



Dr. Yoshijiro Ishikawa, Founding President of ULVAC, Inc.

Impressive financial savvy in support of ULVAC during its startup period

ULVAC, Inc. owes its growth to a large number of benefactors. Yoshijiro Ishikawa is one such person. He was the first president of our company, but his presence was felt in a great many other ways. Without Yoshijiro's commitment, ULVAC might well have met an untimely end.



Tenth anniversary of ULVAC's founding (1962): from left, Jin Imachi, Yoshijiro, Kozo Ishikawa

Dr. Yoshijiro Ishikawa's Background

He was born in 1881 in Tokyo. At the age of 13, he was sent to apprentice at Tokyo Electric Light Company's Kanda power plant. There he encountered Dr. Ichisuke Fujioka, considered a pioneer in Japan's electrical engineering industry, and learned from him. Later Yoshijiro was posted to Shizuoka Electric Light, where he met Dr. Torajiro Ogi of Kyoto University. When he was 18, he joined Nagoya Electric Railway, through the introduction of Dr. Ogi, and in 1901, at age 20, he became a technician at Kyoto Electric Light company, run by Zenkichi Osawa (founder of the J. Osawa Group). Dr. Ogi and Mr. Osawa were lifelong mentors for Yoshijiro. Wishing to continue his studies while he worked, Yoshijiro enrolled in the third year of Doshisha General School. In 1904, at age 23, he entered the Third Higher School; in 1907, at 26, he entered the Electrical Engineering department at Kyoto Imperial University. In 1910, at 29, he graduated and returned to Kyoto Electric Light company. There he worked on electricity supply, which had not made much progress. He joined a study tour to Europe and the U.S. in 1911 and 1919. In the U.S., he met with the great inventor Thomas Edison, and subsequently began to serve on the board of the Edison Foundation. He became Vice President of Kyoto Electric Light Company in 1941, and then President of Keifuku Electric Railroad. In 1952, he became founding President of ULVAC (then called Japan Vacuum Engineering Company). He served on the boards of many governmental agencies, organizations, and private corporations until his death at age 88 in 1969. He was decorated with a fifth rank award and later with the Order of the Sacred Treasure, fourth class, among other honors.

Yoshijiro's financial savvy was the driving force behind ULVAC's founding

On behalf of ULVAC's founders, whom he represented, Yoshijiro Ishikawa approached key figures in industrial circles for investment funding. Those who were asked agreed to give 1 million yen with no conditions attached "because Mr. Ishikawa is starting a company." Moreover, they all added their names to the Board of Directors. One of them was Konosuke Matsushita (the founder of Panasonic Company).

At a time when ULVAC was just beginning its journey and had an uncertain future, the support of six major industrial figures, including Konosuke Matsushita, significantly increased the company's social credibility.

In 1968, fifteen years after its founding, ULVAC built a new headquarters and factory in Chigasaki. At the opening ceremony, Konosuke Matsushita, then

Chairman of Matsushita Electric Industry (and also a Board member of our company), stated, "Fifteen years ago (in 1952), when I heard from Mr. Yoshijiro Ishikawa, the current Chairman, that vacuum technology was extremely important for our nation's industries, and that it was necessary to found this company to promote and develop this technology, I was in full agreement and became involved starting from the early days of ULVAC."

Renowned industrialists supported ULVAC because, in their words, "Mr. Ishikawa is starting a company"

ULVAC was founded on August 23, 1952, as Japan Vacuum Engineering Company. As the name indicated, it was a company that advocated the use of "vacuum technology," which at the time was not commonly utilized in Japanese industry.

The impetus for founding the company came in a letter from Richard Morse, President of NRC Company, a U.S. vacuum equipment manufacturer. The letter was addressed to Jin Imachi, a laboratory researcher who had participated in conferences on vacuum technology (and who later became ULVAC's second President). Morse wrote, "I will willingly support you if you start a vacuum technology business." Colleagues whom Imachi had met at conferences also supported the company's founding. Still, Imachi decided to discuss his aspiration with his brother-in-law, Kozo Ishikawa. Kozo told him, "Founding a company on our own would be too difficult. Let's ask my father for advice." His father was Yoshijiro Ishikawa; in other words, Yoshijiro was Imachi's father-in-law.

Yoshijiro had been Vice President of Kyoto Electric Light, was President of Keifuku Electric Railroad at the time, and held many public positions. He was an engineer who had studied electrical engineering at Kyoto Imperial University. He showed a deep understanding of Imachi's and others'



Signature portion of ULVAC's official incorporation papers, where it was registered as "Japan Vacuum Engineering Company"

ambition to "contribute to Japanese industry through a vacuum company," and promised full-scale backing. He went on to garner the strong support of six leading industrialists.

This was how ULVAC was founded. Despite his advanced age of 71, Yoshijiro took on the position of President, and fulfilled his duties until ULVAC could stand on its own feet.

● **Yoshijiro's strong spirit led ULVAC to contribute to the vacuum technology industry**

One of the colleagues whom Imachi invited was Chikara Hayashi, who can be called ULVAC's "forefather of research and development." On the occasion of the thirtieth anniversary of ULVAC's founding, he commented as follows.

"ULVAC is a very lucky company.

From the start, we had a conviction that vacuum technology would be valuable for the future of industry, and that society would certainly recognize this. But when and in what form this would come about was not something we could determine on our own.

In the initial stages, the world didn't acknowledge our technology. When I think of how we were able to survive our infancy, I can only say it must have been because of luck.

The major reason we have been able to

continue for thirty years is because of our founding President Yoshijiro Ishikawa. He was capable of earning the trust of people like Mr. Matsushita, Mr. Gen Hirose (President of Nippon Life Insurance Company), Mr. Yoshio Osawa (Chairman of J. Osawa Group), and others of high social stature. By firming up our company's foundation so that we could receive that support, he played a major role."

● **Episodes that convey Yoshijiro's humanity**

Yoshijiro left the management of ULVAC to Imachi and Kozo, and in general did not interfere. However, he fully backed the company by exerting efforts to seek not only funding, but also product orders from his broad social network.

In 1957, a major metals manufacturer sought to acquire the nation's first vacuum melting furnace, which Chikara Hayashi had developed. Yoshijiro went to the management leaders in person and said, "Won't you let us keep this technology, since we are a company specializing in vacuums?"

In another instance, in 1960, ULVAC failed to secure an order from a major metals manufacturer for a vacuum melting furnace. Yoshijiro promised, "I'll go and ask the president." He went directly to the top and was able to get the order.

There is a back story to this episode.

During that president's student days, his father hoped he would study economics at university. But the son wanted to study philosophy. The father sought Yoshijiro's advice.

His advice was, "Your son will eventually go into management. Management requires dealing with people, and philosophy will be very useful background for that. Why not let your son study what he wants?" The father allowed the son to study philosophy.

Such anecdotes show the warmth of Yoshijiro's character and his depth of feeling about the vacuum business.

ULVAC's company creed, established in 1966, was formulated by that era's corporate directors and strongly reflects



C. 1960, Yoshijiro's departure for the U.S. to negotiate with NRC Company. Behind Yoshijiro at the right is Chikara Hayashi.



1964: Presentation of Edison's incandescent light bulb from Edison Foundation Chairman Sisler



On the occasion of the founding of ULVAC's first joint venture company, Japan Reliance, the President of Reliance Electric and Engineering Company and his wife visited Konosuke Matsushita's residence at Yoshijiro's invitation (Yoshijiro is third from the right in the back row; Konosuke Matsushita is to his left).

Yoshijiro Ishikawa's business philosophy.

1. Our company's life is eternal.
2. Our company can thrive through its people and can face ruin through its people.
3. Our company pursues profit.
4. Our company is a public instrument.
5. Our company continues to exist solely because of our customers.
6. Our company values time.
7. Our company's business is the promotion of the comprehensive use of vacuum technology.