Diverse Development, Dynamic Competition

Although traditional wireline phone traffic growth has recently been sluggish and phone charges have been dropping, the mobile communications market's heady expansion has served as an engine for continued healthy overall telecommunications industry growth. In fiscal 1994, the first category of telecommunications company carriers are expected to achieve total sales of ¥7.5 trillion.

Cellular and car phone subscriber growth has been particularly impressive in the mobile communications market. Handset sales, phased in from April 1994 to replace leasing arrangements, have led to lower prices, new digital service operators (Digital Phone Group and the Tu-ka Group) entering the market, and the establishment of different fee systems, providing customers a wider selection and resulting in additional rapid growth in the area of personal use. With the likelihood that user costs and handset prices will continue to drop in 1995 the market is expected to continue growing.

Further, attention is now focused on personal handy-phone systems (PHS), scheduled to begin service this summer and expected to give the mobile communications market even more of a boost. The personal handy-phone is the digital version of the indoor cordless phone and will permit cellphones to be used outdoors at train stations, on city streets, and elsewhere (see diagram).

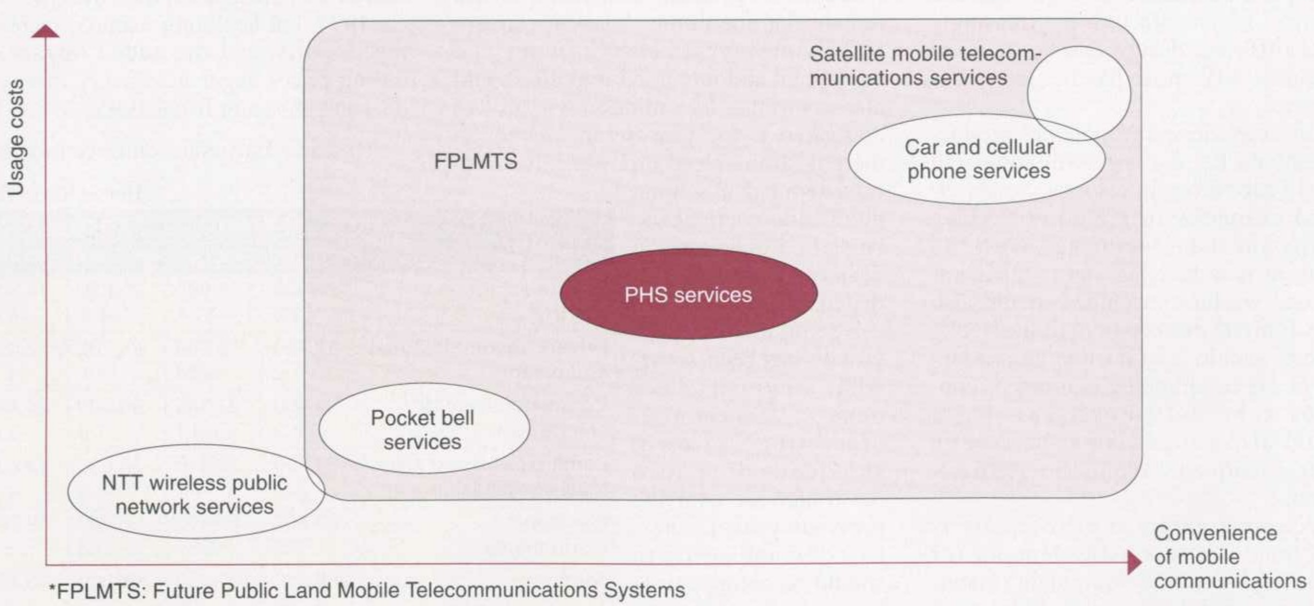
PHS services are distinguished by user fees that are comparatively lower than those of cellular and car phones and if service zones are quickly expanded a huge home use market could conceivably be opened up along with business use markets.

Because PHS services also possess relatively large bandwidths, suitable for the transmission of characters and images as well as sound, it is anticipated that handsets could be developed as cellular multimedia network tools. Three groups, NTT Personal Communications Network, DDI Pocket Telephone, and ASTEL, plan to enter the PHS service market and attention is focused on each companies' service sector development, the content of their supplemental applications, and the business strategies being formulated.

The generally severe business climate that confronts the broadcast industry reflects the recent economic contraction. For example, the repercussions of corporate cost cuts related to advertising and PR have inevitably led to continued negative growth in terrestrial broadcast advertising revenues.

However, as prices for antennas, tuners, and other equipment have come down on the one hand, the number of satellite and communication broadcast subscribers, which had previously been increasing slowly, has skyrocketed.

Comparative Overview of Telecommunications Services



*FPLMTS: Future Public Land Mobile Telecommunications Systems

Source: Industrial Bank of Japan

The broadcast sector has undergone a rapid succession of moves linked to future changes in the industry's structure and, along with the abolishment of local restrictions and deregulation of foreign investment (increasing the investment ratio from less than one-fifth to less than one-third) for CATV enterprises, approval is being granted for entry into telecommunications and other service sectors. Meanwhile, with the lifting of the ban on transnational broadcasts and promotion of licensing of foreign language FM stations, among other moves, wide-ranging regulatory reviews in terrestrial and satellite broadcasting are being implemented.

With remarkable advances in digital technologies it is thought that in the future the broadcast industry will proceed with moves toward multiple channels, interactivity, and multifunctionality, leading to richer variety in satellite broadcast programming and an acceleration of the trend toward multiple systems operators (MSOs, single capital source operators of multiple channels) in the cable TV industry. CATV operators under MSO umbrellas plan to offer comprehensive phone, interactive home shopping, and other services along with traditional video services. It is possible that CATV operators' entry into the phone services market may be the key to attempts to revitalize flat subscriber numbers, a precedent noted in the U.K.

It is believed that 1995 will be an extremely important year regarding which direction Japan's telecommunications industry will take in the future. There is now a scheduled date to decide NTT's operational configuration, a decision which had previously be postponed; depending upon the content, the telecommunications industry may be faced with sweeping changes to its traditional framework.

One focus of the debate has been the issue of open access to local circuit networks which, for all intents and purposes, NTT monopolizes. Under present conditions, new common carriers must use NTT's local circuitry to provide their customers service and calls for NTT to quickly provide access are increasing. However, indications of the difficulties involved in fine tuning the connection terms which accompany open access can be seen in issues involving interconnection related to frame relay data transmission services that offer high-speed data transmission services and virtual private network services that provide discount services to corporations, using public communications grids as a kind of internal extension network.

A second point regards the demarcation between domestic and international communications operations. With the increasing multinationalization of corporate operations, communications requirements have become more global and complex and telecommunications giants from other countries have moved ahead with direct overseas investments and actively sought to build up offshore bases while continuing to develop international partnerships. In this sense, because NTT's operational configuration is expected to have a tremendous impact upon the competitive framework of Japan's telecommunications industry and multinational corporations' footing, the direction of the debate is being closely watched.

Three words—personal, intelligent, and multimedia—are key when pondering the telecommunications industry's midterm outlook.

The ultimate objective in individual communications requirements is the achievement of "personal" communications whenever, wherever, to whomever, and with all types of data. It is anticipated that mobile telecommunications will continue to be developed as a tool in achieving this goal.

With the rapid acceptance of cellular and car phone systems, coupled with the eventual introduction of PHS services and other new systems that seek to alleviate costs and enhance functionality, additional efforts to realize universal services that integrate these various systems on the international level have begun.

With the trend toward diverse, advanced telecommunications services "intelligent" networks have attracted attention. Intelligent networks are part of the attempts to offer highly functional and precise services tailored to individual users by enhancing network and handset functions, as typified by the toll free "800" number services in the U.S. and virtual private networks that employ public networks as though they were leased lines. In Japan's telecommunications market, where price-cutting competition is entering the final stage, the provision of these types of intelligent services will be vital for continued market expansion and efforts to strengthen competitiveness from here on.

Moving ahead with the development of next generation telecommunications networks that employ high speed, high volume optical fiber will permit voice, data, and image information that has traditionally been transmitted separately to be combined digitally, enabling the transmission of "multimedia" data. At the same time, these moves toward multimedia will not only blur the distinctions between broadcast, communications, and computer industry sectors, but will successively foster opportunities for new businesses.

In the U.S., phone companies, cable TV operators, computer manufacturers, and others bear multimedia trends in mind as they briskly proceed with the development of equipment and services, forming agreements between companies along with mergers and acquisitions.

Venture businesses have also exhibited high growth in response to business opportunities that have been created and in some cases have superseded large corporations in propelling the market. Multimedia trends have also promoted telecommunications, broadcast, and other industry mergers along with the creation of video on demand, interactive TV, and other new services in Japan, yielding expectations that the traditional corporate map will be redrawn.

It is thought that the above three words will be important in forecasting future new trends and it is hoped that Japan's telecommunications industry will achieve diverse development as a market sector in which, more than ever, abrupt changes and dynamic competition will unfold.

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