Promoting the Evolution of Solutions

General Manager of
Solution Service Department

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The Solution Service Department is in charge of technology sales and technology management in relation to business-operation services for enterprise customers. To provide solutions that satisfy our customers now and into the future, we support a variety of processes, from making proposals to developing, constructing, and deploying systems (kitting*1), as well as operations monitoring and Business Process Outsourcing (BPO). We also support a wide range of commercial products from terminals to area/network equipment, business-operation service systems for enterprise customers and Software as a Service*2). All in all, our aim is to provide a "one-stop" service in line with customer needs.

The solutions that we provide are diverse and include voice and data systems, but each provides a service essential to a customer's business operations. It is therefore important that we meet basic requirements such as good quality and stable operation. At the same time, solutions must continue to evolve if they are to make the best use of advanced technologies and help solve social problems. To this end, I would like to introduce three initiatives described by the keywords (1) template creation, (2) proactive operation, and (3) application of advanced technologies.

(1) Template creation

"Template creation" means establishing, expanding, and using know-how. There are several types of templates:

- Process checking that checks the content of a project at process milestones such as when making the proposal (presenting an estimate) and deciding when to launch the service.
- Visualization of processes and knowledge and creation of tools to improve the efficiency and quality of technology sales activities such as calculating estimates and surveying the quality of radio signals.
- Packaging (combining) of multiple products according to solution objectives.

In this way, we are visualizing diverse experiences and personal knowledge accumulated over the years and storing and sharing know-how to make business operations more efficient. One example of these activities is the Project Proposal Council that we hold when making an estimate for a System Integration (SI) contract [1]. This is a forum that evaluates and tests the feasibility, risks, etc. of an SI contract customized to individual user needs while taking into account external conditions and internal resources and capabilities. The Project Proposal Council is held about 2,000 times every year under the management of specialized quality control teams. More than 30 check items have been formalized and continuously improved based on a Project Management Body Of Knowledge (PMBOK)*3. Performing rule-based checking of each process in this way ensures the quality of SI products and fosters the evolution of solutions that form the foundation of NTT DOCOMO's know-how.

(2) Proactive operation

"Proactive" means assessing in real time whether a service used by a customer is running in a stable manner, maintaining the quality of that service, and connecting the knowledge gained to subsequent proposal activities. Of course, maintenance operations are performed in an extensive and thorough manner to provide the customer with stress-free use of a service, but in the off chance that a problem occurs, having that problem pointed out to us by the customer is not the best way of winning trust.

For current network services, we are developing and operating systems to monitor services for normal operation on a customer-by-customer basis. In the case of access premium services, these systems also monitor connection completion rate, band usage conditions, and other characteristics in addition to service normality. Analyzing operation data in this way enables us to provide customers with the support they need to use services in a comfortable and stress-free manner. From here on, our plan is to foster the further evolution of operations monitoring by developing advanced data analysis techniques using Artificial Intelligence (AI) while expanding target services.

(3) Application of advanced technologies

It is vitally important to create solutions using advanced technologies such as 5G, Virtual Reality (VR), IoT, Low Power Wide Area (LPWA)*4, AI and drones. Customers are also expressing interest and expectations in this regard, and one of our strengths is the capability of incorporating and providing advanced ICT technologies in solutions as early as possible.

One example of such advanced technologies is NTT DOCOMO's "curling VR" that was showcased at the 2017 Sapporo Asian Winter Games held in February 2017. This technology provides a new User eXperience (UX) such as a 360-degree view from the sliding "stone" in the winter sport of curling. More than 1,800 people had the opportunity of experiencing and enjoying this technology.

In addition, the practical use of low-power terminals using LPWA is progressing. This will drive the conversion of diverse type of equipment into IoT devices and lead to solutions that can contribute to a customer's business by improving productivity, etc.

Going forward, we will work closely with the R&D division to create templates of advanced technology solutions that are easy for system engineers throughout the country to sell. Our aim is to tie these efforts to industry creation and social problem solving as the driving forces behind NTT DOCOMO's "+d" (co-creation initiatives).

The true pleasure of corporate sales is the feeling of making a direct contribution to a customer's business through effective solutions. When working on a project together with a customer, hearing a comment like "We are glad to be working with NTT DOCOMO" is an absolute delight. Looking to the future, we will take up the challenge of solution evolution as a technology business department that can provide both "reliability" and "inspiration" through dependable service releases, safe and secure operations, and advanced solutions.

REFERENCE

[1] C. Koga et al: "Enhancing Quality of Upstream Processes in Corporate System Construction Contracts," NTT DOCOMO Technical Journal, Vol.23, No.1, pp.39–44, Apr. 2015 (in Japanese).

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*1 Kitting: The work of installing applications in a terminal such as a mobile phone, configuring and registering the terminal, etc. so that the customer can begin using the product immediately.
*2 SaaS: A format that provides customers with software over the network as a service.
*3 PMBOK: A systematic grouping of know-how and techniques related to project management.
*4 LPWA: Wireless communications technology that can support a wide communications area on the kilometer level with low power consumption.