CREATIVE SOLUTION TO A COMMON CHALLENGE

Washtenaw County, Michigan
Robots Record Our Revenue

About Washtenaw County
Washtenaw County is located in southeast Michigan, with a total area of 720 square miles. Its 27 cities, villages, and townships are home to 370,000 citizens in urban, suburban, and rural settings. The county also includes two large universities—University of Michigan and Eastern Michigan University—in its two largest cities, Ann Arbor and Ypsilanti. Its annual budget is $130 million.

Many local governments are confronting the reality that resources, staff, and money are flat, while complexity and volume are ever-increasing. When the Washtenaw County Treasurer’s Office struggled to keep up with daily deposits from rapidly diversifying sources of revenue, it was time to find a way to work smarter. In 2021, the county treasurer forged a partnership with the Information Technology (IT) department and a third-party automation vendor to implement the county’s first use of robotic process automation. In just one year, the treasurer’s office has saved more than 450 staff hours while freeing staff to focus on higher-value work, including customer service. In this article, the project team shares the challenges and lessons—and how other governments can benefit from implementing automation.

THE CHALLENGE OF KEEPING PACE
The Washtenaw County treasurer has a pooled banking and investment model in which all departments deposit to a set of connected bank accounts and all revenue is identified and recorded by the treasurer’s office. The treasurer’s staff also collects and records numerous payments for delinquent taxes, general billing invoices, hotel accommodation taxes, and other individual transactions, which are summarized into single deposits. Up until late 2021, the process of revenue identification and recording was largely manual. As volume increased to an average of 67 deposits per day, staff struggled to keep up, especially with absences and turnover. To add to the challenge, where the office had once received only cash or checks, revenue sources had diversified and operational departments took
payment online by credit card, PayPal or ACH; by credit card, check or cash in person; and by bank lockbox. Strict reporting requirements require detailed, accurate record keeping, and keeping up with volume is essential to provide other departments with accurate, timely receipts for reporting, management, and planning.

The office had reached a tipping point. Every possible efficiency had already been squeezed out of Excel, system imports, homegrown processes, and staff training. As Washtenaw County Treasurer Catherine McClary explained, “We didn’t start out by saying ‘we need to automate.’ We started out by realizing we couldn’t handle the volume, and the complexity of the volume.” Like many other organizations and local governments, Washtenaw County has numerous software systems used by individual departments. For example, its parks department relies on park-specific software, while its courts department has court-specific software. These systems are rarely integrated with the county’s financial system, and export/imports often transmit only summarized information. Detailed revenue data had to be rekeyed from one system to another, and the process was laborious and error prone. Reconciliations and corrections then took additional time. “We averaged a transposition error rate of about 88 per year,” Catherine recalled, citing causes like interusions. The treasurer’s office started considering solutions.

**FINDING A SOLUTION, FORGING A PARTNERSHIP**

McClary and Chief Deputy Treasurer Kirsten Osborn had seen demonstrations of robotic process automation software robots (bots) at national accounting conferences and recognized that it might be possible to use them for receiving and recording revenue. Robotic process automation is software designed to replicate repetitive, rules-based tasks. Bots can be programmed to conduct a wide range of well-defined tasks quickly and consistently, with benefits including error reduction and increased productivity. Robotic process automation technology is used more extensively in the private sector, including in telecommunications, banking and insurance, and manufacturing. It has also gained a foothold at the federal level, but so far is not common in local government.

Washtenaw County had recently hired IT Director Jeff Rose, who brought deep experience and perspective from the private sector to his new role. It was a complement to McClary’s 26 years as treasurer and her previous investment banking experience—and the beginning of a true partnership, McClary recalled. “My office lacked the technical skills to implement an automation solution,” she explained. Reflecting on the exploration of a solution, Jeff said, “One of our goals as an IT department is to shift transactional business to free up county staff time so specialists can provide critical services—including customer service. This helps us better serve community residents.”

McClary and Rose saw the promise of solving the immediate need while also providing an example of the transformative power of technology. They issued an RFP, which led to the selection of Automation Anywhere, the technology, however, McClary and Rose realized how important change management would be to the process. In a situation like this, staff may be afraid that automation will replace human jobs, whether or not that fear is unfounded. Rose described their goal as a “shift left for the entire county staff,” while McClary noted that “we explained to people that this process is just software designed to replicate repetitive tasks—it will reduce grunt work.” The team also gave the bot a persona, and it is now called a virtual assistant. “Her name is Akila, which is Arabic for ‘logical,’” McClary said.

Staff logged more than 200 hours in investigatory work, internal meetings, vendor research, documentation, training, and bot development. It’s an investment that has already yielded results, and one that will continue to save. The county estimates that for the deposit process alone, the bot will save 450 staff hours annually for as long as the software is in use. In addition, future bot development will take less time now that staff know how to approach projects and use the tool. Akila has also driven down the error rate. “From January to June 2022,” McClary recalled, “we had zero errors, where we would normally have an average of 44.”
HITTING SOME TURBULENCE

Six months after implementation, Automation Anywhere rolled out a planned upgrade. The county did not have a process in place for upgrades, so its firewall stopped it. The software stopped working, and the fix ultimately led to a reinstallation and nearly three weeks without Akila.

“We have an essential duty to record revenue accurately and in a timely fashion,” McClary said, “so we made a management decision to record revenue manually again, and we diverted the entire staff to catch up on two weeks’ worth of work. During that time, we had five errors, which reminded us about the value of the bot’s precision.” Once the software was up and running again, the team debriefed on lessons learned, a step that McClary and Rose highlighted for the benefit of other governments.

The first takeaway is that eliminating grunt work makes for happier staff—and county residents. With the software handling transmittals and copying them into the general ledger, staff can take more time with customers, including addressing complicated questions. The second insight was that staff saw Akila’s day-to-day value. “Until we had to catch up, we didn’t always realize that four and a half hours of work a day was being done by something we couldn’t see,” McClary said. The third takeaway was the need for a non-production environment to prepare for upgrades, fixes, and other maintenance to avoid a repeat of last summer’s downtime.

LESSONS FOR OTHER GOVERNMENTS

New digital tools enable new ways of working—many of them more efficient and precise. Automation is one such tool, but it exists on a continuum. As McClary and Rose emphasized, smaller organizations can benefit from using Excel to its fullest for sorting and filtering tools. Import tools can help reduce the burden and error risks of data entry. And automation can transform any process with structured data for which rules can be written. Automation can also be tested in pilot projects like Washtenaw’s.

Success in implementation requires the right software and partner—one that fits into the resources available to a local government and one the local government can build a relationship with to work through challenges and unexpected issues. It also depends on allocating key staff time daily, including temporarily reassigning existing duties like help desk tickets for Leon and meeting leadership for Shoemaker so they could work together during dedicated blocks each morning. “It takes saying to your staff, this is going to make such a difference in how we can serve the public that I am going to provide the time,” McClary pointed out.

The challenges Washtenaw County faced in increasing deposit volume and source complexity amid resource constraints are common struggles for many local governments. This makes the county’s success replicable. “Anyone who knows Excel well can take this tool, follow the guided training, and oversee a successful implementation,” McClary emphasized.

The team is already well into another project for Akila: providing login and password credentials for her to download banking information from bank file transfer protocol sites and place it in the shared drive for early-morning access by treasury staff. They are also actively discussing opportunities within the finance, procurement, human resource, service, and help desk departments for other ways to use robotic process automation technology.

GFOA BEST PRACTICES

The Washtenaw County Treasurer’s Office followed GFOA best practices for internal controls to ensure the accurate and timely recording of revenue and reconciliation of bank accounts. Another key to success was following recommendations found as part of the cybersecurity risk assessment related to a GFOA research report (gfoa.org/materials/byte-of-prevention). Rose also noted the county’s strict adherence to data compliance standards as fundamental to project planning and implementation.

McClary, Rose, and the team are breaking new ground for the application of automation tools like robotic process automation. McClary regularly attends meetings and connects with colleagues across the United States and Canada. “Washtenaw County has been a leader in robotic process automation for local government,” she noted, “and we hope to show others the benefits.”

“Treasury has been the ideal partner to showcase the positive aspects of automation,” Rose said. “The implementation has given us a sandbox we can use to show the rest of the county what’s possible with technology, and through strategic alignment among departments.”