Saving Time and Expediting Child Services through Automation

Boundaryless is a consulting company providing solutions and expert resources supporting organizations in their digital transformation. The company specializes in advanced analytics and intelligent (process) automation.

Kreig Fields who works at Boundaryless as an "Innovation and Transformation Guy," wrote this article to describe one of the automations they built with Lahiru Fernando, who is a UiPath MVP out of Sri Lanka to help change child welfare system processes in Florida.

While you may never be involved in creating automations for child welfare, they hope this blog will provide you with some useful details on how to approach **Automation for Good**.

Children at Risk are at the Mercy of current Welfare System Processes

Most people speak about the importance of keeping children safe, healthy, and providing them with a place to call home. Politicians across the world have decried the current child welfare system and promised sweeping reforms, but nothing ever seems to change. We are using UiPath to change words into actions.

Kreig will step you through the thinking process we used to create an automation which saves caseworkers time filing paperwork, and which allows caseworkers to spend more time saving children and families.

What to Change ("A Problem Defined is Half Solved")?

Caseworkers are required to document services they provide. Federal regulations mandate these documents must be uploaded into the state system within 48 hours of services delivery. Failure to post files in a timely fashion can result in services being denied for reimbursement. Repeated issues can lead to loss of licenses and even shutting down the offending local agency. Federal audits are performed periodically to confirm compliance. These audits have continuously shown a lack of compliance. We will use the next few paragraphs to understand why compliance is so elusive.

Most state child welfare systems are based on a federal design from 1997. Some still have "green screens". The legacy systems were designed before modern considerations such as workflow optimization or even just minimizing mouse clicks. Caseworkers may handle 100s of documents for each case. Uploading documents is an arduous and frustrating process. The existing state systems require documents to be loaded one by one into the state system. Caseworkers must exit and re-enter into the system for each document they need to upload. In addition, different types of documents may need to be uploaded to different areas, based on obscure business rules. For example, it typically takes five hours just to upload a foster care licensing application into the state system.

Our Caseworkers also face challenges just accessing the state system. The system is often down for maintenance or emergency fixes and remote access is also limited. As a work-around, Caseworkers temporarily store documents locally, with an intent to upload them to the state system "when they have time," (but they never have the time). Sometimes case workers are juggling dozens of cases and moving from crises to crisis. It's no wonder turnover rates over 40% are not uncommon. Staffs prioritize services over paperwork and most Caseworkers are willing to save their documents to a local drive, yet very few are uploaded into the state system. It simply isn't worth their effort.

Every couple of years the state system case files are audited for compliance. People are chastised, and performance improvement plans are written, but nothing ever changes.

In summary, caseworkers are being asked to upload case documents in a timely fashion, but job and system constraints prevent this.

What solution can they change to? Why automation?

The federal child welfare system in the US was initially designed in 1997. Back in the days of COBOL and green screens. Efforts are being made modernize these systems, but this will likely take many years.

Some people have tried to just hire more caseworkers. But studies have shown that increased staffing doesn't necessarily lead to lower staff turnover or increased job satisfaction. Hiring more workers can relive constraints temporarily but it doesn't address the underlying causes of staff turnover. If we don't take steps to improve job satisfaction, staff turnover will quickly return.

We talked to people, and, without exception, they hated using the state system to process casefiles. Many of the workers were fresh college grads and had never seen a "green screen" before. Several caseworkers told me these antiquated systems were making them rethink their vocation ("I came to help children, not become a clerical worker!"). These caseworker's biggest complaint was having to store the documents in two places. Storing the documents on their local shared drive was easy enough. But then they had to post these same documents to the antiquated state system.

We decided to use UiPath to automate the process of copying documents from the SharePoint repository and posting them to the state system. We broke this into 3 basic steps: grab documents from the local SharePoint repository, determine how documents needed to be posted on the state system, then mimicking the user interaction needed to post the file into the state system.

We created an unattended bot which was triggered to start whenever a new file was submitted to the local SharePoint folder. This bot grabbed the new file and passed it to UiPath's Document Understanding tool to extract the information needed to post the file to the state system. We were handling over one hundred types of documents, so we relied on a flowchart business process to simplify decisions and document the navigation required to post the file. Once the posting details were determined, the automation signed onto the state system and performed the navigation steps needed to post the file. All of this was done offline from the case worker. This freed the caseworker to perform meaningful tasks. While the bot met regulatory requirements for timely posting of documents.

Implementation Details

Once we really understood the problem and proposed solution, it was time to build and implement the solution.

Caseworkers were already using an old document management system to store their local files. We replaced this with a very simple app which stored their files to a local SharePoint repository.

We also had to build navigations to store over 160 types of documents. This navigation logic was based on document name, document type, the case it applied to, and the author. On previous projects for this customer, we had to use document understanding to extract this information. In this project the cases workers were already supplying this information as they stored documents in the SharePoint repository. With a few tweaks we were able to get all the information we needed from SharePoint.

We also thought we were going to use Document Understanding to validate document classification (as we had done on other projects). Frankly, the document information from the portal was "good enough" and Document Understanding would only add complexity and AI costs. It was tempting to use Document Understanding, but we didn't want to just use the latest technology, we wanted to fix the business problem which we analyzed in our first two steps. We decided it was better to keep it simple and not use Document Understanding.

Evidence and Impacts

Prior to this automation, documents were stored locally but rarely made it up to the state system. With the use of automation, recent internal audits confirmed that 100% of new documents are currently being uploaded to the appropriate locations in the state system. In fact, a sub project was performed to upload 30,000 old documents. It is estimated this automation will save case workers over 20,000 hours annually at this local agency. This is the equivalent of having 12 additional case workers. By using UiPath' automation for good, caseworkers can now use the 20,000 hours saved to focus on helping children find families.

In summary, through analysis, and leveraging automation tools, it was impressive to see how RPA could be used to save time, increase employee morale, and provide struggling organizations with new solutions to outdated business processes.

We were fortunate to be able to stand by the Boundaryless strategic vision of working with people across communities and organizations, to create an automation solution using UiPath technology, for this unique circumstance and will continue to explore additional ways to leverage RPA to simplify the way work is currently being done to bring about additional benefits through innovative solutions.