# **Process Definition Document**

## Process Name: Invoice Scraping



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#### Introduction

#### I. 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.

### II. 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

#### III. 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	Niyaz Ahmed	niyaz.ahmed@uipath.com	
Business Analyst	Niyaz Ahmed	niyaz.ahmed@uipath.com	

#### IV. Minimum Prerequisites for Automation

Met (Y/N)	Prerequisites
Υ	A filled in and completed Process Definition Document
Υ	Closure of any open process questions

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Υ	Environment set up
Υ	Test Data to support development and testing
	User access and creation of user accounts (licences, permissions, restriction to create accounts for robots)

# As-Is Process Description

### I. 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

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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

<sup>\*</sup>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. 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.

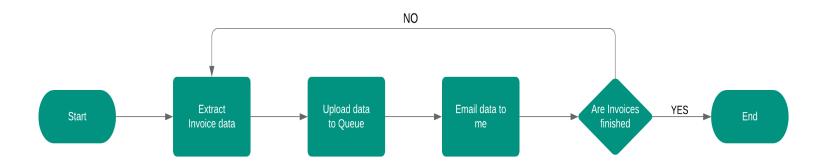
#	Application Name & Version	System Language	Thin/Thick Client	Environment/ Access Method	Comments
1	Microsoft Outlook Version 2006	English	Thin	PC	The Email should be signed in.
3	Adobe Reader PDF	English	Thin	PC	

<sup>\*</sup>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.-----

## III. As-Is Process Map

## High-level Process Map



3 version

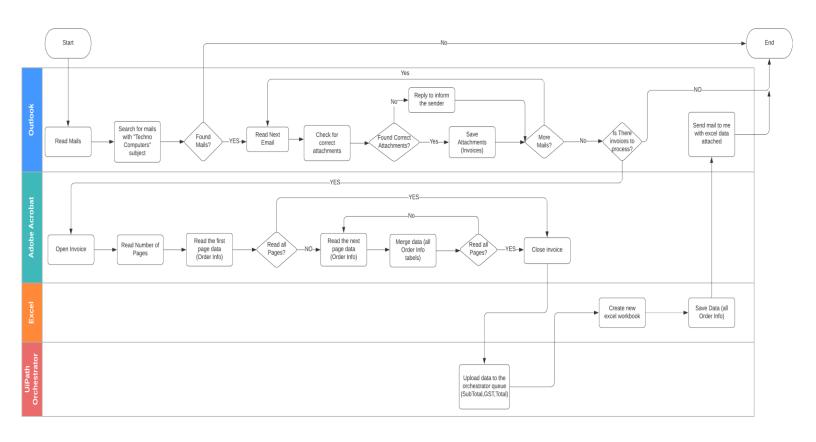
**Detailed Process Map:** This chapter depicts the As-Is business process at a detailed view to enable process owners to document their process

#	Step Action/Description	Screenshot	Remarks
1	Open Outlook	n/a	
2	Open Mails / Mails subject should be "Techno Computers"	Techno Computers  abd-dischemad(8098) gmail.com Is Abdelschemad(8098) gmail.com Is Abdelschemad(8098) gmail.com Is Abdelschemad (8098) gmail.com Is Abdelschemad(8098) gmail.com Is Abdelschem	
3	Save all attachments / Attachment name should be in this format (CustomerName_InvoiceDate_In voiceNumber.pdf)	Save All Attachments X  Attachments:  JaneDoe_01092020_130792.ps  Close	If there was no attachment with the proper naming reply for that mail to inform the sender.
4	Open attachments / open the downloaded attachments one by one using adobe acrobat reader	Technology Campington	
5	Read required data / invoice number, invoice date and all the order information	Doe David Sept 1, 2000	The order information can be in more than one page.
6	Save order info / create a new excel file and save all the order information to it.	A   B   C   D   E	

7	Upload customer details in a queue / upload Sub-Total, GST and Total to a queue.	n/a	
8	Mail the excel file / mail the excel file to (abdelrahman6898@gmail.com) with this subject: "Course 2 Automation: CustomerName_InvoiceNumber details uploaded to queue"	From  AbdelrahmanAbdelgawad_2020@szhar.edu.eg  To abdelrahman6998@gmail.coms  Cc Subject Course 2 Automation: JaneDoe_130792 details uploaded to queue  AsneDoe_130792.xtsx   8 KB	
9	Repeat for all invoices / repeat steps 4-8 for all the downloaded invoices.	n/a	

# To-Be Process Description

## I. Detailed Process Map



Workflow Name	Description	Pre-conditions	Post-actions	Arguments	Notes
SaveAttachments	A flow that reads the last 150 unread mails from outlook that has a subject as	-Outlook application installed and signed in.	Invoices PDFs successfully saved in the current	out_InvoicesFolder in_MailsSubject	Invoked in the main workflow.

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	the provided in the arguments and then saves all the attachments that follow a certain regular exception ([a-zA-Z]+_[0-9]{8}_[0-9]+.pdf).	-Unread mail messages with the provided subject. -Attachments follows the naming rule.	project directory.		
InvoicesScraping	A flow that opens all the downloaded invoices, scrapes all the required data from them and performs all the other necessary processes on the collected data.	-Invoices folder exists and contains the Invoices as PDF. -Adobe acrobat reader is closed at beginning of the workflow.	-Invoices numbers and dates lists are not empty.	in_InvoicesFolder out_InvoicesNumbers out_InvoicesDates	Invoked in the main workflow.
SaveInvoicesOrderInfo	This flow creates a new excel file and saves the provided data table to that file.	-Not empty data table to be saved in the excel file.	-The excel file is created and saved successfully.	in_OrdeInfos in_InvoicesFolderPath in_InvoiceName out_ExcelFilePath	Invoked in InvoicesScrapin g workflow.
SendMails	Sends a file through an outlook mail to "MyEmail".	The provided file path is correct and "file exists".	The File is sent successfully.	in_FilePath in_InvoiceName	Invoked in InvoicesScrapin g workflow

# II. Robot Type

#	Attended	Unattended	Trigger	Comments
1		✓		

## III. 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	Found no mails with the provided subject.	Read Mails	n/a	Mail me with the exception and end the process.
2	Found no correct attachments to process.	Read Mails	n/a	Mail me with the exception and end the process.

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### **Unknown Exceptions**

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

• Mail me with the exception and end the process.

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## IV. 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	Could not find invoices folder.	Invoices Scraping	n/a	Retry for maximum of 3 times.
2	Adobe Acrobat application fail.	Invoices Scraping	n/a	Retry for maximum of 3 times, close the application before retrying again.
3	Could not scrape invoices' date or numbers.	Invoices Scraping	n/a	Retry for maximum 3 times, each time scrape the data from the invoice again.
4	There is no data to save it in excel sheet.	Save Invoice's Order Information.	n/a	Retry for maximum 3 times, each time scrape the data from the invoice again.
5	Could not save the excel file.	Save Invoice's Order Information.	n/a	Retry for maximum 3 times, each time scrape the data from the invoice again.
6	File to be sent does not exist.	Send Mail (with attachment)	n/a	Retry for maximum 3 times, each time scrape the data from the invoice again make sure the excel file saved.

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