

**Summary Translation of Question & Answer Session at  
Briefing on “Applying Manufacturing Innovation to Software Development:  
Application Operation/Maintenance Innovation”**

Date: October 7, 2008

Location: Shiodome Headquarters, Tokyo

Presenter: Kazuhiro Uematsu, Managing Director and President, Assurance Unit

---

**Questioner A**

**Q1.** If you were to break down loss-generating projects by phase, what proportions are represented by the design/production phases and the operation/maintenance phases, respectively?

**A1.** Over 90% of such projects are design/production phase projects. As we explained at last year’s briefing, that is precisely why the requirement definitions process in the design phase is so important in reducing loss-generating projects.

**Q2.** If this is the case, it seems to me that the efficiencies in operation/maintenance you spoke about at this year’s briefing are ineffective in reducing loss-generating projects.

**A2.** In comparison with system development, which requires new investment, the gross margins for application operation/maintenance are 5-8% points higher, and moreover, represent a business with recurring cashflows that can be sustained for 20 or 30 years. That is why I believe that putting emphasis on this area supports the overall health of our business.

**Q3.** If over 90% of loss-generating projects come from the design/production phases, wouldn’t it be effective to channel more resources into that area?

**A3.** It is not that we are entirely focused on expanding our operation/maintenance business. Rather, we are aware of the synergy that this business has with the design/production phases. Up until now, customers have had to devote the bulk of their IT system department resources to operation/maintenance, leaving little resources left over for upstream processes. As a result, no matter how great the efforts on the SI vendor side, the precision of the requirement definitions and other elements in the design stage did not improve, leading to cases of lower profitability or losses.

In the future, if we can increase the operation/maintenance portion that we take on, we can get customers to shift their operation/maintenance resources to upstream processes such as design/production. Then, if they can work well with their SI vendor in the design/production phase, system development and deployment will become smoother for the customer, and wasted effort on the SI vendor’s side will be reduced, resulting in higher profitability.

**Q4.** You state that the ratio of new IT investment to operation/maintenance is 3:7 in overall IT spending, but does this ratio tend to differ greatly depending on the customer or the type of applications, or is it more-or-less consistent across the board?

**A4.** That is a typical ratio. A survey by IDC showed an even more extreme 22:78 ratio.

**Q5.** You talked about quantifying system complexity, but how do you quantify it?

**A5.** We quantify it based on an analysis of the source programs. We calculate the number of interrelated programs, the number of files input and output, and the number of read/write file operations, for example, using different weightings.

**Q6.** Does the complexity you refer to have to do with complex systems, or does it have to do simply with scale?

**A6.** It is not that individual programs are simply large. It has to do with the complexity of relationships between programs (i.e., complexity of function points).

### **Questioner B**

**Q1.** About how long does it take to shift the ratio of new IT investment to operation/maintenance from 3:7 to 5:5?

**A1.** I gave a case study example in which the customer's operations costs were reduced by 20 percent. The effects are greater for large customers, and some of our customers have already reached a 5:5 ratio. Since the situation of individual customers varies considerably, it is hard to generalize. In addition, while there are differences among customers, customers themselves are by no means satisfied with only being able to invest 30 percent of their budget in new IT investment, especially when they want to do something new. It is important to make IT spending visible so that spending proposals can be evaluated and customers can decide how much will need to be spent on maintenance and how much can be spent on new IT investment in a limited budget.

**Q2.** In his Management Direction Briefing, President Nozoe said that operating income margins for your solution/SI business in Japan would reach double-digit levels in fiscal 2009. Was he suggesting that profit margins would be increased by giving greater weight to operational services, which have higher profit margins? Or did he mean you would generate higher profit margins for both new development projects and operation/maintenance?

**A2.** We will increase overall profit margins by improving profitability in new development projects as well as operation/maintenance. Most of our business is on the new development side, so by improving profitability there by strengthening risk management and raising the efficiency of our system engineers, we are aiming to achieve an operating income margin of 10% for our solution/SI business in Japan in fiscal 2009.

**Q3.** Please comment on the risk of a decline in new development spending in the current worsening macroeconomic climate.

**A3.** The economic climate is rapidly deteriorating, as you point out. There is a possibility that not only IT investment but capital spending as a whole will weaken, with non-urgent items being postponed. In regard to operation/maintenance, we think customers will be receptive because it helps to reduce their costs, so we want to steadily push this initiative ahead.

### **Questioner C**

**Q1.** For new software development projects you receive, about what percentage eventually result in operation/maintenance contracts?

**A1.** When handling software development projects in the past, we thought about how quickly systems could be turned over to the customer, because once development was completed, priority was given to having systems engineers move on to their next business assignment. Since customers had strong IT systems departments, they were able to handle operation/maintenance on their own. Now that systems have become more complex, however, customers are not prepared to handle operation/maintenance on their own, so we end up handling it for almost all of the new development projects we receive. Moreover, in connection with our initiatives to make application software assets visible, we approach operation/maintenance by analyzing source code and making frontline observations, regardless of whether or not we developed the application, so we can take over systems constructed by other vendors and handle the operation/maintenance business.

**Q2.** In regard to the expansion of your operation/maintenance business in the next 3 years, will you move in the direction of increasing fixed overhead expenses by hiring some of your customers' systems engineers? Or do you already have enough staff to promote the business without increasing your overhead costs?

**A2.** Fujitsu Group has 23,000 system engineers in Japan. In addition, there are software development vendors that cooperate with us. We can manage with our current staffing level.

In addition, we have long done strategic outsourcing deals, which operate like joint ventures. Under this approach, the customer's resources are concentrated on upstream areas like planning, and Fujitsu is requested to handle operation/maintenance. Fujitsu is able to draw on the resources of the Fujitsu Group in responding to customer requests.

#### **Questioner D**

**Q1.** To what extent can SI vendors understand their customers' operations well enough to be able to design systems that perform the operations needed for each business?

**A1.** We are now making efforts to train Field Innovators. Our Field Innovators are not trained system engineers. Instead, they have had a variety of business experience working within Fujitsu in such areas as manufacturing management, human resources and accounting. Under the Field Innovator initiative, they are posted at customer locations and, based on their own business experience, discover improvements in the customer's business processes that are incorporated into the customer's IT system.

Business architects, by contrast, rather than focusing on the frontlines, focus on the degree to which the ideas of management can be incorporated in IT systems.

We believe that from now on, rather than simply listening to requests from the customer and executing them as requested, it is important in our SI business to work at customer locations, discovering hidden business issues and proposing and carrying out measures to solve them.

**Q2.** Since Fujitsu is a manufacturer, I think this type of initiative would be relatively easy to implement at manufacturing customers. How will you proceed, however, in fields

where Fujitsu does not have a great deal of operational know-how, such as finance, telecommunications, and the public sector?

**A2.** One method is by breaking things down into patterns, but another way is through modeling. That involves making visible the core of the customer's business through such means as interviews with the customer and an analysis of its business. It is important to utilize these methods to uncover the tacit know-how in the customer's business and work together with the customer to improve business processes.

**Q3.** Within Fujitsu's 1.3 trillion yen sales in the Solutions/SI segment, what are the relative shares of your new development business and maintenance/operation? And if margins are high for operation/maintenance, wouldn't it be efficient to expand that area?

**A3.** Within our Solutions/SI segment sales in Japan, operation/maintenance sales amount to about 100 billion yen. This amount is part of the over 600 billion yen in SI sales in Japan that President Nozoe referred to in his Management Direction Briefing recently. So operation/maintenance accounts for about 15% of the total, and new development business accounts for about 85% of the total. The 3:7 ratio for new development spending versus operation/maintenance I mentioned in today's presentation refers to customers' IT budget allocations, and it does not coincide with the ratio for Fujitsu's own Solutions/SI sales. The discrepancy reflects the fact that customers maintain their own IT systems departments and, in many cases, they handle application operation/maintenance without relying upon SI vendors.

**Q4.** In the event that customers' IT spending ratios change from a 3:7 ratio to a 5:5 ratio as you mentioned, how will this change the ratio of new development to operation/maintenance within Solutions/SI sales by Fujitsu in Japan?

**A4.** There are no concrete figures for this. However, when Fujitsu takes over system operation/maintenance for customers through outsourcing, the customers save on costs related to these activities, and the savings can be invested in new development projects. Accordingly, if the savings on operation/maintenance were invested dollar-for-dollar in new development projects, the absolute value of Fujitsu sales would increase, but the ratio of our new development project sales to operation/maintenance sales would not change.

### **Questioner E**

**Q1.** What percentage of Fujitsu's current customers are involved in the visualization and application operation/maintenance innovation initiatives?

**A1.** We have fee-based maintenance contracts with some customers, and with other customers we have defect liability contracts that are part of the system development contracts, but in total we handle about 18,000 application operation/maintenance projects per year. Of these, there are about 4,700 projects where we are engaged in at least one aspect of what we call "making 3 realms visible," representing about 25% of the total.

**Q2.** You mention 4,700 projects, but in the future will you implement your initiatives in all projects?

**A2.** We will move ahead with implementing these initiatives in all projects as basic operations in operation/maintenance. It will also be linked to our campaign to use visualization techniques to propose improvements to our customers.

**Q3.** Several years ago, President Kurokawa said that Fujitsu's systems have become very complicated. How much cost saving have you been able to achieve deploying the current visualization initiatives within Fujitsu?

**A3.** I did not explain this today, but it is within Fujitsu that we have most fully deployed our visualization reference model. Even now, without increasing our IT investment, we are carrying out prioritized investment guided by visualization. The services that we are offering to our customers are grounded in our own in-house experience. Moreover, continuous improvement through visualization is important, and we are continuing to pursue visualization and improvement of our own systems.