Abstract

States have built their unemployment insurance (UI) systems through a variety of approaches including transfer systems from other states, adaptations of revenue tax or pension systems, or older client/server-based technologies.

When the pandemic exposed the weaknesses of these systems, states started updating their UI systems with short-term fixes.

While some of these interventions have helped, they are not enough to support the scale and scope of the program that continues to change and evolve.

This paper discusses a new approach for states to build a truly digital, resilient and future-proof UI system.
Key characteristics of truly digital and resilient UI systems

A system’s ability to scale to handle increased volumes is not just an infrastructure issue. The design of the software, the functionality of the screens, the methods for storing and retrieving data are as important to scalability as infrastructure. So are processes like the triage of customer requests, workflow routing policies, and engagement protocols with businesses. For example, some states require new passwords to be mailed to new workers, and a few others require these to be reset by the staff. Both of these are inefficient, consume staff time and impact user experience. A National Employment Law Project report found all these pieces – infrastructure, technology, design and processes – responsible for the failure of UI systems.

To build a truly modern and future proof UI system, states need to focus on all these areas and ensure that their UI systems are:

- Scalable to address infrastructure, case load and data management related requirements
- Agile to adapt to changing rules and compliance requirements
- Automated to accelerate processes like data management
- AI-based for more effective adjudication and workflow routing
- Human-centric with an intuitive UI and a predictive guided data entry processes
- Device-agnostic and available 24X7 for more effective access
- Supported by conversational AI-based virtual assistants to triage and address customer queries
- Multi-lingual and compliant with accessibility standards
- Supported by an experienced UI team leveraging proven delivery models

Navigating the digitization of UI systems

One option to incorporate these features is tactical intervention. Tweaking code, movement of the citizen interface to the cloud or development of a new citizen interface using low-code platforms, addition of people to manage phone lines and support legacy COBOL-based systems are a few examples of such tactical interventions that states exercised during the pandemic.

While these tactics help, they only cure the symptoms. The underlying issues can only be addressed when states truly digitize their UI systems using a commercial-grade, software-as-a-service solution built on a platform-as-a-service (PaaS) foundation and delivered by UI experts with experience in building state UI systems. This approach will allow states to incorporate all the characteristics outlined above and provide automated scalability and agility. The solution will also build a modern, modular modern architecture using PaaS and incorporate APIs and micro-services to quickly add new capabilities over time. The PaaS solution provides many implementation options to bring together new and legacy processing to maximize agency performance and customer service.

This modular modern architecture will allow for a complete, phased or partial implementation of major functions such as tax, appeals, or workforce incrementally without loss of implementation efficiencies. The solution can also provide...
quick start functions to rapidly improve operations such as implementing stand-alone systems for adjudication, benefit payment control (BPC), claim special programs, or self-service. Regardless of whether implementing the full suite, major functions, or quick start functions, each approach will bring the operational efficiency and performance of the underlying platform-as-a-service foundation.

Benefits of a truly digital UI system

A digital UI system built using this approach will be future proof. It will allow the states to keep pace with the advances in technology more quickly and at a lower cost.

The system will natively run in the cloud. This will allow states to scale or contract system capabilities on demand to rapidly address any new requirements or programs like the Pandemic Unemployment Assistance.

Use of AI and automation will enable states to address staff constraints and at the same time enhance efficiency and reduce service time.

The inherent multi-channel delivery capabilities and ability to support multiple-languages will make it easier for citizens to access the system, especially when they need it the most.

Infosys Public Services is working with states to build these digital and resilient UI systems. Contact Brian.Bennett@infosys.com and Lee.Carter@infosys.com to learn how your state can navigate its UI digitization journey.