

Customer

Equipment Manufacturer

Industry

Manufacturing

Fishbowl Products

Workflow Solution Set™

Oracle Products

Oracle Universal Content Management

Business Need

More efficient method for processing non-conforming material reports

Challenges

To automate the process without alienating a diverse user group

To build workflows encapsulating the complicated logic of the resolution process

Benefits

Increased ease-of-use

Workflow audit trail

Improved reporting and measurement capability

Elimination of inefficient non-value add manual activities

MANUFACTURER STREAMLINES PROCESS FOR HANDLING NON-CONFORMING MATERIALS, GREATLY DECREASING TIME REQUIRED FOR RESOLUTION

BUSINESS NEED

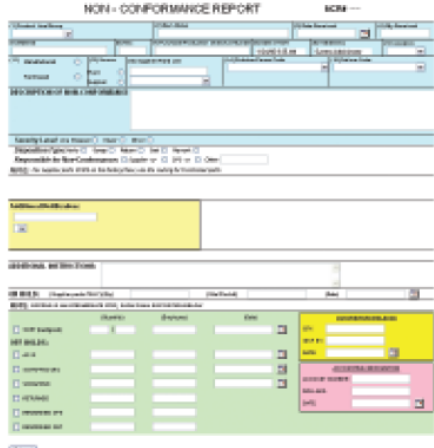
A worldwide manufacturer of medium and high voltage equipment needed to automate a paper-based process for initiating requests to address issues with non-conforming parts. The process for addressing non-conformance issues depended largely on the type of part (third party, in-house, etc.) and the severity of the issue. In order to resolve issues in a timely fashion, the manufacturer wanted to be able to automate a workflow to handle each type of combination.

Different parties also needed to be notified of a non-conformance, depending on the part type and severity of the issue. Additionally, the users initiating non-conformance reports varied from employees on the assembly line to engineers. For an automated system to be successful, it would need to closely mimic the paper form with which users were familiar.

THE SOLUTION

Fishbowl Solutions helped the customer automate their non-conformance procedures and put them on line so issues could be addressed more quickly. The automated system provides the visibility and reporting needed for tracking non-conforming items.

Fishbowl Solutions worked closely with the manufacturer to build an HTML form that looked almost identical to existing paper forms. Four forms were combined into one, greatly reducing confusion and paper. Fields on the form are color-coded and represent various steps in the workflow. While some fields are "read-only", others are auto-populated (e.g., NCR Number, Date, Initiated By). Some sections on the form are kept hidden and do not appear until later, related steps in the workflow.



Four paper forms were combined into one online form, streamlining the process for handling non-conforming parts.

The steps below describe the process for submitting a non-conformance report (NCR):

- A user, or “initiator,” fills out the initial NCR form. Once the initiator completes the form, it is submitted to Oracle, and email notifications are sent to the appropriate parties.
- The workflow then proceeds to the next step, according to the product engineer and product line listed on the form.
- In the NCR workflow, the severity level determines the workflow timeout period. The timeout period is the time within which the workflow must be completed before escalation is triggered. For example, if the severity level was “Line Stopped,” then the workflow timeout period would be one hour. Timeout periods for severity levels of “Major” and “Minor” were one day and three days, respectively.
- A product engineer receives an email notification with an HTML link to the NCR form. He or she reviews the NCR directly from the email and selects the disposition code (e.g., Sort, Rework, Use as is, Return, Scrap) from a dropdown list.
- The disposition, the type of part (manufactured or purchased) and the product line determine the list of workflow approvers. The product engineer can choose to notify additional users or to add additional approvers from a dropdown list.
- After the product engineer makes final assessments on the NCR (e.g., problem cause, failure code, deviation, etc.), he or she submits the NCR for approval.
- The workflow approvers receive an email with a link to the form for immediate access. They can approve or reject and enter comments. If they reject, comments are required, and the form is routed back to the product engineer for resolution. Once the NCR has been approved, action is taken to address the non-conforming material.
- NCR forms are stored in Oracle for reporting purposes. The Oracle repository, workflows and forms provide a reliable architecture for automating an otherwise slow, paper-based and error prone process.

BENEFITS

The new automated and centralized NCR process allows the manufacturer to address non-conformance issues in hours instead of days or weeks. Because the system is based on Oracle, there is also an audit trail for tracking workflow activity. The business is running smoother and more efficiently than before. Moreover, storing the forms in Oracle provides visibility to the history of non-conformance resolutions. Improved reporting and the ability to measure different aspects of the process may lead to even more improvements in the future.