“Whatever people may say about me, I know what I am doing.”

Ryoma Sakamoto

Masahiro Shindo
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Chapter 1 The Early Years

1. Overcoming a Childhood Plagued with Illness

“You almost died”
Masahiro Shindo was born in Niihama city, Ehime Pref., in 1941. When he was in the third year of elementary school, he contracted a serious illness that required three operations. At the time of each surgery, the doctor told his parents to be prepared for a bad outcome, but Shindo miraculously survived them all. However, as an after effect of the general anesthesia he lost most of his memory this caused great concern for his family and everyone was very worried about him.

Shindo’s parents just wanted him to grow up to be healthy and never told him to “do your homework” or put any demands on him. They were just really happy when Shindo played outside full of energy, so he played after school in the mountains and rivers until it got dark to stay outside then he came home. This environment enriched his sense of adventure, determination and independence. His mother often said to him “You almost died; so you can get through anything”; this greatly encouraged him.

Shindo did not do well in elementary school, but he did not care. In his first year of junior high school, his memory started to return and Shindo did so well on an important test that his teacher complimented him and said, “You can do it!” This experience motivated him to study hard, and he went on to a distinguished local high school.
2. **High school and University days**

**Interest for chemistry**

While he was attending high school, Shindo became very interested in chemistry and in doing experiments. The more experiments he performed, the greater his fascination in chemistry. His interest continued to grow, and he became determined to study chemistry at a university. Shindo’s family did not support his desire to go to a university; they wanted him to work and contribute to the household. This was necessary since his parents were already bearing the financial burden of his brother’s tuition. At this time, Ehime University opened a new Industrial Chemistry department. Shindo’s high school teacher stepped in and persuaded his parents to let him attend saying the tuition fee was significantly cheaper than that of high school and that the university is within commuting distance of his home. Shindo’s wish to attend the university and study chemistry was about to come true.

Shindo was very optimistic when he entered the university as a first generation student. However, at the young university there was neither equipment for experiments nor a syllabus, these would have to come later. Shindo stepped in and helped his professors equip the labs as well as prepare the experiments that would be needed for the classes. From this experience, he found it challenging and rewarding to create things from scratch.

After his graduation, Shindo was expected to work for a large chemical company such as Sumitomo Chemical Co., Ltd., Teijin Limited or Toray Industries, Inc. However, his professor gave him advice that he would have fewer opportunities in a large chemical company which is already full of excellent chemists, and recommended he go to a smaller company where he would be highly appreciated and could make a bigger contribution. Since Shindo was working in the laboratory of electrochemistry, he decided to work for Mitsubishi Electric Corporation.
Chapter 2 Career launch

3. First employment at Mitsubishi Electric Corporation
   
   “He who falls today may rise tomorrow”

Soon after Shindo joined Mitsubishi, he was assigned to the Kyoto factory which was recently constructed and just opened. He was one of the first members there. One of his early colleagues recalls his first meeting with Shindo: “He was a man of few words and rather quiet. He didn’t seem like the kind of person to throw caution to the wind, but later we would find out differently.”

At the Kyoto factory, Shindo was in charge of producing photo sensors. At that time there was little demand for the photo sensors, and his project never saw “the light of day”. While Mitsubishi was working on reorganizing its business after withdrawing from the photo sensors market, Shindo and two other employees were left behind in the empty office since they had not yet assigned to their next positions. Nobody at Mitsubishi seemed to care about them: so they searched for ways to help pass the many hours that they spent in the office. They started out by reading academic books, but eventually these changed to novels and then weekly magazines. They just sat around wasting time. It was hard to spend their days with nothing to do, and they became very demotivated. Finally, after they had enough, they all handed in their resignation letters. Mitsubishi then seriously considered their reassignments and decided to transfer the entire photo sensor project to Minolta Co., Ltd. (currently Konica
Minolta, Inc.), so Shindo and the other two employees were sent there. Within the first two years after starting his career, Shindo experienced a microcosm of an office worker’s experience – He was assigned to a new project, had the project cancelled, was sidetracked with no position and then transferred to another company and project. In looking back, this was an important time because Shindo developed the drive and spirit to overcome difficulties as well as learn the essence of entrepreneurship.

4. Encounter with lifetime work

Recognition of his presence

When Shindo finished his project at Minolta, he was transferred back to Mitsubishi where a new IC project at the Kita-Itami Works was being launched. Once again, he was one of the first members of a new project.

During Shindo’s first year at the Kita-Itami Works, he was put in charge of various back office projects such as developing standard procedures for specifications, cost accounting, project planning, investment planning and production planning. This was not a good fit for him because he had spent two years to become a semiconductor process engineer and now he was not doing any development work. His colleagues who had been engaging in this project since joining the company looked down on Shindo, and one of them even said to him, “You are totally useless.” This comment definitely kindled his indomitable spirit, and he became determined to overtake his colleagues as soon as he could.

At this time in Japan, there were only a few articles about ICs; as this was the dawn of the IC
era and not much was known or written about it. Shindo began to acquire as much knowledge as he could from his senior colleagues and engineers as well as from the workers on the assembly lines and from any other source he could find. He read a large amount of books and other literature as well as process specifications. He spent much time observing the manufacturing lines and learning the operations so that he could catch up with his colleagues. Two years after Shindo was transferred to the Kita-Itami Works, he was a participant on the MOS integrated circuit development team and contributed to the success of project. He was involved in several important technological development projects on the leading edge of semiconductor manufacturing. At just 32, Shindo was promoted to a senior staff position in the IC production department that took responsibility for managing people, goods, services, and money.

In the early 1970s, Intel released the microprocessor, peripheral LSIs and the concept of integrated memory. Shortly after that, Texas Instruments and Motorola introduced new products, and the IC industry entered a new phase of dynamic growth. Meanwhile, Shindo kept increasing the integration density of Integrated circuits each year. However, he eventually lost his fascination with just increasing their capacity by improved processing technology, and his interest shifted toward circuit design. He decided to leave Mitsubishi and find some new opportunities.
In 1979, Shindo joined the Ricoh Company, Ltd. At that time Ricoh was leading the copier industry and was focused on the development of in-house capability for the production of semiconductors. The company built the Ricoh Electronics Development Center at the Ikeda plant in Osaka in 1981 and entered the semiconductor market on a full scale.

Shindo got involved with projects and activities at this new development center and dealt with a variety of business operations such as recruiting engineers, fostering and educating human resources, designing the assembly line and developing the semiconductor processing technology. Since this was Ricoh’s first attempt to both manufacture and sell semiconductor devices outside of Ricoh, it was not easy for them to win orders. Even the Office Automation Equipment Division of Ricoh hesitated to use the semiconductor products from the new development center. With the pressure on him, Shindo had no choice but to get personally involved with the sales effort and began to expand sales around the world, eventually expanding sales activities into the U.S.
At that time in the U.S., fabless semiconductor companies had successfully emerged with their unique business model of focusing on the design, development and sales only, outsourcing the manufacturing to outside foundries. During this time, Shindo had a chance to meet with VLSI Technology, Inc. (VTI) that was a typical fabless company outsourcing production to the manufacturers in Japan and Taiwan. The encounter with VTI triggered the official start of Ricoh’s semiconductor business as the foundry for VTI.

6. Fateful encounter with Nintendo (1)

**The concept of Nintendo**
In 1980, there was major movement in Japan as well. Nintendo was planning to develop an in-home-use game designed for families. This product was intended to expand their future growth base following their big success of “Game & Watch” in the mobile game console market. Nintendo wanted to partner with Ricoh and have them provide the semiconductors for these new products.

Nintendo’s concept and business philosophy for these new games were very clear. Because they were for children, the price had to be less than 20,000 yen so that children could buy one with
their pocket money. The new gaming machines were specialized and required at least two LSI chips each. Requirements included:

- Make the games keyboardless for easy use by children
- Prevent competitive products from emerging for more than three years
- Use the sounds and moves of Donkey Kong from arcade games
- Deploy various gaming software in one platform

The concepts for the new Nintendo games were very clear. Impressed with these ideas, Shindo started an internal review of this project at Ricoh.
7. Fateful encounter with Nintendo Co., Ltd. (2)

Challenge the impossible
The Ricoh Engineers response was totally negative they were unwilling to accept the Nintendo concept that Shindo had brought back with him. He wanted to change the situation and submitted the ideas that he developed to implement this project:
- Get a control board used in arcade game machines and remove the LSIs used for image processing, CPU (Central Processing Unit) and memory
- Take microscope photos of collected LSIs
- Cut-and-paste necessary parts in approximately two meters square size
- Place 6502 8bit CPU, which was the smallest in the world at that time, as the core part
- Scale it down to 20cm square using a copying machine.

The ideas above were exactly the concept to create a system LSI. Shindo presented the idea to Nintendo and received positive feedback. He agreed to design a two-chip system LSI. However, when the design engineers saw the scaled down design of LSI, they all said it was extremely difficult to integrate large scale circuit on a silicon wafer of around 1cm square. Shindo suggested organizing a joint development team with Nintendo members. They eliminated unnecessary functions to reduce the circuit size and succeeded in integrating the complete system with two chips.

With this great achievement, Nintendo released the “Family computer” priced 14,800 yen in 1983, and it was a great hit. The semiconductor business of Ricoh grew rapidly, and in 1990 the number of employees grew to 1,100 and the annual revenue reached 400 billion yen.
Chapter 4. Launch of MegaChips

8. Unflagging determination

Direction of semiconductor industry in doubt
While Ricoh was achieving great success, Shindo was feeling concerns about the direction of the Japanese semiconductor industry. In the late 1980s, Japan dominated the worldwide semiconductor industry, this brought trade friction between Japan and the U.S. There were concerns that the semiconductor industry in the U.S would decline and degrade. Shindo believed the U.S. industry could actually be revived since its competitive power relied on creative technologies such as application and algorithm development and these would be the key drivers of the industry recovery.

Japanese semiconductor companies on the other hand, placed great emphasis on productivity. Shindo was certain that a fabless business model which he saw in Silicon Valley would be the crucial key factor to be successful for a start-up company attempting to enter this industry. His idea at that time was completely different than most other major companies who had their own factories, and focused on the traditional business model aimed at enhancing production capabilities. Shindo’s proposal to shift to a fabless style was not accepted by Ricoh. Furthermore, many people around Shindo chastised him saying that “he had lost his mind”. Once again this kindled his bulldog spirit, and Shindo became determined to launch his own company and dedicated himself to proving that his idea was right.

9. Launch of MegaChips
Perseverance in the face of many obstacles

Shingo resigned from Ricoh 1990 after the New Year’s holiday. He gave up his safe career and to follow his dream to build a fabless company dedicated to developing advanced system LSI's.

Six other people followed Shindo’s dream and the Seven Samurai were ready to build a new kind of company. This company was going to be different than the majority of semiconductor companies at the time who were focused on standard commodity products like DRAM (Dynamic Random Access Memory) chips. System chips presented great challenges but the Seven Samurai were up for the challenge to develop a new generation of System IC’s.

The first obstacle came quickly, with limited financial resources they could not rent even rent office space for lack of the funds needed for the security deposit, and even had problems trying to open a bank account. For the first three months, while they were preparing to start the company, they were nomadic. They had no office they wandered from place to place mostly the local community centers.

After being office-less for many months and meeting with countless building owners and bank branch managers they got their first break and were able to open a bank account and rent some small office space for their business. In the early days getting business was the first priority so each of the founding members started prospecting for business with own professional network.
Chapter 5 Selection of the ultimate

10. Joining Nippon Kokan KK (NKK)

A promising start and then trouble
The new company was called MegaChips, and their first order came from Nippon Kokan KK a well-established company in Japan. Since MegaChips was a startup it would have been quite normal for a large company like NKK to have some kind of insurance from the startup this was normally in the form of stock or some other control of the untested start-up. As much as they needed the business Shindo declined that proposal and instead reluctantly agreed to work for NKK and to train their engineers IC development.

Shingo joined the NKK development team and delegated his MegaChips responsibilities to one of his trusted staff members. During this first year at MegaChips the number of employees grew from the original 7 to 24 and they were able to generate a profit of 28 Million yen from sales of 500 Million yen. Shindo worked at NKK for 2 years and during that time he established the Electronic Device Research Center and built a team to run it effectively.

It was at this time that a major downturn occurred that affected all of Japan and MegaChips was not immune to its effects. Customers were pushing out delivery dates and cancelling orders causing major problems for the young company. There were a few internal battles when they were faced with the decision to remain independent or to accept the offer to be acquired by a larger more financially sound company.

11. Arima meeting

Ultimate decision on the future and identity of MegaChips
Shindo decided that the decision of remaining independent or being acquired and becoming a
subsidiary of a large corporation was one that he did not want to make unilaterally; he felt his team needed to be part of the decision and decided to:

1. Have a meeting in which all the employees were invited to attend
2. Allow every employee to voice their opinion and enable them to make the case for their own ideas: everyone was encouraged to speak their own mind
3. The final decision was to be made based on how well it conformed to the established company values

The crucial meeting that was to define the future for MegaChips was attended by 21 employees and was held at Arima Onsen, one of the best hot springs in Japan. This meeting provided the opportunity to both strengthen the company management principles and philosophy. The management philosophy and principles were used to guide all the company decisions.

Management philosophy:
Innovation : Innovative ideas, methods and practices to fuel our growth
Trust       : Be a trustworthy partner with customers and suppliers
Creation    : Create products that benefit society

Management principles:
1. Happy, passionate, and satisfied employees are the core of our success
2. Remain an independent leader in the dynamic industry

Shindo wanted the decision to be made without his interference so he chose not to attend the meeting, but waited nearby for the group's decision. After a lengthy discussion where they could not reach a consensus they invited Shindo back to the room and requested that he make the final decision. Since he realized how important this decision was to the company, he did not want to make it alone and said to them “I think you have all talked this out, so let’s take a vote”. They voted in favor of maintaining their independence and while some of the employees who were not satisfied with the decision left the company those remaining were committed to the future of MegaChips.
The next big break for MegaChips came in 1994 when they won an order for a mask ROM for the “Nintendo 64”, what was to become one of the hottest games on the market. To meet all the requirements of Nintendo, Shindo decided that it was best to delegate manufacturing of the ROM to Macronix International in Taiwan. Macronix had been founded by two people from VLSI Technology Inc. (VTI) whom Shindo knew well - Miin Wu and Tom Yiu. MegaChips and Macronix agreed on a business relationship in which MegaChips established the business model where it did the research and development to make the chip and then handed it off to Macronix for the manufacturing. With this model, MegaChips had set up to become the first fabless semiconductor company in Japan.

12. The Great Hanshin-Awaji Earthquake

The idea emerged from the disaster
A few years later on Jan 17, 1995 there was as massive earthquake in the Hanshin and Awaji area. All the basic services such as water, gas, electricity and communications were disrupted. Once they had determined that they were all safe and there were no serious injuries they needed to find a place to live. With very limited transportation it was virtually impossible for the 30% of the displaced employees living in the evacuation centers to get to work.

Everyone pitched in to help wherever they could delivering food, water and medical supplies to those in need and helping the many homeless families find temporary housing. This
terrible tragedy brought the people closer together and strengthened their already strong bonds.

They say that adversity reveals genius and this was certainly the case for MegaChips, once the situation stabilized one of their engineers who had been living in an evacuation center had an idea that he brought to the next new product development meeting. His idea was to help people in future disasters by developing a compact video system that could send real time images from anywhere over the telephone lines or wirelessly. This was the birth of Real time Video Codec or RVC as it would later be called. This important product enabled MegaChips to be certified as the first company to exercise stock option by the Ministry of International Trade and Industry in 1996. Since then MegaChips has continued in the tradition of developing products for people and society. As a pioneer in the video compression technology it was natural for them to come to MegaChips when they were developing the Nintendo 64. The following year the MegaChips image compression board “PC-RVC” and the Nintendo 64 both won excellence award from the Nikkei Business Daily.
Chapter 6
Initial public offering on JASDAQ and listing on the Tokyo Stock Exchange

13. Going Public: the next step

Go public on the JASDAQ

MegaChips growth continued driven by the strong business with Nintendo and continue to develop innovative products and technology. Then in 1994 Shindo was approached by the Japan Associated Finance Company (JAFCO) with an investment proposal and this set the next goal for MegaChips: to become a public company.

Shindo created a team to oversee and direct the work necessary to prepare the company for the IPO. The team was comprised of key employees as well as two leading securities companies Nomura securities Co., and Asahi & Co. The team began preparation and also created a stock option program for the MegaChips employees. This program resulted from one of the key management principles that MegaChips was founded with:

“Happy, passionate, and satisfied employees are the core of our success”.

Developing a stock option program was not an easy task and required changes to the articles of incorporation as well as provisions for disclosure and fairness to the employees and investors. A team was set up to assure that the program would meet all the legal and financial requirements while being fair to all the employees. Each department made their recommendations and in the end all employees received some stock options. In 1997 options were given to the initial 21 employees and the following year all the other employees received their options. By the time of the IPO in August of 1998 all the employees were shareholders, and MegaChips had accomplished two of the key management principles that the founding team created “to be a going concern” and “to be independent”
14. Follow your vision

Pass the leadership to your successor

Shindo had a vision that was both financial and social and was an inspiration to other startup companies. Being the first fabless semiconductor company in Japan MegaChips became a role model for other startup companies that wanted to do something different that had not been done before. He was able to fulfill his social responsibilities to be setting yet another trend and being the first company to provide stock options to employees enabling them to take ownership in the company and its vision. They were also able to consistently adhere to company principles and maintained their independence.

After the listing on the JASDAQ was completed Shindo started to prepare for the next steps to be listed on the Tokyo Stock exchange and finally to hand over the company to his successor. As he told Matsuoka one day when he returned from a meeting at the JASDAQ “I am a twentieth century man, so I want you and the other startup members run the business in 21st century. I will resign at the next shareholders’ meeting.” At that time Shindo had just turned 60 and ready to try something new.

Under the leadership of Matsuoka MegaChips was listed on the Tokyo stock Exchange in December of 2000; and has continued to follow the management principles that were created
when MegaChips was founded, placing high value on employees and society.

15. Extra edition

From the interview with Shindo

Bring passion into fostering human resources

When he was asked “what are the best things in life?” Shindo answers without hesitation, “keep challenging yourself”. He believes that real happiness comes from three fundamental principles, the first is “sticking to what you want to do”, and “if you find something you really want to do, do it so you have no regrets”.

Next he believes that “life is meaningful only when you try” and it is important to keep yourself challenged and never to give up. To accomplish something no matter how old you are you must continue to try even in the face of adversity and resistance.

Shindo also believes that you need to “learn your lesson”, it is very important to admit your mistakes and learn from them. This requires courage and strength but creates the opportunity of continued growth and continued improvement.

Passing on his knowledge and understanding to the next generation of leaders has been a passion of Shindo. For many years he has lectured and written articles and textbooks on both
the theoretical and practical aspects of business and life. This tough but rewarding job has been his passion for many years and he strongly believes that it is his moral obligation to help the future leaders learn from him.

16. Extra edition 2

Favorite quote

Impressed with Ryoma

Shindo admires Ryoma Sakamoto; he was a visionary and pioneer who made some great contributions to the modernization of Japan. Shindo was greatly influenced by Ryoma’s way of life as well as his belief and ideology.

Shindo was so influenced by Ryoma that he has a framed quote hanging on his wall that says: “whatever people may say about me, I know what I am doing.” This quote has been an inspiration to Shindo and whenever he faced with a new challenge he recalls this quote and follows his dream with renewed passion.

Whatever people may say about me,
I know what I am doing
花の人はわめを
何を言えばいい人
がなすここは
のまし
代馬