

Yokogawa Management Seminar for Top Management of Plants

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Yokogawa has recently launched a new suite of services called VigilantPlant Services to promote customers' operational improvements throughout the lifecycle of a plant. Yokogawa Management Seminar, an element of its introductory Opportunity Identification Services, is a brainstorming seminar where managers from the customers' plants gather with those from Yokogawa to discuss how to solve issues in plant operation such as human resources, organization, budget or motivation to improve the situation. More than 100 executives have already participated in the seminar which has been held five times in Asian countries, and the participants have found the group discussions to be particularly valuable.

INTRODUCTION

In the process industry, there are supply and demand imbalances between regions: oversupply and fierce competition in developed countries due to excessive production capacity, whereas insufficient supply in emerging countries like the BRICs due to exploding demand. How quickly a company can adapt to such a volatile environment is a key issue for managers in order to survive the competition among companies. A series of steps is proposed for meeting the challenge: setting the visual goal, identifying the gap from the ideal situation and the obstacles along the way, and designing a solution to bridge the gap by removing the obstacles. On the other hand, many customers find it difficult to conduct improvements using their own resources and expect instrumentation suppliers to act as a partner.

To meet such customer demands, Yokogawa planned the Yokogawa Management Seminar for the top management of plants, and has held the seminar a couple of times in Asian countries in the last two years.

OVERVIEW OF YOKOGAWA MANAGEMENT SEMINAR

The Yokogawa Management Seminar (hereinafter referred to as "seminar") is outlined below.

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■ Seminar program

This seminar is a brainstorming seminar where managers from the customers' plants gather with those from Yokogawa to discuss how to solve issues in the customer's operations such as human resources, organization, budget or motivation for improving the situation.

The key theme of the seminar is selected each time from various areas and aspects of plant management, and the seminar is carried out according to the agenda shown below focusing on the key theme.

- Keynote speech by a leading expert in the industry
- Introduction of solutions offered by Yokogawa
- Benchmarking report of the industry including participants
- Success stories of improvements by users
- Brainstorming for identifying and solving issues by participants
- Summarizing how to overcome obstacles to the goal
- Creating action plans

■ Features

This seminar is not merely lectures, but is carefully prepared as follows such that participating managers identify potential issues and create concrete action plans.

- Key theme and its experts
- Selected participants according to the key theme from both the same and other industries
- Carefully designed agenda so that solutions can be delivered within the seminar time
- Well-managed seminar progression facilitated by Yokogawa

Furthermore, various sub-sessions are provided which give participants the opportunity to meet others and establish new networks.

RESULTS OF YOKOGAWA MANAGEMENT SEMINAR

The details of the first and the second Yokogawa Management Seminars are introduced below as typical examples.

Dalian Seminar 2008

As shown in Figure 1, the first seminar was held successfully in Dalian, China, with 26 participants from 18 companies in 11 countries. The key theme of the seminar was “Business Focused Manufacturing.”



Figure 1 Participants in the first Yokogawa Management Seminar

■ Seminar agenda

The contents of the seminar are listed below in order of the program.

- 1) Keynote speech: Mr. Chon Pak Yuen, the former manager of the Instrumentation Department, Shell Eastern Petroleum Private Ltd., gave a speech titled “Issues Surrounding the Oil Industry and Approaches to Optimum Operation” regarding how information systems play a key role. Figure 2 shows one of the presentation slides used in the speech.

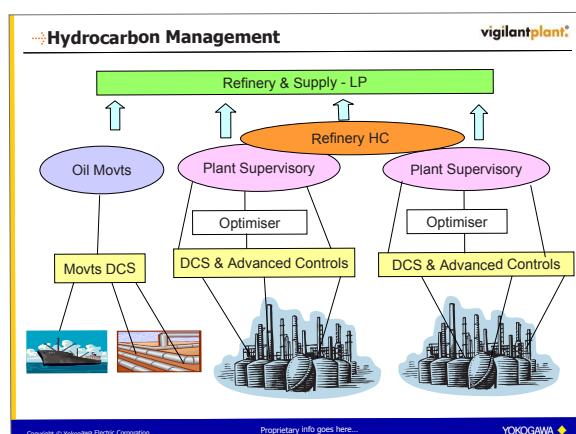


Figure 2 A slide used in the keynote speech

- 2) Introduction of solutions: Yokogawa introduced two proposals for ideal plant information systems, “Flexible Production System Adapting to Volatile Environments” and

“Consolidation of Control Rooms and Road to 500 Loops/Operator.” Figure 3 shows a part of the flexible production system (RPO: Real-time Production Organizer) advocated by Yokogawa.

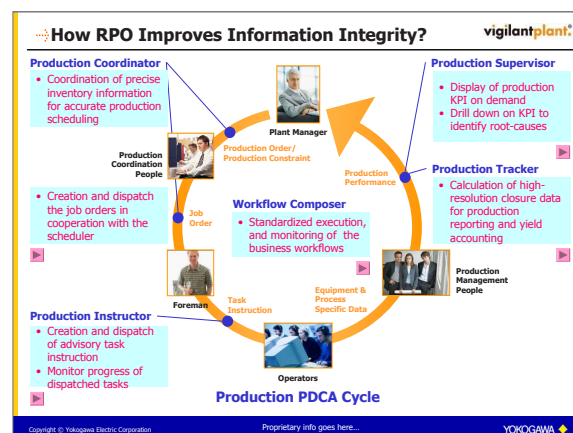
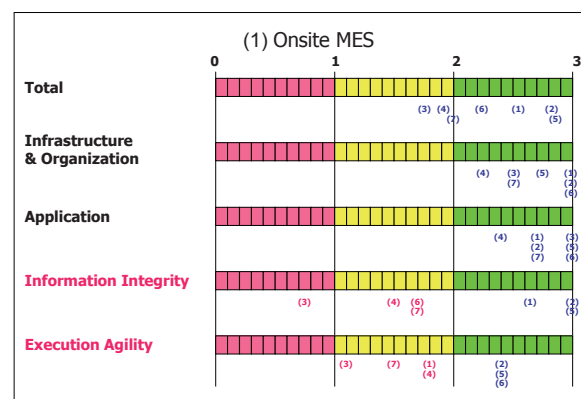


Figure 3 A slide introducing Yokogawa's solutions

- 3) Session on recognizing the current status of a customer: Information was gathered beforehand from the participating customers regarding plant information systems, consolidation of control rooms, advanced process control, off-site automation, etc. The collected data was then analyzed using the Profit Finder, Yokogawa's proprietary plant diagnosis tool, and summarized as a benchmarking report. Issues extracted from the report are presented with each customer's Manufacturing Execution System (MES) environment. Figure 4 shows a part of the results.



Note 1) The number in parentheses represents each plant. Each participant knows only the number assigned to his or her plant.
Note 2) The horizontal axis is the average of many efficiency indexes scored between 0 and 3.

Figure 4 A slide showing benchmarking results

- 4) Success story: The whole picture of the consolidation of control rooms and the status of its associated consolidation of organizations and work-flow reengineering were introduced by Fuji Oil Company. Figure 5 shows one of the presentation slides.

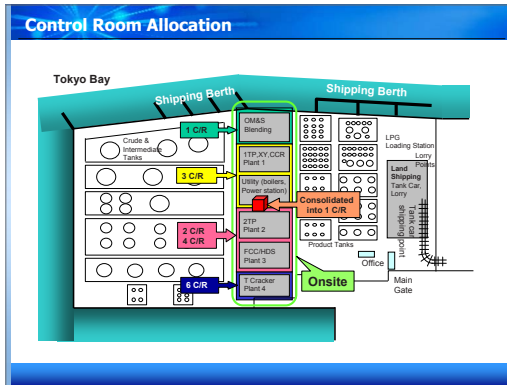


Figure 5 A slide showing the consolidation of control rooms

5) Roundtable discussion: The participants were divided into four groups, and each group selected and examined one of the following three themes to identify issues and solutions.

- Consolidation of control rooms and closer cooperation between operation and planning departments
- Integrated plant information system
- Stable operation and operation of 500 loops/operator

A representative of each group made a presentation on the results of their discussions and future approaches, and all the participants joined a question and answer session to discuss the issues. Figure 6 shows a part of the results.

Group brainstorming 2/2	
cons (concerns)	Approach
-Cost of blast/explosion proof building	-Production room design
-Need clean air/ HC free	-(Audible messaging system)
-Lighting requirements are different by function	-Selected people
-Noise	-Comfortable Environment
-People congestion	-Use communication environment/LAN
-Cable cost of long length	-OTS (Operator training system)
-Training requirement to cover wider areas	-TPM including purchasing and marketing people/reliability engineering
-Risk increment by centralization	-Periodical bench marking
-System reliability during migration	-Risk assessment and control
	-Back up system during migration

Figure 6 A slide showing the results of the brainstorming

In this case, consolidation of control rooms was selected as the discussion theme, and how to deal with the increasing load on operators due to the expansion of area covered per operator was the most serious concern.

■ Evaluation of the seminar

The seminar was appreciated by most participants. Figure 7 shows an interesting finding from the questionnaire: this seminar not only gave the participants an opportunity to obtain knowledge, but also helped them to establish new contacts as a secondary benefit. The participants looked relaxed during the seminar, and the seminar provided an opportunity to discuss the broad theme of ideal plant operation away from their daily work.

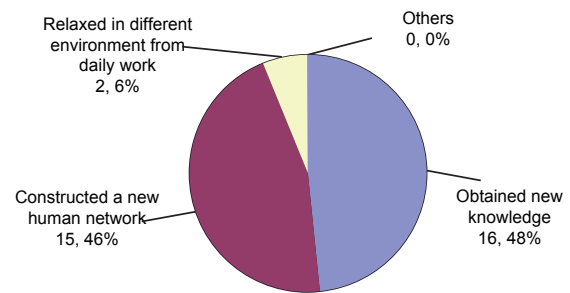


Figure 7 Questionnaire results

Singapore Seminar 2009

The second seminar was held in Singapore with 26 plant or department managers from 23 companies, mainly in Singapore. The key theme was “Operating a Safe and Reliable Plant.”

■ Seminar agenda

The contents of the seminar are listed below in order of the program.

- 1) Keynote speech: Mr. Simon Lam, the former Chief Executive Officer (CEO) of China National Offshore Oil Corporation (CNOOC) and Shell Petrochemicals Company Ltd. (CSPCL) introduced Yokogawa not merely as an instrumentation system supplier but also as a reliable lifetime partner.
- 2) Background of the key theme: The Asia-Pacific representative of Germanischer Lloyd (GL), a safety consulting company, introduced recent large-scale plant disasters and analysis of the causes. One of the introduced disasters was caused by a blackout of the operation screen. In this example, safety measures, such as restricting access to the network, were emphasized.
- 3) Introduction of solutions: Yokogawa introduced automation products and services for improving the safety of a plant and asset availability. The standard service procedures as shown in Figure 8 were introduced to show a company policy of quality assurance.

Standardization of service procedure	
<p>→ All solution implementation services are designed based on Six Sigma DMAIC framework so that all customers can get high-quality service within a defined time frame.</p> <p>→ Define improvement goals that are consistent with customer's demands and the enterprise strategy</p> <p>→ Measure key aspects of the current situation and collect relevant data</p> <p>→ Analyze the data to verify cause-and-effect relationships</p> <p>→ Improve the situation based upon data analysis</p> <p>→ Control to ensure that deviations from target are corrected before they result in defects</p>	

Figure 8 A slide introducing Yokogawa's solutions

- 4) Session on recognizing the current status of a customer: The utilization of production control systems by each

participating customer was benchmarked in the following categories, and the results of comparison were reported. In each participant's company was benchmarked using indexes in the following categories, and the results were reported. Figure 9 shows a part of the alarm benchmarking.

- Alarm
- Control
- Manual intervention
- Management of change

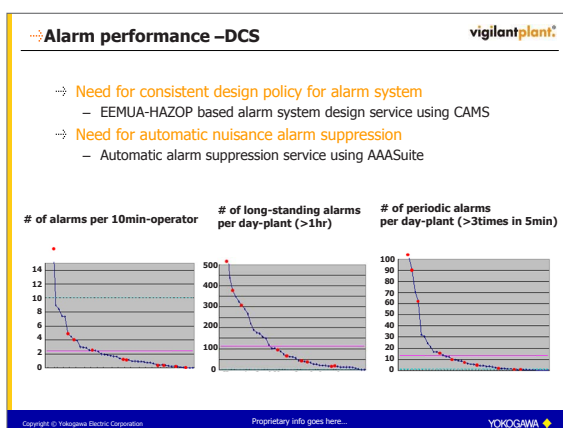


Figure 9 A slide showing benchmarking results

- 5) Roundtable discussion: The participants were divided into six groups. Each group brainstormed as follows regarding the issues identified from the benchmarking results.

- Identifying the issues in plant operation
- Identifying the obstacles for improvement
- Studying the countermeasures required

Then, each group presented their results as shown in Figure 10.

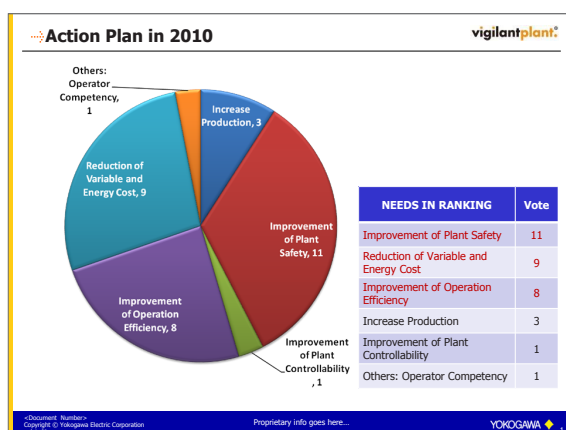


Figure 10 A slide showing the results of brainstorming

■ Evaluation of the seminar

Figure 11 shows the results of a questionnaire on this seminar. These results show that the seminar was appreciated by most participants, and the roundtable discussions in particular were highly appraised. The participating managers gained a deeper understanding through active discussion, stimulated by Yokogawa's presentation.

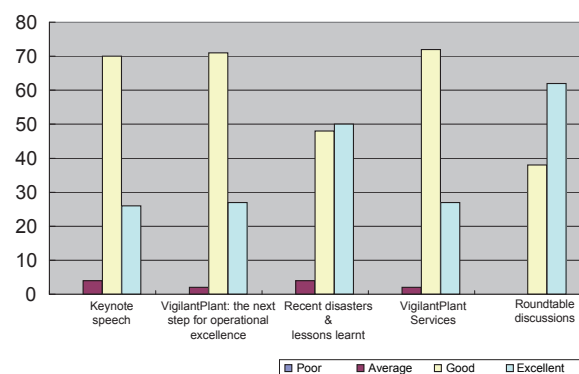


Figure 11 Questionnaire results

CONCLUSION

The first seminar was held in Dalian on a large scale, covering Asia, the Middle East, and Russia, and gathered participants from 11 countries. However, many participants requested the seminar to be held in each country to facilitate participation. Thus, the second and following seminars were held in respective countries, starting in Singapore and continuing mainly in Asian countries such as Thailand and Indonesia, and attracted many participants and were greatly appreciated. To expand this activity to areas other than Asia, the seminar is planned to be held in the Middle East and European countries.

Although this activity is intended to raise awareness of Yokogawa's capability as a solution provider and eventually to enable Yokogawa to be a partner of customers for operational improvement, the seminars also provided a rare opportunity for Yokogawa to learn about the issues faced by a wide range of customers, especially managers, and to hear their expectations for Yokogawa.

It is essential for business succession to create a positive spiral of business activities by grasping the challenges which customers are facing and their expectations for a supplier in a timely manner and correctly, and then to reflect them in the development and improvement of the next generation of products. Yokogawa believes that these interactive activities are the only way to become a real partner of customers to solve issues together with them. Yokogawa will continue these seminars to help achieve this target.