Process Definition Document

*Process Name: Invoice Scraping*

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# Introduction

## 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 steps 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.

## Objectives

The process has been selected for RPA as part of the project initiative conducted within Techno Computers Inc., the Finance department.

The objective of this process automation is linked to the project business case and is mainly intended to:

* Deliver faster processing
* Reduce redundant activities
* Improve overall performance and reliability

## 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 steps, 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 |
| Process Owner | Purnima Singh | [Ps.iec.953@gmail.com](mailto:Ps.iec.953@gmail.com) +1224-830-5525 |  |
| Business Analyst | Purnima Singh | [Ps.iec.953@gmail.com](mailto:Ps.iec.953@gmail.com) +1224-830-5525 |  |

## Minimum Prerequisites for Automation

|  |  |
| --- | --- |
| Met (Y/N) | Prerequisites |
|  | A filled in and completed Process Definition Document |
|  | Closure of any open process questions |
|  | Environment set up |
|  | Test Data to support development and testing |
|  | User access and creation of user accounts (licenses, permissions, restriction to create accounts for robots) |

# As-Is Process Description

## Process Overview

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

|  |  |  |
| --- | --- | --- |
| # | Item | Description |
| 1 | Process Full Name | Invoice Scraping |
| 2 | Process Area | Personal |
| 3 | Department | Finance |
| 4 | Process Short Description  (operation, activity, outcome) | A process that will scrape relevant data from the invoices for further processing. The Robot will read through emails and download the invoices received in the form of an email attachment as a PDF. It will extract specific data and store those values in an Excel spreadsheet and a subset of values will be uploaded to the Orchestrator Queue. And finally, the robot will email the spreadsheet to yourself when finished. |
| 5 | Role(s) required for performing the process | Any |
| 6 | Process schedule and frequency | As needed (recommended End of Day [EOD]) |
| 7 | # of items processed /reference period | 100-150 invoices |
| 8 | Process execution time | 4-5 seconds/invoice |
| 9 | Peak period(s) | N/A |
| 10 | Transaction Volume During Peak period | N/A |
| 11 | Total # of FTEs supporting this activity | N/A |
| 12 | Expected increase of volume in the next reference period | N/A |
| 13 | Level of exception rate | N/A |
| 14 | Input data | Invoices as an attachment over email |
| 15 | Output data | Order details uploaded to Orchestrator Queue |

\*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.

## 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 steps in the flow.

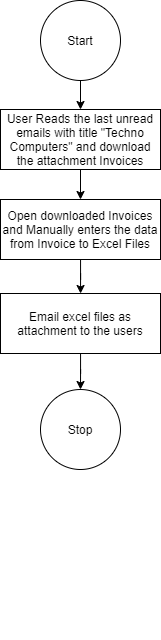
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Application Name & Version | System Language | Thin/Thick Client | Environment/ Access Method | Comments |
| 1 | Gmail | English | Thin | PC |  |
| 2 | Microsoft Office Excel 2019 | English | Thin | PC |  |
| 3 | Adobe Reader PDF | English | Thin | PC |  |

\*Add more rows to the table to include the complete list of applications.

**-------------Complete the rest of the document and submit along with your final submission.-------------**

## 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.



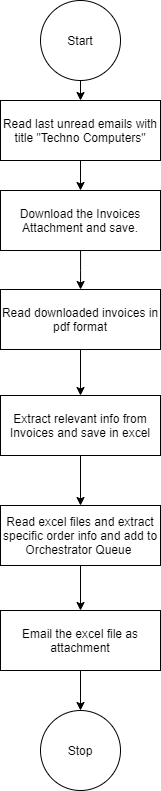
**Detailed Process Map:** This chapter depicts the As-Is business process at a detailed view to enable process owners to document their process

|  |  |  |  |
| --- | --- | --- | --- |
| # | Step Action/Description | Screenshot | Remarks |
| 1 | Business user reads the last unread emails titled” Techno Computers” and download the attachment Invoices. |  |  |
| 2 | Business user opens the Invoices one by one and enters the data from PDF to excel file |  |  |
| 3 | Send the Excel file as attachment to the users |  |  |

# To-Be Process Description

## Detailed Process Map

**High Level To-Be Process Map:** This chapter depicts the To-Be automation process at a High Level to enable developers/COE to have a high-level understanding of the to be developed process.



**Detailed Process Map:** This chapter depicts the To-Be automation process at a detailed view to enable developers/COE to see the workflows involved in the RPA solution

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Workflow Name** | **Description** | **Pre-conditions** | **Post-actions** | **Arguments** | **Notes** |
| Main Workflow | This flow orchestrates the process of reading email, reading invoices, extract specific values to add to Queue and sending created excels in mail as attachment | UiPath robot should be installed, Microsoft office should be installed on the system, google settings for less secure applications should be enabled. | Bot Agent interacts with Gmail application, Excel, and PDF applications. |  |  |
| Read Emails | 1. Read emails and download Invoice PDFs, if Email subject is "Techno Computers" 2. Save those Invoices in the newly created Month folders 3. Fetch invoice title and validate the title format. | 1. 1.Unread “Techno Computers” titled emails should be present in the inbox. 2. Bot should successfully extract the Orchestrator Asset values of Email id,password , Excel Root Directory Path, Invoice root directory path and Archive folder path. | Bot will fetch the last unread “x” number of emails , download their attachments and save attachments as pdf files. | In\_UserName,  In\_Password, In\_InvoicePath |  |
| Read Invoices | 1. Read PDF invoices 2. Extract Order Information details, Customer name, Invoice Number and Invoice date. 3. Save the Order Information details in Excel file 4. Excel file will be titled as “Customer Name \_Invoice Number” 5. Save the excel in newly created date wise folder. | 1.Invoices should be present in .PDF format and title format should be like ”CustomerName\_Date\_InvoiceNumber”.  2. Bot should be able to fetch Invoice Folder root directory path,Excel Folder root directory path and Archive Folder path values from the Orchestrator. | Bot will extract the required data from PDF file and append the same in excel file separately for each Invoice. PDF Files will be moved to Archive Folder and folders will be deleted. | In\_InvoicePath,  In\_ExcelPath,  In\_ArchivePath |  |
| Queue Item Creation | 1. Read excel files 2. Extract Sub Total, Total and GST value. 3. Add Orchestrator Queue” Invoice Scraping”. 4. Add these values as detail of queue item. 5. Send Excel file as attachment over the email to the user. 6. Process will end once all the above-workflows are executed for all Downloaded Invoices. | 1.Excel files “CustomerName\_InvoiceNUmber”should be present with the Order Information Details.  2.Email id and password credential values and Excel Folder root directory path and Archive Folder root directory path values should be fetched from the orchestrator. | 1. 1.Queue item will be successfully created in the Orchestrator “Invoice Scraping Queue. 2. Excel file will be mailed to the users as an attachment. 3. Excel files will be moved to Archive folder and Excel folders will be deleted. Process will end. | In\_ExcelPath,  In\_UserId  In\_Password, Queue Name,  In\_ArchivePath |  |

## Robot Type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Attended | Unattended | Trigger | Comments |
| 1 | No | Yes | 1 | Orchestrator community version used |

## 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 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 | Step | Parameters | Action to be Taken |
| 1 | Format Exception | Read Email workflow | Customer Name, Invoice Number, Date | Catch exception and log it. |
| 2 | Selector not found Exception | Read Invoice Workflow | Customer Name, Invoice Number, Invoice Date | Catch exception and log it. |
| 3 | System Exception | Queue Item Creation | Sub Total, Total, GST | Catch exception and log it. |

### Unknown Exceptions

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

* give System. Exception.

## System Exceptions 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:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SE # | Exception Name | Step | Parameters | Action to be Taken |
| 1 | Authentication Exception | Read Email |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

For all the other unanticipated or unknown system exceptions, send an email to **<placeholder>** and attach a screenshot of the error message.

# Other Observations

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

# Additional sources of process documentation