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China's Rapidly Growing Infocom Industry and Approaches by Japanese Companies

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Having already strengthened its position as a production base for information and communications equipment and software, China has also been coming in for increased attention as a consumer market for such equipment and services over the past several years. For example, the number of mobile phone users has already topped 100 million subscribers and forecasts estimate that this number will exceed even 200 million by the end of 2003. This rapid growth is also seen in the number of Internet users, which expanded by some 10 million during the last year alone. As the low end of this mass consumption market continues to expand, the usage core has quickly started to shift downwards towards budget-priced offerings. For this reason, the market is undergoing a fiercely competitive restructuring as average spending per user continues to rapidly decline despite the accelerating expansion in overall market scale.

Companies in Japan and other advanced nations have been steadily streaming into China to participate in these markets. The urgent task for corporations hoping to achieve success in China will be to firmly establish a business foundation and to determine appropriate strategies that mesh with these mass-market requirements. Such steps include appropriate strategies that combine cost reductions and the offerings of high-end (advanced) services, as well as the localization of technology and know-how to adapt to domestic needs.

I The Rapidly Growing Infocom Industry in China

1 China's Catch-Up Strategies

In determining China's 10th five-year plan (2001-2005), the central government positioned information and communications as a strategic industry and set out a number of ambitious goals. Specific targets included: (1) developing a domestic market scale by 2005 that will be twice as large as that in 2000 (a growth rate of three times on a GDP basis); (2) aiming at becoming the world's leader in terms of scale for both fixed and mobile telephone networks; (3) developing the world's largest communications equipment industry; and (4) doubling the 2000 figure for telecom exports by 2005.

The 10th five-year plan focuses on the mobile telephone field in particular. While the size of the IT (information technology) market (computers, peripherals, software and system solutions) in China was approximately 130 billion yuan (1 yuan = about ¥16) in 2001, the size of the market relating to mobile phone service (sales related to mobile handsets, operator revenues and plant investment) totaled some 450 billion yuan. In other words, in order to promote the introduction of leading edge IT systems owned by foreign-capital companies, taking advantage of the size of China's domestic market assumes an important meaning. Mobile phones represent an area in which the advantages of a huge market can be fully utilized.

The Chinese government often uses the expression "traditional industries vs. knowledge industries," in which traditional industries refer to heavy industries such as automobiles, steel, electrical equipment and chemicals. While China views these industries as important, it also understands the difficulties it faces in catching up with advanced nations in terms of technology in these fields, all of which require huge inputs and the accumulation of experience over the long term—including such things as human resource development and R&D investment.

On the other hand, software and information contents are classified as knowledge industries. These newer undertakings offer an appealing attractiveness in enabling China to catch up with advanced countries in a relatively short period on the basis of well-trained and abundant human resources if only an IT infrastructure is developed. For China, with its core focus on catching up with advanced countries, knowledge industries that utilize IT have a special meaning. Furthermore, IT promises an important tool in catching up with advanced countries in traditional industries as well, as the development of IT will bring in sophisticated production and management know-how in the format of the system solutions pioneered by advanced countries.

The Chinese government expects that the technology and management level of Chinese companies can be efficiently improved through contact with the system solutions brought in by foreign-capital companies. Although China's participation in the World Trade Organization (WTO) means that many Chinese firms will be exposed to intense competition with foreign-capital companies, China is trying to learn state-of-the-art technology and management know-how from the world-class IT companies that have entered the Chinese market, and to broadly assimilate such technology and know-how within the country.

Even though the importance China assigns to the IT industry differs from that given to other industries as described above, the central government is not taking what might be called a "systematic" approach such as formulating a national IT strategy. While there have been moves to create a national IT strategy that is similar to the e-Japan program through the establishment of the "National Economy and Information Collaboration Team" (led by Prime Minister Zhu Rongji) under the supervision of the State Council, no top-down approaches are being pursued to foster industries even under this program.

Indeed, a government official who was interviewed for this paper called for a relatively limited role for the government and instead stressed that "various new business models will be created spontaneously if only the proper infrastructure is developed." This concept presumably comes from their belief that more than an adequate number of players are lined up to freely make use of the infrastructure developed. These players include major world-class companies surging into the Chinese market, a cadre of competent human resources who have completed overseas study programs and a host of young people filled with a burning hunger for success.

2 IT-Related Markets Under Development

The leading IT company in China is Legend Holdings, a venture business established in 1984 by eleven researchers who emerged from the Computer Institute of the Chinese Academy of Sciences. This company, which was listed on the Hong Kong market in 1994, is the largest computer manufacturer in China, with 2001 estimated sales of 27.2 billion Hong Kong dollars (about ¥46 billion). Figure 1 shows the overwhelming strength of Legend Holdings in the growing domestic IT market.

As indicated in Figure 2, personal computers accounted for almost 50 percent of China's IT market in 2000. By regional classification, Beijing represented 37 percent and Shanghai made up 25 percent of the total, meaning that these two cities alone constituted the bulk of the market. Because China's IT market is still under development, the market for servers and

network equipment required for advanced solutions is still small, and IT penetration in rural areas remains almost non-existent. In this environment, a local company that has a nationwide service network and can wield the weapon of low prices offers distinct advantages, and Legend Holdings (which enjoys strong support through a partnership with Intel in the US) is expected to benefit from continuing smooth sailing for some time to come.

As IT starts to tap into the latent market in rural areas, this low end of the mass consumption market can be expected to expand further. This trend may lead to the emergence of the second and third versions of companies similar to Legend Holdings, which feature low prices. Such moves may even see the start of fierce price competition in this high-tech (IT) market as well.

3 System Solutions Market on the Eve of Take-Off

Figure 3 shows the scale of the world's system solutions markets. As of 2001, North America accounted for almost 50 percent of global demand, with Europe making up slightly more than 30 percent and Japan at about 10 percent. These three advanced markets represented almost 90 percent of the total worldwide demand. While the estimated annual growth rate of the Chinese market is approximately 13 percent (the projected average growth rate from 2001 to 2005), its scale is expected to come in at slightly less than $20 billion even in 2005, which is one-third of the Japanese market for the same year and only about 3 percent of the projected worldwide total for that year.

Under the current circumstances, moreover, the Chinese government has assumed the role of the driving force in the nation's system market. The 10th five-year plan allocates a total of slightly less than ¥3 trillion in investment to the development of the information network infrastructure, with the region around Beijing accounting for almost 50 percent of this nationwide total. The full-scale take-off of the system solutions market in China is not expected to come in until the latter half of the 2000s, when full-scale infocom investment by companies is projected to start.

Although the layer of IT engineers has recently been expanding with the return of those who have studied abroad, the major problem still remains with the small number of experienced professionals in specialized work. Projects related to system solutions need to start with the conceptual design for the work process as the first step, after which system design is carried out on the basis of this work process. Generally, this work process is derived from management and business strategies. As China lacks such know-how, there are not a few cases in which design is carried out with a primary focus on technology. For example, the author observed a case in which an executive wanting to

Figure 1. Sales of Major IT Manufacturers in China

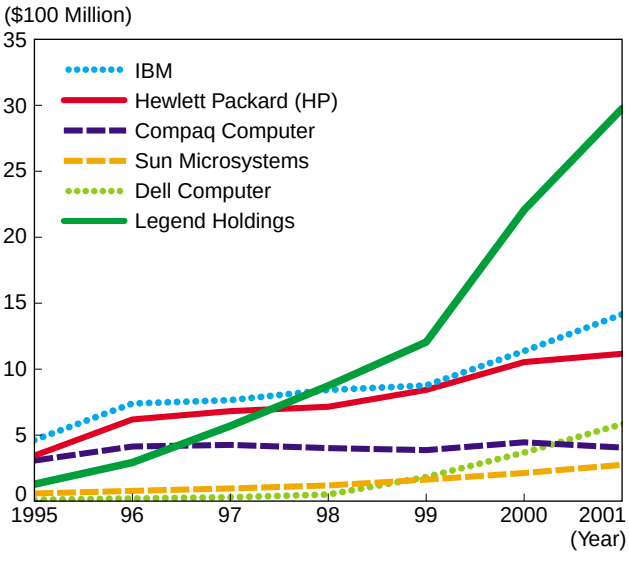


Figure 2. China's IT Market by Product (2000)

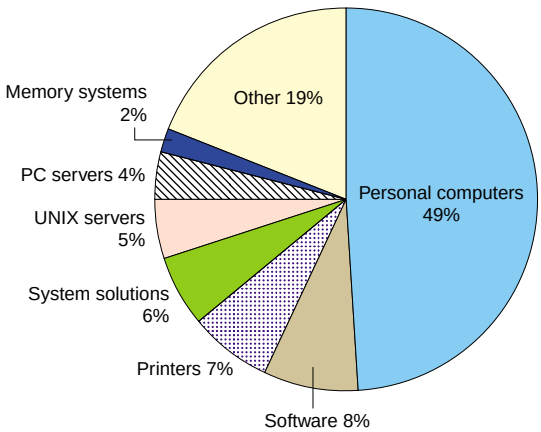
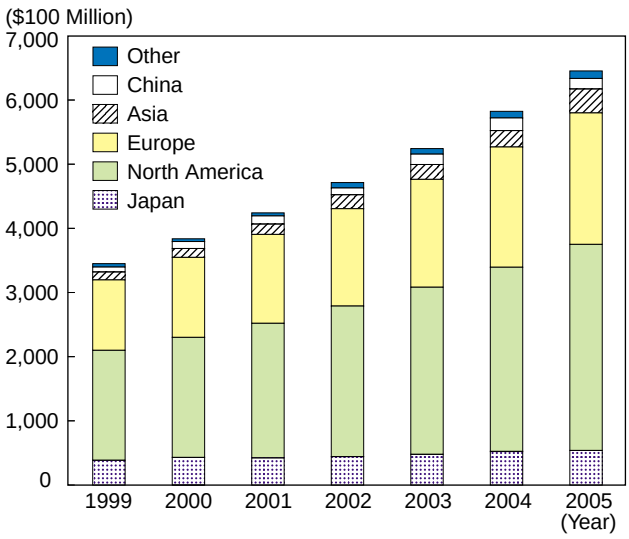


Figure 3. Current Status and Forecast Scale of Worldwide System Solutions Markets



Note: Data through 2000 reflect actual results; data for 2001 and thereafter are forecasts. The overall market scale includes systems integration, IT consulting, operating services, IT education, and support service.

introduce a work system for advanced chain operations ordered a vendor to provide a system that did not conform to the actual conditions in China because he did not fully understand the specific work and management of the chain operations.

When the system solutions market finally takes off in China on a full-fledged basis, consulting on the work process itself—rather than on IT systems and software—will be a core element. Thus, consulting expertise that can provide a comprehensive solution, from business strategies to work process design, will enjoy a success achieving differentiation in the system solutions market.

II Mobile Phone Service Market Growing Towards World's Largest

1 Trends in Mobile Phone Service Market

(1) Rapid expansion of market and plant investment

The scale of the markets relating to mobile phone service (sales related to mobile handsets, revenues of communications operators, plant investment by communications operators) exceeded 300 billion yuan in 2000 and amounted to 450 billion in 2002. This means that the market grew by almost three times in the four years since 1998. According to forecasts by Nomura Research Institute, Ltd. (NRI), the market will continue to expand in the future as indicated in Figure 4 and is projected to reach 600 billion yuan in 2005.

Investment in network infrastructure by communications operators is expected to increase from 77 billion yuan in 2000 to 190 billion yuan in 2005. In particular, China United Telecommunications Corporation (China Unicom), the second-ranked radio communications service operator, invested a huge amount in 2001 to establish a CDMA (Code Division Multiple Access) network, and China Mobile Communications Corporation (China Mobile), the first-ranked operator, constructed the infrastructure for a GPRS (General Packet Radio Service) system. (This data communications technology utilizes a GSM mobile phone network, which is the standard for second-generation digital mobile phones. Also known as 2.5-generation technology, GPRS enables data communications at far higher speeds than GSM). As a consequence, these past one to two years have seen a surge in construction investment.

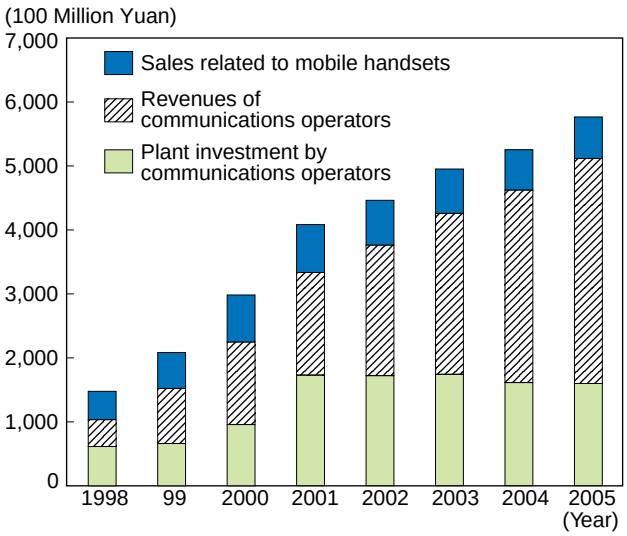
(2) 300 million users in 2005

Rapid growth is also expected in the number of mobile phone service users. While this figure likely reached 123 million as of the end of 2001, forecasts indicate the number will exceed 200 million users in 2003 and will near 300 million users in 2005, as shown in Figure 5.

In terms of population, the overall penetration rate at the end of June 2000 was 9.2 percent. In the coastal areas where pricing tolerance is high (due to a high income level), however, a penetration rate of about 20 percent is seen in most cities—with Beijing the highest at 32.8 percent, Shanghai at 28.4 percent, Guangdong at 21.8 percent, Zhejiang at 19.5 percent, and Tianjin at 15.5 percent.

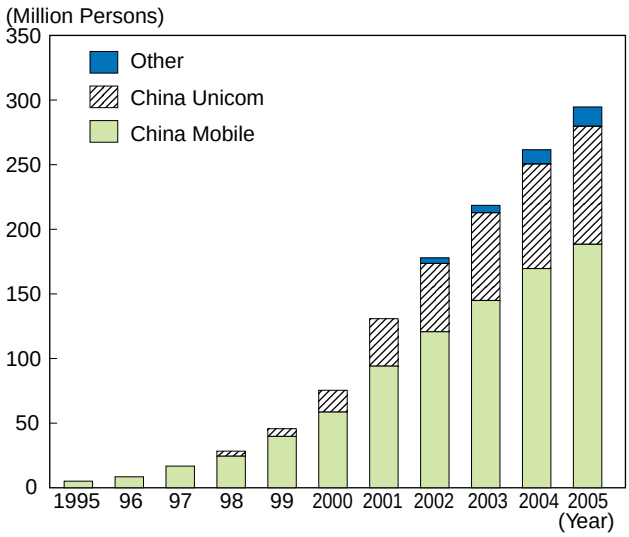
These figures suggest that the number of users in China will keep on increasing in the future as well, with a gradual increase in the ratio of rural residents

Figure 4. Results and Forecasts for Mobile Phone Service Market in China



Notes: (1) Figures for 2001 are preliminary estimates; data for 2002 and thereafter are forecasts; (2) 1 yuan = about ¥16.

Figure 5. Results and Forecasts for Mobile Phone Users in China



Notes: (1) Figures for 2001 are preliminary estimates; data for 2002 and thereafter are forecasts; (2) "Other" refers to the number of subscribers signing up with other operators that are scheduled to newly start service in 2002.

and lower-income strata among the new subscribers. Although there is a need on the part of operators for continuing plant investment in response to the increase in the number of users, a concern has started to emerge over whether they can achieve the growth in business revenues that will allow them to make the needed investments (to be explained later).

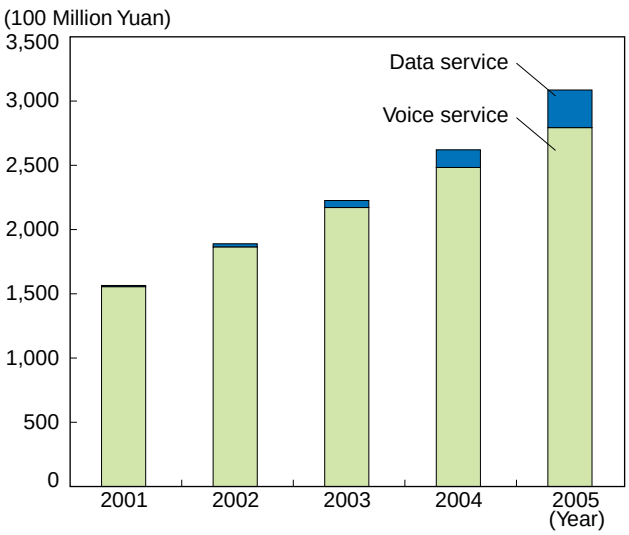
(3) Data communications service rapidly growing in urban areas

The mobile phone business consists of voice service and data service. In most cases, revenues from voice service generally reach a ceiling as the penetration rate nears the upper limit. Accordingly, in Japan, the United States and advanced European countries, greater attention is being directed towards strengthening data communications service as the penetration rate for voice service nears its limit.

In this context, China can maintain adequate increases in service revenues with only voice service, as the number of users is still growing at a double-digit pace. Indeed, revenues from data communications service via mobile phones in 2001 amounted to just 0.5 billion yuan, accounting for only 0.3 percent of total revenues.

In major urban areas such as Beijing and Shanghai, however, data communications services are expected to spread rapidly in the future. In addition to short email service, various data communications services via mobile phones will be made available such as connections to the Internet from mobile phones, access to game ware and news services, and electronic commerce. As shown in Figure 6, the scale of the data communications service market (currently, 500 million yuan) is expected to near 30 billion yuan in 2005, reflecting a triple-digit annual growth rate.

Figure 6. Revenue Structure of Data and Voice Service for Mobile Phone Service Market in China



Notes: Figures for 2001 are preliminary estimates; data for 2002 and thereafter are forecasts.

Furthermore, plans call for the introduction of third-generation mobile phone service (communications speeds are about 40 times higher than existing speeds, enabling moving picture service and music distribution) in 2003 or thereafter. China Mobile, which still holds a lock on the high-end market, expects that new services will contribute to a growth in average user spending. Because of the risk that investment costs for third-generation services will be a digit higher than that for the current generation, however, the introduction period is still uncertain. For this reason, the prospects for the third-generation FOMA service started by NTT DoCoMo in October 2001 are coming in for considerable attention in China.

2 Competition Policy in the Mobile Phone Service Field

With the September 1999 break-up of China Telecom, the firm that had long monopolized the domestic communications business in China, four companies were newly born in 2000: China Telecom for fixed telephone service, China Mobile for mobile phone service, China Unicom for pager service, and China Communications and Broadcasting Satellite Corporation (ChainSat) for satellite communications. Besides these four that were freed from administrative management and allowed to incorporate, three other operators were granted communications service licenses by China's Ministry of Information Industry (MII). These included China Network Communications (China Netcom) and Jitong Communications (both of which were established in 1994), and Railways Communications (Railcom, which was established in 2001).

In line with the approach taken in Japan and other advanced countries, China's communications policy has evolved along with the shift from a national monopoly to the introduction of competition, and this flow is being further accelerated through China's entry into the WTO in 2001. China's participation in the WTO will permit foreign-capital companies to establish joint ventures in China starting in January 2003 for mobile phones, data communications, fixed telephones, and international telephone services. Although service offerings will be limited to major cities with a large demand at the start in January 2003, the regional limitations imposed on foreign-capital joint venture companies will be lifted over the period from 2005 to 2006.

The foreign-capital investment ratio in joint ventures providing mobile phone service will also be expanded to 49 percent in 2005. In anticipation of this easing of regulations on foreign capital, communications service operators in advanced countries have been trying to find appropriate ways of entry into the Chinese market through such steps as investment in the Hong Kong

subsidiaries of domestic operators and technical partnerships.

Despite the ongoing measures to introduce competition, more than 90 percent of the communications service market in 2000 was still dominated by the two top-ranked operators (China Telecom at 55% and China Mobile at 37%), with China Unicom bringing up the rear at 8 percent. This means that effective competition has not necessarily taken place.

In particular, business licenses for mobile phone service have been granted to only two operators—China Mobile and China Unicom. To facilitate the competition, there is a plan to grant a third business license during the first half of 2002. It is expected that either China Telecom (which has a backbone of trunk lines within the country) or China Netcom may be awarded the license. If China Telecom is the winner, the company will be able to provide a full-line of services that include fixed telephones, pagers, data communications, and mobile phones. Incidentally, speculation is rife that the third license may designate the third-generation system, as the current second-generation frequency bands have already been fully used up.

Along with the promotion of liberalization, there is also a need to improve competitiveness among domestic operators in response to the measures to open the market to the outside as a result of participation in the WTO. A reorganization of the current seven communications operators in China is expected to lead to four surviving operators at the final stage. For this purpose, studies are being carried out regarding a merger between China Mobile and Jitong communications (a major data communications operator) and between China Unicom and Railways Communications, (which has business licenses for both local and domestic long-distance services). The likely prospect is that the third business license for mobile phone service that was mentioned above will go to China Telecom, which is scheduled to be separated into two operating companies (covering the northern and southern regions).

3 Usage Prices Keep Falling

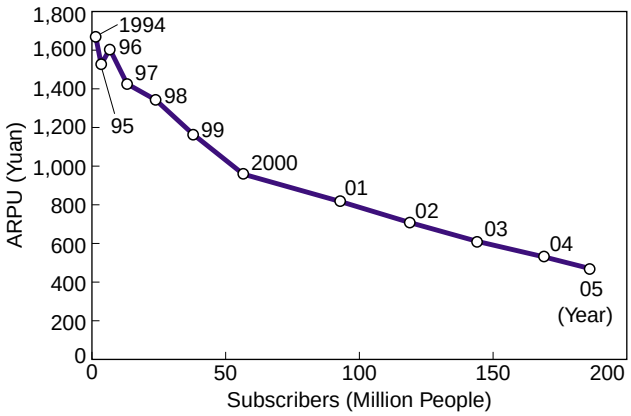
While China's mobile phone service has so far achieved smooth growth under easy sailing, the signs of change are starting to be seen. China Mobile is beginning to encounter newly emerging problems as its scale of operations expands. As indicated by its declining ARPU (annual average revenue per user) in Figure 7, China Mobile is coming up against a falling trend in ARPU in inverse proportion to the growth in the number of subscribers (revenues shown in Figure 7 include those form new services such as short email and voice mail). Because of this, China Mobile's ARPU is projected to decline from the current 800 yuan to around 500 yuan in 2005.

The situation differs for China Unicom, which entered the market after China Mobile and has a greater share of the low-end user segment. While the monthly ARPU (excluding prepaid charges) in 2000 for China Mobile was about 250 yuan, China Unicom registered a level that was less than half that figure at slightly more than 100 yuan. Facing such a problem, China Unicom started CDMA service in January 2002. While the investment needs were large, CDMA permits improving communications speeds and quality, and makes it easier to respond to third-generation broadband systems in the future. Accordingly, CDMA can be positioned in line with important strategies towards acquiring high-end users (which had been one of the weaknesses of China Unicom). In anticipation of an expected increase in the number of subscribers, China Unicom announced a plan to set the rates for CDMA service at the same level as those for current-generation service.

As such, there is a strong possibility that revenues for mobile phone service in China will not grow as much as might be assumed in view of the increasing number of users, as these newly acquired subscribers will not use such services as much as those who signed up when mobile services were first offered. Moreover, the period to recover investment in new services may also be prolonged, as China's mobile phone service starts to expand from the initial market that targeted the higher-income strata and business users (which constituted heavy users) and moves into the mass market with a higher price sensitivity. As noted previously, the number of users is expected to increase from about 130 million at present to about 300 million in 2005. However, forecasts indicate that more than 100 million of this 170 million increase will come from the mass market.

In addition, there are plans to introduce the CPP (Calling Party Pays) system in the near future, which is

Figure 7. China Mobile's Changing ARPU
(Annual Average Revenue Per User)



Note: Figures for 2001 are preliminary estimates; data for 2002 and thereafter are forecasts.

also a source of concern among mobile phone service operators. Currently, mobile phone charges in China are collected from both the calling and called parties. If CPP service is introduced, however, charges will be collected only from the calling parties, and price-sensitive users may limit their mobile phone usage to receiving calls only (e.g., calls originating from fixed telephones). This may lead to even further erosion in the previously mentioned ARPU.

The decline in the ARPU can also be traced to the increase in pre-paid users. According to China Mobile, the pre-paid ratio among total users increased from 10 percent at the beginning of 2000 to 50 percent at the beginning of 2001. While this increase in the number of pre-paid users can have an effect in reducing the charge collection risk, it also gives rise to the problem of cutting the ARPU to less than half when compared to revenues generated from post-payment users.

Accompanying this shift towards the mass market in mobile phone service, operators will also be forced to review their marketing strategies. In particular, although China Mobile retains a number of users in the higher-income strata and among business users who jumped at mobile phones at the initial stage, it will be required to strengthen low-cost operations in preparation for the shift to the mass market in the future. If its ARPU keeps declining, the company will have to take measures to cut costs by seeking economies of scale through a merger or partnership with China Telecom, which uses the same backbone network.

4 Intensified Price Competition in the Mobile Handset Market

The output of mobile handsets in China in 2000 totaled 53.96 million units, 23.1 million of which were exported. Domestic shipments, which consisted of the remaining domestic production and imports, came in at 52.57 million units. Year-on-year growth in production volume for 2000 was 32 percent, and sustained growth is expected in the number of subscribers in the future. As a result, the strategies of mobile handset manufacturers in China are generally bullish.

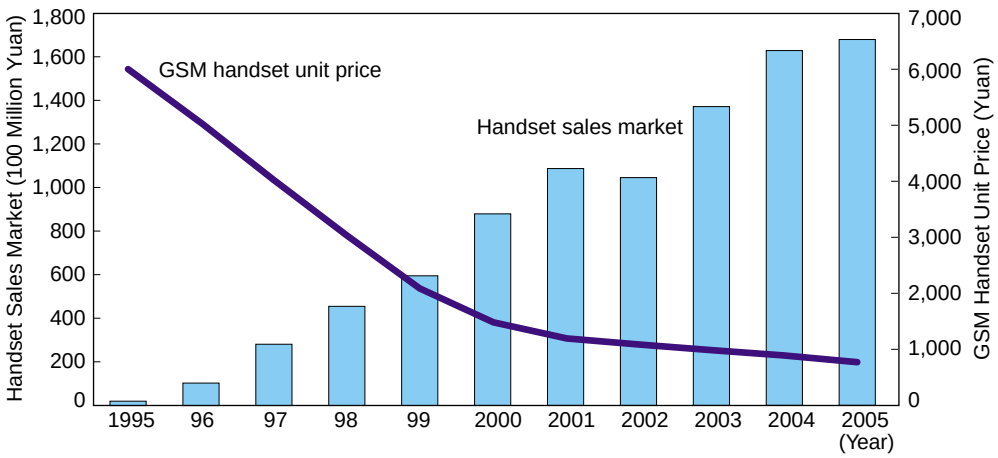
In November of 2001, the major Swedish communications equipment manufacturer Ericsson announced an investment plan that would inject an average of $1 billion annually in its facilities in China. Motorola of the US also spelled out a plan to increase the personnel at its laboratories in China from the current 1,000 to some 5,000 staffers. In many ways it appears that China is becoming the last resort for communications equipment industries, which have been facing some tough times under the worldwide IT depression.

Although Japanese manufacturers were somewhat slow in entering the Chinese market as compared to major manufacturers in Europe and the United States, they have now embarked on strengthening their production structure in China. For example, NEC and Matsushita Communications Industrial established a joint venture to develop 3G mobile handsets at the end of 2001, and have started to make further investment in the development of handsets for the Chinese market by inviting investment from service operators such as China Mobile in this joint-venture company.

However, the mobile handset business is not at all rosy. While it is projected that new users of mobile services will total slightly less than 200 million over the next four to five years, world-class terminal manufacturers have their eyes firmly fixed on this potential and have already entered the Chinese market in great strength and numbers. As a consequence, competition is expected to become brutal.

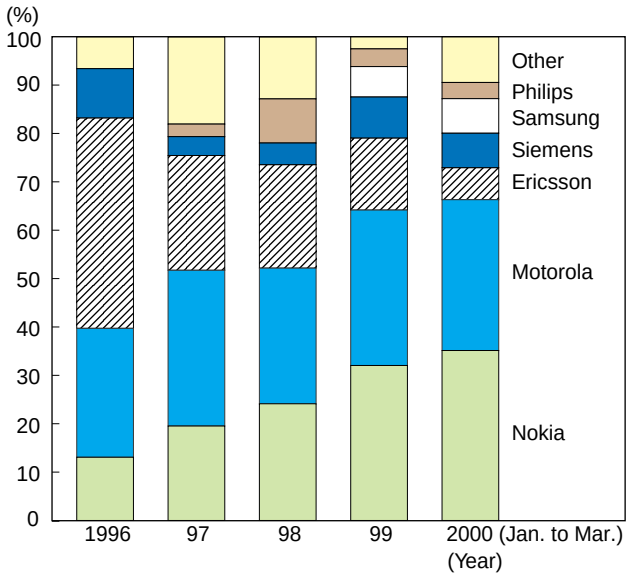
From the very beginning, furthermore, new users are more sensitive to prices than existing users. As shown

Figure 8. Results and Forecasts for Mobile Handset Market and GSM Handset Unit Pricing



Notes: (1) Figures for 2001 are preliminary estimates; data for 2002 and thereafter are forecasts; (2) GSM = Global System for Mobile Communications (2G digital mobile phone technology).

Figure 9. Changing Shares in Mobile Handset Sales in China



in Figure 8, the average unit price of a handset has steadily fallen by over 15 percent annually for the past several years, and this trend is expected to continue for some time to come. Although foreign-capital manufacturers currently hold an overwhelming share in the market for mobile handset sales as indicated in Figure 9, it is highly likely that purely Chinese manufacturers will come to the fore some day soon and provide low-cost units based on key components supplied from the outside.

III Appropriate Competitive Strategies for Japanese Companies

The previous section focused on describing the trends in the mobile phone field, which comes out on top in terms of market scale when we look at the rapidly growing information and communications industry in China. The following section identifies those issues that are considered important for Japanese companies to firmly establish a competitive dominance in this attractive Chinese market.

1 Surviving Cost Competition

In addition to mobile phone service, a rapid acceleration is also starting to characterize the pace at which various IT products and the Internet are spreading in China. Some five years after the introduction of these services in 1996, it appears that the main user segment is shifting from high-end to mid-range users. When a market approaches this stage, the absolute scale of the market will see a robust expansion, while prices for products and services will rapidly decline. For example, the price of a color TV—which was 3,000 to 4,000 yuan in the first part of the 1990s—has now dropped to 600 yuan for 21-inch sets. Similarly, prices for air conditioners have dropped from 6,000 yuan to 1,000 yuan over the past five to six years.

As was the case with household electrical appliances, PCs and mobile handsets will rapidly become commonplace through the successive emergence of Chinese companies with better cost competitiveness, and manufacturers in this market may possibly find themselves caught up in severe price competition. It is important for Japanese companies as well to improve cost competitiveness in the expanding Chinese market. This requires the utilization of local parts and strengthening local production and design capabilities in order to come up with locally needed products and functions that are neither overly elaborate nor functionally inadequate.

In improving cost competitiveness, it is necessary to make effective use of economies of scale by expanding local output. European and American companies are trying to establish a major manufacturing presence by developing China into a production base for not only the domestic Chinese market, but also one that can service the Asian market including Japan over the mid and long term. Of course, a careful approach must be taken from the viewpoint of country risk with respect to concentrating investment in China. However, an examination of the investment gap in the Chinese market between European and US companies on the one hand and Japanese companies on the other does raise concerns that the difference in cost competitiveness in terms of economies of scale may become critical in the future.

A key point affecting the survival of Japanese companies in the Chinese market hinges on the extent to which Japanese companies can establish superiority in terms of costs over their European, US and Chinese rivals (as well as over other Japanese companies) with respect to such elements as design capabilities, the utilization of local components, and substantial economies of scale in order to reduce costs.

For this purpose, powerful cost-cutting measures must be firmly rooted in local operations by constantly implementing benchmark analyses in terms of costs vis-à-vis rival manufacturers in China, such as through the IT-based component and material procurement that has started to become common among European and US companies, as well as among Chinese companies.

2 Defining and Utilizing Market Position

In addition to the importance of strengthening cost competitiveness, it is also vital to carefully define the market position of one's own company without

becoming entangled in a price war. One direction to this end is to concentrate on a product and service strategy that focuses on the high-end market where significant profits can be maintained.

Japan is leading the world in the mobile phone service business as represented by i-mode and 3G technologies, and China also has a very strong interest in what is taking place in this field in Japan. And in order to keep a firm grasp on profit-making operations without being dragged into a price war, it is necessary to maintain non-price competitiveness in areas where differentiation is possible in terms of technology and know-how—something that is possible in the case of mobile phones.

China has already made approaches to introduce technology and know-how from Japan and to establish joint-venture companies for such purposes with respect to i-mode technology, know-how to foster the application industry that offers services over the i-mode system, and the development of mobile handsets supporting 3G technologies. If Japan's original technology and know-how in these areas can be linked to business development by meeting latent needs in China (localization), it would be possible to establish business venues in which price competition is not the primary consideration.

3 Localization of Technology and Know-How

Although many are starting to call China the "factory for the world," the reality is that almost all the leading technology and know-how employed in China must be learned from Japan, the United States and Europe. And there are areas other than mobile phones in which differentiation through Japanese technology and know-how is possible within a wide range of industries.

However, not many Japanese companies with superior technology and know-how are able to link such technology to profits from business in China. One of the major reasons frequently cited for this failure is an inability to localize technology and know-how. While technological collaboration and joint ventures with Chinese companies constitute an important strategy, there are cases in which even 100-percent foreign-capital companies have been successful in localizing their technology and know-how and in expanding their share in the Chinese market in a short time. Conversely, there are cases in which no meaningful penetrations into the Chinese market have been made, despite the fact that technological collaboration and joint-venture undertakings have been implemented over a long period of time.

Localizing technology and know-how means that local personnel who serve as the driving force for business in China can fully utilize such technology and know-how to create businesses meeting local needs in China. For this purpose, human resource education and the formation of appropriate organizational environments have an important meaning.

For example, unlike Japanese companies that have a tendency to force unilateral education in local areas, European and US companies focus on trying to establish an environment where local human resources can easily assimilate knowledge to encourage the voluntary acquisition of technology and know-how. Furthermore, European and US companies have provided a personnel management system that appropriately rewards workers who achieve good performances through their efforts, including incentives such as assigning successful workers to senior managerial post in certain instances. On the other hand, the lack of clear and conspicuous measures to motivate local personnel has often been cited by those looking at Japanese companies. These ideas and methods in the areas of human resource development and personnel management play an important role in localizing technology and know-how.

4 Forming Personal Relationships with Chinese Government Officials

The information and communications field represents a highly strategic industry for China, and the policies of the Chinese government even after full participation in the WTO will continue to have a significant impact on the China strategies of Japanese firms. In this sense, forming strong human links with Chinese government officials is important. However, observers on the Chinese side have often noted that Japanese companies do a poor job in negotiating with the government compared to European and US companies.

Actually, the headquarters personnel of many US companies that handle Chinese strategy include a number of Chinese Americans, and there is almost no problem in communication with China. And as European companies work with the governments of their home countries in handling negotiations, the treatment of their Chinese government counterparts is highly cordial. These are some of many specific cases that have been pointed out.

Why don't Japanese companies put their Chinese employees closer to the front in such negotiations? Why do Japanese companies try to carry out such negotiations on their own without the support of the government or industrial organizations? Apart from whether such assumptions are correct or not, this image of the Japanese approach has already been firmly rooted in the mindset of senior officials of the Chinese government.

In one actual case, a top executive of a certain Japanese company led a large mission of business leaders to China ostensibly to exchange greetings with a number of senior officials of the Chinese

government. Rather than fully conveying the purpose behind his visit, however, he returned home after making a series of on-site inspections. The impression he and his party left in their wake was negative to say the least—namely, that it is difficult to communicate with Japanese companies.

The accumulation of effective communication will lead to the formation of personal relationships. What is important before anything else for this purpose is to establish a relationship that permits the exchange of views, which is built on a clear understanding of mutual expectations and needs. In this case as well, whether or not local personnel familiar with China can be effectively utilized will become important.

5 Market Participation Through Acquisitions

Active efforts to enter the Chinese market have started to take place through the acquisition of Chinese companies in such fields as system solutions. Although there is a large number of highly competent Chinese IT engineers, they often lack experience and reliability where know-how concerning business applications is concerned. System solutions companies in China clearly need to absorb greater know-how from advanced countries. On the other hand, firms in advanced countries that want to offer system solutions in China must make substantial commitments in terms of efforts and labor to start up business on their own, such as hiring and training system engineers, carrying out activities to develop a customer base in local areas.

This makes it important to formulate partnering strategies such as engaging in joint ventures and affiliations when entering the system solutions market in China. However, the joint-venture and affiliation format inevitably encounters problems and delays in decision-making, as the opinions of the China side must be respected. Accordingly, means such as the acquisition of established companies have recently gained greater attention.

Many of acquisition targets are mid-sized private companies that share such characteristics as several hundred employees, sales totaling a few hundred million yuan, and strong performance in specific business applications. The first purpose behind such an acquisition is to secure the company's customer base, as developing new customers in China is not at all easy and requires great efforts. It takes a long time to start forming the human connections and building the personal relationships that lead to cultivating customers. The second purpose is to secure managers who are capable of supervising many system engineers. Training managers is also a time-consuming and troublesome issue for foreign-capital companies.

It is also important to provide incentives such as stock options to executives of the acquired company to prevent the loss of business motivation even after the acquisition. There are many local firms that are not successfully growing because of their failure to provide appropriate management as system solutions companies even though they have highly competent personnel and a well-established list of customers. Accordingly, it is also important to firmly establish advanced business management systems after an acquisition, while doing all that is possible to incorporate local information.

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