

Summary Translation of Question & Answer Session at R&D Strategy Briefing for Analysts

Date: April 13, 2007
Location: Kawasaki Facility, Fujitsu Limited
Presenters: **Kazuo Murano**
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***Questioner A:** Regarding your global operations, could you please explain whether each location is currently selecting its own R&D themes and carrying out activities on its own, as well as your stance on this issue going forward?*

Kazuo Murano: We have long had overseas research labs, and they have operated relatively independently in order to take advantage of the talents of our local human resources. Going forward, however, we think there is a need for all six locations to work together very closely.

Let us take the specific example of blog analysis technology. This is technology that enables reputation analysis from an enormous volume of blogs, and NIFTY Corporation has already been offering this service for Japanese-language blogs. Our labs in China and the US took this technology and, in just two months, collaborated in developing the technology to handle English and Chinese. Having this service in these three languages enables us to cover 80% of the world's population. This is an example of how we were able to collaborate globally to develop an information analysis service.

Another example is in the area of video encoding technology. Our labs in Japan had been researching H.264 technology for several years. Our lab in China has also been working independently in this area, but using the expertise our labs in Japan have accumulated in global standard technologies, our locations in Japan, China, and the US are now able to collaborate and generate synergies in their research efforts.

On a daily basis, each of these locations is communicating with each other through video conferencing and the Web-based communications, and we also have global meetings several times a year.

***Questioner A:** Are individual business units responsible for investment in each laboratory, or are the labs operated by Fujitsu Laboratories? Please also tell us whether management decisions concerning the laboratories are made in Japan.*

Dr. Murano: There are cases where business units shoulder a portion of the costs involved, but overall management responsibility rests with Fujitsu Laboratories in Japan and is conducted with a balanced view of priorities. In the future, we would like to strengthen our relationships with overseas Fujitsu Group companies and Fujitsu Labs locations.

Questioner B: *To what extent does your R&D budget of 40 billion yen contribute to Fujitsu's sales and income in your target markets?*

Dr. Murano: It is very difficult to express the contribution in quantitative terms. For example, we believe that the 45nm process technology for semiconductors will come into mainstream use in the 2008-2009 time frame; however, how we calculate its contribution to sales and income then will be a challenge. If we do not develop 45nm technology, the business will not materialize, so in this sense you could say that the contribution effect is the sales and income for the entire 45nm process business. On the other hand, we figure that about 10 to 20 percent of our R&D results are actually commercialized, and in order to transform research results into products we must build plants and invest in production facilities. The totality of these investments is what results in business. When you think of it this way, the effective contribution of R&D to sales and income could be considered to be in the range of 10 to 20%. Or take the example of our *raku-raku* mobile phone, for which the clarity of the sound and the legibility of the display font have been highly evaluated. How much are these features contributing to sales and income? We would like to be able to say that they are contributing to the *raku-raku* mobile phone's overall sales and income, but there are actually many contributory factors.

In conclusion, I can only say that, whether large or small, R&D accomplishments do contribute to Fujitsu's sales and income, but I would like you to understand that precisely quantifying the contribution is difficult.

Questioner B: *How does Fujitsu's intellectual property, such as for servers and WiMAX, contribute to profitability? In light of the current tough business environment in servers and telecommunications equipment, how can you utilize your intellectual property?*

Mr. Kamei: Coming up with exact figures for the sales and income contribution of intellectual property to individual operations is very difficult. A single patent is not sufficient to provide technology for a business operation. Several hundred are needed. In the case of compound technologies like servers, Fujitsu applies for about 600 patents annually. Many of the patents for servers are held by various companies, and we balance our needs through cross-licensing. In those instances where a particular patent is lacking and a licensing agreement must be concluded with another company, a licensing fee must be paid, this puts pressure on profits. WiMAX is also an area where standardization is advancing, and we are advancing our business by building relationships with fellow patent holders. When all is said and done, gaining patents is a weapon for increasing profits.

Questioner B: *In comparison with your development portfolio of a year ago, the proportion of advanced research has increased from 35 to 45 percent; however, exploratory research has fallen from 20 to 15 percent. Please explain the background of this.*

Dr. Murano: The reason for the change has to do with the increasing speed with which market trends are changing, as well as with changes in our company's business environment. We need to place slightly more emphasis on near-term technologies. We are modifying our portfolio in order to accelerate the development of our businesses in the areas of server technology, WiMAX, about which I just spoke, and business process visualization.

Questioner C: Please explain your current goals and evaluation criteria for R&D.

Dr. Murano: The roadmap is the basis we use for evaluating our progress and goals. For WiMAX, Fujitsu Labs is working to enable the introduction of products starting in 2008, and the business plans of the business units are closely tied to this roadmap. R&D in Web services, primarily at our US laboratories, is progressing, and I think we may be able to announce some results in about a year from now. Some research has yet to produce any results, while other projects clearly have produced results.

Questioner C: Please tell us about your current goals and evaluation criteria concerning intellectual property and standardization efforts.

Mr. Kamei: The value of intellectual property is relative. No matter what rights you have, you will not see any benefits unless someone can exercise them. Therefore, it is difficult to measure in quantitative terms.

Mr. Igarashi: The same holds true for standardization. Even if a technology becomes a standard, it does not guarantee that it will sell well as a product. We are pursuing R&D and standardization activities with future uses in mind. Whether this directly translates into business can only be evaluated in a longer-term context.

Questioner D: What fields account for most of your R&D expenditure?

Dr. Murano: Our expenditure, in descending order, is focused in the following fields: IT systems, semiconductors, networks, and ubiquitous products.

Questioner D: What are Fujitsu Laboratories` main expenses?

Dr. Murano: The majority of expenses are for labor. Investment has also increased in equipment and facilities for semiconductor research.