

Ohio House of Representatives Ways and Means Committee

Testimony on Sub H.B. 614: Study and Reform the Unemployment Compensation System

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Chairman Merrin, Vice Chair LaRe, Ranking Member Rogers and members of the Committee, I am Todd Larson, Sr. Account Executive for Microsoft based here in Columbus, Ohio. I would like to thank Representative Fraizer for providing the opportunity to submit written testimony to the committee on Sub H.B.614.

Microsoft is a technology company whose mission is to empower every person and every organization on the planet to achieve more. We strive to create local opportunity, growth, and impact in every country around the world. Our platforms and tools help drive small business productivity, large business competitiveness, and public-sector efficiency. They also support new startups, improve educational and health outcomes, and empower human ingenuity.

Ohio, like many others across the country, is experiencing unprecedented times from both a public health and economic crisis due to COVID 19. As we have in the past, Microsoft is here to be a trusted partner and support the State of Ohio. Microsoft continues to partner with Department of Administrative Services to provide all state agencies, elected offices and pensions, software and services solutions that help enable the citizens and employees to achieve more. We are aligned with Lt. Governor, Jon Husted's, Innovate Ohio Platform priorities that are focused on customer experience, data analytics, and digital identity.

Ohio Agencies have been using Microsoft cloud solutions since 2014. Microsoft has aligned to the Ohio DAS-OIT Cloud Smart Initiatives. Focusing on enablement, Microsoft has provided Cloud Computing training for over 200 Ohio state employees, and dedicated cloud architecture experts. This investment in Ohio's success has enabled over 20 State Cabinet Agencies to leverage Azure Hyper Scale cloud to innovate and digitally transform.

As you are aware, Ohio has seen its unemployment claims increase more than any other time in history in the wake of COVID-19. The current system deployed in 2004 was not designed to manage the current demand. To improve the user experience, ODJFS has built several bots that leverage Microsoft's cloud, and specifically the Azure Bot Service. These include:

1. LUIS BOT – deployed previously by ODJFS to integrate Language Understanding Intelligent Services (LUIS) with their IVR call system, provide an interactive call response to allow citizens seeking unemployment to reset their PIN for claim filing. Resources assisted: Microsoft partner, Microsoft Cloud Solutions Architects (CSA), Premier Services.

2. [Unemployment FAQ BOT](#) – this bot uses the Azure Q&A framework to allow citizens to interact and find information about filing unemployment. Over 700K unique conversations have taken place using the FAQ BOT (LISA) since it was implemented. Considerable work is ongoing to further tune the UI/UX overall experience. Additional solutions are being investigated to take input from citizens and log with call center agents for follow up, as well as solutions using adaptive cards for further enhancements. Resources assisted: Microsoft Premier Services, and Microsoft CSA's to assisted with adaptive card implementation.
3. [Unemployment PIN Reset BOT](#) – Using the Azure BOT framework, provided under the “Forgot PIN”, this allows citizens to interact with the bot to reset their PIN. Over 1.3M unique conversations since the pandemic started.
4. [State Hearings/SHARE BOT](#) - Using the Azure BOT framework, Citizens can interact with the bot to find and obtain information for State appeals hearings.
5. Weekly Unemployment Claims BOT – COMING SOON! This bot will be built upon the Azure bot framework with Twilio integration to allow citizens to submit weekly claim information via SMS text messaging on a mobile device.

Modern "bot" technology provides a way for individuals to interact with information systems in a natural way. Chatbots are a common type of bot that have many applications across both private and public sector scenarios, whether providing answers to questions that are populated from a FAQ document, or facilitating more complex scenarios such as guiding customers through insurance claims or citizens through applications for unemployment benefits.

Modern bots are not simply glorified search engines, and bots based on the Microsoft Azure Cloud and using the Azure Bot Service leverage complex AI, Search and Natural Language Understanding (LUIS) in a way that is transparent to end users and simple for developers within an organization. Additionally, bots are not constrained to "instant message" style interactions but can leverage voice recognition and text-to-speech, SMS instant messages, Facebook, Microsoft Teams and many other interfaces.

One important note in relation to not only bots, but any system which provides information to users, is the system can only provide the information that has been fed into it. Complex AI and search algorithms, such as those that are part of the Azure Bot Service, can provide multiple pathways to access that data, or interpret conversational questions and guide users to what they "meant" to ask. To clarify recent testimony presented to the committee, AI cannot synthesize data to manufacture answers. However bots can be taught where to look to find additional information, and they can report back to agency administrators with questions that have been asked that do not yet have an answer populated so the answers can be added to the database. In short, a modern bot is a system that is constantly improving and evolving.

Microsoft understands the importance of the Unemployment Insurance (UI) program as a stabilizing force during unprecedented employment and, most importantly, as a lifeline for citizens who have lost their job through no fault of their own. For these reasons, we have partnered with superior market leading providers in the labor and employment space for the last 7 years as a primary provider of government cloud services for UI modernization projects.

The unemployment insurance (UI) program is a federal state partnership established by the Social Security Act of 1935. Federal laws and regulations provide the overarching framework for the UI program. The program is subsequently defined and refined through state laws and regulations. UI program information is shared with other federal and state agencies and is used extensively by other government programs that include child support enforcement, workers compensation claims, social security administration, IRS tax intercepts, state disability and paid family leave among others.

Initial computer systems to support the UI program were created using mainframe technology in the 1970s through the 1980s. Some of these systems persist and are still in use today. Others were replaced with expensive ground up development in the 1990's and early 2000's. These systems were written using the development strategies and techniques of the time and have proved to be inflexible and have themselves become antiquated legacies. Until recently, these systems were transferred to other states in the hopes that they could be modified and updated for those states unique laws and regulations. This strategy has resulted in multiple challenged projects that took years to complete, vastly exceeded budget estimates, and did not meet the needs of the state.

In the past several years, the UI vendor community and states have changed their strategy to deploying highly flexible commercial off the shelf (COTS) solution that satisfy the shared and common requirements of all states' UI programs that is easily configured to meet the unique requirements of the state. The most innovative of these approaches takes this strategy one step further and deploys the solution in the cloud as software as a service (SaaS) – thereby eliminating the information technology burden on the state, providing superior performance and delivering the underlying base infrastructure at a fraction of what it would otherwise cost.

This approach has led to a significant reduction in the development time of UI system modernization projects. Prior to the COTS/SaaS approach, system modernization projects averaged 7-10 years. The COTS/SaaS approach has shaved years off the timeline, with UI tax projects requiring being developed in 12-14 months and UI benefits projects in 18-24 months, or both simultaneously within 3 years. Given the unique attributes of the UI program, this is the most efficient timeline to deploy a successful system that suits the needs of all stakeholders including employers, third party representatives, claimants, the agency, among others. No UI system has been developed in less time.

Microsoft recommends that modernized UI solutions be delivered as Software as a Service (SaaS). We have partnered with Sagitec to implement and operate Ohio's modern solution as a cloud-based service in the FedRAMP-certified Microsoft Azure Government Cloud (Azure). Azure provides the critical interoperable cloud platform, with open-standards technology that allows Ohio to tailor the solution to meet their specific requirements for availability, speed, scale, security, compliance, and sound economics.

The Ohio Department of Job and Family Services is almost a year into UI tax, benefits and appeals system modernization project using the innovative COTS/SaaS approach. Sagitec's market leading COTS package has been procured and is in process of being configured and deployed. The solution is tailored for the common requirements and processes inherent in the UI program while being highly flexible so that Ohio's laws and regulations are configured using business rules instead of developers modifying source code. The solution resides in the Microsoft's Azure government cloud. This market leading approach ensures that the solution can auto-scales regardless of demand and is secured to the most

stringent, federally approved, standards. The UI tax component will be deployed in August 2020. The benefits and appeals component will be deployed in October 2021.

### **Laws, Regulations and System Requirements**

Every state has unique laws, regulations and policies. The ODJFS request for proposal (RFP) included 1,469 distinct high-level requirements, both functional and technical in nature. As a standard enterprise system development best practice, vendor and ODJFS staff have engage in detailed design sessions to ensure that these system requirements meet all RFP requirements, federal and state laws, and agency regulations. These sessions have already resulted in 254 detailed additional use cases and supplemental specifications, and 109 additional technical specifications to capture details of interface exchanges with other systems.

Once configured, these requirements are be fully tested through several increasingly stringent testing methods including unit, integration, system and user acceptance testing.

Failure to understand ODJFS's requirements in detail will lead to system failures, incorrect and inconsistent payments, data corruption, severely hindered internal work processes.

### **Data Conversion**

A primary root cause of failed and challenged projects is an insufficient data conversion approach and execution. States have tremendous amounts of legacy data created by legacy systems and ancillary support solutions. This data must be extracted, cleaned, updated, and imported into their chosen solution in full to avoid errors, functional impacts and severe technical bugs and glitches.

ODJFS is in the process of converting over 1.3 billion legacy data records dating back to 1997. Failure to properly convert these records will result in incorrect employer tax rates, incorrect and improper claimant payments and other system related issues.

### **Federal/State Partnerships and Data Sharing Agreements**

UI data is extremely valuable to other federal and state partner programs. States are required to share data with multiple other agencies. In addition, the UI program requires data from other partners to administer the UI program. These partners have their own missions and own unique resource constraints. States must work with their partners to define appropriate schedules to define, execute and test data exchanges. Failure to fully test these data exchanges will result in severe consequences for the mission of other agencies or in the inability for the UI agency to fully administer the UI program.

ODJFS shares data with over 200 external entities including:

- Incoming
  - Treasurer of the State
  - Internal ODJFS systems (Kofax imaging, FileNet, OJI)
  - Social Security Administration
  - (Among Others)

- Outgoing
  - Banking interfaces for processing tax payments from employers and benefit payments to claimants.
  - Internal Revenue Service data exchanges (Treasury Offset Program, 1099 Certification)
  - Federal DOL data exchanges (Wage Record Interchange System, Tax Performance System, Employment and Training Administration)
  - Worker’s Compensation Commission
  - (Among others)
  
- Bi-directional
  - Unemployment Insurance Interstate Connection Network
  - Federal Labor Market Information exchange programs (ETTP, LEHD)
  - DOL WR2 Crossmatch program
  - Ohio Business Gateway
  - Ohio Attorney General’s Office
  - (Among Others)

In summary, the labor and employment market has seen massive innovation since the last “Great Recession” of 2008. The COTS/SaaS strategy has proven to be the most innovative strategy for producing a quality solution within the most efficient time schedule. This has resulted in reducing project time frames by up to five years.

Sagitec’s 15-year long, strong relationship with Microsoft as a Gold partner sets our combined solution apart and gives an edge in implementing the proven technologies that are trusted around the world.

Azure is the only public cloud option that is designed solely for U.S. Federal, State, local, and tribal agencies, and their partners. Our partnership with Sagitec ensures that Ohio is receiving the most quality solution in the most efficient timeline available on the market.

In addition, we have also found that times of high-unemployment attract technology vendors, due to large investments of federal funding, that have limited solution capabilities. These vendors do not understand the complexities of the UI program. Without fail, projects initiated with these vendors end without the primary objectives achieved and the stated goals of modernization unrealized.

In closing, Microsoft will continue to support and innovate with our state partners, DAS-OIT and State Agencies as their digital first responders today, and as their trusted digital transformation partners going forward. Thanks for your time.