

Revolutionizing Smart Benefit Systems

Category: State CIO Office

Special Recognition

State: Michigan

Project Start: June 2023

Project End: Ongoing

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EXECUTIVE SUMMARY The Michigan Department of Health and Human Services (MDHHS) has implemented a solution which enhances the processing of applications and renewals received from citizens, aimed at improving the overall transparency and efficiency of benefits administration in the State of Michigan. Whether the forms are received digitally or in the mail, the solution leverages OCR to automate the process while enhancing transparency for citizens by providing real time updates on their application status.

To kick off the overall solution, the department embarked on a project to automate traditionally manual and labor-intensive application processing. Automation of application processing simplifies the administration of benefits for the approximately 1.4 million residents served by MDHHS. This initiative reduces the workload for eligibility specialists, allowing them to focus on higher-value activities, while maintaining a commitment to accuracy, compliance, and the adoption of innovative technologies

Once applications are submitted by the client, they can follow the status of their applications and the tracker provides residents with deeper insight into how the state manages their paperwork and addresses their urgent needs. Additionally, this visibility alleviates the workload of case specialists by reducing client inquiries that would otherwise overwhelm the help desk.

This solution enhances specialist efficiency, benefit transparency, and client satisfaction in benefits administration, positioning MDHHS as a leader in leveraging technology to improve government services.

IDEA

THE PROBLEM The Michigan Department of Health and Human Services (MDHHS) manages SNAP benefits for a substantial population. Residents submit applicants and periodic renewal forms to MDHHS. Traditionally, the labor-intensive manual processing of these reports by eligibility specialists hindered MDHHS's ability to efficiently handle caseloads and promptly meet client needs. This manual system often left residents uncertain about their application status while overburdening case specialists with backlogs and a high volume of client inquiries.

To enhance transparency and streamline processing, MDHHS launched an enhanced solutions for automating renewal processing and providing benefit transparency through an application Tracker. This initiative allows specialists to work more effectively by reducing administrative burdens while providing residents with real-time application status updates. As a result, residents can track the progress of their applications, reducing anxiety and helping them plan for their household needs. Specialists can now focus on high-value tasks, ensuring accurate and compliant benefit administration while responding promptly to client inquiries.

WHY IT MATTERS Understanding the status of their applications is vital for residents who urgently require benefits like food and health care to meet their daily needs. Additionally, automating the processing of renewals make MDHHS specialists to concentrate on cases needing immediate attention, streamlining benefit processing, and enhancing responsiveness to client needs. It bolsters the department's emergency readiness and optimizes resources for critical tasks both internally and externally. Moreover, by reducing the workload of eligibility specialists and help desk staff, the solution enables the Michigan Department of Health and Human Services to maintain a strong commitment to accuracy, compliance, and innovative technologies, all while positioning itself as a leader in leveraging technology to improve government services.



HOW IT'S DIFFERENT This project stands out by leveraging a Google Cloud solution with Optical Character Recognition (OCR) to convert scanned handwritten and printed forms into searchable and editable digital files. This innovation significantly enhances data processing efficiency and marks the first cloud-based solution of its kind in Michigan. Additionally, allows eligibility specialists focus on high-priority cases, expediting benefit processing and enhancing responsiveness to client needs.

The solution also distinguishes itself by offering residents access to detailed application processing information within a day of submission. This rapid transparency allows them to monitor the progress of their benefits applications in real time, empowering them to better plan for their current and future household needs without having to reach out or call the MDHHS offices for checking the status.

By prioritizing innovative automation and real-time tracking, MDHHS ensures timely aid delivery, reduces the burden on help desk staff, and establishes itself as a technological leader in improving government services through a more personalized and efficient benefits administration system.

HOW IT'S UNIVERSAL The renewal and application process for SNAP benefits is a universal requirement across all states, presenting a significant opportunity for automation implementation. By leveraging automation, states can streamline and standardize the renewal process, leading to greater efficiency and consistency nationwide. Additionally, a human-centered approach can revolutionize the resident experience by providing transparent and visually appealing application tracking tools by addressing two key CIO priorities:

- 1. Digital Government / Digital Services: Improving and digitizing citizen experience.
- 2. **Customer Relationship Management:** Fostering confidence and trust through efficiency, quicker results, and transparency.

Application Tracker: Resident View



ROADMAP Fueled by a commitment to innovation, the Department of Technology, Management, and Budget (DTMB) embraces cutting-edge technologies like Artificial Intelligence and Automation, following Michigan's SUITE methodology and Agile framework. Recognizing the importance of human-centered design, a collaborative team spanning various state agencies was assembled to drive forward the implementation process. Through these sessions, residents expressed a need for greater transparency in benefit application processing, igniting the vision for the Application Tracker. Our teams embarked on design sessions in 2023, they integrated resident feedback, shaping the tracker's development with a focus on transparency and efficiency. This seamless integration of resident insights and innovative technology drives the shared goal of delivering an automated solution that enhances the experience for Michigan residents.

KEY INVOLVEMENT Obtaining approval, buy-in, awareness, and adoption from various stakeholders was critical in successfully implementing the project. The collaborative effort involved multiple entities, each contributing unique expertise and resources.

Guiding principles, methodology, and a Human-Centered Design (HCD) approach provided a solid foundation for the project's development and ensured a user-centric approach to problem-solving. Meanwhile, The State of Michigan contributed significantly by appointing a product owner and assembling a team of user acceptance testers. Their involvement ensured that the solution met the specific needs and requirements of end-users within the department. Within the State, the project benefited greatly from the input of the **HCD Discovery Group** and **HCD Design Validation Group**, comprised of end-users who provided valuable insights from the project's inception. These groups not only guided the project's direction but also validated the product design before formal testing commenced, ensuring alignment with user expectations.

The successful implementation of the automation project was achieved through crucial stakeholder buy-in, **collaboration across multiple entities**, user-centric design approaches, and the integration of cutting-edge technology, resulting in improved efficiency and tangible benefits for end-users.

Deloitte's involvement further bolstered the project, with their functional analyst and technical lead contributing expertise across all aspects of the project and implementing a proven product management approach. Their contributions ensured the project's alignment with best practices and industry standards. Google's provision of the Document AI service, featuring intelligent Optical Character Resolution (iOCR), was instrumental in realizing the project's objectives. This technology played a crucial role in automating the processing of paper forms, streamlining workflows, and enhancing efficiency.

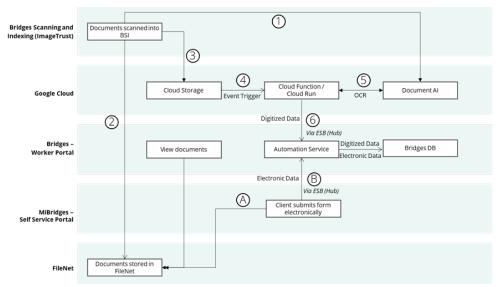
IMPLEMENTATION

In Michigan, applications and benefit reviews are predominantly submitted through two channels: 51% via a self-service portal and 49% through handwritten forms received by mail. The portal prompts individuals with pre-existing information and a series of Yes/No questions to indicate changes in their circumstances. Data entered is packaged and sent to worker portal. Conversely, handwritten forms are scanned using the Scanning and Indexing System (BSI), utilizing GCP's Document AI for iOCR, a technology which this project pioneers. Data extracted by iOCR is sent to worker portal for processing.

Digitized data undergoes rule-based assessments to determine changes and additional validations. Only forms with no changes proceed to automation. Trusted data sources like SOLQ supplement client-reported data, identifying unreported changes which are alerted to specialists. Forms with no changes are presented to specialists for review. Specialists certify benefits after confirming automation results, significantly reducing manual processing time.

This automation **leverages modern solutions** such as Google Cloud Provider (GCP) that streamline workflow creations and enable intelligent optical character recognition to digitize handwritten documents.

Michigan's automation solution aligns with key architectural considerations, ensuring modularity, scalability, security, responsiveness, and reusability. Paper applications received via BSI leverage GCP for document classification and data extraction, while electronic applications from MI Bridges utilize APIs for seamless data transfer to Bridges. An asynchronous, message-based architecture manages the volume of submissions, ensuring scalability and resilience. Failover mechanisms mitigate technical failures, maintaining high reliability. The following diagram shows the architecture employing the process resulting from carefully considering the key architectural principles and leveraging modern and existing platforms:



The residents knows whether their benefits are approved, denied, or pending through the application tracker. For pending applications, the user gets a real-time look at what is next on the journey to approval including interview requirements, documentation required and a high-level estimated date of determination. Like the automation solution, the Application Tracker was designed to meet the resident's need while minimizing additional technical work. Designs considered existing system integrations, responsiveness, and scalability. Through regular technical sessions over a three-month period, the team decided to reuse an existing integration and build one new, smaller integration to add the missing details from the existing integration service. This approach allowed the team to minimize additional technical requirements and testing, while producing the same benefits for the resident.

IMPACT

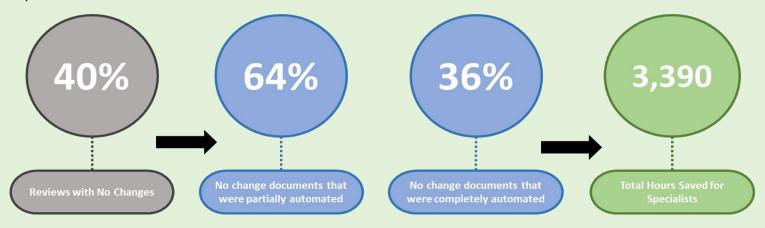
The implementation of this project coincided with Michigan's unwind from the Public Health Emergency. During this time, the state had to schedule and process over 3 million renewals applications in one year. With significant strain already being placed on the local office staff, the application automation and ability for Michiganders to track the status provides the right solution at the right time, resulting in a significant positive impact for workforce capacity and for resident benefit.

WAS IT BETTER?

During the PHE unwind period, workload reduction emerged as a critical priority for MDHHS, aiming to enhance flexibility with resource allocation. Among various avenues for optimization, having real-time insight into the processing timeline of their applications and introduced automation enabling MDHHS specialists to focus on cases requiring attention, expediting benefit processing, and enhancing responsiveness to client needs. By reducing the time specialists spent on processing renewals, local office managers can increase the amount of Medicaid redeterminations that their office can process each month. While this project was not designed to increase the Medicaid redetermination processing rate, it has had impressive short-term impact. Long term, the solution allows greater flexibility in resource allocation which improves Michigan's readiness for future emergencies. The Application Tracker successfully met the resident need to have greater insight into where their benefit applications were in the determination process.

HOW DO YOU KNOW?

Automating Semi Annual and Mid Certification Reviews: Prior to this change, it took specialists around 20 minutes to complete each Semi-Annual and Mid-Certification review. Complete automation saves the specialist more than 10 minutes per review and partial automation saves the specialist about 5 minutes per review. The numbers below show data since our implementation.



3,390 hours were saved since implementation, saving the state over 4 Full Time Equivalents (FTEs) during that time.

Application Tracker Impact

"This innovative tool will allow residents to know the exact status of their benefits application 24/7 and help them prepare for any next steps. In addition to helping Michiganders feel more involved and empowered in their application process, we are hopeful it will also result in lower call volumes to local offices and employee success." - Elizabeth Hertel, Director, MDHHS, March 25, 2024

HOW DO YOU KNOW?

Application Tracker: Since go-live, the Application Tracker has immediately made a positive impact for resident awareness of where they were in the benefit determination process. During the first month, about 17,800 residents accessed the Application Tracker daily and the Help Desk received 14% fewer resident calls related to benefit status, saving 985 hours of work.

Number of Times
Application Tracker
Accessed in April 2024

Number of Times
Application Tracker
Accessed in April 2024

Reduction in call center volume

LONG-TERM PLAN We believe in creating sustainable solutions. Beyond the initial setup detailed above, we have a robust maintenance plan that includes scheduled updates and improvements to these enhancements. For example, next steps for the Application Tracker include giving Community Navigators access to the Tracker so they can easily monitor resident applications and the addition of application details, such as healthcare breakdown by household member.



RETURN ON INVESTMENT The question of investment value is paramount when considering the implementation of any new system enhancement. Our Automation Solution and Application Tracker offer a robust return on investment, as demonstrated by the reduction in manual labor and enhanced resident experience. MDHHS has already seen increased operational efficiency from the automated SNAP renewal process and resident satisfaction with quicker renewal processing and increased transparency in the application processing timeline.