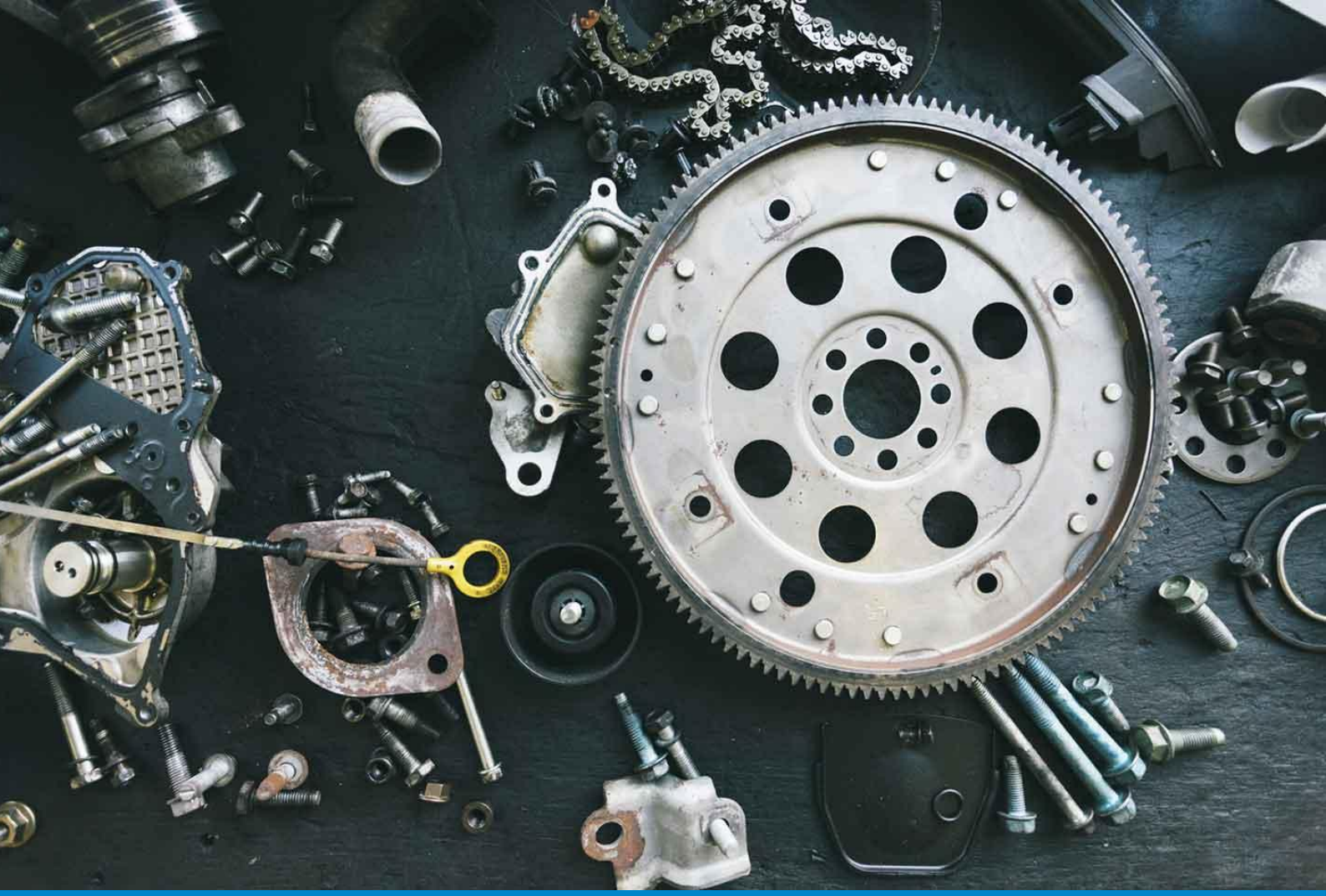


Process Definition Document

UiPath

HR Offer Letter Automation - PDD

This document describes a process for automating the HR Offer Letter distribution following campus recruitment. The automation involves reading candidate data from an Excel file, filtering out hired candidates, validating email formats, generating personalized offer letters using a Word template, and sending these letters via email. The solution is implemented using UiPath Robotic Process Automation (RPA) to eliminate repetitive manual effort, reduce human errors, and streamline the onboarding communication process.

TABLE OF CONTENTS

I. 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
Process Owner	Wan Chee Tin	kwct.1997@outlook.com	

1.4 Minimum Pre-requisites for the Automation

a) Filled in Process Definition Document
b) Test Data to support development
c) User access and user accounts creations (licenses, permissions, restrictions to create accounts for robots)
d) Credentials (user ID and password) required to logon to machines and applications

II. 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	HR Offer Letter Automation
Process Area	Human Resources (Recruitment)
Department	Talent Acquisition
Short Description (operation, activity, outcome)	After campus interviews, HR manually filters hired candidates from an Excel file, creates personalized offer letters using a Word template, and emails each candidate individually with their offer letter. This is a personal RPA project built using UiPath to demonstrate hands-on automation capabilities.
Role(s) required in applications to perform the process	HR Recruiter
Process schedule and frequency	Ad-hoc — typically triggered after a recruitment event or end of an interview batch

Number of times the process is ran by selected frequency	Once for each hiring cycle (e.g., after a campus drive or bulk recruitment event)
Process execution time	~30–45 minutes per batch (depending on candidate count)
Process Restrictions	Applications can only be used during normal working hours (e.g., 8 AM – 6 PM weekdays). Process is manual and depends on staff availability. Not usually performed over weekends.
Peak Period (s)	End of semester months: May, August, December (aligned with campus recruitment seasons)
Peak Volume Approximate increase	Up to 200–400 candidates during peak drives
Number of persons performing the process	1–2 HR personnel (manually handling Excel, Word, and email)
Expected Volume increase during next periods	Anticipated increase of 10–20% due to higher intake targets
Percentage Un-handled exceptions	~15% (manual errors such as incorrect data, email typos, or missed candidates)
Input data description	Excel file manually updated with candidate information: names, status (Hired/Rejected), emails, addresses, job titles, etc.
Output Data description	Manually generated Word/PDF offer letters and individual email communications sent to hired candidates

**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/Thick Client	Environment/ Access method	Comments
MS Excel	Version 2503 Build 16.0.18623.20208 (32-bit)	English	Thick	Local installation	Used to read the candidate data from the Excel spreadsheet. Must

					support reading .xlsx files.
MS Word	Version 2505 Build 16.0.18827.20102 (32-bit)	English	Thick	Local installation	Used to load and customize the offer letter template using bookmarks or placeholders.
MS Outlook (Web)	Outlook Online (Office 365)	English	Thin	Accessed via browser	Used to send offer letters via email using the Send SMTP Mail Message activity or Outlook 365 Integration. Requires authentication setup (App registration or secure credentials).
UiPath Studio	2025.0.167-cloud.20201 (Community License)	English	N/A (Automation Tool)	Local development environment	Used to build the RPA process for Dispatcher and Performer. Integration with Orchestrator Queue.
UiPath Orchestrator	Cloud (Community Orchestrator)	English	Web	Browser-based access via cloud platform	Used for queue management and execution of performer processes.

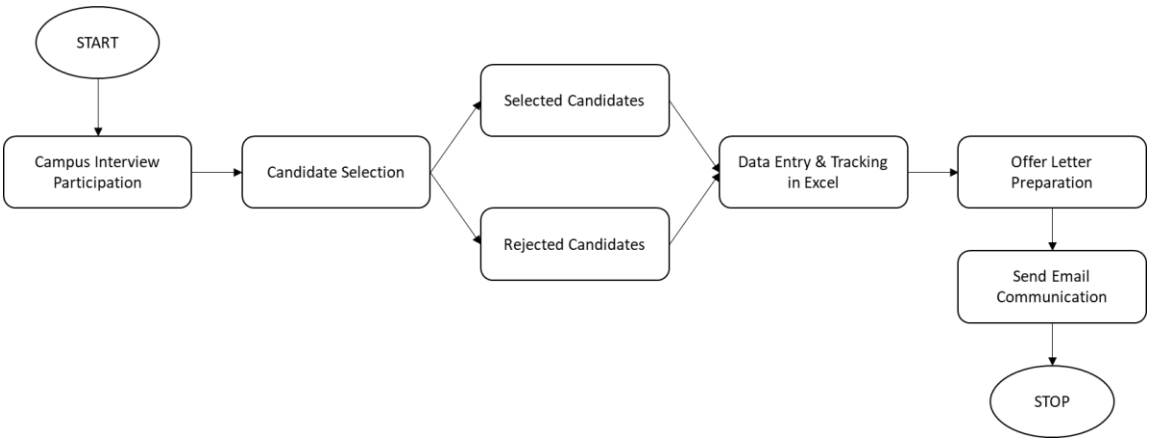
**Add more rows to the table to include the complete list of applications.*

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.

1. Campus Interview Participation
   HR representatives attend campus recruitment drives to conduct interviews and evaluate candidates.

I. Candidate Selection Logging
   a. HR opens the Excel tracking file.
   b. Candidate details are entered, including name, contact, and status (Hired / Rejected).
   c. The file is saved and closed for record-keeping.

II. Hired Candidates
   a. For each hired candidate, HR prepares a personalized offer letter using a Word template and saves it as a PDF in a designated folder.
   b. An email is composed and sent via Outlook Web with the offer letter attached.

III. Rejected Candidates
   Candidate status remains recorded in the Excel file. No further action is taken.

2.4 Process Statistics

High Level statistics

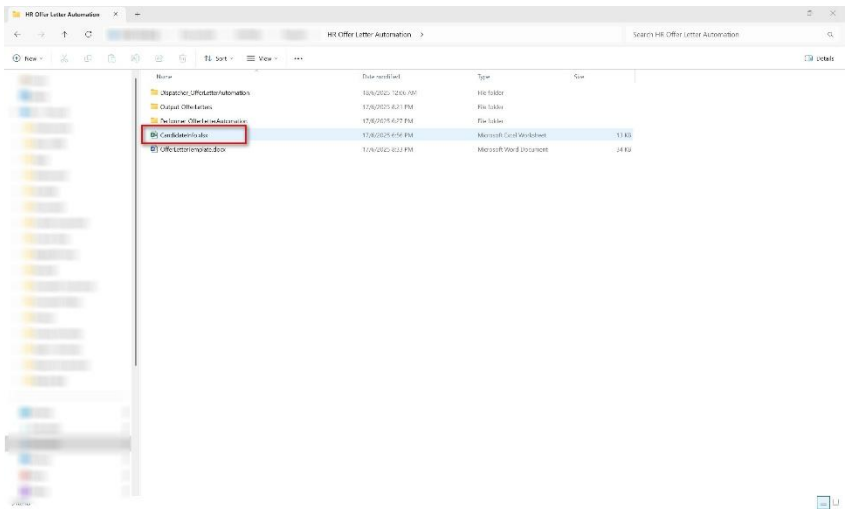
Processes	Windows	Actions	Mouse clicks	Keys pressed	Text entries	Hotkeys used	Time
4	6	28	26	5	1	0	52.8 sec.

Detailed statistics

Window name	Mouse clicks	Text entries	Key pressed
HR Offer Letter Automation - File Explorer	2	0	0
CandidateInfo.xlsx - Excel	8	0	0
OfferLetterTemplate.docx - Word	13	1	5
Save As	2	0	0
MS Outlook	1	0	0

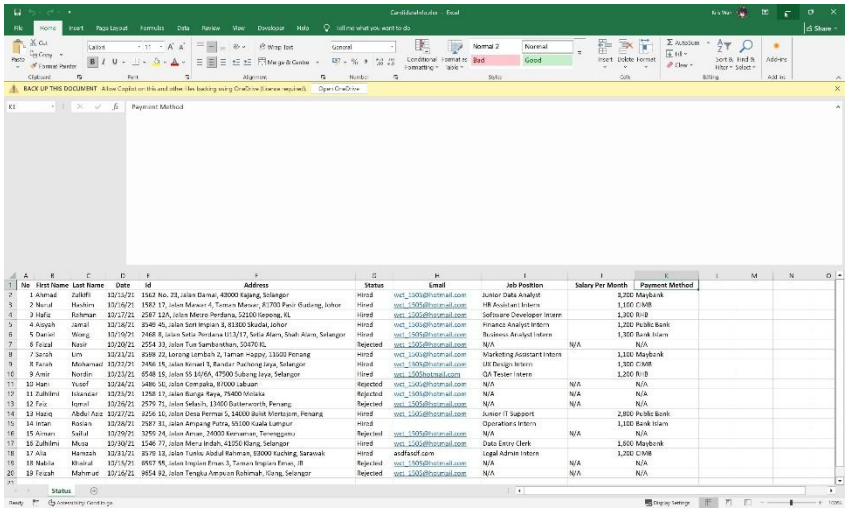
2.5 Detailed As Is Process Actions

1 HR Offer Letter Automation - File Explorer	
	Est. time: 9.7 sec.

1.1 Launch CandidateInfo.xlsx	
	Est. time: 2.4 sec.
	Action: Double Click

1.2 Content of CandidateInfo.xlsx

Est. time: 7.3 sec.



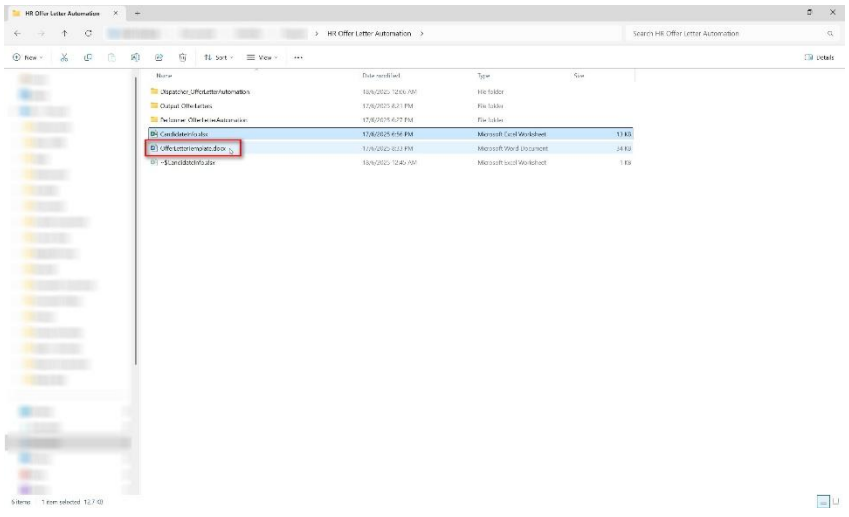
Action: Click

2 HR Offer Letter Automation - File Explorer

Est. time: 4.6 sec.

2.1 Launch OfferLetterTemplate.docx

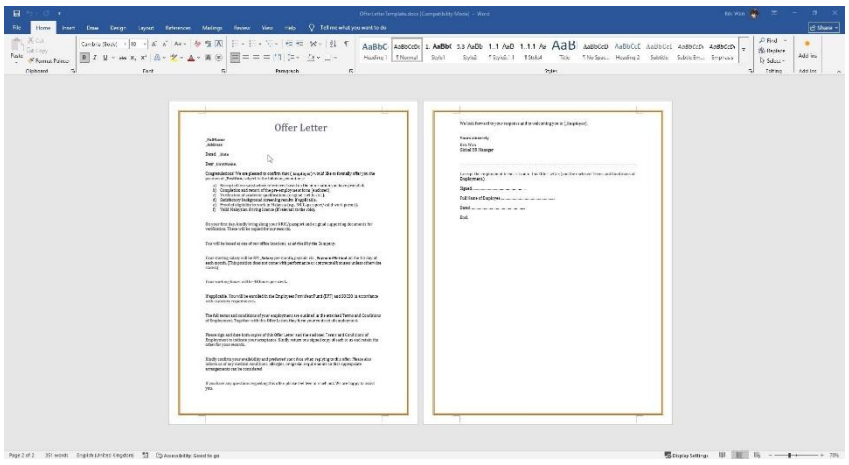
Est. time: 1.2 sec.



Action: Double Click

2.2 Content of OfferLetterTemplate.docx

Est. time: 3.4 sec.



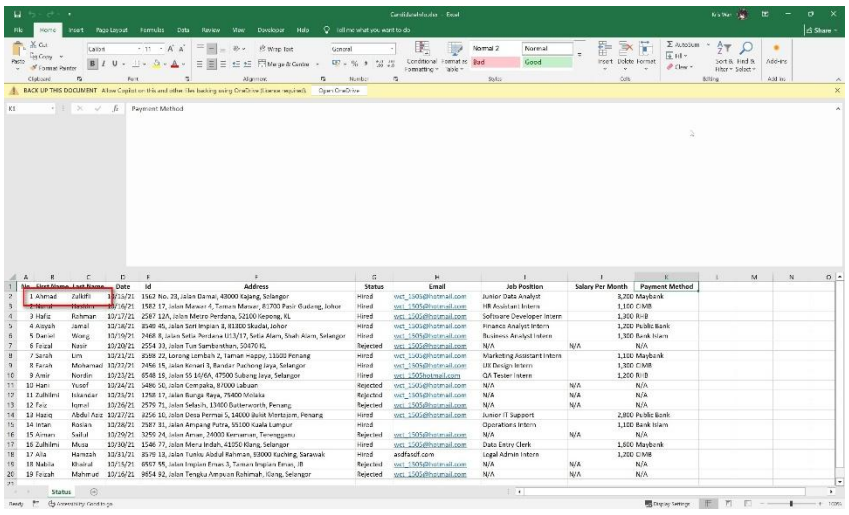
Action: Click

3 CandidateInfo.xlsx - Excel

Est. time: 3.9 sec.

3.1 Copy the Full Name (First Name + Last Name)

Est. time: 3.9 sec.



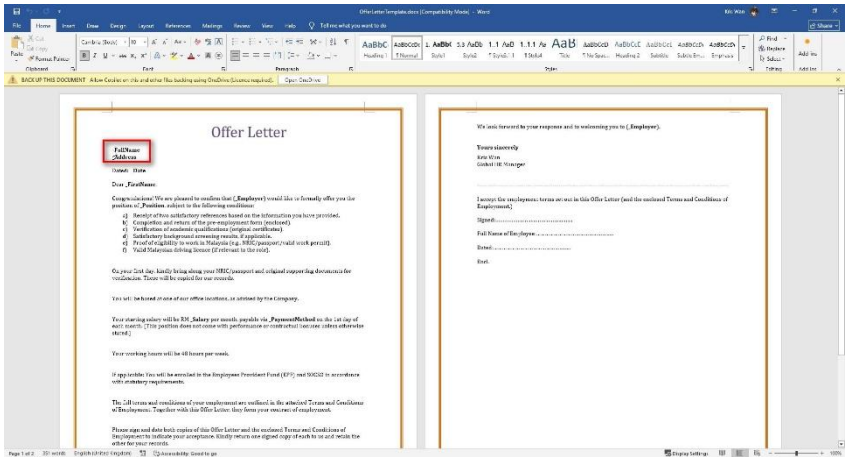
Action: Click

4 OfferLetterTemplate.docx - Word

Est. time: 0.8 sec.

4.1 Replace _FullName with the Full Name

Est. time: 0.8 sec.



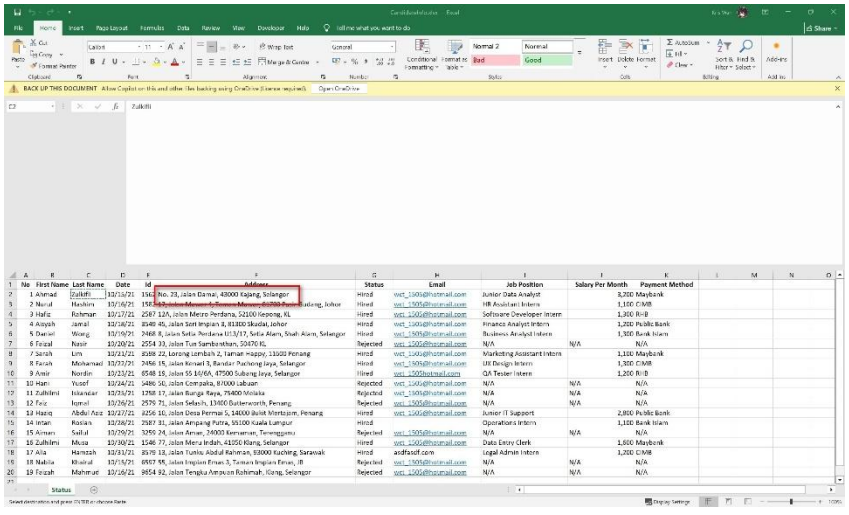
Action: Click

5 CandidateInfo.xlsx - Excel

Est. time: 2.9 sec.

5.1 Copy the Address

Est. time: 2.9 sec.



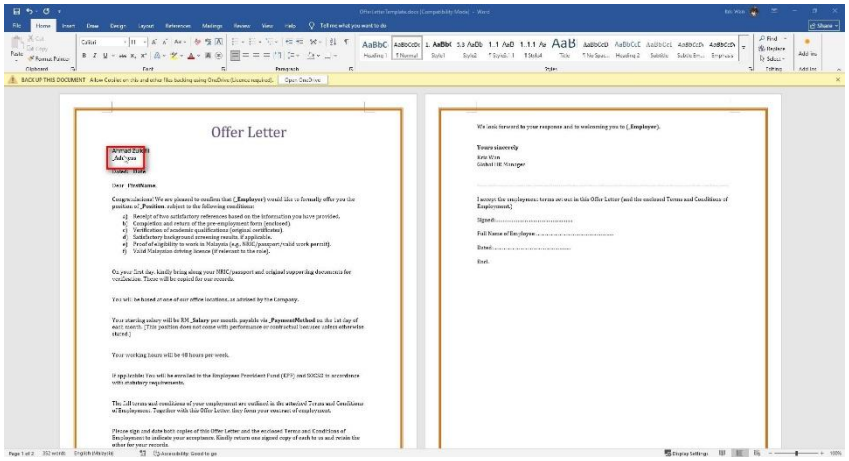
Action: Click

6 OfferLetterTemplate.docx - Word

Est. time: 1.2 sec.

6.1 Replace _Address with the Address

Est. time: 1.2 sec.



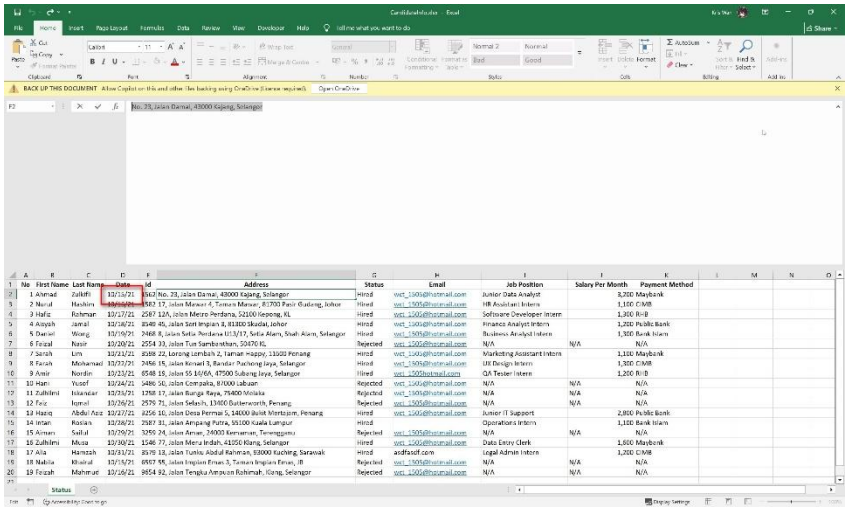
Action: Click

7 CandidateInfo.xlsx - Excel

Est. time: 0.4 sec.

7.1 Copy the Date

Est. time: 0.4 sec.



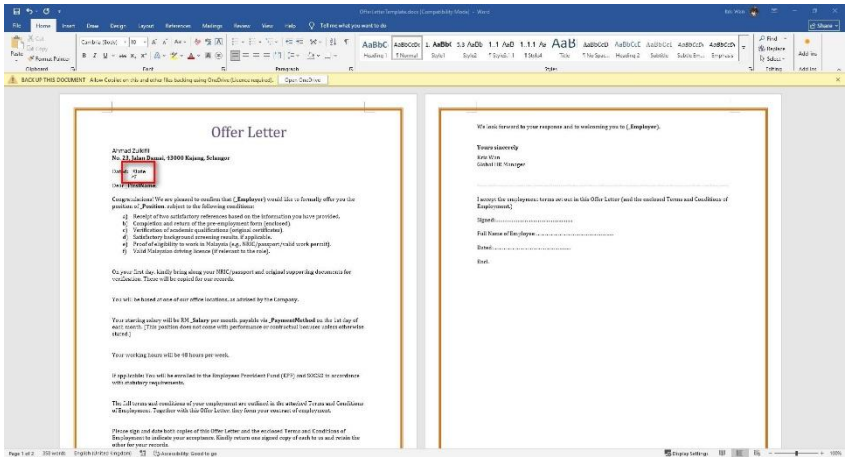
Action: Click

8 OfferLetterTemplate.docx - Word

Est. time: 0.8 sec.

8.1 Replace _Date with the Date

Est. time: 0.8 sec.



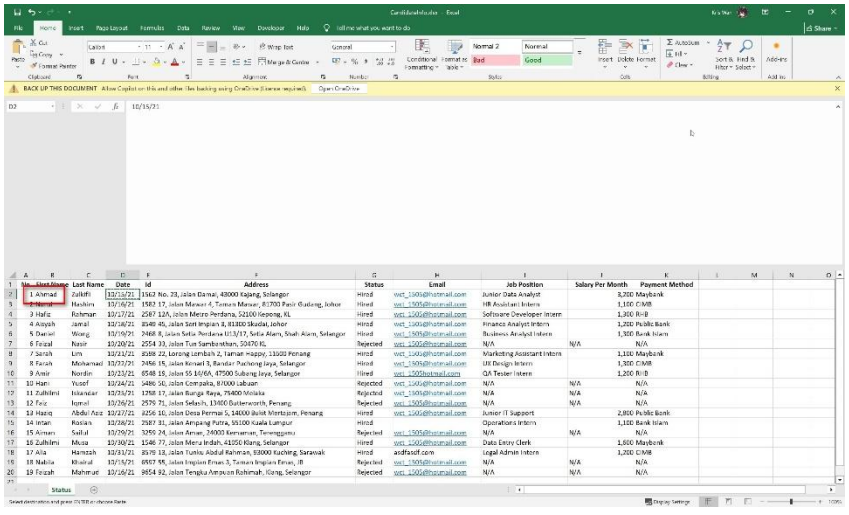
Action: Click

9 CandidateInfo.xlsx - Excel

Est. time: 0.4 sec.

9.1 Copy the First Name

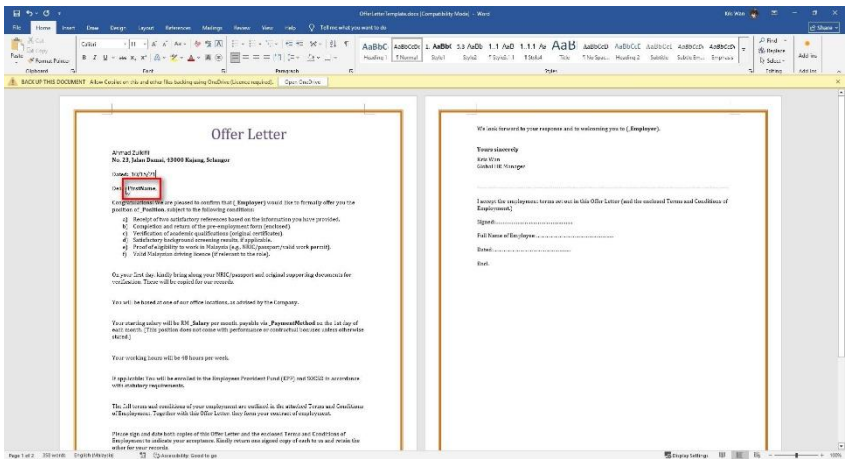
Est. time: 0.4 sec.

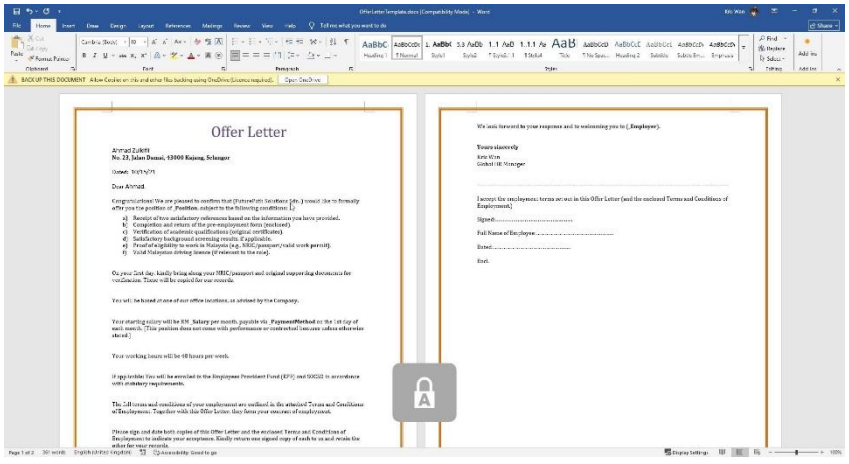


Action: Click

10 OfferLetterTemplate.docx - Word

Est. time: 0.6 sec.

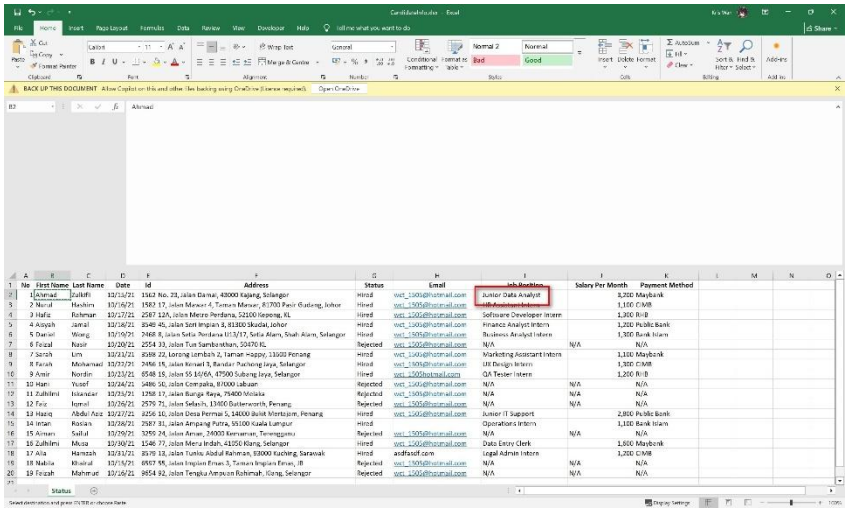
10.1 Replace _FirstName with the First Name	
	Est. time: 0.5 sec.
	Action: Click

10.2 Replace _Employer with 'FuturePath Solutions Sdn. Bhd.'	
	Est. time: 0.1 sec.
	Action: Click

11 CandidateInfo.xlsx - Excel	
	Est. time: 0.5 sec.

11.1 Copy the Job Position

Est. time: 0.5 sec.



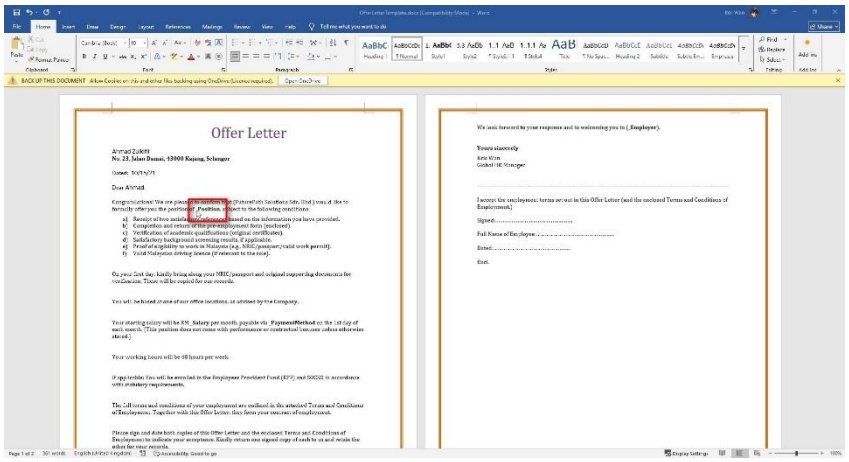
Action: Click

12 OfferLetterTemplate.docx - Word

Est. time: 1.1 sec.

12.1 Replace _Position with the Job Position

Est. time: 1.1 sec.



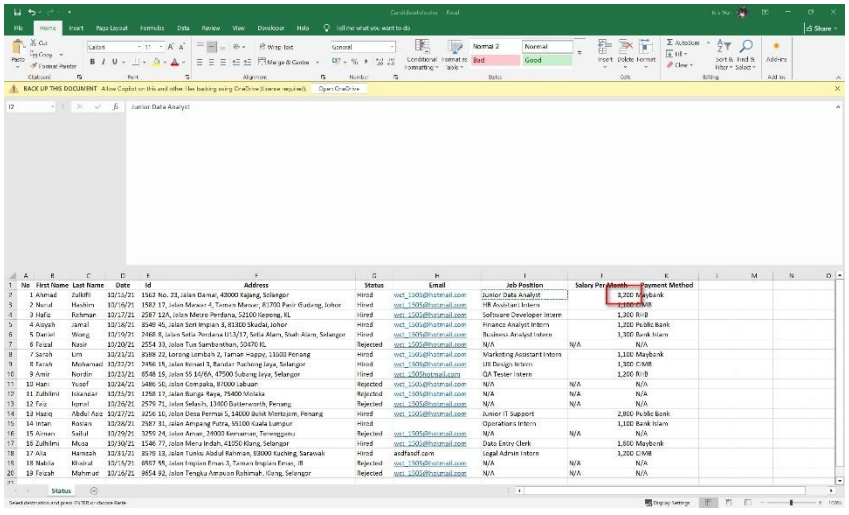
Action: Click

13 CandidateInfo.xlsx - Excel

Est. time: 3.8 sec.

13.1 Copy the Salary Per Month

Est. time: 3.8 sec.



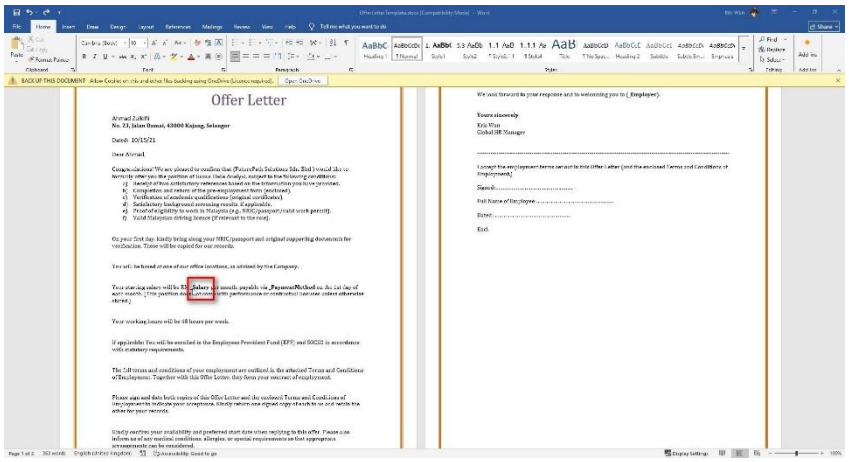
Action: Click

14 OfferLetterTemplate.docx - Word

Est. time: 2.5 sec.

14.1 Replace _Salary with the Salary Per Month

Est. time: 2.5 sec.



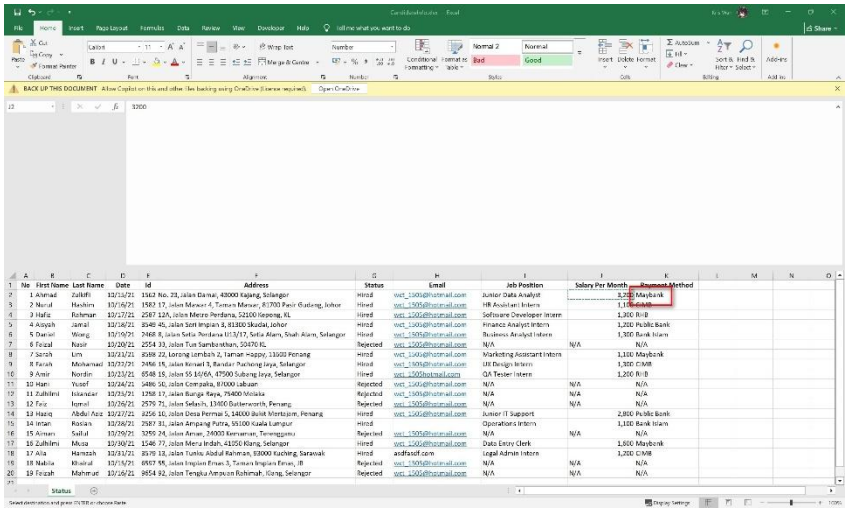
Action: Click

15 CandidateInfo.xlsx - Excel

Est. time: 2.4 sec.

15.1 Copy the Payment Method

Est. time: 2.4 sec.



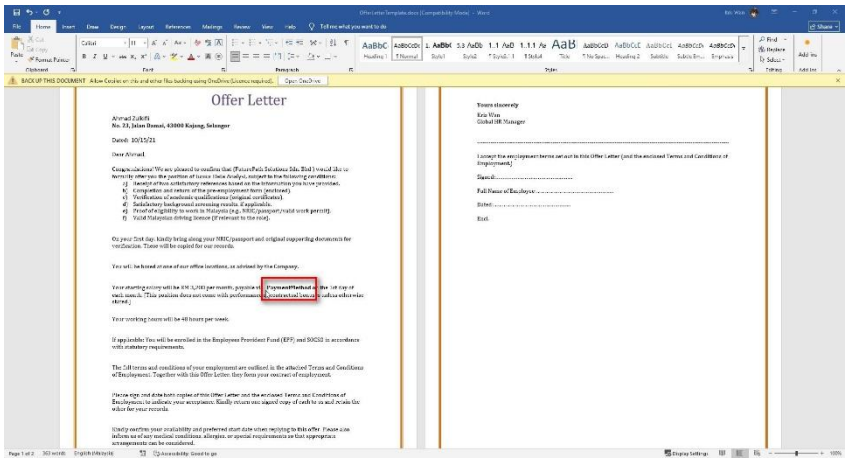
Action: Click

16 OfferLetterTemplate.docx - Word

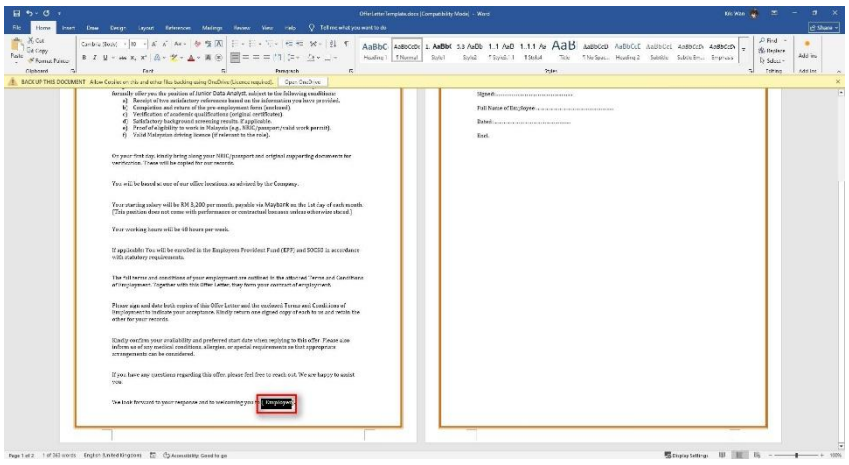
Est. time: 7.7 sec.

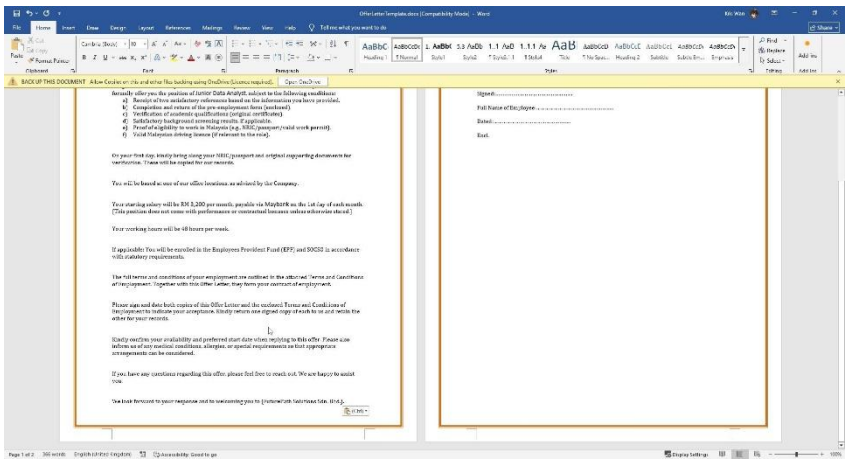
16.1 Replace _PaymentMethod with the Payment Method

Est. time: 1.2 sec.



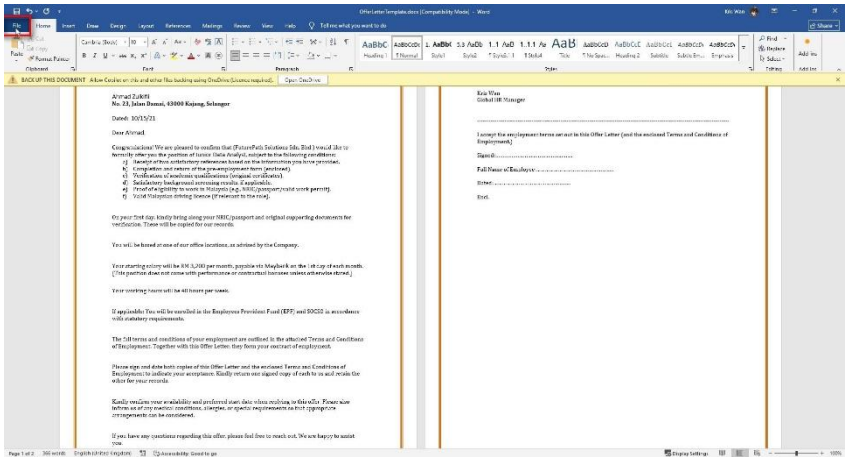
Action: Click

16.2 Replace _Employer with 'FuturePath Solutions Sdn Bhd.'	
	Est. time: 0.2 sec.
	Action: Keyboard Input

16.3	
	Est. time: 0.9 sec.
	Action: Click

16.4 Click ‘File’

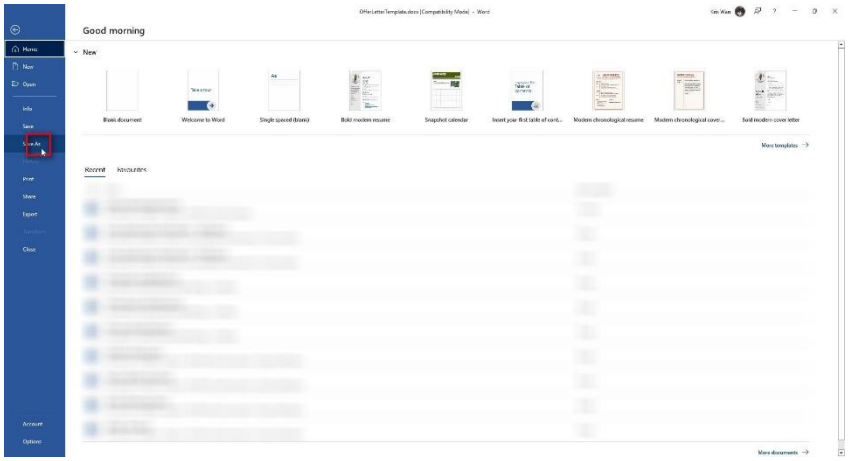
Est. time: 2.3 sec.



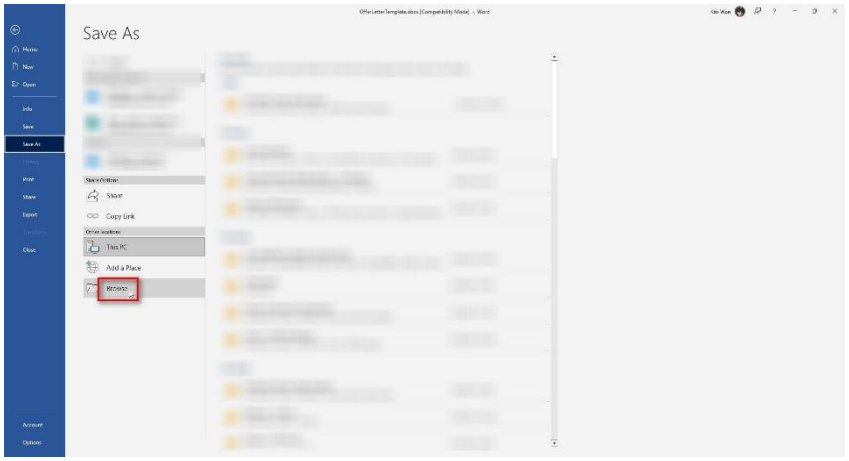
Action: Click

16.5 Click ‘Save As’

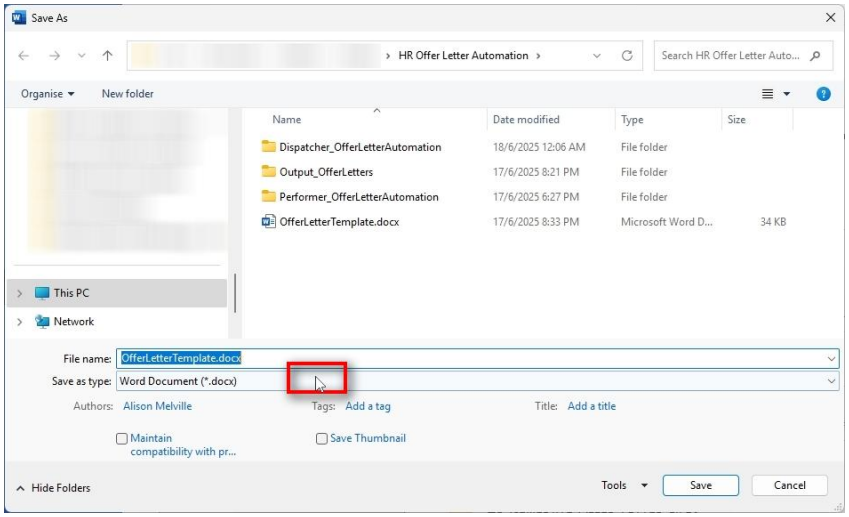
Est. time: 1.2 sec.



Action: Click

16.6 Click 'Browse'	
	Est. time: 1.9 sec.
	Action: Click

17 Save As - File Name	
	Est. time: 3.3 sec.

17.1 Insert File Name	
	Est. time: 3.3 sec.
	Action: Click

18 Save As - File Type	
	Est. time: 0.8 sec.

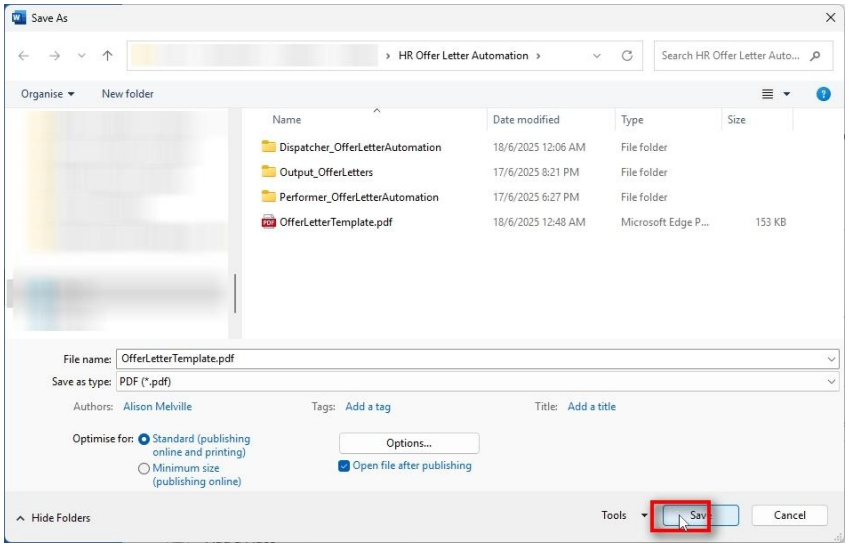
18.1 Change Document Type to PDF

	Est. time: 0.8 sec.
	Action: Click

19 Save As - Save File

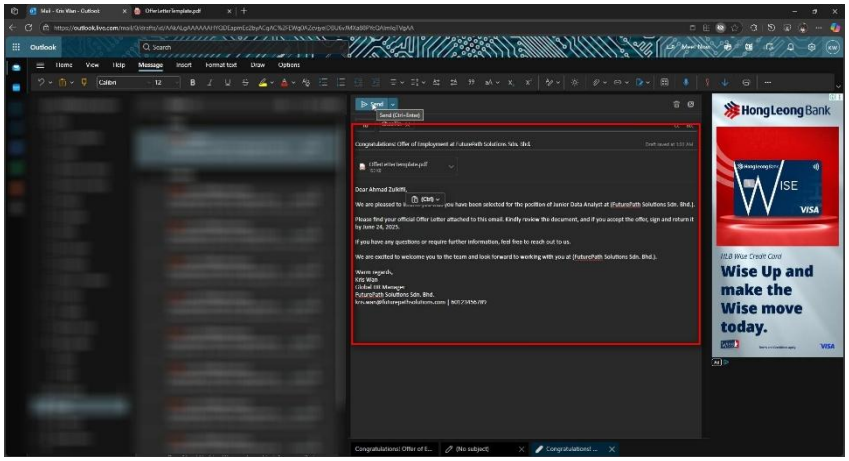
	Est. time: 1.9 sec.

19.1 Click 'Save'

	Est. time: 1.9 sec.
	Action: Click

20 Email Communication - Outlook

	Est. time: 3.8 sec.

20.1 Create and Send Emails with Offer Letter	
	Est. time: 3.8 sec.
	Action: Click

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*?
1	CandidateInfo.xlsx	MS Excel	Shared folder/Desktop	Yes	Yes
2	OfferLetterTemplate.docx	MS Outlook	Shared folder/Desktop	Yes	Yes

---

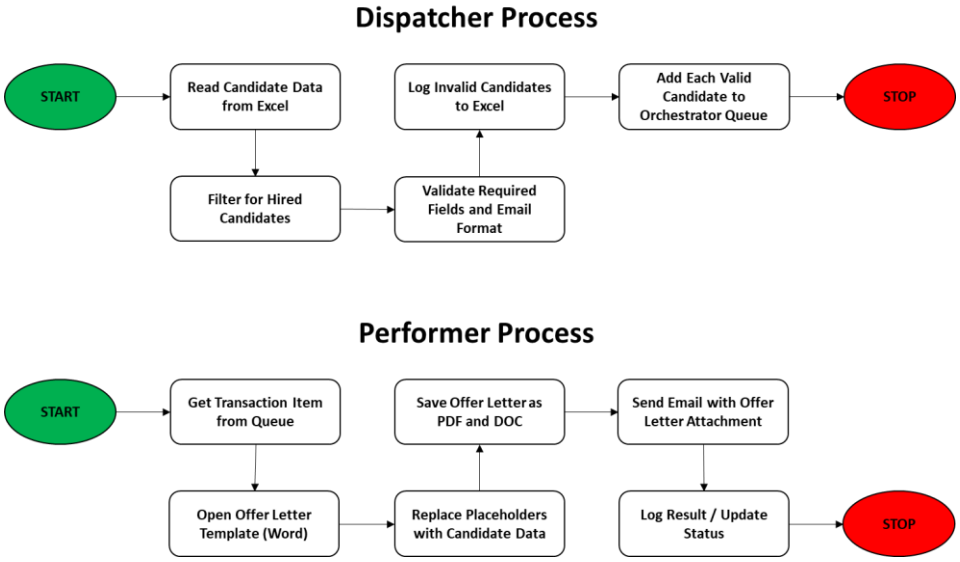
** Native Digital: This is data that was originally created digitally e.g. excel, database or application reports etc. The non-native digital inputs are usually scanned images.*

** 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.*

III. 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



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
N/A	N/A	N/A	N/A	N/A

3.3. In Scope For RPA

The following actions are in scope for RPA automation:

Dispatcher

- Open and read candidate data from Excel file.
- Filter candidates with Status = “Hired”.
- Validate required fields (e.g., name, address, email, position, salary).
- Validate candidate email format using regex.
- Mark and log invalid candidates in a dedicated worksheet for recruiter review.
- Add only valid candidate records to the Orchestrator queue (HiredCandidatesQueue).

Performer

- Retrieve transaction items from the Orchestrator queue.
- Open the offer letter Word template.
- Populate candidate-specific information into the template.
- Save personalized offer letter as DOCX and PDF files.
- Compose and send email with the offer letter attached.
- Update transaction status in Orchestrator.

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
Candidate interviews	Human interaction required	Bot is triggered post-selection	None – this remains manual
Candidate selection decision	Requires hiring manager’s judgment	Bot only processes candidates marked as “Hired”	None – remains a human decision step
Rejected candidate processing	No follow-up action is taken	Bot ignores rejected rows	Add email automation for rejections if needed

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

3.5. 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.

3.5.1. Known Business Exceptions

Details regarding how the robot should handle the exceptions.

Exception Name	Action	Parameters	Action to be taken
Missing Required Fields	Validate Fields	Candidate row (e.g., Name, Email)	Set "Validation" column value to "Not Valid". Skip adding to queue.
Invalid Email Format	Validate Email Address	Email column	Set "Validation" column value to "Not Valid". Skip adding to queue.
Offer Letter Template Missing	Load Word Template	File path	Throw Application Exception. Log and stop process or retry, depending on configuration.

3.5.2 Unknown Business Exceptions

Any unexpected or unhandled errors (e.g., file corruption, system crashes, missing Excel headers) will be logged and handled by REFramework (Performer).

The bot will proceed based on configured retry rules or terminate if critical.

In the Dispatcher, critical errors (e.g., Excel not found) will stop the process and be surfaced through logs or manual inspection.

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	Action to be taken
Excel file in use or inaccessible	Read/Write Excel	File path, error message	Log error and terminate process.
Word template missing/corrupted	Open Template	File path	Log error and terminate process.
Email send failure (API error)	Send Email	Email address, message	Log error and continue to next item.

3.6.2. 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.

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

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
N/A	N/A	N/A	N/A

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

IV.OTHER

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

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