, destroying homes, buildings, and infrastructure such as harbors and telecommunications. In a few months, the spring rains would start and not let up for eight months, providing a natural April deadline for shelter for displaced families. The government had to ship in everything it needed. To respond, IBM developed another Smarter Planet demonstration, an unconventional supply-chain system to track what was shipped, whether it came in by air or sea, and its location in a variety of stocking points. It could reconcile inventory when items came in tons or truckloads and were then dispatched in bales or carton-loads. People could call in lists and have them keyed into the system.

A vanguard company gains its powers primarily from the ability to integrate its pieces, to combine people, to get the action moving quickly. IBM's emphasis on teamwork across the whole extended enterprise helped the tsunami efforts. Field activities, from discovery to deployment, used a collaborative approach. People worked across IBM units, tapped business partners, and involved NGOs. (That is the difference between arm's-length transactions, such as donating supplies, and implementation of systemic solutions that leave the recipient better off later.) In the Andamans, IBM trained students from a polytechnic institute in Port Blair in open source and Linux programs,

deploying the students to collect data the way IBMers had done after the Gujarat earthquake. Joint involvement in service solidified or built relationships. Business partners were useful sources of knowledge, helping identify an appropriate resource for a particular situation. Later, IBM helped the Indian Institute of Technology in Kharagpur near Calcutta establish a disaster management and relief center. Everyone was getting smarter.

The satisfaction for the IBM team members came from their desire to serve and the knowledge that if they did not maybe nothing would get done. When a vanguard company encourages employees to look outside the company, to society, to understand markets and supply chains, its people also see where there are gaps, underserved populations and unmet needs, for which they feel responsible. "The mandate was to serve," Raghavan said. "It was not 'figure out how we can make more money off this in the future.' Otherwise we would have never gone to the Andamans, a remote chain of islands with tourism as its main business. I think the reason we were keen to go there was simply because it is so inaccessible for people from the mainland to go there, so the normal NGO presence that we would have found there, we did not find in this case. So I think it was that much more important for us to go and make the difference."

The support that made this project possible was just one of many examples of employee autonomy and managerial trust, another hallmark of a vanguard company's new way of working. That is not surprising to IBM senior managers involved with the tsunami efforts. Amitabh Ray, Sunil Raghavan's boss, said, "Trust is one of the IBM values, right? That's why this tsunami project was so important to me. It was not corporate directed. It came from people who believed in IBM values; they said this is what we ought to do. If you strongly believe that you have a solution that can help the people on the ground, you approach your manager. And I can bet that any of our managers will say okay, unless that person's doing something that is very client critical. Then obviously we'll have a group meeting, because there could be a very serious impact on the client side. But we will provide all the support to the client team to ensure that we can release that person."

IBM was careful about its commitments because there was still a business to run, so it did not overpromise on these so-called Blue

projects—projects done under the IBM banner (its ubiquitous blue logo) without a revenue-producing (“green”) customer. As the business unit head, Amritabh Ray was asked by Raghavan for approval, because the tsunami effort would have to be funded from the global delivery organization’s own budget, for the software development and for the time of IBMers to implement the system district by district.

Leaders figured out how to sustain the effort. A vanguard company is measured not on declarations but on results, which means making longer-term commitments and sticking with them. “Even when we started as a voluntary effort,” Shanker Annaswamy said, “it was not the one-day effort, right, where you go in and then you do your magic and you come out and everybody’s happy? If you go in, you are committing your teams for a little bit longer time. And then the utilization pressure of their time comes in, and that’s where my leadership team members and the global teams come and help. And if that person has to be released for a certain time to go and do their job and come back, then an alternative person steps in. So the one good thing about IBM is IBM does not jump in and do without thinking. The effort is not done with compromises of a customer solution. But you very knowingly commit your time, plan for that, and contribute.”

The ability to deploy people flexibly and their willingness to give their personal time make it possible to have big impact with modest resources. Backing up the IBM India teams in the field were many people back home in the offices, each giving a little something. People from a variety of functions got involved in an operations center in Bangalore managing the movement of relief material, including In-deepet Thukral, director of strategy. Because IBM India was an offshore delivery center for software, the systems could be built by the best architects, while a handful of people in the field for a short time could contribute the specifications. Some of the code producers spent three days and nights of their personal time—Friday, Saturday, and Sunday—creating software without impacting their other project schedules. Though some work was done on IBM time, volunteers added enormous capacity. The code was open source, meaning it could be given away without worrying about licenses.

IBM India could also draw on worldwide experience. When the

tsunami hit, IBM’s corporate response was swift. Similar to the way IBM mobilized after the 9/11 attack on New York City, a group of about two dozen people from IBM’s global Crisis Response Team (CRT) moved into place in India, Indonesia, Thailand, and Sri Lanka. But with India in the hands of local IBM experts who had developed expertise following the Gujarat earthquake, the CRT was sent onward to Sri Lanka and Thailand. Raghavan said, “We [in India] pretty much had this figured out. We said we would support the global team from the software standpoint.”

IBM team members were ready to jump in, self-organizing without waiting for instructions from management. For example, while Raghavan was on his way to disaster sites, developers in Bangalore were already adapting IBM’s system to track missing people, which had been used in other disasters, such as the Kosovo relief effort in eastern Europe. But then his team discovered that there were several different groups with systems tracking missing people. So the India team did not deploy the IBM system in India or the islands but instead donated it to the Indonesian government via IBM Indonesia. Indonesia wanted local modifications, some of which were done for them in India, and then the Indonesian system was available for continuing use.

Throughout IBM India, involvement in tsunami relief was widespread, well beyond the specialist teams. In vanguard companies, volunteering is almost a way of life, in and outside of formal jobs. “One of the strong points of Indians as a whole is that in adversity a lot of people will pitch in and help,” a top manager said. Through the IBM Club, a voluntary association, many employees donated relief materials, from medicines to clothes and cash, made easy through signing up for payroll deductions. All the cash was consolidated and given to the Red Cross. Despite IBM’s dispersion over several locations, each with several offices, there was a feeling that the entire IBM company came together, because so many people in India did what they could. A senior woman leader explained, “Bangalore is a cosmopolitan city where people come from all over to work, from smaller places. Many are young, not married. They have a lot of free time on their hands, and they want to relate to something, to belong somewhere. Volunteering makes them feel they’re doing something productive with their lives.”

Shanker Annaswamy was proud of IBM's agility as well as its compassion. "You see the whole organization connecting within minutes. IBM is a very large corporation, right? It has its own advantages and disadvantages. Because it's spread out and so many people are involved, to move them all quickly at a lightning speed is a challenge. But in this effort, the moment IBM committed, it moved at a lightning speed. Some other Indian companies were surprised at IBM's speed."

Overall, the worldwide community donated more than \$7 billion in humanitarian aid following the tsunami. Indian prime minister Manmohan Singh established the Indian Prime Minister's National Relief Fund; the government and NGOs (including the International Committee of the Red Cross and Red Crescent) coordinated relief efforts in India; and the Indian Ministry of External Affairs, along with the Indian defense forces and the Home Ministry, coordinated relief operations to Sri Lanka, Maldives, and Indonesia. Pfizer, Deutsche Bank, and Coca-Cola headed a long list of corporate donors. Pfizer's \$35 million included \$25 million in medicines, the rest in cash. Microsoft donated \$3.5 million, Cisco \$2.5 million, and Infosys, an Indian IT company, donated 50 million rupees, about \$1.1 million. IBM was down the list as a \$1 million cash donor.

About twenty-seven companies donated more cash than IBM, but IBM provided critical capabilities. IBM contributed an organization registry to allow for the rapid registration and collection of information about NGOs, government agencies, and multinational organizations; a request management system to coordinate and track relief requests; a people registry to support tracking of those missing or deceased; a camp registry to track location, numbers of individuals, and operations information; and an assistance database, damage tracking system, burial information system, health and incident management system, and logistics management system. For IBM India, the tsunami experience added new capabilities for dealing with crises in general and stimulated innovation that could be used in other Smarter Planet initiatives.

IBM received an award from the president of India, among other accolades. But Raghavan added a more personal indication of value: "I think that these opportunities are real eye-openers for many of us, because otherwise we are very sheltered humans. We work nine to five or nine to seven or whatever, and then we head out; we're used to

doing a set of things in a certain environment. I think this experience has been life changing for many of our people, because you get to see the worst of how things can get, and you also get to see how people can rally around and try and help in those situations. Quite a few guys who were just a few years out of college came across and spent two or three weeks in Gujarat with me. They'd talk about their learnings out of that experience. In terms of enriching oneself as a human being, this is tremendous. No management development course is going to be a substitute."

FROM DISASTER TO SOLUTIONS

Corporate staff took note and provided vehicles for other humanitarian efforts, such as IBM's swift response to Hurricane Katrina in 2005, which destroyed much of New Orleans and the surrounding area. Under the leadership of Stanley Litow, vice president of corporate citizenship and corporate affairs, IBM codified its innovations into a set of resources for NGOs, a kind of "disaster relief in a box," featuring open-source software tools called Sahana, which means "passion." Sahana is a free disaster management system conceived during the tsunami aftermath and developed by volunteers from the technology community in Sri Lanka to compensate for the devastating consequences of a government attempt to manually manage the process of locating victims, distributing aid, and coordinating volunteers. Used in other disaster relief efforts in Asia, with funding from the Swedish International Development Agency through the Lanka Software Foundation, Sahana won the 2006 Free Software Foundation Award for Projects of Social Benefit.

With evidence that a vanguard company has capabilities and responsibility to contribute, IBM sprung into action yet again following the earthquake in China in May 2008, which took another huge toll in human lives and displacement. In this case, the government acted quickly and effectively. The main challenge became rebuilding, especially the schools that had proven to be poorly constructed and unsafe for children. Henry Chow, chairman of IBM Greater China, met with the mayor of Chengdu, in Sichuan Province, to determine options for IBM involvement. The government adopted the Sahana disaster relief software and implemented it throughout Sichuan. Chow and the mayor,

with support from Litrow at headquarters in Armonk, New York, agreed to expand IBM's efforts with schools, to deploy more KidSmart workstations, an early childhood teaching tool, and to increase use of Reading Companion, an innovative Web-based voice recognition system to teach English. IBM worked on databases for building safety and a system for predicting earthquakes using IBM's supercomputer, Blue Gene. These are all examples not just of onetime humanitarian aid but of innovations to make the system smarter.

IBM also committed to send Chengdu a corporate service corps team. The corporate service corps is an IBM innovation announced in 2007 to enable selected volunteers from around the world to perform a month of community service wherever needed, on company time, as global citizens and future global leaders. The formation of the IBM service corps is a fitting postscript to the tsunami story. Now, many hundreds of IBMers from anywhere in the world can take direct action on the world's most pressing problems, experiencing the satisfaction that Shanker Annaswamy and IBM India gained after the tsunami. Service corps members will take that learning back to their countries and translate it into how they do business and how they think about the world. Imagine the cumulative impact, as this ripples through and beyond IBM's 386,000 people and their work in 170 countries.

This is hardly bureaucracy or stifling conformity, as contained in images from the past, nor is it corporate greed and political manipulation. It is a whole new way of working.

who is in the vanguard?

THE STORY OF IBM's response to earthquakes, terrorist attacks, hurricanes, and the tsunami represents more than simply an example of wonderful people at a great company responding to humanitarian needs during an emergency, though they certainly did that. The story shows more than generosity; it shows that innovation can arise when people seek systemic solutions to make things run in a smarter way the next time.

While IBM is an unusual company and did extraordinary things during these crises, it is hardly alone. It reflects the paradigm for the emerging vanguard companies that pursue their everyday business

opportunities in a way that reflects humanistic values and promotes the highest standards in the countries where they operate. This, in turn, helps them grow quickly and effectively, with strong profits and solid reputations. I know that this is hard for some people to believe, because they think of big companies as inherently immoral or, at best, amoral. But the proof is in their actions.

Some companies that qualify for vanguard company status are giants with household names, like IBM or Procter & Gamble (P&G). But many others are emerging from a range of countries and operate in a range of industries. Consider the following examples from around the world.

- Cemex, which began as Cementos Mexicanos in 1906, is one of the world's largest building materials companies, operating in fifty countries, with a philosophy of improving well-being through innovative industry solutions and a commitment to sustainability. Its Cemex Way methods have helped it grow successfully through significant international acquisitions, improve productivity and working conditions in cement factories in the United States and Europe, and also develop cleaner biofuels. It has raised wages and supported community development in Egypt and has created innovative solutions for affordable housing in rural Mexico. In 2002, Cemex won a World Environment Center Gold Medal for International Corporate Achievement in Sustainable Development, despite being in one of the most polluting industries, because of its commitment to alternative fuels and environmental cleanup.

- Omron, a Japanese electronics company that describes itself as "small but global" (with nearly \$7 billion in revenues and thirty-five thousand employees worldwide), invokes its motto—"At work for a better life, a better world for all"—as the impetus for numerous innovations, such as the world's first online automated teller machines, the world's first automated train station, a system to increase safety and reduce deaths in industrial laundries, and a blood pressure monitor for women. The Omron Principles, first articulated in 1960, are said to be responsible for its success in acquiring outstanding smaller U.S. companies with similar values, without being the highest bidder and without the usual merger turmoil.