

# Beyond the e-Japan Strategy: Vision for Information-based Economy and Industries

By Murakami Teruyasu

## Entering the 2<sup>nd</sup> Stage of IT Enhancement

The e-Japan strategy is an IT infrastructure development policy that began after the collapse of the IT bubble, responding to the rapid development of broadband networks in South Korea and the United States. It is based on the concept that Japan must catch up with these countries in the area of information technology.

Japan quickly achieved its goal and its development of broadband networks for high-speed Internet connections has been remarkable. Given such progress in infrastructure-building, the updated

e-Japan strategy II, announced in 2003, greatly shifted the strategic targets to promote the enhanced use of IT.

Nevertheless, when we look at each category of IT utilization today, there are still various issues that need to be resolved before we can achieve real satisfaction.

IT usage in corporation has always been the driving force behind IT adoption in Japan. Yet IT was limitedly used for optimizing certain domestic operations, such as improving the efficiency of individual business departments and industrial plants by using computers with narrowband networks. It is still difficult to say whether IT has led to

increased competitiveness, innovation and the resolution of problems for companies. Meanwhile, some negative aspects of the network society have now emerged, in the form of growing unease over information security and privacy.

On the other hand, from the IT infrastructure development viewpoint, Japan has gone beyond the mere popularization of broadband. There are now initiatives to lead the world in the creation of the ubiquitous network, the next-generation IT usage environment which will connect anyone, in any place, at any time, by linking not just people to people, but also people to things and things to things.

In other words, while companies and the government are just starting to utilize IT, we are now entering the next stage of IT infrastructure development. The Japanese information economy is steadily approaching the second stage and we have arrived at a point when the public and private sectors must share a new industrial vision, based on a new IT paradigm, in order to determine the future direction. To help bring about this new era, the Ministry of Economy, Trade and Industry (METI) set out its Vision for Information-based Economy and Industries in this April.

This Vision for the second stage has the basic objective of transforming the Information-based Economy and Industries in four directions:

(1) moving from computers to ubiquitous information technologies such as mobile phones Internet, home network, electronic tags, digital TVs and car navigation systems;

(2) shifting the focus from the Silicon Valley IT cluster to an East Asian cluster;

(3) moving from IT infrastructure development and popularization (convenience) to reform and solutions through IT (realizing strength);

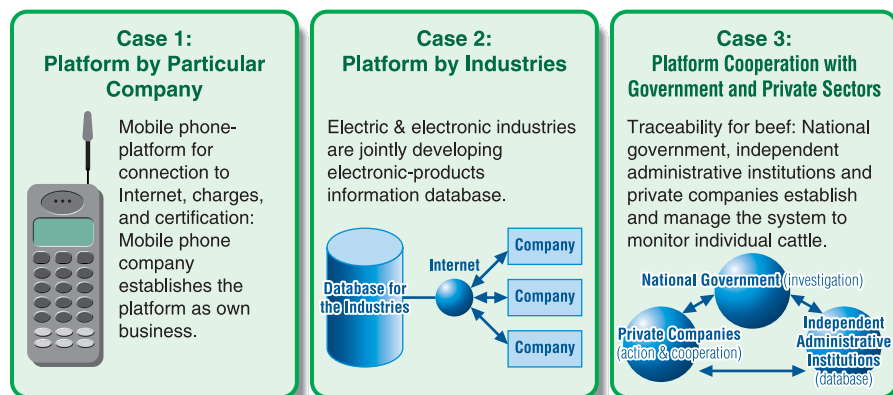
(4) moving from partial optimization of IT usage to optimal IT usage for the entire social system.

Table 1 The 1<sup>st</sup> and the 2<sup>nd</sup> Stages of IT

	The 1 <sup>st</sup> stage of IT	The 2 <sup>nd</sup> Stage of IT
Apparatus	Mainly computers	Ubiquitous IT (mobile phones Internet, home network, electronic tags, digital TVs and car navigation systems)
IT clusters	the Silicon Valley IT cluster	East Asian cluster
Goals	IT infrastructure development and popularization (convenience)	Reform and solutions through IT (realizing strength)
Effects	Partial optimization of IT usage	Optimal IT usage for the entire social system

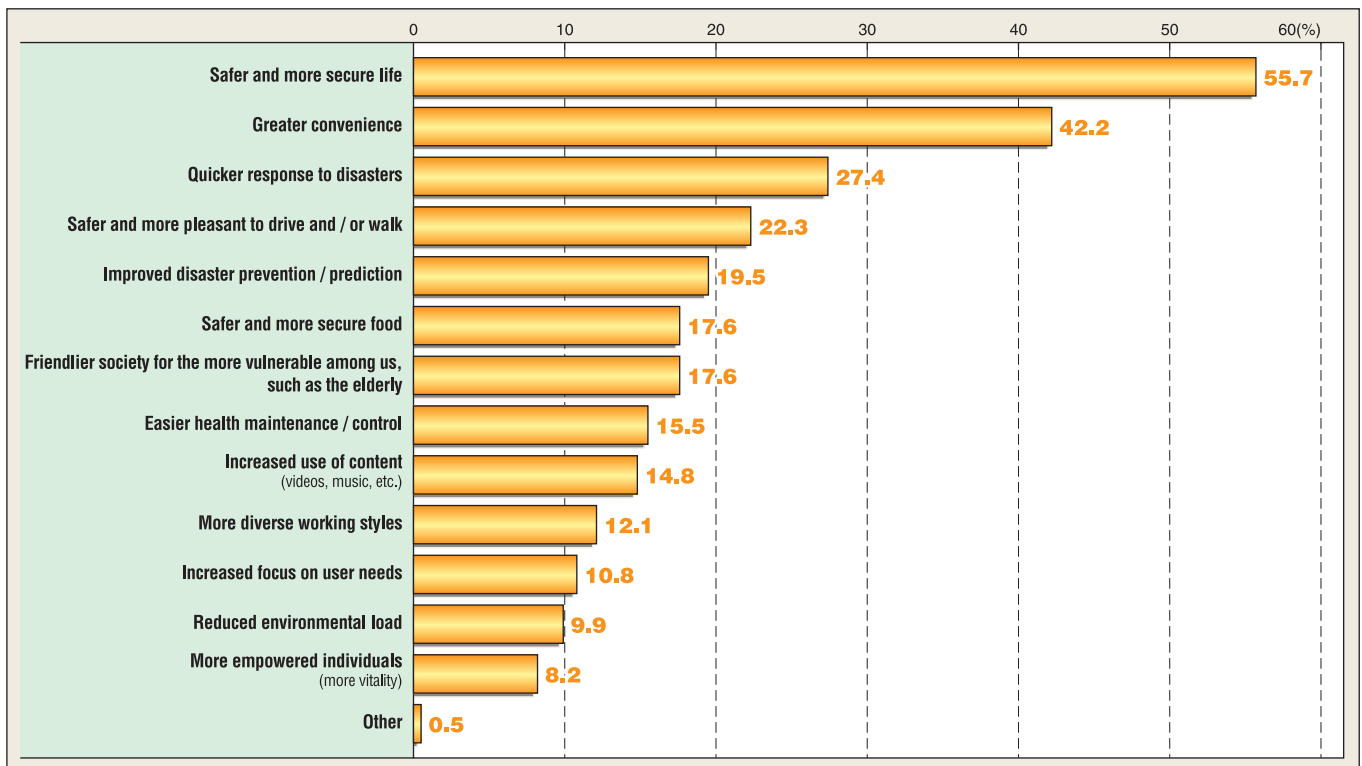
Source: Information Economy Committee, Industrial Structural Council, METI

Figure 1 Cases for Platform Business



Source: Information Economy Committee, Industrial Structural Council, METI

Figure 2 Expected Benefits from Ubiquitous Networks



Source: Survey on Trends Concerning a Ubiquitous Network Society (Web survey)

Note: Multiple responses possible

## Platform Strategy and Solutions Development

Meanwhile, the Japanese IT industry must grow and survive competition from the United States, the defending champion of the global economy, and the steadily expanding EU, as well as various Asian countries such as China, which has a huge economy with remarkable price competitiveness and business promotion ability, and South Korea, which has the ability to make rapid decisions and implement strategies. That is why there are not so many choices for industrial restructuring to be carried out by Japanese industry.

This Vision suggests how Japan can create new industries using various platforms, and the highly efficient provision of solutions that precisely meet consumer needs.

The Japanese industry of the future

needs to continually create unique products and services, while being tested by its sophisticated consumers. The source for the creation of original products and services lies not in individual products or services, but rather in the method of value provision, namely solutions that have their appeal through the combination of many different products, devices, systems and services to better meet customer needs.

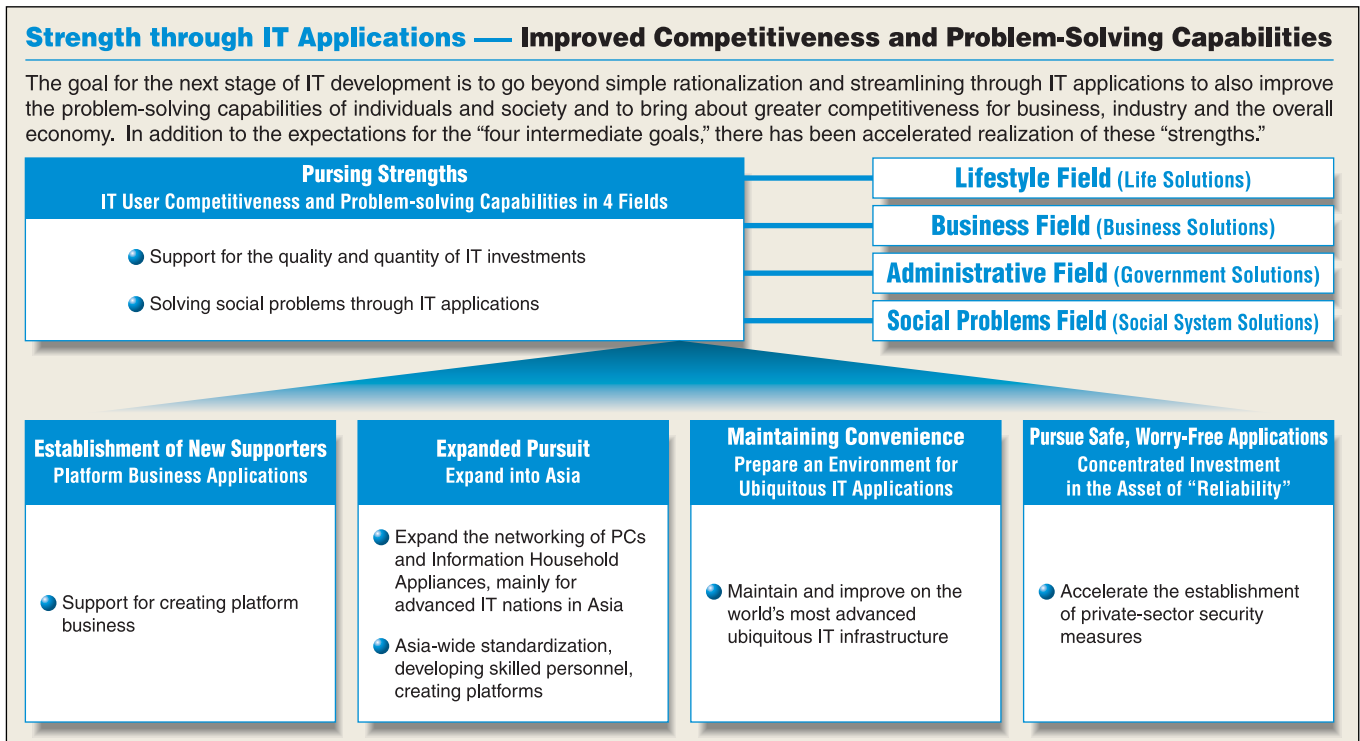
A platform is an integrated foundation for IT business that can serve as a steady springboard for new enterprises, by gathering together and winning the trust of a large number of players, which makes these business solution models possible.

For example, in Japan, through the development of a content platform for the mobile phone network, a new mobile content solutions market worth ¥300 billion was created offering

*Chaku-Melo* (melody ringtones) and *Chaku-Uta* (song ringtones), fortune-telling services and games, which did not exist at all five years ago. This platform has played an enormous role in turning the Japanese mobile phone industry into a ¥7 trillion market in a short period of time. The reasons for this success were the mechanism for the easy processing of copyright and the shared platform on which content bill is charged automatically added in calling charge.

The key to the Vision for the Information-based Economy and Industries is an industry that will grow by continually creating various solutions not just in the field of entertainment, but also in the sectors of daily life, industry, government and social systems, and by building a wealth of platforms throughout industry that bring together these kinds of IT and services.

Figure 3 Goal: Five Strategies to Solve Problems in Four Fields



Source: Information Economy Committee, Industrial Structural Council, METI

## Five Strategies and the Post e-Japan Strategy

There are five development strategies necessary for the realization of this Vision. The first is the early realization of the world's most advanced IT infrastructure, the ubiquitous network. This will involve not just the creation of a fixed-line network infrastructure, but also sufficiently widespread wireless, broadcast, traffic and actual networks such as electronic tags and sensor nets. By promoting sufficiently widespread infrastructure creation to secure interconnection and interoperation among them, this strategy can create a base that will produce new networked digital home appliances, as well as industries for automobile, housing and office devices that are constantly connected to the network.

The second strategy is to promote platforms across Asia for the electronic Kanban System and content distribu-

tion, by working on human resource development and standardization. This can be achieved by forming a single IT industry cluster in Asia, while continually securing partnerships with other Asian countries.

The third strategy is to concentrate investment in the asset of reliability. The prerequisite for the realization of any platform or solution is first to create a sense of confidence between the industries and users. In order to achieve this, it is necessary to create the perception that the Japanese network environment is one of the world's most secure and reliable, by carrying out early concentrated investment in security and privacy measures.

The fourth strategy is to establish platform businesses that link IT and services, as a new industry, based on the strategies above. The Vision gives some specific platform development examples, including digital homes, mobile multi-use and digital communities.

The fifth strategy involves achieving the improvement of problem resolution abilities and the strengthening of the competitiveness of users in the four fields of daily life, business, government and societal issues, through the realization of four types of solutions, namely, lifestyle, business, government and social system solutions.

While always being aware of developments in other Asian countries, Japan's basic direction for the second stage of IT strategy should be the strategic integration of world-leading infrastructure creation of a reliable ubiquitous network and the promotion of IT utilization that is truly linked to the improvement of personal and social problem resolution, as well as emergent creation of new industries through the construction of platforms. **JS**

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