Process Definition Document  
Process: Employee Pay Adjustment  
Process Owner: Parui, Tanumoy



Document History

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| --- | --- | --- | --- | --- | --- |
| **Date** | **Version** | **Role** | **Name** | **Function** | **Comments** |
| 18.04.2025 | 1.0 | Candidate | *Rakshit Bhadoria* |  | Initial Draft |
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## Introduction

### Purpose of the document

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, 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).

### 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** |
| ***Process SME*** | Parui, Tanumoy | Tanumoy.parui@natwestmarkets.com |
| ***Process Reviewer /*** | *Surname, Name* | [Name.surname@domain.com](mailto:Name.surname@domain.com) |
| ***Process Owner/ Approver for production*** | *Surname, Name* | [Name.surname@domain.com](mailto:Name.surname@domain.com) |

### Minimum Pre-requisites for automation

1. Filled in Process Definition Document
2. Test Data to support development
3. Testing environment setup to support development process.
4. User access and user accounts creations (licenses, permissions, restrictions to create accounts for robots).
5. Credentials (user ID and password) required to log on to machines and applications.
6. Data security review.
7. Testing environment setup

## As IS process description

### Process Overview

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

|  |  |  |
| --- | --- | --- |
| # | Item | Description |
| 1 | **Process full name** | *Employee Pay Adjustment* |
| 2 | **Process Area** | *Human Resources (HR) / Payroll* |
| 3 | **Department** | *HR* |
| 4 | **Process short description** | *This RPA process reads employee details from an Excel file, updates salaries based on experience and skill mapping, generates a salary report (HTML + chart), and sends it via email.* |
| 5 | **Role(s) required for performing the process** | *- RPA Developer (for implementation and deploying)*  *- Business Analyst (for requirement gathering)* |
| 6 | **Process schedule and frequency** | *Twice a week* |
| 7 | **# of items processes /month** | *~20 employee records (depends on HR update frequency)* |
| 8 | **Average handling time per item** | *~5 seconds per employee* |
| 9 | **Peak period (s)** | *End of month (for payroll processing)* |
| 10 | **Input data** | *- EmployeeDetails Excel sheet (with ID, Name, Experience, Skill)*  *- reference Excel sheet (mapping Experience range + Skill → Salary)* |
| 11 | **Output data** | *- Updated employeeDetails Excel sheet (with Salary)*  *- HTML report with chart*  *- Email confirmation with report attached* |
| 12 | **Dependencies**  (upstream, downstream) | *N/A* |

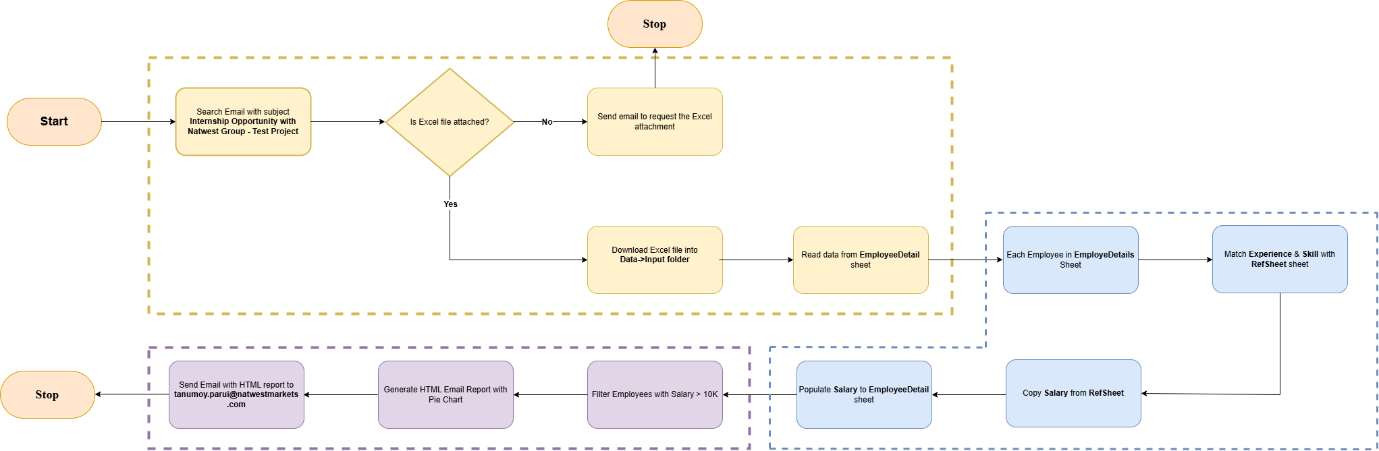
### Applications used in the process

The table includes a comprehensive list all the applications that are used as part of the process automated, at various steps in the flow.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | Application name & version | System  Language | Login Module | Interface | Environment/  Access method | Comments  (Include URLs) |
| *1* | *Microsoft Excel 365* | *EN* | *N/A* | *Desktop Application* | *Local desktop* | *Used for reading employee details and reference data, and writing updated results.* |
| *2* | *Outlook 365 / SMTP* | *EN* | *Windows Login* | *Desktop / SMTP* | *Outlook Desktop or SMTP Config* | *Used to send the HTML report via email.* |

### Detailed Process map

This chapter depicts the AS IS business process in detail to enable the developer to build the automated process.



|  |  |
| --- | --- |
| Step ID | **1** |
| ***Step Title*** | *Search for Email* |
| ***Screenshot*** |  |
| ***Step Description*** | *Search in mail inbox for an email with the subject* ***"Internship Opportunity with Natwest Group - Test Project".*** |

|  |  |
| --- | --- |
| Step ID | **2** |
| ***Step Title*** | *Check Excel Attachment* |
| ***Screenshot*** |  |
| ***Step Description*** | *Verify whether the email has the necessary Excel file attached:*  *If yes, save the file to the* ***Data → Input folder****.*  *If not, halt the process by sending a follow-up email asking for the attachment.* |

|  |  |
| --- | --- |
| Step ID | **3** |
| ***Step Title*** | *Read EmployeeDetails Sheet* |
| ***Screenshot*** |  |
| ***Step Description*** | *Read data from the* ***EmployeeDetail*** *sheet by opening the downloaded Excel file.* |

|  |  |
| --- | --- |
| Step ID | **4** |
| ***Step Title*** | *Update Salary* |
| ***Screenshot 1*** |  |
| ***Screenshot 2*** |  |
| ***Step Description*** | *Compare the* ***experience and skill*** *of each employee (in* ***EmployeeDetail*** *sheet) with the* ***RefSheet*** *sheet* ***(Screenshot 1)****.*  *Populate the salary in the Salary column (in* ***EmployeeDetail*** *sheet,* ***screenshot 2****) after obtaining it from the* ***RefSheet.*** |

|  |  |
| --- | --- |
| Step ID | **5** |
| ***Step Title*** | *Filter Employee – Have 10K Salary* |
| ***Screenshot*** |  |
| ***Step Description*** | *Employees with salaries over* ***10K*** *should be filtered out from* ***EmployeeDetail*** *Sheet and saved for reporting.* |

|  |  |
| --- | --- |
| Step ID | **6** |
| ***Step Title*** | *Generate HTML Report and send email* |
| ***Screenshot*** |  |
| ***Step Description*** | * *Make a pie chart in an HTML report that displays the salary distribution of workers making above 10K.* * *Use the SMTP/Outlook to send the HTML report to* ***tanumoy.parui@natwestmarkets.com*** *via email.* |

## To BE Process Description

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

### In Scope for RPA

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

1. *Reading employee and reference data from Excel sheets*
2. *Updating the employee sheet's salary column*
3. *Pie chart-based HTML Email report generation with attachment*
4. *The process is scheduled to run twice*

### Out of Scope for RPA

The activities **OUT of scope of RPA**, are listed here. Mention of the changes/ improvement opportunities identified for automation are out of scope for this automation iteration.

1. *Handling bounce backs or unsuccessful email deliveries*
2. *Changing the reference salary rules*

### 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** | **Unknown Exceptions** |
| 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. |

#### Known Exceptions

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

|  |  |  |  |
| --- | --- | --- | --- |
| **SNo** | **Exception name** | **Parameters** | **Action to be taken** |
| ***1*** | *Missing attachment* | *If attachment is missing* | *send email by using* ***Reply email*** *function*  *“Hello,*  *The current email is missing the EmployeeSalary file in Excel format. Please resend the email with the file attached.*  *Thank you”* |
| *2* | *Missing Experience/Skill Value* | *Null or blank fields* | *Skip that row, log the employee ID for review* |
| *3* | *Invalid Experience Format* | *Non-numeric or out-of-range value* | *Skip row, log the error in output log file* |

#### Unknown Exceptions

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

* *send an email notification at* [*XYZ@domain.com*](mailto:exceptions.invoiceprocessing@domain.com) *with the original email and error message screenshot attached.*

### 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, action plan or workaround available for it. | New situation never encountered before, or may happened independent of the applications used in the process. |

#### Know Errors or Exceptions

The table below reflects all the errors identifiable 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **AE #** | **Error name** | **Step** | **Parameters** | **Action to be taken** |
| ***1*** | *Outlook /SMTP stops responding* |  | *Error message* | * *Wait for application to respond. Retry (3 times).* * *Close application and run the sequence again. If still fails, log & escalate* |
| ***2*** | *Excel not opening / responding* | *Step 4* | *Error Message* | * *Wait for application to respond. Retry (3 times).* * *Close application and run the sequence again. If still fails, log & escalate* |

#### Unknow Errors and Exceptions

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

* *send an email notification at* [*XYZ@domain.com*](mailto:exceptions.invoiceprocessing@domain.com) *with the original email and error message screenshot attached.*

## Other Requirements and Observations

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

### 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **AE #** | **Report Type** | **Reporting frequency** | **Details** | **Action** |
| ***1*** | *Activity Performance* |  | *Report of transactions that were run by this process successfully* | *This email will include the following information:*    *Status (Success)* |
| ***2*** | *Fault Reporting* |  | *Report of transactions that weren’t run by this process due to an error or the defined exceptions.* | *This email will include the following information:*  *Status (failed), Error Message* |

## Document Approval

This document requires serial approval (sign off) from the roles defined in the table below.

Changes to the requirements must be documented in an updated version (i.e v 2.0) and requires a new signature flow.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Version** | | **Flow** | **Role** | **Name** | **Organization**  **(Dept.)** | **Approval Date:** |
| **1.0** | **Document prepared by** | |  | *Bhadoria, Rakshit* |  |  |
| **1.0** | **Document Approved by:** | | ***Process Owner*** | *Surname, Name* |  |  |
| **1.0** | **Document Approved by:** | | ***Operations*** | *Surname, Name* |  |  |
| **1.0** | **Document Approved by:** | | ***Compliance*** | *Surname, Name* |  |  |
| **1.0** | **Document Approved by:** | | ***RPA Architect/ Developer*** | *Surname, Name* |  |  |