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Sustainable Management Practices of Japanese Companies
in Pre-War Period from the Perspective of SDGs and ESG

10

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Pioneer of Automobile Tire
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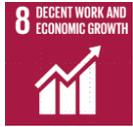
(10) Shojiro Ishibashi : Pioneer of Automobile Tire Manufacturing in Japan



Shojiro Ishibashi (1889-1976)

Masaatsu Takehara, Naoya Hasegawa

Achievement of Shojiro Ishibashi and related SDGs

Economy	 	<ul style="list-style-type: none"> *Transformation of business domain *Innovation in marketing methods *Development of domestic tires
Society	  	<ul style="list-style-type: none"> *Improve employees' working conditions *Support for educational institutions *Operate museum *Drive R & D *Strict quality control
Governance	 	<ul style="list-style-type: none"> *Management based on appropriate profit *Progress from family business *Alliance with foreign companies

1. Early days

Shojiro Ishibashi, Bridgestone Corporation's founder, was born in 1889 as the second son of Shimaya, who ran a tailoring shop in Kurume, Fukuoka Prefecture. When he was young, he was a sickly and unobtrusive child. In 1902, he entered Kurume Commercial School as the youngest student. At that time, there were only about 30 commercial schools nationwide and it was extremely difficult to be accepted (Ishibashi Shojiro Biography Publication Committee [1978], p.17).

When he was attending Kurume Commercial School, Shojiro met Koujiro Ishii, who later became the chairman of the House of Representatives, and Shigejiro Sakamoto, who later received the Order of Culture award from the government as a successful western painter. Shojiro deepened his knowledge of painting through exchanges with Sakamoto, and paintings he collected are renowned worldwide as the Ishibashi Collection. Also, Shojiro came to have a deep relation with politicians Ichiro Hatoyama and Shigeru Yoshida, both of whom became prime ministers after World War II.

As a next step after graduation from the Kurume Commercial school, Shojiro hoped to go to the Kobe Higher Commercial School, but he could not get his father's permission. While watching his classmates go on to study, Shojiro felt bitterly disappointed. However, Shojiro was quick at changing his thinking.

He decided to take over the family business and renewed his determination as " I want to create a business that develops nationwide and benefits society (Ibid., P. 29).

2. From family business to full-scale business

2.1 Transformation of business domain

"Shimaya" had an inefficient business of producing various products after receiving orders. The first step in the management reform that Shojiro implemented was the restructuring of the business domain.

Shojiro abolished order-made production of many varieties and concentrated his business on manufacturing and selling tabi (Japanese split-toed socks). In addition, he hired unpaid apprentices as paid employees to increase their motivation. Shojiro broke away from the cottage industry and pursued business innovation to establish a business that introduced modern management.

In 1908, as the first step in mechanization, the company constructed a new factory, invested in equipment such as oil engines and power sewing machines, and hired 30 new workers.

Before shifting to specialized tabi manufacturing, tabi production capacity was 280 pairs per day. However, after becoming a specialized tabi manufacturer, the number increased to 700 pairs per day (Bridgestone [1982], p.10).

After that, Shojiro pursued his management reforms, focusing on (1) setting appropriate profits and (2) establishing brands. These two points were the core of Shojiro's management vision.

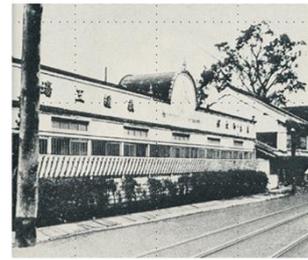
Table 1 Shimaya tabi sales

Year	sales(unit)
1906	90,000
1907	134,000
1908	148,000
1909	232,000

(Source) Ishibashi [1978] p. 32

Shojiro set the appropriate profit at 10% of sales, and decided on manufacturing costs and selling prices based on the appropriate profit. A price determination method widely used in companies is the cost addition method. In this method, a price is determined by adding a certain margin to direct and indirect costs. This method is expected to be stable from a corporate perspective. However, in a market where competition between companies is fierce, this method would be risky because customers may not accept the price calculated by the cost addition method.

Figure 1



Shimaya Tabi (Japanese split-toed socks) Factory
Source: Bridgestone (1978)

In those days, Kurume was crowded with competitors. Tsuchiya tabi (the predecessor of Moonstar Co., Ltd.), founded by Unpei Kurata, a pioneer tabi maker, had a large presence, and Fukusuke Tabi, a leading manufacturer of machine-stitched tabi based in the Kansai area, also entered the market.

Shojiro gained customer support by drastically reducing both costs and prices, and at the same time succeeded in balancing the difficult task of securing appropriate profits.

Shojiro developed a new branding strategy centered on trust and originality. Due to the nature of tabi (split-toed socks), in the summer when sales decreased, working capital was in short supply, and there was a great need for a bank loan. Shojiro's Shimaya, which was a late entrant, had poor creditworthiness and had difficulty obtaining financing. Therefore, Shojiro succeeded in building a brand of trust by strictly observing the repayment date of the debt. His close relationship with financial institutions greatly helped his company to advance business innovation (Ishibashi Shojiro Biography Publication Committee [1978], p.34).

Shojiro devised creative advertising to build a corporate brand. In 1912, he rode a car for the first time in Tokyo. From that experience, he came up with an idea of advertising tabi using a car. He purchased a very expensive foreign-made open car, decorated it with fancy signs and banners, and toured the entire Kyushu area, advertising tabi. The power of this advertising car was enormous. Shojiro's bold advertising campaign was a huge success.

Although Shojiro conducted an innovative advertising campaign based on novel ideas that attracted the public's attention, he had a negative opinion of advertising that merely appealed to consumers to buy products. With the belief that the products themselves were the best advertisements, once the company's name was better known, he avoided spending too much on advertising, opting to spend on

improving quality and lowering prices instead.

2.2 Product development and marketing strategy

In 1914, Shojiro launched a new product that overturned conventional wisdom in the industry. It was "20-sen Asahi tabi" sold at a low set price¹. At that time, tabi were priced according to type and size. In Shimaya, the production system was modernized and mechanized so mass production of high-quality products was possible.

Shojiro improved complex distribution processes and focused on customer-oriented product development. Shojiro's strategy, which consistently expanded from manufacturing to sales, seems to have some underlying ideas with strategy of today's UNIQLO which is gaining customer support by providing high quality classic casual clothing in low prices.²

The responses from competitors for Ishibashi's flat-price tabi were extremely cold. Rivals entered flat-price tabi two years after the launch of Asahi Tabi. However, Ishibashi's strategy was a great success. Before the launch of Asahi Tabi, Shimaya's sales was 600,000 pairs a year, but by 1918, it had grown to 3 million pairs a year (Bridgestone [1982], p.13). Asahi Tabi grabbed the customer's heart in terms of both quality and price, and swept the market.

In 1918, Shojiro established Nippon Tabi Co., Ltd. (hereinafter referred to as Nippon Tabi) with a capital of 1 million yen, and switched from a small family business to a more organized, larger business. In 1921, Nippon Tabi started to develop an advanced form of tabi called jika tabi. Jika tabi was made of durable cloth and a rubber plate was pasted on the sole so that it could be worn outdoors. At that time, ordinary workers used straw shoes (straw sandals). Shoes were not durable, and when workers put them on with bare feet, they were often injured by fragments or nails, so tabi was a necessity for workers.

The price of the straw shoes was 5 sen per pair, and when added to the tabi fee, 1.50 yen per month (about 18 yen per year) needed to be spent on footwear. The average wage of workers at that time was around 1 yen per day, so the cost of footwear was not light.

Tabi with rubber soles were not original of Japanese tabi. It was produced in the Kinki region around 1902. However, it was not widely spread because the rubber sole was easily peeled off.

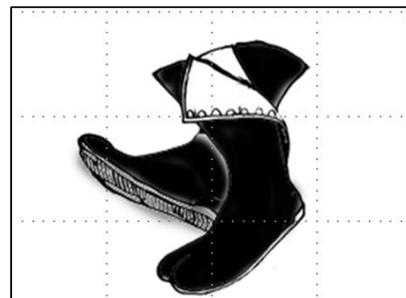
After trial and error, Nippon Tabi technically overcame this shortcoming, and succeeded in commercializing Asahi jika tabi (split-toed heavy cloth shoes with rubber soles). The name "jika tabi" was an original trademark of Japanese Tabi, but it has become a common name.

Figure 2



Advertising by car (1912)
Source: Bridgestone (1978)

Figure 3



Jika tabi
Source: Bridgestone website

At that time, the price of one pair of jika tabi was 1.50 yen. The useful life of a jika tabi was about half a year, so the annual cost of footwear using jika tabi was 3 yen. Compared to 18 yen per year for using the straw shoes, the cost was reduced to one sixth. Consumers were very pleased with the emergence of jika tabi which was both economical and safe. In January 1923, the production of jika tabi was 1,000 pairs per day, but in December in the same year, it increased dramatically to 10,000 pairs per day (Bridgestone [1982], p.17).

Nippon Tabi, which solidified its base with strong sales of jika tabi, started to produce rubber shoes in October 1923. With the spread of Western clothes, the mainstream of footwear was about to shift from clogs and sandals to shoes. Focusing on these changes, Nippon Tabi anticipated increased demand for inexpensive rubber shoes. Nippon Tabi's anticipation turned out to be right; orders for rubber shoes surged from abroad, and the export of Japanese rubber shoes even caused international trade friction.

Let's look back on the competition between companies in the age of tabi makers.

In the first phase, homogenization (imitation / improvement) activities took place. The first mover was "Tsuchiya tabi ", a local maker in Kurume. Shojiro's company, Shimaya, which was a follower, tried to homogenize the first mover by thoroughly imitating the innovative business of Tsuchiya tabi.

In the second phase, differentiating actions were developed. The keyword here is price destruction. The first mover in the second phase was "Shimaya (Shojiro's Nippon Tabi)", and followers were "Tsuchiya tabi" and other major manufacturers such as Fukusuke.

Shimaya made a bold differentiation with the "20 sen priced Asahi Tabi". Tsuchiya tabi and other major manufacturers underestimated this and allowed Shimaya to run ahead of other rivals. Shimaya succeeded in gaining trust from consumers and retailers, and made a leap to become a top manufacturer in the industry.

In the third phase, companies in the tabi industry returned to the homogenization competition again. The key word here was product innovation. the first mover in the third phase was Nippon Tabi again, and its followers were Tsuchiya tabi and other major manufacturers. Nippon Tabi became the top manufacturer in the second phase by developing a revolutionary product, jika tabi.

However, poor counterfeit goods spread all over Japan, and lawsuits for patent infringement were filed frequently. Nippon Tabi allowed companies following the settlement to manufacture and sell jika tabi under the condition of royalty payments. As a result, many tabi manufacturers accelerated activities to imitate and improve jika tabi products of Nippon tabi.

3. Challenge to "Made in Japan" tires

3.1 Establishment of Bridgestone Tire Co., Ltd.

Shojiro Ishibashi based his business management on the expansion of retained earnings and the development of new businesses using the funds. What made this possible was the "30% leap forward"

campaign which began in 1923 to aim at increasing production by 30% every year (Bridgestone [1982], p.17). In addition, the company maintained its policy of securing 10% of sales as appropriate profit, so if the company could increase production by 30% every year, internal reserves would expand exponentially.

In a rapidly changing socio-economic environment, companies need to create new businesses based on their strengths (core technologies) in order to survive. Nippon Tabi linearly developed a new business such as jika tabi and shoe boots based on their technologies of tabi manufacturing and rubber processing.

Ishibashi's next goal was to produce car tires that had not yet been domestically manufactured in Japan. This decision is often regarded as a challenge in a different field. From the perspective that the company was a footwear manufacturer, it would be evaluated as a challenge to a different field. It can be said that the business is expanding. However, if the company's core technology is regarded as rubber processing technology, the production of automotive tires can be said to be a natural expansion of business utilizing the core technology.

In its development process, Nippon Tabi evolved its core technology into rubber processing technology. In other words, new technologies were added to the core technologies, and the two complemented each other to achieve growth. In addition, as seen in the export of rubber shoes, Ishibashi's business philosophy of contributing to the country through the development of industry and the spirit of challenge brought him toward the domestic production of automobile tires.

By the time Ishibashi decided to enter the tire business, it was about the time that the main products of the rubber industry in the US and Europe would shift to automotive tires. Ishibashi loved cars after he bought them for advertising his tabi products. The number of vehicles owned in Japan increased dramatically from 512 in 1912 to 40,070 passenger cars and 12,097 trucks in 1926 (Ibid., P. 102).

Only 595 domestic cars were produced in Japan from 1912 to 1926, and automobile tires were dominated by imported goods.

Dunlop Far East Co., Ltd., founded in 1913 by Dunlop, UK, began producing tires in Japan and controlled the domestic market.

On the other hand, Yokohama Electric Wire Manufacturing Co., Ltd. (the predecessor of Furukawa Electric Co., Ltd.) and Goodrich Corporation of the United States jointly invested to established Yokohama Rubber Manufacturing Co., Ltd. (the predecessor of The Yokohama Rubber Co., Ltd.), and began its production of tires in 1921.

The business of Yokohama Rubber Manufacturing was interrupted by the Great Kanto Earthquake in 1923, but its Yokohama factory was rebuilt, and production of domestic tires started in 1930.

Figure 4



Production of tire prototype
Source: Bridgestone (1978)

Strong opposition was raised from inside and outside of the company on Ishibashi's plan to enter the tire business. However, Professor Takeo Kimijima of Kyushu University and Takuma Dan, president of Mitsui Godo Company, who knew Ishibashi through the tabi business, supported Ishibashi's plan. After examining the technical and cost challenges, Kimijima, a rubber research expert, suggested that tire manufacturing was possible.

In 1929, Ishibashi ordered a tire manufacturing machine with a production capacity of 300 tires a day, and set up a tire factory in a corner of the Kurume factory of Nippon Tabi. The following year, Shojiro Ishibashi became the president of Nippon Tabi to replace his brother Tokujiro, and declared his plan to enter into the automobile tire business. In April 1930, after various technical issues were overcome, a prototype of an automobile tire was completed. The biggest challenge was ensuring quality. Since there were no tire specialists in Nippon Tabi, they tried to improve the quality by scouting Japanese engineers from Dunlop Far East Co., Ltd.

In 1931, Bridgestone Tire Co., Ltd. was established, and Shojiro Ishibashi became president. The new company was established with a capital of 1 million yen, jointly funded by Shojiro and his brother Tokujiro. The investment ratio was 66% for Shojiro and 34% for Tokujiro. At that time, imported cars accounted for most of passenger cars and trucks in Japan, and the brand power of foreign products was overwhelming. Car tires were in a similar situation. In addition to reducing the quality gap with imported tires, the company was also required to eliminate the image of tires manufactured by tabi maker.

Ishibashi thought that in order for Bridgestone, a follower, to compete with first movers such as Dunlop and Yokohama Rubber, it was imperative for Bridgestone to gain customer trust for its products. Therefore, a new system called liability guarantee system was introduced. This is a mechanism for unconditionally replacing tires when a complaint occurs. Many customers abused the system and the losses were not small, but Ishibashi endured.

In 1932, Bridgestone tire products were recognized as excellent domestic products by the Ministry of Commerce and Industry. Starting with being recognized as a qualifying product by Ford Japan, Japan General Motors and Chrysler successively adopted Bridgestone tires as genuine tires. The entry of Bridgestone tires created price competition, forcing foreign manufacturers, which used to dominate the domestic market, to cut prices. As a result, the price of tires dropped sharply, bringing great benefits to consumers.

3.2 Bridgestone management during the war

In 1937, Bridgestone Tire moved its headquarters from Kurume to Tokyo. At that time, Bridgestone tires had a problem of securing natural rubber, the raw material for manufacturing tires. In the midst of the wartime block economy, natural rubber production in Southeast Asia was dominated by Britain and the Netherlands. Ishibashi planned to develop synthetic rubber instead of natural rubber and use

it as a raw material for automobile tires. In 1938, rubber distribution control regulations were promulgated and securing natural rubber was even more difficult. In 1941, Bridgestone Tire successfully commercialized synthetic rubber and named it BS Rubber.

In 1939, production quotas and distribution controls for tires and tubes for private vehicles were enforced. In response, Bridgestone tires (shares 27-28%), Dunlop (shares 42%), and Yokohama Rubber (shares 32-33%) agreed to evenly divide the market share by 1/3. Also, agreements on sales territories was concluded (Ibid., P. 158).

Under this agreement, Bridgestone tires' area of business was determined as from Kyushu to part of Kansai (around Osaka, Kyoto, and Kobe). In 1942, the name of the company was changed from Bridgestone Tires to Nippon Tires as the military pointed out that the company name Bridgestone was not appropriate as it was described in English, the language of enemy countries.

In 1944, Nippon Tires was designated as a munitions company. In addition to automobile tires, Nippon Tire also produced aircraft tires, anti-vibration rubber, solid tires for tanks and bulletproof tanks. The Army and Navy fought a fierce battle for these products.

4. Regeneration of Bridgestone and technological innovation

Immediately after the end of the war, Ishibashi came to realize that car tire production was a social mission as it was vitally important for the country to improve the means of transportation to speed up post-war reconstruction. At the Kurume plant, which survived the war, car tire production resumed just two months after the end of the war.

In 1951, Ishibashi changed the company name from "Nippon Tire" to "Bridgestone Tire" again. In the same year, Bridgestone Tire entered into a production and technical alliance with Goodyear, the world's top tire manufacturer. During World War II, Ishibashi was entrusted with the management of Goodyear's Java plant, which was requisitioned by the Japanese army, but after the war, he returned it to Goodyear intact. This deepened the bond between the two companies.

The details of the alliance with Goodyear were as follows (Bridgestone [1982], pp. 156-157).

- (1) Goodyear would provide technical guidance to Bridgestone tires, while Bridgestone tires pay technical guidance fees.
- (2) Bridgestone tires provide Goodyear with a portion of their production capacity, and produce Goodyear brand products, and Goodyear pays production costs.

In the final stages of the partnership negotiations, Goodyear requested that it would take a 25% equity stake in Bridgestone. During this period, many Japanese companies were willing to accept foreign capital, but Ishibashi refused this request. He wanted to protect the management independence of Bridgestone. Eventually, the partnership was formed, as Goodyear withdrew its request for equity participation. This partnership enabled Ishibashi to absorb the latest tire manufacturing technology using rayon cords.

The cord constitutes the skeleton of the tire, and has the role of maintaining the internal air pressure from the load and impact the tire receives. When tire cords were developed in the 1920s, Egyptian cotton was used. After that, rayon was used in 1937, nylon in 1942, and polyester in 1962, to improve strength and product life (Hayashi [2009], p.157).

Tires Bridgestone produced at that time were cotton cord tires, but this product was already discontinued in the United States. Ishibashi was clearly aware of the technical gap and recognized that innovation and improving production efficiency were urgent issues for Bridgestone to address.

After World War II, the Japanese tire industry recovered its production level, supported by special demand from the Korean War. However, after the end of the Korean War, the domestic economy became deflationary and the tire industry suffered a sharp decline in demand. Under these circumstances, Bridgestone started a five-year plan to modernize production facilities in 1951, and Ishibashi ordered the development of rayon tires. Rayon tires were superior in cost and durability, so their commercialization was a necessity for Bridgestone to survive in a stagnant market.

Figure 5



The structure of tires
Source: Bridgestone website

Table 2 Trend in purchases of tire cord yarn
(Unit : t)

Year	Nylon	Rayon	Nylon ratio
1958	49	4,410	1.1%
1959	403	6,735	5.6%
1960	1,210	6,644	15.4%
1961	3,507	5,424	39.3%
1962	4,811	5,753	45.5%

(Source) Bridgestone Corporation [1983] p.219

The production of rayon tires in full scale began in September 1951. In May of the following year, 80% of Bridgestone tires were replaced with rayon tires. When the rayon tires were on track, Ishibashi ordered the development of tires that use nylon cords instead of rayon. In 1956, prototypes of nylon tires for trucks and buses were completed, and mass production was decided based on the results of test sales

However, a big challenge was the procurement of raw nylon yarn. Nylon yarn production for tire manufacturers was dominated by DuPont. Ishibashi conducted joint research with Toyo Rayon Co., Ltd. to avoid dependence on foreign companies in terms of cost and stable supply, and eventually achieved domestic procurement of nylon raw yarn (Bridgestone [1982], pp. 215-216).

Nylon tires had many advantages such as 1) heavy load resistance, 2) shock resistance, 3) fatigue resistance, 4) resistance for temperature rise, 5) water resistance, and 6) improved fuel efficiency by light weight. Therefore, it quickly attracted many customers. Bridgestone's technological innovation

and modernization of production facilities were successful, and in 1953 its sales exceeded 10 billion yen, jumping to the top in the industry.

5. Outcomes of business diversification

5.1 Challenges and setbacks in automotive development

Ishibashi, who became the manager of the leading tire manufacturer, next planned to move into the automobile manufacturing business. In 1949, Ishibashi invested in Tokyo Electric Vehicle Co., Ltd.

Tokyo Electric Vehicle was founded by employees of Tachikawa Aircraft, which once produced fighter aircraft during the war. They also worked on the development of electric vehicles.

However, as fuel efficiency was improved, the advantage of electric vehicles was lost.

Therefore, the company decided to switch to gasoline-powered vehicles, and commissioned the production of engines to Fuji Precision Industries, which was descended from Nakajima Aircraft. Ishibashi purchased the shares of Fuji Seimitsu Kogyo held by the Industrial Bank of Japan, aiming for integrated production of engines and bodies. He led management himself as chairman (Ibid, p.356-357).

In 1949, Tokyo Electric Motor Company changed its name to Tama Motor. In 1951, Tama Motor completed a truck equipped with a gasoline engine developed by Fuji Precision Industries. The following year, the first gasoline passenger car, named Prince, was launched and gained popularity. That year, Tama Motors changed its name to Prince Motor Corporation. In 1953, in line with Ishibashi's intentions, Prince Motor Corporation and Fuji Precision Industries merged. As a result, an integrated automobile production system was realized.

The cars produced by Prince Motors were renowned for their innovative style and advanced technology. However, Prince Motors had no mass-market compact car in its product lineup, which was at the core of motorization in Japan. In addition, the company's corporate culture of seeking technical breakthroughs without being conscious about the development costs had a negative impact on Prince Motors' business performance.

Under these circumstances, the Ministry of International Trade and Industry (MITI), which wanted to strengthen the base of domestic automakers in preparation for liberalization of imported cars, urged the merger of Prince Motor and Nissan Motor (Ibid, p.358).

In 1965, Ishibashi accepted the merger of Prince Motor Company and Nissan. Apart from Ishibashi's personal thoughts, his judgment as an entrepreneur, based on his deep insight into the domestic and international economic situation, seem to have influenced his decision to withdraw from

Figure 6



Prince Sedan AISH (1952)
Source: Japan Society of Automotive Technology

the automobile manufacturing business.

5.2 Withdraw from motorcycle business

After the war, Ishibashi started production of bicycles at the Asahi Plant (Tosu City, Saga Prefecture).

In 1949, Ishibashi spun off its Asahi Plant as Bridgestone Bicycle Co., Ltd., but there was a large technical gap in bicycle manufacturing capability from leading manufacturers such as Yamaguchi Bicycle, Miyata Kogyo, and Maruishi Bicycle. In addition, Recession due to the Dodge Line policy³ deteriorated the company's business performance.

In 1952, Bridgestone Bicycle released the motor-driven bicycle "Bamby". The engine was developed by Fuji Precision Industries, which Ishibashi acquired for automobile manufacturing. The Bamby grew rapidly, improving its quality and gaining 52% market share in 1952. But then, with the advent of the motorcycle age, small motorcycles fell into a slump (Bridgestone [1982], p.195). Bridgestone bicycles, who had no experience in full-scale motorcycle production,

sought a way via mopeds (motorcycles with pedals). However, with the spread of motorcycles, mopeds were already obsolete. In addition, the company's sales remained sluggish due to a lack of brand power and technical gaps with leading manufacturers.

At that time, the motorcycle market in Japan was oligopolized by Honda Motor Co., Ltd., Suzuki Motor Co., Ltd. and Yamaha Motor Co., Ltd., and their combined share increased from 67.8% (1960) to 92.3% (1966) (Small Car Newspaper [1958], pp. 16-21). In contrast, the Bridgestone cycle's share only increased slightly from 2.1% to 3.4%. With the oligopolistic status of the top three companies completed in the motorcycle market, Bridgestone lost its meaning in continuing its motorcycle business. In 1966, Ishibashi decided to withdraw from the motorcycle business.

6. Out from family business and modernization of management

In October 1961, Bridgestone went public on the Tokyo and Osaka Stock Exchanges. Though a bank encouraged Ishibashi to list Bridgestone's shares, he was reluctant about listing. However, the rapidly expanding business created strong financing needs. In addition, Bridgestone became a large company and was required to take responsibility as a public institution. Therefore, Ishibashi decided to go public in response to changes in the environment surrounding the company.

Prior to Bridgestone's listing, Ishibashi gave Bridgestone shares at a lower price to qualified employees (approximately 9% of all employees). This not only served as securing stable shareholders, but also aimed at fostering a sense of unity between employees and the company (Bridgestone [1982], pp. 282-283).

In 1963, when he was 74 years old, Ishibashi transferred the position as president to his son

Figure 7



Moped (motorcycles with pedals)
BS Champion Type I
Source: Oseki (1993)

Mikiichiro, and he became chairman. He continued to exert strong leadership until 1973 when he retired due to illness.

7. Conclusion

The Japanese automobile tire industry has been steadily growing since the 1960s with the progress of motorization and the growth of the Japanese economy. Even after the bursting of the bubble economy in the early 1990's, the industry has captured global demand in the United States, Europe and emerging markets, and their business performances have been generally strong.

In 2005, Bridgestone surpassed Michelin in sales-based market share and became the world's number one tire manufacturer. Until now, it has maintained the leading position in the industry. The major tire manufacturers' market shares in FY2016 were Bridgestone (14.6%), Michelin (14.0%) and Goodyear (9.0%).

The characteristics of Shojiro Ishibashi as an entrepreneur can be summarized in the following three points. The first is excellent self-innovation ability. He solidified his business base with the success of the tabi business, but he didn't stick to his successful experience. Instead, he constantly challenged new fields. Top management's self-innovation fostered a self-reliant organization that produced continuous innovation and achieved spiral growth.

The second point is the effective use of knowledge. In taking on the challenge of developing automotive tires, Bridgestone made the most of its knowledge of rubber processing technology. With the leadership of Ishibashi and his support, this diversion of technical knowledge was actively explored in Bridgestone and led to new businesses.

The third point is outside-in thinking. Outside-in thinking is an indispensable ability to create innovations that respond to social needs. Ishibashi captured the social needs of the domestic production of automobile tires and succeeded in capturing it as a business opportunity. It can be said that he practiced management that anticipated CSV (Creating Shared Value) proposed by M. Porter in 2010.

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¹ In the early Meiji period, sen was used as the secondary currency unit. 1 yen was 100 sen, so 20 sen was one fifth of 1 yen.

² UNIQLO is a casual wear brand operated by Fast Retailing Co., Ltd in Japan. The official name is UNIQUE CLOTHING WAREHOUSE. UNIQLO has gained the support of customers around the world as a brand of high quality and reasonable price for all ages and genders.

³ The Dodge Line was a fiscal and monetary tightening policy implemented by the Allies in February 1949 for the independence and stability of the Japanese economy. Inflation subsided due to this policy, but deflation progressed, and unemployment and bankruptcy increased.



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