Individual Project Report

Your Name:	Ang Pau Huang, Edwin, A0195275U
Certificate:	Graduate Certificate in Intelligent Software Agents – RPA & IPA project

My background: I am a mid-career worker in network infrastructure domain.

1. Your personal contribution to the project.

I developed robotic process automation (RPA) processes using UiPath Studio to replace repetitive human tasks oriented around emails. The tasks replaced are human liaison staff tasks in managing openhouse waitlists for a childcare center, which includes:

- Sending reminder emails for open house appointments
- Inform parents on open house vacancies
- Follow up on parents who missed open house events
- Process messages from parents.

I looked into how to integrate UiPath processes with Python libraries. I was initially stuck with UiPath and Python environment integration problem and reached out for solutions in UiPath discussion forums to UiPath staff, but the solution was not found (within project timeframe). Eventually, I learnt what works and managed to use Python libraries together with UiPath process.

After being able to use Python together with UiPath, I included the use of intelligent process automation (IPA) tasks like text summarization and sentiment analysis into the project.

I prepared documentation to clarify design and implementation of abovementioned tasks.

2. What you have learnt from the project.

I learnt about how to develop RPA processes using UiPath. I understand that to scale a new RPA/IPA solution enterprise wide, an off-the-shelf solution and partner like UiPath helps a lot, because there is dedicated support to look into bugs and security vulnerabilities issues. With this support and RPA developer's 'back' better covered, then can scalability (*which is required to make RPA/IPA become of value to organizations*) be achieved when the RPA developer focuses on solving business problems.

I learnt how to use Python together with UiPath. When Python is used, open source libraries which can perform IPA tasks can be integrated with UiPath. While UiPath sells solutions like AI-Fabric, I am able to add some of the features offered under UiPath's AI-Fabric into RPA/IPA processes while using community version of UiPath by using open source Python libraries.

3. How you can apply this in future work-related projects.

I had observed increasing challenges for enterprise network operations where headcount remains flat or is decreasing. I understand this is the trend within private companies and public sector in Singapore. Network operations need to operate faster in an environment that is more complicated as ever.

If I am working in the domain of network infrastructure in future, I would apply what I had learnt to address the widening gap between headcount and increasing operation demand by:

- Use RPA to perform repetitive tasks to free up time that operators can use address complicated operation problems
- Use IPA for reasoning and prediction functions like gaining insights, such as extracting data related to an operation problem from different data sources and perform correlation between them. This aids operators to be more effective in addressing and solving complicated operation problems.