

FORTUNE

TOYOTA

Full Speed Ahead

Toyota CEO Fujio Cho is driving the Japanese automaker to new heights—and straight past the competition.

FORTUNE

Monday, January 24, 2005

By Clay Chandler



Fujio Cho

When Fujio Cho arrived in Georgetown, Ky., in 1986 to supervise production at Toyota's first American factory, he soon discovered it was easier to export cars than Toyota's ideas about how to build them. "There were cultural differences right from the beginning," he recalls. "We'd give somebody a sketch, figuring they'd get the idea. But workers were baffled. They kept asking us, 'Why do it this way?' I was completely unprepared for that. We hadn't been trained to think in terms of logical reasons." (Illustration: Robert Risko)

Cho's recollections of his early travails in the U.S. seem light-years removed from the company he runs today. Efficiency and quality standards at the Kentucky plant now rival those of factories in Japan. Toyota's model lineup features some of the U.S. market's most popular vehicles, from Camry sedans to Lexus coupes and street-chic Scion xB compacts. Detroit snickered when Toyota first unveiled its Prius sedans, powered by hybrid gas-and-electric engines. But it's Toyota that's laughing now: Its hybrids are a runaway hit, outstripping Toyota's ability to keep up with demand. Smart products and a sterling reputation for quality have lifted Toyota's share of the U.S. market to 12.2% last year, from 6.4% in 1986.

Many industry analysts predict Toyota will soon pass DaimlerChrysler to join the ranks of the U.S. Big Three. In the global market, Toyota has already eclipsed Ford as the world's second-largest carmaker and at its current pace could overtake General Motors in the No. 1 slot within the next two years.

Indeed, by nearly every measure, Toyota is the world's best auto manufacturer. It may be the world's best manufacturer, period.

Consider: Last year, Toyota's worldwide sales leapt 10%, to 7.5 million vehicles, posting strong growth in all regions. But Toyota has long since kicked the Japanese habit of chasing sales and market share at the expense of profit. Earnings in fiscal 2003, which ended in March, jumped 67%, to \$10.3 billion—more than the profits of GM, Ford, DaimlerChrysler, and Volkswagen combined.

But Cho—who, for his near flawless execution of Toyota's bid for worldwide dominance, is FORTUNE's Asia Businessman of the Year for 2004—isn't about to hit the cruise-control button. Among senior management, there is broad agreement that Toyota must grow and push into new markets to keep its edge. Over dinner in Detroit during the international auto show last month, Cho, who has been CEO since 1999, scoffed at the suggestion that Toyota could afford to take its foot off the gas. To hear him tell it, running Toyota is less like driving a car than "trying to pull a handcart up a steep hill—there's always tremendous danger that if we relax, even for a moment, we could lose momentum and be thrown to the bottom."

Cho, a lawyer by training who has spent his entire career at Toyota, is known for his steady hand. Yet even as the company surges to the fore, the 68-year-old executive is still struggling with the complexities of transplanting Toyota's vaunted production methods to foreign soil. Cho's international expansion plan is testing the limits of Toyota's ability to function outside Japan. Long considered the most parochial of Japanese manufacturers, Toyota now runs 47 plants in 26 overseas markets—up from 20 plants in 14 foreign countries in 1990—and generates more than 70% of its profits overseas. In the next two years, Toyota will add factories in Mexico, the Czech Republic, and the U.S. and roll out an ambitious campaign to make up lost ground in China. As foreign production lines multiply, executives are struggling to cut months from the time required to launch new models, and they are working with suppliers on a radical program to slash tens of billions of dollars in annual spending on parts.

Until now, the Japanese automaker has pursued a strategy of localization—establishing factories in major markets and building out supply chains in each country. Increasingly, though, Toyota executives are coming to view the world as a single integrated market and are hatching bold plans to launch models simultaneously around the globe, with parts manufactured in one

country designed for use in vehicles assembled in another. All this comes as Toyota is pushing harder than ever at home, where it has raised market share to a record 46%. Later this year it will roll out a new dealership channel to sell luxury Lexus cars in Japan for the first time.

Cho downplays—though he doesn't disavow—reports that he has set a companywide goal to capture 15% of the global auto market before the end of the decade. "It's an internal target," he says, meant as "a kind of banner to remind Toyota employees to work harder. It's not an official goal as such." But the multifront blitzkrieg launched to reach that target has put unprecedented strain on the production process once hailed as the "machine that changed the world." And it has Cho and his colleagues debating anew the difficulties of exporting the Toyota Way.

To Toyota's executives, the dilemma is how to maintain the pace without diluting their "corporate DNA." The metaphor is a poor one. Genes are immutable and parceled out by nature. At Toyota it is an article of faith that proper production methods can be learned. The problem, Toyota executives say, is that they aren't being learned fast enough.

The soul of the Toyota production system is a principle called *kaizen*. The word is often translated as "continuous improvement," but its essence is the notion that engineers, managers, and line workers collaborate continually to systematize production tasks and identify incremental changes to make work go more smoothly. Toyota strives to keep inventories as close to zero as possible, not only to minimize costs but also to ferret out inefficiencies the moment they occur. Toyota deliberately runs production lines at full tilt. And workers are given authority to stop the process and summon assistance at the first sign of trouble.

At the Tsutsumi plant in Toyota City, 6,600 employees working two shifts on two separate production lines can turn out 500,000 vehicles a year in eight model variations at a rate of one per minute. It is a ballet of astonishing precision, enhanced by a myriad of tiny improvements on the factory floor. Along one segment of the line, workers fastening parts beneath the dashboard straddle mechanized chairs that enable them to bounce in and out of the passenger compartment with a minimum of squatting and bending. At another, robots guide air conditioners into optimum position for manual installation.

Further on, engineers have fashioned a mechanism of coils and magnets to lift bolts from a parts bin in the exact size and sequence required.

The *kaizen* approach has been widely emulated in the auto industry, but getting it right is harder than it looks. Indeed, Toyota is so certain its methods can't be replicated through observation alone that each year it welcomes tens of thousands of visitors—many from rival carmakers—to tour its factories. The truth is, even Toyota struggles to make the system work effectively outside Japan.

Toyota has long maintained that the Toyota Way can only be grasped through constant practice on the factory floor under the tutelage of an experienced production master. There's an almost mystical, Zen quality to the Toyota approach. It has its own specialized vocabulary, and practitioners advance through formal gradations of enlightenment. Executives insist it requires the proper mindset as well as discipline and hard work. To the uninitiated, discussions about the Toyota Way can sound like bad dialogue from *The Karate Kid*. But what worries Toyota's production wizards is that methods for imparting the secrets of their system have not kept pace with the sophistication of the system itself. "Toyota is so big now," says Teruo Suzuki, general manager of Toyota's human resources department. "We make so many cars in so many different places with so many people. Our greatest fear is that as we keep growing, our ability to maintain the discipline of *kaizen* will be lost."

In an effort to speed the transmission of skills on the factory floor, Toyota recently created a new facility, the Global Production Center, in a corner of its Motomachi plant in Toyota City. Trainees begin by watching "visual manuals" illustrating basic production techniques, then move to a practice area where they perform progressively more complicated tasks. A December visit to the center found a class of about 1,500 workers—half from overseas facilities in China, Malaysia, and Indonesia—being drilled at stations for parts pickup, welding, painting, and plastic stamping. At Screw Grommet Insertion Station No. 2, a worker from China struggled to keep pace with a computer. Elsewhere, workers from Indonesia, perfecting their body-painting techniques, practiced a series of deep knee bends holding spray guns filled with water. Trainees at the Cylinder Insertion Station were given one minute to fit a sequence of progressively larger metal cylinders into a row of corresponding

holes. It looked easy, but no one succeeded on first attempt. The trainer, who can complete the sequence in 24 seconds, showed novices how to position their feet, distribute their weight, and hold each cylinder to get it right. The center is preparing visual manuals for hundreds of assembly-line tasks, according to general manager Koichi Ina. The goal, he says, is to train four times as many workers without having to dispatch more Japanese managers abroad.

Cho wants better managers too. He complained in a speech last year that Toyota had a "short bench" of global managers. To remedy that, Toyota recently established the Toyota Institute, an in-house leadership-development program run in partnership with the Wharton School. The alliance is a radical departure for Toyota. Traditionally, its leaders have insisted on grooming senior and middle management themselves and have taken a dim view of foreign MBA programs. Cho's mentor, Taiichi Ohno, is famed for his assertion that Toyota managers should be sufficiently engaged on the factory floor that they have to wash their hands at least three times a day.

Cho, meanwhile, is trying to apply what he learned on the factory floor to corporate management: He wants to shorten the chain of command, improve accountability, and speed up the decision-making process. Last year he slashed the number of Toyota directors from 58 to 27. He hopes to increase the number of non-Japanese directors, now only five. And he says he wants a management structure that is as instantly responsive as Toyota's production lines. "If there's a problem," Cho says, "I want to hear about it in an hour."

Cho is an affable and low-key manager who prefers to give credit to his predecessors and subordinates rather than steal attention for himself. He is also a nimble problem solver, quick to adapt to conditions at hand. Cho says he learned the value of flexibility during his nine-year stint as general manager of the Georgetown plant. The constant questioning from U.S. workers, he says, helped him see that many aspects of Toyota's production process had to be retooled for U.S. factories—and could be improved on in Japan as well. He realized, he says, that "we did a lot of things without thinking, because we had been taught in a certain way by our predecessors, and it seemed to work, so we just did it." Toyota's expansion into the U.S., he argues, "rejuvenated the entire company, forcing everyone to make adjustments and abandon outdated ideas."

Now Toyota faces a similar challenge in China, the world's fastest-growing auto market. In Beijing last spring, Akio Toyoda, grandson of the company's founder and the executive leading its China operation, acknowledged that Toyota "is still the new kid on the block." That's putting it politely. The Japanese company, which makes only about 130,000 vehicles in China and has a market share of less than 5%, trails far behind Volkswagen, GM, and Honda. Toyota hopes to boost production to one million units and raise its China market share to 10% by the end of the decade. But it has made some uncharacteristic blunders.

After the normalization of relations in the 1970s, Toyota was the odds-on favorite to lead the first wave of foreign investment in China's auto industry. But Toyota, preoccupied with efforts in the U.S., dithered over Beijing's invitation. Chinese leaders took offense. In the 1990s they shrewdly exploited Toyota's desire for an alliance with China's strongest domestic maker, state-run Shanghai Automotive, to secure a sweeter deal with GM. Toyota compounded its problems by turning up its nose at an overture from Guangzhou Automobile, the next-best ally, allowing Honda to rush in and close a deal. Finally, in 2002, with attractive dance partners disappearing, Toyota was permitted to form an alliance with First Autoworks in Changchun.

This past September, Toyota announced plans to spend \$460 million on a plant to produce Camry sedans with Guangzhou Automobile and cooperate with FAW in producing Prius hybrids, now made only in Japan. Bringing hybrids to China is a bold step that signals Toyota's commitment to get in the game. Most Japanese manufacturers are loath to take leading technologies to China for fear they will be stolen. And Chinese consumers aren't exactly clamoring for environmentally friendly cars—especially if they have to pay extra for the privilege of driving them. But the decision makes an important statement. Beijing is eager to promote clean, fuel-efficient vehicles and has made it clear that it expects Toyota to share its best technology with Chinese partners as the price of admission to China's market.

The Chinese aren't the only ones hoping to get their hands on Toyota's hybrid technologies. During a trade mission to Tokyo in November, California Governor Arnold Schwarzenegger made a point of seeing Cho to urge him to build a Prius factory in his state. Cho says Toyota intends to manufacture some form of

hybrid vehicle in the U.S. by 2006 and that it will decide on a location within the next few months. In the meantime Toyota is scrambling to meet U.S. demand for hybrids. It will double to 100,000 the number of Prius sedans it ships to the U.S. this year, and it is rolling out sleek hybrid versions of its Highlander and Lexus SUVs. Critics say Toyota is losing money on each hybrid car it sells, but securing early dominance in the hybrid market is likely to yield future dividends.

Cho credits his predecessor, Hiroshi Okuda, now Toyota's chairman, for prodding the research and development team to bring the Prius to market before the technology was perfected. And he cites the popularity of the hybrids as an example of the way Toyota is learning to move more swiftly. "If this had been left to the R&D guys, we'd probably still be tinkering with it," Cho says.

Now it is Cho who is doing the prodding. Between 2004 and 2007, Toyota will revamp 93% of its fleet, according to Prudential Securities analyst Michael Bruynesteyn, far outpacing U.S. rivals and lowering the model age of the average car manufactured by Toyota to less than half that of GM. Meanwhile, Toyota is muscling in on Detroit's favorite profit niches, including SUVs and powerful trucks, as well as broadening its luxury-car lineup.

Closer to home, Toyota has taken the lead in organizing the World Expo, set to open in Aichi Prefecture in March. It dispatched a top executive to supervise construction of the new Chubu International Airport, which was completed this month, on schedule and under budget. The airport clears the way for Toyota to move thousands of executives from the company's administrative offices in congested Tokyo to Nagoya, where it is building a gleaming 47-story headquarters.

It's unclear whether Cho will occupy the presidential suite when the Nagoya office opens in 2006. Many expect him to vacate his post at Toyota's annual meeting in June, possibly to succeed Okudain the more ceremonial role of chairman. Whether or not Cho stays on, expect Toyota to keep pulling its handcart uphill—and to rush to the next mountain the moment it gains the summit.