

**YOKOGAWA** ◆ Yokogawa Electric Corporation

## Enterprise System Deployed in Global Five Regions in Two Years, Accelerated the Global Expansion of Management Foundation

Since 2006, Yokogawa Electric Corporation and its partner ABeam Consulting, has been promoting the deployment of the Yokogawa Global System (YGS) with the aims of establishing the information infrastructure based on the Global Single Instance and unifying all its processes, systems, and rules on a global basis. In April 2015, Yokogawa began setting up the YGS, and by May 2017, it started fully fledged operation in five regions around the world. Yokogawa has thus successfully created foundation for the global unification of processes, for swift decision-making based on standardized data and for the expansion of new businesses in the control business that accounts for about 90% of the company's total sales.



- Acceleration of the deployment of the Yokogawa Global System (YGS) which started in 2006
- Increase of YGS coverage rate in the control business from 50% in April 2015 to 90% by May 2017, and establishment of the foundation for the improvement of management efficiency
- **Utilization of the global network to provide driving force to the project conducted in each region**
- **Extensive experience in overseas business development, and ability to solve problems in various environments where cultures and customs are different**
- **Business models based on the CoE (Center of Excellence) concept, and reliable governance and standardization of their applications**
- The system covers 90% of the control business which the deployment completed in the five global regions in just two years
- As a result, the top management at the head office is able to obtain information of global business operations in real time.
- Thus, the top management gains the ability to make prompt business decisions.



**Concurrent deployment of the system in Europe, the Middle East, Africa, Russia, Korea, and Southeast Asia in just two years.**

**Yokogawa draws on ABeam Consulting's global network.**

**Process unification and data utilization accelerate the global expansion of management foundation.**

**VOICE**



General Manager  
Management Information System Department  
Management Information System Headquarters  
Yokogawa Electric Corporation

Taku Kitahara

"ABeam has a global network and its overseas members provided fully-fledged support, so we were able to introduce the YGS system in multiple regions simultaneously."



Leader  
Business Process Group  
Management Information System Department  
Management Information System Headquarters  
Yokogawa Electric Corporation

Hiroyuki Kuroda

"The accounting systems in Russia and India are very complicated and difficult to understand. With the involvement of the local consulting companies that ABeam Consulting introduced to us, we were able to carry out the project smoothly."

**Project background**

**Global deployment of Yokogawa Global System for the establishment of information infrastructure for the control business**

Yokogawa Electric Corporation (hereafter referred to as "Yokogawa") was founded in 1915, and its mainstay businesses are the control (industrial automation, IA) business, the testing and measurement business, and the aviation and other business. Yokogawa states in its corporate philosophy that its goal is to contribute to society through broad-ranging activities in the areas of measurement, control, and information. While addressing the establishment of the infrastructure necessary for global business operations, Yokogawa has been spurring on its transformation to a solutions/service company to provide high-value-added products and solutions to the clients.

In fiscal year 2015, Yokogawa drew up a mid-term business plan, "Transformation 2017 (TF2017)," for the period ending fiscal year 2017, in order to accomplish business reforms aimed at boosting investment for growth and improving profitability.

At Yokogawa, the control business accounts for approximately 90% of total sales. For this core business, the company launched the Yokogawa Global System (YGS) project in 2006. "While the ratio of our overseas sales continues to increase, we realize that we cannot make quick business decisions unless we unify our rules, processes, and systems on a global level. Therefore, under the banner of 'One Global YOKOGAWA,' we initiated the YGS project in order to quickly unify processes, visualize data, and standardize our systems on a global basis, so we can ultimately improve management efficiency," says Mr. Taku Kitahara, General Manager of the Management Information System Department at Yokogawa's Management Information System Headquarters .

The YGS consists of three systems, and it serves as the backbone system for all the company's businesses. The first system handles the information of almost all core business operations and activities including order taking, production, distribution, accounting, and personnel affairs. It is configured with SAP ERP modules and based on the Global Single Instance. The second system is a tailor-made decision-making system. It is used in designing products according to customers' specification requirements, calculating costs, and preparing quotations. The third system is a production-related system that operates to assist the manufacturing subsidiaries.

**Reasons for selecting ABeam**

**Extensive knowledge of global management infrastructures, and provision of continuous support utilizing the network**

Yokogawa acknowledges that the project will span over a long period of time. In 2006, before the YGS project was launched, Yokogawa sought a partner company for the project. For the selection, the company set the criteria: the partner company must have a broad range of knowledge and expertise and it will spare no effort until Yokogawa achieves the goal. Furthermore, because global support was vital for the worldwide deployment of the YGS, the partner company had to have business bases around the world and a global network. ABeam Consulting fitted the bill exactly.

"While working together on the project, I felt that the consultants from ABeam Consulting were well-versed in the knowledge of SAP modules, efficient in carrying out the project, and skillful in communicating. ABeam Consulting changed project consultants in rotation at an interval of a few years. Since all consultants had diverse and different experiences, we were able to gain different perspectives," says Mr. Tomoya Suyama, Leader of the Business System Group in the Management Information System Department at Yokogawa's Management Information System Headquarters.

Yokogawa's project members stated that ABeam Consulting's global network and the continuous support provided by its overseas members through the network steadily moved the project forward. Yokogawa also highly evaluates ABeam staff's excellent project executing abilities and their teamwork.

"The project required ABeam's consultants to learn about YOKOGAWA's Corporate Culture and its way of running business. The consultants from ABeam Consulting understood them in a very short time. Therefore, the consultants were able to perform immediately after participating in the project. I believe their competence is backed by the strength of the teamwork and the in-house collaboration. We often asked them to perform difficult tasks, and they always produced greater results than we

expected, not to mention that they always met the deadlines and budgets." (Mr. Kitahara)

## Overcoming obstacles to achieve the objectives

### Completion of the deployment of the information infrastructure in the five regions, Europe, the Middle East & Africa, Russia, Korea, and Southeast Asia in just two years

The YGS project was first started in the United States, and then expanded to the group companies in Japan. Meanwhile, the project faced many obstacles, including the global economic recession triggered by the collapse of Lehman Brothers, and the project had to be suspended at one time. Nonetheless, the YGS covered 50% of Yokogawa's control business as of April 2015, after ten years from the launch of the project. The next objective of the management was to accelerate the deployment of the YGS and produce results, and then to proceed to the next stage. To that end, Yokogawa set a target of increasing the YGS coverage rate to 90% by May 2017.

"To achieve our objective, we drew up a plan to simultaneously complete the deployment of the system in 39 companies in the five regions – 17 companies in Europe, 16 companies in the Middle East and Africa, one company in Russia, one company in Korea, and four companies in Southeast Asia (three companies in Malaysia and one company in the Philippines) – by May 2017. Since the project had to take place in the five distant and different regions, at least five teams were needed. It was very difficult to organize and deploy the teams," describes Mr. Hiroyuki Kuroda, Leader of the Business Process Group in the Management Information System Department at Yokogawa's Management Information System Headquarters.

Yokogawa assigned a dedicated team to Europe. For Malaysia and the Philippines, members in the regional headquarters for Asia located in Singapore provided support. In the Middle East and Korea, one team completed the tasks by working alternately. In Russia, ABeam Consulting provided major support to many project tasks including the duty to lead the project.

"Initially, we planned to organize the teams only with our employees, but no matter how we looked at it, we lacked the necessary resources. So, we received full-scale support from ABeam Consulting, and planned the project schedule. Our head office member, Suyama, stayed in Europe during the project, and I travelled back and forth to the Middle East and Korea together with a consultant from ABeam Consulting." (Mr. Kuroda)

The most difficult part of deploying the system in all those regions was to ensure "unification." Cultures are different in Europe, the Middle East, Africa, Russia, Korea, and Southeast Asia, as are the business systems. Under such circumstances, unifying business processes was a major challenge. In most past cases, each business base worked on its own to optimize processes in order to improve business efficiency. Taking the same approach for a global project would result in inefficiency. So, considerable time and effort were spent in convincing local members in order to push the YGS project forward. "We had difficulties in obtaining informed consent from the employees of our overseas companies. For example, when we presented templates, we were bombarded with requests such as the addition of more functions. We discussed patiently and persistently in order to forge forward." (Mr. Suyama)

## Solutions to issues

### ABeam's consultant accompanying Yokogawa staff to each region to powerfully promote the project

ABeam Consulting provided a powerful driving force towards completing the project in a short period of time. In overseas regions, particularly in Europe, the issuance of top-down instructions from the head office would not be a good way to obtain understanding of the employees working in the field or their consent. ABeam staff logically explained the policy of standardization and the necessity of unified templates based on the CoE (Center of Excellence) concept for maintaining the competitive edge of the corporate group.

"When the project members explained about the project, the local employees described the business style that they believed was appropriate. To convince them, we did not just present

## VOICE



Leader  
Business Systems Group  
Management Information  
System Department  
Management Information  
System Headquarters  
Yokogawa Electric  
Corporation

Tomoya Suyama

"We look forward to active proposals and value creating activities of ABeam Consulting as our partner for the next data utilization phase."



reference materials or explanatory documents prepared beforehand, but we gave logical answers to their questions and comments on the following day. ABeam's consultants provided powerful and consistent support based on the CoE concept, so our project members strongly requested the accompaniment of ABeam's consultant to each site." (Mr. Suyama)

The accounting system in Russia is very complicated and hard to understand. So, the staff of BearingPoint, an alliance partner of ABeam, was involved in the project. The accounting system in India where the project is presently underway is also complicated. As in the case of Russia, ABeam Consulting used its global network to obtain assistance from a local consulting company in India to ensure smooth progress of the project.

### Effects of the YGS deployment and future outlook

#### Establishment of the information infrastructure enables effective utilization of data and spurs swift decision-making and business development.

In May 2017, introduction of the YGS in Europe, the Middle East, Africa, Russia, Korea, Malaysia, and the Philippines was successfully completed and the system began operation. The YGS system now covers 90% of Yokogawa's control business as planned. Previously, the systems in those regions were not unified so that the head office had to contact the overseas business bases one by one in order to obtain information of their business conditions. The YGS has consolidated those systems to enable the acquisition of all information in one instance and in a unified manner. It allows the head office to access data of any overseas base according to the level of authority given.

The global standardization project has also enabled all business bases to view and analyze information from the same viewpoint and using the same yardstick, so they can present to the head office various numerical data that are compiled based on the same criteria. Yokogawa has successfully established the foundation that enables the company to quickly plan and execute next strategies for global business operations.

"The data accumulated in the YGS can be utilized effectively for making business plans. These data are important information that can be used by the business departments to formulate business strategies and by the management to draw up management plans. The IT department's next aim is to enable them to understand what kind of data are available and where to find them so that the data will contribute to the management and business operations." (Mr. Kitahara)

The YGS also stores information of products sold and to where they were delivered. The business departments can utilize that information to conduct campaigns to promote after-sales service in order to boost sales and profits. Yokogawa plans to organize the master data in the YGS and provide accurate data in an easy-to-use format to its partner portals, distributors, and cooperative companies through the global infrastructure.

Following the commencement of the operation of the YGS in India scheduled in April 2018, Yokogawa will introduce the YGS in Vietnam, Taiwan, China, Turkey, and other countries. In the regions where the YGS is already implemented, the company is planning the next phase of the YGS project, which includes the supply of data and also encompasses maintenance and data utilization. In these activities of Yokogawa Electric, ABeam Consulting will continue to provide the best solutions as its partner while meeting their deadlines and budgets.

#### Outline of the Customer

Company name	Yokogawa Electric Corporation
Location	2-9-32, Naka-cho, Musashino-shi, Tokyo 180-8750, Japan
Establishment	December 1, 1920
Business segments	Control business, test and measurement business, aviation and other business
Capital fund	43,401,050,000 yen (As of the end of March 2015)

#### Project Overview

Global deployment of the Yokogawa Global System (YGS) for the establishment of the information infrastructure that contributes to the improvement of management efficiency