Toyota and Structural Reform of Australian Automotive Industry

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1. Introduction

Australia holds a special place for Toyota. Despite having only a population of 20 million, Australia is currently the second largest market for Toyota after America. The wealth of sales and production know-how that Toyota acquired in Australia beginning in 1959 expedited business development later in America, Europe, and other regions as new markets were identified and local production begun. It also helped Toyota spread the Toyota Production System to the world, and Toyota grew to become a powerful global enterprise and is today often referred to as the world's most robust automaker. Toyota's inroads into Australia, a highly motorized country, and Toyota's management efforts are a bright spot in the epoch-making years of the global company's business history.

In turn, Toyota holds a special place for Australia. In the latter half of the 1980s, Australia, hoping to cast off protectionism, adopted industrial policies to promote liberalization in an aim to foster an internationally competitive manufacturing industry. In particular, it sought challenging industrial reorganization and a reduction in the number of vehicle models in the automobile industry. Within this drastically changing business environment, Toyota showed unflagging resolve and made the bold decision to lay out further capital investment. Toyota moved ahead with extensive quality improvements and cost reductions to enhance global competitiveness and was able to sharply increase the number of completely built units (CBUs) exported from Australia. Thus, Toyota played a leading role in the groundbreaking structural reform carried out in Australia's automobile industry. It was the birth of the strong manufacturing industry that Australia had long been waiting for.

This paper examines the developmental process of Toyota Australia, and the actual conditions of the structural reform in Australia's automobile industry. It attempts to clarify the essential qualities of the innovative management practices while searching for the parameters of business and industrial growth.

2. Prior to Toyota's Presence in Australia

In 1937, Toyota Motor Co., Ltd. (hereafter referred to as Toyota) was established through the spin-off of the Automobile Department of Toyoda Automatic Loom Works. In 1955, Toyota gained prominence with the development of the Crown, and presently has grown into an exemplary global enterprise that is poised to surpass General Motors (GM), the current industry leader.

Following the end of World War II, in September 1945 the General Headquarters (GHQ), the military headquarters for the Supreme Commander for the Allied Powers, authorized production of trucks and buses, followed by permission in June 1947 to manufacture passenger vehicles.

A disparate difference in technical expertise compared with Europe and America at that time highlighted the significant void in the Japanese passenger car industry. Kiichiro Toyoda (then President of Toyota), promptly instructed Eiji Toyoda (then General Manager of the Engineering Department) to begin working on developing a small passenger car. In October 1948, production began on the Toyopet, a 995cc engine, 4-passenger car with a maximum output of 27 horsepower and a maximum speed of 87km/h. At that time, the [monthly] starting salary for a civil servant was around 5,000 yen, which put the 910,000 yen car out of most people's reach. Furthermore, in April 1950, the company was faced with a sudden labor dispute that was resolved when Kiichiro Toyoda stepped down as president. Production of the original Toyopet Model SA was halted in 1952, but redesigned models — the SD, SF, SH, and RH — were later produced.

Parallel to the development of redesigned models of the Toyopet, development plans for a new passenger car were put into motion in 1952, and 3 years later in January 1955, Toyota unveiled the long-awaited, high performance first generation Crown, which greatly surpassed standard passenger vehicles manufactured in Japan at that time. Back then, Japanese passenger car manufacturers were gaining technical knowledge through licensed technical agreements with overseas manufacturers, such as Nissan with Austin, Isuzu with Hillman, and Fuji Heavy Industries with Prince Motors. Each company was carrying out production on a knocked-down parts (KD) basis, and introducing new models developed overseas, fueling fierce competition for market share. At a time when the majority of Japanese automakers were dependent on technical transfer from major overseas automakers, Toyota concentrated on developing purely Japanese technologies. In 1954, the Toyota Technical Center was built to reinforce research and development, and actively promote an academic-industrial alliance with the School of Engineering at the University of Tokyo. The Crown was one result of those efforts. Sales of the Crown started strong, and in the first year topped 7,000 units in Japan. In 1956, sales increased to 11,938 units for a 68.8% market share of the particular vehicle class, and in 1957 reached 15,000 units. As its name suggests, it was the king of cars in Japan. The year [2004] marked the 50^{th} year since the launch of the first-generation Crown. Toyota's history is reflected in the history of the Crown. Just as the Crown maintains its unwavering position as a prominent vehicle series worldwide, Toyota has grown to become an extremely powerful global player, and is today often referred to as the most robust automaker in the world. This global expansion of operations has its beginnings in Australia, where Toyota has been exploring the market since 1959.

In that same year, Toyota built an assembly plant exclusively for producing passenger cars on a 1,600,000 m^2 site in Motomachi, Koromo City. The Motomachi Plant was to later become the parent plant for operations worldwide. After visiting prominent plants in Europe and America, the newest and best machines and facilities in the world were used to furnish the new plant with a 4,000 m-long conveyer belt, shop floors for vehicle body assembly, painting, stamping, and machining, and a centralized production line control system fitted with TV cameras. Parts manufacturers and affiliated companies set up facilities in the area surrounding the Motomachi Plant, and Koromo City became an automotive city. Eventually the name was changed to Toyota City. For Toyota, the year 1959 was a memorable year for more than one reason.

3. The start of Toyota operations in Australia

Expansion of Toyota's business into Australia began in 1959, when a distributor agreement for sales of commercial vehicles was signed with Thiess Sales Pty., Ltd. and exports of the Land Cruiser were begun. Local production started in 1963 when Toyota contracted the assembly of the Tiara to the Port Melbourne Plant of Australian Motor Industries Ltd. (AMI). AMI was a subsidiary of the British company, Standard Triumph, but Australians held about 60% of company shares. Localization continued, but Toyota, had already experienced tough times at different locations around the world before it was able to establish local production in Australia.

In 1950, Toyota created an independent sales company Toyota Motor Sales Co., Ltd (TMS) from its sales department. An Export Department was established and aggressive efforts were made to open new markets overseas. With the export of trucks to Brazil in 1952, export of the Land Cruiser was begun to Latin American countries. In 1958, Toyota established a local company, Toyota do Brasil S. A., and in 1959 began local assembly of the Land Cruiser. Furthermore, in 1960 Toyota started export of knocked down parts of the Crown to be assembled in Mexico (terminated in 1964). In Thailand, Toyota opened a directly managed sales outlet in Bangkok in 1957. In 1962, Toyota Motor Thailand Co., Ltd (TMT) was established, and in 1964, started assembly of knocked down parts of trucks and the passenger car, Tiara.

In August 1957, Toyota founded Toyota Motor Sales, U. S. A., Inc. (TMS, USA) in Beverly Hills, Los Angeles. Export of the Crown to the US was begun, where the automobile industry was already well established. However, while the Crown garnered admiration in Japan, it did not enjoy the same success in America. There were many issues, such as vibration and overheating when driven at high speed or long distances. Acceleration was poor, making it difficult to enter the highway from an onramp, and even after finally getting on the highway, when going uphill cars would line up behind it. It proved unpopular due to the underpowered 1,500 cc engine. In December 1960, Toyota was forced to suspend exports.

Toyota's failure in exporting passenger vehicles to the US led to a revamping of the company organization. In 1962, the Export Department was dissolved, and the Overseas Planning and Administration Department was created. Export destinations were split into five regions, North America, Latin America and the Caribbean, the Far East, Oceania & Asia, and the Middle East & Africa, and comprehensive initiatives in development, manufacturing, sales, and after-sales service were begun to penetrate the overseas markets. The division responsible for Australia wasted no time visiting parts manufacturers, as well as both GM-Holden and Volkswagen, but was met with disdain and not treated seriously. It was a time when Japanese products were considered cheap and of low quality. AMI, however, showed a strong interest in Toyota.

At the time, the Australian automobile industry was tumultuous due to fierce competition for market share by British companies (such as British Motor Corporation, Rootes Group, and Standard Triumph) and American companies (Chrysler, Ford, General Motors-Holden). In 1955, Standard Triumph established an engine assembly plant at Port Melbourne, but because of the strong competition, its market share fell from 6.3% in 1954 to 3.1% in 1958. In the same year, AMI was born from a reshuffling of the Standard group. To develop new business, AMI set up Mercedes-Benz Australia and acquired 90% of the company's shares. Sales of Mercedes vehicles gave AMI a short-term reprieve, but influenced by a new offering on the market, the Ford Falcon, sales of in-house products (such as the Vanguard) continued to suffer. Daily production at the assembly plant dropped from 120 cars to only 16. To stave off financial ruin, AMI sold off their 90% interest in Mercedes-Benz Australia. Even so, financial statements from June 1961 showed a huge financial deficit of 250 million Australian dollars — an industry record in Australia.

AMI's operations fundamentally involved assembling vehicles by installing locally procured parts such as window glass, tires, and batteries with engines and other parts sent from the British company, Standard-Triumph, i. e. assembly of knocked down parts. The needs of the Australian market and customer preferences were not taken into account. When British Leyland, a major British truck manufacturer, bought out Standard-Triumph, AMI became a Leyland Group company. In 1961 Leyland CEO, Donald Stokes, appointed Ken Hougham as the new CEO of AMI to restructure the company. AMI's market share had plummeted to 1 %, and its plant operating rate to 25%. The future of the company lay in raising its plant operating rate. Hougham was eyeing Japanese manufacturers, not just western companies, as a possibility (he had received information about Nissan, which was aligned with Austin, a British company he had previously worked for). By chance, he learned of visitors from Toyota, who were seeking business partners, and contact was made.

In December 1962, Bob Neave and George Harris from AMI visited Toyota. During the 2-week negotiations, they test drove the Tiara, inspected numerous plants, and visited the Toyota Group auto parts manufacturer, Nippondenso Co., Ltd. Following tough price negotiations, in 1963 a deal was cemented with AMI for CKD production (assembly of completely knocked down parts) of the Toyota Tiara, marking Toyota's first overseas production in a highly motorized country. The experience Toyota gained in Australia would later prove to be the touchstone for local production in Europe and the US. Australia came to have a special meaning for Toyota.

With the introduction in 1964 of the Corona, the Crown in 1967, and the Corolla in 1968, Toyota's production of small passenger cars was underway. In 1968, Toyota bought a 51% controlling interest in AMI. It also bought a 40% interest in Thiess Sales, changed its name to Thiess Toyota Pty., Ltd., and garnered a position of management. Later, in 1980, Toyota purchased 100% of the shares of Thiess Toyota, and in 1987 bought 100% of AMI, thus successfully gaining all rights to production and sales in Australia. In 1988, Toyota became locally incorporated, and established Toyota Motor Corporation Australia (TMCA). In the same year the name Thiess Toyota was changed to Toyota Motor Sales Australia (TMSA). Both in name and reality, it was the birth of Toyota Australia.

4. Automotive Manufacturing Policies: Button Plan

Australian automotive manufacturing policy was at the height of protectionism from the mid-1970s through the 1980s. The import tariff on passenger vehicles went from 44% in 1975 to 57.5% in 1977, and in 1975 an import allocation system was introduced which limited imports to 20% of domestic demand. Furthermore, beginning in 1968 the percentage of "local content" was set at a high 85% in order to protect domestic parts manufacturers. Australia's protective policies during this period forced the five major foreign automakers, GM, Ford, Toyota, Mitsubishi, and Nissan, into fierce competition in the small market. However, around the time that Toyota Motor Corporation Australia (TMCA) was being established, Australia was gradually relaxing its protectionist policies against foreign auto imports and was instead making them more export-oriented. The first wave of these policy changes came two years after the start of the Hawke Administration (Australian Labor Party) in 1983. In January 1985, a plan for reorganizing the automotive industry (the first Button plan) was introduced by John Button, then Minister of Commerce and Industry. The basic elements of this plan were as follows.

1. With the aim of strengthening the competitiveness of the Australian automotive industry, automakers should be consolidated from five companies into three groups and production models should be consolidated from 13 to 6.
2. Models that fall below a certain number of vehicles should be subject to penalties such as back taxes. Automakers are required to produce at least 30,000 vehicles of each model. An automaker's failure to meet this quota would result in a reduction of the 15% entitlement to duty free importation for the shipment cost of parts and other items, imported by that automaker's assembly plants. For example, an automaker that produced less than 20,000 vehicles of a particular model would be entitled to no duty free importation, while an automaker that produced between 20,000 and 30,000 vehicles will receive between 0 and 15% entitlement to duty free importation.
3. Reduce the import tariff rate and promote cost reductions efforts by automakers.
4. Strictly adhere to a local content percentage of 85%.

The second Button plan, introduced in 1988, contained the following.

1. Abolish the import allocation system which limits imports to 20% of national demand.
2. Reduce import tariffs from 57.5% to 45.0% for passenger motor vehicles (PMVs),

and reduce it a further 2.5% each year until 1992. For commercial vehicles, reduce the import tariff for vehicles with 35.0% to 20.0% tariffs depending upon the vehicle series to 20.0%, and reduce it a further 1.0% each year until 1992.

3. Implement an Export Facilitation Scheme (EFS), the general outline of which is as follows:

EFS Credits =Export Cost (FOB) − Import Cost
=Australian Added Value for Export Cost (FOB)

Tariff-free Import Benefit:

Exemption of import tariff for the amount calculated based on the formula:

Obtained EFS credits × the PMV import tariff rate

This provided a framework whereby automakers in Australia could import tariff-free their own brands into Australia from plants in their home countries or from third countries, giving them advantageous terms in comparison with dealers of imported vehicles in Australia.

The revisions enacted in 1988 helped to clearly push the industry in a more export-oriented direction, and, in 1992, the government decided to further reduce the tariffs on passenger motor vehicle imports to 15%, to be achieved through 2.5% cuts each year until 2000.

Figure 1 shows the shift in tariff rate reductions over the course of the Button plans:

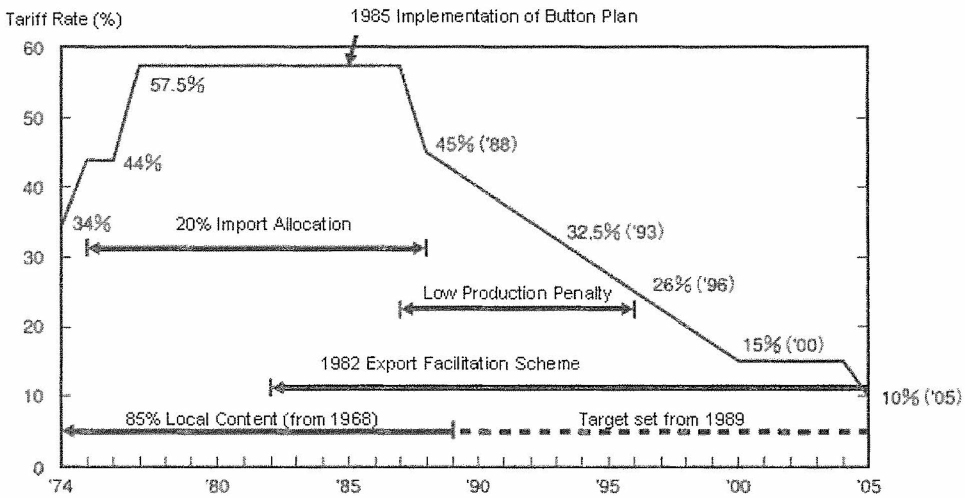


Figure 1

The implementation of the Button plan brought with it the elimination and consolidation of automakers and vehicle models. With the establishment of a joint venture between Toyota and GM in 1988 and the withdrawal of Nissan from production in Australia in 1992, the five companies were consolidated into three groups (Toyota/GM, Ford, Mitsubishi); and with the termination of local production of certain vehicle models, including the Gemini (GM), Astra (GM), Colt (Mitsubishi), and Pulsar (Nissan), the number of vehicle models produced locally was reduced to six, thereby achieving the initial aim of the Button plan. In 1994, Ford terminated production of its compact car Laser. The number of vehicle models produced in Australia was now reduced to five: the Corolla and Camry (Toyota), Magna (Mitsubishi), Commodore (GM), and Falcon (Ford).

These eliminations and consolidations are shown in Figure 2:

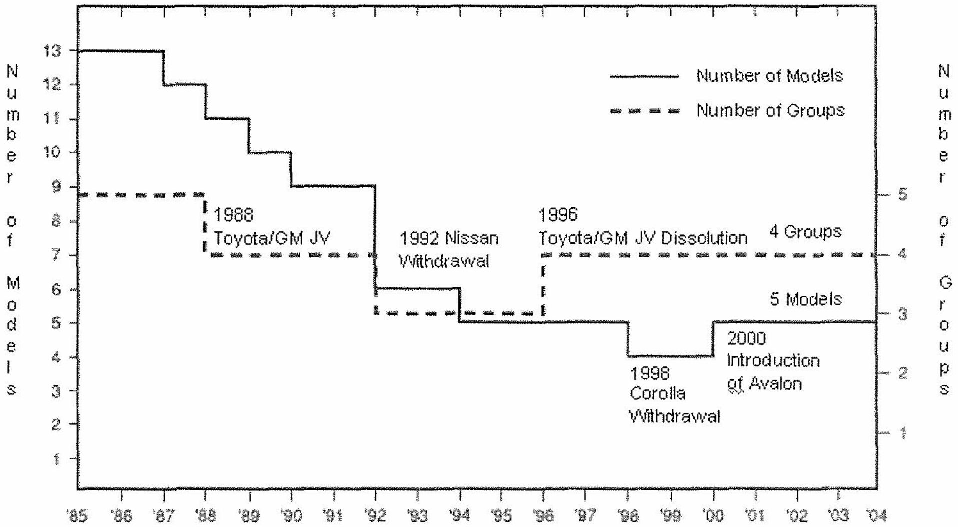


Figure 2

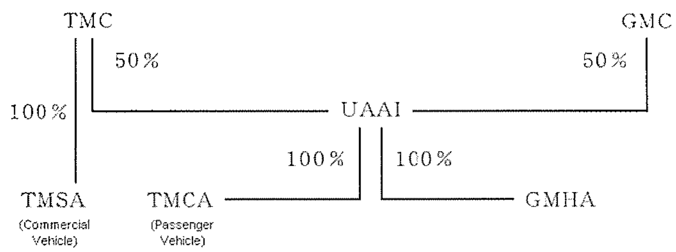
5. Toyota Initiatives

From the 1970s through the 1980s Australia's market for new cars was between 500,000 and 600,000 vehicles; however, in the 1990s, with the introduction of the Button plan, reduced costs brought about by lower import tariffs on passenger motor vehicles, and other factors, and with the sudden increase in personal income created by a stronger domestic economy, in 2003 new car sales posted their highest level ever at 910,000 units. With a penetration rate of 1.6 people per 1 vehicle, Australia's automobile market is the second most mature market next to America. Thus, this increase in the new car market suggests a major shift in demand away from used cars. By way of comparison, the new to used car ratio in Australia is traditionally approximately 1 to 2.5, whereas in Japan, America and Europe it is approximately 1 to 1.

The import rate for passenger motor vehicles, which make up slightly less than 600,000 of all new vehicles in the market, has continued to grow steadily : 19% in 1988 (with a 45% tariff), 38% in 1994 (with a 30% tariff), and 59% in 2003 (with a 15% tariff). The import rate for the approximately 300,000 commercial vehicles in the new vehicles market was 89% in 2003 (with a 5 % tariff). One can imagine how difficult the competitive situation has been for automakers in Australia. Plans call for further reductions of the import tariff on passenger vehicles to 10% in 2005 and 5 % (the same level as commercial vehicles) in 2010. TMCA has been in the thick of all of this, holding the top share of 190,000 vehicles out of 910,000 vehicles on the new car market in 2003. TMCA also led the industry in exports with 66,000 vehicles, far ahead of GM (in 2nd place with 36,000 vehicles) and other competitors. With the Button plan making the business environment increasingly competitive, what responses did TMCA enact in order to handle these changes? Let us examine Toyota's initiatives.

(1) Agreement for Complementary Supply of Vehicles with GM, and its Dissolution

In May 1988, Toyota and GM invested equally in the creation of a holding company, United Australian Automotive Industries (UAAI), making TMCA and General Motors-Holden's Automotive Limited (GMHA) subsidiaries. Toyota Motor Sales Australia Ltd. (TMSA), Toyota's sales company for commercial vehicles, was retained as a direct subsidiary of Toyota. The capital ties between the two are shown in the following figure.



This joint venture was a cooperative measure actively pursued within the automotive industry aimed at achieving the Button plan's goal of three groups of automakers and five vehicle models. It also helped systematize the complementary supply of vehicles between Toyota and GM. At the same time that UAAI was established, Toyota and GM began supplying one another with vehicles. Toyota supplied GM with the Corolla and Camry which were sold at GM sales outlets as the Nova and Apollo. Conversely, GM supplied Toyota with the Commodore which Toyota sold at its outlets as the Lexcen. Thus, both companies worked to enhance their sales strength, reduce costs and increase the economy of scale for each of their base vehicles, and counter the expected influx of imported vehicles. A structure was also created that allowed TMCA to secure profits from import and sales of commercial vehicles — a major source of income for TMCA — independent of the joint venture. However, the flood of compact car imports, including Hyundai from Korea, was tremendous, making it hard to maintain the production of the Corolla; thus, Toyota dissolved its arrangement for complementary supply of vehicles with GM in 1996.

Figure 3 shows the operational diagram for TMCA at the time:

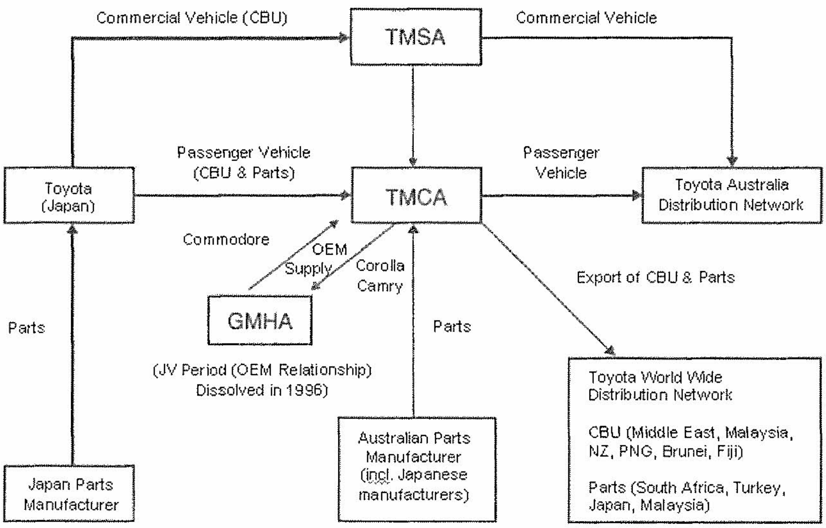


Figure 3

(2) Establishment of a Centralized Production Structure: Decision for Large-Scale Investment in Altona Plant

When the Button Plan was introduced, there were five auto manufacturers in Australia — three Japanese (Toyota, Mitsubishi, and Nissan) and two American (General Motors and Ford)— competing fiercely in a market of about 600,000 vehicles annually. The increase in imported vehicles had already become a serious issue, and Nissan decided to withdraw production from the market. Toyota, however, made the opposite decision.

Toyota searched for a means of survival through drastic cost reductions and quality improvements. The result of that search was a policy of switching to a centralized production structure at the Altona Plant in place of production that was at the time distributed among three plants. Toyota calculated that it would require approximately A$500 million in new investment. This was a tremendous investment previously unseen in the history of the Australian automobile industry. Toyota believed that reductions in tariffs, a factor detrimental to the profitability of local production, would be balanced out by the appreciation of the yen, a factor favorable to local production. Toyota made a determination based on all of the following factors: the possibility that a policy of restricting automobile imports would be restored in conjunction with the increase of the Australian balance of payments deficit, i. e., the possibility that the government would shift to a policy beneficial to local production; the fact that once a withdrawal was made it would be extremely difficult to redevelop local production structures; the fact that an investment of A $500 million was relatively inexpensive for a plant with a production capacity of 100,000 to 150,000 vehicles (Toyota needed to increase production capacity somewhere in order to achieve its goal of annual production capacity of 6 million vehicles); and the fact that even if local production was unprofitable, it could make a profit from the import of CBUs from the Toyota network. One gets the impression that Toyota made its decision based on rationalizations and emotional attachment such as appreciation for being given the chance to learn about overseas production in Australia. This decision was made at the end of 1990, just before the collapse of the economic bubble in Japan, and later came to support Toyota's financial position.

The Altona Plant, completed in January 1995 as a fully-integrated production plant with an engine production facility as well as aluminum casting, stamping, chassis (welding), painting, and assembly processes, was Toyota Australia's first new plant in 30 years. Prior to completion of the Altona plant, the Corolla assembly line was transferred from the Dandenong Plant to Altona in July 1994, and the Camry assembly line was transferred from the Port Melbourne Plant in January 1995. An opening ceremony for the Altona Plant was attended by numerous political and business leaders, including Prime Minister Paul Keating and Jeff Kennett, Premier of Victoria, to celebrate the completion of a revolutionary new plant that adopted the world's latest and most advanced facilities, equipment, and technologies. The creation of a cutting-edge plant under Australia's new industry policy was a cause for celebration for the entire country.

(3) Efforts to Improve Quality

TMCA promoted the concept of fair treatment of employees and encouraged process designs that facilitated ease of work on the production line (low parts labels, synchronized carts, elimination of doors, etc.), the development of favorable work environments (parking lots, cafeterias, etc.), and large-scale local hiring (100% of section and department managers were hired locally). Based on the concept that the efforts of each individual as well as creativity and innovation are the essence of a good workplace, and making efforts to improve quality with the participation of all employees, Toyota has achieved the highest quality of all vehicle models produced in Australia. In other words, Toyota has achieved a quality that does not differ from that of imported vehicles of the same class.

Raising the quality of locally-procured parts is an absolute requirement for improving the quality of CBUs. Streamlining of operations by Australia's parts manufacturers, however, was lagging as a result of long-standing protectionist policies. Toyota selected leading parts manufacturers as "Toyota Showcases" and dispatched five specialists as a support team to encourage manufacturers to take measures to improve both quality and costs and to spread the Toyota Production System to related companies.

(4) Introduction of a Single Labor Union

The labor agreement was revised in conjunction with the start of operations at the Altona Plant, and a single labor union was introduced in place of the existing job-specific unions. Toyota made an official announcement of its decision to invest in a centralized production structure in Altona in 1991, but when Prime Minister Keating visited Chairman Eiji Toyoda in Japan the following year, the Prime Minister asked, "What are you seeking with this plant?" Chairman Toyoda is reported to have responded simply "one union." This episode tells of the particular emphasis that Toyota placed on having a single labor union. There were three noteworthy features of the new labor agreement.

1. Agreement with a single union

There were two labor unions at the Altona Plant, the Automotive, Food, Metals and Engineering Union (AFMEU) with 3,250 members (general employees, maintenance personnel, group leaders and technicians), and the Electrical, Electronic, Telecommunications and Plumbing Union (ETPU) with 70 members, but the ETPU had no negotiating rights and the AFMEU became the sole labor union representing plant employees. This established a corresponding relationship in decision-making by labor and management and clarified responsibility for problem solving.

2. Review of labor-management practices

A labor-management practice based on dialogue was created, conflict among the union departments was limited, and the numerous and fragmented agreements and accords were streamlined.

3. Flexible production systems introduced

A shift was made from planned days off (PDO) to roster days off (RDO), orders to work overtime the same day were made possible, and other restrictive work conditions were reviewed to establish flexible production systems.

(5) Efforts to Increase Exports

TMCA made repeated efforts to raise its international competitiveness and thereby increase exports through internal streamlining, including raising quality and reducing costs. Looking at TMCA's export performance, we see that in 1992 exports were only A$62 million but reached A$400 million when full-scale exports to the six countries of the Gulf Cooperation Council (Saudi Arabia, Oman, United Arab Emirates, Kuwait, Bahrain, and Qatar) started in 1996 and reached A$1,299 million (66,000 Camrys) in 2003, far surpassing second-place GM's export performance of 36,000 vehicles. In 2003, Australia's exports of passenger motor vehicles had a total value of A$2,743 million, exceeding exports of wheat, wine, and wool. Of this amount, Toyota accounted for 47%, making it a highly prominent company contributing to Australian exports. In 2002, Toyota's economic contributions through exports were recognized and Toyota was given a state of Victoria Export Award.

Previously, Toyota had exported vehicles to these Middle Eastern countries from Japan, but as a result of the appreciation of the yen and the depreciation of the Australian dollar it adopted a strategy of switching to exports from Australia. We can see this as the implementation of a global strategy whereby a single overseas production site operates in coordination with the entire global production and sales network.

6. Plans to Establish an R&D Company

In FY2003, Toyota Australia's operating income reached A$100 million. It is likely that the domestic scale of production of 114,000 vehicles was in excess of the level necessary to generate a profit. It is thought that Toyota Australia is freeing itself from the earlier difficult management circumstances of determining whether it could offset the losses from production with sales of imported vehicles. The company has reached a situation where it can generate a profit from production alone.

In 1998, Toyota Australia decided to suspend production of the Corolla and switched to imports from overseas. Toyota's policy of producing vehicles where the customers are, combined with centralized production to achieve economies of scale have begun to take full effect in Australia too. The embodiment of this is in the 2005 plan to establish an R&D company. The objectives of this are as follows:

1. Build stronger ties with customers. Preferences in Australia and the Middle East are similar, and it would be possible to develop suspensions, engine acceleration performance, and so on according to consumer tastes.
2. Achieve optimal local procurement in terms of parts development, parts manufacture, and parts procurement. Streamlining of operation by parts manufacturers in Australia is lagging because of long-standing protectionist policies, and parts are generally characterized by high cost and low quality. Raising the international competitiveness of parts manufacture in terms of both cost and quality is an urgent issue.
3. Utilize favorable R&D conditions in Australia. Australia meets the necessary requirements for an R&D base from an international perspective in terms of automotive technology levels, pay scales, and infrastructure.
4. Incorporate a perspective that includes management of operations in all of Asia and Oceania. By adding Melbourne (Asia and Oceania R&D base) to the existing R&D bases in Japan, Detroit (North American R&D base), and Belgium (EU R&D base), a global, four-base structure would be created. Projections for the worldwide automobile market share in 2010 are for North America, Europe, and Asia/Oceania to each hold 30% and for Latin America to hold 10%. This move would respond to the growing importance of Asia/Oceania.

7. Conclusion

Generally speaking, it is possible to say that there have been pessimistic "myths" about Australian manufacturing exports. Among them are the ideas that "exports increase because the Australian dollar is weak," "if exports of primary products increase, the Australian dollar will increase in value, making it more difficult to export," "the growth of Australian manufacturing exports is a reflection of the strength of Australian resources," and "export growth is the result of government incentives." According to all, the increase in exports is not the result of the economic efforts of individual companies in the manufacturing industry, but is the result of dependence on external factors. The new industrial policy is a challenge to these myths.

Australia must integrate with the Asia-Pacific region in the future whether it likes it or not. Australia was a promoter of APEC, which was created in 1989 to promote active trade liberalization and economic cooperation in the Asia-Pacific region. In this way, Australia has bolstered new industrial policies designed to nurture export-oriented manufacturing industries and encouraged deregulation.

Businesses are living entities and part of the surrounding environment. Businesses inherently possess the ability to adapt to favorable environments. But when faced with difficult environments, they seek the necessary means to survival. Businesses develop and foster economic resources such as people, money, goods, and information (the accumulation of technology, sales networks, brands, reputation, corporate image, etc.) and consider their optimal utilization and allocation. The most important conditions for supporting the continued growth of a business is the continuity and propagation of the entrepreneurial spirit of creative innovation and creating the environment necessary for this.

In implementing the new industrial policy, the Hawke Government put its energies into reaching an accord with the Australian Council of Trade Unions (ACTU) because it believed this was an important factor for developing an environment that could question the economic responsibility of individual industries and firms. Reform cannot be created from business management without freedom and responsibility.

Toyota's determination to have a single labor union was based on this same point. The establishment of a structure that provides for personal responsibility is an essential prerequisite for managerial reform. The accelerating pace of industrialization, internationalization, and the adoption of information technology is reducing disparities in technology and wages at an accelerating pace. The importance of managerial capabilities will increase in the future. The management skills and development of a managerial mindset, not only of senior management, but ultimately of all personnel in the organization, will come into play. In a small market such as Australia, manufacturers that require economies of scale face substantial risks. Without global strategies that effectively use regional or global purchasing, production, sales, and logistics networks it can be difficult to achieve effective investment. Toyota's strength lies in the advanced nature of its strategy development.

At each business site, the mental energy of people who can express the corporate culture of constant reform and improvement from senior management to rank-and-file employees is essential. Toyota is a company that has led the world in this respect. It has raised customer satisfaction, respect for human rights, an international perspective, and continuous reform and improvement as fundamental principles and spread them throughout the world as universal guiding principles that transcend space and time. Toyota's achievements are noteworthy not just in the parent company, but also in the research systems that include all overseas affiliates, QC activities, and coordinated action for improvement proposals. This, in the form of advanced organizational development, is Toyota's strength.

To the extent that the decision to invest A$500 million in the Altona Plant at the end of 1990 is, in the author's opinion, to have been 50% to 60% logic and 40% to 50% emotion, it was a delicate and difficult decision. Toyota had an emotional attachment to Australia, and this was an aspect in favor of investment. The reasons for the success of the investment are not to be found within the investment itself, but required continued inner strength, passion, persistence, understanding and a sense of mission, to continue reforms until the investment delivered results. The nearly 50-year history of Toyota Australia is the history of implementation of comprehensive management based on strategic and organizational development and leaves an impression that management has a strong aspect of inner fortitude.

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