

SERVICE SECTOR INNOVATION AND POLICY ISSUES IN JAPAN

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INTRODUCTION

The weight of service industries in the Japanese economy has been increasing year after year. With the manufacturing and wholesale and retail sectors in need of restructuring, hopes are being pinned on service industries to become a key player in the rehabilitation of the Japanese economy. In the past, the service industries in Japan primarily grew due to the injection of manpower. Compared with manufacturing and other industries, the service industries have failed to achieve demonstrative increases in productivity due to innovation. Even so, some new Japanese service providers have grown on the basis of their strong competitiveness. These businesses share the common feature that they built their business models by adopting new technologies or know-how used in manufacturing or other sectors.

With such companies as a reference, this paper recommends a Japanese model of “service innovation” based on the development and adoption of technologies and know-how. The Japanese model of service innovation will serve as the key instrument for the future development of the service industries. The paper also discusses the aspects of a desirable industrial policy for the development of these industries.

GROWING IMPORTANCE OF SERVICE INDUSTRIES IN JAPAN’S ECONOMY

The service industries’ contribution to Japan’s economy rose from 12.2 percent of GDP in 1978, to 13.9 percent in 1988, and to 16.4 percent in 1998 (Table 1). With the sharp increase in the share of service industries between 1988 and 1998, the Japanese economy became highly service-oriented. Moreover, according to the Labor Force Survey, the number of employees in the service sector increased approximately 1.7 fold in 20 years, from 10.34 million in 1981 to 17.79 million in 2001 (Figure 1). This means that the service industries

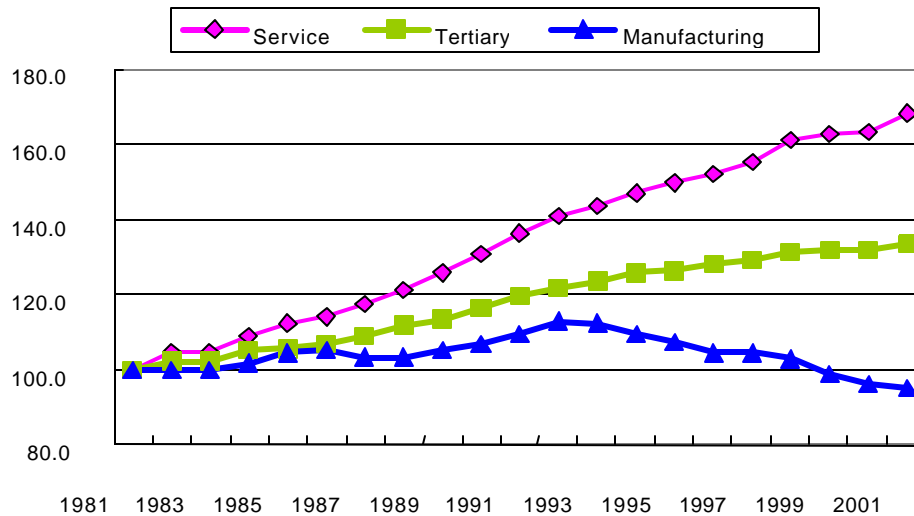
created 7.45 million jobs during these years, or 73 percent of the 10.16 million non-agricultural, forestry or fishery jobs created in these two decades. The rate of business-opening was twice as high in the service industries as in the manufacturing industries, while the rate of business-closing was lower (Figure 2).

TABLE 1
Changes in Japan's Industrial Structure, 1978-98
 (Percent of GDP)

	1978	1988	1998
Agriculture, forestry, and fisheries	3.7	2.6	1.8
Secondary industries total	36.5	35.8	33.9
Mining	0.5	0.2	0.2
Manufacturing	24.9	26.2	25.9
Construction	11.1	9.3	7.8
Tertiary industry total	59.8	61.6	64.3
Electric power, gas and water supply	2.4	2.5	2.9
Wholesale and retail	11.2	12.6	12.2
Finance and insurance	4.1	5.6	5.0
Real estate	10.8	10.8	11.9
Transportation and communications	6.4	6.2	6.3
Services	13.2	13.9	16.4
Government service providers	9.7	8.0	7.2
Private non-profit service providers	2.0	2.0	2.3

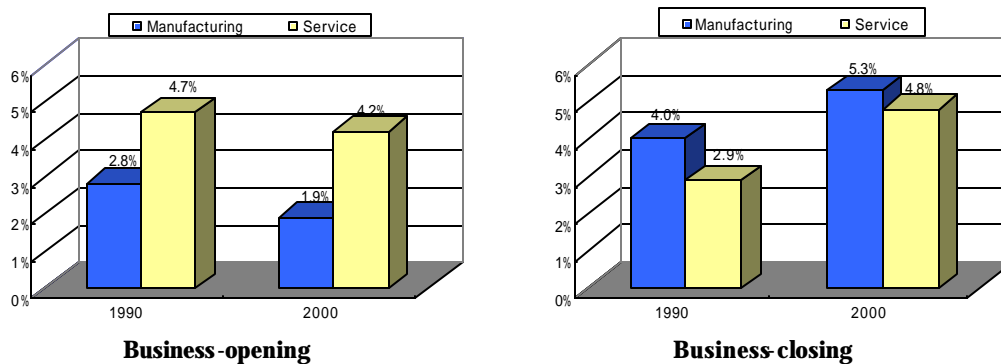
Source: *Annual Report on National Accounts*.

FIGURE 1
Trend in Employment by Major Sector
 (1981 = 100)



Source: *Annual Report on the Labor Force Survey*.

FIGURE 2
Business-opening and -closing Ratios in the Manufacturing and Service Industries



Source: Compiled by NRI from *Establishment Census of Japan*.

Evolution toward a Service Economy

The evolution toward a service economy is being driven by the changing needs of users of services as well as by factors relating to service providers.

Users' Side

Structural changes affecting consumers, businesses, and governments are resulting in increased demand for many kinds of services. Among consumers, for example, the graying of the population has led to increased demand for healthcare, welfare services, and nursing care; the greater participation of housewives in the labor force has raised the demand for household-related services, while the shift of emphasis from ownership to the use of goods has increased the demand for leasing and rental services. The rising importance of re-training and keeping up with changes in technology has increased the demand for educational services. At the same time, among businesses, the tendency to focus on areas of core competence generates demand for outsourced business services. In the government sector, with fiscal rehabilitation a top priority, government agencies have begun to outsource some of their operations to more efficient private entrepreneurs in order to maintain the level of public services with shrinking budgets. For example, Takahama City in Aichi Prefecture reduced the number of civil servants by not replacing those who left and by outsourcing a wide variety of work. In so doing, it slashed expenses by approximately ¥300 million saving

¥8,000 per citizen.

These changing patterns of demand are reflected in the growth patterns of the service sector. Service sector segments registering the highest increases in output, employment, and number of establishments from 1989 to 1999 included (Table 2):

- Maintenance services, such as machinery and furniture repair
- Content services, such as the production of movies and videos
- Environment-related services, such as waste disposal
- Health and welfare services, such as healthcare, public health and hygiene, social insurance, and social welfare.

TABLE 2
Service Industries Growth Sectors
(Percent change 1989-99)

	Output	Employees	Establishments
Daily life services			
Laundries, barbers, and public bath houses	82.5	18.7	2.8
Parking	96.2	26.3	3.1
Other services related to daily living	62.9	35.5	19.1
Business services			
Inns and other accommodations	56.5	18.2	-13.6
Entertainment (excl. movie and video production)	80.6	49.4	17.3
Automobile maintenance	45.5	21.2	11.3
Machinery and furniture repair	150.7	52.6	11.9
Rental of goods	81.6	33.6	12.6
Movie and video production	81.2	44.0	51.3
Broadcasting	63.6	19.6	0.7
Information services and investigation	164.6	42.3	44.6
Advertising	42.0	7.2	-3.5
Professional services	121.1	44.3	23.9
Other services for business	133.2	64.3	42.2
Social and public services			
Waste disposal	162.3	60.7	45.3
Healthcare	207.3	125.2	29.1
Public health and hygiene	244.3	162.9	88.1
Social insurance and welfare	135.8	103.7	49.2
Education	44.1	24.9	36.6
Academic research institutions	-5.6	33.3	45.0
Religion	66.0	8.7	2.3
Political, economic or cultural groups	57.0	21.7	11.6
Other services	138.1	95.0	56.1

Note: Other daily life services include photographers, custody of goods, funeral, and wedding services; other business services include: building maintenance, security services, and temporary help providers and other social and public services include halls and central wholesale markets. Shaded cells indicate the five sectors in each category with the highest growth.

Source: *Survey on Service Industries*.

Suppliers' Side

Factors promoting Japan's evolution to a service economy are at work on the service suppliers' side as well. These factors arise from changes in the manufacturing sector. First,

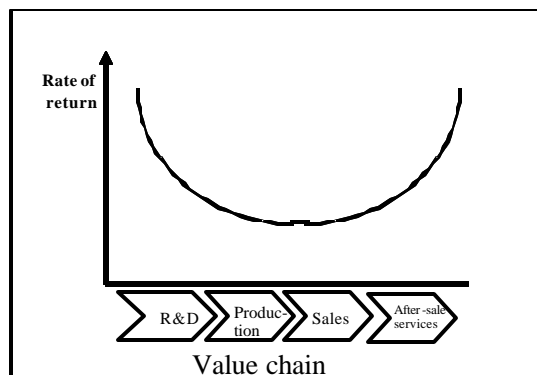
manufacturers have started to spin off their headquarters' administrative departments to create independent units that provide shared services to all group companies. These shared service companies then expand to sell their services to companies outside the group. In addition, manufacturing companies are expanding their focus from manufacturing per se into after-sale, product-related activities such as maintenance, leasing, and operating.

Changing Structure of Value Added

On the supply side, the evolution to a service economy is related to the changing structure of value added. Some service industries are closely tied to manufacturing industries because providing after-sale services is one way for manufacturers to increase earnings.

The connection between manufacturing and service industries can be understood in terms of the profitability or value added of various activities along an industry's value chain, or the flow from R&D to production, sales, and after-sales service. As Stan Shih, Chairman of Taiwan-based Acer, Inc observed, profitability along the value chain of the computer industry exhibits a smile shape: value added tends to be high for activities at the up-stream and down stream ends and low in the center of the value chain (Figure 3). In other words, production is the least profitable stage, and manufacturers can increase profitability by expanding up-stream innovative activities or down-stream service activities.

FIGURE 3
Smile Curve



In order to better understand this relationship, we compared value-added or so-called smile curves for two Japanese industries, computers and automobiles, and looked at how the curves changed over the decade from 1988 to 1998. These curves depict the value-added ratio (operating surplus/value of output) for various stages in each industry calculated from data in the input-output (extension) table (Figures 4 and 5).¹

Personal computer industry

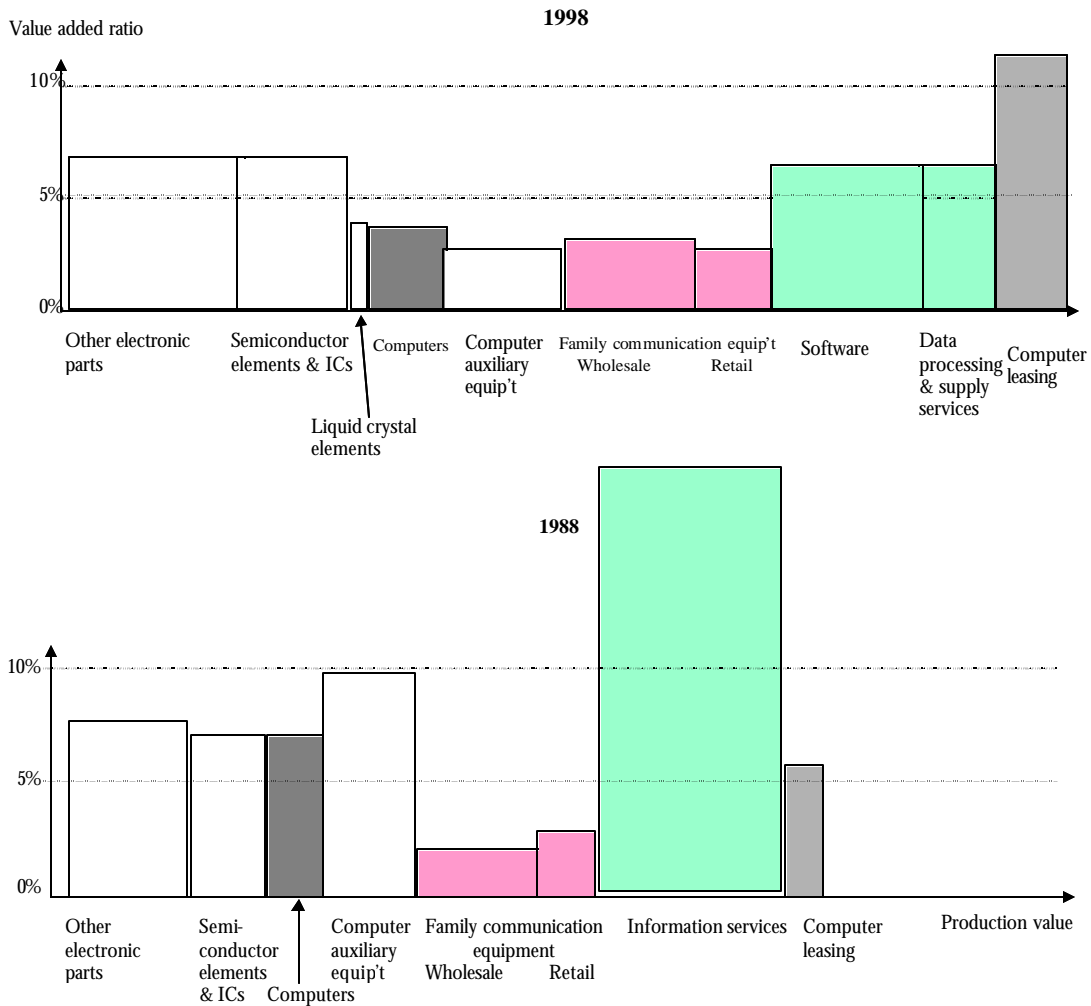
The top panel of Figure 4 verifies that in 1998 value added in Japan's computer industry resembled a smile-shaped curve, with higher value added ratios at either end of the value chain, electronic parts and computer leasing, and lower value-added ratios in activities such as computer assembly and wholesale and retailing in the middle section of the value chain.

The smile-shaped curve was less evident in 1988 compared to 1998. One reason is the comparatively high value added ratio of auxiliary computer equipment in 1988; this ratio was sharply lower in 1998. The higher figure in 1988 may reflect the larger share of multi-purpose computers in the industry's output at the time, but it also suggests that computer manufacturers were emphasizing auxiliary and peripheral equipment to compensate for the effect of fierce competition on revenues from their main computer products. At the right-hand end of the value chain, the value-added ratio of information services including data processing and software fell sharply from 1988 to 1998, while the share of the industry's total production value coming from these down-stream, service-oriented activities increased slightly.

Successful companies in Japan's computer industry focused on the two extremes of the value chain, where profitability was highest. For example, Sharp Corp. focused on liquid crystal displays at the up-stream end of the value chain, while Sony Corp. and Fujitsu Ltd. focused on content businesses at the down-stream end.

¹ Input-output data on wholesale and retail activities were supplemented using data from the Census of Commerce, since the concept of sales in the input-output table differed from that in the Census of commerce. The analysis was made using nominal data for 1998 and 1988.

FIGURE 4
Structure of Value Added in the PC Industry, 1988 and 1998



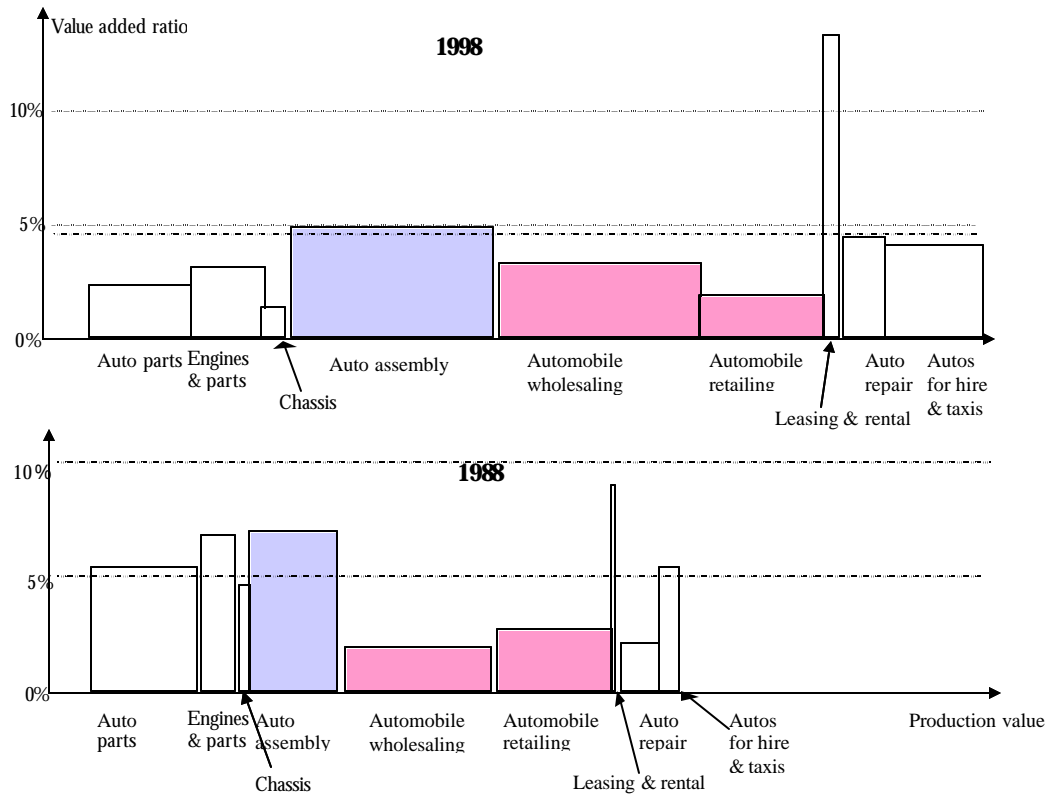
Note: the width of the columns represents the revenue generated by the activity while the height represents the operating surplus/output value.
Source: Compiled from Input-Output Tables of Japan.

Automobile industry

Unlike the concave “smile curve” observed in the PC industry, the value-added curve for Japan’s automobile industry in 1998 is convex, with higher value-added ratios in the activities in the middle of the value-chain and value-added concentrated in the assembly process (Figure 5). Also, from 1988 to 1998 value-added became more concentrated in the assembly process, while the value-added ratio of the parts industry declined markedly. This decline may be attributable to intensifying global competition in the auto parts industry as well as to

the procurement policies of Japan's major automobile assemblers.

FIGURE 5
Structure of Value Added in the Automobile Industry, 1988 and 1998



Source: Compiled from Input-Output Tables of Japan.

Taking these findings as typical of the PC and automobile industries in general, it might be safe to attribute the different shape of the value-added curve in the two industries to the power relations that exist among various parts of the value chain in each industry. In the PC industry, power is concentrated in companies at the two ends of the value chain. Intel, maker of CPUs, and Microsoft, which supplies operating systems, dominate the industry, as the expression “Wintel strategy” suggests. In addition, other successful companies, such as South Korea’s Samsung and Japan’s Sharp Corp., have focused their business strategy on the up-stream production of liquid crystal displays. The automobile industry, on the other hand, is dominated by assemblers. The major automakers such as Toyota Motor Corp. have overwhelming negotiating power in activities ranging from parts procurement through sales.

The growing importance of service provision by manufacturers is in part a response to the changing power balance within the value chain.

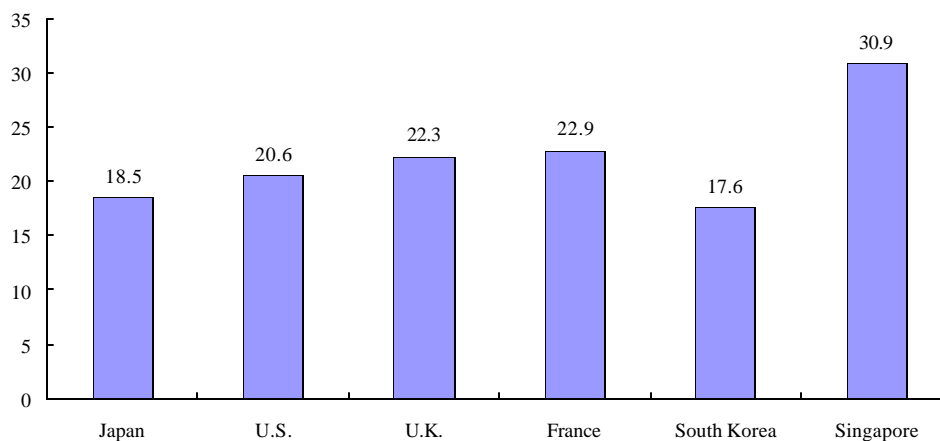
In both industries, the level of value added as a whole fell between 1988 and 1998. While the average level of value added declined due to intensifying competition, the bulge(s) in value added shifted from one part of the value chain to another. These changes suggest that it is possible to change the structure of the value chain over time through innovation. They also suggest the possibility of building new value structure by, for example, shortening the chain as well as increasing the value of a particular part of the chain.

FUTURE ROLE OF SERVICE INDUSTRIES IN JAPAN'S ECONOMY

Service Industries as Drivers of the Economy

There is still a great deal of room for further growth of the service sector because Japan's evolution into a service economy has been slow. The service sector's share in Japan's economy is still lower than in advanced industrialized nations in Europe and the United States (Figure 6). Among the reasons for the comparatively slow growth of the service sector in Japan is government and industry regulations that protect existing enterprises and inhibit the development of businesses through the market mechanism.

FIGURE 6
Ratio of Business Services to the Total Economy in Major Countries



Note: Share of finance, insurance, real estate and business services in the total economy Japan, France, South Korea, and Singapore are 1997 and the United States and the United Kingdom 1995.
Source: Compiled by NRI from economic statistics of each country.

Hopes for the service industries to become drivers of growth have risen along with their share of the economy. In many ways, the development of the service sector is critical to the future of the Japanese economy. First, since the service industries are relatively labor intensive, their growth offers a way to reduce the current high jobless rate. At the same time, with manufacturers transplanting their operations to China and elsewhere in the region, Japan must realize a desirable international division of labor with other Asian countries. In this scheme, Japan's role is to create knowledge and to create business models. In order to play this role, Japan must build up the service industries that create knowledge, such as research and development and design, as well as those that create sophisticated business services to support these industries. In addition, the service industries raise the competitiveness of the industries that use them. For example, supporting services, such as those of lawyers, accountants, and management consultants with professional expertise are said to be important to nurture venture businesses, and manufacturers are finding ways to maintain their competitiveness by increasing the product-related services they offer. Finally, the service industries are also instruments to realize "rich" life for individuals by providing safety, security, entertainment, and the like.

Government Measures to Develop the Service Industries

Recognizing the potential of the service industries to become the mainstay for the rehabilitation of the economy, since 2001, the Japanese government has released various recommendations and reports on the development of the service industries.

The Cabinet Office: Council on Economic and Fiscal Policy

In May 2001 the Council on Economic and Fiscal Policy, which was launched with the reorganization of government ministries and agencies in 2001, released an emergency report by the "Experts' Committee on the Rehabilitation of the Japanese Economy Based on a Strategy to Increase Jobs in the Service Sector." Based on the philosophy that revitalizing the economy requires structural reform aimed not only at existing problems but also at creating jobs, this report suggested that five million jobs be created in the service industries

over the next five years. It called for these jobs to be created in nine specific service industries (Table 3).

TABLE 3
Service Industry Job -Creation Targets for 2006

	Number of jobs
Personal and family services	1,950,000
Educational services for adults	200,000
Services for businesses and organizations	900,000
Housing-related services	550,000
Child-care services	350,000
Elderly-care services	500,000
Health care services	550,000
Legal services	200,000
Environmental services	100,000

Source: Council on Economic and Fiscal Policy, Report of Experts' Committee on the Rehabilitation of the Japanese economy Based on a Strategy to increase Jobs in the Service Sector. May 2001.

Industrial Structure Council

In 2001, the Industrial Structure Council under the Ministry of Economy, Trade and Industry created the Sub-committee for the Evolution toward a Service Economy and Employment Policy under its New Growth Policy Group. In July 2002, the subcommittee released a report calling for the “creation of a diverse and creative educational system that meets the needs of the transition into a service economy.” The recommendations stated that one of the factors in the economic revival of the United States in the 1990s was the smooth business reorganization and restructuring and strengthening of competitiveness through the evolution toward a service economy. It recommended that Japan should also strive to create job opportunities, primarily in the service sector, and adopt an employment policy that responds to changes in the employment systems.

The Ministry of Economy, Trade and Industry: Service Forum

Recognizing that industrial policy had focused primarily on the manufacturing industries and neglected service industries, the Ministry of Economy, Trade and Industry in December 2002 launched Service Forum, comprising experts on service industries in business and academia. The Forum will meet once a month between until May 2003 to discuss what should be done to develop the service industries.

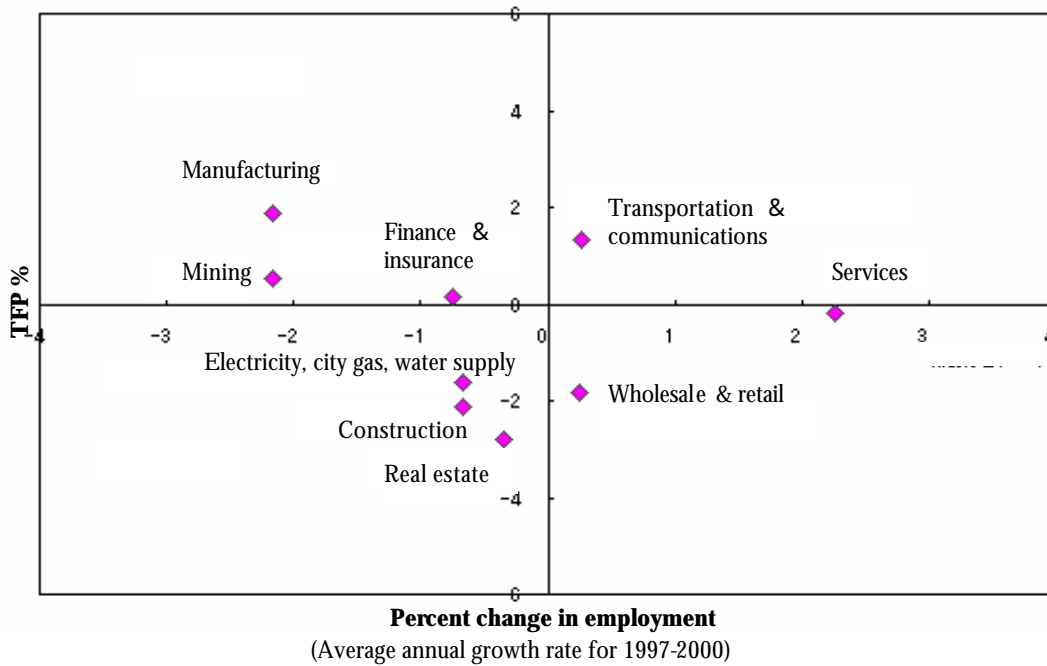
The Japan Tourism Advisory Council

The tourism industry, which is a cluster of service industries, including as hotels and amusement facilities, can play a significant role in revitalizing the economy by bringing in funds from abroad. Japan has a huge imbalance between outgoing and incoming tourists, however. Foreign visitors to Japan number only about five million a year, while approximately sixteen million Japanese travel overseas each year. Awareness of this disparity prompted the creation of the “Japan Tourism Advisory Council” within the Cabinet in January 2003. The Council will discuss strategic measures to make tourism a major national industry and to attract foreign visitors.

A JAPANESE MODEL OF SERVICE INNOVATION**Effects of innovation in the service industries Need for Innovation in Services**

So far, Japan mainly valued the service industries for their labor intensity, because they could absorb labor during recessions. Figure 7 depicts the rate of increase in employment for major industries against the industry’s total factor productivity for 1997 to 2000. Total factor productivity (TFP) is the portion of an industry’s growth rate over and above that due to additions of capital and labor inputs. The three industries with positive growth in employment—transportation and communication, wholesale and retail, and services—were all service related. But, while the rate of increase in employment in the service industries was the highest among all industries, the TFP for this sector was almost zero. By contrast, while employment was falling in the manufacturing sector, its TFP stood at 2 percent.

FIGURE 7
TFP and the Rate of Increase in Employment by Industry



Source: *Annual Report on Japan's Economy and Public Finance, 2002*, Cabinet Office.

A TFP of almost zero in the service industries means that increases in employment simply generate proportional increases in output. If the service industries are to play a leading role in Japan's future economic development, they must raise productivity. Innovation is a means to both raise labor productivity and improve the quality of services. The creation of demand through innovations should expand the markets for services. Moreover, they will need to do business abroad, and hence, strengthening the international competitiveness of service industries will become an important theme.

Direction of Service Innovation

Characteristics of "services"

In order to discuss innovation in the service sector, we define a service as an activity that offers only intangible functions and performances to the user. For example, educational service means for a teacher to offer his or her intangible knowledge and methodology to students.

This definition points to two characteristics of the service industries. First, because a service is intangible, the act of providing it and the act of consuming it must be synchronous. As such, unlike the manufacturing industries, which can produce goods in anticipation of demand and keep them in inventory, services cannot be stored. Since demand for services is bound to be uneven over time, how to cope with fluctuations in demand is an important concern for service-providers. Second, intangibility makes it difficult for users to assess the quality of a service beforehand. As a result, while consumers may be unhappy when a service does not match their needs, once they have a regular provider of a service, they become reluctant to change.

Innovation in the service industries

As in manufacturing, innovations in the service industries can be separated into product and process innovations. Product innovation involves creating new service content. For example, service product innovation occurs when a manufacturing business whose value chain ends with the sale of its products extends its activity to offer new service content such as leasing and rental, maintenance, or operating contracts as well as the products themselves. Process innovation involves building new systems to deliver service content. Chain operation, such as convenience stores or family restaurants, is an example of a process innovation for services. Through this system of delivery, suppliers of retail services can meet their conflicting objectives of offering diverse service content to attract many users and of standardizing delivery to increase efficiency and profits.

Creating new services (product innovation) requires developing technology, and offering services more efficiently (process innovation) requires developing new technologies and know-how. In practice, new businesses are built through a combination of product and process innovation. They adopt new technologies, such as information technology and information networks, and new management methods, such as client relations management (CRM). Applying the abundant accumulation of technologies and know-how developed in Japan's manufacturing sector to the services industries should be a source of service innovation—a Japanese model of service innovation.

Examples of Service Innovation

In fact, there are many examples of innovative Japanese service firms that have successfully increased the efficiency of the existing businesses or created new ones. A number of them have succeeded in other countries as well as in the domestic market. Looking at some of these firms gives an idea of the nature of the Japanese model of service innovation.

SECOM CO., LTD.

SECOM is a pioneer and the largest firm in the security service industry in Japan. In the past, security service depended on manpower, as it entailed dispatching guards to client establishments. SECOM mechanized security by combining crime-detection sensors and telecommunications technology and by moving its guards from client premises to central depots from which they are dispatched when a crime takes place. As a result of this improvement, the company has achieved very high growth.

SECOM used the information and communications infrastructure it developed in mechanizing security services and guard depots to enter one business area after another. Subsequently, it has developed technologies in such areas as remote sensing, image processing, geographical information systems (GIS), and the application of information technology to finance. By combining these technologies, it has succeeded in advancing each service to a higher level.

SECOM is an example of service firms that have successfully applied their own in-house, IT-based platforms to a variety of new business areas.

YAMATO TRANSPORT CO., LTD.

Yamato Transport grew briskly by launching a home delivery service that catered to the need of individuals in the household sector to send packages to other individuals. The service combines a physical distribution and delivery system and an information system. This combination of systems allowed the company to optimize the allocation of trucks and made it possible to offer next-day delivery anywhere in Japan. Using this infrastructure Yamato has diversified its services to include “cool home delivery” for refrigerated or frozen goods, “time designation delivery,” in which packages are delivered during hours designated by the

recipient, and “cash-on-delivery” for mail-order sales. It has also branched into offering direct-mail service for businesses. With a similar business domain, the company boldly challenged the government monopoly of the postal business and opened the way for private enterprises to enter.

Seven-Eleven Japan Co., Ltd.

Seven-Eleven Japan (SEJ) was the first company in Japan to adopt the convenience store concept and opened its first outlet in 1974. Today, it is the largest convenience store chain operator in Japan, boasting 9,000 outlets throughout the country.

The company’s combination of a sophisticated physical distribution system and information system allows high-frequency, small-lot deliveries to retail outlets, which reduces store inventories as well as the chances of stores running out of stock. It also allows the company to offer various services in addition to selling merchandise. Its outlets offer the following services in-store services .

- Copying
- Fax transmission
- Photo DPE
- Parcel home delivery
- Sale of postal stamps, post cards and revenue stamps
- Sale of waste disposal stamps
- Sale of ski lift tickets
- Printing of New Year’s cards
- Sale of third party automobile liability insurance
- Sale of magazine subscriptions
- Pick-up of merchandise ordered via the Internet
- Catalogue gift sales
- Sale of various prepaid cards

QB House

QB House operates a chain of barbershops based on the concept of a ¥1,000-10 minute haircut. In creating this business model, the founder and present chairman questioned the existing structure of the barbershop industry, where entry is difficult because of government regulation and industry regulation. The Barber Law requires a permit to open a shop and

voluntary industry groups set rates, holidays, and other conditions of business. Examining the range of services that barbershops typically offer, the founders of QB House did away with or reduced shampoos, shaves, and massages and focused on the services that customers truly seek. He eliminated unnecessary work by employees and designed a shop system, including utensils and barber's chairs, that allows efficient and inexpensive delivery of these services. QB House has now opened shops in Singapore in addition to those in Japan and thus merits attention as a Japan-based service company that has started international operations.

Service Industry Applications of the Toyota Production System

There are several examples of service businesses that have enhanced competitiveness and raised quality by adopting the so-called Toyota production system, also known as the *kanban* or "just-in-time" method, developed by Japan's premier automobile manufacturer. For example, following the *kanban* model, some cleaners have switched to processing small lots of various types of clothing rather than trying to raise efficiency by increasing the size of the lots they process at one time. This innovation has resulted in improved finishing technique, elimination of delivery errors and misplacements, and reduced damage to clothing. In another example, a hospital has reformed its operations based on the concept of eliminating waste, which is at the core of the Toyota production system, and sharply reduced the waiting time of patients.

These cases suggest the common features of a Japanese model of service sector innovation. These growing service companies have innovated by

- utilizing information technology and other new technologies
- breaking open markets protected by government regulation or industry groups;
- adopting know-how developed by the manufacturing industries, and
- applying their information and communications systems and other internal and external infrastructure to a number of new business undertakings. Or finding new businesses in which to utilize their information and communications systems and other infrastructure

POLICY ISSUES FOR THE DEVELOPMENT OF SERVICE INDUSTRIES

Government policies per se are not able to induce growth and development of service industries. The fundamental element in the future of Japan's service industries is the innovative efforts of service-providers to devise new business models based on the needs of users and to find ways to meet these needs. Nevertheless, since service-providers are typically smaller businesses, the development of service industries is an important policy theme from the viewpoint of the development of small and medium-sized businesses. At the same time, some service areas, such as those relating to the environment, do not respond well to market mechanisms. This means that policies to make sure that businesses meet the requirements for competition in the marketplace are necessary and that there are areas in which the public sector should take the initiative in creating the market.

Existing Regime: Regulation by Industry Laws

Japanese government policy related to the service sector has focused on regulation, based on the philosophy that because services are intangible, potential harm or damage to individuals should be prevented by ex-ante regulation. Industries that affect people's health or safety, such as healthcare and welfare are governed by so-called industry laws, which are aimed exclusively at a particular industry. For example, the cleaning industry is regulated by the Cleaning Industry Law and hotels by the Hotel Industry Law. By contrast, there are hardly any "industry laws" for manufacturing industries. Industry laws not only regulate existing service-providers but also protect incumbents by posing barriers to entry by new businesses. Moreover, the industries regulated by industry laws typically receive generous public support, including government subsidies. Most of this support is extended to existing technologies and methods, and so it does not encourage businesses to adopt new technologies and methodologies. Hence, the industry laws are obstacles to service innovation.

Future Policy Role to Support Development of the Service Industries

Despite the sharp increase in the weight of the service industries in the economy, they have been comparatively neglected by industrial policy, which has allocated large portions of the

national budget to the agriculture, forestry and fisheries and the manufacturing industries. The government should increase the budget allocated to the development of the service industries, but this requires the government also to offer a clear vision emphasizing the importance of the service industries and the direction of their future development.

Development of Service Technology

As we discussed, one way to promote service innovation is to adapt the technologies and know-how developed by Japan's highly competitive manufacturing industries to suit the requirements of the service industries. In addition, the service industries need to develop original technologies that are especially important for the service industries. Such "service technologies" include not only information technology, which will play the central role, but also ubiquitous network technologies that use IC cards and RFID tags, as well as data-mining and other information-processing and sensor technology for remote maintenance and other service functions.

The government should extend policy support to develop these technologies, especially by promoting joint research between business and academia, joint R&D among private enterprises, and the establishment of technological standards relating to services.

Improvement of the Market Environment

For the service industries to develop in ways that maximize the benefits to individuals and businesses, they need to operate in a business environment based on the competitive market mechanism, not one in which they are protected by industry laws. The government should actively pursue policies to create a competitive environment by eliminating monopoly and removing entry barriers.

Another important policy step for developing the service industries would be the opening of the markets that have been monopolized or heavily regulated, including water supply and sewerage, healthcare and welfare, and education. A case in point is the recent opening of the meteorological information market to private sector actors, which resulted in a wave of new meteorological information service businesses and made possible the provision of

meteorological information tailored to the needs of individual enterprises.

Development of Professionals

The provision of services relies heavily on manpower. This means that securing and nurturing capable professionals are essential for the development of the service industries. Japan, is well behind in this area, however. University departments or faculties specializing in service-related disciplines are scarce and tend to be concentrated in a few fields, such as welfare. Consequently, service businesses mainly hire vocational school graduates and rely on in-house training. Moreover, the near-absence of institutions of higher education offering service-related courses means a near-absence of scholarly research on management or content of service businesses.

An important priority in Japan at present is the absorption of redundant workers from the manufacturing and distribution sectors by the service industries. To accomplish this, the workers must be re-trained and equipped with knowledge and know-how for the service industries. Under these circumstances, the government should provide support for enhanced higher education in the field of services and the development of vocational schools for re-training and re-education of workers.

Promotion of the Internationalization

Given that demand and supply of services are synchronous and intangible, the service industries cannot internationalize in the same way as the manufacturing industries, which produce goods at home before shipping them abroad. Nevertheless, expanding operations to other countries can be an effective means to promote service business growth and development, provided intellectual property rights are rigorously protected. For example, American and European providers of IT-related services, consulting services, healthcare services, and other services have actively entered overseas markets. In contrast, very few Japanese service-providers have done so.

One important policy measure to foster the internationalization of Japan's service industries is to offer information to help companies take their businesses abroad. The

government should also work to harmonize systems that affect the business environment in various countries through by signing free trade agreements or by and other measures. At the same time, Japan should actively promote inward foreign direct investment in Japan should be promoted actively, as the added competition in the domestic market will enhance the competitiveness of existing Japanese service-providers to the great benefit of the consumers of services. The government should provide support to the entry of foreign service-providers to Japan while at the same time rectify rectifying the closed nature of the domestic market.