|  |  |
| --- | --- |
|  | | Process Definition  Document |
|  |  |

Best Tablet Finder

There is a request to create a process that would help individuals with purchasing the best tablet for them from eMag.

The user requests are sent via email and at least three requirements needed to be specified (brand, OS, minimum rating, minimum/maximum price, storage, memory etc).

For each request, filters are set on the eMag page, and the results will be extracted to excel spreadsheets with all the relevant information, one spreadsheet reserved for each requested brand. If no brands were requested only one spreadsheet is created for the extracted data.

The data is sorted on each spreadsheet using the requested criteria and the lists with the top 10 tablets for each requested brand are sent via email (if no brand is requested, only one top 10 list is sent).

Contents

[1. Introduction 3](#_Toc51682797)

[1.1 Purpose 3](#_Toc51682798)

[1.2 Objectives 3](#_Toc51682799)

[1.3 Key Contacts 3](#_Toc51682800)

[1.4 Minimum Pre-requisites for the Automation 3](#_Toc51682801)

[2. AS IS Process Description 4](#_Toc51682802)

[2.1 Process Overview 4](#_Toc51682803)

[2.2 Applications Used 5](#_Toc51682804)

[2.3 AS IS Process Map 5](#_Toc51682805)

[2.3.1 High Level Process Map 5](#_Toc51682806)

[2.3.2 Detailed Level Process Map 5](#_Toc51682807)

[2.4 Process Statistics 5](#_Toc51682808)

[2.5 Detailed AS IS Process Actions 6](#_Toc51682809)

[2.6 Input Data Description 6](#_Toc51682810)

[3 TO BE Process Description 7](#_Toc51682811)

[3.1 Detailed TO BE Process Map 7](#_Toc51682812)

[3.2 Parallel Initiatives 7](#_Toc51682813)

[3.3 In Scope for RPA 7](#_Toc51682814)

[3.4 Out of Scope for RPA 8](#_Toc51682815)

[3.5 Exception Handling 8](#_Toc51682816)

[3.5.1 Known Business Exceptions 8](#_Toc51682817)

[3.5.2 Unknown Business Exceptions 8](#_Toc51682818)

[3.6 Applications Errors & Exceptions Handling 9](#_Toc51682819)

[3.6.1 Known Applications Errors and Exceptions 9](#_Toc51682820)

[3.5.2 Unknown Applications Errors and Exceptions 9](#_Toc51682821)

[3.7 Reporting 9](#_Toc51682822)

[4 Other 10](#_Toc51682823)

[4.1 Additional sources of process documentation 10](#_Toc51682824)

## Introduction

### 1.1 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.

### 1.2 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 by 80%.
* Better Monitoring of the overall activity by using the logs provided by the robots.

### 1.3 Key Contacts

Add here any stakeholders that need to be informed or to approve changes to the process:

| **Role** | **Name** | **Contact Details** (email, phone number) | **Notes** |
| --- | --- | --- | --- |
| Mentor | Edward Volgyesi | Edward.volgyesi@fwfcompany.com |  |

### 1.4 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.

### 2.1 Process Overview

Section contains general information about the process before automation.

| **Item** | **Description/Answer** |
| --- | --- |
| **Process Full Name** | ***Best Tablet Finder*** |
| **Process Area** | ***Digital Market*** |
| **Department** |  |
| **Short Description**  (operation, activity, outcome) | ***The responsabile person receives the mail and then goes to eMag and searches for the products and then collects the results in an excel file and sends it back to the user*** |
| **Role(s) required in applications to perform the process** | ***Request Processor*** |
| **Process schedule and frequency** | **5-6 times per day** |
| **Number of times the process is ran by selected frequency** | **1** |
| **Process execution time** | ***25 miuntes/mail*** |
| **Process Restrictions** | ***The process is ran manually*** |
| **Peak Period (s)** | ***-*** |
| **Peak Volume Approximate increase** | ***-*** |
| **Number of persons performing the process** | ***1*** |
| **Expected Volume increase during next periods** | ***20-25%*** |
| **Percentage Un-handled exceptions** | ***10%*** |
| **Input data description** | ***E-mails with user input*** |
| **Output Data description** | ***E-mails with excel attachment containing top 10 tablets for each received mail*** |

*\*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.*

### 2.2 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** | **Version** | **Application Language** | **Thin/Think Client** | **Environment/ Access method** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| **eMAG** | Working version 13.01.2023 | *Romanian* | - | Browser | - |
| **Excel** | Any | Any | - | Microsoft Office | - |
| **Outlook** | Any | Any | - | Microsoft Office | - |

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

### 2.3 AS IS Process Map

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

#### 2.3.1 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.

#### 2.3.2 Detailed Level Process Map

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

### 2.4 Process Statistics

**High Level statistics**

| **Processes** | **Windows** | **Actions** | **Mouse clicks** | **Keys pressed** | **Text entries** | **Hotkeys used** | **Time** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 1 | 6 | 1 for each filter which has to be applied (except the price)  +  2 for price  +  5 for products in excel  +  1 for each each mail sent | no. of letters the prices has  +  no. of letters for excel writting | 50 for each brand selected | Eveytime ctrl+c or ctrl+v it is needed | 20 minute / mail |

**Detailed statistics**

| **Window name** | **Mouse clicks** | **Text entries** | **Key pressed** |
| --- | --- | --- | --- |
| **Outlook** | 4 | 1 | 6 |
| **Microsoft Edge** | 6 + no. brands | 2 | 8 |
| **Microsoft Excel** | 1 for each cell | 10 rows for each provider | 10 |

### 2.5 Detailed AS IS Process Actions

| **#Action** | **Input** | ***Description*** | **Details (Screen/Video Recording Index** | **Exception Handling** | **Possible Actions** |
| --- | --- | --- | --- | --- | --- |
| **Get mail data** | Outlook | *Get the data from the mail, needed for automation* | - | If mail cannot be parsed, do not process it | Get the data and go to eMag |
| **Search Products** | eMag filters | *Fill the necessary eMag filters in order* | Every action except the price has a dedicated section in which you can input the price | No exception thrown here | Get the products from the eMag website |
| **Excel filling** | Excel | *Put the data into excel* | The date get from eMag has to be given to the requester | No exceptions thrown here | Automatically fill the excel |
| **Mail sending** | Outlook | *Compose the mail* | Give the results to the user by sending him an e-mail with the excel he requested | No exception thrown | Automatically send the mail |

A diagram of an email address

Description automatically generated

| 1. **Handle requests** |
| --- |
| Get data from e-mail | 5 minutes |
| Search eMag and apply filters | 5 minutes |
| Fill the excel with the provided data | 10 minutes |
| Send back the mail to the user | 5 minutes |

### 2.6 Input Data Description

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

| **#Action** | **Sample** | ***Input Type*** | **Location** | **Are inputs Natively Digital\*?** | **Are the inputs Structured\*?** |
| --- | --- | --- | --- | --- | --- |
| **Get mail data** |  | *E-mail* | Outlook | yes | yes |
| **Search products** |  | *Text* | Web | yes | yes |
| **Excel filling** |  | *Excel* | Folder, Email | yes | yes |
| **Mail sending** |  | *E-mail* | Outlook | yes | yes |

*\* Native Digital: This is data that was originally created digitally e.g. excel, database or application reports etc. The non-native digital inputs are usually scanned images.*

*\* Structured Data: has a predictable format and exists in fixed fields (e.g. an excel cell or a field in a form) and is easily detectable via search algorithms.*

## 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.**

### 3.1 Detailed TO BE Process Map

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

*Highlight Bot interventions/ To-Be automated actions with different legend/ icon (purple).*

*Mention below if process improvements were performed on the To-Be design and provide details.*

| **Legend** | **Description** |
| --- | --- |
|  | Action number in the process. Referred to in details or Exceptions and Errors table. |
|  | This process action is proposed for automation. |
|  | This process action remains manual (to be performed by a human agent). |

A diagram of an email

Description automatically generated

|  |  |  |  |
| --- | --- | --- | --- |
| Action Number in the Process | Process Action | Proposed for Automation | Remains Manual |
| 1 | Retrieve last 10 e-mails from Outlook | Yes | No |
| 2 | For each e-mail map the filters to a dictionary | Yes | No |
| 3 | Apply filters and scrape tablet info for each e-mail | Yes | No |
| 4 | Sort and save results to excel | Yes | No |
| 5 | Send e-mail response in Outlook to each e-mail request | Yes | No |

### 3.2 Parallel Initiatives

The table below will capture the proposed Business, Process or Application changes to be made in the near future that would impact the process at hand (if any).

| **Initiative Name** | **Process Action(s) where it is identified** | **Impact on current Automation Request** | **Expected Completion Date** | **Contact Person** |
| --- | --- | --- | --- | --- |
| **Automated execution** | Start of the process | *All the requests will be processed automatically without the need of human interfering* | 13.01.2024 | Team |

### 3.3 In Scope for RPA

The actions in scope for RPA should be listed below:

* Select the first 10 e-mails from the company inbox
* For each e-mail map the filters to a dictionary
* For each e-mail open eMag in browser and apply the filters
* Scrape the first 10 results
* Sort results by the give criteria
* Save the results to an excel file
* Send an e-mail with the result for each sent e-mail

### 3.4 Out of Scope for RPA

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

| **Activity/Action\*** | **Reason for out of scope** | **Impact on the TO BE** | **Possible measures to be taken into consideration for future automation** |
| --- | --- | --- | --- |
| *-* | *-* | *-* | - |

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

### 3.5 Exception 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.

#### 3.5.1 Known Business Exceptions

Details regarding how the robot should handle the exceptions.

| **Exception Name** | **Action** | **Parameters** | **Actions to be taken** |
| --- | --- | --- | --- |
| **SubjectNotInScope** | The goal of the e-mail couldn't be identifiied from it's subject | Mail subject | Send an e-mail to the user letting him know that his request was not processed |
| **SenderNotInScope** | The sender wasn't found in the list of accepted requester | Mail sender | Send an e-mail to the user letting him know that his request was not processed |

#### 3.5.2 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.

**For all other cases which do not follow the rules defined: we will send an email letting the user know that we encountered an unknown error and he should try later or contact the owner**

### 3.6 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.

#### 3.6.1 Known Applications Errors and Exceptions

Details regarding how the robot should handle the exceptions.

| **Error/Exception Name** | **Action** | **Parameters** | **Actions to be taken** |
| --- | --- | --- | --- |
| **Application crash** | Send an email to the user with the failure | Error message | Go to the next image to be processed |

#### 3.5.2 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.

**Robot should attempt to access the application once that it should terminate**

### 3.7 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** |
| --- | --- | --- | --- |
| **Process logs** | Daily | How many times did the process run and the average time to complete | Check debuggers and process logs |

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

## Other

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.**

### 4.1 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** | | |
| --- | --- | --- |
| **-** | - | - |

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