Digitizing Inspection Forms with a Native SAP Solution

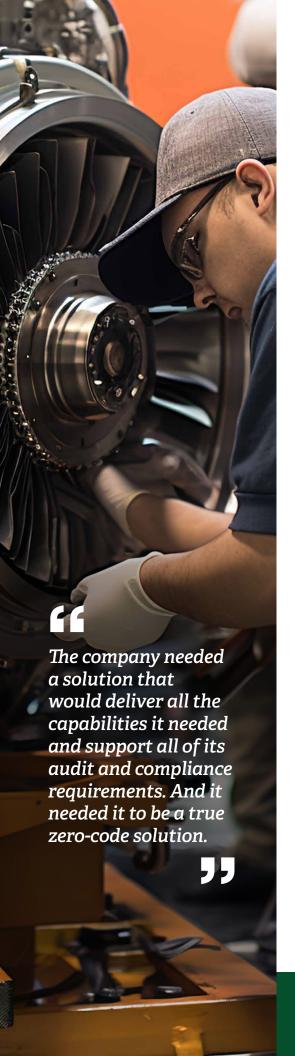## Lessons to Avoid Limitations, Failures and Unexpected Surprises

Inspection processes and audit trails are crucial in every industry where quality and regulatory compliance are essential. But many inspection processes are still handled with paper forms and spreadsheets, even in organizations that use SAP software to manage their quality assurance as well as their MRO data and workflows.

Inevitably, these manual and paper-based processes lead to inefficiency, errors, and compliance issues. But, to help alleviate this, many companies turn to digital forms solutions. These solutions can help them automate their inspection processes and replace their current paper forms and spreadsheets with a fully digital and mobile workflow that posts the right data into SAP and helps them ensure proper inspection, reviews, signoffs, and audit trails.

However, as one U.S.-based multinational aerospace manufacturer recently discovered, not all digital form solutions are equal.

A Reality Check for Digital Form Solutions

Nearly all digital forms solutions claim to be mobile solutions that help you digitize your workflows, collect data, and get information into your systems with minimal or no programming required.

However, the reality is that nearly all digital forms solutions are unable to support complex inspection, quality, and audit processes with a zero-code approach. This is especially the case in industries such as manufacturing, aerospace, defense contracting, medical devices, and the energy sector, where inspections and compliance requirements are often far more complicated.

For example, in the case of the U.S.-based aerospace manufacturer, it needed a solution that could handle the following requirements:

- Support for complex, multi-stage and multi-person inspection processes
- Intelligent routing to inspectors and supervisors based on conditional logic
- Signature capture with user authentication that meets strict FAA signoff requirements
- Automated data syncing and integration with SAP
- A complete audit trail for everyone who touched forms or the inspection process
- Zero-code form creation and management for its MRO team

Unfortunately, after initially choosing a solution and investing considerable time and effort to build forms with it and fully evaluate it, the company discovered that the solution couldn't support its complex requirements. It definitely couldn't do so with a zero-code approach.

As soon as its forms became more complicated and they needed to route forms between users based on specific conditions, it couldn't be done without writing code. Additionally, the forms solution only provided an unsecure form of signature capture, where a digital "signature" could be applied, but any user could theoretically access that signature and apply it. This fell well-short of FAA requirements for authenticated digital signatures, so it was a non-starter.

The company needed a solution that would deliver all the capabilities it needed and support all of its audit and compliance requirements. And it needed it to be a true zero-code solution, where its MRO team could create, deploy, and update forms without having to wait for IT or compete with other departments for resource prioritization in the IT project queue.

Fortunately, the manufacturer was able to pivot quickly and find the right solution for their requirements by working with Mirata Digital Forms and our SAP mobile solution experts at Havensight Consulting.

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Mirata

Using Mirata to Create Zero-Code Digital Forms for SAP Mobile

Using Mirata's true zero-code platform, our team at Havensight helped the aerospace manufacturer build a solution that supports all of the company's requirements, without needing to write a single line of code.

Specifically, we've used Mirata to help its MRO team build digital forms for the company's highly complex aircraft engine inspection process, including:

- Multi-stage processes and sub-sections, using 'parent' and 'child' inspection forms
- Fully digital and streamlined data collection with optimized forms and workflows
- Enforcement of correct process steps in the correct sequence and order
- Reviews and signoffs by inspectors and supervisors, to ensure process compliance
- Intelligent routing between inspectors and supervisors based on conditional logic
- Routing of forms back to inspectors based on supervisor comments or questions
- FAA-compliant digital signature stamps based on authenticated device user logins
- Configurable forms based on manufactured product classes and families
- A complete audit trail for any user who touches any aspect of the inspection process

In phase one of the project, we used Mirata as a standalone solution to help the company create the forms, design the required inspection processes, reviews and signoffs, enable the workflows and data collection, and make the resulting data and outcomes available to the company via Microsoft SharePoint.

Results were immediate and impactful, with an estimated inspection time savings of over 15%, thanks to a fully digital inspection process that's simpler and easier for users to manage. Additionally, process step enforcement, automation of routing, and digital error-proofing are already minimizing the chances of human error.

The company's MRO team is now trained and creates and maintains its forms with zero-code or help from IT, which allows them to be nimble, responsive and proactive in their inspection and quality management.

In phase two, we are natively integrating the company's Mirata forms with SAP, so inspection data, results, and signoffs are synced, updated, and shared with SAP in real time. This will further enhance the efficiency and accuracy of inspection processes, and, since Mirata is an SAP-certified and native SAP solution, its interface works seamlessly to sync and share data with any SAP module.

All of this has happened in a matter of weeks, since form development is so much faster, and efficient with Mirata, especially with absolutely zero-code required. Moreover, since development is so much faster and less resource-intensive it's been developed at a much lower total cost for the business.

Moving forward, since Mirata can be used to digitize workflows, eliminate paper, and boost efficiency across all areas of the business, we anticipate that the company will have many more opportunities to extend and maximize the value of its Mirata Digital Forms solution.

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How to Learn More and Demo Mirata Digital Forms

To learn more about digitizing your processes and SAP workflows with Mirata Digital Forms, visit Mirata Digital Forms on the SAP app store, and contact our SAP mobile solutions experts at Havensight Consulting. We'd be glad to answer your questions, provide more insights and case studies, and schedule an online demo at your convenience.

To get started, visit us at havensightconsulting.com, call us at 630-339-3030, or email us at info@havensightconsulting.com.

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