



**Process Design Document (PDD)**

**Building the stock portfolio**



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**NOTE:**

This version of the document and its current content is meant to serve as an example for business users (e.g. process SME) and it is intended to help with the creation of the process design documentation for RPA.

The current example`s content is fictive or adjusted to remove real confidential data and it should not be replicated to the automation of other business processes. The document or process should not be considered as financial advice.

**Document History**

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**Document Approval Flow**

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| **2.0** | **Document prepared by**  | *Business Analyst* | Cyril Rouillon | *IT* |  |
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# **Introduction**

## I.1 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 the details required for applying robotic automation to the selected business process.

## I.2 Objectives

The process that has been selected for RPA is part of the larger project Robot Advisor conducted within the Cyro Technology, Finance and Accounting department.

The business objectives and benefits expected by the Business Process Owner after automation of the selected business process are:

* *Reduce processing time per item by 90 %*
* *Better accuracy*
* *Error reducing*

## I.3 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(email, phone number) | Notes |
| Process SME  | F. Ictional | f.ictional@acme-test.com | Point of contact for questions related to process details & exceptions  |
| Process Reviewer  | I. Maginary | i.maginary@acme-test.com  | Point of contact for questions related to process details & exceptions  |
| Process Owner/ Approver for production | Cyril Rouillon | cyril.rouillon@cyro.technology | Escalations, Delays etc. |

## I.4 Minimum Prerequisites for Automation

1. Filled in Process Design 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
5. Dependencies with other projects on the same environment

# **As-Is Process Description**

## II.1 Process Overview

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

|  |  |  |
| --- | --- | --- |
| # | Item | Description |
| 1 | **Process full name** | Building the stock portfolio |
| 2 | **Process Area** | Finance |
| 3 | **Department** | Financial department |
| 4 | **Process short description** (operation, activity, outcome) | The Financial department build portfolio from the MSCI website several times per month. The Excel files build is assigned to Buy&Sell staff to rebalance existing portfolio. |
| 5 | **Role(s) required for performing the process** | Financial department  |
| 6 | **Process schedule and frequency** | Monthly, Monday, 9 am – 6 pm |
| 7 | **# of items processes /reference period** | 5 per month |
| 8 | **Average handling time per item** | 15 min |
| 9 | **Peak period (s)** | End of year, when every portfolio need to be processed |
| 10 | **Transaction Volume During Peak period** | 60 |
| 11 | **Total # of FTEs supporting this activity** | 1 |
| 12 | **Expected increase of volume in the next reference period**  | Volumes will increase with 20% |
| 13 | **Level of exception rate** | No expected exceptions |
| 14 | **Input data** | MSCI (PDF) Google (web) |
| 15 | **Output data** | Excel file |

*\*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.2. 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 | SystemLanguage | Thin/ThickClient | Environment/Access method | Comments |
| 1 | Excel | EN | Thick Client | Windows Application  | Format file Output |
| 2 | MSCI | EN | Thick Client | Web Browser | PDF Input File |
| 3 | Google | EN | Thick Client | Web Browser | Data source and consolidation |
| 4 | IG Markets | FR | Thick Client | Web Browser | Stock Broker  |

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

## II.3 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 As-Is Process Map:**



## II.4 Detailed As-Is Process Steps

This chapter depicts the As-Is business process in detail to enable the Developer to build the automated process.

|  |  |
| --- | --- |
|  | Detailed As-Is Process Steps |
| Step | Input  | Description | Details (Screen/ Document/ Video recording Index) | Exception Handling | Possible Actions | Business Rules Library Index |

*See doc attached*

****

## II.5 Input Data Description

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Step | Sample (Print-screen) | Input type | Location | Inputs are standard? (Yes/ NO) | Inputs are structured? | Data to be used from  |
|  |  |  |  |  |  |  |

*\* Inputs are* ***standard*** *if the content is positioned in the same place even if the input types are different.*

 *E.g. a process that uses at each transaction the same template, so fields to be extracted are always fixed..*

*Inputs are* ***structured*** *if it is machine readable and digital. Scanned PDF Images/ Free flow texts in Emails are unstructured inputs*

*See doc attached*

**

# **To-Be Process Description**

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

## III.1 To-Be Detailed Process Map

*Highlight Bot interventions/ to-be automated steps with different legend/ icon (orange)*

**

*\*Mention below if process improvements were performed on the To-Be design and detail them*

## III.2 Parallel Initiatives/ Overlap (if applicable)

This chapter captures the proposed Business, Process & System changes in near future and its impact

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No | Initiative Name | Process Step(s) where it is identified | Impact on current automation request? How?  | Expected Completion Date | Contact person for more details |
|   |  n/a  |   |   |   |   |

## III.3 In Scope for RPA

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

1. *Steps 1-29*

## III.4 Out of Scope for RPA

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sub-process(if case) | Activity (step) | Reasons for Out of Scope\* | Impact on the To-Be | Possible measures to be taken into consideration for future automation |
| 1.1 |  |  |  |  |

*\*Add more rows to the table to reflect the complete documentation provided to support the RPA process.*

## III.5 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  | Unknown |
| 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **BE #** | **Exception name** | **Step** | **Parameters** | **Action to be taken** |
| 1 | Email/password invalid | 9 | login | Check password and change in the Credential data in Orchestrator. |

#### Unknown Exceptions

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

Send an email notification at cyril.rouillon@cyro.technology and error message screenshot attached.

## III.6 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Error name** | **Step** | **Parameters** | **Action to be taken** |
| 1 | Application Crash / Internal Server Error | Any step | Error message | Recover & retry for maximum 3 timesClose the applications and run the sequence again  |

#### Unknow Errors and Exceptions

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

Send an email notification at cyril.rouillon@cyro.technologyand error message screenshot attached.

## III.7 Reporting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Report type** | **Update frequency** | **Details**  | **Monitoring Tool to visualize the data** |
| 1 | Process logs | Daily | How many times was this process run since the beginning of the month and what was the average run duration? | Kibana  |
| 2 | Process logs | Monthly | How many robots worked on this process per each month? | Csv file posted daily on sharedrive |
| 3 | Transaction logs | Daily | How many transactions were run by this process since the beginning of the month and what was the average transaction duration? | Kibana |
| 4 | Error logs | Daily | Average number of errors by type per day  | Kibana |
| 5 | Error logs | Daily | All errors per month grouped by type  | Csv file posted daily on drive |

*\* For complex reporting requirements, include them into a separate document and attach it to the present documentation*

## **Other Observations**

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

*Example: Specific Business monitoring requirements (audit and reporting) etc.*

## **Additional Sources of Process Documentation**

If there is additional material created to support the process automation please mention it here, along with the supported documentation provided.

|  |
| --- |
| Additional Process Documentation |
| Video Recording of the process [Optional] | Manual Demo | Insert any relevant comments |
| Standard Operating Procedure (s)(Optional) |  | Insert any relevant comments |
| Business Logic Translation Table(Optional) | Insert link to Business Logic Translation Table | Insert any relevant comments |
| Other documentation(Optional) | Insert link to any other relevant process documentation (L4, L5 process description, fields mapping files etc.) | Insert any relevant comments |

*\*Add more rows to the table to reflect the complete documentation provided to support the RPA process*