**Process**

**Design**

**Document**

*MRI*

Document History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Version** | **Role** | **Name** | **Comment** |
|  | 1.0 | Business Analyst |  | Created initial draft |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Contents

[1](#_Toc103873452)

[I. INTRODUCTION 2](#_Toc103873453)

[1.1. Purpose 2](#_Toc103873454)

[1.2. Objectives 3](#_Toc103873455)

[1.3. Key Contacts 3](#_Toc103873456)

[1.4. Minimum Pre-requisites for the Automation 3](#_Toc103873457)

[II. As Is Process description 4](#_Toc103873458)

[2.1. Process Overview 4](#_Toc103873460)

[2.2. Applications Used 5](#_Toc103873461)

[2.3. As Is Process Map 5](#_Toc103873462)

[2.3.1. High Level Process Map 5](#_Toc103873463)

[2.3.2. Detailed Level Process Map 6](#_Toc103873464)

[III. To Be Process description 6](#_Toc103873465)

[3.1. Detailed To Be Process Map 6](#_Toc103873467)

[3.2. Detailed To Be Process Actions 6](#_Toc103873468)

[3.3. Input/Output Data Description 7](#_Toc103873469)

[3.4. Parallel Initiatives 7](#_Toc103873470)

[3.5. In Scope For RPA 7](#_Toc103873471)

[3.6. Out Of Scope for RPA 7](#_Toc103873472)

[3.7. Exceptions Handling 8](#_Toc103873473)

[3.7.1. Known Business Exceptions 8](#_Toc103873482)

[3.7.2. Unknown Business Exceptions 8](#_Toc103873483)

[3.8. Applications Errors & Exceptions Handling 8](#_Toc103873484)

[3.8.1. Known Applications Errors and Exceptions 9](#_Toc103873486)

[3.8.2. Unknown Applications Errors and Exceptions 9](#_Toc103873487)

[3.9. Reporting 9](#_Toc103873488)

[IV. Other 10](#_Toc103873489)

[3.10. Additional sources of process documentation 10](#_Toc103873490)

# INTRODUCTION

## Purpose

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, the **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).

**The PDD is a communication document between:**

* The RPA Business Analyst and the SME/Process Owner. The goal is to ensure that the RPA Business Analyst has the correct understanding of the process and has represented it accurately.
* The RPA Business Analyst and the Development team (represented by the Solution Architect and RPA Development Lead). The goal is to ensure that the process is documented appropriately and to a sufficient level of detail so that the Solution Architect can then create the solution based on the PDD content.

## 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;
* Eliminate human error;
* *{Add business specific objectives}*

## 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 |
| **RPA Developer** |  |  |
| **Business Analyst** |  |  |
| **Solution Architect** |  |  |
| **Project Manager** |  |  |
| ***Process SME / Process reviewer*** |  |  |
| ***Process Owner/ Approver for production*** |  |  |

## Minimum Pre-requisites for the Automation

1. Filled in Process Definition Document
2. Test Data to support development
3. User access and user accounts creations (licenses, permissions, restrictions to create accounts for robots)
4. Credentials (user ID and password) required to logon to machines and applications

# As Is Process description

In this section the Business Analyst will document the process. This section will serve as the starting point for the re-engineering and automation effort.



## Process Overview

Section contains general information about the process before automation.

|  |  |
| --- | --- |
| Item | Description/Answer |
| **Process Full Name** | {Title} |
| **Process Area** | { } |
| **Department** | { } |
| **Short Description (operation, activity, outcome)** | {Description} |
| **Role(s) required in applications to perform the process** | { } |
| **Process schedule and frequency** |  |
| **Number of times the process is ran by selected frequency** |  |
| **Average handling time per item** |  |
| **Process Restrictions** | **e.g**. *This is necessary for the Solution Architect to decide how they will need to split the Master Project into smaller projects (the scheduling of the robots will depend on this)*  ***Example:*** *The applications can be used only between 7 AM-8PM during work days and not allowed to be used during weekend.* |
| **Peak Period (s)** | ***e.g.*** *It is important to understand peaks in order to design a robust and scalable solution.*  *Example:  Beginning of month, usually from 28th to 30th day of each month* |
| **Peak Volume Approximate increase** | ***E.g.*** *It is important to understand peaks in order to design a robust and scalable solution.*  *Example: 600* |
| **Total # of FTEs supporting this activity** |  |
| **Expected Volume increase during next periods** | ***e.g.*** *It is important to understand peaks in order to design a robust and scalable solution.*  *Example: 10-20%* |
| **Level of exception rate** |  |
| **Input data description** | ***e.g.:*** *pdf invoices from ~100 suppliers* |
| **Output Data description** | **e.g.** *posted invoices report in SAP* |

## Applications Used

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 | Details (Version, Language, Environment/ Access method) |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## As Is Process Map

This section contains various process maps contributing to a better understanding of how the process is performed pre-automation.

### High Level Process Map

This section is useful for the Business Analyst in presentations and discussions with management to underline areas of weakness, inefficiency or to demonstrate which actions could be in scope for automation.

### Detailed Level Process Map

This section describes the process at key-stroke level and is an essential part for the communication with the developers.

# To Be Process description

In this section the proposed improvements to the process, actions to the process will be outlined as well as the actions proposed for automation and the type of robot required. This will be cross-checked by the Solution Architect.



## Detailed To Be Process Map

A detailed process map of the process as it will look like post-automation will be outlined here.

\* include a link to the diagram file

## Detailed To Be Process Actions

|  |  |  |
| --- | --- | --- |
| # | Step Description and Details | Exception # |
| **Section 1** | | |
|  |  |  |
|  |  |  |
|  |  |  |
| **Section 2** | | |
|  |  |  |
|  |  |  |

## Input/Output Data Description

The following table should contain details regarding the inputs that every action of the process takes.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Sample | Type | Process step # | Storage location | Other details |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## Exceptions Handling

The Business Process Owner and Business Analysts are expected to document below all the business exceptions identified in the automation process. Exceptions are of 2 types and both need to be addressed:

**Known exceptions** = previously encountered. A scenario is defined with clear actions and workarounds for each case.

**Unknown** = New situation that was not encountered before. It cannot be predicted and in case it happens it needs to be flagged and communicated to an authorized person for evaluation.



### Known Business Exceptions

Details regarding how the robot should handle the exceptions.

|  |  |  |
| --- | --- | --- |
| # | Exception description | Action to be taken |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### Unknown Business Exceptions

An umbrella rule that includes a notification needs to be designed for all other exceptions that could happen and cannot be anticipated.

***e.g.:*** *for all other cases which do not follow the rules defined an e-mail should be sent to:* [*exceptions@company.com*](mailto:exceptions@company.com) *with a screen shot and robot should proceed to next transaction.*

## Applications Errors & Exceptions Handling

A comprehensive list of all errors, warnings or notifications should be consolidated here together with the action to be taken for each by the Robot. There are 2 types of exceptions/errors:

**Known** = Previously encountered and action plan or workaround available for it (e.g. SAP unresponsive during peak times)

**Unknown** = these are exceptions and errors that cannot be anticipated but for which the robot needs to have a rule so that the RPA solution is sustainable.



### Known Applications Errors and Exceptions

Details regarding how the robot should handle the exceptions.

|  |  |  |
| --- | --- | --- |
| # | Exception description | Action to be taken |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### Unknown Applications Errors and Exceptions

An umbrella rule that includes a notification needs to be designed for all other exceptions that could happen and cannot be anticipated.

*e.g. robot should attempt to access the application 3 times then it should terminate thread.*

## 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.

|  |  |  |  |
| --- | --- | --- | --- |
| Report Type | Update frequency | Details | Monitoring Tool to visualize the data |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## In Scope For RPA

The actions in scope for RPA should be listed below:

## Out Of Scope for RPA

The actions **out of scope** for RPA should be listed below together with the reasoning:

## Change/Improvement details

Use this section to detail the list the change or improvement opportunity in the To-Be Process.

Important aspects to be mentioned: what is the initiative, expected outcome, expected completion date, contact person for details, and if will impact the current automation request.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Initiative Name | Process Action(s) where it is identified | Impact on current Automation Request | Expected Completion Date | Contact Person |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

# Other



## Additional sources of process documentation

|  |  |
| --- | --- |
| Item | Location |
| **Video Recording of the process (Optional)** |  |
| **Business Rules Library (Optional)** |  |
| **Other documentation (Optional)** |  |
| **Standard Operating Procedure(s) (Optional)** |  |
| **High Level Process Map (Optional)** |  |
| **Detailed level process map (Optional)** |  |
| **Work Instructions (Optional)** |  |
| **Input Files (Optional)** |  |
| **Output Files (Optional)** |  |

## Change requests

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Date | Change description | Affected process steps / section | Change reason | Change initiator |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## Document Approval