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Emerging & Innovative Technologies

The Silver Lining: States of Emergency Drive DHS Citizen Channel Improvements Forward

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Early 2020 was a difficult time for many Tennesseans due to natural disasters/tornadoes, COVID-19 pandemic, statewide school closures, and social unrest. These challenges resulted in thousands of Tennesseans in need of SNAP, TANF, Child Care, and other Department of Human Services (DHS) services. The increase in need also increased the volume of the calls DHS received, and placed a significant burden on the DHS call center. The TN Department of Human Services knew they must revolutionize customer experience through innovation and a seamless network of services, even in the face of a pandemic. This meant leveraging new tools and adjusting operations to serve their customers. So, DHS announced that all field offices were to be closed to customers as of 3/23/2020. This required DHS to transition to 100% online applications and service delivery.

The significant business model change for DHS consisted of a shift to two channels for customer benefit support (online, telephony), whereas before, the single primary channel had been DHS office locations. This in turn drove process and staffing changes, as well as pushed the call center/service center forward significantly in terms of automation and customer experience.

In preparation for this transition, DHS and STS worked closely with multiple vendors to provide the technology necessary to support customers in this new environment. Drawing on the expertise of Pharicode LLC, the team built and delivered online applications using the ServiceNow platform for Disaster TANF and SNAP benefits, Pandemic TANF (PTANF) benefits and Child Care assistance for essential workers. DHS supplemented their existing call center by adding IVR capabilities for Family Assistance calls and deploying a new Amazon Connect IVR capable of providing callers with the status of their PTANF benefit applications. In early April, an ACCENTURE call center was quickly established to support the high volume of calls regarding PTANF applications. A little later, yet another online application was developed supporting Pandemic EBT which provides benefits to families with children who receive free or reduced lunch at school.
Following these improvements, DHS also launched an Accenture virtual assistant named AVA in a short amount of time to provide informational responses to the most common DHS customer questions.

AVA-supported topics closely align to the family assistance service center inquiries and are supporting the overall deflection of calls away from the phone queue. TN DHS AVA leverages technology that is scalable. Within two days of launch, AWS connect FAQs and AVA handled
more than 82% of the call volume. DHS now has the flexibility with technology to quickly launch new programs and adapt to changing events. Below is a summary of features that AVA provides:

The introduction of the Ava virtual assistant has again raised the bar on serving customers. From a convenience perspective, Ava is available 24X7 to answer customer questions. In addition, this moves call volumes away from call center staff, allowing them to work on higher value activities. Also, by utilizing its learning capability, Ava continually improves the ability to respond to the questions most asked by DHS customers. The hope is that this initial launch is the first of many steps in improving support for DHS programs. The introduction of AVA ensured TN citizens were immediately connected to crucial information upon accessing the DHS website for assistance. Further opportunities and potential impact of AVA expansion include:

**CHATBOT + LIVE AGENT** - Integrating the virtual assistant with live agents. Potential Impacts: Residents with specific needs will have access to additional live agent assistance.

**OUTBOUND CHATBOT LINK** - Enabling the virtual assistant link to be sent proactively to users within the IVR. Potential Impacts: Call-in residents will be proactively provided the link to seamlessly transition them from the phone into the virtual assistant.
**CHANNEL EXPANSION** - Integrating the virtual assistant across platforms including SMS, Facebook Messenger, and Twitter. Potential Impacts: Residents will be able to interact with the department in a way they are comfortable with.

**END-TO-END EXPERIENCE** - Integrating the virtual assistant with backend systems to give a personalized and transactional experience. Potential Impacts: Residents will be provided with personalized information and complete their requests with the virtual assistant.

As DHS continues to transform its business and respond to customer needs and behaviors, the experiences with the emergency response solutions will be invaluable as input to the transformation efforts.

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