

Automating Purchase Order generation with MuleSoft RPA and Anypoint Platform

Case Study of a Component Manufacturing Company's Industry 4.0 Strategy:

This case study outlines how a component manufacturing company is utilising "Hyperautomation of MuleSoft RPA with MuleSoft Anypoint Platform" solution, developed by NJC Labs to integrate their inventory management and ERP system to automate the process of PO generation.

Challenge

The inventory management process at the warehouse currently involves receiving, putaway, picking, and packing, which is accomplished using legacy RFID and barcode (2D matrix) system. At the end of each day, the warehouse manager extracts stock updates from the system and sends them to the SCM executive via email. The executive then creates a Purchase Order based on the reorder point of the stocks in inventory on the following day.

However, this approach is outdated as per industry 4.0 standards and the management wants to automate the process. They are reluctant to abandon their established applications, so they are looking for a solution that can integrate with their existing applications and reduce the workload of the SCM team.

The goal is to free up the team's time from repetitive tasks, so that they can focus on more important tasks. While there are many tools available in the market, the management is seeking a solution that can work in tandem with their existing system.

Automating Purchase Order generation with MuleSoft RPA and Anypoint Platform

Objective

The objectives for a solution are highlighted below

- Improved supply chain management
- Reduced manual work
- Increased efficiency
- Better visibility

Understanding the Process

Let us break the process into three steps:



1 Generating a current stock report and mailing it to SCM.



2 SCM executive identifies the stocks that needs to be ordered



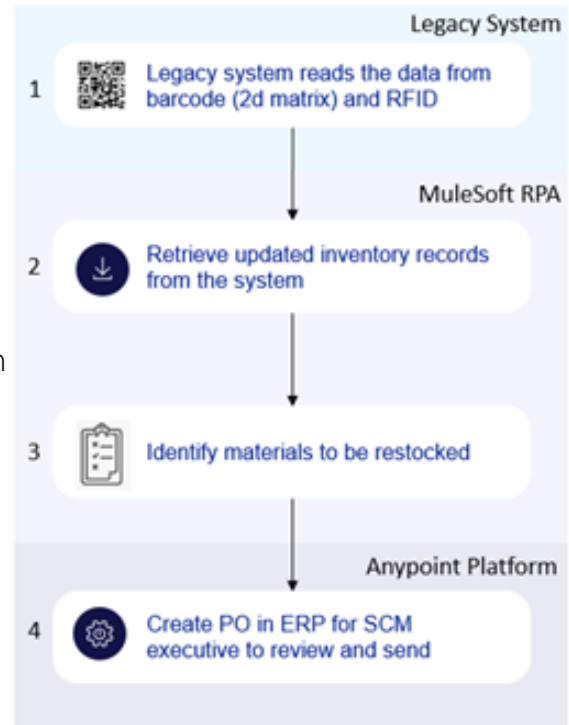
3 SCM executive then creates a PO from the list of vendors in ERP software

Automating Purchase Order generation with MuleSoft RPA and Anypoint Platform

Solution

Hyperautomation tools used:

- MuleSoft RPA – The bot can be deployed on the windows system operating the legacy inventory management system.
- Anypoint Platform – Cloud-based platform to integrate inventory management system and ERP system.
- MuleSoft RPA streamlines repetitive tasks and grants accessibility to legacy systems, while the Anypoint Platform facilitates seamless integration between various systems as follows:



Automating Purchase Order generation with MuleSoft RPA and Anypoint Platform

Refer to the image on the previous page, the numbers below indicate what is happening at each part of the process.

- 1 Inventory is registered in the system using legacy RFID and barcode systems.
- 2 RPA bot is configured in this legacy system to retrieve the inventory records. The bot carries out this task on a fixed scheduled frequency as per the requirement.
- 3 RPA bot identifies stocks to be purchased by comparing it with its reorder point.
- 4 When a RPA process is published to production the application can be accessed in Anypoint Exchange. The ERP system is integrated with the bot on the Anypoint platform to automate the creation of purchase orders.

Once these purchase orders are created, they are submitted, or set aside to be reviewed by an SCM Executive before submission, based on custom conditions evaluated by Dataweave (functional programming language used by MuleSoft for transforming data).

Automating Purchase Order generation with MuleSoft RPA and Anypoint Platform

Results

The results of this simple integration are



**UP TO
98%**

REDUCTION IN THE TIME
REQUIRED TO PROCESS
PURCHASE ORDERS



12%

REDUCTION IN
STOCKOUTS



21%

IMPROVEMENT IN
ORDER FILL RATES



14%

AVERAGE REDUCTION
IN INVENTORY
CARRYING COST