



CASE STUDY

JSR Micro uses digital process automation to increase throughput time of key business processes by 45%



JSR Life Sciences

Organization:

JSR Micro

Industry:

Manufacturing & Retail

Location:

United States of America

As its business was growing into new product lines and business sectors, JSR Micro needed to speed up adoption of new business processes while keeping its administrative overhead low. As an advanced materials manufacturer, they also had to ensure compliance with numerous ISO and customer audit requirements.

By applying Digital Process Automation with the help of InnoVelocity, JSR Micro identified, improved and automated key business processes in all areas of the organization (Sales and Customer Service, Purchasing and Logistics, Manufacturing and Quality, IT support, and more). DPA ensured that these processes were performed consistently with the audit trail to match, while improving efficiency by 45%. Bizagi's low-code platform and the assistance of InnoVelocity meant they were able to do this with no additional IT headcount.

Full audit compliance/documentation on key processes

45% throughput time improvement

Zero additional IT headcount required

"I haven't yet been asked a question by an auditor that I couldn't answer by immediately pulling up the data."

VP Global Quality

Objectives

- 🎯 Speed up adoption of new and changed business processes
- 🎯 Improve throughput time, eliminate processing delays
- 🎯 Minimize overheads: reduce manual effort and rework
- 🎯 Continue to satisfy stringent customer, legal and financial audit requirements
- 🎯 Ensure complete, accurate audit documentations

Achievements

- ✅ Clearly defined processes followed to ensure compliance
- ✅ 45% throughput time improvement
- ✅ Zero additional IT headcount required
- ✅ Customizable BAM reports that pull data in real time

Overview

JSR Micro is a manufacturer and supplier of semiconductor solutions. Their comprehensive portfolio of materials allows customers to solve unique technical challenges for a variety of uses, from new generations of semiconductor manufacturing processes, energy applications and medical research.

Challenge

JSR Micro was facing obstacles to growth. As the manufacturer acquired new customers and employees and established new product lines, they needed to maintain their product and service quality, keep admin overheads low, speed up adoption of new and changed business processes. All this needed to be achieved while continuing to adhere to stringent customer, legal and financial audit requirements.

It was determined that putting a digital process automation program in place would be a key to overcoming these issues.

- DPA would ensure that the processes are appropriately designed and modelled for efficiency and compliance, with best practices and ISO requirements built in.
- DPA would institutionalize these processes through automation - ensuring they are followed consistently, with a full audit trail to match.
- DPA would provide efficiency improvements by automating previously manual work tasks.
- DPA would accelerate throughput time by providing visibility, reminders and other tools to keep work moving.

The key processes selected for automation touched every key process in the organization, including but not limited to:

Sales, Customer Service and QA

Customer issue and audit management, price quotes, customer compensation requests, engineering support and product requests.

Manufacturing, Engineering and QC

SDS (Safety Data Sheet) creation and changes, product specification creation and changes, manufacturing process changes.

Purchasing and Logistics

Purchase Requisitions and Capital Approvals, SKU requests, material transfers.

Organization Support

IT requests, maintenance requests, visitor approvals, new hire onboarding and offboarding.

Solution

InnoVelocity assisted JSR Micro in setting up an internal Centre of Excellence made up of the key executive process owners from each division of the company. This CoE created clear and actionable goals for the program, and identified the key processes to target, based on JSR's strategic direction.

Bizagi was unanimously selected as the automation tool to execute the project due to its outstanding balance of speed, features and cost - in particular seamless SAP integration and audit/metrics features.

InnoVelocity also implemented an iterative continuous improvement delivery framework. This focused on identifying a baseline of current tools, processes, practices and metrics, delivering quick improvements, updating the baseline, and selecting the next improvement.

On each process, InnoVelocity would work with the Process Owners to scope and capture business process requirements, interactively modelling the processes and system designs with Bizagi Modeler with Subject Matter Experts in a workshop setting. Once the process design was approved, automation was executed in Bizagi Studio. The low-code approach allowed, on average, one process to be automated per month.

Each process has clear metrics accessible in real-time through Bizagi Engine's BAM and Analytics reports, allowing results to be measured against goals and adjustments to be made.

Results

JSR Micro was able to document, streamline, automate, measure and improve over 20 key processes in two years (at a rate of nearly one per month). This was achieved with no additional IT headcount on their team and with a three person InnoVelocity project team; making the initiative highly cost-effective.

On average a 45% throughput time improvement has been realized, allowing the same resources to take on more work and improving customer satisfaction.

JSR continues to win numerous top supplier quality awards from their large suppliers that audit their processes and process compliance. They are able to participate in those audits much more quickly and convincingly - producing documentation and evidence in just a few clicks.