

## **Chapter VII**

### **Experience of Development of Venture Business**



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#### 1. Overview of Venture Business in Japan

##### 1.1 Outline of Venture Business in Japan

The term "venture business" originated in the early 1970s as a Japanese expression using English words. Initially, venture business was defined as follows:

"Venture business means a creative, newly founded business that is based on concentrated abilities in research and development or design and development. Such a business originates as a small enterprise, but unlike the case of conventional newly founded small enterprises, there is an original purpose for its existence; its operators have the entrepreneurial spirit to organize a business that can attract creative human resources with advanced specialized abilities and talents, and it is a highly profitable enterprise" (Tadao Kiyonari, Shuichiro Nakamura, and Koji Hirao, *The Venture Business (New Version)* [in Japanese], Nihon Keizai Shimbun Sha, 1973, p. 11).

So in the early stages, venture business tended to be characterized as an enterprise in a high-tech field with a concentration of knowledge. Since that time, along with changes in the economic and social environment, the phrase has come to be defined with a new additional meaning although it still indicates the same core concept. In the next section, to arrive at a definition of venture business that reflects the present situation, we will compare it with general small- and medium-sized enterprises, keeping in mind that venture business develops from a small business.

##### 1.2 Differences Between Small- and Medium-sized Enterprises and Venture Businesses

To define "venture business" within the scope of small- and medium-sized enterprises, Table 1-1 lists the differences between small- and medium-sized enterprises and venture businesses with regard to eight aspects: business content, executives, management system, employers, technical level, products and services, business performance, and procurement of capital.

**Table 1-1 Summary of Differences between Small- and Medium-sized Enterprises and Venture Businesses**

	General small- and medium-sized enterprises	Venture businesses
1. Business content	The business is developed in response to the needs of existing businesses, with risk avoidance.	Risk is embraced in a field having a high degree of originality, without depending on existing businesses.
2. Executives	They develop a business that can provide a stable profit base within the scope of skills they have acquired over a long period of time.	They are highly knowledgeable in specialized fields, and embark on the business with a strong growth orientation.
3. Management system	An executive is a decision-maker in charge of many different management fields.	Originality is sought in the management system as well, as experts (who may be external experts) participate in planning for each area of specialization.
4. Employees	Most employees are experienced technicians, and mobility is low.	Most employees are outstanding young technicians, and mobility is high.
5. Technical level	Technological improvements are built up, within the scope of existing technology.	New products and services are introduced, broadening the scope by promoting research and development.
6. Products and services	Products and services are aimed at existing markets and customers, based on the fulfillment of orders, without going beyond the established Scope of capability.	Areas of growth and creativity are consciously selected, and new markets and customers are aggressively targeted.
7. Business performance	The main aim is to maintain the existing state of affairs under low profitability. Performance is susceptible to economic changes.	Emphasis is placed on obtaining high profitability and on forward-looking investment.
8. Procurement of capital	Capital is mostly financed by loans from financial institutions for small- and medium-sized enterprises.	Venture capital and other high-risk investment funds are used.

Although it is difficult to accurately portray the characteristics of general small- and medium-sized enterprises and venture businesses, when the two are compared, clear differences are seen to exist. In this paper, the definition of venture business will be taken as the characteristics of venture businesses described under the eight aspects listed in Table 1-1.

### 1.3 Categories of Venture Businesses

As stated above, venture businesses are classified as small- and medium-sized enterprises in terms of business size, but differ widely from general small- and medium-sized enterprises. In addition, many differences exist among the enterprises that can be classified as venture business under the above definition. In this section, to further clarify the situation of venture businesses based on an understanding of their characteristics, we will classify the venture businesses currently existing in Japan according to two key factors, the business type and the added value that is created. (This classification was prepared with reference to *Venture Business* [in Japanese] by Shuichi Matsuda, Nihon Keizai Shimbun Sha, 1998, pp. 32-37.)

### (1) Classification by Business Type

The types of venture businesses classified here can be arranged into the patterns of distribution and services planning, technology planning, and research and development planning.

**Table 1-2 Venture Businesses Classification by Business Type**

	Main characteristics
1. Distribution and services planning	Venture business that enters a niche market by introducing new concepts and techniques in existing areas of distribution and services. Growth is achieved by an increasing share in an existing market, but profitability may be raised in the existing market itself by stirring up the market. Supermarkets are a representative business format in this category, and for example, introduction of POS in the management system results in higher comparative strength by improving the management methods.
2. Technology planning	Venture business that develops new products and services for a market in which high rates of growth are expected, using existing technologies. Marketing ability for the new products and services and development speed are important factors for competition. With growth in enterprises of this type, new technologies can be introduced by purchasing to expand the business size, and a business may develop into the research and development type by emphasizing original research and development.
3. Research and development planning	Venture business that creates new products and services through original research and development to achieve expansion or create a completely new market. It should be noted that high levels of risk may be present if the enterprise cannot develop new products and services that meet market needs.

### (2) Classification by Added Value

Venture businesses can be classified as leading-edge technology (and application), employment creating, or self-supporting, according to the kind of added value that is created.

**Table 1-3 Venture Businesses Classification by Added Value**

	Main characteristics
1. Leading-edge technology (and application)	Venture business that can obtain a high market share and high profitability by supplying useful original products and services, often seen with the research and development or technology planning types under the preceding section. There is a risk of failure in research and development or failure to meet market needs, and this is a high-risk, high-return venture business pattern in comparison to the other types.
2. Employment creating	Venture business that creates many jobs in providing products and services, such as computer software and systems development or retail using new management techniques. The business objective is to improve existing fields, so as long as the enterprise has the speed and innovation needed to achieve a competitive edge, this is a middle-risk, middle-return venture business pattern.
3. Self-supporting	Venture business that is started by highly independent and self-motivated entrepreneurs along with family members or friends. These businesses operate from small or home-based offices in fields such as information technology development and human resource assignment. This is a low-risk, low-return venture business pattern in comparison to the other types.

#### 1.4 Venture Businesses in Japan and Historical Course of Events

As stated above, venture businesses were first recognized in Japan in the early 1970s. However, this does not mean that there were previously no enterprises in Japan that could be described as venture businesses as discussed above. Here, it is important to recognize that the early 1970s marked the emergence of a group of businesses that achieved success by maximizing the use of originality based on the needs of the times, distinguishing themselves from existing businesses. It must also be noted that this was the time when a support system came to be built by both the public and private sectors in view of the importance of venture businesses.

Venture businesses have become prominent in Japan during three eras of significant growth that can be called venture businesses booms. The first occurred in the early 1970s; the second occurred in the mid-1980s, and the third, current boom began after the collapse of the economic bubble. In this section, we will discuss the socioeconomic background of each boom, the fundamental reasons that each era grew into a boom, and the process by which a boom subsided.

##### (1) First Venture Businesses Boom: Sudden Rise of Research and Development Planning Businesses

In the 1960s, the Japanese economy achieved an average annual growth rate of 10.4% in its gross domestic product (GDP). By the end of the 1960s, the heavy and chemical industries were entering a phase of maturity, and there was beginning to be some exploration toward the transition into a deindustrialized society. Also during this period, there was a desire to escape from the heavy dependence on other countries for new technology and the export-led industrial structure, coupled with the "Nixon shock" caused by President Nixon's announcement of a new general economic policy for the U.S. in August 1971. Exploration began toward a shift from mass production/mass consumption industry (material industry) to processing/assembly industry (automobiles and electrical appliances). To this end, along with the concentration of knowledge in existing businesses, there was a need for the emergence of high-tech venture businesses, and there was rapid progress in social recognition of the need for venture businesses.

The U.S. had seen a sudden rise in research and development businesses from the late 1950s into the early 1960s, and this influenced the Japanese government to establish the Small and Medium Business Investment Consultation Company Co., Ltd., a provider of venture capital, in Tokyo, Osaka, and Nagoya in 1963. This system to increase the equity of small- and medium-sized enterprises is considered to have promoted the growth of venture businesses. During the venture capital boom that occurred in the U.S. in the late 1960s, large companies and financial institutions had begun getting into venture businesses, in addition to independent enterprises. The establishment of private sector venture capital then moved ahead in Japan as well. In 1972, the Kyoto Enterprise Development Co., Ltd. (KED, dissolved in 1979) was founded primarily by Kyoto financial circles, and the Nippon Enterprise Development Co., Ltd.

(NED) was founded through the guidance of the Japan Long-Term Credit Bank. In 1973, Nomura Securities founded the Japan Associated Finance Co., Ltd. (JAFCO). This was the stage in which a system was established to provide financial support for the venture businesses boom.

This venture businesses boom came to a sudden end in late 1973 when the Japanese economy was plunged into a recession after the first oil shock. The boom can be said to have evaporated as Japan recorded negative GDP growth (-1.2%), for the first time excluding the chaotic period following World War II.

Three general comments can be made about the first venture business boom. First, the existence of venture businesses themselves was recognized clearly in social and economic aspects of Japan. Second, both the public and private sectors promoted the establishment of venture capital. And third, although the boom ended in an economic recession, the importance of venture businesses in research and development planning had been recognized. With regard to this third point in particular, it is important to note that the Research and Development Enterprise Promotion Center was established in 1975 (currently the Venture Enterprise Center).

## (2) Second Venture Businesses Boom: Sudden Rise of Venture Capital

After the second oil shock, the Japanese economy entered a period of low growth, and Japan's GDP rose by an average of 5.2% during the 1970s. By the early 1980s, it was necessary to improve productivity and energy efficiency in the manufacturing industries to deal with increasing competition on the domestic market and ensure export competitiveness. There were increasing expectations for venture businesses as demand grew for creativity and innovation in leading technologies, including electronics, new materials, and biotechnology. At the same time, a shift was occurring away from an industrial structure built around the manufacturing industries, and venture businesses were emerging in tertiary industry, primarily in the areas of distribution and services.

In considering the second venture businesses boom, it is important to note the aggressive introduction of venture capital. JAFCO, which already existed at this time, made it possible to procure long-term, stable funding by devising corporate debentures with separable new stock acceptance rights (warrant bonds) for non-public businesses through the organization of the Japanese Investment Business Union as a new means of investment in venture businesses, and the revision of the commercial code (1981). The standards for offering shares for public subscription on the OTC market were relaxed in 1983, and this was also a time of great financial liberalization; as a result, many venture capital organizations were founded by banks, securities companies, and foreign businesses. This was the reason that the second venture business boom came to be called a "venture capital boom."

The rather chaotic establishment of venture capital resulted in excessively large capital investment in a small number of promising venture business enterprises, and

along with the rapidly growing prospects for venture businesses, this promoted enormous capital investment. However, few venture businesses actually had a clear market strategy, and when the October 1985 Plaza Accord led to appreciation of the yen, causing a recession, a low operating rate resulted from the gap between the excessive capital investment and market scale. This situation resulted in so many bankruptcies that the period was called a "winter" for venture businesses.

### (3) Third Venture Businesses Boom: Demands of the Times and Improvement of the Public Support System

Following the collapse of the economic bubble, the Japanese economy was forced into a long period of recession. High expectations have been placed on venture businesses as a means to escape the hollowing out of industry, provide employment, and power new industries such as the computer network businesses. This is the result of a sense of crisis in Japanese society as a whole, since the former industrial structure, built around conventional large businesses, is not able to fully handle the problems of cost cutting and product distinction in a matured domestic market; it has become difficult to maintain employment and obtain profit because of the lack of competitiveness on the international market; and it cannot enter niche markets through rapid decision making based on advanced specialized knowledge. This has led to the demise of the seniority system, lifetime employment, and other Japanese labor practices that were considered strengths in the past, and venture businesses have served to provide employment to capable workers, promoting rapid development in the mobility of human resources. In Europe and North America, OTC markets for venture businesses have been active and many successes have been reported due to the emergence of "angels" (individual investors who invest in venture business) and "mentors" (advisors); this has been another factor drawing attention to venture businesses.

Against this background of great expectations for venture businesses, rapid improvements have been made in the public support system for venture businesses in Japan. As some examples of individual improvements, an angel tax system was established in 1996; and in 1997, stock options were introduced and the ban on trading in shares that have not been offered for public subscription was lifted. Also, the Law on Special Measures for Industrial Revitalization was enacted in 1999. Support for the establishment of venture businesses has come to be perceived as an important theme for economic revitalization in Japan, and institutional financing for entrepreneurs has been expanded. Local governments have also begun formulating many ways to support venture businesses from the standpoint of regional economic stimulation. Expansion is also occurring in the organization of venture support businesses for initial public offerings (IPO), and in entrepreneur training and education at universities and other institutions.



## **2. Example of Successful development of venture business-related small and middle-sized enterprises**

### **2.1 Growth Process and Success Factors for Venture Business**

In many cases, venture businesses go through the growth process in a manner that includes the characteristics of venture businesses. That is, at the startup stage, they emphasize the products and services that they offer, without having fully established the elements of business management. Of course, it's true that there are inherent difficulties in starting up a venture business with a complete management system in place. However, it would seem that success is impossible if the basic elements of business management are lacking. Venture businesses, which are started up as small- and medium-sized enterprises, entail a great deal of risk; and although the level of recognition has increased through several boom periods, it is difficult to say that much progress has been made in Japan in terms of starting up such businesses.

In this section, we will examine the characteristics found at each step in the process of venture businesses development, and explain the Japanese experience and the elements needed in the management of venture businesses.

#### **(1) General Growth Process of Venture Businesses**

The general growth process of venture businesses can be described in terms of six steps. These are the stage prior to preparing for startup, the stage of preparing for startup, the startup stage, the growth stage, the gradual growth stage, and the stage of entering new areas of business. The main characteristics found at each stage are as follows.

**Table 2-1 Main Characteristics at Each Step in the Venture Businesses Growth Process**

	<b>Main Characteristics</b>
<b>1. Stage prior to preparing for startup</b>	During this period, whether or not there is an intention to start up a business, the future entrepreneur is acquiring the advanced specialized knowledge needed in a venture business, obtaining the minimum experience needed to run a business, developing the capability to determine customer needs and markets, and gaining relevant experience that is similar to starting up a business.
<b>2. Stage of preparing for startup</b>	During this period, the future entrepreneur builds up the knowledge and experience needed for the decision to start up a business, and formulates a business plan that focuses on a particular market and customer group. This is also the period for formulation of a business strategy (including the location to establish the business, personnel, R&D and procurement of products and services, organization and system, and funding) that looks ahead to the startup stage.
<b>3. Startup stage</b>	During this period, the entrepreneur makes maximal use of his knowledge, experience, personal network, and business plan, to actually start up the business. Funds are procured externally to establish an enterprise, and systems are set up for the research and development, production, and supplying of the products and services.
<b>4. Growth stage</b>	During this period, the entrepreneur's efforts during the startup stage bear fruit as the enterprise carves out and enters a new market. There is now a need for different elements of business management than those of the startup stage (business strategy [business plan and targets], business management [organization and personnel], marketing, system for the production and supplying of products and services, research and development, fund procurement, introduction of technology, etc.).
<b>5. Gradual growth stage</b>	During this period, the business earns a certain level of recognition and achieves a stable market share. There are no changes in the content of products and services it provides, but it achieves distinction in the marketplace by increasing the added value. Also during this stage, efforts are made to further perfect the elements of business management that were incorporated during the growth stage.
<b>6. Stage of entering new areas of business</b>	Although the business has achieved a market share, the market itself now approaches maturity. To survive, the business aims for high added value and diversification based on the products and services it has built up, but also needs to expand into new areas of business which are unrelated to its original business.

**(2) Elements Needed in Management of Venture Businesses, and the Japanese Experience**

Venture businesses need three main elements of business management. These can be outlined as follows:

**1) The entrepreneur's latent management skills to support venture businesses**

- ① Entrepreneurial ability
- ② Experience as an entrepreneur

**2) Business environment surrounding the venture businesses**

- ③ Macroeconomic environment
- ④ Local business environment

⑤ Market and customer environment

3) Business environment of the venture businesses themselves

⑥ Business vision

⑦ Business organization and system

⑧ Personnel hiring and training

⑨ Funding

⑩ Purchasing, sales, and distribution

⑪ Production and quality control

⑫ Research and product development

These individual elements of business management have varying degrees of importance at each stage of the growth process. In general, the relationships between the six stages of the growth process and the elements of business management can be summarized as follows.

**Table 2-2 Relationship between Stages of the Venture Businesses Growth Process and Necessary Elements of Business Management**

Stage of Growth Process	Element of Business Management	Details
1. Stage prior to preparing for startup 2. Stage of preparing for startup	(1) The entrepreneur's latent management skills to support a venture business	1. Entrepreneurial ability 2. Experience as an entrepreneur
3. Startup stage	(2) Business environment surrounding the venture business	3. Macroeconomic environment 4. Local business environment 5. Market and customer environment
4. Growth stage 5. Gradual growth stage 6. Stage of entering new areas of business	(3) Business environment of the venture business itself	6. Business vision 7. Business organization and system 8. Personnel hiring and training 9. Funding 10. Purchasing, sales, and distribution 11. Production and quality control 12. Research and product development

In the stage prior to preparing for startup and the stage of preparing for startup, the important elements are entrepreneurial ability and experience, which become the core latent elements of business management for venture businesses. It is no exaggeration to state that the success or failure of venture businesses depends on entrepreneurial spirit. However, until the present time, Japan has not provided the kind of environment in which the entrepreneurial spirit is nurtured by the experience and abilities acquired in educational settings or businesses. In other words, the background of experiences and abilities acquired through education and business have not directly led to the entrepreneurial spirit. First of all, this can be traced to the belief

that large companies and government offices provide stable employment, a result of the uniform educational system following World War II, which meant that education did not nurture the kind of entrepreneurial spirit in which outstanding individuals would take risks to start up a new business. Second, another important point is that the Japanese business management system included lifelong employment, pay and advancement based on seniority, company unions, and company benefit systems, and starting up one's own enterprise did not merit discarding all of these advantages. Also, business failure does not tend to be accepted in Japanese society and it is not easy for someone who has failed once to bounce back and achieve success; meanwhile, starting up one's own business involves a large amount of risk. Third, venture businesses are not able to provide the kind of appealing business environment needed to attract capable researchers and engineers. That is, they were not realistically able to offer favorable enough treatment to close the gap between large companies and small- and medium-sized enterprises. These facts are considered to be the main reasons why there has not been a more aggressive move to start up venture businesses in Japan.

Arriving at the stage when these risks have been overcome to actually start up an enterprise, there is a complicated situation of interplay between the business environment surrounding the venture businesses and the business environment of the venture businesses themselves. Since venture businesses are, of necessity, started up within the scope of the business resources that can be mustered by the entrepreneur, there is little risk in the venture businesses themselves. Since the entrepreneur performs the initial investment within the scope that he can afford, even if the business fails, he can cover those losses. So the most important point at this stage is to determine whether the products and services match the needs of the market and customers, against the background of macroeconomic trends, characteristics of the local community, and abilities and experience. In Japan, transactions among businesses are often performed on the basis of long-term relationships of trust, and it is very difficult for venture businesses with no established track record to enter the market. Even if it can provide products and services with high added value, in many cases, it may not be accepted in the marketplace simply because it is a venture business. It is essential at this stage to fully exploit the advantages of venture businesses. For instance, one must target the appropriate market from among the many minor markets; use a flexible approach that is impossible for large companies; and build the business on new ideas.

After overcoming the risks to start up a business and succeed in entering the market, venture businesses enter the growth stage. When a business passes through this stage and achieves a stable market share, in many cases, the market has already become mature, and it becomes necessary to branch out into new areas of business in order to survive. At these stages, the important tasks before venture businesses are to build up the functions needed for business management and to procure funding. Of course, even if the people who started the venture businesses are able to use their abilities and experience to provide high value added products and services, it still might not be strong in every area of business management, including forming a business vision, setting up an organization and system, and hiring and training human resources.

Therefore, it may need to obtain human resources from the outside. However, in the case of Japan, there is low mobility of human resources, and it is not easy to hire people who are skilled in business and managerial fields. Also, they may lack flexibility and accommodation in business management itself, since they are accustomed to the unique management system used at the business where they were employed under the premise of lifelong employment. So even if the human resources can be hired, it may not be possible to use their abilities and experience due to differences in the corporate systems. Also, there are many problems with the procurement of funding. Japanese financial institutions provide funding on the basis of indirect financing, so they do not tend to make risky investments. And since they have emphasized security for loans, they are not experienced in assessing the latent value of products and services, and do not readily offer funding to venture businesses with no assets. Japanese financial institutions will only provide funding if they judge that the business can achieve a certain level of growth and obtain stable profitability. It has been extremely challenging for venture businesses in Japan to be able to meet its financial needs.

Entering the stage of gradual growth, cost cutting becomes an important task, and the business needs to rethink its purchasing, sales, and distribution. At the same time, greater importance comes to be attached to production and quality control. Then when it begins to branch out into new areas of business, close attention is placed on the importance of marketing. Venture businesses are businesses that have grown by aggressively entering a market by providing new products and services to meet the needs of existing customers and markets. It must now investigate those needs again, bravely rising to a new challenge and recognizing that success is not so easily obtained.

As we have seen, many issues and problems face venture businesses at each stage of the growth process. Major reforms were made in the Japanese business environment affecting venture businesses before the third venture business boom, as described above; still, it is necessary to understand that the business environment remains a harsh one.

## 2.2 Public Support System for Venture Businesses

In the past, venture businesses have been perceived as kinds of small- and medium-sized enterprises. But each time the Japanese economy has faced a transitional period for its industrial structure, a venture business boom has occurred, and more public support has been established for venture businesses specifically.

In this section, we will discuss the public support system for venture businesses, in the country as a whole and under regional governments. In particular, with regard to public support from regional governments, we will look at the case of Kanagawa Prefecture, which has actively supported venture businesses for some time; and the case of Hokkaido, which began actively supporting venture businesses as a means to revitalize its regional economy when faced with a long-term recession after the collapse of the economic bubble.

## **(1) Support for Venture Businesses by the National Government**

As stated above, venture businesses have been considered as one area of small- and medium-sized enterprises. However, as the importance of venture businesses has become clear, systems have been established to support venture businesses specifically. As for small- and medium-sized enterprises, support is provided for venture businesses in five categories: subsidies, loans, investment, bond surety, and consultation, guidance and training.

In this section, we will examine three public support systems that have been operated specifically for venture businesses in Japan. These are the Venture Enterprise Center, which provides bond surety services; the Tokyo Small and Medium Business Investment Consultation Company, Co., Ltd., which provides loans; and the New High-Tech Venture Development Foundation, which provides financial assistance.

### **• Public Support System of the Venture Enterprise Center**

The Venture Enterprise Center (VEC) is a bond surety agency, established in July 1975 under the guidance of the Machinery and Information Industries Bureau of the Ministry of International Trade and Industry. (Originally named the Research and Development Enterprise Promotion Center, it received its current name in June 1994.) The objective in its establishment was to "help guide and nurture small- and medium-sized enterprises of the research and development type and the knowledge fusion type, based on promotion and education concerning new knowledge and thinking related to science and technology." From the time of its establishment, it introduced a venture business bond surety system; and beginning in 1988, it also introduced a new business bond surety system. It has an endowment of 7 million yen, a bond surety fund of 1,973 million yen, and operating capital of 1,430 million yen. In addition to the bond surety business, which is its main service, it also operates an information exchange business (investigative research services, information provision and public information services, and commissioned services).

The following is a summary of the unsecured, long-term bond surety provided by VEC to venture businesses and new businesses.

**Table 2-3 Overview of the Bond Surety Services of the Venture Enterprise Center**

	Bond Surety for Research and Development Type Enterprises	Bond Surety for Knowledge Fusion Type Enterprises
Eligible enterprises	Small, mid-size, and medium-standing enterprises with specific plans to develop or do business in new technologies or new products.	Small, mid-size, and medium-standing enterprises with specific plans to experimentally implement or do business in new services.
Eligible projects	Projects that are new in terms of the current technological level, have high commercial potential, and fall under one of the following: 1. Development of machinery and systems which are expected to contribute to promoting social welfare, labor saving, etc. 2. Development of products equivalent to part 1 above, and relevant equipment, parts, raw materials, etc. (excluding pharmaceuticals)	1. Projects having a high level of knowledge fusion, providing services by combining strongly development-oriented leading expertise with the latest achievements of technological development, whose promotion is expected to have strong ripple effects in rational and advanced directions. 2. New services equivalent to part 1 above, and related equipment development.
Funds covered	Limited to the capital for research and development equipment costs, experimental expenses, trial manufacture costs, etc., and the minimum necessary equipment purchases, raw material costs, etc. to begin doing business based on those results. It does not cover the purchase of land or buildings.	Limited to the capital for equipment and tools needed to develop expertise related to methods for providing new services, facility development and improvement, costs of experimental implementation of services, etc. It does not cover the purchase of land or buildings.
Maximum surety	80% of the loan amount, and up to 100 million yen per project. So the maximum loan amount covered is 125 million-yen.	80% of the loan amount, and up to 50 million yen per project. So the maximum loan amount covered is 62.5 million-yen.
Security and guarantor	Security: No security is needed for 80% of the loan amount. There is consultation with the lending institution concerning the remaining 20%. Guarantor: As a general rule, the representative director becomes the guarantor.	
Guaranty period	Up to 8 years, as a general rule. So loans are also repaid within 8 years (including deferment of up to 1 year).	
Interest on loans and guaranty fee	Interest fixed by the lending institution, for the time being. Guaranty fee: 2% annually. If the project covered by surety is a success, success compensation is paid under a separate contract concluded at the time of the decision to provide surety. The standards to determine success, amount of payment, etc. are decided through discussion at the time of the decision to provide surety.	Interest fixed by the lending institution, for the time being. Guaranty fee: 1% annually. If the project covered by surety is a success, success compensation is paid under a separate contract concluded at the time of the decision to provide surety. The standards to determine success, amount of payment, etc. are decided through discussion at the time of the decision to provide surety.
Review	Project applications are reviewed at the secretariat and deliberated in a review committee to determine acceptance or rejection. Matters reviewed include the level of innovation in the project, marketability, enterprise content, ability to perform the business, and appropriateness of the use of funds.	
Bond Surety Approval Records (as of 3/31/1999)	Number of bond surety projects: 519 Bond surety amount: \22,766 million	Number of bond surety projects: 30 Bond surety amount: \1,034 million

• Tokyo Small and Medium Business Investment Consultation Company, Co., Ltd.

The Tokyo Small and Medium Business Investment Consultation Company, Co., Ltd. is a public company that was established in November 1963 based on the Smaller Enterprise Investment Promotion Company Law, with a wide range of investment from the national government, regional governments, and financial institutions, with the objective of increasing the equity of small- and medium-sized enterprises and supporting their sound growth and development. Small and Medium Business Investment Consultation Company, Co., Ltd. were also established in Osaka and Nagoya under this law. Some of its effects are that the use of an investment promotion system encourages the trust of banks and trading partners, while the increase in equity and introduction of long-term stable shareholders provides a business base, and the establishment of necessary elements of business management, including preparation of a funding policy and in-house management system, allows efficient promotion of the public offering of stock.

The company's investment business is divided into four areas: general investment, venture business investment, initial investment, and flotation investment. The investment promotion business of these institutions has the following content.

**Table 2-4 Summary of Investment Business of the Tokyo Smaller Enterprise Investment Promotion Co., Ltd.**

	Type of Investment	Eligible Enterprises
General investment	* Underwriting of new shares for capital increase	Enterprises with unique business and promising growth (Some record of profitability is required)
Venture business investment	* Underwriting of convertible bonds * Underwriting of bonds	Enterprises of the research and development type, with original leading technology or expertise.
Initial investment	with new stock acceptance rights	Enterprises which show particular promise for future growth and development.
Flotation investment	* Underwriting of new shares upon flotation	Enterprises which show particular promise for future growth and development.

The following is a summary of the business content.



**Table 2-5 Conditions of Investment by the Tokyo Smaller Enterprise Investment Promotion Co.**

	Conditions	Content
Underwriting of new shares for capital increase and new shares upon flotation	Limit of Underwriting	Underwriting in the range of 15% to 50% of the total shares issued after the capital increase.
	Holding period	No particular holding price is set.
	Distributions	Stable distributions are required after investment. However, in the cases of venture business investment, initial investment, and flotation investment, priority may be given to profit retention based on discussion.
Underwriting of convertible bonds and bonds with new stock acceptance rights	Limit of Underwriting	Convertible bonds are subscribed so that at the time of underwriting, the amount converted to stock represents a stockholding ratio within the range of 15% to 50%. Similarly, bonds with new stock acceptance rights are underwritten so that at the time of underwriting, the amount of exercised stock acceptance rights represents a stockholding ratio within the range of 15% to 50%.
	Redemption period	As a general rule, 5 years.
	Interest rate	Based on the long-term prime rate.
Method of share price calculation	Expense of Underwriting	Calculated according to the capitalization formula (determined by the Small and Medium Enterprises Agency and the National Tax Administration Agency), based on the expected profit per share (before tax).
	Conversion price and price for exercise of rights	In the case that the conversion price and price for exercise of rights are set in advance at the time of underwriting of convertible bonds and bonds with new stock acceptance rights, these are calculated according to the capitalization formula.
	Transferal price	The price is calculated according to the capitalization formula. (This excludes the period after shares are offered to the public and the restricted period before shares are offered to the public.)

• **New High-Tech Venture Development Foundation**

The New High-Tech Venture Development Foundation is a public-service corporation that was established in March 1984 with investment by the Smaller Enterprise Investment Promotion Companies of Tokyo, Nagoya, and Osaka. It provides financial assistance to small- and medium-sized enterprises and individual researchers who are engaged in original leading-edge research and development. The assistance programs run by this foundation are a research and development subsidy and an overseas research subsidy. The content of each program is as follows.

**Table 2-6 Summary of the Assistance Programs of the Smaller Business Venture Promotion Fund**

	Research and development subsidy	Overseas research subsidy
Objectives	To provide a portion of the funding needed for research and development to small- and medium-sized enterprises performing R&D on new technologies or new products, or to individual researchers who are performing R&D with the goal of starting a business.	To provide a portion of the funding needed for research and development to small- and medium-sized enterprises (including individual researchers who are performing R&D jointly with overseas businesses, etc. with the goal of starting a business) which plan to perform joint R&D with overseas businesses, universities, testing and research institutions, etc. to develop new technologies or new products.
Eligible Recipients	1. In the case of small- and medium-sized enterprises: As a general rule, the business should either be less than 10 years old or have embarked on a new business less than 10 years ago. 2. In the case of individuals: Individual researchers who intend to start a business based on the results of research and development.	
Eligible Projects	Projects that are innovative, have a high technological level, and are highly feasible, based on the current level.	
Expenses Covered	Funds needed for research and development on new technologies, new products, etc., or for research on applications of science and technology.	
	Costs of investigation, design, trial manufacture, equipment, raw materials, etc.	Costs of development, investigative research including travel expenses, etc.
Subsidy Amount	Up to one half of the expenses subject to subsidy coverage, but not exceeding the limit of 4 million yen.	
Review	Acceptance or rejection is determined through review by a committee of scholars and experienced persons.	
Records	2,688 applications were received for subsidies from FY 1984 to FY 1999, and 226 projects were selected to receive subsidies totaling 624 million-yen.	

**(2) Support from Regional Governments for Venture Businesses**

**• Support from Kanagawa Prefecture for Venture Businesses**

Kanagawa Prefecture, bordering Tokyo to the southwest, had played the role of a production base for the materials industry, especially the heavy and chemical industries, as the central prefecture of the Keihin industrial zone that supported the rapid economic growth of the postwar period. But in the early 1970s, the heavy and chemical industries were hurt by the "Nixon shock" which we mentioned earlier (1971) and the first oil shock (1973), and the need arose for Kanagawa Prefecture to change its industrial structure. These two shocks had the effect of damaging the international competitiveness of heavy and chemical industries, which consumed large amounts of energy, and labor-intensive light industry, both of which had supported postwar Japan's rapid economic growth. Kanagawa Prefecture had been excessively dependent on the heavy and chemical industries, and there was an urgent need to change the industrial structure to one of processing and assembly; so the prefecture needed to promptly address the matter of promoting new enterprise formation. It must be noted that Kanagawa Prefecture became a model for other regional governments in Japan as a leader in the introduction of a venture business support system, because of this need.

Kanagawa Prefecture formulated an intellectual center concept in 1978. That was the beginning of its active support for venture businesses, which continues to this day. During this time, Kanagawa Prefecture's venture business support system developed in four major ways. First, for the creation of research and development type enterprises, it established the Kanagawa Science Park in 1982 to begin development of projects under a comprehensive industrial policy; and in 1989, it established the Kanagawa High-Technology Foundation and the Kanagawa Academy of Science and Technology within this park for intermediation of technology transfer, support of testing and measurement, promotion of research and development, and education in advanced technology. Second, the prefecture adopted the Kanagawa New Industrial Plan in 1992 to integrate and unify support for enterprise establishment (forming the Kanagawa Entrepreneur Supporting System), and issued a basic policy in its Feasibility Study on Supporting Entrepreneur (1993). Based on this policy, it began lending funds and providing enterprise building consultation and manager education in 1994, and established the Kanagawa Start-up Business Support Center within the Kanagawa Small- and Medium-sizes Enterprises Management Center in 1996. Also during this time, it orchestrated the transferal of multiple support programs that existed in different agencies to an appropriate support agency, and actively promoted the integration of support agencies. Third, through the reorganization of the Kanagawa Prefecture Testing and Research Institute, it established the Kanagawa Industrial Technology Research Institute in 1995 and began providing development support for new technologies, research, etc. and issuing grants. Fourth, in 1999, based on the New Businesses Creation Promotion Law, it revised its basic concept for the comprehensive support system, recognized 8 agencies as support agencies, and began actively developing programs under the new framework.

The table below explains the venture business support functions currently provided in Kanagawa Prefecture under the New Businesses Creation Promotion Law. In addition, there is a cooperative system of affiliated institutions, including universities in the prefecture, a technology transfer agency (TLO), the Chamber of Commerce and Industry, commercial and industrial firms, Industry Promotion Foundation, Kanagawa Multimedia Consortium, Kanagawa Association of Consultant Engineers, Kanagawa Venture Club, and the Public Testing and Research Institute.

**Table 2-7 Kanagawa Prefecture's Venture Business Support System based on the New Businesses Enterprise Creation Promotion Law**

Name of Organization and role	Support function								Comments
	Technological development	Technology transfer	Enterprise development	Provision of capital	Managerial guidance	Finding sales routes	Computerization	Personnel training	
Kanagawa Small and Medium-sized Enterprise Center: Coordination				⊙	○	○		⊙	
K.S.P., Co., Ltd. (Kanagawa Science Park): development			⊙	○	○			○	Ctd.
Kanagawa Industrial Technology Research Institute: Technological development	⊙	○						○	
Kanagawa Small- and Medium-sizes Enterprises Management Center: Managerial guidance					⊙		○	○	
Kanagawa High-Technology Foundation: Technology transfer		⊙							
Kanagawa Academy of Science and Technology: Technological development	⊙							○	
Yokohama-Kanagawa Institute of Regional Information Systems: Computerization							⊙	○	
Sagamihara Industrial Creation Center, Co., Ltd: Development			⊙		○	○		○	Ctd.

⊙: Core agencies performing support programs, ○: Agencies performing support programs, CTD: Contracted.

With regard to corporate status, for example, K.S.P., Co., Ltd. (established December 19, 1986, capital: 4.5 billion yen [about 1.5 billion yen from the public sector - Kanagawa Prefecture, the city of Kawasaki, and Japan Development Bank; and about 3.0 billion yen from the private sector - 41 companies]) is a public company (third sector) which was established as the core institution of Kanagawa Science Park. It performs development of programs, information exchange planning programs, networking programs, facility service programs, etc. as the main administrator of the research core (R&D and enterprise building base facility) under the Civil Code, and also promotes the development of new industries by creating research and development type enterprises as the coordinator of the science park as a whole. Its operation includes the execution of commissioned programs for regional governments, collection of rent for development rooms, and compensated programs paid for by the beneficiaries. For another example, the Kanagawa High-Technology Foundation (established August 28, 1989, basic assets: 1.2 billion yen [1.0 billion yen from Kanagawa Prefecture, 0.2 billion yen from the city of Kawasaki]) handles the measurement functions for the Kanagawa Science Park, providing sophisticated testing and measurement services to support corporate research, development, and production activities; this foundation was established for the formation of a technology market to promote the distribution and use of patents and the like. It is run primarily with profits from the operation of its basic assets.

Next, the following is a summary of the primary support activities provided by these 8 main support agencies.

**Table 2-8 Summary of the Programs of the Main Venture Businesses Support Agencies in Kanagawa Prefecture**

	Primary support activities
Kanagawa Small- and Medium-sized Enterprise Center: Coordination	Established in 1953 with the objective of promoting small- and medium-sized enterprises. In March 1993, for the comprehensive promotion of a smaller enterprise support system in the prefecture, it was progressively integrated with the Kanagawa Prefecture Smaller Enterprise Support Foundation and took over the business of the Kanagawa Enterprise Building Support Center from the Kanagawa Prefecture Smaller Enterprise Management Center. This made it the core agency in a comprehensive, unified support system for small- and medium-sized enterprises. Main programs: 1. Enterprise building support programs (unified coordination of support measures for technology, management, personnel, location, financing, and networking, and operation of the Kanagawa Capital Fund to provide bond surety for investment using venture capital and bond subscription, etc.) 2. Programs to support exchange among differing industries and among industrial, governmental, and academic circles.
K.S.P., Co., Ltd. (Kanagawa Science Park): Development	A public company, established in December 1986 under the third sector method as the core entity of Kanagawa Science Park. Main programs: 1. Education of entrepreneurs in the KSP New Enterprise Management School, 2. Providing persons preparing to start a business with advice and support appropriate for each developmental stage, including provision of a shared office and trial manufacture laboratory at the startup stage, and provision of a startup room after the startup stage, 3. Providing capital in stock, convertible bonds, bonds with new stock acceptance rights, etc., and offering managerial guidance in personnel mediation, funding procurement, technological development, and sales mediation.
Kanagawa Industrial Technology Research Institute: Technological development	Established in April 1993 as a support agency for technological improvement in small- and medium-sized enterprises. This public testing and research institution, having over 150 research staff members, is known nationwide. In September 1994, it was recognized by the Patent Agency as an "intellectual property rights center," and it collects and provides patent information. Main programs: 1. Promoting exchange and R&D among industrial, governmental, and academic circles, 2. Providing testing and measurement services and commissioned research, 3. Developing technical support, 4. Promoting the provision of technological information.
Kanagawa Small- and Medium-sized Enterprises Management Center: Managerial guidance	Established in November 1949 as a management evaluation and guidance agency to promote the development of small- and medium-sized enterprises. It later underwent several reorganizations and took on its present functions in December 1994. Main programs: 1. Comprehensive consultation services by smaller enterprise evaluation experts, 2. Personnel education programs for executives, middle managers, and hands-on staff, 3. Programs to promote industry creation in consumer related areas.
Kanagawa High-Technology Foundation: Technology transfer	Established in August 1989 to provide advanced testing and measurement services in order to reinforce research and development functions and promote more advanced technology at small- and medium-sized enterprises, and to form a technology market to promote the provision of patent information and the distribution and use of intellectual property rights and the like. Main programs: 1. Technology market services, 2. Testing and measurement services.
Kanagawa Academy of Science and Technology: Technological development	Established in July 1989 within Kanagawa Science Park as an agency to promote science and technology based on joint projects by industrial, governmental, and academic circles to improve the scientific and technological base. Main programs: 1. Conducting basic research in leading areas of science and technology, 2. Providing sophisticated education to researchers and engineers, 3. Promoting academic exchange projects (assistance to young researchers, providing research sites, providing scientific and technological information, etc.).
Yokohama Kanagawa Institute of Regional Information Systems: Computerization	Established in 1986 with the objective of conducting comprehensive survey research and data collection and provision on the regional economy. In 1988, it set up the Smaller Enterprise Regional Information Center with the objective of collecting, processing, and providing data to small- and medium-sized enterprises. Main programs: 1. Performing survey research related to the regional economy, issuing reports, and holding seminars, 2. Survey research and systems development on computerization in the region, 3. Collection, processing, and provision of data to promote computerization in small- and medium-sized enterprises, issuing informational gazettes, and developing online database searching.
Sagamihara Industrial Creation Center, Co., Ltd: Development	Established in April 1999 in view of the large number of research and development type enterprises located in the area, as a base to promote new business creation and new business founding by networking regional industrial resources, and to raise the capabilities of existing small- and medium-sized enterprises in the areas of technology, research, and development and support business diversification and entry into new industrial areas. Main programs: 1. Mediation and discovery for joint research with private sector enterprise utilizing alumni networks, 2. Lending modest business spaces to entrepreneurs at the initial stage, 3. Providing rental laboratories (rooms for research and experimentation) to promote linkage between industry and academia.

• Support from Hokkaido for Venture Business

Hokkaido, located in the northernmost part of Japan, had grappled for some time with several problems: Its industrial structure was weak; there was a high level of reliance on public demand; and it had a chronic inter-regional trade deficit. Under these circumstances, the long-term recession that began in 1990 in the Japanese economy caused three difficulties for Hokkaido. First, under the long-term recession, Hokkaido experienced an increase in corporate bankruptcies, worsening of the employment situation, and shrinking of final demand in the private sector, earlier and over a broader range than the nation as a whole. In particular, the increase in corporate bankruptcies and worsening of the employment environment became prominent earlier than in the nation as a whole, causing a deeper, longer-term, and more severe problem of shrinking final demand and economic retreat than in Japan overall. Second, a declining trend in public investment had a stronger effect on Hokkaido than the rest of the country, since the economy in Hokkaido depended so heavily on public demand. And third, the direct and continuing consequences of the failure of the Hokkaido Takushoku Bank, which had been the largest, core financial institution of the regional economy, had several adverse effects: It became difficult for Hokkaido businesses to procure funding, and bankruptcies occurred; there was depression of household consumption and corporate capital investment, causing a long-term decline in final demand in Hokkaido; losses from ownership of the failed bank's stock led to financial troubles; and there was instability in business management related to credit succession.

To restructure the economy of Hokkaido in response to these problems, the Hokkaido Prefecture Government launched a program of comprehensive industrial promotion from the wide-ranging perspective of increasing competitiveness, starting new industries, and making the best use of excellence. Support for venture businesses was considered to be an important issue and a main pillar of this program. At a 1999 meeting of the Hokkaido legislative assembly, the governor of Hokkaido made the following statement concerning venture businesses: "With the economy of Hokkaido under unprecedented severe circumstances, it is important to build and foster growth-oriented enterprises with a rich entrepreneurial spirit to stimulate the economy and business and to create employment opportunities and healthy industries rooted in Hokkaido, to promote the strong development of the economy of Hokkaido into the twenty-first century."

Hokkaido had already been providing support for the promotion of small- and medium-sized enterprises, like other prefectures. However, its support system had not been constructed with an eye to promoting venture businesses until the current long-term recession. When this is compared to the case of Kanagawa Prefecture, there is a clear difference that the Hokkaido Prefecture Government itself performs many of the support programs, and the Hokkaido Small- and Medium-sized Enterprises Promotion Fund Association is the only organization performing the core functions of funding, personnel training, and development. (This association has been selected for designation as the core support agency under the Basic Law on New Businesses Creation

Promotion.) The following is a summary of the main support activities performed by the relevant agencies.

**Table 2-9 Main Venture Business Support Programs in Hokkaido**

	Primary support activities
Hokkaido Prefecture Government: Administrative supervision	<p>Some of the main support activities provided single-handedly by the Hokkaido Prefecture Government to venture business are 1. a program to support smaller enterprise development (since 1996), 2. a program to encourage new industry creation (since 1998), and 3. a special encouragement program to promote enterprise formation by middle-aged and elderly persons (since 1999).</p> <p>Main programs: 1. The program to support smaller enterprise development includes providing integrated support at each stage of the enterprise growth process and each business stage to promote the starting of small- and medium-sized enterprises, providing the training needed to start a business, offering partial financial support to promote the starting of businesses, consultation for the starting of businesses, and holding explanatory meetings to encourage more widespread entrepreneurship.</p> <p>2. The program to encourage new industry creation includes the granting of new enterprise subsidies in six areas (culture and leisure, health and welfare, industrial support, information and communications, housing and urban infrastructure, and the environment and recycling) to encourage and promote involvement in starting new businesses.</p> <p>3. The special encouragement program to promote enterprise formation by middle-aged and elderly persons provides assistance with the funding needed by these persons, who are under a very harsh employment environment, to prepare to start a business.</p>
Hokkaido Small- and Medium-sized Enterprises Promotion Fund Association: Funding, personnel training, and development	<p>Established in December 1969 with the objectives of increasing the equity of small- and medium-sized enterprises and promoting equipment modernization, rational and innovative production, research and development for sales and service provision technologies, enterprise building, and demand development. Its programs fall under the categories of financial assistance and leasing/ stock subscription.</p> <p>Main programs: 1. First, under financial assistance, it provides the funds for (i) Research and development, (ii) Joint research, (iii) Expenses of dispatching engineers to learn new skills, (iv) Expenses of inviting expert technicians, and (v) Expenses of showing new products at exhibitions.</p> <p>2. Its programs under lending/ stock subscription are: (i) Lending funds to start a business based on the results of research, (ii) Subscription of shares issued to start a business based on the results of research.</p>
Hokkaido Equipment Leasing Agency for Small and Medium Enterprises: Leasing equipment	<p>Established in August 1989 to promote equipment modernization, improved production technology, and rational management in small- and medium-sized enterprises, and support business activities to stimulate small- and medium-sized commerce.</p> <p>Main programs: 1. To promote more rational management of small- and medium-sized enterprises, the corporation purchases equipment and facilities on behalf of entrepreneurs who wish to modernize their equipment, and loans them at long-term, low-interest conditions (installment payments or lease).</p> <p>2. To facilitate redemption by enterprises using program 1, it accepts promissory notes in monthly installments and uses the monies from settlement of those notes as reserve funds, making redemption payments on behalf of the enterprise.</p>
Hokkaido Commercial and Industrial Guidance Center: Managerial guidance	<p>Established in September 1951, it provides guidance and consultation in business rationalization to promote the sound development of small- and medium-sized enterprises, collects and supplies information on business management and technology, and uses survey research to contribute to business management. Its programs fall under the categories of public programs commissioned by the Hokkaido Prefecture Government, and independent programs performed by the center itself.</p> <p>Main programs: 1. Its public programs are: (i) Evaluation and guidance for small- and medium-sized enterprises, (ii) Information center operation to provide data on business management and technology, (iii) Subcontractor promotion activities in mediation, consultation, and information exchange to ensure certain order amounts for subcontractors, and (iv) Training services for human resource education.</p> <p>2. Its independent programs are: (i) Guidance by rotating experts in the evaluation of small and medium-sized enterprises, (ii) Consultation, (iii) Seminars and other courses and lectures, and (iv) Issuing publications.</p>

## 2.3 Success Stories in Venture Businesses

During the long-term recession that has affected the Japanese economy since the collapse of the economic bubble, expectations are being placed on venture businesses to actively develop new markets and customer bases by using knowledge in original, highly specialized fields. As the concepts which supported the development of the Japanese economy are eroding away one by one, expectations for venture businesses are higher than ever.

In this section, we will discuss the experience of enterprises which are receiving so much attention for these reasons. We have chosen enterprises located in Kanagawa Prefecture and Hokkaido, the regions discussed above.

### (1) Venture Businesses in Kanagawa Prefecture

#### • Venture Business A

After the founder and current president graduated from university and accepted employment at IBM Japan, he engaged in research and development on hard disks (HDD), and made quite a few achievements in that area. These achievements included a patent for an HDD shock absorbing mechanism. In the early 1990s, he began concentrating on research in production management systems. That phase began with the emergence of the trend toward outsourcing at production sites, especially EMS (electronic product manufacturing service contractor) which he had learned about during a business trip to the U.S. At the same time, he learned about the American style of setting directions for business management and the logical development process. He tried earnestly to get IBM to introduce EMS, but this was not accepted. At the age of 46, he left IBM under the "second career program" (voluntary retirement system).

Two years passed between the time he left IBM and the founding of Firm A. This delay was necessary because he previously had only worked in the field of research and development at IBM, and had no practical experience in operating a business. By spending a year working in sales at a company that sold peripheral equipment for computers, he gained practical experience in commercial business, learned the importance of marketing, and discovered the difficulty of raising funds. By combining his specialized technical expertise learned at IBM with this experience at a sales company, he was able to equip himself with the necessary elements for starting a business. That is, during the stage prior to preparing for startup, he became involved in a sophisticated technological field at a leading global corporation, and at a sales company, he obtained the knowledge and experience needed to start a business. Next he spent about six months helping a U.S. business to start up a Japanese corporation. Then in November 1995, he established Firm A with a staff of five persons.

In the past, the personal computer market has consisted of sales of products produced by manufacturers such as IBM, Fujitsu, and NEC. Although these



manufacturers are starting to get into direct sales as well, their business is based on selling products that they have made. But Firm A adopted the principle of integrating sales with manufacturing, as a manufacturer of related equipment, and began using the BTO (built-to-order) format, in which the product is manufactured to suit a customer's specifications for a personal computer. Under this format, there is no need to keep an inventory of finished products and parts, and there are no losses from declines in the prices of products in stock. To establish this kind of system, one needs stable procurement channels for materials, a price determination mechanism, production and support capabilities, and large volume sales channels. The firm formulated two business strategies based on this production system: first, to establish a supply chain that can make the products significantly cheaper and faster than existing manufacturers; and second, to concentrate on carving out a "white box" business (in which a sales or distribution company sells personal computers under its own brand name). This has made it possible for the firm to produce a "500 U.S. dollar PC" (November 1998) which generated nationwide buzz about Firm A. At the same time, it has been setting up agreements and alliances with major commercial firms including Otsuka Shokai, Uchida Yoko, and Mitsui Bussan, and there is high potential for further development of the white box market.

Firm A currently has 32 employees, capital of 230 million yen, and annual sales of 4.65 billion yen. In 1999, Firm A was selected to receive bond surety from Kanagawa Capital Fund. This surety covers bonds with new stock acceptance rights. The bonds issued total 98.0 million yen; the amount of surety is 68.6 million yen; and the guaranty period is 5 years.

#### • Venture Business B

Firm B (one-man enterprise) was founded in 1969 by an individual female entrepreneur, based on the concept of updating the traditional Japanese decorations for New Year to suit the new housing styles. The firm has continued to expand smoothly since then, and the main product lines it currently handles are New Year decorations, rice paper, mizuhiki [traditional red and white paper cords], wrapping products, tableware, cash envelops, Christmas products, and party goods. This expansion is the result of continuous development of new products, including patents for gift wrapping paper and New Year decorations that use mizuhiki, and efforts to develop sales routes, including visits by the founder (and current president) to department stores and mass merchandisers, with her children in tow in the initial period. Thus the business went through a period of development that covers the stage prior to preparing for startup and the stage of preparing for startup. At present, the firm's products are supplied to nearly all of the 100 major mass merchandisers, and it has built an 80% share of the market for New Year decorations.

With the experience and accumulated achievements of about 20 years in the business, she started Firm B, Co., Ltd. in 1988. The business currently has 32 employees, capital of 50 million yen, and annual sales of 1.8 billion yen. During the

growth stage, the firm obtained 320 subcontractors, mostly housewives; trained in-house designers; and improved its management system, including inventory, purchasing, guidance, and quality control. It has progressed smoothly through the growth stage and the gradual growth stage.

Firm B has been enjoying an increased level of attention since it entered its current stage, that of branching out into new areas of business. The current president (and founder), whose father was an artist, has continued to create art using mizuhiki during her spare time. She wanted to preserve these works of art with mizuhiki, and began looking into coating methods. She then came across a kind of glass that is liquefied at room temperature. The firm had no laboratory, and she initially performed many experiments in her kitchen, saturating the mizuhiki in liquefied glass to form a film. This resulted in the development of a completely new material, in which glass is integrated with paper to form a translucent, volatile, flame resistant, insulating material. This material has been named "Choetsu-shi," or "Super-paper." There are currently 7 patents and 6 utility model rights for it, and it has been honored with a public award for new inventions. The firm is currently performing joint development with over 20 other companies, including some of the largest corporations in Japan, and is also involved in joint research with Waseda University.

Firm B has established a foundation with its main products, especially the New Year decorations that represent its origins; and it also has limitless possibilities in the area of "Super-paper," its new endeavor. The firm is expected to continue to grow in the future. In 1999, the firm was selected to receive bond surety from Kanagawa Capital Fund. This surety covers bonds with new stock acceptance rights. The bonds issued total 100 million yen; the amount of surety is 70.0 million yen; and the guaranty period is 5 years.

## (2) Venture Businesses in Hokkaido

### • Venture Business C

The forerunner of Firm C was a software house started by four members of the Hokkaido Microcomputer Study Club in 1977, when they were juniors at Hokkaido University, to build personal computers as a form of part-time employment. Their first job was to develop an operation control system for the municipal bus system in the city of Tomakomai. With the vague aspiration of eventually working in Sapporo, they went to graduate school and continued accepting commissions to develop software and accumulating experience. By the time they were second-year students in the master's program, they had confidence in their skills and founded the present Firm C. Although these entrepreneurs did not have a clear image of their future enterprise during the stage prior to preparing for startup or during the stage of preparing for startup, they were going through the process of accumulating experience through actual business and took their time by first going to graduate school until they had enough business confidence to start up the enterprise.

Two years after Firm C was established, a turning point came when it developed a software component that Sony had been working on. At that time, the entrepreneurs became confident that they could do core work for a major company so long as they had the technological abilities. They targeted an appropriate market for their high technological abilities, and since they could be more flexible than a large company, the firm developed through the growth stage and the stage of branching out into new areas of business as a systems house that develops and designs both software and hardware. At present, it has capital of 165 million yen and 109 employees (as of April 1999), and its sales volume is 5.12 billion yen (period ending July 1999). Its main clients include many large companies in Japan and the U.S.

Although Firm C tends to be perceived as a software firm, its main product today is ISDN connection equipment for general consumer use. It is often commissioned by government agencies and businesses to develop systems, and is involved in a wide range of areas from hardware to software. The firm's executives state that their strategy is business diversification. The reason for this is that in the past, when its image processing systems development for one company grew to 80% of total sales volume, the executives discussed the situation and decided that it was too dangerous, deciding instead to take the path of diversification. At present, the firm is active in three main areas of business: image processing systems development, sales of connection equipment for general consumers, and software development. All of its divisions are operating in the black. It has entered new technological fields by creating a free workplace environment that is necessary for research and development. This firm has also been successful at the stage of branching out into new areas of business.

With regard to the hiring of human resources, who form the core of a venture business, this is one of the few attractive employers in Hokkaido for outstanding students who wish to continue living in Hokkaido although they could be hired by major companies in Tokyo based on their abilities. This seems to be a reason why they have been able to hire outstanding personnel. About 70% of the firm's employees are natives of Hokkaido.

Firm C's future strategy is to stress profitability rather than size, and to continue promoting further diversification. Its main strategic areas are to be image processing systems for newspaper companies, and encoding systems for networks.

#### • Venture Business D

When Firm D's founder and current president was a university student, he wanted to work in desert agriculture. However, when his professor told him that a company in Nagoya was searching for personnel to raise new varieties of wasabi in Abashiri, he took that opportunity and relocated to Hokkaido. Since this project was conducted under the direct supervision of the company president, at the final stage, he was able to gain expertise in handling the entire process from research and development to financial management and the business overall. This is the typical pattern of

obtaining experience in a company during the stage prior to preparing for startup and the stage of preparing for startup. That is, the entrepreneur gained the necessary expertise while working at a company.

After a smooth transition of the wasabi business, he decided to delve into cultivation suited to Hokkaido's cool summers and severe winters, and chose strawberries. His goal was to develop varieties that could make use of the cool Hokkaido climate during the period between harvests in the rest of Japan, from summer into autumn. He had learned that confection manufacturers had a high level of demand for strawberries but had to buy low quality imported strawberries during this season. He also considered that the summer coolness in Hokkaido would be appropriate for producing quality strawberries, and that the difference in temperatures between morning and evening would make it possible to ship delicious strawberries. After resigning from the company where he was employed, he established Firm D in June 1987. The firm has capital of 41.5 million yen. The firm name is taken from the Chinese characters for "Hokkaido" plus a character from "biotechnology." The startup period for the new firm went very smoothly, including the procurement of funding, due in large part to the fact that the entrepreneur had already become recognized as one of the most capable researchers in Hokkaido in the field of biotechnology through his experience with wasabi cultivation. Also through the wasabi project, he had gained the business knowledge and experience needed to start up a business, and had already formed a network of personal contacts.

Through an academic society, he found a variety that seemed promising; however, further improvement was needed to allow mass production without any quality degradation. He obtained a commission for fruit and flower breeding research from an agricultural cooperative, earning the operating funds to continue his research. Development was well underway in 1990, but everything was lost that year due to blight, pests, and heat. Still, he has continued making improvements until the present, and the firm achieved sales volume of 1.2 billion yen in 1999, having established a firm business foundation.

Strawberries are a luxury food item, and constant variety improvement is necessary. In September 1997, Firm D purchased trading company, a major strawberry wholesaler in Tokyo, to obtain a source of market information. This company has three franchise shops, a pastry shop, so it can easily discover the preferences of consumers with regard to strawberries. It is no exaggeration to state that this provided a means to build new business possibilities after obtaining a stable market share.

Firm D now has a system of providing shoots and contracting with about 300 farmers, mostly in Hokkaido, for production. Based on the experience with wasabi, the policy is to avoid very rapid expansion of production; since experience provided the lesson that rapid expansion to more farmers makes it impossible to provide thorough technical guidance. Also, to improve farmers' motivation for production, the firm appealed to confection manufacturers to improve the current distribution system, in

which many strawberries are discarded only because their shape is not considered desirable; and as a result, it has been able to sell its entire production volume since 1998.

Firm D has obtained a distribution system to meet market needs, and while building a strong foundation for production and quality control, it has promoted research and product development; and seems likely to continue further market development and growth.

### **3. Application in Developing Countries, and Points to Consider**

As stated above, Japan is currently entering its third venture business boom, with the public support system being enhanced in response to the demands of the times. Venture businesses encounter different issues and problems at each step in the growth process, and are susceptible to changes in the business environment. In this section, we will examine Japan's public support system, discuss its applicability in developing countries, and identify some points for consideration.

#### **3.1 Positive and Negative Aspects of Public Support in Japan**

Subsidies, loans, investment, and bond surety make up the core of public support for venture businesses in Japan. This is because private sector financial institutions tend to avoid risky investment, and even if they do take the risk of investing in venture businesses, they are biased toward the later stages, after the period when the venture businesses have the greatest need for capital. So it is not easy for venture businesses, which lack security and credit, to procure funding. In many cases, it is impossible to restart a business after bankruptcy since the failed business was financed with secured loans or loans that were personally guaranteed by the entrepreneur. For these reasons, relatively few people in Japan have made the decision to take on the risk of starting a business.

We would like to identify the following two advantages of public support for venture businesses in Japan under the current conditions. The first is the very existence of public support. Under circumstances that make it difficult for venture businesses to procure funding, there are great advantages to providing funds, regardless of the format in which this is done. The second is the advantage of receiving public support. To obtain public support, venture businesses need to meet certain standards and pass reviews set by government agencies and the like. For venture businesses that lack security and credit, the very fact that it has received public support tends to be counted in its favor in credit reviews by private sector financial institutions, enabling it to obtain financing.

However, it is also true that there are criticisms and problems with regard to public support. The following two problems are representative. First, massive amounts of paperwork are required to obtain public support. Of course, a venture business needs

to fully disclose its information in order to obtain public support. But the procedures are so complicated and take so much time that they may actually place pressure on the management of the businesses themselves. We have heard from the administrators of venture businesses that if the procedures are so complicated, they would rather spend their time trying to latch onto one more business opportunity. Second, the review process lacks clear definition. During the review, which is performed after the submission of a massive amount of paperwork, the first consideration is to pass a certain set of standards; but in many cases, a final judgment is then made by a review committee composed of intellectuals. Often, the central members of these committees are people of learning and experience. In these cases, the committee may be better suited to evaluate the venture businesses in terms of their technological merits than in terms of the market, although both the technological and market aspects are important to venture businesses. There are doubts as to whether intellectuals with a broad knowledge of the vast field of technology are able to make such a judgment. There is also the question of whether intellectuals can judge the marketability of these products and services. Although there are many risks related to providing funds for venture business, this is also an area with a huge upside; the question is whether intellectuals can make judgments in an area of review that Japan's private sector financial institutions cannot handle.

### 3.2 Potential for Application, and Points to Consider

The first and second venture business booms in Japan fizzled because of changes in the economic and social environment combined with an immature support system. Based on this experience coupled with social demand, the areas covered by public support are becoming deeper and broader in the current third boom. For example, in terms of providing capital, improvements are being made in the areas of individual investor education, enhancing venture capital functioning, easing the standards for public stock offering, and providing support in the tax system. In terms of education as well, there is a movement to build curricula that help to develop entrepreneurs, expand programs for cooperation between industry and academia, and improve corporate training programs. To achieve effectiveness in sustainable venture businesses support, in conjunction with these additions and improvements to the relevant systems and programs, it will be necessary to raise consciousness concerning venture businesses, encourage the entrepreneurial spirit, and build networks on a variety of levels, linking industry with academia, investors with venture businesses, venture businesses with each other, and consultants with venture businesses.

Based on the above, we would like to indicate the following three specific aspects with regard to the potential for application of the Japanese experience and points for consideration.

- **Establishment of an Appropriate Public Financial Support System**

From the Japanese experience, it can be said that the tendency among private sector financial institutions to emphasize security when providing financing has led to public support in the form of providing funds for venture businesses. In other words, since there is no flow of capital from private sector financial institutions to venture businesses, public support for venture businesses in Japan have been excessively biased toward financial support. The Japanese experience suggests that it is necessary to reconsider the approach of having the provision of capital as the main form of support to venture businesses.

- **Human Resources Training**

In Japan, although there is growing social recognition of venture businesses, in general there is still a need for further development. In particular, full-scale involvement in the training of human resources began only during the current third venture business boom. It is necessary to promote the training of human resources to raise consciousness concerning venture businesses and encourage the entrepreneurial spirit.

- **Network Building**

Thorough attention has been given to building networks among venture business entities only since the beginning of the current third boom. For venture businesses, which are poor in business resources, it is necessary to build diverse networks in order to achieve sustainable growth.

## Afterword



## Afterword

### Five Essential Points Contributing to Development of Small and Medium Enterprises (SMEs) in Developing Countries

- For SME promotion policy makers and SME supporting agencies -

#### 1. Governmental commitment to SMEs and establishment of a division dedicated to policy making - Basic laws and establishment of units (bureau, division, and section) dedicated to SMEs -

In developing countries, fostering of SMEs is an important subject for industrial vitalization and economic growth. Economic policies of these countries have tended to place an emphasis on attraction of foreign enterprises or introduction of the foreign capital, but in the face of the current economic crisis of Asia this time, the necessity to foster SMEs inside the country has come to be stressed.

In this context, the government must commit itself through policy in fostering of SMEs. Specifically, the basic law on SMEs, which should be called the constitution to foster SMEs, must be established. Its basic concept must be appropriate to the economy of that country and the policy structure must be constructed on the basis of such concept. It is essential to define clearly SMEs to be covered by this law. (For definition adopted in Japan, refer to Chapter 1.)

In Japan, the policy target has conventionally been to correct the gap, that is, to overcome the outdated SME structure based on a background of a dual economic structure theory. The conventional basic theory has therefore been the so-called "Post SME Economy". In 1999, such concept has been modified to the assertion that diversifying and active SMEs are the source of growth and vitality of the Japanese economy, with the policy converted toward direct support of self-help efforts of SMEs.

As described in Chapter 1, the Small and Medium Enterprise Agency was established in the Ministry of International Trade and Industry in 1948 as a governmental agency to plan and promote SME-related policies. At present, 240 employees are working under the three-division system of planning, guidance, and small enterprise in addition to the Office of Secretary. Regardless of the scale and name, the central government of developing countries should establish a dedicated agency for promotion of SMEs.

#### 2. Well-balanced Policy Making - Structural Coordination among SMEs, IMF, and World Bank in the Macro-economic System, and Support of Promoters

Developing countries often request aid from IMF or the World Bank when their economic operation face difficulties due to internal and external factors. Similar aid is requested in many cases during transition from the socialistic planned economy to the market economy. When receiving the aid, it is often the practice to get charged with certain economic indexes as targets (conditionality). In implementation, the

policy maker must always take into account the existence of small and medium enterprises. For example, privatization of state-owned enterprises, curtailment of financial burdens (abrogation of subsidy, etc.), benefit theory, etc. may often threaten the very existence of SMEs. Furthermore, stress on the management and bankruptcy may also occur due to absorption of the excess fund for preference of macro-economy to suppress inflation that causes depletion of the enterprise operation funds, increase in the interest rate, and currency devaluation. As described in Chapter 5, structural change of the textile industry may cause failure of keeping the conventional industry and operation types. Structural adjustment is always associated with a pain, and it is desirable that the appropriate guidance be made in parallel toward integration of enterprises through merging and consolidation, change of business, location abroad, pullout, closedown, etc.

Also important is an option to develop the environment favorable for new foundation by the promoters, instead of taking protective measures endlessly for the industry whose historical duty is over.

### **3. Service Provider to Remain on the Same Eyelevel as SMEs - Support more than Guidance**

Because of the historical background, there exists a substantial difference in levels between SME supporting agencies and Small and Medium Enterprises in developing countries. Since SMEs have risen from family enterprises or tiny subcontractors in many cases, it is essential to understand their actual situation to ensure appropriate support. The supporting agency tends to provide a guidance from the higher position. Though small in scale, most of SMEs are professionals to a certain extent. In not a few cases, there arise discrepancies and disunion between the guiding party and the guided party.

It is essential to assign specialists with sufficient knowledge and experience in fostering of SMEs to service providers. This in turn makes it necessary to establish an official system to foster specialists and to provide certain qualification requirements. In the course of fostering of these specialists, training must be provided so that they always consider things from viewpoints of SMEs.

Recently in Japan, reflecting on these points, the draft amendment of law has been brought up for discussion before the diet in an intention to change the SME Guidance Law to SME Support Law.

### **4. One-stop Service by Service Agencies - Tie-up and Integration of Service Providers, Package Measures**

As was discussed previously, Japan has many agencies to support SMEs, with functions fragmented considerably. In developing countries, there are cases in which agencies with similar functions coexist to receive aid and loans from donors. Being a receiving party, developing countries are rather difficult to maintain the independence. Nevertheless, it is essential for them to make efforts to avoid overlap of organizations and eliminate wasting of personnel and financial resources through establishment of

master and action plans to foster SMEs. Donors must also show an understanding of their efforts.

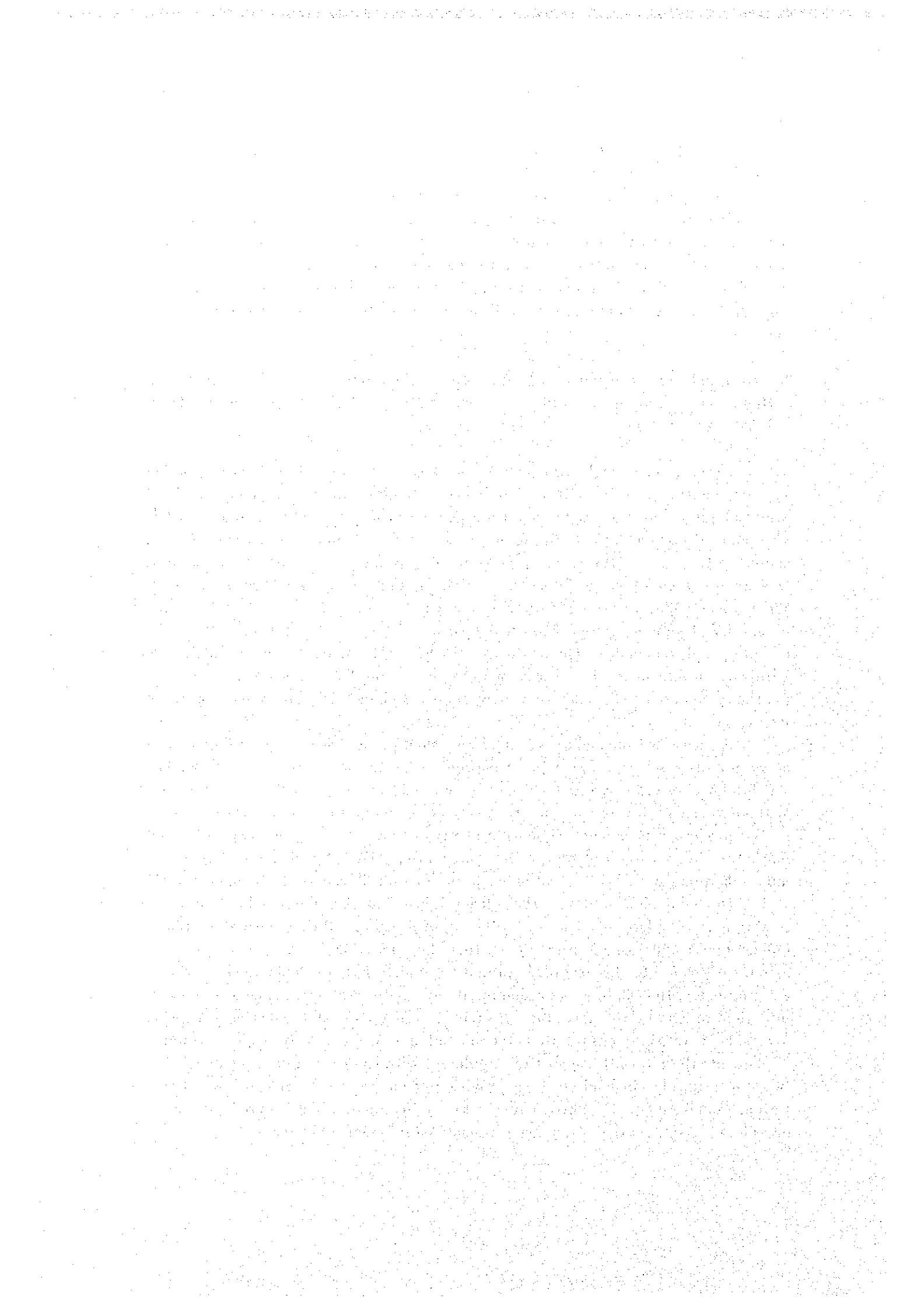
In Japan, review for integration of organizations is currently underway concerning role assignment of official agencies to support SMEs. Local governments are active in an effort to establish the SMEs Support Center through integration of agencies for SMEs promotion planning and its implementation (promotion corporation, etc.), fund supply (SMEs Promotion Fund Association) and management consultants. With this Center, it is intended to facilitate access of the system users for adequate support.

##### **5. Support for Software Management Resources, not for Hardware Resources - Role of the Budget, Effective Budget Utilization, and Aid from Foreign Countries**

In addition to high-level policies (industrial complex, etc.), Japan is taking various measures, such as lend and lease of equipment, special depreciation of acquired equipment, tax credit for modernization of facilities and machinery. It is also easy to use technical facilities, such as public laboratories and regional SME centers. Contrary to this, developing countries do not provide enough preferential treatment to secure these facilities and equipment and to proceed with modernization. When these endeavors are difficult with one country only, one option is to seek the possibility of joint utilization of facilities within the recent trend toward the block economy and regional unions (ASEAN, SADC, NAFTA, etc.). Along with this hardware development, it is necessary to secure intellectual software resources (market gain and management know-how, etc.), as well as technologies to utilize these facilities effectively.

As described in Chapter 2, certain developing countries tend to think that, if only a fund is provided, they can purchase equipment independently to solve problems. The fund may be compared to the blood of a human body, whose shortage causes death. Without various software resources that may be compared to the brain or limbs, such as the product development capacity and production technology, management and marketing know-how, the enterprises cannot grow. Both the donor and recipient must take this fact into consideration when taking overall measures to support SMEs.

During implementation of the policies, it is essential, as described in Chapter 2, to eliminate complete financing or scattering of funds and thus to encourage SMEs independence and responsibility by seeking their individual payment of a certain amount of costs. In this regard, it cannot be denied that the donor tends to ride a winning horse, that is, to select a dominant enterprise in developing countries in an intention to obtain the favorable position for financing and subsidy. What is necessary here is to ensure that the official aid agency of a recipient country implements the fair SME support in compliance with the policy purpose through the two-step loan, etc., instead of direct provision of aid to private enterprises. Some European and American countries appear to underestimate the role of official service providers in Asia, but their existence is considered to remain effective.









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