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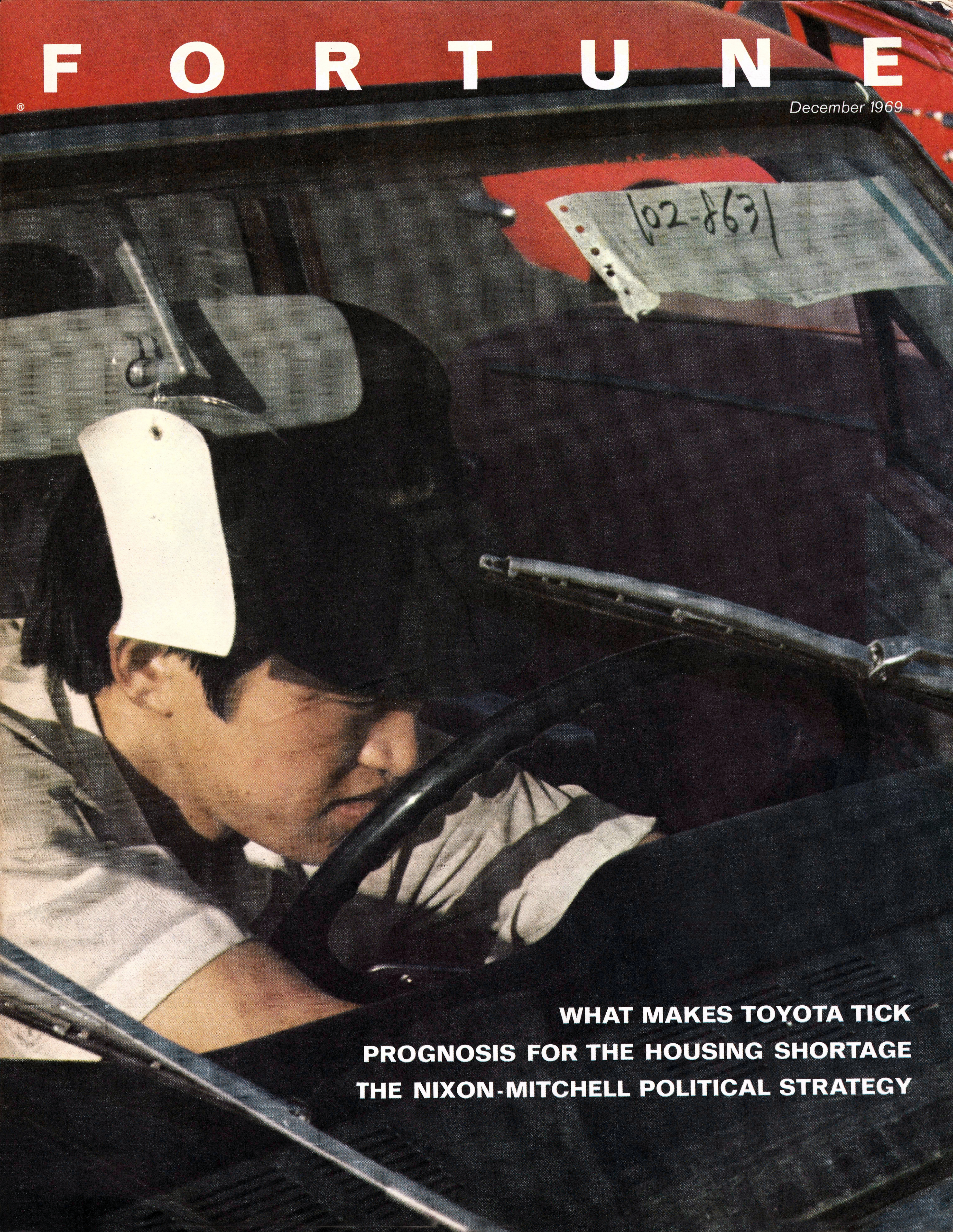


WHAT MAKES TOYOTA TICK

PROGNOSIS FOR THE HOUSING SHORTAGE

THE NIXON-MITCHELL POLITICAL STRATEGY

THE WORLD'S FASTEST-GROWING AUTO COMPANY

Toyota has vaulted into sixth place and is overtaking Fiat. From a strong base in Japan, it is reaching out to become a fearsome international competitor.

by William Simon Rukeyser

Low-priced Corollas roll off a typically spacious and clean assembly

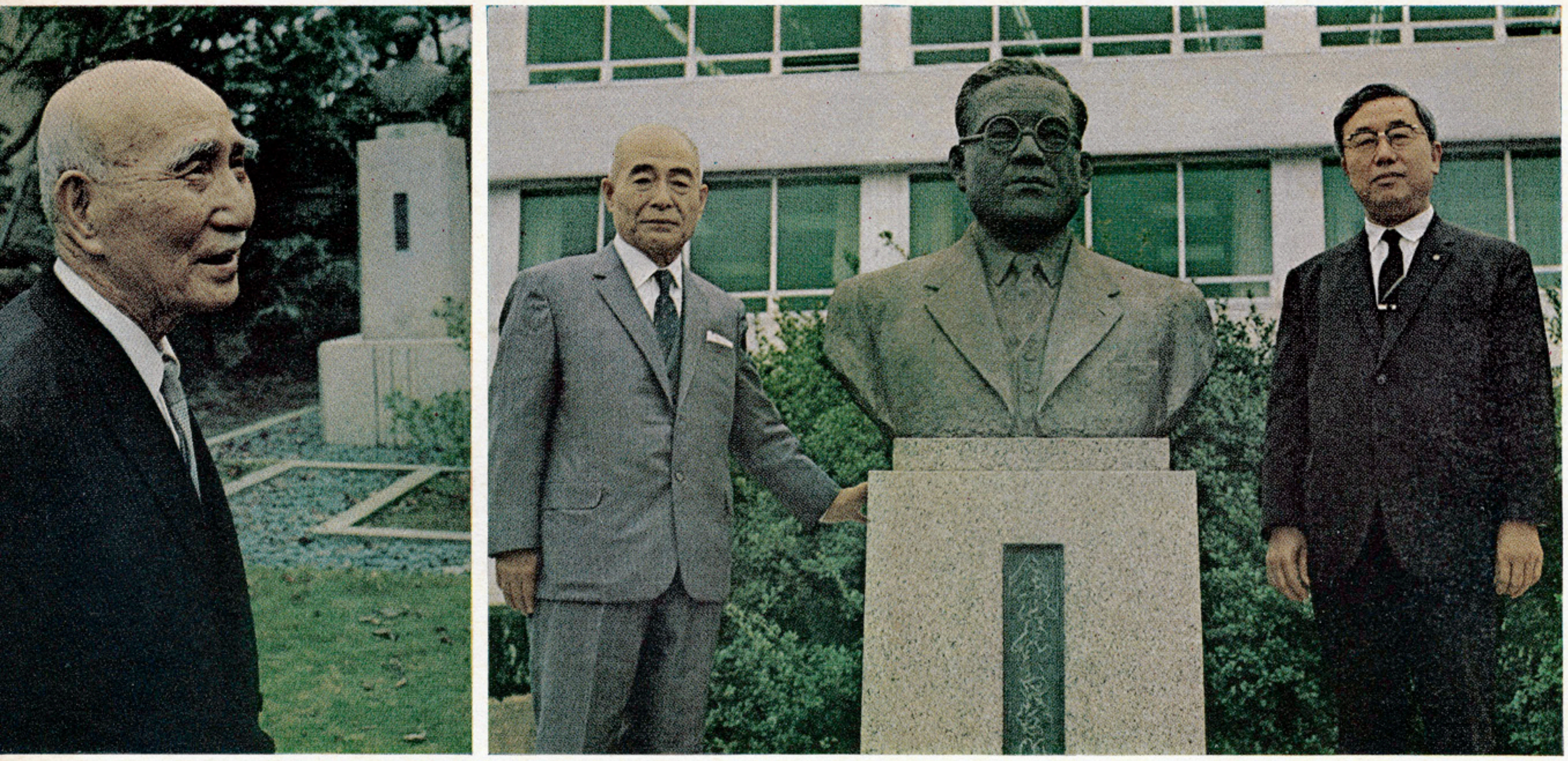
For most of its history, the automobile industry has been dominated by a small group of companies in the industrialized West—the American Big Three, plus a few European manufacturers such as Volkswagen, Fiat, and British Leyland. But this tidy and familiar line-up is now being upset by the unexpected emergence of a powerful new Japanese challenger, which has a solid base in its home market and is making important inroads into markets around the world. No member of the industry, no matter how strong, can afford to overlook the challenger, whose name—Toyota Motor—is rapidly coming to be both celebrated and feared.

Toyota's record in the toughest auto market of them all, the U.S., indicates the company's increasing competitive might. In the U.S., sales of imported cars have been rising without interruption since 1962. This year they will account for a record 11 percent or more of the total new-car market. Of all the foreign companies competing for that segment of over one million cars, Toyota has had the fastest growth. Its sales here, which amounted to only 6,388 vehicles in 1965, went to 20,000 in 1966, and since then have almost doubled every year. Toyota has now outdistanced a long string of more famous makes, among them Fiat, Renault, Austin, and MG, as well as the cars imported into the U.S. from the Big Three's foreign subsidiaries, including GM.'s Opel and Ford's Cortina.

This year Toyota will sell around 125,000 cars in the U.S.; until now, no importer but Volkswagen has surpassed 100,000. Toyota's feat is being achieved in a year when VW's American sales have been in decline for the first time since it entered the market in 1949. In the Los Angeles area, the stronghold of foreign cars in the U.S., Toyota lately has been the fourth largest seller of *all* makes—behind only Ford, Chevrolet, and VW. Next year Toyota expects its U.S. sales to exceed 200,000.

This breathtaking performance in the U.S., however, does not mean that Toyota is unduly dependent on exports. The company sells one-quarter of its production abroad, enough to make it the largest earner of foreign currency in Japan, ahead even of Mitsubishi Heavy Industries, a shipbuilder and manufacturer of heavy machinery as well as autos. The big European auto companies depend far more on exports: 40 percent of Fiat's auto production goes abroad, and more than 70 percent of Volkswagen's.

line at Toyota's big Takaoka plant, completed in 1966. The sign proclaims: "Good products, good thinking."



Once considered naive provincials by the sophisticates of Tokyo, Toyota's top managers, natives of the Nagoya area, have taken a position of leadership in the business community. Taizo Ishida, eighty-one (left), is chairman of Toyota Motor Co. and also president of the affiliated Toyoda Automatic Loom Works. Ishida, whose specialty is finance, stands in front of a monument to Sakichi Toyoda, founder of the Loom Works. Beside a bust of Sakichi's son Kiichiro (right), who started the automotive operation, are Toyota's top marketing and technical men, Shotaro Kamiya, seventy, head of Toyota Motor Sales Co., and Eiji Toyoda, fifty-six, president of Toyota Motor Co.

Furthermore, Toyota's foreign markets are well distributed. Less than half of the corporation's exports come to the U.S. It has distributors in 110 countries, and even outsells VW in a few places—Australia, the Philippines, Thailand, Puerto Rico, Hawaii.

Toyota also has a commanding position in a fast-growing domestic market. Japan's consumption of motor vehicles has been bounding ahead by about 20 percent a year—a faster rate than that of any other industrialized nation. And Toyota's share of the swelling Japanese market has been increasing.

As recently as 1962, Japan's annual output of motor vehicles was still less than a million; last year, just over four million cars, trucks, and buses came off the nation's assembly lines, a production exceeded only in the U.S. Toyota accounted for 26.9 percent of that output. The company is Japan's largest maker of both cars and trucks, even though it does not produce any of the tiny, motorcycle-engined vehicles that currently account for over one-quarter of all auto production in the nation. Toyota's only close rival, Nissan Motor Co., maker of the Datsun, had 24 percent of total output. (In the U.S. market, too, Nissan has been doing well, but not as well as Toyota.) Toyota's share of the conventional passenger-car market in Japan is already over 40 percent, and rising.

The rate of growth of auto production in Japan is expected to taper off in the next few years. Nonetheless, by 1974 the industry should be producing a minimum of five million cars and trucks a year, including perhaps 1,500,000 for export. By then, cars, including station wagons (which the Japanese classify as trucks), should constitute about two-thirds of all vehicles produced, compared with less than 50 percent a couple of years ago. According to informed estimates, Toyota is likely to account for close to half of that impressive 1974 total.

Last year, with its production of just under 1,100,000 vehicles, Toyota ranked sixth among the world's auto companies. This year, by producing around 1,400,000, it will come almost abreast of Fiat, now in fifth place. VW, Chrysler, Ford, and G.M. are still ahead, but Toyota is gaining on them all. Next year it should come close to matching Chrysler's current U.S. domestic production of around 1,700,000, although foreign subsidiaries will keep Chrysler's total worldwide output ahead for a while longer.

A congenial climate for expansion

Toyota's dramatic rise has been encouraged by a highly favorable economic environment at home and abroad. The company's exports have boomed during years when world trade in general has climbed to historic high levels, and

At the foot of Mount Fuji, a Crown hardtop barrels around a new test track. Toyota engineers designed special equipment to pave the steeply banked track with seamless asphalt rather than concrete.

Photographs by Osamu Murai

when the U.S. market in particular has been unusually receptive to imported cars. At the same time, Toyota has been well shielded from the foreigner on the home front: Japan has been almost entirely closed to outside auto makers by a roadblock of tariffs and other barriers.

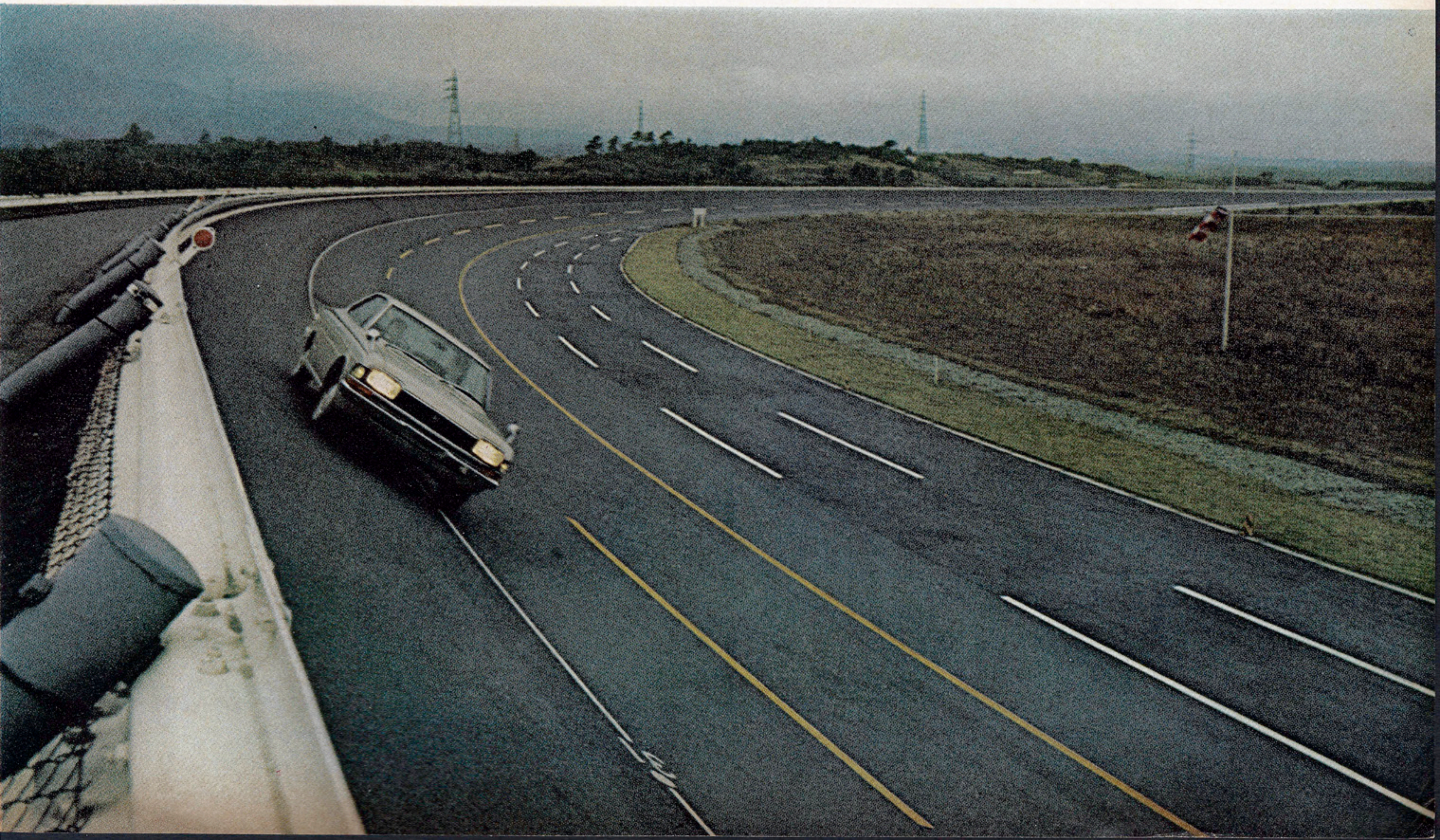
Helpful as these external factors have been, however, they by no means explain Toyota's success. All Japanese companies have enjoyed the same pleasant conditions. Yet Toyota has not only retained its edge in sales through a decade of tumultuous growth, but has also emerged as incomparably the most efficient and profitable auto company in Japan—and, by some measures, in the world. The company's management has demonstrated rare qualities of intelligence, imagination, and flexibility. It has shown outstanding strength in all the major managerial areas—marketing, production engineering, finance, and labor relations.

Toyota is a company closely geared to the marketplace. Its market researchers have accurately forecast the annual growth of sales for nearly two decades—a remarkable record even considering that for the past few years demand has far exceeded supply. Market research has also helped shape the designs of Toyota's various models. In the early 1960's the company became interested in building a two-door hardtop, a body style immensely popular in the U.S. but almost unheard of elsewhere. At that time, one of the very few two-door hardtops offered on world markets was British Ford's Consul Capri, a car selling so sluggishly that it was eventually discontinued. Toyota's research indicated that buyers were cool to the Capri because, although the car was designed to compete with sedans, its rear seat was too small for adults. They concluded that a hardtop with more room in the back had a good chance of success. Since its introduction in 1965, Toyota's Corona hardtop has sold well not only in the U.S. but also in Japan. The company now offers two-door hardtops in three of its five main car lines.

No confining tradition

In approaching its diverse markets, Toyota has benefited from the fact that Japan essentially has no motoring tradition to hem in its industry. Japanese auto companies got started more than a generation later than their Western competitors, and did not produce significant numbers of passenger cars until the 1960's. They have looked to Detroit for guidance at almost every stage of their development. Before World War II, the guidance took the form of on-the-spot demonstration: General Motors and Ford were assembling cars there. That period, and the seven years of U.S. occupation after the war, helped shape Japanese attitudes toward automobiles. As a result, no great conflict has emerged between the tastes of Toyota's domestic customers and foreign buyers. Toyota cars, while mostly smaller than U.S. models, strike many Americans as reassuringly familiar in styling, dashboard layout, and road behavior.

By contrast, the European motor industry predates Henry Ford. It is richly encrusted with traditions quite different from those of the U.S. The comparative virtues and vices of European and American cars have provided the subject for hours of inconclusive debate. But one certain consequence of the differing outlooks is that the U.S. importers, before they can promote whatever make they are selling, must first convince U.S. buyers that they want a European, rather than an American, type of car. It can be done: Volkswagen makes few concessions to traditional U.S. predilections. But Toyota has been lucky enough to avoid the whole issue.



Cars await shipment to the U.S. at Toyota's wharf near Nagoya. Until last year, Toyotas traveled aboard a motley fleet of chartered general-cargo ships, and forty cars out of a hundred were damaged in transit. The introduction of four big, specially designed car-carrying vessels, called Toyota Marus, has cut the damage rate to about 2 percent.

The men who run Toyota relish their position at the top of the Japanese sales charts, but they have remained quite clear about the distinction between sales and profits. They have rarely shown any inclination to boost volume at the expense of earnings—their own or those of their dealers. Among other advantages, this policy has helped the company to build tremendously strong dealer organizations in Japan and, when allowance is made for the extreme rapidity of the buildup, also in the U.S.

In planning its roster of models, Toyota has followed the classic G.M. strategy of blanketing the market with a variety of nameplates, each one a step above the other in size and cost. Cars for the mass family market, rather than sports or other specialized models, are emphasized. Toyota's cheapest car line is the Publica, a utilitarian series reminiscent of the French Citroën 2 CV, intended for buyers moving up from motorcycles or minicars. It is not exported to the U.S. Then, in ascending order, come the Corolla, roughly similar in size and price to the VW Beetle, the best-selling Corona, the Corona Mark II, and the six-cylinder Crown, which costs up to $3,700 in the U.S. and is about the size of an American compact. In addition, the company builds two limited-production prestige cars: the luxurious, eight-cylinder Century, which costs $6,500 in Japan and is not exported, and the 2000 GT, a $7,000 two-seater that looks something like the Jaguar XKE. Toyota also makes a full range of trucks.

Exotic fringe benefits abound at Toyota. Workers can grow their own plants, amid the squawks of tropical birds, in a jungly hothouse a few hundred yards from the smokestacks of Aisin Seiki Co., a parts-producing affiliate. Below, employees and their families disport themselves during a company-sponsored athletics day.

The most productive labor in the world

Many Westerners still cling to the outmoded notion that Japanese industry depends for its successes on a bottomless reservoir of inefficient but cheap labor. Toyota has upended the stereotype by showing a genius for making efficient use of a compact work force. Its employees are now almost certainly the most productive auto workers in the world. In fiscal 1969, each of Toyota's approximately 39,000 workers (including those of its minority-owned sales affiliate) produced, on average, more than $44,000 in sales. By comparison, General Motors' sales per employee last year were about $30,000, Nissan's were $24,000, and Volkswagen's $20,000.

Not only is Toyota's productivity high in absolute terms, but in recent years it has been increasing at an annual rate of 14 to 19 percent. Twenty years ago the average Toyota worker produced less than 1.5 vehicles annually. Five years ago the figure was twenty vehicles, and last year it was around twenty-eight. This ability to get a lot of production out of a small work force has a special value in Japan, because workers there, once hired, normally stay on the payroll for life; employees casually taken on during a period of expansion can become a serious embarrassment when business levels off.

Toyota's efficiency results partly from the newness of its facilities: all its passenger cars are made in plants built since 1959. The company's management has been quick to take on advanced production techniques. Computers guide the flow of parts to the assembly lines, and are extensively used elsewhere in the organization. (The shoes of company technicians can sometimes be seen outside the computer rooms, lined up in the traditional Japanese fashion.) In one highly automated new plant, two shifts of only eighty men each are turning out some 30,000 auto engines per month. Toyota has adopted aerospace-industry techniques of quality control; by testing quality at every stage of the manufacturing process, the rate of rejects at the final inspection stage has been dramatically reduced, and costs of repairing defects covered by warranty have been slashed. One of Toyota's Japanese bankers observes: "I have been to Detroit and seen the car factories. I was not impressed."

With its high productivity, moderate labor costs, and access to inexpensive Japanese steel, Toyota has been able to generate exceptional profits. In the fiscal year that ended last May, Toyota Motor Co. had net earnings of $85,437,000 on sales of $1,715,048,000, up from $66,330,000 on sales of $1,305,315,000 the previous year. That performance must be viewed with Toyota's odd corporate

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structure in mind. Actually there are two separate corporations—Toyota Motor Co., which makes the cars, and Toyota Motor Sales Co., which markets them. Each puts out its own financial statement. Neither has a majority interest in the other. Full consolidation would probably increase the motor company's sales figure by about 15 percent, its profit by somewhat less. Such ratios as return on investment would be affected only slightly.

Toyota Motor's return on investment in fiscal 1969 was 22.2 percent—the highest earned by any major auto company anywhere. Among U.S. auto makers, return on investment last year ranged from G.M.'s 17.8 percent down to American Motors' 6.2 percent. Comparisons between countries can be misleading, because accounting practices differ. However, Toyota has been setting aside unusually large sums for depreciation and reserves; its reported earnings are more likely to be understated by U.S. standards than overstated. Among large Japanese corporations, Toyota's return on investment was exceeded only by the 25.95 percent earned by Matsushita Electric, manufacturer of Panasonic electrical products. Nissan's fiscal 1969 return was 18.4 percent. The average for all Japanese industries, according to the Bank of Japan, was 13.8 percent.

Toyota's growth curve, achieved without mergers, resembles that of one of the more daring U.S. conglomerates. But its balance sheet does not. Toyota's top managers and their bankers, like those of many other Japanese companies, were badly shaken by their experiences at the brink of bankruptcy after World War II. Unlike most Japanese companies, though, Toyota has generated enough cash to implement the conservative financial principles inculcated during those dark years. Toyota has recently kept about 15 percent of its assets in cash, an unusually high proportion by international standards. Its ratio of long-term debt to shareholders' equity is about 15 to 85. The opposite would be closer to the norm for Japanese industry. Toyota's capital spending, most of which comes out of cash flow, has recently amounted to about $180 million a year, or more than 10 percent of sales.

One of Toyota's electrifying achievements has been in the field of labor relations. The company has not lost a single hour of production because of a strike since 1959. Toyota

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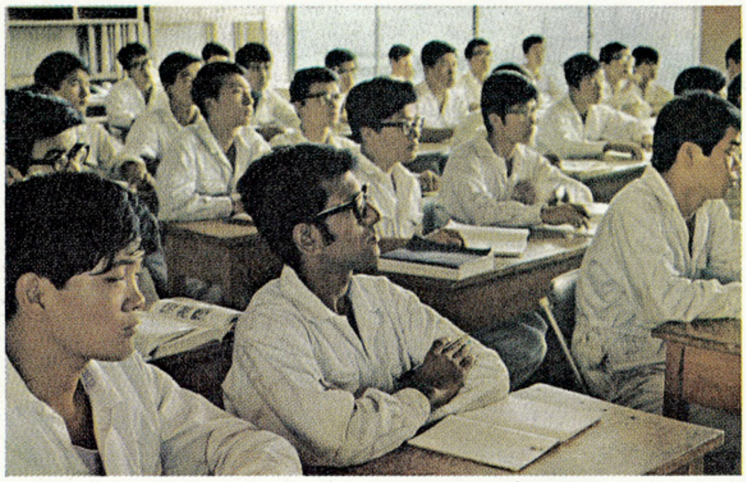
A SCHOOL RUNNING AT OPEN THROTTLE



Japan has raced into the automotive age. Fifteen years ago, the nation had less than one motor vehicle for every 200 people; now the ratio is about one to eight. This motorization, which was fostered by Toyota long before most people thought there could ever be a mass market for automobiles in Japan, has required the creation and the maintenance of a supply of skilled mechanics to work both on the line and in service stations.

Since 1961, Toyota Motor Sales Co. has operated the Toyota Motor Mechanics Junior College on a campus three miles outside the city of Nagoya. The college offers an intensive twelve-month course with some 1,500 hours of instruction. In classroom sessions, instructors teach such subjects as civics, mathematics, and commercial law, as well as automotive repair. But the 360 students spend nearly two-thirds of their time in the repair shops, taking apart and putting back together the school's 100 vehicles. Graduates normally qualify for a government mechanic's license that would take two years to obtain by other means.

Currently, the college is turning away three times as many applicants as it accepts. Besides its regular curriculum it also offers a one-week refresher course for mechanics already working for Toyota dealers. And as part of Japan's foreign-aid program, the college gives six months' training each year to about ten students from other countries of Asia.

Before the founding of the college, Toyota Motor Sales set up a number of enterprises aimed at promoting acceptance of automobiles. These include a car-rental agency and two huge driving schools, at one of which some 6,000 students each year pay more than $100 apiece for a course of more than thirty lessons. Started as promotional devices, the rental business and driving schools now are profitable. The Mechanics Junior College is not: the tuition fee of about $250 covers less than one-quarter of the school's operating expenses. But 98 percent of its graduates go to work for Toyota, its affiliated companies, or its dealers.

workers demonstrate a characteristically Japanese devotion to their jobs, often even hanging around the assembly line after hours to discuss improvements in the manufacturing process. A company union negotiates wages, hours, and fringe benefits, but leaves such matters as the speed of assembly lines strictly to management's discretion.

Undoubtedly, some of the reasons for this industrial peace that very nearly passes understanding lie deep in the nature of Japanese society. But a mystical view of Japanese labor relations does not explain everything. By no means have all Japanese companies been free of strikes for a decade. And Toyota itself used to have periodic work stoppages. But now management works hard at maintaining smooth relations. It runs elaborate orientation programs, and actively encourages informal contact between employees in different departments and at different levels of authority. The company provides highly visible fringe benefits, such as free lunches and subsidized housing. And, because fast growth constantly creates new positions, Toyota has got away from the Japanese habit of promoting people almost exclusively on the basis of seniority. Most Toyota workers are young—the average age is twenty-six—and their titles and salaries are determined chiefly by the quality of their work.

Further, wage increases in the past ten years have been large enough to make militancy superfluous. The pay of Toyota workers has recently been racing ahead by almost 20 percent a year, and now averages about $2,800 annually, a level similar to that of Italy. Parity with Europe seemed a hopeless dream a few years ago, but now union officials are beginning to talk about catching up with the U.S., an aspiration that Toyota's productivity would seem to justify.

All is not perfection

The geometric growth rate that supports such hopes has inevitably left a certain amount of corporate dislocation in its wake. For example, the assembly lines in the airy Takaoka plant recently were turning out fewer than fifty low-priced Corollas an hour. In Detroit, not even the Cadillac is assembled at such a stately pace. Takaoka was designed to produce sixty Corollas an hour, but facilities to build enough Corolla engines to support that rate of assembly will not be completed until sometime next year.

A similar situation has left Toyota in the anomalous position of simultaneously producing—and thereby requiring its dealers and distributors to stock parts for—two fundamentally different four-cylinder engines of almost identical size. The company has been unable to add productive capacity for the newer engine fast enough to allow the older one to be phased out. While pointing to the merits of both engines, executives concede that they do not plan to continue the parallel production indefinitely.

The Toyota Corona was the first economy import to be offered in the U.S. with "factory" air conditioning. Currently about 23 percent of the Coronas sold in this country are ordered with that option—which is not surprising, since for $295 the buyer gets an efficient air conditioner, neatly mounted in the dashboard and similar in many ways to the "factory air" on U.S. cars. But the Toyota units are actually installed many miles from the factory where the car is built. Air-conditioned Coronas are still too insignificant as a percentage of total production, the company says, to justify disrupting the assembly lines. Instead, Nippon Denso Co., the Toyota affiliate that makes the air conditioners, has set up a shed at the dock where Toyotas are loaded for shipment to the U.S. Here the air conditioners are installed by skilled workers who spend three to six hours on each car, removing and replacing a variety of factory-fresh parts.

Inefficiencies such as these in some ways demonstrate Toyota's potential for further improvements in its already awesome productivity. However, some other steps taken to achieve rapid increases in output may have led to unwise long-term commitments. Toyota has recently bought minority interests in two small motor companies, Hino Motors and Daihatsu Kogyo, partly in order to obtain the use of their production facilities. These companies have begun producing some of Toyota's low-volume models in distant plants. If Toyota should someday end this makeshift arrangement by consolidating all production in its own factories, it will have to find something else for the affiliates to manufacture.

As the evidence of Toyota's great technical and financial strength accumulates, and its sales on world markets balloon, there seems less justification for the protectionist wall that still surrounds the Japanese auto industry. Government measures have made it virtually impossible for foreign manufacturers either to export vehicles to Japan or to produce them there. Japanese tariffs and taxes (even after Kennedy Round reductions) help make even the cheapest American cars, such as Ford's Maverick, twice as expensive as they are in the U.S. But Toyota can sell its cars in the U.S. for only $300 or $400 more than in Japan. Toyota's present share of the U.S. new-car market, about 1.4 percent, is twice the total share of *all* foreign manufacturers in the Japanese market.

Japan's restrictions on capital investment by foreigners date from a period when the country had a legitimate need to nurture infant industries. But Toyota is not an infant any more. Still, the government has so far banned any big foreign stake in a Japanese auto company. By contrast, Toyota owns part or all of a dozen assembly plants in countries from Canada to Korea.

This fall, under pressure from the U.S., Japan agreed to liberalize the rules governing foreign investment in the auto industry by October, 1971. But even after the planned changes, foreign participation in any company will be limited to 50 percent, and foreigners will be able to buy even that restricted share only of wholly new ventures, not previously existing companies. (One effect of that provision would be to rule out any unfriendly take-overs; but to be doubly sure of that point, Toyota Motor Co. recently amended its charter to make Japanese citizenship a requirement for membership on its board.) The big Japanese auto companies have only grudgingly endorsed even this inadequate degree of liberalization. But they cannot forever ignore the main arguments in favor of complete liberalization of investment—namely that the Japanese industry, despite its self-doubts, is now strong enough to face open competition, and that fairness dictates that others should be allowed to compete as freely in the Japanese market as Japanese companies can compete abroad. Moreover, intransigence about cars puts Japan at a disadvantage as it seeks to head off U.S. protectionist measures aimed at its exports of steel and textiles.

A helping hand from a horse

The explosive prosperity of recent years contrasts sharply with the situation during most of Toyota's history. The company was an outgrowth of the genius of one of Japan's most distinguished inventors, Sakichi Toyoda, designer of what forty years ago were the most advanced automatic textile looms in the world. In 1929 a Lancashire firm paid his company,

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Toyoda Automatic Loom Works, £100,000 for rights to manufacture Toyoda looms in England. Toyoda earmarked the money for research on the feasibility of diversifying into car production. The Loom Works eventually established an automotive department with Kiichiro Toyoda, Sakichi's son, at its head, and in 1935 the department's engineers unveiled their prototypes. On an early test drive from the headquarters of the Loom Works to the nearby industrial city of Nagoya, one of them broke down and had to be pulled back to Kariya by a horse.

In those days, Taizo Ishida, now chairman of the motor company, was general manager of the Loom Works, and he fretted that Kiichiro was likely to bankrupt the works with his fool notions about building cars. Ishida, a former schoolteacher whose father was a rice farmer, now allows that his opposition was mistaken, but his feelings about cars have not changed: he has never learned to drive. His affections remain closely tied to the Loom Works, which he still regards as the parent company.

Despite the need for assistance from the horse, building the prototypes convinced Kiichiro Toyoda of his staff's technical competence. But he had to assign one of his engineers to travel to America and see how to set up an assembly line. On reaching Detroit, the man decided to study the Packard plant, which offered convenient guided tours. Mingling with the tourists, he inspected the plant repeatedly for several days, making notes and sketches each night in his hotel room. Before anybody thought to question him, the engineer and his notebooks were on their way back to Kariya. The automotive department, which was soon to be reorganized into an independent company called Toyota Motor Co., Ltd., was ready to begin limited mass production. While the reorganization was being considered, one of the executives took a traditional Japanese precaution by consulting a numerologist, who advised using the modified spelling of the family name. When written in Japanese characters, "Toyoda" requires ten strokes of the pen, "Toyota" only eight. As of 1937, the number eight was believed to be more auspicious for the Toyoda family, and in retrospect no one is inclined to quibble.

Pressing needs, little money

After the war, Toyota started producing trucks for customers with pressing needs but little money. The sales manager, Shotaro Kamiya, who had come to Toyota from G.M. in 1937, began offering installment credit—a policy that persists to this day. But in February, 1949, U.S. occupation authorities introduced a tight-money policy that sent the economy into a fresh decline. Customers began missing payments, and by late in the year Toyota was stuck with large uncollectable debts and with unsold inventory increasing fast as union leaders pressured management to maintain output. For the six months that ended in March, 1950, Toyota reported a deficit of over $200,000. Executives were caught up in a hair-raising struggle to avert bankruptcy. With their principal backers, the big Mitsui and Tokai banks, they tentatively agreed late in 1949 on a plan to rescue the company.

The plan's principal provision was that Toyota would be split in two. Toyota Motor Co. would continue solely as a manufacturer of vehicles. A new, separate corporation, Toyota Motor Sales Co., with Kamiya at its head, would be responsible for marketing the vehicles and related products, such as spare parts. A main purpose of the separation of production and sales was to open up a ready source of working capital for the factory. Instead of keeping finished vehicles in inventory, the production company would immediately transfer ownership of new trucks to the sales company, which would pay for them by issuing notes.

This arrangement, however, would serve its intended purpose only if the manufacturing company could obtain immediate cash by discounting the notes at its banks. To make this possible, Toyota needed to convince the Bank of Japan that its two companies would be completely separate in fact as well as form. In December, 1949, at a dramatic conference in the Nagoya branch office of the Bank of Japan, Toyota officials and their bankers argued with passion the underlying need for the Bank of Japan to come to rescue of the national motor industry. Soon afterward, the central bank made known its agreement to accept Toyota's notes for rediscount.

That decision made possible the implementation of the whole package of rescue arrangements, and thus signaled the end of the most serious phase of Toyota's crisis. But the company remained in turmoil for many months. In the spring of 1950 the announcement of layoffs touched off a bitter two-month strike, the longest in Toyota's history. While the strike was on, Kiichiro Toyoda, whose health was failing, called on Ishida for help in straightening out the motor company's affairs. In July, a month after the strike ended, Ishida replaced Kiichiro as president.

The market is the leader

Partly because of the imaginative leadership of Shotaro Kamiya, the separation of the manufacturing and sales functions at Toyota has proved to be a key to the company's

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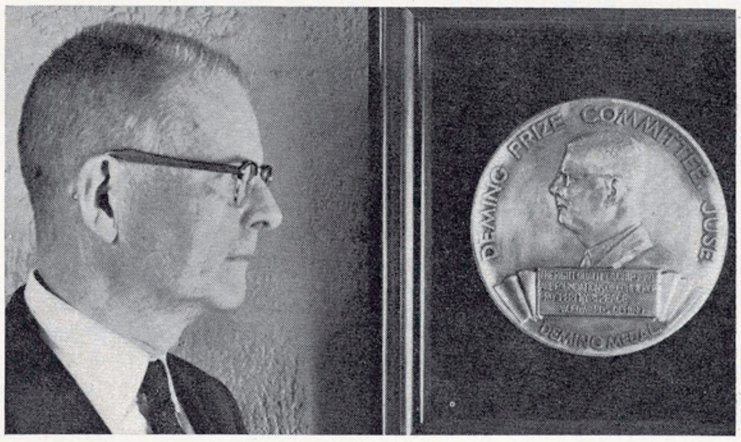
WESTERN MAN, EASTERN IDOL



While the man himself is not formally enshrined in Japanese hagiology, the teachings of W. Edwards Deming probably come closer to being revered by Japanese than those of any other Westerner. Deming, who is now sixty-nine, began preaching to the Japanese in 1950, when he delivered the first of a series of lectures on quality control, a subject dear to Toyota's heart. A professor of statistics at New York University's business school, he emphasized statistical methods of quality control—a topic that had special appeal for the Japanese at the time because they were aware of, and hampered by, their worldwide reputation as producers of cheap, shoddy goods.

Today Deming's methods pervade Japanese industry, from automobiles to steel and pharmaceuticals. Every year since 1951, the Japanese Union of Scientists and Engineers has awarded the Deming Prize for excellence in quality control. Although the celebrity attached to winning the prize has diminished somewhat as Japanese products have improved, it remains one of the country's most prestigious industrial awards. Among the proud recipients are Toyota, its affiliate Nippon Denso (a maker of electrical components), and its chief competitor, Nissan. As for Deming himself, he has been decorated by the Japanese Government for his services to the nation—which he believes is now doing a better job than the U.S. in involving all levels of management in quality control.

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success. The arrangement has worked even better than originally envisioned as a fountain of working capital for the factories: because of its ability to turn its expanding production into instant cash, the motor company has rarely had to borrow from banks in recent years. But the greatest value of the split has been to multiply the power of the sales executives in relation to the production men. By making it impracticable for the factory to produce more cars than the number and type that Kamiya agrees will be salable, the separation transformed Toyota from an organization almost entirely oriented toward production to one highly responsive to the demands of the marketplace.

Toyota's salvation was completed in June, 1950, by what must have seemed to company officials to be the providential outbreak of war in Korea. The long sales slump was ended by the U.S. military, which wanted trucks and was ready to pay in advance. Production increased rapidly, and Kamiya undertook an ambitious program aimed at nothing less than the motorization of Japan (see page 128). The company expanded the availability of installment credit, this time with adequate financial backing. Kamiya also welded the company's motley network of small, underfinanced dealers into Japan's largest and most profitable auto retailing organization. Today the relationship between the company and its independent dealers, often an abrasive one in the U.S. auto industry, remains civil, even rather familial, at Toyota. The company has never rescinded a franchise. When a dealer gets into real trouble, Kamiya sends in "salvage teams" to manage the dealership until the deficiencies are corrected.

At the factory, Ishida concentrated on building up the company's financial strength and its relationship with its subcontractors. Some 60 percent of Toyota's parts are purchased from other members of the Toyoda Group, which consists of nine firms in addition to the motor company, sales company, and the Loom Works. Though the policies of these companies are closely coordinated, financial ties are loose. None of the major companies is more than 50 percent owned by other members of the group. Holdings of the Toyoda family are small. Under Kiichiro Toyoda's cousin Eiji, now president, Toyota's technical staff made use of its freedom from sales and financial worries by learning how to make high-quality cars, a feat never previously mastered. G.I.'s in Japan during the 1950's joked unkindly that if you stripped off the lining of a Toyota's door, you could read the beer-can labels.

Entering the big league

Toyota made its first abortive stab at the U.S. market during the great import boom of the late 1950's. Its car, the Toyopet Crown, was a trucklike sedan with a top speed of around 60 mph. Sales never reached 1,000 a year, and after the introduction of Detroit's compacts the Toyopet was withdrawn. The company kept a toehold in the U.S., however, by continuing to offer its four-wheel-drive Land Cruiser.

Before returning to the U.S. car market in 1965, Toyota evolved a new strategy. The company decided to offer buyers in the under-$2,000 price class a comparatively luxurious, well put together car with acceleration superior to other economy imports, and to concentrate its initial sales efforts in Los Angeles, rather than trying to take on the whole continent at once. Export models of the new Corona were fitted with 90-horsepower engines, nearly twice as powerful as those then offered by VW. In addition to providing performance closer to that of U.S. cars, the bigger engine made it possible to offer options, such as automatic transmission and air conditioning. And by concentrating its resources in Los Angeles, Toyota, almost unknown in the rest of the country, was able to become a major advertiser on Los Angeles television and to set up sixty-five dealerships and a $2-million factory-parts depot in the area. Sales there soon were sufficient to justify expansion into other regions.

The company's top man in the U.S. is Shoji Hattori, a California-born Japanese who has been in charge of the U.S. operation since 1957, when his office was a converted Rambler showroom on Hollywood Boulevard. The highest-ranking American executive, national sales manager James McGraw, came to Toyota from Ford's Edsel division in 1959, a year that was about equally dismal for both organizations. In 1962, Toyota considered entering a joint venture with Ford to produce Toyota's austere Publica. Negotiations foundered because, according to Toyota, Ford declined to accept a minority interest.

A grand ambition

Today, Toyota faces uncertainties in both Japan and the U.S. In June, the Japanese Government began requiring auto companies to recall defective cars. Some 2,400,000 vehicles have already been affected, and for the time being at least, public confidence in the industry has been shaken. To make things worse, in August the U.S. magazine *Consumer Reports,* which has often written favorably about Toyotas, rated the Corolla station wagon "Not Acceptable." Explained the magazine: "A test driver actually bent the brake pedal trying to stop the car during one of our tests." Toyota has since modified the Corolla's brakes, but some uneasiness remains.

Toyota's U.S. sales, like those of all importers, may slow over the next few years as the U.S. auto companies introduce a wide range of new models selling for around $2,000. But Toyota seems well enough entrenched in the U.S. to survive. Its 750 U.S. dealers, supported by six computerized regional parts depots, are putting down roots and will be hard to dislodge. Their annual sales are already around 160 cars each, making them the first foreign dealers except VW's ever to average over a hundred cars a year. Toyota's U.S. advertising budget is currently $13 million annually. The company seems as formidable a competitor to Detroit as VW was in 1959 and 1960, when the Beetle was the only import to come unscathed through the first wave of U.S. compacts.

Moreover, new opportunities abound elsewhere. It is not inconceivable that even mainland China, so temptingly near, could one day become a big buyer of Japanese cars. Though he later added modest demurrers, eighty-one-year-old Taizo Ishida had a ready answer recently when asked if Toyota would eventually be the world's largest auto maker. "I have that ambition," he said briskly. END

Acknowledgments

19, 20, 24—Charts by Bob Weiss Associates
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