# **My AI Innovation Story**

## **Introduction**

**As a Solution Architect, I'm deeply invested in the world of RPA and the emerging AI and Gen AI tools. These technologies hold immense potential to enhance efficiency in workplaces and communities alike. But with its power, comes a responsibility. It's important to handle these powerful tools with care, ensuring they don't lead to unethical practices and always keeping people's well-being at the forefront. The constant stream of industry advancements, seemingly happening every week, fills me with excitement regarding their potential applications.**

## **My Role**

**In my role at The Australian Red Cross, one of my responsibilities is to identify technological solutions for our business challenges. This entails researching and selecting appropriate programs or systems from the market, as well as devising strategies for their integration into our enterprise. Additionally, I'm involved in designing automated solutions for deployment within our RPA environment and exploring Azure AI products.**

## **Our Setup**

**I've established the RPA environment and workflows to ensure smooth operations from ideation to production. Our infrastructure is equipped to handle both development and production, with bots allotted 24-hour operational windows. We've deployed three servers, providing room for scalability. The process begins with ideation templates, allowing the business to detail their current manual processes and time spent on such activities. This aids in assessing the feasibility of bot implementation while ensuring that there is a return on investment. We then conduct review sessions with IT department heads, scrutinizing various facets such as IT security, data governance, and service delivery, including support and monitoring. Upon approval, collaborative design sessions with the business ensure alignment with expectations and requirements. With this process in place we are set for success. This process has assisted in the production of numerous bots being implemented.**

## **The Business Problem**

**This story focuses on one of our most impactful RPA bot workflows, which has been operational for two years. Within our Migration Support Programs, we facilitate online cash grant applications for various initiatives, including rent assistance, temporary visa migrants, disaster relief, and victims of domestic violence, among others. These applications are received into our payment system, where we evaluate eligibility criteria and disburse cash payments to clients. Additionally, certain programs require assessment for casework support needs, transitioning applicants into clients whose information must then be transferred to our casework system. Furthermore, we receive client referrals from a government portal, necessitating their integration into the same CRM platform.**

**These processes were handled manually by the business, consuming considerable time on data entry, particularly with an impending surge in workload volume. Analysis revealed that it took 8 minutes per application and 25 minutes per referral for manual data entry at scale. Automating these tasks look like there would be significant efficiency gains. During the discovery workshops and analysis phase, it became evident that the casework CRM lacked APIs or bulk import capabilities. Consequently, RPA emerged as the appropriate solution to address this challenge.**

## **Design**

**Once we confirmed RPA as our solution, we initiated our design workshops, addressing numerous aspects of the build.**

**Our first task was to access data from the two source systems. It was crucial for the bot to identify which applications and referrals needed to be transferred. We implemented two strategies to achieve this: first, we created a data view within one of the source systems, and secondly, we equipped the bot to maintain a record of historical transactions, ensuring it knows what has already been processed. To achieve this, the bot needed to log in to the systems, locate the data, and begin looping through each entry. We ensured secure management of login details by utilizing password lockers, increasing password length, and implementing regular password changes.**

**Subsequently, we mapped data fields from the source to the target system, determining appropriate entry points to modularize the build. Modularization enabled component reuse in future builds and ensured build manageability. We identified necessary transformations and created configuration files to handle them, such as converting language from the source to a dropdown list-compatible format in the target system.**

**Finally, we integrated our reporting framework into the process. With each RPA bot build, we logged all transactions into our reporting database. This comprehensive transactional reporting framework guaranteed the reliability and accuracy of the automated process. It provided confidence in the bot's functionality and facilitated reporting across all RPA projects, enabling proactive error correction and easy access to statistical information on historical project operations. We've seamlessly integrated reporting software with our data, providing management with continuous access to insightful analytics informing them on the success of our RPA projects.**

## **Production**

**Following approval of the project design, development kicked off. Like any RPA endeavour, we encountered obstacles and challenges along the way. After several weeks of effort, the bots were primed for scrutiny against the project requirements and design. With business acceptance confirmed and change management activities in place, we prepared for production release. Scheduling the bot to run overnight, we provided comprehensive support during hyper care to address any inconsistencies or expectations. This support persisted until the bot's operations stabilized.**

## **Ethical Considerations**

**Incorporating ethical considerations is essential when deploying RPA and AI tool designs. In our RPA bot development process, safeguarding data security takes precedence. In this project, we guarantee that all personal data is securely stored within designated CRM systems, minimizing data security risks inherent in manual entry processes, where data often traversed less secure platforms like Excel spreadsheets, potentially jeopardizing client confidentiality. With automation, we gain transparent oversight of our client data's whereabouts, bolstering its protection.**

**When collaborating with business units on RPA and AI initiatives, addressing the concern of job loss is important. It's a valid concern that requires sensitive handling. In many cases, the tasks being automated by bots were previously performed by staff members. Therefore, it's essential to adopt an approach that reassures employees that the goal of RPA and AI tools is to augment our work and collaborate alongside people, rather than replace them entirely. We can empower the workforce to adapt to the evolving landscape and take on more strategic, value add tasks.**

## **Impacts and Benefits**

**The deployment of RPA for data entry has yielded tangible benefits and positive outcomes. Firstly, the time savings achieved are substantial. With manual data entry processes consuming significant amounts of time, the automation provided by RPA has liberated hundreds of staff days, enabling caseworkers to dedicate their time and energy to meaningful interactions with clients. For this one RPA bot, it has processed the data entry for 2,000 referrals and 19,000 applications, ultimately saving 400 days of effort over the 2 years. In addition to saving time, the system has delivered reliable and prompt information to our caseworkers, facilitating their interactions with clients. This centralized access to client information enhances both the quality of client interactions and overall satisfaction. By increasing efficiency, the system enables us to extend support to a greater number of community members, ultimately enhancing our humanitarian impact.**

## **Other RPA projects**

**We've undertaken several RPA projects in the past, each delivering comparable benefits. One notable project involved building a bot to redact Payment Card Data (PCI) and credit card information from files across our environment, tackling what seemed like a daunting task without RPA support. Additionally, we have numerous ideations in progress. An exciting project on the horizon is a service leveraging AI Transcribing and Document Translation services, integrating both RPA and AI for seamless translation capabilities.**

## **Conclusion**

**Through careful planning, ethical considerations, and a commitment to continuous improvement, we can continue to explore the full potential of RPA and AI services. This exploration aims to enhance service delivery, improve outcomes, and make a meaningful difference in the lives of vulnerable individuals. Additionally, it advances our mission of humanitarian aid and support.**

**Simon Ashworth – Solution Architect**

**Australian Red Cross**