

Auto Samir Rayan

Dispatcher





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I. Introduction

I.1 Purpose of the document

The Process Definition Document outlines the business process chosen for automation using UiPath Robotic Process Automation (RPA) technology.

The document describes the sequence of actions performed as part of the business process, the conditions and rules of the process prior to automation and how they are envisioned to work after automating it, partly or entirely. This specifications document serves as a base for developers, providing them with the details required for applying robotic process automation to the selected business process.

I.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 item by 80%
- Better Monitoring of the overall activity by using the logs provided by the robots.

I.3 Process key contact

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 actions, context, impact and a set of process exceptions. The details are to be included in the table below.

| Role | Name | Contact details (email, phone number) | Notes |
|-------------|---------|--|-------|
| Software SA | Raya IT | | |

I.4 Minimum Pre-requisites for automation

- 1. A filled in Process Definition Document
- 2. Test Data to support development
- 3. User access and creation of user accounts (licenses, permissions, restrictions to create accounts for robots)

II. As-Is process description

II.1 Process Overview

General information about the process selected for RPA prior to automation.

| # | ltem | Description |
|----|---|---|
| 1 | Process full name | Auto Samir Rayan (Dispatcher) |
| 2 | Process Area | NA |
| 3 | Department | NA |
| 4 | Process short description (operation, activity, outcome) | Reads emails to extract car brand URLs, opens the Auto Samir Rayan portal, retrieves brand data, and dispatches the information as queue items to Orchestrator. |
| 5 | Role(s) required for performing the process | RPA Developer |
| 6 | Process schedule and frequency | Trigger By Time |
| 7 | # of items processed /reference period | Can vary widely based on email volume and processing time. |
| 8 | Process execution time | N-Time based on numbers of brands |
| 9 | Peak period (s) | N |
| 10 | Transaction Volume During Peak period | N |
| 11 | Total # of FTEs supporting this activity | Initially, 1-2 FTEs for development and implementation. Ongoing support may require 0.5 FTE. |
| 12 | Expected increase of volume in the next reference period | N |
| 13 | Level of exception rate | Normal |
| 14 | Input data | Mail messages |
| 15 | Output data | Queue Items |

^{*}Add more rows to the table to include relevant data for the automation process. No fields should be left empty. Use "n/a" for the items that don`t apply to the selected business process.

II.2. Applications used in the process

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.

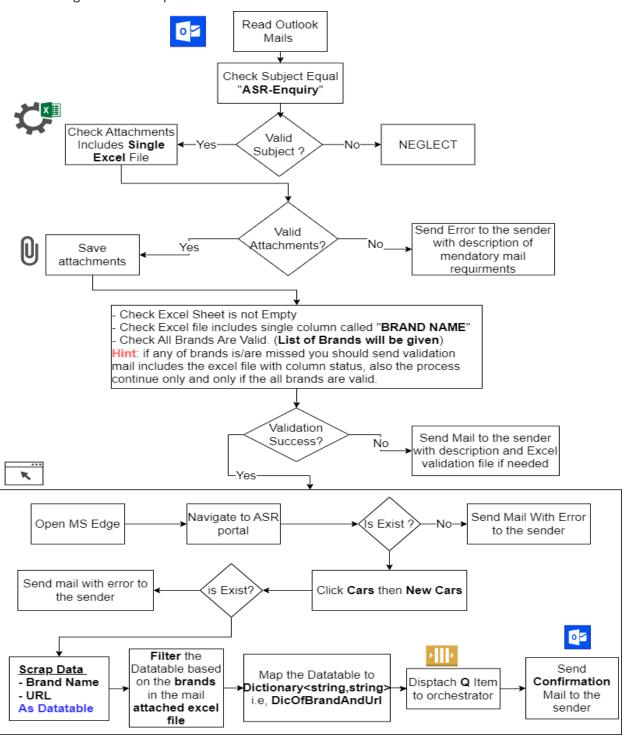
| # | Application name & version | System Language | Thin/Thick Client | Environment/ Access method | Comments |
|---|----------------------------------|--------------------|----------------------|-------------------------------|----------|
| 1 | Outlook Mail | English | Thin | UiPath Activities - API | |
| 2 | MS Edge | English | Thin | UiPath Activities - UI | |
| 3 | Excel | English | Thick | UiPath Activities - API | |

^{*}Add more rows to the table to include the complete list of applications.

II.3 As-Is Process map

High Level As-Is Process Map:

This chapter depicts the As-Is business process at a High Level to enable developers to have a high-level understanding of the current process.



II.4 Process statistics

High level statistics

| Processes | Windows | Action S | Mouse clicks | Keys pressed | Text entries | Hotkeys used | Time |
|-----------|---------|-------------|-----------------|-----------------|-----------------|-----------------|------|
| 1 | 2 | 5 | 2 | 0 | 0 | 0 | N |

Detailed statistics

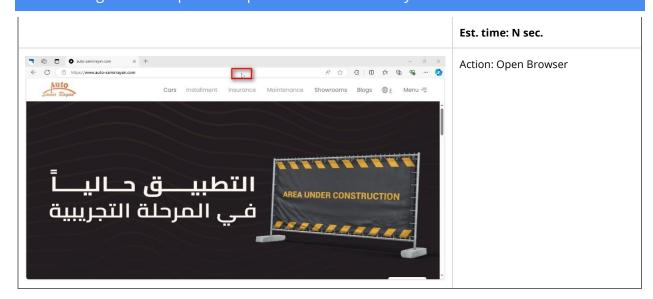
| Window name | Mouse Clicks | Text entries | Keys pressed |
|---|--------------|--------------|--------------|
| auto-samirrayan.com/cars - Work - Microsoft Edge | 1 | 0 | 0 |
| auto-samirrayan.com/new-cars - Work - Microsoft Edge | 1 | 0 | 0 |

II.5 Detailed As-Is Process Actions [UI Only]

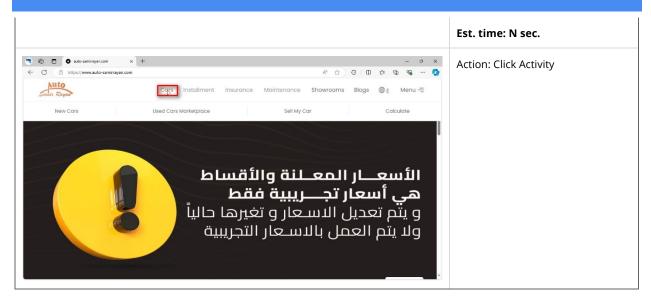
1. auto-samirrayan.com - Work - Microsoft Edge

Est. time: N sec.

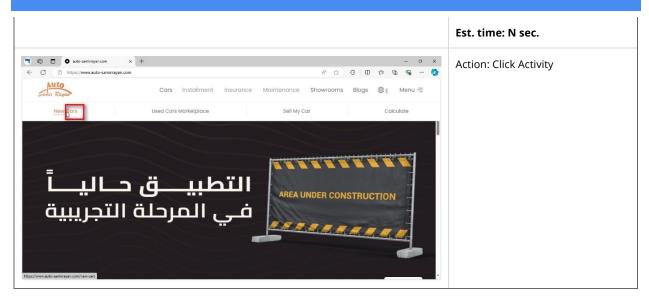
1.1 Navigate to ASR portal "https://www.auto-samirrayan.com/"



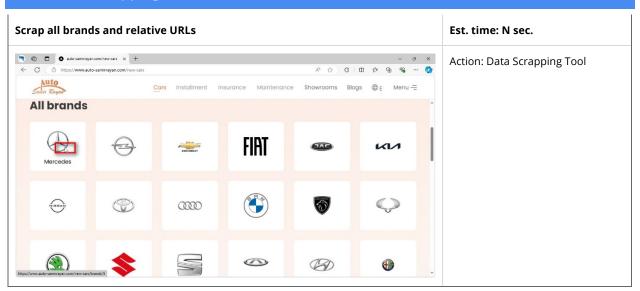
1.2 Click Cars



1.3 Click New Cars



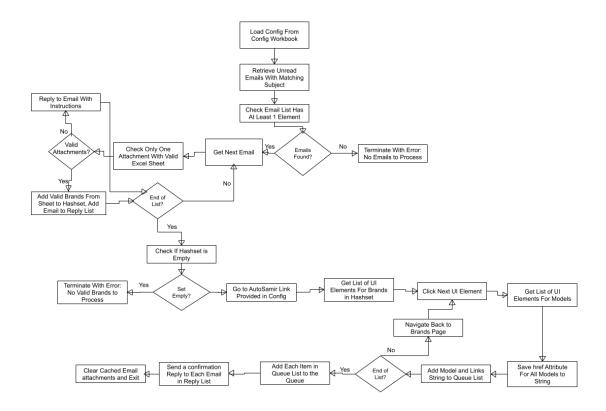
1.4 Data Scrapping



III. To-Be Process Description

This chapter highlights the expected design of the business process after automation.

III.1 To-Be Detailed Process Map



Highlight Bot interventions/ To-Be automated actions with different legend/ icon (purple)

*Mention below if process improvements were performed on the To-Be design and provide details

Process Improvements:

- Handles multiple emails at once, reducing processing time and duplicate queue transactions
- · Filters brands before scraping links instead of scraping every brand then filtering, significantly increasing efficiency
- Goes directly to new cars link (which can be changed in config) instead of relying on website navigation
- Dispatches one queue item per brand, containing brand name and a comma separated string of all its links, reducing number of queue transactions required
 - o Note: This is safe since commas are not valid characters in link
- Tracks which emails were valid and contributed to the hash set, then replies to each of them

• Note: error handling is in place while traversing brand ui elements, but is not explicitly detailed. Any errors will be retried (with a page refresh). If retries are not successful, an email reply is sent to all users on reply list

| Legend | Description |
|--------|---|
| 1 | Action number in the process. Referred to in details or Exceptions and Errors table |
| | This process action is proposed for automation |
| 0 | This process action remains manual (to be performed by a human agent) |

III.2 Parallel Initiatives/ Overlap (if applicable)

This chapter covers the proposed Business, Process & System changes to be made in the near future and their impact.

| S.No | Initiative Name | Process Acion(s) where it is identified | Impact on current automation request? How? | Expected Completion Date | Contact person for more details |
|------|-----------------|--|--|--------------------------------|---------------------------------------|
| | n/a | | | | |

III.3 In Scope of RPA

The activities **In scope of RPA**, are listed here:

☐ Retrieve and Process Emails:

- Use Get Outlook Mail Messages to retrieve emails.
- Check for emails with Excel attachments.
- Save attachments to a local directory.

☐ Read Excel File:

- Use Excel Application Scope to open the Excel file.
- Use Read Range to read data into a DataTable.
- Validate the given brands one of the next brands [Case-Insensitive]:

Mercedes, Opel, Chevrolet, Fiat, Jac, Kia, Nissan, Toyota, Audi, BMW, Peugeot, Ssang Yong, Skoda, Suzuki, Seat, Chery, Hyundai, Alfa Romeo, Porche, BYD, Jaguar, MG, Jeep, Jetour, DS, Citroen, Subaru, Changan,

Land Rover, Mini, Lexus, Haval, Forthing, Honda, Ford, Lada, Maserati, Mitsubishi, Renault, Volkswagen, Volvo, BAIC, Bestune, GEELY, DFM, Cupra, Soueast

☐ Open and Interact with Auto Samir Rayan Portal:

- Use Open Browser to launch the portal.
- Use Navigate To to go to the necessary page(s).
- Use Data Scraping to extract car brand information from the portal.
- Compare and filter extracted data based on the brands from the Excel file.

☐ Dispatch Queue Items:

- Use Add Queue Item to send filtered brand data to Orchestrator.
- Set up queue items with necessary details.

☐ Send Confirmation Email:

- Use Send Outlook Mail Message to send a confirmation email.
- Include details about the number of items processed and dispatched.

III.4 Out of Scope of RPA

The activities **Out of scope of RPA**, are listed here:

| Sub- process (if applicable) | Activity (action) | Reasons for Out of scope* | Impact on the To-Be | Possible measures to be taken into consideration for future automation |
|------------------------------------|-------------------|---------------------------------|---|---|
| 1.1 | 1.1.1 | Input: handwritten form | After processing action 1.1.2, an email is sent to the user to perform action 1.1.3 in a csv file | Collect the form in an editable pdf format and electronically signed |

| | In order to go to action 1.1.4, the robot will read the csv file | |
|--|--|--|
|--|--|--|

^{*}Add more rows to the table to reflect the complete documentation provided to support the RPA process.

III.5 Business Exceptions Handling

The Business Process Owner and Business Analysts are expected to document below all the business exceptions identified in the automation process. These can be classified as:

| Known | Unknown |
|---|---|
| Previously encountered. A scenario is defined with clear actions and workarounds for each case. | New situation never encountered before. It can be caused by external factors. Cannot be predicted with precision, however if it occurs, it must be communicated to an authorized person for evaluation. |

- o No emails to process
- o Bad email attachments
- Excel workbook does not contain exactly one sheet
- o Excel sheet is formatted incorrectly

Sheet contains invalid brands

Known Exceptions

The table below reflects all the business process exceptions encountered during the process evaluation and documentation. These are **known exceptions** that occurred before. For each of these exceptions, define a corresponding expected action that the robot should complete if it encounters the exception.

| BE # | Exception name | Action | Parameters | Action to be taken |
|---------|---|--------|------------|--|
| 1 | Invalid Mail attachments | BE | | Send error mail to the sender with details |
| 2 | Invalid excel file data | BE | | Send error mail to the sender with details |
| 3 | No emails to process | BE | | Terminate |
| 4 | Excel workbook does not contain one sheet | BE | | Send error mail to the sender with details |
| 5 | Excel sheet is formatted incorrectly | BE | | Send error mail to the sender with details |

Unknown Exceptions

For all other unanticipated or unknown business (process) exceptions, the robot should:

III.6 Application Error and Exception Handling

A comprehensive list of all errors, warnings or notifications should be consolidated here with the description and action to be taken, for each, by the robot.

Errors identified in the automation process can be classified as:

| Area | Known | Unknown | |
|-------------------------|---|--|--|
| Technology/Applications | Experienced previously, an action plan or a workaround available. | Never encountered before, or may happen independently of the applications used in the process. | |

Known Errors or Exceptions

The table below reflects all the errors identified in the process evaluation and documentation.

For each of these errors or exceptions, define a corresponding expected action that the robot should complete if it is encountered.

| # | Error name | Action | Parameters | Action to be taken |
|---|---|------------|---------------|--|
| 1 | Application Crash / Internal Server Error | Any action | Error message | Recover & retry for maximum 3 times. Close the applications and run the sequence again |

Unknown Errors and Exceptions

For all the other unanticipated or unknown application exceptions/errors, the robot should:

Log the error, retry a maximum of 3 times, then terminate process.

III.7 Reporting

| # | Report type | Update frequency | Details | Monitoring Tool to visualise the data |
|---|------------------|---------------------|--|---------------------------------------|
| 1 | Process logs | Daily | How many times was this process run since the beginning of the month and what was the average run duration? | Kibana |
| 2 | Process logs | Monthly | How many robots worked on this process per each month? | Csv file posted daily on share drive |
| 3 | Transaction logs | Daily | How many transactions were run by this process since the beginning of the month and what was the average transaction duration? | Kibana |
| 4 | Error logs | Daily | Average number of errors by type per day | Kibana |
| 5 | Error logs | Daily | All errors per month grouped by type | Csv file posted daily on drive |

^{*} For complex reporting requirements, include them into a separate document and attach it to the present documentation

IV. Other Observations

Include below any other relevant observations you consider needed to be documented here.

Example: Specific Business monitoring requirements (audit and reporting) etc.

V. Additional sources of process documentation

If there is additional material created to support the process automation please mention it here, along with the supported documentation provided.

| Additional Process Documentation | | | | | |
|--|--|--|--|--|--|
| Video Recording of the process (Optional) | | | | | |
| Standard Operating Procedure (s) (Optional) | | | | | |
| Business Rules Library (Optional) | | | | | |
| Other documentation (Optional) | | | | | |

^{*}Add more rows to the table to reflect the complete documentation provided to support the RPA process.