



YASKAWA ELECTRIC AMERICA

STREAMLINING FIELD SERVICE WITH SAP® INTERACTIVE FORMS SOFTWARE BY ADOBE

QUICK FACTS

“We used to complete field service confirmations after a week or two – when both parties’ recollection of the service call had faded. Today we have confirmations based on defined scenarios, streamlined for ease of use in real time and with 100% accuracy.”

Dennis Fitzgerald

Vice President of Customer Satisfaction
Yaskawa Electric America Inc.

Company

- Name: Yaskawa Electric America Inc.
- Location: Waukegan, Illinois
- Industry: Industrial machinery and components
- Products: Inverter drives, servo motors, and robotic motion control devices
- Revenue: US\$410 million
- Employees: 1,000
- Web site: www.yaskawa.com
- Partner: Principal Consulting Group

Challenges and Opportunities

- Improve overall customer service
- Leverage expertise in drives and motion controls to build better customer relationships
- Resolve bottlenecks in field service processes

Objectives

- Enable a service channel for authorized third parties without compromising corporate systems
- Speed the processes required to quote, order, and confirm service
- Empower field technicians to prepare and transmit documentation quickly and efficiently
- Reduce the number and impact of billing disputes with customers

SAP® Solution and Services

SAP® Interactive Forms software by Adobe

Implementation Highlights

- 2000: Brought SAP service management applications online within 3 weeks
- 2006: Brought SAP Customer Relationship Management (SAP CRM) application online
- 2007: Deployed SAP Interactive Forms within 5 weeks

Why SAP

- Demonstrated expertise with SAP CRM software
- Deep understanding of business and technology landscape at Yaskawa through SAP partner Principal Consulting Group
- Thorough command of interactive technologies and integration of forms with enterprise systems
- Strong references from industry peers

Benefits

- Higher customer satisfaction through fast, accurate service estimates
- Expanded field service delivery capabilities through easy-to-use Web portal
- Increased output using personal assignment overviews for service technicians
- Vastly shorter times for service reporting and confirmation
- Improved bottom line through tighter management of spare-part shipment and usage

Existing Environment

- SAP software (functionality now found in the SAP ERP application), SAP CRM, SAP NetWeaver® Portal component, business warehouse functionality of SAP NetWeaver Business Intelligence component
- Manual field service processes



Japan-based Yaskawa Electric Corporation Inc. is the largest manufacturer of inverter and servo drives and robotics automation systems in the world, with sales in 2006 of over US\$3 billion. Its subsidiary Yaskawa Electric America Inc., with headquarters in Waukegan, Illinois, operates three manufacturing facilities and markets motion-control machines and related services to customers in the Americas.

Yaskawa products include adjustable-frequency industrial induction drives, commercial HVAC drives, and spindle drives, as well as breakers and switches for various voltage levels and industry-leading servo motors and other motion-control devices, including robotic systems.

The Yaskawa Group's culture embraces a drive for quality that not only meets but exceeds customer expectations. Customer relationship management at the company must also meet these exceptionally high standards. Only the best implementation, maintenance, and repair service can enable the long-term trusted partnerships Yaskawa seeks with customers across the globe in all areas of business, including the automotive, chemical, food and beverage, machine tool, packaging, plastics, and textile industries. To ensure that customer equipment remains in peak working condition, Yaskawa uses the SAP® Customer Relationship Management (SAP CRM) application to integrate information and processes across the entire life cycle of each customer site.

Unblocking the Service Confirmation Process

Once SAP CRM was installed and brought online in the beginning of 2006, Yaskawa Electric America looked at key services that the application could help to improve. The field service group in particular had several areas that needed streamlining, specifically in the processes for estimating repairs and confirming services. There were two groups of users involved in this activity: the field service engineers internal to Yaskawa and a set of authorized service providers external to the company. The company wanted to make these processes faster and easier for both types of workers without compromising access control for nonemployees.

SAP Interactive Forms software by Adobe answered Yaskawa's requirements. Integrating SAP Interactive Forms with SAP CRM made case-specific quotes quick and easy and reduced the time required to confirm and bill completed service from hours to minutes. Here's how the new

solution works: When a customer requests field service, the customer service representative creates a service order in SAP CRM. The resource-planning function assigns the work to be done based on engineer qualifications and geographic locations. The assigned technician is automatically notified via e-mail. Upon accepting the assignment, the technician receives a link to the interactive form, which can be downloaded to a laptop or used online. Working from the job site, the technician interacts directly with a single dynamic form to view details of the assignment. The form works equally well online or offline, and no active access to Yaskawa systems is required for either internal or third-party users.

The technician performs the service and documents service steps, parts disposition, labor, and expense details directly on the form. Built into Yaskawa's field service form are such crucial elements as warranty coverage, spare parts required, parts and labor pricing, serial numbers, freight charges, labor allocations, travel costs, and credit or refunds from unused parts or exchanges. With this information at hand, the technician quickly generates a detailed repair report and an accurate bill estimate for the customer. Once the form is completed, it is submitted to SAP CRM, and a service confirmation generates automatically. The customer benefits from vastly shorter installation, maintenance, and repair cycles, and field service representatives save hours in paperwork time.



“To provide our customers with a comprehensive installation history to help them manage their assets better, we needed a better way to capture detailed information about the services we perform on the equipment, without unnecessarily burdening our service engineers with tedious data-entry work. We needed a way to capture the data soon after the service takes place to increase accuracy and to speed up follow-on processes.”

Maricel Cabahug, CIO, Yaskawa Electric America Inc.

Both Yaskawa field service technicians and authorized third-party service providers find the form easy to use without any special training. With the user-friendly interface, entering parts disposition and labor details is a breeze.

Managing the Scope of Available Information for Service Confirmation

Yaskawa was also feeling pressure for a more efficient confirmation process. “To provide our customers with a comprehensive installation history to help them manage their assets better, we needed a better way to capture detailed information about the services we perform on the equipment, without unnecessarily burdening our service engineers with tedious data-entry work. We needed a way to capture the data soon after the service took place to increase accuracy and to speed up follow-on processes,” explains Maricel Cabahug, CIO at Yaskawa Electric America. Vital additional requirements included an instinctive user interface that would not require training beyond a WebEx session; an application that would not require installation of complicated software on laptops; and the option for engineers to interact with the form both online and offline.

The joint implementation team from Yaskawa and SAP partner Principal Consulting Group had to balance concerns for security, portability, performance, and completeness when selecting which data from SAP CRM

to make available on this form. In most cases, they chose to perform validation and error correction on data entered offline through a separate program, before the form is actually converted to a service confirmation.

The SAP applications were easily integrated with the Web Dynpro development environment and IBM Lotus Notes software to send an automatic e-mail message to a technician when a service call is assigned.

Technicians must still confirm that spare parts have arrived on-site, travel to the site, perform the service, and ensure that unused parts and exchanges are packed and ready to be shipped back to Yaskawa. But the work of documenting the details of the service transaction is infinitely easier using the interactive form.

Dennis Fitzgerald, vice president of customer satisfaction and manager of field service at Yaskawa, explains, “We used to complete field service confirmations after a week or two – when both parties’ recollection of the service call had faded. Today Yaskawa has designed the confirmations based on defined scenarios and streamlined them for ease of use in real time and with 100% accuracy. Reliable confirmation is now a matter of minutes rather than hours or even days. Since the billing is based directly on the confirmation form, we are also able to generate invoices shortly after the service takes place.”

Additional Applications for SAP Interactive Forms

Better data quality brought about by the use of SAP Interactive Forms in field service has clearly helped Yaskawa increase its knowledge of its customers and build new efficiencies into service delivery. Based on those successes, Yaskawa has used the same innovative technology to streamline other business processes. The company recently revamped its new customer setup process, reducing the time for setup from a day to just minutes. Yaskawa also uses similar technology for its transaction-based customer survey form.

In the works is an application to streamline the workflow for requests for special pricing and to automatically generate sales quotations from approved requests. Future plans include harnessing the same power to automate other now-manual processes such as updates in the opportunity management system. For Yaskawa, the benefits of SAP Interactive Forms have just begun.



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