

Process Design Document

Automation of Offer Letter Generation

Process Design Document History

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| --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Version** | **Role** | **Name** | **Organization** | **Function** | **Comments** |
| 24.06.2022 | 1.0 | Draft | Shakthi Ramani  Jyothi J S  Anyatha K | Her Second Innings | Trainee | Creation  V1.0 |
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**Date Version Role Name Organization Function Comments**

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1. Introduction

* A Process Design Document (PDD) is a document that captures the flow of a business process to be developed within RPA.
* The PDD is used in RPA implementations to communicate business processes to be automated and facilitate development.
* The PDD contains the process flow and sequence of steps for the current manual (as-is) process as well as the automated (to-be) process, and the various exceptions, conditions and rules of the business process to be automated.
* The documentation will give the description of the design of the project fully enough to allow the software development to proceed with understanding of what is to be built and how it is expected to build.



* When there is bulk hiring, at the end of the recruitment there will be a huge list of candidates whom the HR (Human Resources) needs to send n number of letters to the selected candidates which is repetitive and mundane in nature. So building this project to automate generate offer letters with the help of RE Framework.
* The main objective of process automation is to:
* Reduce costs.
* Reduce process time.
* Increase productivity.
* Reduce mistakes.
* To replace activities with manual ones or to reuse the software.
* Improve overall performance and reliability.

2. AS IS Process Description

General information about the process selected for RPA implementation, prior to its automation:

|  |  |
| --- | --- |
| AS IS Process Details | |
| **Process Full Name** | Automation of Offer Letter Generation. |
| **Process Short Description**  **(Operation, Activity and Outcome)** | Generate offer letter for hired candidates. |
| **Role Required for performing the process** | System 1 User |
| **Process Schedule** | Every time after hiring of candidate’s process. |
| **# of item processes one day** | 25 - 30 candidates |
| **Average handling time per candidate** | As per company standards. |
| **Peak period(s)** | Campus Recruitment, Bulk Hiring |
| **# of FTE’s supporting this activity** | 3 |
| **Level of exception rate** | Depends on the number of candidates hired. |
| **Input Data** | Excel file with candidate’s details, Offer Letter Template |
| **Output Data** | Sending offer letters to the hired candidates in pdf format via candidates respective email-ID’s. |

2.1.1 In scope for RPA

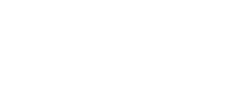
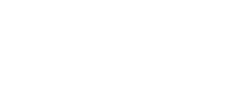
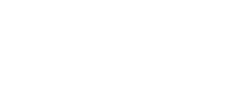
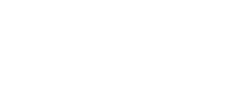
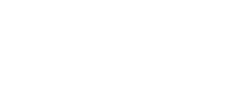
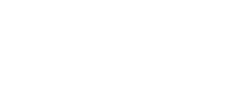
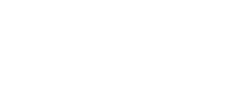
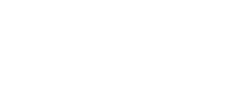
The activities and exceptions in this process that are in the scope for RPA, are:

* To replace repetitive, mundane, rule-based processes with software bots.
  + 1. Out of scope for RPA
    - The human resources (HR) should fill up the correct details of the interviewed candidates.
    - The offer letter template is constant format.

2.2 Detailed Process Map

This chapter presents the chosen process in detail, which enables the developer to build the automated process.

Filter Data table based on type status and load the data into a new table.



Using filtered data, Generate offer letter in the word format.

Read the excel file from specified location.

Load data from excel file into a new data table.

Start

Read the offer letter template.

Save the generated offer letters in a folder.

Convert the offer letter to PDF format.

Mail the offer letter to the candidates to their respective email-ID.

END

|  |  |
| --- | --- |
| Steps | Short Description |
| **1** | Read the Excel file which contains candidate’s info from the specified location. |
| **2** | After reading load the data from the excel file into a new data table. |
| **3** | Filter the data table using “Filter Data Table” activity, by on the type of status value. |
| **4** | Create a new data table for the filtered data that contains data of hired candidates. |
| **5** | Using filtered data table generate offer letter for each candidate in the word format. |
| **6** | Save the generated offer letters in a folder. |
| **7** | Convert generated offer letter format from word document to .pdf format. |
| **8** | Mail offer letters to the candidates to their respective email-ID’s. |

**STEP Short Description**

2.3 Detailed Mapping Process

The complete set of steps in the process, including keystrokes and clicks, are to be defined with screenshots. If there are any data restrictions, mask the sensitive information, such as Policy Number, Customer ID, bank account number, etc.).

|  |  |  |  |
| --- | --- | --- | --- |
| Steps | Description | Screenshot  Screenshot 2022-06-26 162044.png | Result |
| **Step 1** | Read the Excel file which contains candidates’ info from the specified location. |  |  |
| **Step 2** | Using Read Range activity, load the data into a new data table. |  | The data is stored in a new data table. |
| **Step 3** | Filter the Table , where condition is based on type “Status” and the value of status is “Hired”.  Create a new data table for the filtered data. |  | The data table will only contain the data of the candidates which is filtered by status type. |
| **Step 4** | Read the Offer Letter Template from a specified location which is in Microsoft word format. | offer letter template.png |  |
| **Step 5** | Using the filtered data table generate offer letters for each candidate in the Microsoft Word format, using the given offer letter template. | OfferLetter_Candidate.png | The offer letter is generated for each candidate with their Name, Address and employee ID. |
| **Step 6** | The generated offer letter is saved in a folder in a specified location. |  | The Microsoft word format offer letter file is stored in a specified location. The file name od each letter is stored by the Employee ID as the File name |
| **Step 7** | Convert each offer letter from Microsoft Word to a PDF format.  The PDF format offer letter is stored in a specified location. | Offer letter_PDF.png | The file is stored with employee ID as the file name in a specified location. |
| **Step 8** | Using filtered data table, the PDF format offer letter are sent to the respective candidates via E-Mail. |  |  |

2.4 Exceptions Handling

The types of exceptions identifiable in the automation process can be classified according to the table below.

**Area Known Unknown**

**Business**

Previously encountered situation. A possible scenario is defined, and clear actions and workarounds are

provided for each case.

A situation never encountered before. It can be caused by external factors.

Based on the above criteria, the table below should reflect all the known exceptions identified throughout the process and map the expected action the robot needs to take in each case.

Insert as many rows as required in the table, to capture all exceptions in a comprehensive list.

**Exception**

**#**

**name**

**Step where exception is**

**encountered**

**Parameters Action to be taken**

Business Rule Exception.

1

Reading new candidate data from excel.

Prompt Message:

No new candidate data has been added or updated in the excel file.

If no new candidate data is added or updated

Unable to read excel file or the file is corrupted.

Prompt Message:

File might be corrupted or unable to read the file.

Reading Excel file or while extracting data

2 System.Exception

2.5 Error Mapping and Handling

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

The errors identified in the automation process can be classified according to the table below.

**Area Known Unknown**

**Technology**

Previously encountered situation

- action plan or workaround available.

A situation never encountered before, or may happened independent of the

applications used in the process.

Based on the above criteria, the table below should reflect all the identifiable errors in the process, and map the expected action of the Robot in each case.

Insert as many rows as required in the table, to capture all the errors in a comprehensive list.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Error Name** | **Step where error is encountered** | **Parameters** | **Actions to be taken** |
| 1 | Network Error | When running the process. | If connection is lost or network fluctuation or connection is poor. | Prompt Message:  Check for network connection o your desktop. Else contact IT department of your organization. |
| 2 | Email ID | When executing the process. | While sending emails if incorrect senders’ email is provided. Make sure use of correct port fort sending emails. | Prompt Message:  Error in sending message.  Check Senders details. |

2.6 In-Scope Application Details

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| # | Application name & Version | Syst. Lang | Login Module | Interface | Environment/Access Method | Comments | |
| 1 | Microsoft Excel 2016  V16.0 | English | Desktop | Desktop | Desktop | To save data and file path of the excel file. |
| 2 | Microsoft Word  2016  V16.0 | English | Desktop | Desktop | Desktop | Use the application to create the offer letters in Microsoft word format.  Software can be used to save file in PDF format also.  Also, to view word format offer letter file. |
| 3 | Adobe Acrobat DC  V22 | English | Desktop | Desktop | Desktop | To view the PDF format offer letter files. |

The table below lists all the applications that are used as part of the automated process.

2.7 Reporting

|  |  |  |  |
| --- | --- | --- | --- |
| Report# | Report Type | Update Frequency | Details |
| 1 | Zoom Calls | Two days in a week | Reporting the progress of  the automated project. |

3. Development details

3.1 Prerequisites for development

• Development or testing environment are to be provided for development purposes.

•The provided development and testing environments are exact replicas of the production environment.

•Dedicated system and application access are given to developers with the adequate

permissions.

Users manage their own passwords. There are no special policies in place.



Login details (user IDs and passwords) should be stored under **Windows Credential Manager** or

**UiPath Orchestrator Assets**.

4. Document Approval Flow

**Version Flow Role Name**

**Organization**

**(Dept.)**

**Signature**

**and Date:**

Her

1.0 Document Prepared by: RPA Trainee Jyothi J S Second Innings

Her

1.0 Document Prepared by: RPA Trainee Shakthi Ramani Second Innings

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1.0 Document Prepared by: RPA Trainee Anyatha K Second Innings

5. Appendix

**Note: this step is to be filled in after automation process is complete**

**Automation overview**: (time to dev, test, etc.)

**Robots type**: Unattended

**Level of human intervention required**:

**Use of Orchestrator**:

**Exceptions recorded in automation process**: **Errors identified in the automation process**: **Challenges identified in the automation process**: **Lessons Learned**:

**Any adjustments** made to facilitate the automation process and any steps taken to shift from the human way of working to the automatic one. Any activity performed to improve the As Is process and to enable higher rates of automation of the process:

➢Process Assumption

➢Input data assumption

➢Number or types of input to be received

➢Skipping the login interface and collecting backend details

➢Extracting backend data without opening the file

➢Data conversion / formatting

**Reporting:** The details and format of the logging mechanism available in the workflow have to be specified here, whether it is a local log report or the Orchestrator log).

The format should be specified by the business users.

**Workflow and scripts:** A brief overview of each workflow and the sequence in which it is executed should be provided here.