The Japanese Smartphone Market and Case Studies

Yoshinari Shiraishi   Chairman, MCPC Smartphone Committee

June 22, 2009

http://twitter.com/SmartphoneMCPC

The term "smartphone" has become an increasingly common part of our vocabulary. Still, there is no common industry-wide definition of the term; a smartphone is mainly dubbed such when the device fills the usage gap between a mobile phone and a PC.

On March 16 of this year, the MCPC (Mobile Computing Promotion Consortium) announced the "Smartphone Market Medium-Term Forecast." The objective of this report is to gather an understanding of the current situation in the Japanese smartphone market, as well as to make intelligent projections of the future of the market. In fiscal 2008, 13 different models were introduced to the Japanese smartphone market, including the much-talked-about iPhone. We estimate that there was a 55% growth in the market, from 860,000 units shipped in the previous year to 1.33 million units (1.02 million individual purchases; 310,000 corporate purchases). We believe this increase is due to a decrease in real charges based on the transition to a two-tier fixed pricing system for fixed priced packet fees.

With President Obama of the United States claiming to be a fan of smartphones, and other increasing opportunities for media coverage in newspapers and magazines, this has truly been a year to remember for the worldwide smartphone market.

Established in 1997, the goal of the MCPC is to promote the expansion of mobile computing. The organization is engaged in efforts for standardization (terminal interface guidelines, Bluetooth devices, etc.), to publish guidelines for security measures, to sponsor awards and technology fairs in the mobile solutions segment, and to conduct mobile systems certifications and mobile phone qualification certifications. Through these activities, we intend to contribute to the development and market expansion in the mobile computing industry. As of May 2009, we have 168 member firms.

The MCPC approaches the promotion of mobile solutions adoption and support among small- and mid-sized companies from a position of neutrality beyond the framework of any particular corporate interest,

uncovering best practices to publish through booklets and web pages. We have also set up a mobile solutions consulting desk for IT coordinators as another way to strengthen ties with other cooperative organizations.

Five days prior to the MCPC announcement of our medium-term forecast, Gartner, Inc. of the United States published their 2008 global smartphone market survey. The survey led to some negative conclusions due to the short supply of appealing new products (other than the iPhone), as well as the effects of the global economic recession.

However, the survey did not provide a picture of the growth in the Japanese market. For example, where global smartphone shipments have experienced a year-on-year increase of 14%, North America experienced 69% growth, while growth in Asia/Pacific (including Japan) was only 2%. Even so, the survey only proposes the position that the smartphone market is growing as compared to the mobile phone market as a whole, which experienced a 9% decrease.

The MCPC believes that there is a difference in smartphone usage patterns between Japan and Europe/North America. Smartphones in the West have become popular as a device for email and other communications as compared to the voice-centric nature of regular mobile phones. In Japan, mobile phones have been designed with advanced functionality, including i-mode, picture mail, official websites, etc. Accordingly, the smartphone in Japan is viewed as more of a mini-computer, used for Web searching, data processing, etc. As such, we see two distinct markets in Japan: the "advanced-function mobile phone" market and the "smartphone" market.
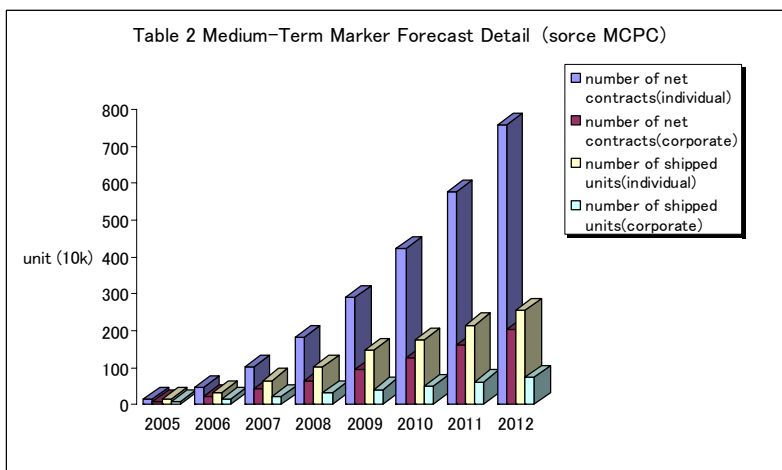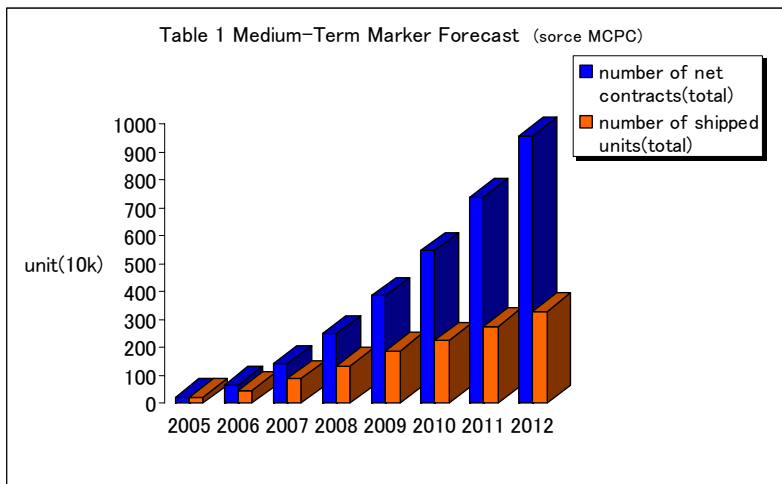
If the smartphone in Japan expands in innovative and diverse formats as personal/governmental/corporate communications and entertainment, we will see a phase of "agile computing," where we can expect new information technologies that contribute to greater economic, social and cultural activity.

Overview of Medium-Term Market Forecasts

Looking back, we can identify the 2004 introduction of Vodafone's "702NK" as the first smartphone marketed in Japan. The market expanded the following year when Willcom released its "W-ZERO3."

Continuing the trend from 2008, the smartphone market for fiscal 2009 is projected to grow by about 50%. The continued growth of broadband communications, the expanded availability of applications and

services in the open-source environment, and the growing adoption in various industries and businesses based on cost-benefit considerations will all be factors driving market growth. We estimate that the number of units shipped for fiscal 2012 will grow to 2.6 million units for individual users, and 700,000 units for corporate/business users. The total number of net contracts is projected to reach 7.6 million for individuals, and two million for corporate/business users in fiscal 2012, as compared to 2.5 million total in fiscal 2008. (See Tables 1, 2)

Table 1 Medium-Term Marker Forecast (sorce MCPC)

Table 2 Medium-Term Marker Forecast Detail (sorce MCPC)

The MCPC medium-term forecast includes projections for both individual and corporate markets. We have gone to considerable effort to accurately reflect the actual market situation.

We conducted online surveys to both individual and corporate users. After a preparatory survey of individuals between the ages of 15 and 69, as well as corporate information technology staff, we

collected 1,000 valid responses from each category. We then conducted a weighted-back projection (a method for summarizing survey data considering the composition of the population) by sex and age for individuals, and by number of employees and industry type for corporations. We believe this method provides a realistic model for our investigations. An important characteristic of our survey is that we further categorized individuals as sole proprietor, corporate officer, corporate employee, civil service employee, self-employed, student, etc., projecting the difference in usage characteristics according to occupation.

Our estimate of the fiscal 2008 market is the number of smartphone owners as of October 2008 (based on survey responses) to which we added the number of planned purchasers through March 2009. We adjusted the latter figure to reflect the rapidly deteriorating economic situation.

Our forecasts beyond fiscal 2009 include the effect of the general mobile phone model change cycle for those individuals who will likely purchase a smartphone, but have not decided when they will do so. When assuming the need for a technological solution, we reflected technologies predicted to exist in 2011—LTE (also called 3.9G; a high-speed data communications specification for mobile phones), next-gen PHS, WiMAX (one standard for fixed wireless communications; has been revised to allow communications with terminals not in visible range), femtocell (a radio wave range facilitated by extremely small-scale mobile phone base stations; expected to improve communications within homes, across an office floor, etc.), etc.—in the number of units shipped and number of contracts.

The MCPC surveyed corporations about intended smartphone adoption based on different solutions scenarios. We expect usage figures for fiscal 2011 to approximately double those of fiscal 2008. Given this growth factor, we then projected the number of contracts (according to a fitted curve model) for each intervening fiscal year, and then further incorporated the model change cycle for smartphones to forecast the number of units shipped.

Issues related to Usage Characteristics and Market Growth

The smartphone, as defined by the MCPC, is a mobile phone or PHS that incorporates a public general-purpose operating system, to which users can freely add applications, extend functionality, or customize. Specifically, we mean those devices that incorporate Windows Mobile, OSX (iPhone), Blackberry OS, Symbian or Android.

More than 70% of both individual and corporate smartphone users in Japan use Windows Mobile devices—a markedly high rate compared with the 12% share that Windows Mobile holds in the global market (Gartner, Inc. survey).

Individuals primarily use smartphones for email and Web browsing. Corporate officers, the self-employed, and men ages between 20 and 59 mainly use smartphones for work-related email and calendaring. Students and women aged between 20 and 39 also tend to use smartphones for online shopping. The overwhelming majority of corporate users use smartphones for sales/external communications, regardless of the size of the company in terms of the number of employees.

Smartphone usage among corporate management for reporting and intra-company communications (as seen commonly in the West) is high among major Japanese companies, but still only represents one-third of the overall total compared to use for sales/external communications.   (See Figures 3, 4)

Figure3 Usage Characteristics of Individual (source MCPC)
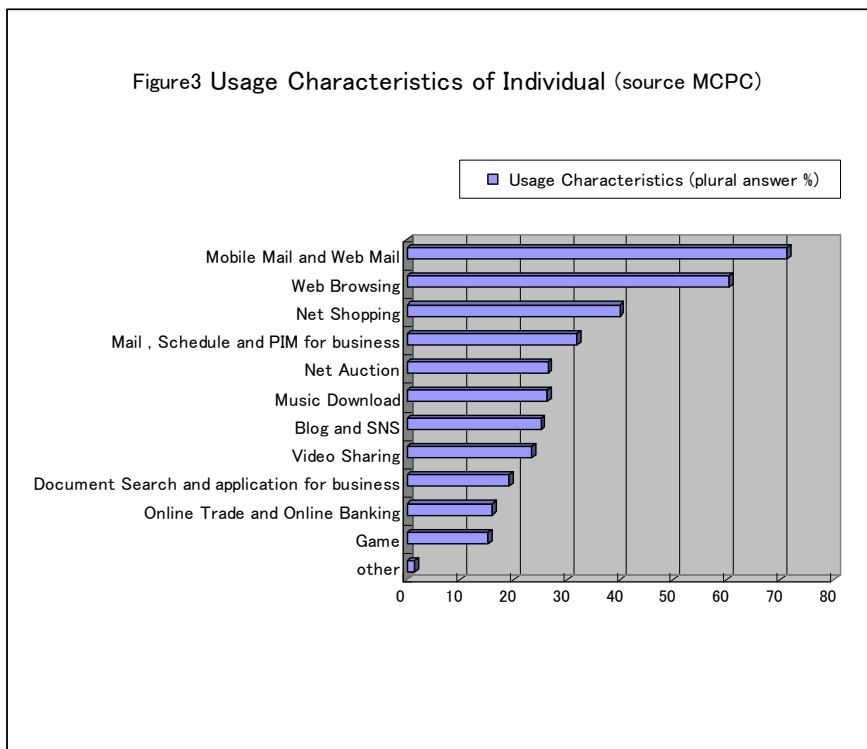
As we stated earlier, the Japanese market for mobile phones consists of "advanced-function mobile phones" and "smartphones." However, smartphone usage and awareness are still in the early stages.

Where individuals access the Internet outside their homes, 64% use mobile "full browser" and 52% use notebook computers. In comparison, only 8% use smartphones. At only 7%, the corporate smartphone adoption rate is quite low, even when considering the fact that companies are not providing smartphones to their employees in high numbers.

Figure4 Usage Characteristics of Corporate (source MCPC)
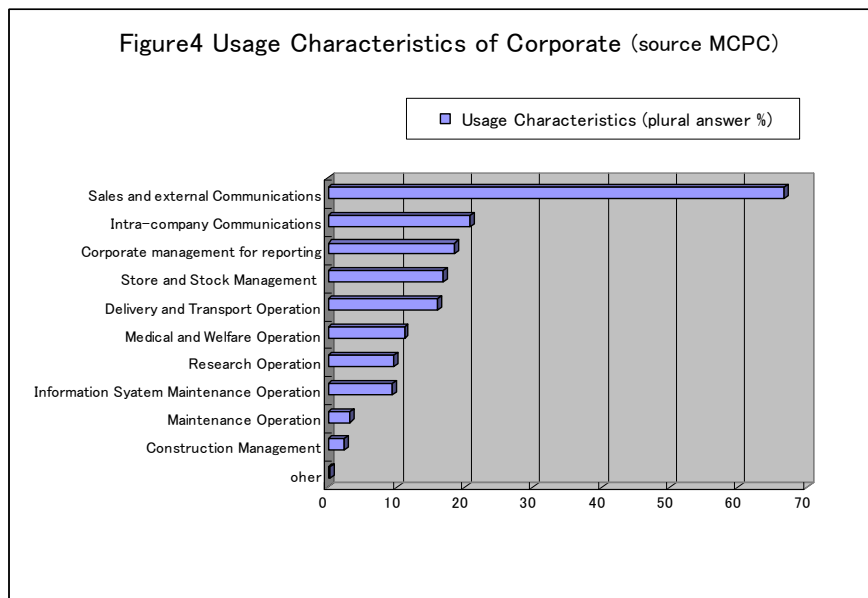
The major issue is the lack of awareness among both individuals and corporations. Almost 70% of combined individual and corporate users responded that they had either never heard of a smartphone or had at least heard the term "smartphone." Smartphone suppliers obviously need to offer an easily understood explanation of smartphones to potential users.

Our questionnaire sought to discover answers related to usage incentives/disincentives (why do you want to use a smartphone; under what circumstances would you want to use a smartphone; why will you continue to use a smartphone; why will you stop using a smartphone).

Individuals cited "reduced packet fees" as an incentive, surpassing the numbers that cited "battery life" as a disincentive, indicating the greater need for flexible fee plans. Corporate users cited greater functionality than mobile phones, the ability to freely combine applications, and form factor (cheaper and lighter than PCs) as incentives, indicating an advanced understanding of, and expectations for, the benefits of smartphone computing.

A "clear investment effect" was cited as an issue that rivaled packet fees and battery life in importance. In particular, individuals involved in the real estate, education and learning, food and agriculture, forestry and fishery industries indicated that investment effect planning was a key for adoption. The MCPC and industry consultants have a demonstrated need to offer advice in terms of both management and workplace smartphone use.

As with the introduction of the PC to the market, innovative business models, improved work efficiency, and the creation of intra-company, vendor and customer communications channels are just a few areas in which we are expecting to see progress.

Expectations for the Introduction of New Services

The MCPC has established short-term and medium-term outlooks for smartphone penetration based on the results of our questionnaire.

For example, one way that MCPC has worked to increase smartphone awareness among individuals and corporations is the addition of the "Smartphone" category for the MCPC Awards, presented to corporations, groups or municipalities that demonstrated the benefits of adopting mobile computing. The MCPC also sponsors booths at various events, explaining smartphones in easy-to-understand terms.

In addition to these educational activities, improved communications environments through faster/multi-networking, advanced functionality through OS evolution, and increasing numbers of applications are all factors that will drive greater market expansion.

The advent of application stores ("App Store," "Windows Marketplace," "Android Market," "BlackBerry App World," etc.) and cloud computing services (services provided as necessary through the Internet and other networks; e.g. "Mobile Me," "My Phone," etc.) will have the added effect of making smartphones both more popular and easier to understand.

We believe that these factors will help create an environment of "agile computing," accelerating the usage of smartphone applications that differ from the "content" available through mobile phones.

Just considering domestic living, health, education and hobbies, we see a literally unlimited number of services possible in the future tailored to everyday life.

Music is a familiar example. A person can use the "Genius" function in "iTunes" to create a playlist of compatible music from among all of the songs throughout the world, which the user can then quickly purchase on the spot. The iPhone and iPod have become indispensable tools because the accumulation of visual memories (use with a PC, user interface, etc.) has coalesced into a favorable user experience.

As for businesses, the smartphone as a reliable, easy-to-use device that offers an application integration platform facilitating company-specific customization, as well as collaborative filtering to recommend applications compatible with both internal and external systems, is likely to offer great potential for new integration business opportunities.

This will be an amazing chance for small IT services firms and IT venture firms that combine creativity and sharp technological insight with speed.

A Growing Number of Customer Case Studies

The MCPC publishes a website called "Here's How Far We've Come! Here's How It's Used!" that introduces case studies of mobile computing adoption for corporate users. Of the 50 recent case studies, nine involve smartphone adoption.

The first and foremost among these case studies was the business adoption of smartphones in a long-established sushi restaurant. The head chef and manager began using a smartphone for daily report management, reducing the time required to collect information from each branch, and allowing him to see customer traffic by time, daily ingredient costs, and hours worked by part-time and temporary employees—all at a single glance.

As a result, the manager was able to check sales, costs and profit figures directly from the restaurant floor. The company also created smoother communications among store managers by using PHS as an internal extension between the restaurant locations.

The convenience of smartphones that combine this kind of rapid data processing with mobile phone functions originated in "epiphanies" at the work floor. The use of smartphones is spreading across a wide variety of industries, including women's apparel outlet staff members, salespeople for household delivery drugs, printing equipment service technicians, IT solutions salespeople, construction site foremen and construction managers, pharmaceutical wholesaler marketing specialists, on-site video

producers, and more. Tennis school coaches and members—even elementary school teachers and students—are starting to use smartphones.

Recently, we have seen a pharmaceuticals wholesaler who is using smartphones with pharmacies, offering a simple, convenient way to manage orders. The smartphone is easy for older pharmacy staff members to use, and helps hold down operating costs. In the future, providing more and better information may be a way to breathe life back to the industry as a whole, including those pharmacies currently struggling to stay in business.

The common thread throughout these case studies is that the implementation was dictated by the needs at the location where services are provided to the customer—a smart model for which the Japanese have come to be known.

(end)

For more about the MCPC (Mobile Computing Promotion Consortium), see

http://www.mcpc-jp.org/

office@mcpc-jp.org