

Start-up Companies and Growth Strategies

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[Summary]

From the time SAMCO International was founded in a local garage in 1979, it took the company 21 years to be listed on the JASDAQ market in May 2001. If Japanese hi-tech start-ups are taking an average of 20 plus years to be listed, we can safely say the time needed to IPO has become a little bit shorter. But, American hi-tech start-ups need only a few years, and ten years at the longest, to be listed on the NASDAQ. This comparison points to inadequacies in Japan's entrepreneur development, start-up support systems, and financing and related tax systems. Even if the overall start-up environment is poorly developed, the fact remains that various business risks can be effectively avoided if necessary funding, technology development strategies, minimum marketing requirements, prior knowledge of accounting and other requirements are available at the outset. Hence, these are necessary conditions for establishing start-up businesses, and it is desirable to fully develop related support systems.

What is most important for a hi-tech start-up business? From the perspective of the entrepreneur, the most important things are technology development strategies and R&D management. And from the perspective of supporters, the supply of funds and the ability to appraise and evaluate the technologies of start-ups are the most important. In our case, the company was engaged in the very specialized field of thin film processing. Our experiences and methods have many points in common with the technology development strategies of hi-tech start-ups.

Now I will explain SAMCO's growth strategies in line with the path the company actually took. SAMCO was founded in 1979 in a garage located in Fushimi-ku, Kyoto. Our first challenge was to develop technologies for the manufacture and commercialization of amorphous silicon films which were becoming important then. Specifically, our objective was to develop equipment known as plasma enhanced CVD. Some of our early obstacles were: how to procure the necessary capital, and how to test and evaluate the new products that we had developed. Initial funds came mostly from personal resources and small amounts provided by family and friends. We received almost no support from financial institutions. Later, the company received low-interest loans from the National Life Finance Corporation, a

government financial institution, and the Chamber of Commerce and Industry. As a start-up business with no track record, I recall that the evaluations of the company by various financial institutions were extremely inadequate. In terms of support and evaluation, the situation was considerably more favorable in the field of technology development. From the outset, we were able to work closely with a number of universities and research institutes. This allowed us to participate in joint research and to make presentations at academic conferences. In this way, our technologies became known and appreciated. I consider this to be a textbook case of successful cooperation between start-ups and universities. (Figure 1: Start-up stage)

Within a few years, the business had taken off and we had arrived on the threshold of growth. At this point, we found that we needed additional research funds to finance the development of the highly novel technologies that we had in sight. These included the development of manufacturing equipment for super-conductive thin films,

and CVD equipment for semiconductor films based on gallium arsenate and gallium nitride compounds. At this stage, we required an R&D budget which exceeded 10% of total revenues. Lacking a strong financial foundation, this was very burdensome for the company. It was at this time that we realized that we could tap into a source of very strong support, the SME Technological Innovation Support Program operated by what was then the Ministry of Trade and Industry. Time and again we received support from this program which provided a 50% government subsidy on R&D expenditures. This significantly eased our funding needs. In later years, we were able to draw on other R&D support programs, such as NEDO and local consortiums, to solidify our foundations for new technology development. (Figure 1: Accelerated growth stage)

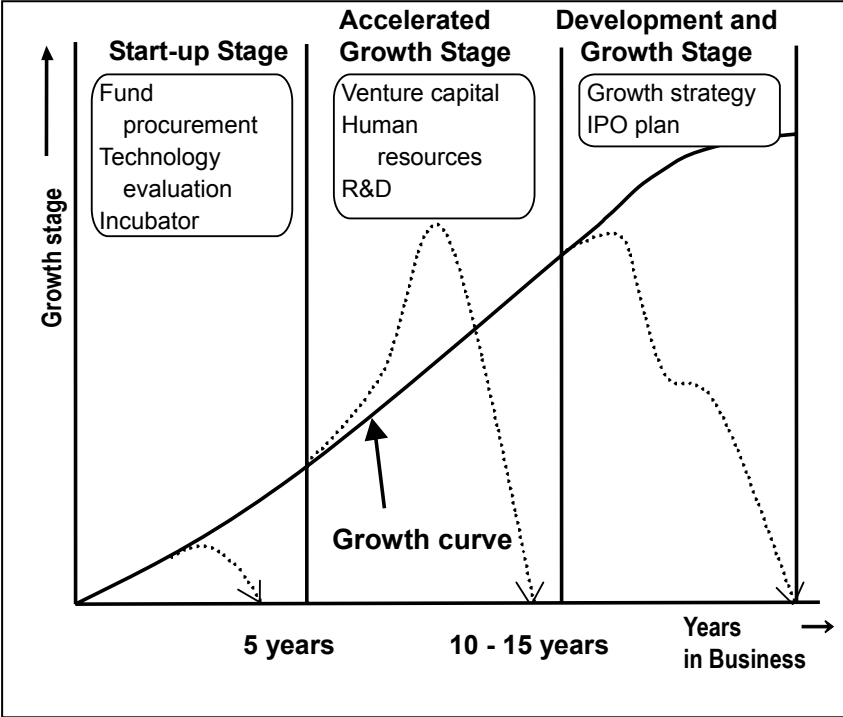


Figure 1: Stages in the Development of Start-up Companies (5-Year Cycle Model)

After a decade or more in business, the company's financial foundation was relatively stable and we were becoming more confident of our ability to develop new products. It was about at this time that a new problem emerged. In this development and growth stage, we found that

it was not enough to merely concentrate on product development. We needed to ensure the compatibility of our management strategies and business plans. By this time, our product line-up included more than 40 types of products and we were involved in a growing number of industries, including silicon semiconductors, compound semiconductors and displays. Consequently, our management resources were being dispersed and stretched thin. The decision was made to reduce our line-up to 20 products and to exit the silicon semiconductor market where many companies were competing. Instead, we began concentrating our resources on relatively smaller markets that had good future prospects, such as compound semiconductors and opto-electronics. This was a process of selection and concentration. At about the same time, we began reforming the company's internal structure with an eye to IPO. As a result, we were able to register high growth rates of 20-30% every year, and we were able to achieve listing on the JASDAQ market in May 2001 as planned. (Figure 1: Development and growth stage)

This is a brief outline of the company from its founding to IPO. In hindsight, if today's support systems and fund procurement channels had been available to us, IPO could have been achieved much sooner. Probably, it would have been possible to arrive at this goal within 10 - 15 years. For the sake of the new generation of entrepreneurs and start-ups, the quality of our support systems must be improved.