

Forging Ahead Towards A Total Solutions Provider Focusing Energy on Customer Satisfaction

The fiscal year, started April 1, 2002, the final stage of TEC's renovation plan, which will establish a stable business and management structure. TEC is making every effort to develop effective total solutions by focusing on customer satisfaction through internal reform. This issue presents candid opinions of our young members active at the business frontline on the current situation of total solutions business and further developments.

TEC's Primary Strengths

Inoue (Chairperson): I would like first to address the concept of total solutions. How have TEC's primary strengths been utilized to provide total solutions?

Kyodo: Concerning what TEC's strengths are, I think it would have to be the ability to clearly consider the customer's expectations, then bring everything neatly together to arrive at a solution. When referring to our project management capabilities, this is displayed as one of our abilities, which are possessed by all TEC's members

as one element to strengthen TEC's total solutions, along with communications capabilities.

Kaji: Essentially, many elements comprising total solutions are included in the work we do for our plant business. As an example, our response to the situation where we must work around various restrictions makes customers confident enough to depend on TEC to take care of everything. I believe that this display of appropriate management capabilities and skill whenever possible work to validate TEC's total ability—a strength that leads

to customer confidence and trust.

Sato: Speaking from a sales point of view, I think TEC's strength lies in the effective integration of required resources such as personnel, material and technology, be it inside the Company or out. Of course, the bigger the project, the higher the risk, however in order to complete a project successfully, this risk must be well managed in cooperation with other companies. I'd say that there are only a few companies in Europe, the United States and Japan that can achieve this arrangement. In the recent LNG-related facilities project, while it is true that TEC out-sourced the necessary technology to complete this project, I'd say that this ability is itself one of TEC's strengths.

Kudo: From a customer satisfaction point of view, the keyword is "quality," and that includes the delivery date. It is possible stay on schedule while maintaining quality and reliability by leveraging TEC's project management capabilities via our transnational (TN) structure, which is now underway.

Tanaka: In the industrial systems field, the important point is how TEC turns the customer's abstract ideas into conceptual



designs, then brings them into being. Real total solutions start from the customer, and this capability is inherent in the DNA of industrial systems businesses. On the other hand, I notice that people transferring to the e-Solutions business from EPC business utilize an EPC style of thinking and approaching a problem, combined with our customer-oriented DNA. This makes me think that process management is very thorough in EPC work. I believe the creation of versatile and advanced business processes at e-Solutions Business Operations has become one of TEC's strengths.

Kawauchi: I basically agree with everyone's opinion, but through close contact with customers, I feel that in order to make TEC stronger, we need to supply the products that fit what the customer demands. Providing total solutions through our project management capabilities and integrated engineering technology strengths is TEC's core competence, so it is essential that each business segment strives for more outstanding attributes in order to bring more depth to our integrated capabilities and create products that are attractive to customers. In order to bring this to fruition, TEC must squeeze out even more of its collective strength than ever before.

Direction to Aim for and Hurdles to Overcome

Inoue: In order to make full use of the competitive advantages and to bring out the potential capabilities that you have spoken of, what kinds of hurdles need to be overcome, and what challenges must be faced?

Kawauchi: In the EPC business, for example, it is important not to constrain oneself to simply being a contractor, but also to look at things from the standpoint of the customer's business. In the e-Solutions business, it is important to not only be involved in systems integration for each project, but also to take more of an active involvement in the ongoing business, including operations, in order to discover new things.

Sato: I think that an ongoing so-called "cradle-to-grave" style, used by global manufacturers who are considered market leaders, is one kind of total solution. On the other hand, TEC, being an engineering company, differs from manufacturers in that we do not have a factory. This makes it possible for TEC always to pursue the most advanced technology without the restrictions of manufacturing facilities. However, the drawback is that it is more difficult to take the lead in getting customers the same way manufacturers can. We must strengthen our functions and organization in order to successfully implement business reform—such as our transnational structure—as well as to consistently enhance earning capabilities.

Kyodo: Compared with the plant EPC-related business, it is believed that a highly profitable field exists in IT-related business. However, simply shifting to this highly profitable field will not be able to bring about the kind of business that the Company wants: the kind that can continue for ten or twenty years. It is necessary to steer the corporation toward a business environment where the life cycle of products is short and drastic changes in the market often happen by M&A, and that demands strategic moves in order to



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cope with situational changes.

Tanaka: The question is where to find the profit. For example, rather than trying to recover our investment in one attempt, I think that TEC should look for long-term sources of income throughout the lifecycle of the products. Although this probably deviates from the engineering contractor side, the issue in the years to come may well be expanding into the service area, if we look at business in a slightly flexible way.

Kawauchi: If we start trying to move into the service area without any preparation, we risk losing money. President Hirose says, "If the customer is unsatisfied, business does not continue." In other words, we must provide service links to continuous work and also pour our efforts into the plant EPC business at that point. Although long-term commitment requires a long period of time, we must also strive to get that little bit extra on a daily basis. Finding the right combination between the two is one hurdle that we must overcome individually.

Finding the Balance Between Organization and Individual

Kaji: If you are in charge of work such as test operations, it is difficult to clearly distinguish between a service and a business, or between services within the scope of responsibility and those outside the contract scope for us to charge. This is what causes problems. People at TEC tend to provide services that exceed the contract scope, concerned solely with customer satisfaction. However, I feel it is essential to make an effort to bring the customers to an understanding concerning services

and charges. I feel that customer satisfaction can be realized if there is room to take some aspects of Western business style into consideration, and if each individual is empowered to make decisions rapidly.

Inoue: Following up on this opinion, how do you keep a balance between the organization and the individual?

Kudo: Although individual engineering and management skills are taken for granted, we are often told that we need to improve our negotiating skills in the engineering area of the plant EPC business. Without improvement of our negotiating and debating skills when dealing with customers and subcontractors, we will not be entitled to obtain high paying work. Our generation should become conscious of this problem. By widening the scope of discretion while strengthening individual responsibility, cost awareness can be increased and customer satisfaction can be enhanced.

Sato: As Mr. Kaji said, in some way we have failed to keep a proper balance, managed risk emerges again and our superior position in negotiations with customers cannot be maintained. I feel it is necessary to take a stance from a free and flexible standpoint in order to keep our balance. At any rate, rather than simply relying on technology to cope with competition from developing countries, one possible direction we could take in the future is to become a project finance contractor, for example.

Kyodo: In the plant EPC-related business, the magnitude of money and responsibility on one person is larger than

that of the IT-related business. Whereas individual decisions in the plant EPC-related business are tough, in IT-related business it is easy to define what sort of overall effect individual judgment will cause because it is comparatively easy to oversee the entire scenario. At present, in my department, we are trying to make clear, in writing, the responsibility of each individual. I believe that by being more active within one's own role and authority, we will not only enhance cost-consciousness, but also expand the space in which to utilize individual ideas and personal networks. In the future, I think personnel will increasingly act on their own discretion rather than relying on the project manager's decision.

Kaji: Customer satisfaction can not be attained simply by always saying "yes" in response to the customer's request. In fact, doing this will probably end in a loss of final profits. On the other hand, always responding in a business-like fashion, similar to the Western style, will make the relationship with the customer become estranged. It's important to find the balance between Western and Japanese style.

TEC's Appeal, TEC's Future

Inoue: Lastly, tell us what is TEC's uniqueness, TEC's hope for the future, and the general feeling throughout the Company recently.

Tanaka: One of TEC's endearing features is that everybody has a strong tendency to think logically as an engineering company, and also has the power of concentration and a logical step-by-step approach towards project completion. When we try

to do something new, we can show an unsurpassed ability to arrange all elements together nicely. I believe these kinds of abilities will become the key factors for future development.

Kawauchi: When I joined TEC, I was attracted by the catchphrase, "technological trading company." Recently, I hope to be a "consulting professional" in a technology-oriented think-tank, rooted in plant EPC engineering. Looking at TEC from an overall perspective, I think it has a large role to play in reforming the infrastructure of society, based on TEC's wide range of businesses from finance to plant operations, as well as technical consulting. With regard to the feeling inside the Company, informal meetings to exchange ideas often take place, and we are now able to think in a borderless fashion across division lines.

Sato: From talking with banks and trading firms, it is understood that TEC is doing business with managing more risk than imaginable. From the point of view of risk management, European and U.S. firms seem to become too sensitive to disturb smooth work. In comparison, while managing risk well, TEC has completed the work under strict management. However, in the future, TEC should adopt a freer and more flexible style, with a more risk-free approach as a management contractor with the experience of an EPC contractor.

Kaji: Focusing on our core competence and maintaining confidence in what we do will lead to more profit, and just how smartly and interestingly we can go about this will be a key point. Our awareness of the reform is increasing, and positive



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thinking and a mood of active response in the workplace makes us feel like giving it one more go.

Kudo: It goes without saying that to enhance profitability by utilizing IT, it is important to remember that as each person's individual responsibility increases, the more we can display discretion as the person in charge of a project with the reduction of manpower. Even with less experience, we must be able to bring things together neatly by outsourcing wisely. On this point, our young staff is quite capable and this is the place where TEC's potential lies. With the reduction of manpower, I feel that awareness of cost as well as individual responsibility tends toward growth.

Kyodo: TEC is applying the *Internet INQ* system in its procurement activities for plant materials. This service has been grabbing a great deal of attention from a lot of customers since sales promotion began. From the systems in own use, we

can find a lot of sale value that is not yet recognized by other companies. By using these types of relatively unknown products outside the Company, it will serve to further enhance the business potential of TEC.

Tanaka: Just as Mr. Kyodo said, in work and services being done by TEC as a matter of course, we can find out the possibility of commercializing these in-house business processes themselves. If we can develop potential products through R&D, I believe the future will further open up to us. With the sharing of a sense of risk, every person will have a more real awareness of being in sales activities, and I feel a big wave of enthusiasm in TEC as a whole is growing considerably.

Inoue: Thank you very much for today's discussion. We heard many valuable opinions, and I hope your opinions spoken here will be duly utilized in management.

