

2017 Michigan NASCIO Award Nomination

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Project Title

Call one, Call once: Michigan elevates its child support IVR system to the cloud

Category: Digital Government: Government to Citizen

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Call one, Call once: Michigan elevates its child support IVR system to the cloud

Executive Summary

Michigan's Department of Technology, Management and Budget (DTMB) partnered with the Department of Health and Human Services (DHHS) Office of Child Support, CenturyLink, County Friend of the Court (FOC) Offices and Accenture to modernize and standardize its IVR system in order to improve customers' access to child support information. It moved its outdated, multi-server IVR system to a new centralized, cloud-hosted server solution, allowing Michigan residents to use one toll-free number to access their child support information. The solution provides Michigan with the agility to adapt to the evolving needs of citizens, and because it was delivered with true collaboration, it guarantees the greatest level of efficiency and effectiveness in customer service and successfully fulfills DTMB's mission to put the State at the forefront of innovative government solutions.

"With this initiative, parents with a child support order now have one number to contact their local enforcement office, improving our accessibility to those we serve."

~ Erin Frisch

Michigan Department of Health and Human Services (DHHS) Director of Child Support

"Together, our State and County Departments working with our technology partners Accenture and Century Link using the State's Cloud First Strategy are helping improve services for the citizens of Michigan."

~ Neil Slagle

Michigan Department of Technology Management and Budget (DTMB) Director of Contact Centers and Cloud Applications

Concept

The Michigan Department of Health and Human Services (DHHS) child support program helps parents establish a financial partnership to support their children, ensuring the future generation gets the chance to reach its full potential. But delivering this service efficiently in today's world requires technology and digital solutions that put citizens' needs first. As part of the State's Digital Strategy for building confidence and trust between the government and its citizens, Michigan's Department of Technology, Management and Budget (DTMB) began a project in January 2016 to modernize DHHS's IVR system in order for citizens across the state to get quick, excellent service and information on their child support cases.

A. Challenge

The legacy IVR system was designed in 1999, and operated on 34 separate IVR servers in 28 counties. Each call-in number had its own messaging and menu structure, meaning that a caller in one county would have an experience completely unique from a caller in another county. Customers were often confused about which number to call, and with long-distance calls costing 2-4 cents per minute, lengthy hold times meant an expensive toll-free number for the State.

Furthermore, maintaining servers in dozens of locations proved both costly and ineffective. The system ran on analog lines and was susceptible to viruses, natural disasters and even the accidental coffee spill. Server maintenance cost the State and counties up to \$6,000 per month, which further burdened their limited and ever-shrinking budgets. Hardware failures would result in long service outages—from at least 24 hours and up to two weeks—delaying citizens from accessing case information. For families relying on child support payments as a monthly source of income, delays were acutely felt. For employees, downtime was frustrating. Instead of being productive, they spent time having to individually explain the technical problem to callers without being able to assist them.

The software was also outdated. It had been six years since the last upgrade. Current vendors did not have trained staff to support the system and could not fulfill requests for changes. This prolonged updates and maintenance, as staff essentially had to teach themselves how to address each task. Deep menu paths hid business processes and changes in policies, and it could take up to three months to complete even the simplest update, such as a change in office hours. On average, the change process cost DHHS \$24,000 a year.

Additionally, the proprietary software had no reporting capability and no "warnings" of poor operation or potential malfunctions. Department staff ran statistical reports manually upon request—a time-consuming endeavor. As a result, the department was slow to respond to customer needs and could not anticipate its own requirements. It

also did not comply with current technical security standards that ensure customer data is protected from both operational failures as well as data breaches.

While the legacy system did achieve the department's initial communication goals, it had long outlived its usefulness. It became cumbersome and lacked serviceability. DTMB and DHHS needed a more economical solution that would focus on customers' needs and ensure a smooth and consistent experience for all customers.

B. Solution

DTMB envisioned a modern, flexible, cost-efficient and scalable solution that would allow DHHS, the State, and county-based Friend of the Court (FOC) offices to collaborate and provide citizens a standard experience on the IVR system. The project replaced the current technology with a modernized, cloud-based IVR system. It merged the more than 70 individual IVR servers currently used by FOC agencies in 83 counties into a single, centrally hosted solution. It was implemented as part of broader strategic business plan for the DTMB and the entire State of Michigan.

The cloud solution—CenturyLink—provides a centralized technical solution that utilizes standard and modern architecture. A move to the cloud also eliminates geographical maintenance issues. And most importantly, it replaced the 35 different IVR numbers with one toll-free number so that all callers could access the same features and standardized functions to experience the same level of customer service.

So when the IVR system receives a call, it directs the call to the main platform and answers it via a touch-tone menu. It then routes the information requests through a secure network to the appropriate web application server for response. The IVR application allows callers to receive general service information and updates on payment status and to request name and address changes. If a caller needs to talk to a caseworker, the application uses ACD Connect to provide information from the IVR session to the PBX automatic call distribution service and the call is routed to the customer's ACD, where the caller receives the requested information.

The modernization of the IVR system simplifies the support process by allowing hidden features to be placed in a more accessible location, while removing underutilized options. The new solution also increases speed to delivery for county message changes and is scalable so that more features can be added in the future at little to no cost to the department.

Finally, it integrates with the child support enforcement system (MiCSES) which is the system of record for child support, to streamline child support services and operations in order to maximize assets, enhance shared services and cross-boundary partnerships, reduce operation costs and improve overall customer service.

Significance

The IVR modernization project follows the State's technology initiative to retire legacy applications and move toward a "Cloud First" strategy. These initiatives focus on putting the customer's needs first, ensuring greater coordination across agencies so that citizens and government employees have more positive interactions.

It was also a joint technology partnership project between DTMB, DHHS Office of Child Support, 83 distinct county FOC offices and technology partners CenturyLink and Accenture. This alliance brings together the technical and strategic expertise needed to guarantee a seamless experience for customers, which, in turn, strengthens their relationship with the government.

The implementation of the modernized IVR system meets DTMB's mission to transform the State into one of the most innovative, efficient and responsive governments in the world. The project achieved this by:

- Developing a trusted partnership with customers;
- Achieving a culture of excellence and accountability, where all parties work diligently and successfully to meet citizens' needs;
- Enhancing government value and engaging and empowering employees to participate in the solution and approve standard functions and templates; and
- Leading, innovating and delivering solutions that will continuously enhance the IVR application now and in the future.

DTMB is most proud of the quick and seamless turnaround of any change in the system—a capability that the old system could not support and which, ultimately, inhibited efficiency and productivity. The department can now easily address any issues and give customers more options that satisfy their needs. And the single number for customers to call streamlines customer service, guaranteeing excellence and building confidence in the government.

Impact

Modernizing the IVR system provided numerous benefits and had a tremendous impact. Foremost, it delivered a centralized technical solution that utilizes standard and modern architecture, saving the State of Michigan money by removing the costs of maintaining old servers. By moving to a more modern system, the IVR can utilize text-to-voice technology, which not only saves additional money on voice talent recording costs but also allows a higher degree of customization for counties in a fraction of the time. Finally, overhauling and standardizing the IVR scripts not only provides a more standard telephonic experience, it gives counties the ability to include customized county messages and notifications to callers.

In addition to the upgrades in the system's hardware and software applications that support the user experience, the project also delivered significant quantifiable benefits:

- It reduced the phone and ancillary equipment in the 83 counties, saving counties and the State about \$1M million a year.
- The system's cloud-based application reduced the time necessary to make customer-requested changes from three months to one day. Also, by streamlining the change process across all 83 counties, the new IVR system increases the speed to delivery for all county message changes.
- Easy and efficient functional capabilities that allow quick changes to the system save the department about \$24,000 annually.
- The number of menu options reduced from seven to three. Messaging was standardized so that all counties would hear the same general information, creating a single, consistent user experience.
- The consolidation to a single IVR number reduced the State's toll charges by 50%. Research shows that 85% of calls on the IVR system do not need to be transferred to a live agent. Because the new IVR system provides a single number, less populated counties can relieve themselves of this expense.

These improvements have also directly enhanced the customer experience. In the last five years, call volume has slowly decreased from about 1.2 million calls per month to 625,000 a month. But the new IVR system dramatically reduced this number to about 82,500 calls per week, indicating that the system is becoming exponentially more efficient. Moreover, IVR downtime has decreased significantly, with 99.97% service uptime, providing greater guarantees that when a customer calls, they can get the information they need almost immediately. Customers no longer have to call multiple times or experience long wait times to get child support assistance. They can get back to supporting their families.

This modernization effort demonstrates Michigan's commitment to innovation and forethought in government relations with its citizens. It implemented a solution that provides the State and counties the tools they need to continuously respond to citizens' needs. The system is scalable so that functional features can be added in the future. And it provides State and Counties real-time customer analytics and call reports so that they can improve services. These newfound efficiencies in child support assistance truly help build confidence and trust in Michigan's agencies.