

Process Design Document

VENDOR ONBOARDING PROCESS

Document History

Date	Version	Role	Name	Comment
	1.0	Business Analyst		Created initial draft

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I. INTRODUCTION

1.1. Purpose

The Process Definition Document outlines the business process chosen for automation. The document describes the sequence of actions performed as part of the business process, the **conditions**, and rules of the process prior to automation (AS IS) as well as the new sequence of actions that the process will follow as a result of preparation for automation (TO BE).

The PDD is a communication document between:

- The RPA Business Analyst and the SME/Process Owner. The goal is to ensure that the RPA Business Analyst has the correct understanding of the process and has represented it accurately.
- The RPA Business Analyst and the Development team (represented by the Solution Architect and RPA Development Lead). The goal is to ensure that the process is documented appropriately and to a sufficient level of detail so that the Solution Architect can then create the solution based on the PDD content.

1.2. Objectives

The business objectives and benefits expected by the Business Process Owner after automation of the selected business process are:

- Reduce processing time per 80%;
- Eliminate human error;
- Better Monitoring of the overall activity by using the logs provided by the robots.

1.3. Process key contacts

The specifications document includes concise and complete requirements of the business process and it is built based on the inputs provided by the **process Subject Matter Expert (SME)/ Process Owner**.

The **Process Owner** is expected to **review it and provide signoff for accuracy** and completion of the steps, context, impact and complete set of process exceptions.

The names have to be included in the table below.

Role	Name	Contact Details
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<i>Process Owner/ Approver for production</i>	Amna Fitzgerald	Amna.fitzgerald @mail.com 123-234-8532

1.4. Minimum Pre-requisites for the Automation

- Filled in Process Definition Document
- Test Data to support development
- User access and user accounts creations (licenses, permissions, restrictions to create accounts for robots)
- Credentials (user ID and password) required to logon to machines and applications

II. As Is Process description.

In this section the Business Analyst will document the process. This section will serve as the starting point for the re-engineering and automation effort.

The manual process for vendor onboarding process of ACME Systems Inc. is:

- The executive reads the mails received from the vendor and downloads the attachments.
- Check that all the vendor details are present. Also, check that the Tax ID has a valid format.
 - If not, send an email to the vendor that a particular detail is not present, or the Tax ID has invalid format.
- Log in to the ERP application and check that the vendor details do not exist in the database of the application using the Tax ID.
 - If the Tax ID matches with the existing entries, send email to the vendor that the vendor already exists in the system.
- Log in to the CRM application and check that the vendor details do not exist in the client database using the Tax ID.
 - If the Tax ID matches with the existing Client entries, send email to the vendor that the vendor already exists in the system.
- Enter the details of the vendor (Vendor Tax ID, Name, Address, City, and Country) in the ERP application to add the vendor.
- When all the transactions have been processed, create an MIS report.
- After completing the process, send the MIS report to the support team.

2.1. Process Overview

Section contains general information about the process before automation.

Item	Description/Answer
Process Full Name	Vendor Onboarding
Process Area	Vendor Management
Department	Accounts
Short Description (operation, activity, outcome)	Extract details from the vendor onboarding form and insert vendor details in ERP Application. The MIS is prepared and shared with the business team.
Role(s) required in applications to perform the process	ACME System 1 and ACME System 3 user
Process schedule and frequency	Daily
Number of times the process is ran by selected frequency	1 times
Average handling time per item	20 minutes
Process Restrictions	The applications can be used only between 7 AM–8PM during workdays and not allowed to be used during weekends.
Peak Period (s)	<i>Beginning of the month</i>
Peak Volume Approximate increase	<i>225 vendors daily</i>
Total # of FTEs supporting this activity	<i>15</i>
Expected Volume increase during next periods	<i>NA</i>
Level of exception rate	<i>NA</i>
Input data description	<i>Mail with attachment vendor information (pdf & word)</i>
Output Data description	<i>Vendor details uploaded in ACME with MIS</i>

2.2. Applications Used

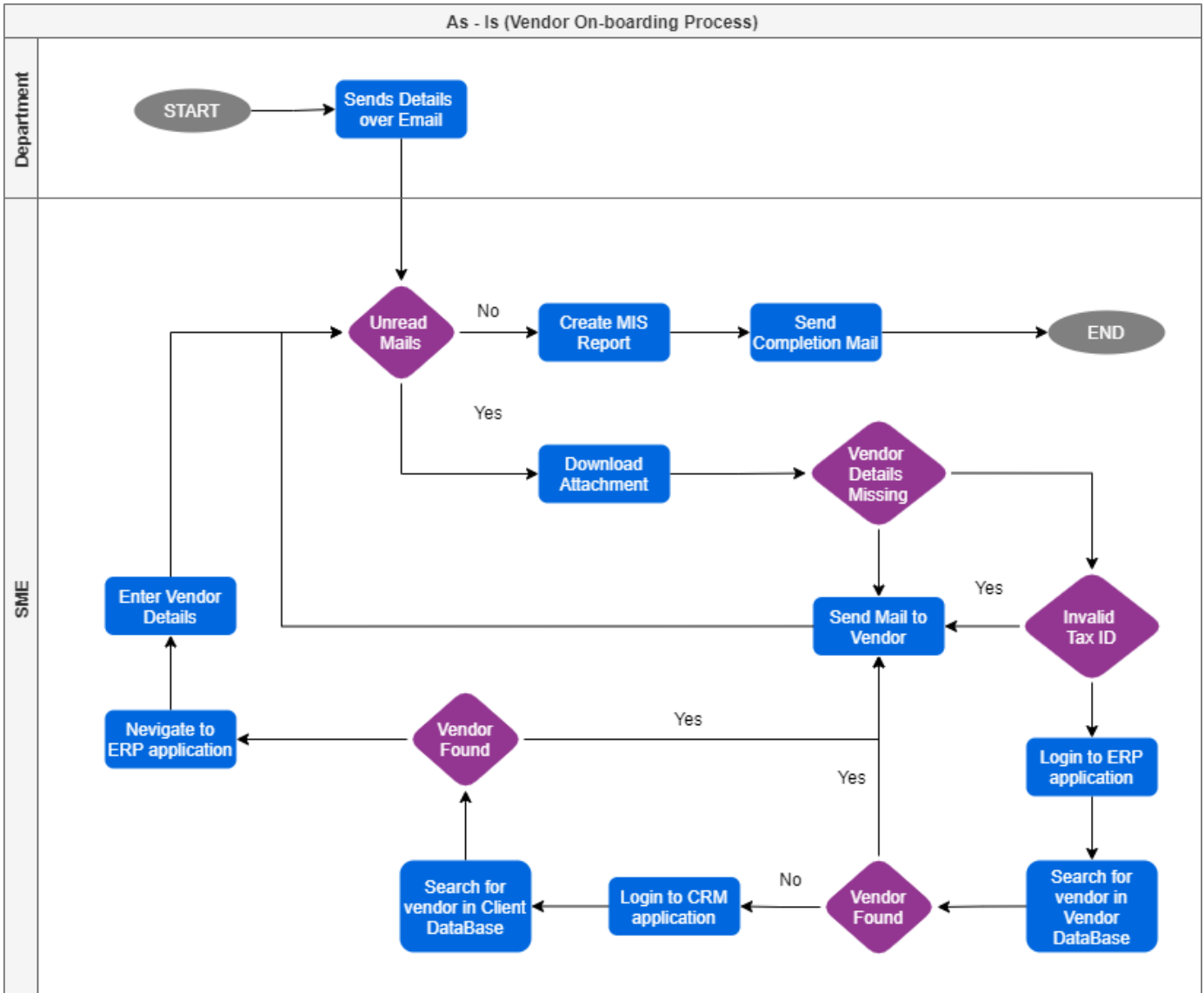
The table includes a comprehensive list of all the applications that are used as part of the process to be automated to perform the given actions in the flow.

Application Name	Version	Application Language	Thin/Thick Client	Environment/ Access method	Comments
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ACME System 1	2020.1	EN	Thin	Web browser	N/A
ACME System 3	2020.1	EN	Thick	Desktop	N/A
MS Outlook	2023	EN	Thick	Desktop	N/A
MS Excel	2311	EN	Thick	Desktop	N/A

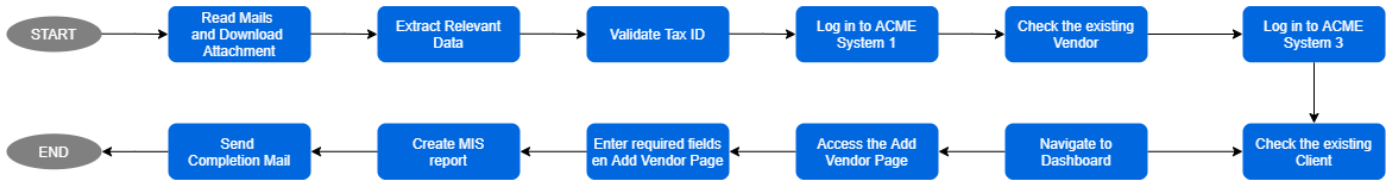
2.3. As Is Process Map

This section contains various process maps contributing to a better understanding of how the process is performed pre-automation.



2.3.1. High Level Process Map

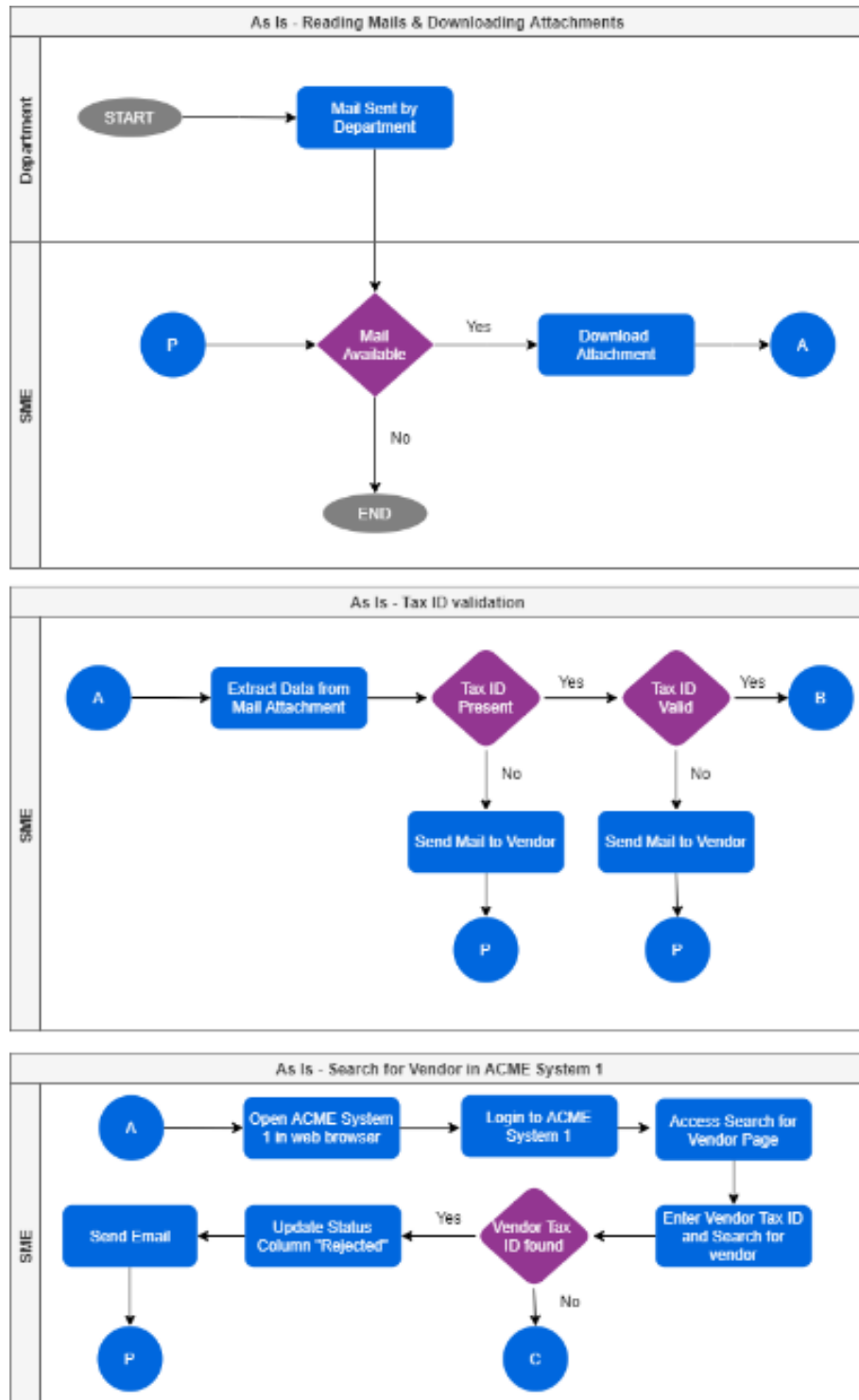
This section is useful for the Business Analyst in presentations and discussions with management to underline areas of weakness, inefficiency or to demonstrate which actions could be in scope for automation.

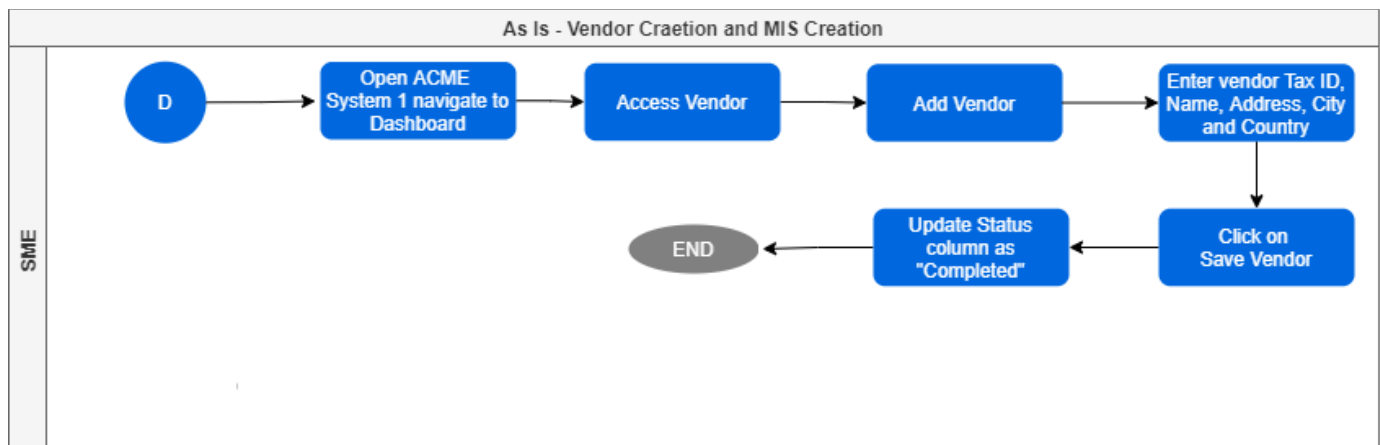
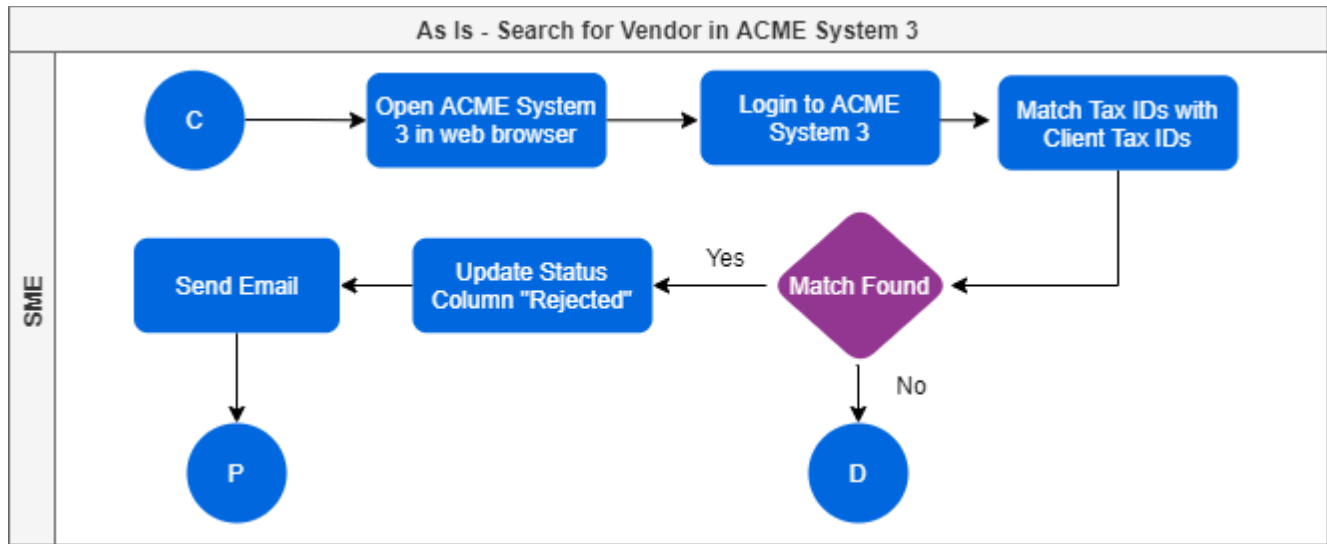


Step	Short Description
1	Read Mails
2	For Each Mail
3	Download Attachment
4	Extract Data from mail attachment
5	Search for Tax ID in the mail attachment
6	Open ACME System 1 Web Application
7	Log in to System 1. Required data: Email and Password
8	Access the Dashboard- the central location, where the user can pick a specific menu item
9	Access the ‘Search for Vendor’ page in the ‘Vendors’ section.
10	Enter Tax ID in Search for Vendor page and Click Search button.
11	Log in to System 3. Required data: Email and Password
12	Search for the Tax ID
13	Open ACME System 1 and Navigate to Dashboard
14	Access ‘Add Vendor’ Page in the Vendors section
15	Enter Vendor Tax ID, Vendor Name, Address, City and Country extracted from the mail attachment.
16	Click on Save Vendor button and Update the MIS DataTable’s Status column as ‘Completed’
17	If there are no mails to be processed.
18	Create MIS Report.
19	Send mail to the concerned department.



2.3.2. Detailed Level Process Map

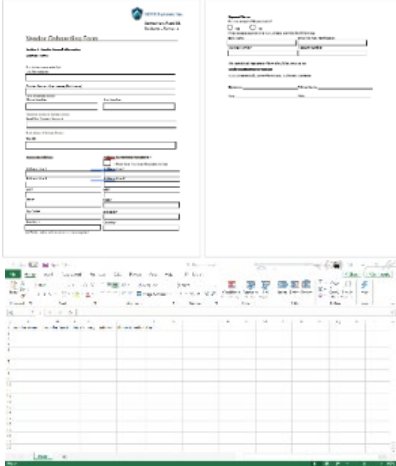
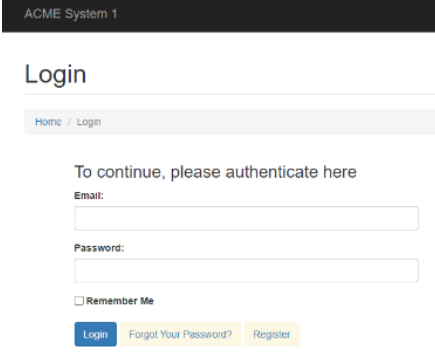
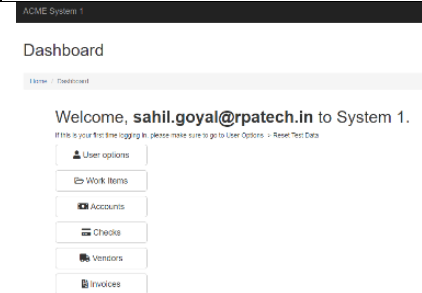
This section describes the process at key-stroke level and is an essential part for communication with the developers.

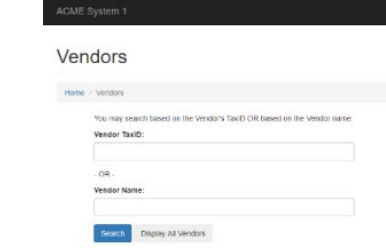
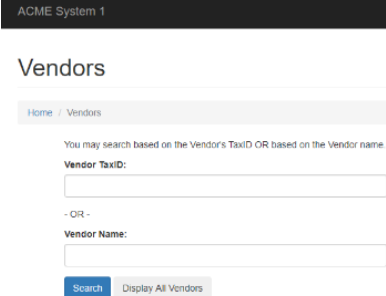
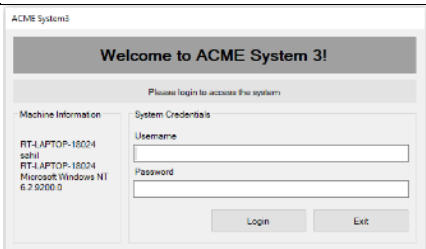
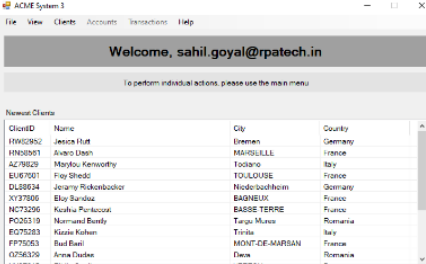
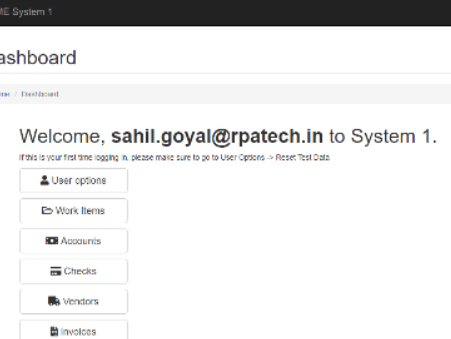


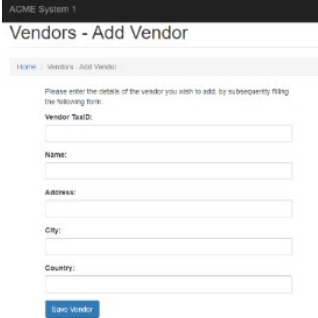
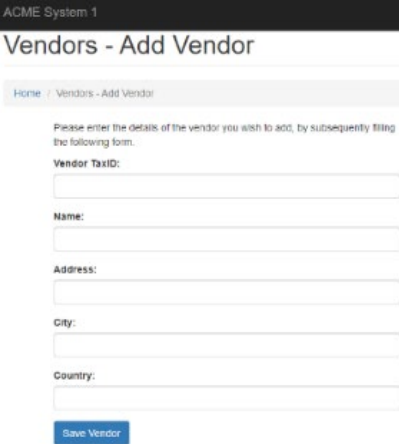




2.4. Detailed AS IS Process Actions

#Action	Input	Description	Details	Exception Handling	Possible Actions
1	Unread Mails			1. Mailbox not configured 2. Invalid Mail Subject Format	Reading Unread Mails with a pre-defined mail subject: "New Vendor received"
2		Download Attachment	 Vendor.xlsx  Vendor.pdf	Attachment not Found	1. Save attachment in the Input folder. 2. If attachment not found, Notify Vendor 3. If more than one attachment found, Notify Vendor

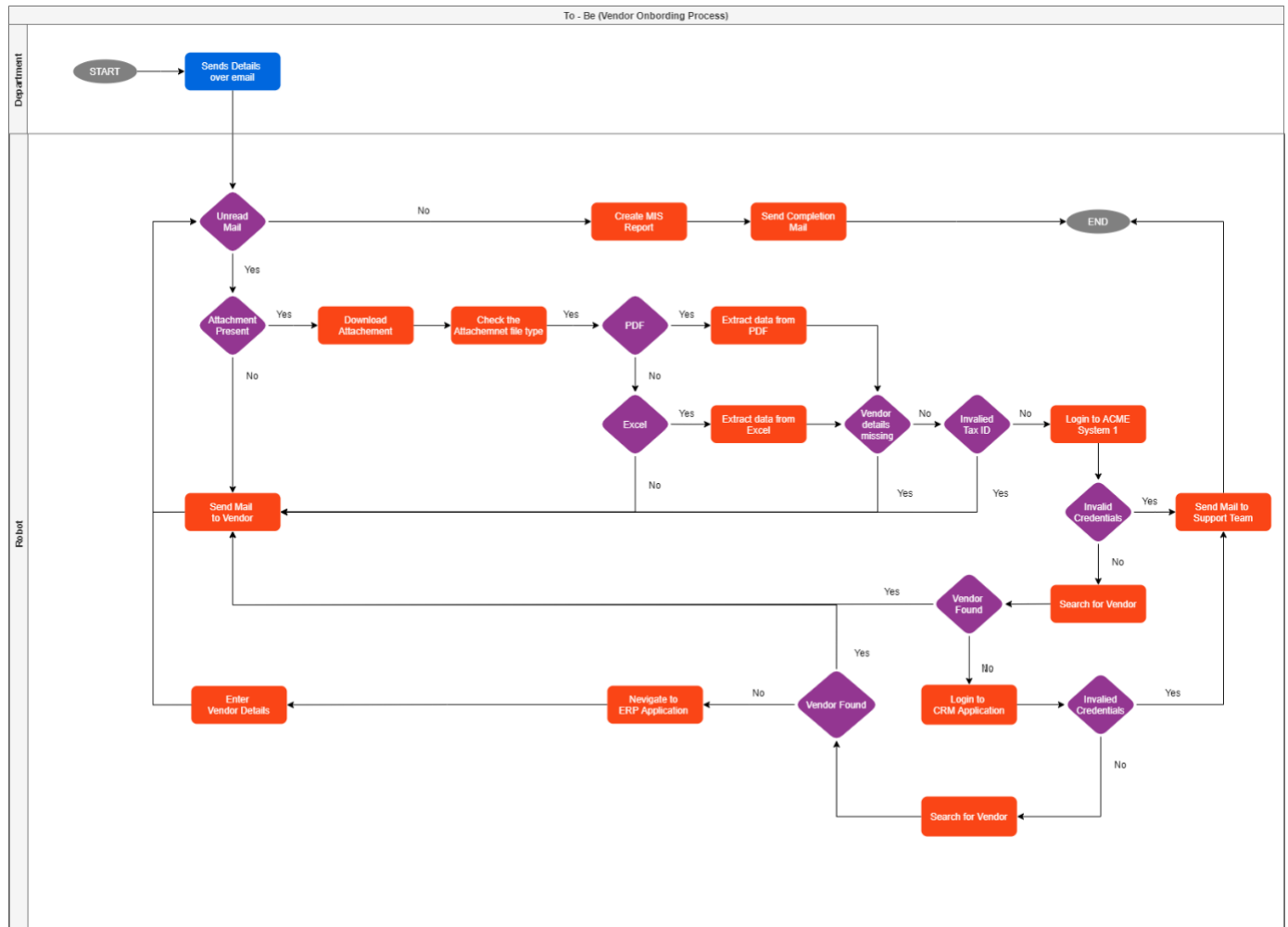
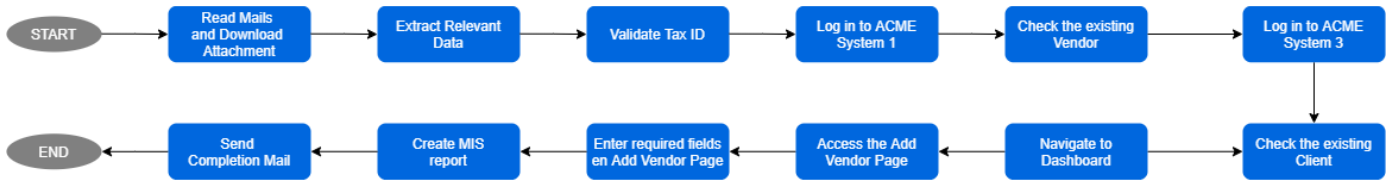
3	Vendor Onboarding Form (PDF (Native or Scanned)/Excel)	Extract Data from mail attachment		Invalid File Type	<ol style="list-style-type: none"> 1. Store the vendor details in a Data Table. 2. Update MIS Report. 3. If Invalid File Type found, Notify Vendor
4		Check for the vendor details and validate Tax ID	<p>Vendor Tax ID</p> <p>RO356452</p> <p>Tax ID:</p> <p>RO356452</p>	<ol style="list-style-type: none"> 1. Vendor Details missing 2. Tax ID not valid 	<ol style="list-style-type: none"> 1. Vendor Details should not be empty 2. Update MIS Report 3. If vendor details missing, Notify vendor. 4. If Tax ID is not valid, Notify Vendor.
5		Open ACME System 1 Web Application.		Webpage not responding	Restart the browser.
6		Log in to System 1. Required input data: Email and Password		Wrong Credentials	<ol style="list-style-type: none"> 1. Login to ACME System 1 using the Credential Asset (ACME_Credential) 2. If Invalid Credentials found, Notify Support Team
7		Access the Dashboard- the central location, where the user can pick a specific menu item.			Click on the 'Home' button

8		Access the 'Search for Vendor' page in the 'Vendors' section.			From the Vendors tab, select Search for Vendor option from the drop-down menu.
9		Enter Tax ID in Search for Vendor page and Click Search button.		Tax ID found.	<ol style="list-style-type: none"> 1. Enter the Tax ID in the Vendor Tax ID section and select the Search button 2. Update MIS Report 3. If vendor is present in database, Notify Vendor
10		Log in to System 3. Required input data: Email and Password		Application Crashes	Login to ACME System 3
11		Search for the Tax ID in Client Data.		Tax ID found.	<ol style="list-style-type: none"> 1. Update the MIS Report 2. If a vendor is present in database, Notify Vendor
12		Open ACME System 1 and Navigate to Dashboard			Navigate to Vendors>Add Vendor

13		Access 'Add Vendor' Page in the Vendors section			Click on Add Vendor Page
14		Enter Vendor Tax ID, Vendor Name, Address, City and Country extracted from the mail attachment.			
15		Click on Save Vendor button and Update the MIS DataTable's Status column as 'Completed'			Update MIS Report
16		Create MIS Report.	 MIS Report.xlsx		
17		Send mail to the concerned department.			Send mail to business team with MIS Report as Mail Attachment

III. To Be Process description.

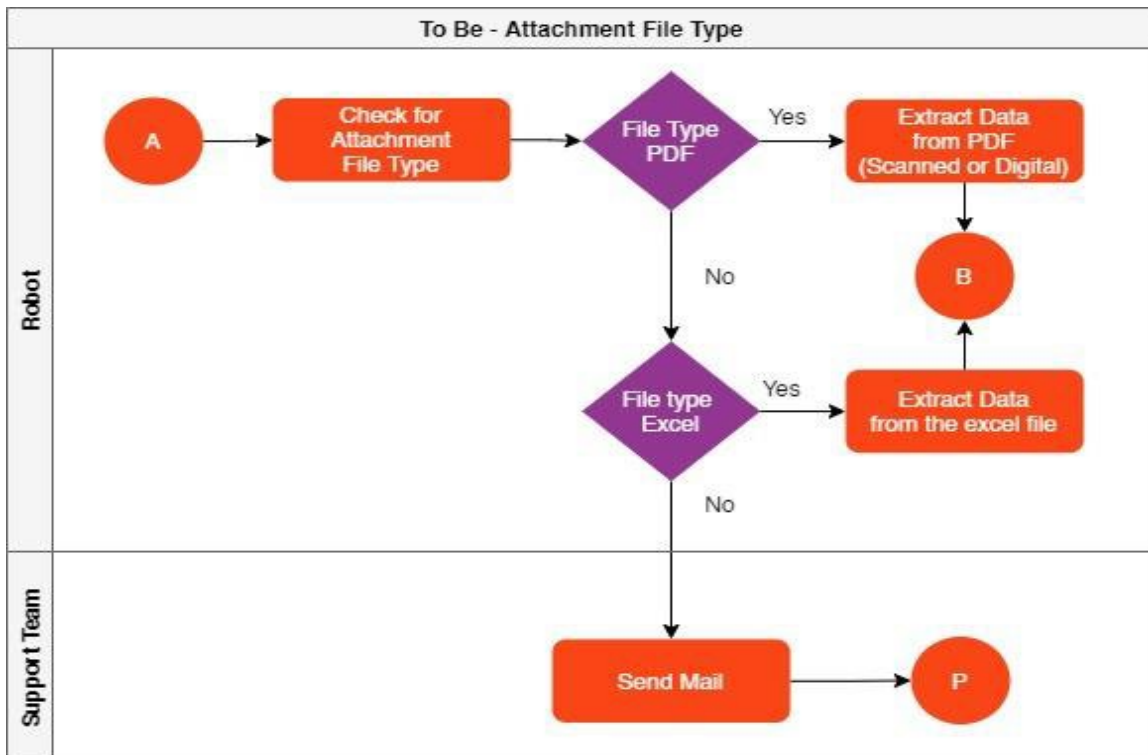
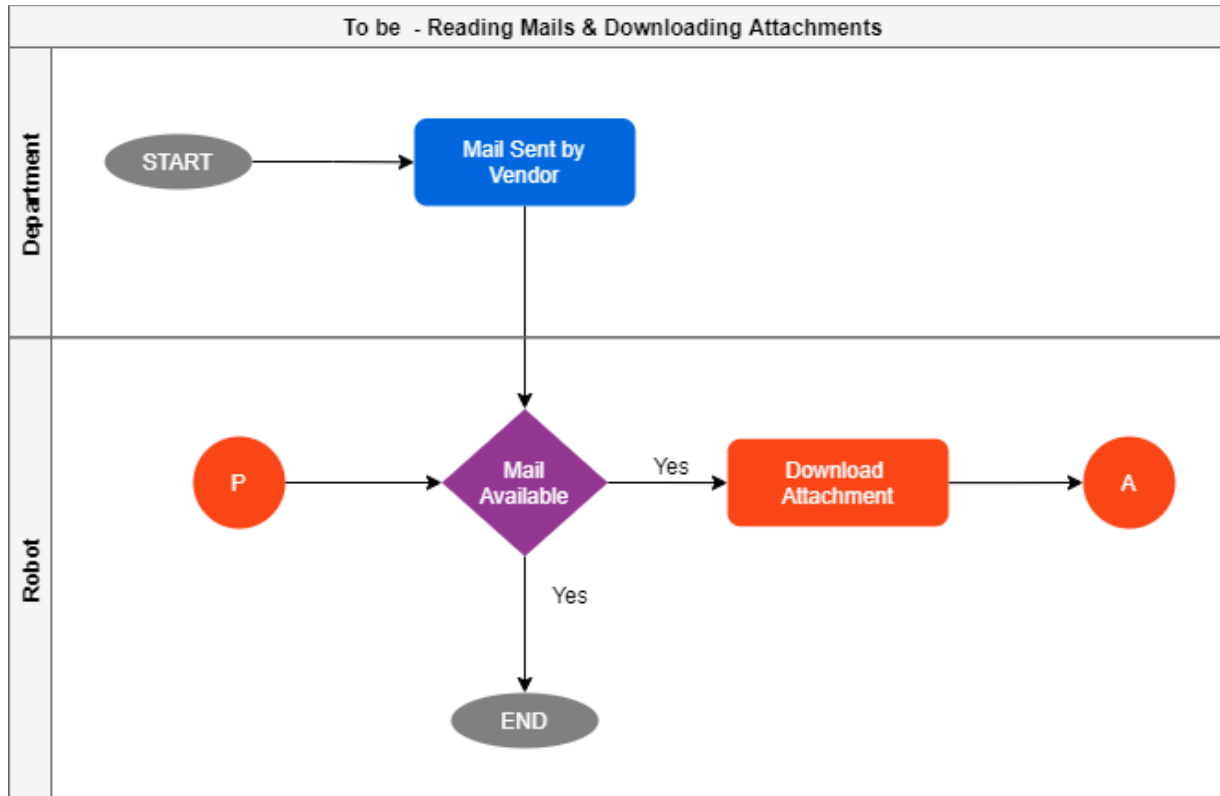
In this section the proposed improvements to the process, actions to the process will be outlined as well as the actions proposed for automation and the type of robot required. This will be cross-checked by the Solution Architect.

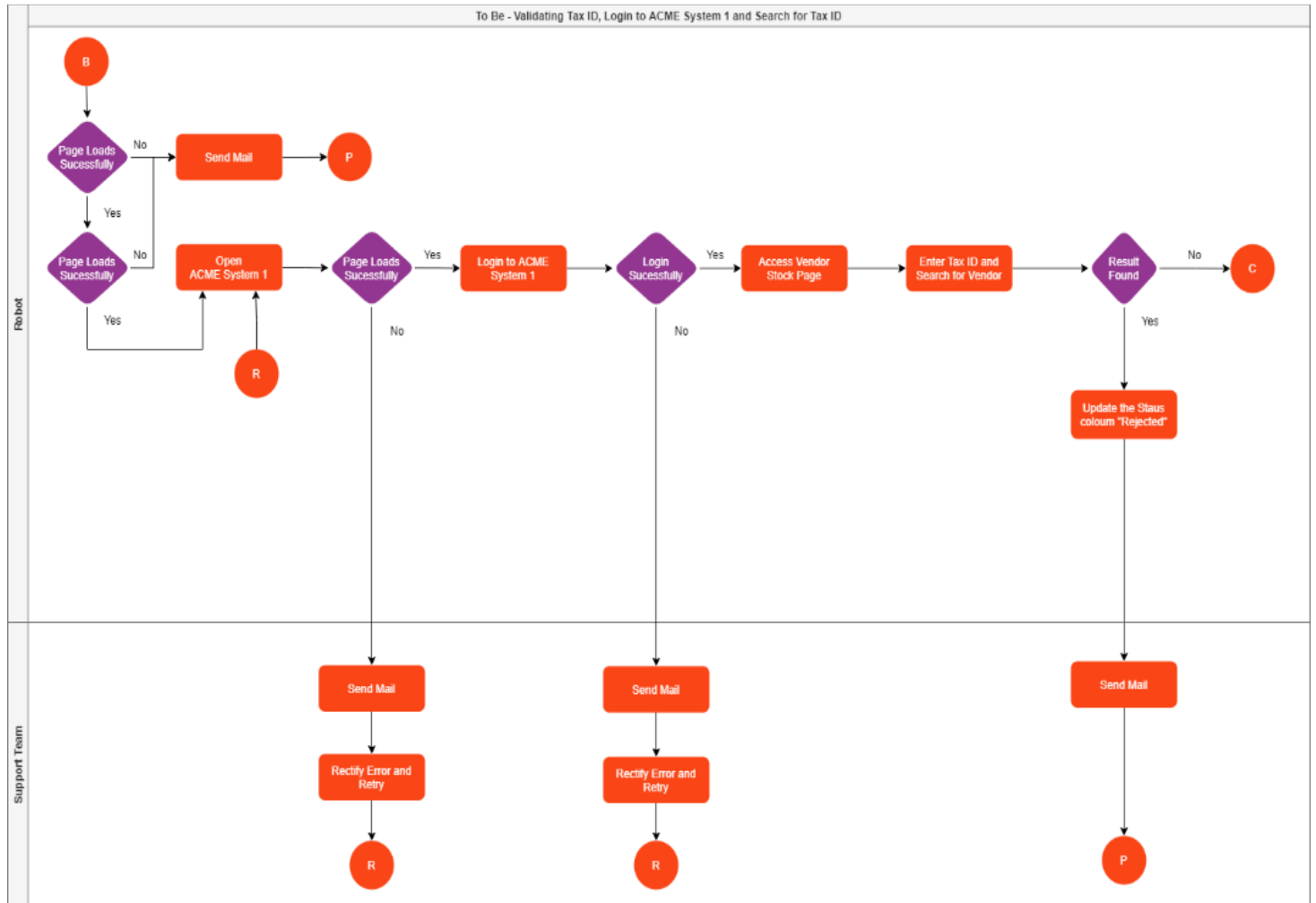


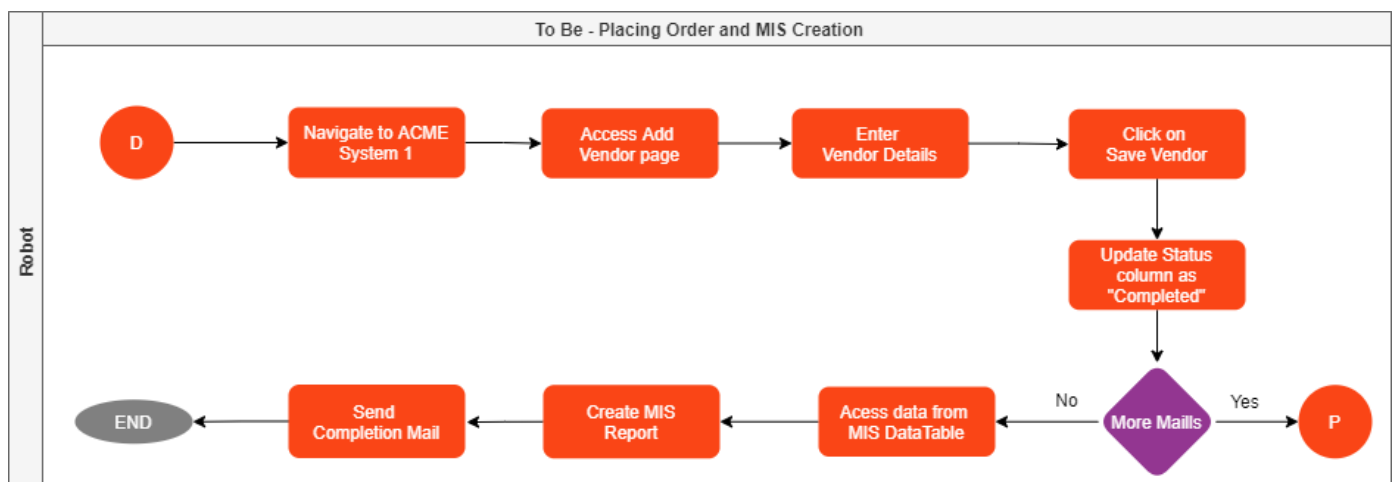
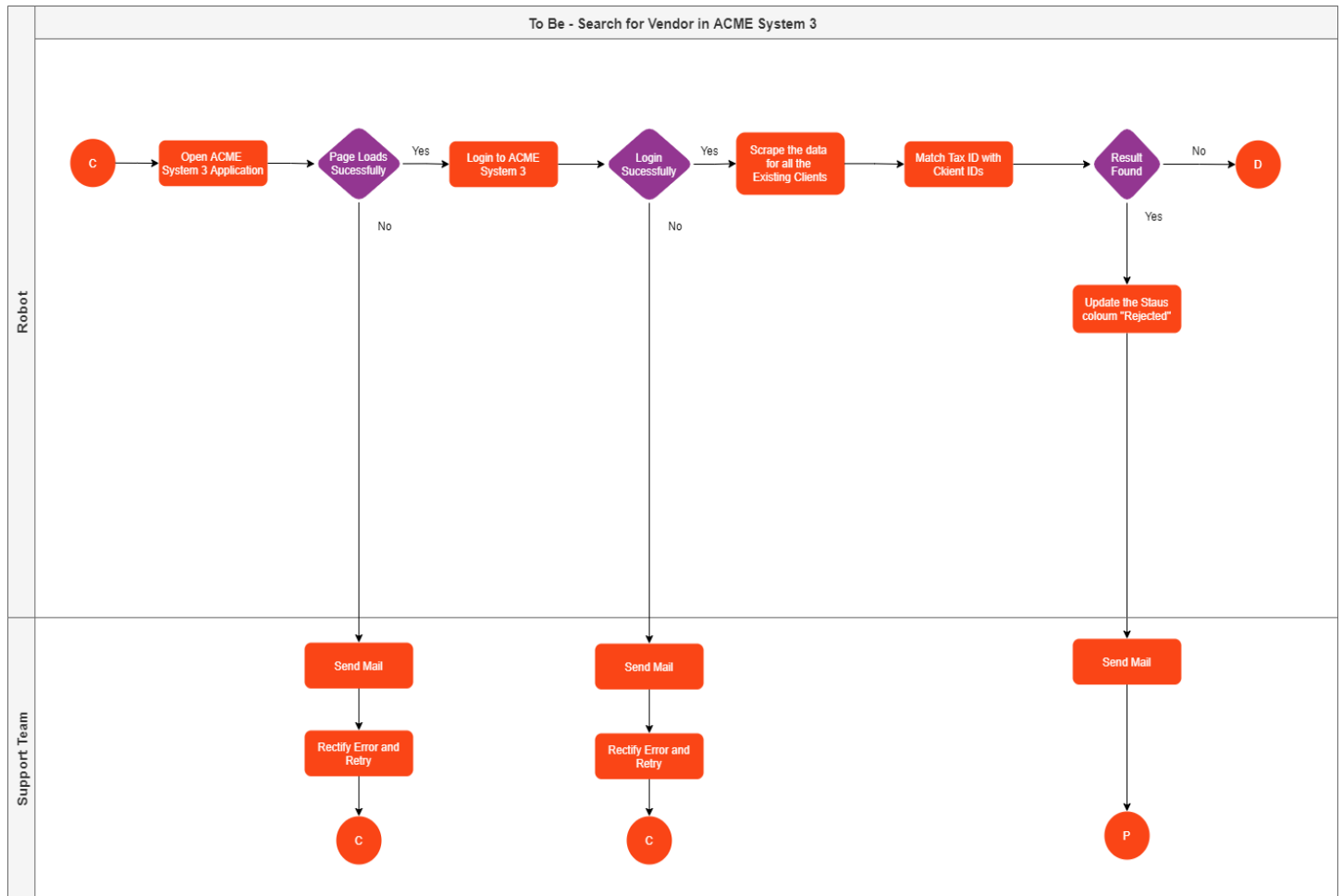
3.1. Detailed To Be Process Map

A detailed process map of the process as it will look like post-automation will be outlined here.

Legend	Description
	Decisions made throughout the process.
	This process action is proposed for automation.
	This process remains manual (to be performed by a human agent).










3.2. Input/Output Data Description

The following table should contain details regarding the inputs that every action of the process takes.

#	Sample	Type	Process step #	Storage location	Are inputs Natively Digital*?	Are the inputs Structured*?
1	 Vendor.pdf	PDF	2	Input Folder	Yes	Yes
2	 Vendor-photo.pdf	PDF	2	Input Folder	No	Yes
3	 Vendor.xlsx	Excel	2	Input Folder	Yes	Yes

3.3. Exceptions Handling

The Business Process Owner and Business Analysts are expected to document below all the business exceptions identified in the automation process. Exceptions are of 2 types and both need to be addressed:

Known exceptions = previously encountered. A scenario is defined with clear actions and workarounds for each case.

Unknown = New situation that was not encountered before. It cannot be predicted and in case it happens it needs to be flagged and communicated to an authorized person for evaluation.

3.4.1. Known Business Exceptions

Details regarding how the robot should handle the exceptions.

#	Exception Name	Action	Parameters	Actions to be taken
1	Tax ID found in ACME System 1	9	VendorTaxID	Send an e-mail to vendor with the text: Vendor is already added in our system." Go to the next transaction
2	Tax ID found in ACME System 3	11	VendorTaxID	Send an e-mail to vendor with the text: Vendor is already added in our system." Go to the next transaction
3	Input File Type	3	InputFileType	Send an e-mail to vendor with the text: Invalid FileType received."

				Go to the next transaction
4	Email Subject	1	MailSubject format is not supported	Send an e-mail to vendor with the text: Incorrect Format of the Subject. Go to the next transaction
5	Attachment not present	2	Input Folder is Empty	Send an e-mail to vendor with the text: Vendor onboarding form is missing in the mail. Go to the next transaction
6	Relevant Fields	4	VendorName/ VendorAddress/ VendorCity/ VendorCountry	Send an e-mail to vendor with the text: Data missing for 'x' field. Go to the next transaction
7	Invalid Credentials	6	Invalid Credentials	Send an e-mail to support team with the text: Invalid Credentials. Go to the next transaction

3.4.2. Unknown Business Exceptions

An umbrella rule that includes a notification needs to be designed for all other exceptions that could happen and cannot be anticipated.

For all other cases which do not follow the rules defined an e-mail should be sent to: exceptions@acme.com with a screen shot and robot should proceed to next transaction.

3.4. Applications Errors & Exceptions Handling

A comprehensive list of all errors, warnings or notifications should be consolidated here together with the action to be taken for each by the Robot. There are 2 types of exceptions/errors:

Known = Previously encountered and action plan or workaround available for it (e.g. SAP unresponsive during peak times)

Unknown = these are exceptions and errors that cannot be anticipated but for which the robot needs to have a rule so that the RPA solution is sustainable.

3.5.1. Known Applications Errors and Exceptions

Details regarding how the robot should handle the exceptions.

#	Error/Exception Name	Action	Parameters	Actions to be taken
1	Application (Crash / Non-Responsive)	10	Application Unresponsive	Recover and retry 3 times

2	Webpage not loaded	5	Webpage Unresponsive.	Recover and retry 3 times
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3.5.2. Unknown Applications Errors and Exceptions

An umbrella rule that includes a notification needs to be designed for all other exceptions that could happen and cannot be anticipated.

Robot should attempt to access the application 3 times then it should terminate thread.

3.5. Reporting

In this section all the reporting requirements of the business should be detailed so that when the RPA solution is moved to production the administrators can track the performance of the solution.

Report Type	Update frequency	Details	Monitoring Tool to visualize the data
Process logs	Daily	How many times was this process run since the beginning of the month and what was the average run duration	Orchestrator
Transaction logs	Daily	How many transactions were run by this process since the beginning of the month and what was the average transaction duration?	Orchestrator
Error logs	Daily	Average number of errors by type per day	Orchestrator
MIS report	Daily	All transactions processed during the day	Excel file over an email to be sent

3.6. In Scope For RPA

The actions in scope for RPA should be listed below:

- Full Scope for RPA - the process is to be 100% automated.

3.7. Out Of Scope for RPA

The actions **out of scope** for RPA should be listed below together with the reasoning:

- There are no activities out of scope for RPA.

3.8. Change/Improvement details

Use this section to detail the list the change or improvement opportunity in the To-Be Process.

Important aspects to be mentioned: what is the initiative, expected outcome, expected completion date, contact person for details, and if will impact the current automation request.

#	Initiative Name	Process Action(s) where it is identified	Impact on current Automation Request	Expected Completion Date	Contact Person
	NA	NA	NA	NA	NA

IV. Other

4.1. Additional sources of process documentation

Item	Location
Video Recording of the process (Optional)	N/A
Business Rules Library (Optional)	N/A
Other documentation (Optional)	N/A
Standard Operating Procedure(s) (Optional)	N/A
High Level Process Map (Optional)	N/A
Detailed level process map (Optional)	N/A
Work Instructions (Optional)	N/A
Input Files (Optional)	N/A
Output Files (Optional)	N/A

4.2. Change requests

#	Date	Change description	Affected process steps / section	Change reason	Change initiator
	N/A	N/A	N/A	N/A	N/A

4.3. Document Approval