

# **TOYOTA HISTORY**



TOYOTA INSTITUTE  
ASIA PACIFIC

**TOYOTA MOTOR ASIA PACIFIC**

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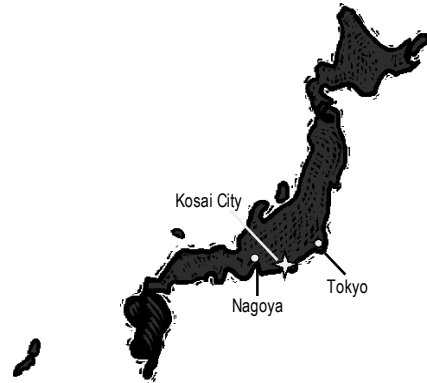
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## SAKICHI TOYODA

Sakichi Toyoda was born on February 14, 1867 in a small farming village, (near Kosai City), in Shizuoka Prefecture . He was the eldest of three sons. His father was primarily a farmer, but in the small village he also did carpentry work whenever needed. His mother did weaving to supplement the family income.



Tradition in Japan is very strong and deep rooted, especially in the early Meiji era. Young men were simply expected to follow their father's footsteps and become what their father was.



Sakichi was different, however. He wanted to contribute to his society in an era that needed his creative contributions. He began by witnessing the difficulties his mother experienced using the family loom to supplement the family income. He felt she, and others in his village, worked too hard when there could be a better loom than the ones they were using.

Against his father's wishes, he set his mind on inventing a better loom to contribute to society beginning with bettering the life of his own mother. His perseverance resulted in Sakichi's first invention, the Toyoda wooden hand loom (1890). He was 24 years old.

Although he became a successful businessman, Sakichi continued to commit most of his time working on his inventions. He never gave up trying to improve his looms. In 1927, Sakichi was awarded the 'Order of the Sacred Treasure'.

By the time of his death in 1930, Sakichi was not only a famous inventor but had built a highly successful business group, including Toyoda Spinning & Weaving Co. (Toyoda Boshoku).

## CONTRIBUTIONS OF SAKICHI TOYODA

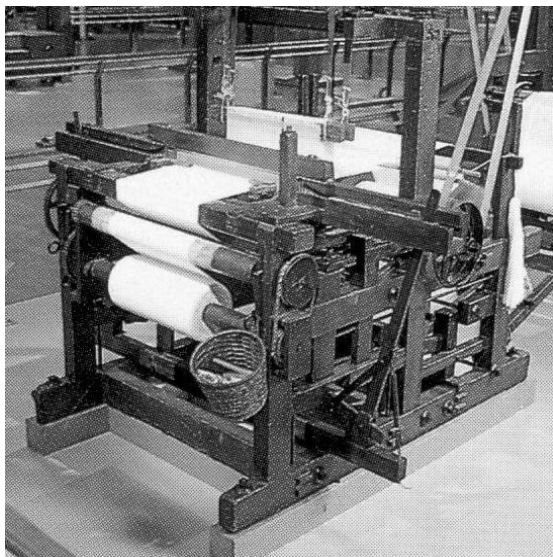
Sakichi Toyoda had registered many patents in his lifetime, both in Japan and around the world (e.g. UK, USA, Canada, Russia). The following are the two major examples of his creative and inventive thinking.

### 1890 Toyoda Wooden Hand Loom

This loom could be operated with just one hand. It was 40% to 50% faster in making cloth and the cloth was of better quality and softer than the previous looms could produce.



1896



The loom in this photo was manufactured in 1899 and used until 1966. It has been restored to its original form.

### Toyoda Power Loom made of wood & iron

This was the first power loom manufactured in Japan. It was a powered version of a hand loom. Its principal components were made of iron. It was invented with several automatic devices such as an automatic stop motion for broken thread (warp\*). It brought about major increases in productivity and product quality.

The Toyoda Power Loom introduced the concept of JIDOKA. That is, the loom stopped when a thread (warp\*) broke, ensuring a higher quality product.

\* Warp: the threads running the length of the loom (left to right) across which threads are woven

## **TOYODA PRECEPTS (FIVE MAIN PRINCIPLES OF TOYODA)**

The Toyoda Precepts, passed on from the time of the company's foundation up to the present day, have acted as the core of our management. The precepts capture the thinking of the founder of the Toyota Group, Sakichi Toyoda, and have become the basis of the Guiding Principles at Toyota Motor Corporation (TMC).

Risaburo Toyoda and Kiichiro Toyoda worked together to document the teachings of Sakichi Toyoda, and published them in the form of the Toyoda Precepts on October 30, 1935, the fifth anniversary of his death. From that time, the precepts have played the role of a spiritual support for employees as the principles of the company.

1. Always be faithful to your duties, thereby contributing to the Company and to the overall good.
2. Always be studious and creative, striving to stay ahead of the times.
3. Always be practical and avoid frivolousness.
4. Always strive to build a homelike atmosphere at work that is warm and friendly.
5. Always have respect for God, and remember to be grateful at all times.

## **KIICHIRO TOYODA**

Kiichiro Toyoda was born (1894) in the same house as his father, Sakichi Toyoda, a small farming village, (near Kosai City), in Shizuoka Prefecture. He grew up in Nagoya, Aichi Prefecture and eventually studied mechanical engineering at Tokyo Imperial University.

After graduating from university (1920), Kiichiro joined (1921) the Toyoda Spinning & Weaving Co. (Toyoda Boshoku Co.), owned by his father.

From that time, as a young engineer, Kiichiro began with full-scale research development for the automatic loom. Kiichiro, like his father, was dedicated to developing a new automatic loom.

In 1921, Kiichiro departed on his first trip to the West. Kiichiro was struck by the prosperity of the Western countries and recognized the difference between Japan and the West. He was especially amazed by the popularity of automobiles. He felt that the time of the automobile was also coming to Japan.

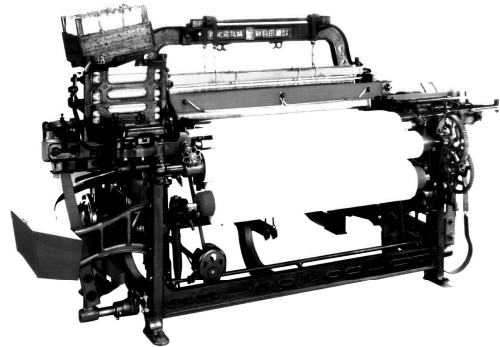


Although Kiichiro had a great interest in cars, he continued to conduct practical testing, based on his actual experience at Toyoda's weaving testing plant. In 1924, Kiichiro completed the Non-Stop Shuttle Change Toyoda Automatic Loom Type G.

**1924 Type G (Non-Stop Shuttle Change Toyoda Automatic Loom)**

The G-Type loom widely recognized for the use of Jidoka. That is, the loom stopped when a thread broke, ensuring higher quality product.

1 worker could operate 25 Type G looms



The Type G Automatic Looms were so successful that they attracted the attention of Platt Brothers & Company Ltd, the leaders in the textile machine industry in Europe.

In 1929, Kiichiro went to Europe to negotiate the sales of the foreign patent of Type G automatic loom. But the real purpose of the trip was to witness the automotive industry of the west. He was inspired by what he saw and returned to Japan with a renewed vision.

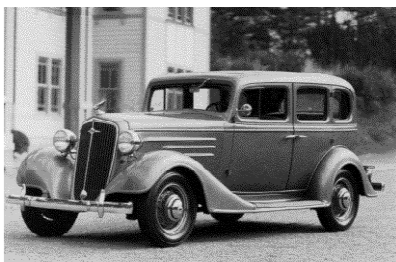
## **BEGINNING OF THE AUTOMOTIVE BUSINESS**

At that time, it was thought reckless to try to compete with the west in the auto industry. With the support of his brother-in-law, Risaburo Toyoda, Kiichiro employed a group of young engineers in order to train them in the development and manufacturing of automobiles in the future. They did not have any knowledge of automobiles and were trained with more emphasis placed on experience rather than textbook knowledge.



Kiichiro believed that it was critical to let the young engineers touch and study a mass-produced automobile. So, they started to disassemble a 1933 Chevrolet. By actually touching and disassembling a genuine car, and sketching the parts

and studying its materials, they began to grasp automobile fundamentals. The team then 'reverse engineered' the engine of the 1933 Chevrolet (the most powerful engine of the day – 65hp).



1934 Chevrolet

In 1933, Kiichiro gained approval from Risaburo Toyoda, President of Toyoda Automatic Loom Works (TALW) and the board members to the TALW to officially begin the Automotive Division.

In September 1934 after many failures, Kiichiro and his team built the 'Type A' engine that achieved the same power as their benchmark (1933 Chevrolet). Toyoda was on its way to realising the dream of a car for the masses.



Since Japan had very few natural resources, the company had every incentive to develop engines and vehicles that were highly fuel-efficient.

Kiichiro decided to base his car on the style and body structure of 1934 Chrysler De Soto. He wanted to adopt the De Soto's streamlined style for his Toyoda car. The style was ground breaking at the time and there were some who thought it was too early for Toyoda to adopt such a modern style. However, Kiichiro was determined to follow the trend, while adding the Toyoda sense of style.

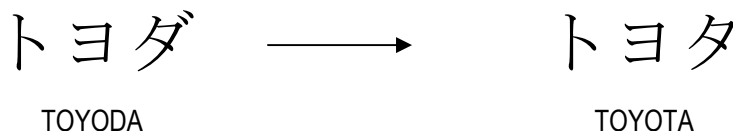


In 1935, the "Model A1" prototype with a "Type A" engine was produced. Further improvements were carried out by conducting test-runs including one in Tokyo.

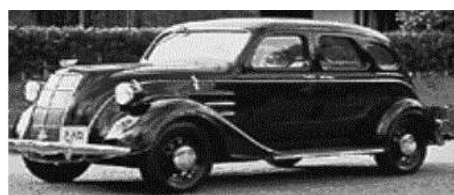
1935 Toyota Model A1 passenger car prototype

## A NEW NAME

The name "Toyota" was chosen in 1936 as the result of the company seeking ideas for a new logo from the public. This was aimed at promoting sales, and a new logo was chosen out of the 27,000 entries received.



There were a number of reasons for choosing the name "Toyota". One key reason was that the design looked less cluttered (less characters), and the word "Toyota" with its crisp and clear tone, sounded better.



1936 Toyota Model AA

## SALES NETWORK IN JAPAN

In 1935 Shotaro Kamiya joined TALW's Automotive Division. He was recruited personally by Kiichiro Toyoda to be responsible for the sales department. Kamiya brought vast experience in international and the automobile business.



**Shotaro Kamiya**

Although some felt that the company should establish a system of dealerships directly managed by the company, Kamiya insisted that it was essential for cars to be sold by those who had a deep knowledge of the local area and its people.

Therefore, Kamiya worked hard to build strong relationships with existing car sellers in each prefecture and eventually convinced them to create a dealer network for Toyota in Japan. By the end of 1938, a sales network consisting of

one dealer in each prefecture had been established.



**Dealers attending a demonstration  
of the Model "AA" (1936)**

Kamiya continued to build a strong mass sales system by introducing a number of initiatives. For

example, in the late 1950'S, when Toyota could barely sell its cars to the Japanese public, Kamiya

decided Toyota could increase demand by investing in Japanese

driving schools.

## HARD TIMES

As Japan became embroiled in World War II, the sourcing of basic materials for automobile manufacturing became more and more difficult. At one point Toyota was manufacturing trucks with no radiator grills, brakes only on the rear wheels, wooden seats, and a single headlight.

When the war ended in August 1945 most of Japan's industrial facilities had been destroyed or damaged, and the Toyota production plants had also suffered slightly. The company had many employees and the economic situation in Japan was chaotic. The tradition of dedication and perseverance proved to be Toyota's most powerful tool in the difficult task of reconstruction.

Just as the Japanese motor industry as a whole was beginning to recover, there was mounting concern that American and European auto manufacturers would overwhelm the Japanese market with their economic and technical superiority. Japan's automakers knew that they could no longer count on government protection in the form of high import duties or other barriers as they had before the war.

Since American manufacturers were concentrating their efforts on medium-sized and larger cars, Toyota's executives thought that by focusing on small cars the company could avoid a head-on market confrontation.

## LABOR DISPUTE

In 1950, Toyota suffered a serious conflict between labor and management in Japan.

Although over four years had passed since the end of the war, in 1949 Japan's economy was still in poor shape: goods and materials of all kinds were in short supply, inflation was rampant, and people in the cities were forced to trade their clothing and home furnishings for rice or potatoes to survive.

That year the Japanese government took measures to control runaway inflation,



Rally in front of the then head office

severely reducing consumer purchasing power and worsening the already severely depressed domestic automotive market. Japan's auto manufacturers found themselves unable to raise the funds needed to support their recovery efforts. The Japanese economy at that time was suffering from a severe depression, and because the Toyota dealers were unable to sell cars in sufficient quantities, recovery payments on sales fell behind and

inventory kept accumulating.

Finally, Toyota was unable to meet its regular payroll. Delayed payments were followed by actual salary reductions and then plans for large-scale layoffs. In April 1950, the Toyota Labor Union went on strike. Negotiations between labor and management dragged on with the union leaders bitterly opposed to any layoffs. Workers staged demonstrations, and all the while Toyota kept falling further into debt, until the company finally found itself on the verge of bankruptcy.

Discussions between labor and management finally focused on whether to admit failure, declare bankruptcy, and dissolve the company, or to agree on the dismissal of some employees and embark upon a

*"The company right now is like a stricken vessel; unless we can get some on board to jump off the ship, it will sink. For this reason I beg you to accept personnel adjustment"*

rebuilding program. In the end management and labor agreed to reduce the total workforce from 8,000 to 6,000 employees, primarily by asking for voluntary resignations. At the management level, President Kiichiro Toyoda and all of his executive staff resigned.

## A SEPARATE SALES COMPANY

During the era of financial difficulty for Toyota, bank loans were taken to keep the company operating. However, these loans were given on the condition that Toyota separate its sales department from the manufacturing departments and establish a separate sales company. As a result, April 1950 saw the establishment of Toyota Motor Sales Co. (Japan). When Toyota Motor Sales Co. (TMS) was established Shotaro Kamiya become the first president of TMS in Japan.



In the summer of 1957, Kamiya decided to send three employees to California on a survey mission. A few months later, Toyota set up a small dealership in Hollywood to sell the Toyopet Crown. The car went on sale in 1958. However, only 287 were sold.



Toyopet Crown

The first years in the U.S. were a disaster. Toyota eventually withdrew the Toyopet Crown from the market. Meanwhile its engineers in Japan tried to create a passenger car that American customers would actually want. The result was the 1965 Corona, a modestly priced vehicle for the U.S. market.

## RECOVERY

On Kiichiro's resignation Taizo Ishida, then was president of Toyoda Automatic Loom Works, took the role of president of TMC. President Ishida oversaw the recovery of TMC. He established a sound financial basis for Toyota. He then lead Toyota to become a "no debt" company.



Taizo Ishida

Once he was able to bring the company back to profit he asked Kiichiro to come back to TMC and take the role of president of TMC, once more. However, in March 1952 Kiichiro died of a stroke. He was 57 years old. As a result, Taizo Ishida continued as president of TMC until August 1961.

## PRODUCTIVITY

Not long after the strike was settled in July 1950, two of the company's new executives, Eiji Toyoda and Shoichi Saito, visited the United States. Seeking new ideas for Toyota's anticipated growth, they toured Ford Motor Company's factories and observed the latest automobile production technology.



On their return to Japan, the two men started a vital policy that has remained in force at Toyota - the continuing commitment to invest in only the most modern production facilities as the key to advances in productivity and quality.

Toyota moved quickly and aggressively in the 1950s, making capital investments in new equipment for all of the company's production facilities.

Along with improvements in its production facilities, Toyota also worked to develop a more comprehensive line of vehicles to contribute toward the growing motorization of Japanese society. During 1951, for example, Toyota introduced the first four-wheel-drive Model BJ 4WD vehicle (Land Cruiser).

Moreover, as the domestic demand for taxis rapidly increased, production of passenger cars also rose quickly, from 463 units in 1950 to 3,572 units by 1953.



Toyota BJ 4WD vehicle (Land Cruiser)

To accomplish his objectives, Eiji Toyoda enlisted Taiichi Ohno. Ohno transferred from Toyoda Boshoku to TMC to become the Machining Plant Manager, of Honsha Plant.

## TOYOTA PRODUCTION SYSTEM (TPS)

In 1954, Taiichi Ohno introduced the 'Kanban' system. He came up with the idea after visiting a supermarket in the US, where 'consumers' took 'products' from the stock shelves, and the 'storekeepers' replenished the stock to the level that was depleted. Kanban is a key tool in what would become the Toyota Production System (TPS). TPS was established based on two concepts. The first is "JIDOKA"(which can be loosely translated as "automation with a human touch").



Taiichi Ohno

This means that when a problem occurs, the equipment stops immediately, preventing defective products from being produced. The

second is the concept of "JUST-IN-TIME," in which each process produces only what is needed by the next process in a continuous flow.

Based on the basic philosophies of jidoka and Just-in-Time, TPS can efficiently and quickly produce vehicles of sound quality, to satisfy customer requirements.

#### **JIDOKA** – Highlighting/visualization of problems

Quality must be built in during the manufacturing process!-  
If a defective part or equipment malfunction is discovered, the machine concerned automatically stops, and operators stop work and correct the problem.  
For the Just-in-Time system to function, all of the parts that are made and supplied must meet predetermined quality standards. This is achieved through JIDOKA.

1. JIDOKA means that a machine safely stops when the normal processing is completed. It also means that, should a quality or equipment problem arise, the machine detects the problem on its own and stop, preventing defective products from being produced. As a result, only products satisfying the quality standards will be passed on to the next processes on the production line.
2. Since a machine automatically stops when processing is completed or when a problem arises and is communicated via the "ANDON (problem display board)," operators can confidently continue performing work at another machine, as well as easily identify the problem cause and prevent its recurrence. This means that each operator can be in charge of many machines, resulting in higher productivity, while the continuous improvements lead to greater processing capacity.

#### **Just-in-Time** – Productivity improvement

Making only "what is needed, when it is needed, and in the amount needed!"  
Producing quality products efficiently through the complete elimination of waste, inconsistencies, and unreasonable requirements on the production line.  
In order to deliver a vehicle ordered by a customer as quickly as possible, the vehicle is efficiently built within the shortest possible period by adhering to the following:

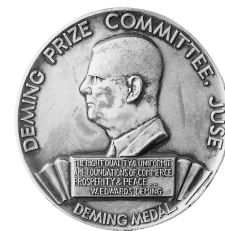
1. When a vehicle order is received, a production instruction must be issued to the beginning of the vehicle production line as soon as possible.
2. The assembly line must be stocked with small numbers of all types of parts so that any kind of vehicle ordered can be assembled.
3. The assembly line must replace the parts used by retrieving the same number of parts from the parts-producing process (the preceding process).
4. The preceding process must be stocked with small numbers of all types of parts and produce only the numbers of parts that were retrieved by an operator from the next process.

## GLOBAL MARKETS

Beginning with the Crown model, introduced in Japan in 1955, Toyota quickly expanded its passenger-car line to include the 1,000-cubic-centimeter Corona, then added the Toyo-Ace (Japan's first cab-over truck) and a large-sized diesel truck.



In 1955, Japan became a member of the General Agreement on Tariffs and Trade (GATT); but automobiles remained one of Japan's least competitive industries in the international arena. Toyota, foreseeing the coming age of large-scale international trade and capital liberalization in Japan, decided to focus on lowering its production costs and developing even more sophisticated cars, while at the same time attempting to achieve the highest possible level of quality in production.



This was a joint effort conducted with Toyota's many independent parts suppliers and one that proved so successful that ten years later, in 1965, Toyota was awarded the coveted Deming Prize for its quality-control achievements. That was also the year that the Japanese government loosened regulations regarding imports of foreign passenger cars. Now Toyota was ready to compete with its overseas competitors -- both in price and quality.

In subsequent years Japan's gross national product expanded rapidly, contributing to the impressive growth in auto sales to the Japanese public. The Toyota Corolla, which went on sale in 1966, quickly became Japan's most popular family car and led the market for autos of its compact size. Toyota continued to make major investments in new plants and equipment to prepare for what it believed would be a higher market demand.

## OIL CRISIS

In 1973 the Middle East War erupted and the world's economy was shaken by the first international oil crisis. Japan, wholly dependent upon imports for its oil supply, was especially affected. The rate of inflation increased and demand for automobiles fell drastically.



Yet, in the face of the overall pessimism that gripped the industry and the nation, Toyota's president, Eiji Toyoda, proposed a highly aggressive corporate

strategy. His conviction was that the automobile, far from being a "luxury," had become and would remain a necessity for people in all sectors of society. As a result, Toyota decided to move forward by expanding the company's operations.

The 1973 oil crisis and its aftermath were valuable lessons for Toyota. The crisis demonstrated the necessity for a flexible production system that could easily be adapted to changes in consumer preferences. For example, Toyota did away with facilities designed exclusively for the production of specific models and shifted instead to general-purpose facilities that could be operated according to changes in market demand for the company's various models.

## **EXPANSION OF OUTSIDE JAPAN PRODUCTION**

Shoichiro Toyoda, president of Toyota from the mid to late 1980s, possessed a solid understanding of American culture. He directed a process of intense advertising and controlled public relations to elevate the principle of free competition in the minds of American consumers. At the same time, Shoichiro Toyoda carefully committed the company to greater international cooperation in both technological and managerial areas.



In 1984, for example, Toyota entered into a joint manufacturing venture with American giant General Motors called New United Motor Manufacturing, Inc. (NUMMI). This state-of-the-art facility allowed Toyota to begin production in the United States cautiously at a time of increasing protectionism, as well as learn about American labor practices. The plant was planned to build up to 200,000 vehicles a year.

In the autumn of 1985, Toyota announced that it would build an US\$8million production facility near Lexington, Kentucky. The plant, which was expected to begin assembling 200,000 cars per year by 1988, created approximately 3,000 jobs.

By the beginning of the 1990s, Toyota held 43 percent of the Japanese car market, and in the United States it sold, for the first time, more than one million cars and trucks. Aside from these two key markets, Toyota was solidifying its global operations, particularly in Southeast Asia, and carving new markets in Latin America, where there was a growing demand for cars. Toyota also entered the Japanese automobile industry's venture into the luxury car market, leading the way with its Lexus LS400 luxury sedan, which by the mid-1990s was outselling the European makers, then seen as the luxury car market veterans.

## ECONOMIC DOWNTURN

Despite these favorable developments, Toyota had little control over external forces. As the 1990s progressed, a global economic downturn brought Toyota's prolific growth to a halt. The recession stifled economic growth throughout the world, while a rising yen made Japanese products relatively more expensive in overseas markets. Toyota's profits declined for four consecutive years between 1991 and 1994, falling to the lowest level in more than a decade.



Midway through Toyota's net income slide, the company gained new leadership when Tatsuhiro Toyoda succeeded his brother in September 1992. Under Tatsuhiro Toyoda's stewardship, a cost-cutting program was enacted that 1) reduced expense account budgets by 50%; 2) limited travel expenditures; and 3) eliminated white-collar overtime. President Toyoda also continued the trend toward moving production to overseas markets, with the construction or expansion of six assembly plants in Great Britain, Pakistan, Thailand, Turkey, United States, and Japan.

## MOVING TO FULL GLOBALIZATION

When Hiroshi Okuda was appointed as company president in 1995 his chief ambition was to revitalize Toyota's standing in the global marketplace. In June 1995, he unveiled Toyota's New Global Business Plan, which placed renewed focus on innovation and international expansion. The purpose of "localization" was to reduce the time and expense involved with shipping components across great distances, enabling Toyota to increase its overall automobile production and devote greater resources to research and development. By widening the scope of operations in Toyota's overseas locations, President Okuda envisioned a more streamlined, cost-effective manufacturing process. Furthermore, the stimulation of local economies was an effective public relations tool, enhancing the value of the Toyota brand name in foreign markets. President Okuda wasted no time putting his vision into practice. In 1995 Toyota announced its intention to set up a manufacturing operation in Indiana (USA), in the hope of becoming a major participant in North America's highly competitive large truck market. In 1997 the company opened new plants in Canada and India, and in December it announced plans to build a second European plant in Valenciennes, France, to begin production of a new line of cars specifically



designed for the European consumer.

The year 1997 also saw increased production in Toyota's Thailand operations, with a total output of 240,000 vehicles. In 1998 the company also raised its export levels from the Thailand plants, with most of the vehicles destined for the Australian and New Zealand markets. That same year, the company opened a new operation in Brazil, and in 1999 it began construction of a transmission production plant in the Walbrzych Special Economic Zone in Poland, to export parts to Toyota's manufacturing centers in France, Turkey, and the United Kingdom.

One of the most promising automobile markets to open up in the late 1990s was in China. By March 1998 Toyota already had stakes in four Chinese parts manufacturing plants, one of them a wholly owned subsidiary. The company took a more significant step in November 1998, when it established the Sichuan Toyota Motor Co., Ltd., Toyota's first vehicle production plant in China. A joint venture with the Sichuan Station Wagon Factory and Toyota Tsusho Corp., the new plant began manufacturing coaster-class buses in 2000.

President Okuda also took an aggressive approach to Toyota's role in the domestic market. In August 1998 Toyota extended its hold over the domestic market with the purchase of a majority stake in Daihatsu.

The company also implemented a number of environmental initiatives during this period, both in Japan and abroad. In July 1999 it began an initiative that aimed to eliminate all landfill waste by 2003. In 2000 it introduced stricter environmental regulations in its U.S. manufacturing plants. This actually exceeded Environmental Protection Agency standards of the day.

## **TOYOTA GUIDING PRINCIPLES**

The Guiding Principles at Toyota (adopted in 1992 and revised in 1997) reflect the kind of company that Toyota seeks to be in light of the unique management philosophy, values, and methods that it has embraced since its foundation. Toyota hopes to contribute to society through its corporate activities based on understanding and sharing of the Guiding Principles at Toyota.

1. Honor the language and spirit of the law of every nation and undertake open and fair corporate activities to be a good corporate citizen of the world.
2. Respect the culture and customs of every nation and contribute to economic and social development through corporate activities in the communities.
3. Dedicate ourselves to providing clean and safe products and to enhancing the quality of life everywhere through all our activities.
4. Create and develop advanced technologies and provide outstanding products and services that fulfill the needs of customers worldwide.
5. Foster a corporate culture that enhances individual creativity and teamwork value, while honoring mutual trust and respect between labor and

management.

6. Pursue growth in harmony with the global community through innovative management.
7. Work with business partner in research and creation to achieve stable, long-term growth and mutual benefits, while keeping ourselves open to new partnerships.

## NEW TECHNOLOGY – PRIUS

One of the most radical innovations to arise in the late 1990's was the Prius, Toyota's first hybrid car. Launched in October 1997, the Prius combined a highly efficient petrol engine with a self-regenerating electric motor, reducing carbon dioxide emissions by half. Although initial estimates showed that production would have to surpass 200,000 vehicles a year for the Prius to turn a profit, by March 1998 demand was already surpassing supply, and the future of the eco-car on the domestic market looked promising.



Prius finally hit the U.S. and European markets in late 2000, amid increased fuel prices and mounting concerns over global warming.

Toyota experienced strong sales in the United States and Japan during this time, and in 2000 Toyota's total worldwide production exceeded five million vehicles for the first time ever.

## TOYOTA IN THE 21<sup>ST</sup> CENTURY

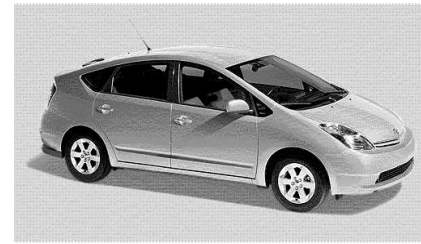


In 1999 President Okuda became TMC Chairman, and Fujio Cho was appointed as TMC president. President Cho accelerated the pace of growth that had been set by Okuda. President Cho had a formidable task ahead of him. In order to achieve his stated goal of 15% of world vehicle market by 2010, he would have to sell over nine million cars and trucks against very stiff competition. The potential markets of India and China would not yet be large enough to absorb this

production; thus, Toyota's new market would have to come mainly from America and partly from Europe. To compete in those markets, President Cho needed to address the issues of styling and image. Many found Toyotas to be reliable but a growing number of young, upscale Japanese were turning to the new models marketed by its competitors. President Cho, worried about Toyota's aging consumer base, felt that the company's cars lacked sufficient appeal to young buyers: "Our salespeople are not 100 percent satisfied with styling," he said in

Fortune magazine (Dec 8, 2003).

President Cho believed that his team could not design smart, global cars while based in Toyota City. As a result, he began to decentralize the design process. Toyota teams located in France and Southern California competed with those in Japan for the best designs. As a result, the Toyota



Scion was produced. The Scion was geared to appeal to young, urban Japanese consumers who might have otherwise been tempted to buy other brands. Recognizing that the somewhat box-like compact was something of a gamble, President Cho intended to first try out the Scion in California in 2003 and then across the United States in 2004. It was planned that there would be a review the appeal of the car, within a year or two of its release.

President Cho recognized that engineers and other "car people" alone could not make and sell the vehicles that would push Toyota to number one in the industry. While the safety features, transmission, mileage, and engine were all important, so were the style and total image of the vehicle. President Cho knew that he needed to sell all of those aspects in a single vehicle. In addition he wanted Toyota to occupy the leading edge in the sustainable car culture. In October 2003 Toyota began selling the second-generation Prius in the United States.

President Cho continued to dedicate himself to the principles of lean production and kaizen that he had learned directly from Taiichi Ohno. In order for the long-term goals that the company had set to accomplish, TPS would have to become ever more flexible and efficient. While Toyota was well ahead of most of the competition, President Cho refused to become complacent. He knew that in the 21st century consumer demands would be changing more rapidly than ever; Toyota would need to be able to change just as rapidly in order to meet those demands.



President Cho gave a high priority to the application of information technology in improving production. The streamlined Global Body Line production process made it possible to switch from one model to another on a single line, permitting Toyota to place more robots at any given line location. It would soon be possible to custom produce a Lexus, a truck, an SUV, a Camry, or a Prius on the same line on the same day at any plant in the world. This would give Toyota an enormous advantage over less flexible competitors who would constantly have to retool or shift production to other plants to meet customer demand.

In June 2005 Katsuaki Watanabe became president of TMC, succeeding Fujio Cho. Under President Watanabe's leadership, Toyota has continued to

experience worldwide success. However, President Watanabe has strongly requested all employees focus their efforts on ensuring Toyota is number one in Quality, Cost and Customer (satisfaction). President Watanabe believes that by focusing on these key factors, Toyota will be in a position to enjoy ongoing success and continue to contribute to society through its products and services.

# TOYOTA TIMELINE

New Model Introduction, Productions, Sales & Exports	Business Development, Plants & Facilities
	1867 Sakichi Toyoda born.
	'90 Sakichi Toyoda invented the wooden Toyoda handloom.
	'94 Kiichiro Toyoda born.
	1924 Completion of the non-stop shuttle change type Toyoda automatic loom (Type G).
	'29 Kiichiro Toyoda traveled to Europe and the United States to investigate automobiles. Patent agreement signed with Platt Brothers & Co. of the UK for Type G loom.
	1930 Kiichiro Toyoda started research into gasoline-powered engines.
	'33 Automobile Department established in Toyoda Automatic Loom Works, Ltd.
A1 prototype passenger car completed. G1 truck completed.	'35 Hinode Motors (currently Aichi Toyota) started operations.
Toyota Model AA Sedan, AB phaeton, and GA truck announced. First export of a Toyota car (G1 truck).	'36 Toyota's logo established.
	'37 Toyota Motor Co., Ltd. established.
Production of GB truck started.	'38 Koromo Plant (currently Honsha Plant) started operations. "Just-in-time" system launched on a full-scale basis.

New Model Introduction, Productions, Sales & Exports	Business Development, Plants & Facilities
	<p>1950</p> <p>Financial crisis/Labor dispute/Voluntary retirement. Toyota Motor Sales Co., Ltd. established. ·Minsei Spinning Co., Ltd. (currently Toyoda Boshoku Corporation) established.</p>
<p>BX truck and BJ Toyota Jeep (currently Land Cruiser) announced. · Production of SF compact passenger car started.</p>	<p>'51 Creative Idea Suggestion System started.</p>
<p>Production of SG small truck started.</p>	<p>'52</p>
<p>RH Toyopet Super and RK small truck announced.</p>	<p>'53 Towa Real Estate Co., Ltd. established. Corporate slogan "Good Thinking, Good Products" established.</p>
<p>SKB small truck (currently Toyo Ace) announced.</p>	<p>'54 Main Technical Building (Technical Center) completed.</p>
<p>Toyopet Crown, Toyopet Master and Crown Deluxe announced.</p>	<p>'55</p>
<p>RK52 small truck (currently Dyna) announced.</p>	<p>'56 Toyopet dealerships started operations. Head Office test course completed.</p>
<p>DA60 diesel truck and Toyopet Corona(currently Premio) announced. First export of Japanese passenger car (Crown) to the U.S.</p>	<p>'57 Toyota Motor Sales, U.S.A., Inc. established.</p>
	<p>'58 Toyota do Brasil S.A. started operations.</p>
	<p>'59 Motomachi Plant started operations.</p>

New Model Introduction, Productions, Sales & Exports		Business Development, Plants & Facilities
	1960	Main Building completed. Toyota Central Research & Development Laboratories, Inc. established.
Publica announced.	'61	Publica dealerships (currently Toyota Corolla dealerships) started operations. TQC adopted throughout company. Haruhi Plant (currently Haruhi Center) completed.
1 millionth Toyota vehicle produced domestically.	'62	Labor-Management Joint Declaration signed. Toyota Motor Thailand Co., Ltd. established.
RK170B light bus (currently Coaster) announced.	'63	
Crown Eight, FA100 and DA100 heavy-duty trucks announced.	'64	
Toyota Sports 800 announced.	'65	The Deming Prize awarded. Kamigo Plant started operations.
Corolla announced.	'66	Takaoka Plant started operations. Entered into business tie-up with Hino Motors, Ltd. Higashifuji Proving Ground completed.
Toyota 2000GT, Hiace and Miniace announced.	'67	Toyota Auto dealerships (currently Netz Toyota dealerships) started operations. Entered into business tie-up with Daihatsu Motor Co., Ltd.
Hilux, Corolla Sprinter and Corona Mark II announced.	'68	Miyoshi Plant started operations.
Cumulative exports reached 1 million units. Annual domestic sales reached 1 million units.	'69	
Carina (currently Allion), Celica and Light Ace	1970	First Japan Quality Control Medal awarded.

New Model Introduction, Productions, Sales & Exports	Business Development, Plants & Facilities
announced.	Tsutsumi Plant started operations.
10 millionth Toyota vehicle produced domestically.	'72
Publica Starlet announced.	'73 Myochi Plant started operations. Calty Design Research, Inc. established.
	'74 Toyota Kuragaike Commemorative Hall completed. The Toyota Foundation established. Nisshin Training Center completed.
Cumulative exports reached 5 million units.	'75 Shimoyama Plant started operations. Prefabricated housing business started.
Town Ace announced.	'76
Chaser announced.	'77 Toyota Technical Center U.S.A., Inc. established. Toyota Kaikan Exhibition Hall completed.
Celica XX (currently Supra), Tercel and Corsa announced.	'78 Kinuura Plant started operations.
Cumulative exports reached 10 million units.	'79 Tahara Plant started operations
Celica Camry (currently Camry), and Cresta announced.	1980 Toyota Vista dealerships started operations.
Soarer announced.	'81 Toyota Technological Institute inaugurated.
	'82 Toyota Motor Co., Ltd. and Toyota Motor Sales Co., Ltd. merged into Toyota Motor Corporation.

New Model Introduction, Productions, Sales & Exports		Business Development, Plants & Facilities
Hilux Surf and MR2 announced.	'84	Toyota-GM joint venture in the U.S., New United Motor Manufacturing, Inc. (NUMMI), started production. Shibetsu Proving Ground completed.
Cumulative exports reached 20 million units.	'85	Tobishima Center completed.
50 millionth Toyota vehicle produced domestically.	'86	Teiho Plant started operations.
Celsior announced.	'87	Kasugai Housing Works started operations. Toyota Memorial Hospital completed. TMME Technical Center established.
Annual domestic sales reached 2 million units.	'88	Toyota Motor Manufacturing, Kentucky, Inc. started production.
Estima announced.	1990	Hirose Plant started operations. Tochigi Housing Works started operations. Toyota Automobile Museum completed. Lexus dealerships established in the U.S. Tokyo Design Center established.
Windom and Aristo announced.	'91	Amlux opened. Toyota Motor Europe Marketing & Engineering S.A. (TMME) established.
RAV4L and RAV4J announced. Annual overseas output exceeded 1 million	'92	Guiding Principles at Toyota announced. Toyota Earth Charter established. Toyota Motor Manufacturing (U.K.), Ltd. (TMUK Ltd.) started production. DUO dealerships for VW and Audi cars opened. Toyota Motor Hokkaido, Inc. started operations. Toyota Motor Kyushu, Inc. started operations.
RAV4L and RAV4J announced. Annual overseas output exceeded 1 million	'94	Industrial Technology Memorial Museum opened.

New Model Introduction, Productions, Sales & Exports	Business Development, Plants & Facilities	
units.		
Avalon and Toyota Cavalier announced.	'95	
Ipsum announced.	'96	Genesis Research Institute, Inc. established.
Prius and Harrier announced.	'97	
Altezza announced.	'98	<p>"Toyota Auto" sales channel changed name to "Netz Toyota".</p> <p>Toyota Motor Manufacturing Indiana, Inc. (TMMI, Inc.) and Toyota Motor Manufacturing, West Virginia, Inc. (TMMWV) started operations.</p> <p>Tianjin Toyota Motor Engine Co., Ltd. (TTME) started operations.</p> <p>Toyota Motor Tohoku, Inc. started operations.</p>
<p>Vitz, Cami, Platz, FunCargo, and MR-S announced.</p> <p>100 millionth Toyota vehicle produced domestically.</p> <p>Annual overseas sales exceeded 3 million units.</p>	'99	<p>MEGA WEB opened.</p> <p>Listed on the New York and London Stock Exchanges.</p> <p>Toyota Kirloskar Motor, Ltd. started operations.</p>
<p>Will Vi, bB, Pronard, Opa, Sparky and Kluger V announced.</p>	2000	<p>Toyota Financial Services Corporation was established to oversee Toyota's finance companies worldwide.</p> <p>Sichuan Toyota Motor Co., Ltd. (SCTM) started production in China.</p>
<p>Alex, Allion, Voxy, Will VS, Brevis and Verossa announced.</p>	'01	<p>Toyota Motor Manufacturing France S.A.S. (TMMF) started production.</p>
<p>ist, Alphard, Probox and Succeed, Voltz, Will CYPHA announced.</p> <p>Toyota FCHV introduced on a limited sales basis.</p> <p>North American production achieved 10 million units cumulative production.</p> <p>Worldwide Prius sales achieved 100,000 units.</p>	'02	<p>Toyota enters Formula One (F1) competition.</p> <p>Toyota Peugeot Citroën Automobile Czech established.</p> <p>Toyota Motor Manufacturing Poland Sp.z o.o.(TMMP) started production.</p> <p>China FAW Group Corporation (FAW) signed a cooperative agreement in China.</p> <p>Toyota Motor Manufacturing de Baja California S. de</p>

New Model Introduction, Productions, Sales & Exports		Business Development, Plants & Facilities
		<p>R.L. de C. V. established.            Toyota Kirloskar Auto Parts Private Ltd. established.            Tianjin Toyota Motor Co., Ltd (TTMC) started production in China.            Toyota Motor Industries Poland Sp.z o.o.(TTIP) established.</p>
<p>WISH, Sienta and Avensis announced.</p>	<p>'03</p>	<p>Toyota Home Inc. (house retail company) established.            Toyota Motor Manufacturing, Texas, Inc. (TMMTX) established.            Toyota Motor Manufacturing, Alabama, Inc. (TMMAL)</p>
<p>Passo, Porte, Isis and Mark X announced.</p>	<p>'04</p>	<p>Toyota FAW (Tianjin) Dies Co., Ltd. established.            FAW Toyota Changchun Engine Co.,Ltd. established.            Guangzhou Toyota Motor Co., Ltd. established.</p>
<p>Ractis and Belta announced.            Lexus GS430, SC430, IS350/250 announced.            Worldwide Camry Sedan sales reached 10 Million units.</p>	<p>'05</p>	<p>Toyota has started production of the "Toyota Aygo" along with "peugeot 107" and "Citroen C1" through a joint venture with PSA Peugeot Citroen in the Czech Republic.            000 "TOYOTA MOTOR MANUFACTURING RUSSIA"(TMMR) established.            The Lexus brand was launched in Japan.            Toyota and Fuji Heavy Industries to Agree on Business Collaboration.</p>
<p>Rush announced.            GS450, LS460 announced.            Collora Axio, Auris, Blade announced.            Worldwide Prius sales achieved 500,000 units</p>	<p>'06</p>	<p>Toyota Motor Engineering &amp; Manufacturing North America Inc.(TEMA) established</p>

## GLOSSARY OF TOYOTA TERMS

<b>Andon</b>	A communication board to show the current status of the workplace activities. This ensures information is available so that problems are always visible and immediate action can be taken.
<b>Andon Cord</b>	Cord on the production line that a team member pulls when they identify a problem, to stop the line so the problem can be resolved.
<b>Five Why's</b>	In problem solving, keep asking 'why' until you have found the true root cause of the problem.
<b>Genchi Genbutsu</b>	Genchi – actual place; Genbutsu – actual product/thing. At Toyota this term is used to describe go to the source to find the facts in order to make a correct decision, build consensus and achieve objectives at the best speed.
<b>Heijunka</b>	Level sequential production. Leveling the type and quantity of production over a fixed period of time. This is an important tool of Just In Time.
<b>Just In Time</b>	Customer demand drives production. Toyota supplies, receives, produces and transports only what is needed, at the time needed, in the quantity needed
<b>Jidoka</b>	Automation – a system that informs of problems with a process or equipment, so to avoid defects or mistakes.
<b>Kaizen</b>	Improvement to a system, process or equipment that adds value and reduces/eliminates waste.
<b>Kanban</b>	Sign card used to order and manage inventory levels. A tool used to ensure Just In Time production.
<b>Muda</b>	Non value-added or 'waste'. It raises the cost of producing products or services.
<b>Mura</b>	Unevenness. When work is unevenly balanced amongst members or when products/services are unevenly balanced on the production line or within a process.
<b>Muri</b>	Overburden. Too heavy a work load on members or running equipment with more load than it was designed for.
<b>Pull System</b>	One of the basic requirements for Just In Time. This is where the following process ('customer') 'pulls' the product/service from the preceeding process, creating a need for the proceeding process to produce more product/service.
<b>Standardized Work</b>	An established method of work (order of steps, time, tools) to ensure a high quality product or service every time.

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