

Automating ASN Process for a Tier-1 Off-Road Vehicle Supplier Using IBM RPA

A Tier-1 supplier to “Off-Road” vehicles with 5 plants and warehouses, across multiple countries in India, US and Europe, employing more than 2000 employees. These plants and warehouses were designed to be stationed in the same regions as their customers (automotive OEMs).

The trigger for doing this project was that a new management team had come into the organization, with a new CFO and a new CIO. The customer had started with identifying multiple initiatives to improve the operations. Some of the initiatives were related to modernizing the ERP, automation of back office processes etc.

Company Overview

Specializing in logistics, manufacturing, and consultancy with supply chain, automotive, and engineering expertise.

The customer is off-road vehicles **Tier-1** supplier.

Running **five** plants and warehouses across India, the US, and Europe, with over **2,000** employees.

Business

The organization uses Infor ERP for manufacturing.

ASN data extraction complicates automation efforts.



CHALLENGES



Complex and Error-Prone ASN Process



Variation in OEM Portals



Frequent Portal Changes

SOLUTIONS



Analyzed customer requirements, including process, ERP, and human factors.



Developed custom logic for diverse information and language needs of OEMs, including Japanese and Spanish.



Implemented a robust access control matrix to ensure

IMPACT



Achieved a reduction in errors by over 31%



Reduced costs related to the ASN process by more than 24%.



The BoT executes ASN entry tasks in 1/12th the time required by a human

Case Study | ASN Process Automation

STREAMLINING ASN WITH IBM RPA

About ASN: With most automotive (OEM) companies working on JIT processes, they expect their suppliers to inform them in advance about the shipping of material from the supplier's factory. This then helps them plan their manufacturing schedules better. In case of "off-road" vehicle manufacturers, the assembly parts are larger so a wrong shipment, not only results in a breakdown of the production plan, but also results in huge freight costs etc.

INITIAL CHALLENGES:

- The customer identified the ASN process as a high-impact area for automation due to its complexity and error-prone nature. Every OEM has a different format for entering the ASN into their portal. Not only are the portals different, but the OEM also keeps changing the "screens" of the portal.
- Our customer's ERP System: Utilizes Infor ERP for managing their manufacturing operations across all their plants.

AUTOMATION JOURNEY – High Impact Processes Identified:

- Order Processing
- Delivery Note
- ASN Generation

CHOOSING THE RIGHT SOLUTION AND MEETING THE DEADLINES

Implementation Approach

1. **Understanding Requirements, Limitations, and Expectations:** Analyzed customer needs and constraints, including process, ERP data limitations, and human factors.
2. **Defining Logic for Each Customer:** Developed customized logic for each customer's unique requirements, addressing different OEM information needs and language variations for Japanese and Spanish-speaking clients.
3. **Identifying Exceptions for Each Web Application:** Documented exceptions for smooth automation.
4. **Defining Access Control Matrix:** Established a robust access control system



5. Development and Publishing of BOTs:

- Mapped processes for BoT coding.
- Designed integrations for Infor ERP due to its constraints.
- Created and deployed bots to automate selected processes.

6. **Unit Testing of BOTs:** Conducted rigorous functionality and reliability testing.

7. **Release for Production:** Transitioned bots to the production environment successfully.

RESULTS

- **Error Reduction:** Achieved a reduction in errors by more than 31%.
- **Cost Savings:** Cut costs associated with the ASN process by more than 24%.
- **Improved Productivity:** The BoT can execute the tasks of entering an ASN in 1/12th the time it would take for a human being to load and the BoT was working 24 hours a day. This resulted in massive increase in productivity

CONCLUSION

- **Impact on Business:** The automation of the ASN process significantly improved operational efficiency and accuracy, providing a strong business case for further automation initiatives.
- **Future Plans:** The customer plans to continue their automation journey, leveraging the success of the ASN process automation.