Automate | Capture | Integrate

FORMVERSE USE CASE SERIES

ELIMINATING CRITICAL SHORTAGES IN GLOBAL MANUFACTURING OPERATIONS

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FORMVERSE

1. USE CASE: ELIMINATING CRITICAL SHORTAGES IN GLOBAL MANUFACTURING OPERATIONS

This FORMVERSE customer is a USA-headquartered corporation and a leading manufacturer of critical infrastructure technologies for large and high-profile data centers. The company maintains operation and manufacturing centers worldwide where it manufactures critical infrastructure to many of the largest companies in the world, ensuring manufacturing projects are on time and on budget.

PROBLEM STATEMENT

Identifying potential critical parts shortages in the manufacturing process and quickly replenishing materials is essential to maximizing profitability, meeting customer commitments and ensuring client satisfaction. This is particularly important and challenging when those manufacturing facilities are physically located around the world.

The escalation process can require up to four levels of approval before an acquisition is made. Before implementing FORMVERSE, this process involved sending multiple unstructured emails to communicate these vital time sensitive requests and approvals. Many times, managers and executives are traveling or involved with other projects delaying the process of securing the needed materials. This caused frequent delays in the manufacturing process which negatively impacted production output and client delivery schedules. Even when on vacation, approvers needed to be tied to their mobile devices in case action was required.

THE FORMVERSE PROCESS

After implementing FORMVERSE, workflow initiators still use their email system that has now been transformed into a sophisticated **enterprise-class automation**, reporting, audit, and recordkeeping system. The workflow rules are defined completely based on the specification and requirements the customer

has developed for their business operations. A capability that is crucial for **large multinational organizations**.

The buyer initiates the **Critical Parts Shortage workflow** by simply starting a new email message and initiates a new workflow directly from within their existing **Microsoft Outlook** email. When opening the email message, the buyer sees a list of workflow applications which that user has been granted access to.

- The buyer fills in the required **structured data** (form) which is rendered directly within their Microsoft Outlook email, attaches any supporting documents (if needed) and hits "Send", no differently than sending any normal email message.
- By hitting "Send", all data entered into the form, all metadata, and any attachments are automatically stored in a **Microsoft SQL Server database**.
  - The workflow is also automatically routed to the Site Materials Manager who performs due diligence on the request ensuring that the needed parts can't be found somewhere else in the system.
- After the Manager completes their research and approves the request, the **structured data** (form) automatically moves via email to the Global Supply Manager for approval, then to the Commodity Manager, and if needed to the VP of Supply Channel (sourcing lead).

At each step in the workflow, **automatic reminders** are used to ensure that action is taken in a timely manner. Those reminders can range from minutes to hours to days depending on the severity level.

Travel schedules and vacations are no longer interrupted as all parties in the workflow can **delegate** action & responsibility to other managers, in accordance with the customer's internal policies and procedures.

REPORTING AND AUDIT

As mentioned earlier, each time data is entered into a FORMVERSE application (email), all data, metadata, and attachments are stored within the SQL Server database. This data capture makes possible custom **real-time reporting** accessible by authorized users, managers and executives. This reporting is

made available without needing to introduce any new applications to users because all reports can be accessed directly through email.

WHY FORMVERSE?

The customer considered multiple options to create this application. Those included using their existing ERP system, as well as creating the workflow using Microsoft SharePoint. The lengthy deployment time needed to create comparable solutions using these systems was a primary factor in choosing FORMVERSE's "**no-code**" High Productivity Application Development Platform (**hpaPaaS**).

The **bi-directional data integration** capability "to and from" the customer's other enterprise applications was another significant factor in selecting FORMVERSE. Through the use of **FORMVERSE PASSPORT**, FORMVERSE's Integration Platform as a Service (**IPaaS**), data, metadata, and attachments are collected in the FORMVERSE SQL database and can be integrated easily with other the customer's other enterprise applications.

The customer also considered FORMVERSE's cost-effective licensing model in its final decision. This model is based on the number of applications (Workflow Templates) used, not the number of users, locations or servers. This was an important consideration for a large, multinational organization.

FORMVERSE IMPLEMENTATION TEAM

FORMVERSE strives to create the best customer experience possible by providing innovative software and" top-notch" professional services. As such, their experienced team provided the customer with guidance and best practices important in structuring this complex workflow and addressing the potential issues that come into play in designing an such an application. Most importantly, the end result of implementing FORMVERSE is that while the rules related to this workflow are quite intricate, the complexity is hidden from the day-to-day participants.

Other comments received by the customer's Global Supplier Manager & Procurement Manager, on the FORMVERSE Implementation and Technical Services Teams included:

- *"Good communication"*
- *"Never let us down"*
- *"Very good at setting and meeting expectations"*
- *"Responsive and flexible in providing additional functionality on-the-fly"*
- *"Pleased with the service received"*

COST BENEFIT & TIME SAVINGS

Although no formalized study has been completed, the time savings of implementing FORMVERSE are apparent. With the previously deployed method of escalation, an email could sit in a user's inbox for hours, days or even weeks. The workflow initiator was tasked with tracking and follow up at every step of the process. With the automated workflow provided with FORMVERSE reminders and delegations, the escalation process takes a fraction of the time to complete! The key benefits of implementing this system are:

- **Avoid losing revenue due to delays in the manufacturing process**
- **The capability to confidently confirm order delivery dates**
- **The ability to win new customer contracts by eliminating shortages**

WHAT'S NEXT FOR THIS APPLICATION?

This application is currently being used at plants in Mexico, Canada, and the United States. Later this year, it will be rolled out to plants in the South American countries of Peru, Chile, and Brazil. That will be followed by implementation by plants in Europe and Singapore.

The customer also plans to engage their Suppliers in this critical workflow. Using FORMVERSE to assist in Quality and Payment Resolution processes.

CUSTOMIZED FEATURE SET

Please note that this Critical Parts Shortage is one example of a workflow application that can be implemented using FORMVERSE. Since the FORMVERSE software has been created with a **flexible architecture**, a similar

process can be easily customized for each customer requested variation. A key benefit enjoyed by customers is that this powerful additional functionality is made available to users without the notion of introducing multiple new applications. This approach results in **high adoption, low cost, high-security, and enterprise-class functionality.**

2. ABOUT FORMVERSE

FORMVERSE, Inc. provides a commercial-off-the-shelf (COTS) "no code" development platform that transforms customer's existing Microsoft infrastructure into a "High Productivity Application Platform as a Service" (hpaPaaS), which offers flexible deployment options including being fully hosted by FORMVERSE, deployed in a customer-controlled cloud environment, or installed on-premise.

Customers can create enterprise-grade, highly-functional "no-code" Workflow Applications that have very broad use throughout all parts of the organization. Users can interact with the FORMVERSE Workflow Applications using their existing Microsoft Outlook, Microsoft Office 365, or by accessing the web-based version of FORMVERSE using a PC, Mac, smartphone or tablet. In addition, customers may configure the system to enable those outside the network (like vendors, partners & regulators) to interact with workflows in quite sophisticated ways.

Regardless of the interface used, all data, metadata, and attachments are securely stored within the FORMVERSE database (Microsoft SQL Server) which then may be made available via custom reporting to authorized users. Additionally, once the data is stored in the SQL Server database, through the use of the FORMVERSE PASSPORT, that data can be integrated bi-directionally into and out of a wide variety of other enterprise applications, such as ERP's, CRM's, Document or Content Management Systems, HRIS & Payroll Systems, Ticketing Systems, and many others.

For further information, contact us at 925.264.0045 x201 or at askus@formverse.com.

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