

STATE OF OHIO – TRANSFORMING DELIVERY OF HEALTH & HUMAN SERVICES THROUGH ROBOTICS PROCESS AUTOMATION

AWARD CATEGORY: Emerging & Innovative Technologies

STATE: State of Ohio

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PROJECT INITIATION: May 2018

PROJECT END DATE: First three Bots deployed by October 2018 (Additional Bots deployed in May 2019 and on-going)

Executive Summary

The State of Ohio's Department of Administrative Services (DAS) and the Ohio Benefits project leveraged robotics process automation software – a high impact, low-cost, and quick-to-implement technology – to undergo rules-based tasks that free up the workforce and enhance the delivery of public assistance programs to the most vulnerable populations across the state. In recent years, robotics process automation technology has already demonstrated success across multiple commercial entities. In 2018, the State of Ohio served as state government pioneers within this technological space and explored opportunities to implement process automation to realize operational efficiencies that transform and enhance the user experience for all stakeholders involved, including State and County workers, as well as the citizens of Ohio.

To date, the State of Ohio has successfully developed and deployed four automations or “Bots” that operate within a state government system known as Ohio Benefits, which determines eligibility for public assistance programs that include Medicaid, Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF). The Bots work alongside county workers or caseworkers and state employees, who help the citizens obtain critical social services. The Bots reduce the burden of repetitive tasks for the county caseworker, which allows them to focus on higher-impact activities to serve their customers across the state with greater care and efficiency. These four Bots have provided over 8,000 newborns with immediate access to medical care from birth, cut the citizen wait time for access to their public assistance case information to 1 day, saved counties over 1,000 working hours by processing alerts, and ensured that is no gap in Medicaid coverage for pregnant women.

Significance

THE TECHNOLOGY

Robotic Process Automation (RPA) software is a high impact, low-cost, and quick-to-implement technology that replicates human actions to undergo rules-based tasks that free up the workforce. Often, this technology is used to automate structured, back office digital processes. The State of Ohio has taken this technology a step further. Not only has RPA helped workers across the State regain time that was previously lost to mundane tasks that require very little judgment or decision making, RPA and its powerful tools have been leveraged to transform human service delivery across the state. In other words, Ohio has created a robust robotics workforce whose impact can not only be felt by county workers, and state employees but perhaps most importantly, the citizens of Ohio.

THE BOTS

The State of Ohio pioneered the adoption of process automation capabilities to reduce the burden of mundane, repetitive tasks for workers, and allow them to truly deliver value to all Ohioans. The Bots have not only delivered tremendous time savings, they have also helped the state address some of its most critical issues.

The first bot is known as the Baby Bot and is designed to add a newborn's information to their mother's Medicaid eligibility case and determine the newborn's eligibility for Medicaid. In Ohio, the Department of Medicaid contracts with five managed care plans, which are a type of health insurance, to deliver Medicaid program healthcare services to their beneficiaries. Whenever a baby is born, these managed care plans send newborn information to the County and rely on the county caseworker to add a newborn to their mother's Medicaid case. The State of Ohio Baby Bot works alongside the county caseworkers across the ten metro counties in Ohio to ensure that a newborn's information is accurately entered into Ohio Benefits. The Baby Bot also ensures that a newborn is properly enrolled in Medicaid, so they can receive the care they need. To dramatically reduce the turnaround time for processing, the Baby Bot corresponds directly with each managed care plan via secure email correspondence. The Baby Bot only notifies caseworkers of complex scenarios that require human judgment.

The second Bot, known as the Disability Onset Alert Bot, works to clear a specific alert found in Ohio Benefits. The alert is generated whenever an update is made to an individual's disability information as any medical updates could impact an individual's eligibility for Medicaid assistance. The Bot assists the caseworker by reviewing predetermined screens to compare information, and only notifies a caseworker when it encounters more complex cases.

Ohio's Self-Service Portal (SSP) Case Linking Request Bot is designed to review case linking requests that are submitted by citizens via a self-service portal who would like to access their case in Ohio Benefits. The Bot retrieves these requests and reviews key personal identifiable information related to the case to determine whether a case should be linked. Once the citizen receives access to their case, they can make updates to key personal details as necessary and at their convenience.

Finally, in May 2019, Ohio deployed its fourth Bot into production. The Pregnancy Bot is designed to support the NurtureOhio System, better known as the web-based Pregnancy Risk Assessment Form, which connects with the Ohio Benefits system to notify counties of a Medicaid individual's pregnancy for eligibility determination. The goal of automating the process of

handling New Pregnancy alerts is to ensure that pregnant women who are eligible for Medicaid assistance are promptly processed so there is no gap in coverage.

THE IMPACT

The Baby Bot has enhanced the State and Metro County's ability to ensure that newborns, the most vulnerable members of our society, have access to the medical care they need as soon as possible. Since October 2018, the Baby Bot enrolled over 8,000 newborns in a managed care plan the same day that the metro county received their information. The Baby Bot effectively eliminated any delay in getting newborns covered for medical treatments in their most vulnerable initial days. When it could previously have taken up to 7-10 days to process the newborns, the ability for 8,000 to be processed the same day they are received is significant.

The Baby Bot's role in expediting the processing for Medicaid eligibility for newborns is especially relevant given the high rate of infant mortality across Ohio. In 2011, Ohio's infant mortality rate was 7.9 infant deaths per 1,000 live births compared to the national rate of 6.1 infant deaths per 1,000 live births. While the cause of death certainly varies, the importance of providing access to care to the most vulnerable members of our society cannot be overstated. Today, the Baby Bot can enroll newborns the same day that they are reported by the managed care plan.

Separately, an additional 9,000 newborns that were sent from the Managed Care Plans were reviewed by the "Baby Bot" and identified as requiring further caseworker review based on its assessment. In these instances, the caseworker was notified and provided with a guided path to directly address the issue identified in the case. These "Smart Exceptions" provide further time savings by removing the investigative work previously required to resolve an issue. In addition to the reduction of overall timeliness of processing the newborns, the "Baby Bot's" activities have resulted in tremendous time savings for county workers; time that can now be spent on high value tasks that require their attention. Finally, managed care plans now receive enrollment information for their newborns within days of submission, providing improved access to care and appropriate capitation payments. This significantly decreases submissions to Ohio Department of Medicaid's managed care reconciliation team and the administrative burden associated with the investigation of those cases.

Meanwhile, the Alert Bot has transformed business processes for counties by working and clearing a backlog of alerts; helping workers re-prioritize and re-define their workload. To date, the Bot has processed 68,000+ alerts, saving workers across the state over 1,100 working hours.

The Self-Service Portal (SSP) Case Linking Request Bot has helped connect the citizens with their Ohio Benefits account information to dramatically improve client outcomes across Ohio. It has reviewed 79,000+ requests, processing 95% of these requests from end-to-end with no caseworker intervention. The Bot has cut the citizen wait time for access to their public assistance case information to 1 day, allowing Ohioans to quickly access their case information, and provide crucial updates in a timely manner.

Finally, the recently deployed Pregnancy Bot has proven the ability to process 85% of new pregnancy alerts, providing these soon-to-be mothers with the reassurance that there will be no gap in their healthcare coverage during these crucial months when proper medical coverage is critical to the pregnant mother's health, and that of her baby.

The operational efficiencies and time savings generated by the four Bots are groundbreaking within the state and local government space. This technology and the variety of use cases now provides a blueprint for other state government agencies to adapt and adopt the use of RPA for this type of citizen-centric services. While a few stakeholders expressed hesitation regarding the use of RPA to support their work, once they saw the Bots in action and their ability to allow them to focus on more valued-added tasks – they became believers very quickly.

While the Ohio Bots were customized to enhance business process efficiencies within Ohio Benefits, the challenges of repetitive, mundane tasks that may be prone to human error transcend state borders. Given the appropriate change management strategies, the same technological innovations in Ohio can be repurposed and adapted for other state government entities.

Given the success that the State has seen in deploying these 4 Bots across the State, they have invested in the identification of additional Bots that will further address the critical challenges that the citizens of Ohio who are on Public Assistance are facing. Future bots will support citizens receiving long term care support, those who must re-certify their public assistance, and citizens who are awaiting service; to name a few. Ohio has embraced this innovative and emerging technology and its potential to be a transformative force and are fully invested in continuing to explore new and creative ways in which the State and its citizens can realize its benefits.

SUPPLEMENTAL MATERIALS

The following are links to an article on the Bots as well as videos showing the first three Bots in action:

- **Article:** Accelerating Benefit Requests with RPA: https://gcn.com/articles/2018/11/01/psi_ohio-benefits-process-automation-pilot-project.aspx
- **Video:** Metro Baby Bot: <https://youtu.be/JnUQIIVzS7M>
- **Video:** Case Linking: <https://youtu.be/brehJhy1EAU>
- **Video:** Statewide Alerts: <https://youtu.be/2qkt8eW2WOQ>